

# ALLIED RADIO

★ ★ ★ ★ CORPORATION ★ ★ ★ ★

833 WEST JACKSON BLVD • CHICAGO ILLINOIS



Radio Traffic Control  
Randolph Field, Texas  
Photo Courtesy of  
U. S. Air Corps

*Everything in Radio for '42*

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CATALOG No. 107

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OUR GREATEST AC-DC RADIO "BUY"!



## Knight 5-TUBE AC-DC SUPERHET

We honestly don't know where you can get a greater AC-DC value! Here's your best "find" in an ideal "extra" radio—for use on AC or DC—with all the performing ability, the tone quality and the handsome looks you want—at an amazingly low price that makes it the AC-DC "Buy" for 1942! Buy several—for bedroom, kitchen, living-room or den—don't miss this great value!

**Built-in Loop Aerial.** Here's the set you can carry and play anywhere. Has an efficient built-in loop aerial—no outside aerial or ground is needed—just plug in and play! Operates with equal efficiency from 105-125 volts, 40-60 cycles AC or from DC current (works on 220 volts also with adapter listed below).

**Easy to Tune.** You'll like tuning the easy-to-read illuminated Airplane Dial. Covers 540 to 1680 KC to bring you powerful standard Broadcast band reception and some police calls. Dial is handsomely calibrated both in kilocycles and meters for easy tuning. You'll log station after station without any effort.

**1942 Superhet Circuit.** The RCA and Hazeltine licensed circuit of the **Knight 5** (with rectifier) gives you the equivalent of seven tube power and efficiency. Multi-purpose tubes are included, as follows: 12SA7GT is Osc.-Mod. (dual-purpose); 12SK7GT is IF; 12SQ7GT is Det.-AVC-1st Audio (triple-purpose); 50L6GT is Beam Power Output; 35Z5GT is Rect. This new 1942 circuit is designed for unusual tone and power results—you'll be amazed at the performing quality—it's rare in a radio of this compact size and low price!

**For Extra Dependability,** you get full Automatic Volume Control—keeps volume uniform on all programs; prevents fading. The surprising Beam Power Output is ably handled by the Electro-Dynamic Speaker and reproduced as just about the smoothest, most natural tone you've ever heard in a compact radio. There's also connection for outside aerial whenever longer-distance reception is desired. You get surprising "extra" value in this outstanding "extra" radio.

**1942 Plastic Design.** You'll be proud to own the **Knight 5** because it will blend in with any room in your home. Available in your choice of either Walnut or Ivory, the **Knight 5** features a charming plastic design, with softly-rounded contours, interesting step-back grille effect and beautifully framed dial escutcheon. Size: 9" long, 5 3/4" high, 5 1/4" deep.

**Knight AC-DC 5 Complete.** The **Knight 5** Tube AC-DC Superhet is offered complete with tubes, as illustrated and described above. For operation from 105-125 volts, 40-60 cycles AC or DC. Shpg. wt., 6 lbs.

**D-101. Walnut.**

Value, \$14.95.

**NET EACH, \$7.95.**

**YOUR PRICE, LOTS OF 3, EACH.....**

**D-100. Ivory.**

Value, \$16.95.

**NET EACH, \$8.75.**

**YOUR PRICE, LOTS OF 3, EACH.....**

**\$7.45** **\$8.25**  
**49-580, 220 Volt Adapter for above set. NET..... 60c**

### YOU GET ALL THESE FINE FEATURES:

- Superhet Circuit
- Dynamic Speaker
- Full AVC Adian
- Big Airplane Dial
- Built-in Loop Aerial
- 1942 Plastic Beauty





THE "SUPER-SIX" — A SUPER VALUE FOR 1942!



## Knight 6 TUBE 2 BAND AC-DC SUPERHET

Here's the "Super-Six" for 1942—the radio that's 'way ahead of the field no matter how you judge it! Yes, here's more radio for your money—more in cabinet beauty and up-to-the-minute styling—more in performance (two band reception at the price you'd ordinarily pay for just one band)—more in tone quality and power—more value all around! Prove this exceptional value for yourself on our 15 Day Trial and Money-Back Guarantee—see page 11. Just check these features:

**Foreign Reception.** You get extra value, extra entertainment with the wide, two-band range of the **Knight 6** (with rectifier). Thrill to dependable Short-Wave foreign reception on the 5.7 to 18.3 MC range—get world news in the making—every day! And know the pleasure of powerful, true-toned reception of all American and Canadian standard Broadcast stations, on 535 to 1650 KC. You can tune easily on either band with the big Slide-Rule Dial that's set at "Eye-Line" vision angle—the finest new dial development in radio for 1942. Whether you tune Short Wave or regular Broadcast, you've got a real listening treat coming every time!

**Plays Anywhere.** The **Knight 6** works equally well from 105-125 volts, 40-60 cycles AC or from DC (can also be used from 220 volts with adapter listed below). The new high-gain loop aerial—built right into the cabinet—gives you dependable reception. Just plug in and play—no fuss, no bother. (There's also provision for outside aerial connection whenever shortwave or stronger Broadcast reception is desired.) Nothing has been overlooked to give you outstanding radio convenience.

**Brilliant 1942 Circuit.** You get just about the finest and latest engineering developments in the RCA and Hazeltine licensed circuit of the **Knight 6**. Newest type tubes give you actual 7-tube power and efficiency. 12SA7GT is Conv.; 12SK7GT is 1F; 12SQ7GT is Det.-AVC; 12SQ7GT is 1st Audio; 35L6GT is Power-Output; 35Z5GT is Rect. Note the use of the multi-purpose tube for extra power and efficiency. There's a big advantage in the power and tone quality of the "Super-Six" you'll not find in ordinary six tube models even at higher prices.

**Extra Value Features.** The **Knight 6** has full Automatic Volume Control to prevent fading and to keep volume uniform on all stations. The large Beam Power output is handled beautifully by the newest six-inch oval Dynamic Speaker that delivers about the best tone you've ever heard in a radio at this price. We're really proud about this quality of tone that will never fail to please you no matter what program you tune. Add to this fine tonal performance the extra entertainment of the 2-Band range, the easy-tuning Slide-Rule Dial, the convenience of the built-in Loop—and you can see for yourself that here's a radio value that can't be matched anywhere today at the price.

**Advanced Styling.** Here's the latest note in 1942 radio styling—the new Continental-type table model—with a streamlined beauty that's hard to beat. You've really got to see it to appreciate its beautiful design and finish. Top and front are of choice walnut veneers; sides are of selected, walnut-finished hardwood. The distinctive speaker grille treatment adds unusual grace and beauty to the design. The entire cabinet is hand-rubbed to a lustrous finish. Size: 13" wide, 6 $\frac{3}{4}$ " deep, 8 $\frac{1}{2}$ " high. Here's a table model cabinet you'll be proud to place anywhere in your home.

**Knight 6 AC-DC Complete.** The **Knight 6** Tube AC-DC 2 Band Superhet comes complete with tubes in the table model cabinet illustrated and described above. For 105-125 volts, 40-60 cycles AC or DC. One of the outstanding radio values for 1942! Shpg. wt., 10 lbs.

D-106. Value, \$29.95.

NET PRICE EACH, \$15.75.

YOUR PRICE, LOTS OF 3, EACH .....

49-581, 220 Volt Adapter for operating set from 220 volts AC or DC. NET..... 60c.



Enjoy Foreign reception on the **Knight 6** 2 Band Range. Hear World events direct!



Built-in Loop Aerial eliminates need for aerial or ground. Just plug in and play!



Thrill to superb tone quality, brilliantly produced on your program you

**\$14<sup>95</sup>**



## Knight 5 TUBE AC-DC SUPER

You'd never guess that so little could buy so much—that this charming **Knight 5 Tube** (with rectifier) AC-DC Superhet can be yours for only \$11.95. For cabinet beauty, for easy tuning, for richness of tone, here is your perfect "companion" radio—and for value, for extra features, for built-in quality, here is 1942's outstanding buy!

**Plays Anywhere.** You can operate the **Knight 5** with the same efficiency from 110-120 volts, 40-60 cycles AC or DC, or (with adapter listed below) from 220 volts. New loop antenna—built right into the cabinet—adds to convenient portability. No trailing wires—no need to anchor your set to one spot. All you do is plug in anywhere and play!

**Easy to Tune.** You'll enjoy tuning the **Knight 5**. Reception range covers 550 to 1700 KC for all standard Broadcast programs and for Police calls. Handsome 6"x1½" full-view Slide-Rule dial, slanted for easy vision, has large, clear markings.

**RCA and Hazeltine Licensed Superhet.** A powerful circuit of modern design. Tubes used are: 12SA7GT as Osc.-Mod. (dual-purpose); 12SK7GT as I.F.; 12SQ7GT as Det.-AVC-1st Audio (triple-purpose); 50L6GT as Beam Power Output; 35Z5GT Rectifier. And all these extra features: full Automatic Volume Control for uniform volume; big Beam Power Output for better reproduction of all programs; full five-inch Electro-Dynamic speaker for crisp, clear tone—bringing you every program in a thrilling lifelike way—for lasting enjoyment.

**Modern Continental Styling.** The latest in beautiful, practical cabinet design. Note the smooth-flowing lines, the new Continental-type styling with top-tuning Slide-Rule Dial and handsome speaker grille. Of rich walnut veneers on hardwood. Size: 11¼" x 6½" x 6".

**Knight 5 Complete** with tubes, presented in table cabinet shown at left. For operation from 110-120 volts, 40-60 cycles AC or DC. Shpg. wt., 9 lbs.

**D-102.** Value, \$19.95.  
**NET PRICE EACH, \$11.95.**

**NET, LOTS OF 3, EACH** .....

**\$1135**

49-580. 220 Volt Adapter. 1 lb., NET. .60c



**BEAUTIFUL  
MAPLE  
FINISH**



**BIG SAVINGS ON  
AC-DC MODELS**

Now!—a completely new note in compact radio styling! Here's a compact masterpiece—a gleaming maple-finished cabinet housing a remarkable new **Knight AC-DC Superhet** that gives you splendid reception, convenient versatility, and rich, vibrant tone quality. This new 5-tube (with rectifier) receiver gives you more for your money in every way—in beauty, in performance, in quality. And it's way ahead with the latest features! You get all this at a price you can't beat anywhere today;

**Built-in Loop Antenna.** You can play the **Knight 5** just about anywhere. It has an efficient, built-in loop aerial for perfect reception—no more trailing antenna and ground wires. And it operates with equal efficiency from 105-125 volts, 40-60 cycles AC or DC, and (with adapter listed at right) from 220 volts. This is your perfect "companion" radio. You can enjoy it almost anywhere.

**Always Easy to Tune.** The big three-inch square Airplane dial is simplicity itself to tune. Range covers 538 to 1680 KC for all standard Broadcast programs and many Police calls. Dial is dual-calibrated in kilocycles and meters.

**Powerful Superhet.** An efficient RCA and Hazeltine licensed Superhet circuit incorporates the newest desirable features for more power and better tone. Employs latest tubes as follows: 12SA7GT as Osc.-Mod. (dual-purpose), 12SK7GT as I.F.; 12SQ7GT as Det.-AVC-1st Audio (triple-purpose); 50L6GT as Power Output; 35Z5GT Rectifier. You get better than conventional 5-tube performance from the multi-purpose tubes. And you get all these features, too: full Automatic Volume Control for uniform volume level; big Electro-Dynamic speaker for true-toned reproduction of every program; Beam Power Output for bigger volume without distortion.

**New Maple Finish.** Here's real beauty of a new, distinctive kind. The **Knight 5** is presented in a beautiful cabinet of solid hardwood, finished in a gleaming maple color. Perfect for Early American settings, but built to harmonize with any interior. The ideal set for bedroom, den, breakfast room, or kitchen. Makes the perfect "extra" radio for your home. Measures: 10¾" wide, 6¼" high, 5½" deep.

**Knight 5 Complete.** The **Knight 5 Tube AC-DC Superhet** is offered complete with tubes in maple-finished cabinet shown above. For 105-125 volts, 40-60 cycles AC or DC. Shpg. wt., 7 lbs.

**D-103.** Value, \$19.95.  
**NET EACH, \$10.45.**

**LOTS OF 3, EACH** .....

49-580. 220 Volt Adapter. Wt., 1 lb.  
**NET** ..... **\$995**  
..... **60c**



BEAUTIFUL..POWERFUL..THE SUPER-FIVE FOR '42!



## Knight 5 TUBE AC-DC SUPERHET

**Our choice** for one of 1942's supreme radio values . . . **your choice** for beautiful styling, powerful performance, thrilling tone . . . **everybody's choice** for a wonderful compact "companion" radio—that's the new **Knight Super-Five**. And this 5-tube (with rectifier) AC-DC Superhet is packed with features you'd never expect in a set priced so low. Here's the radio everyone will want to own. Check its features yourself:

**Built-in Loop Antenna.** The almost-magical built-in aerial that brings you dependable reception without annoying antenna and ground wires to trail on the floor. Just plug in and play—anywhere, anytime. There's nothing like it for convenience.

**Plays Anywhere.** Here's the handiest set you've seen. Plays with equal efficiency from 110-120 volts, 40-60 cycles AC, 110-120 volts DC, or (with adapter listed below) from 220 volts. You can move the Super-Five from room to room—play it anywhere.

**Powerful Reception.** The **Knight Super-Five** tunes 535-1720 KC for strong, dependable reception of all standard Broadcast programs and Police Calls. For extra tuning ease there's a big Slide-Rule dial, full 6 1/4" long, tilted to the right angle for easy vision. Dial is brilliantly illuminated and has large, clear calibrations for easy reading.

**RCA Licensed.** An ultra-efficient Superhet circuit—1942's finest—with radio's newest and best features. Uses latest tubes as follows: 12SA7 as Osc.-Mod. (dual-purpose); 12SK7 as I.F.; 12SQ7 as Det.-AVC-1st Audio (triple-purpose); 35L6GT as Power Output; 35Z5GT Rectifier. The use of two multi-purpose tubes gives you extra power, extra efficiency, comparable to many ordinary 6 and 7 tube radios.

**Extra-Value Features.** You get full Automatic Volume Control to maintain steady, unvarying volume on all programs; big Power Output for better reproduction; latest Dynamic speaker for richer, clearer tone; provision for attaching outside aerial.

**Handsome Plastic Continental Cabinet.** It's beautiful—it's practical! The rich plastic-molded cabinet will look right at home in any setting. The tuning dial is cleverly placed for better vision; the speaker has larger baffle area for better tone. And the smooth, neat lines, the rounded top, the unique speaker grille are splendid extra touches. Available in rich Walnut or warm Ivory. Measures: 10 3/8" wide, 7" high, 6 3/8" deep.

**Superb Tone Quality.** You'll enjoy every program you hear with the **Knight Super-Five**. Whether it's voice or music—a dramatic sketch or a popular orchestra—every note, every sound, is brought to you in a wonderfully life-like way. The **Knight 5** has been built to give you the tone quality you'll like.

**The Knight Super-Five** is offered complete with tubes in the plastic-molded cabinet shown above—available in Ivory or Walnut. One of the finest AC-DC values of the season. For 110-120 volts, 40-60 cycles AC or DC. Shpg. wt., 8 lbs.

D-104.  
Walnut.  
NET EACH, \$10.75.  
LOTS OF 3, EACH . . .

\$10<sup>35</sup>

D-105.  
Ivory.  
NET EACH, \$11.75.  
LOTS OF 3, EACH . . .

\$11<sup>35</sup>

49-580, 220 Volt Adapter for above. Wt., 1 lb. NET . . . 60c





# NOW AS ALWAYS



To thousands of wise radio buyers everywhere, **ALLIED RADIO** is the one single, dependable source of supply for everything in radio. Our constant aim to do business according to the highest standards of reliability—in quality, in service, in full value for your money—has made **ALLIED** famous throughout the nation as "Radio's Leading Supply House." You will find that **ALLIED** lives up to its reputation—that you can depend on **ALLIED** in every way.



Radio is and has always been the 100% interest of the entire **ALLIED** organization. Since our very earliest days we have specialized in radio and radio alone. Thus we have built up a vast organization of special skills and interests in the radio field . . . with all our efforts directed to the single purpose of serving you better. You can be confident—as we are—that all of your radio needs will always be better cared for when you depend on **ALLIED's** expert staff of radio specialists.



Whatever your particular radio interests may be—Public Address, Amateur Radio, Radio Servicing, Experimenting or Set-Building, Radio Receivers, Industrial Radio Equipment—**ALLIED**, "Radio's Leading Supply House," is ready to serve you. Follow the lead of thousands of satisfied radio buyers—make **ALLIED** your First Choice—your dependable source of supply, too.



Row after row, shelf after shelf, the tremendous **ALLIED** stock-rooms are completely stocked with vast stores of the more than 15,000 quality radio items listed in this catalog. Our fresh, clean stocks—available in quantities, ready for immediate shipment—mean dependable service for you. You needn't worry about your source of supply. You always get what you want when you order from **ALLIED**.



The huge **ALLIED** inventories of radio equipment are never allowed to become depleted. Our alert staff of buyers see to it that our stocks are always complete. This means that whether in an emergency or on a routine order—whether your order is large or small—you can be sure that **ALLIED** will deliver the goods. Furthermore, we are in constant touch with the leading radio manufacturers, and can supply all the newest products promptly.



**ALLIED** radio stocks are actually a roll-call of all the foremost brands in radio. Throughout this catalog you will see the names and trademarks of the most respected, most reliable manufacturers of quality radio equipment. Here is further assurance for you of **ALLIED's** complete dependability—assurance that you will always get the finest.



Our low prices always assure you of fullest value for your money. You get more, save more, profit more on every purchase. You obtain the full benefits of our efficient way of doing business. You get extra savings because of our economical merchandising methods, our vast purchasing power, our lower overhead costs.



You will find dozens of outstanding radio values on every page of this catalog. But you will also want to shop with special care through pages 187-195—our Feature Value and Special Bargain section. Here you will see an extensive selection of all types of popular radio equipment, top-notch in quality, yet priced to give you truly remarkable savings.



Our high standards of quality mean that you can buy with complete confidence. We not only purchase our merchandise from the best manufacturers—but we also make our own exhaustive tests for performance and dependability. Our standards are your best protection.



# YOU CAN DEPEND ON ALLIED FOR EVERYTHING IN RADIO

Through all the years, from the very first days of the radio industry, through thick and thin, **ALLIED RADIO** has always held fast to certain fundamental, time-tested ways of doing business . . . to these clear, basic principles:

**FIRST**—Our high standards of quality must never be relaxed. Everything you buy from us must satisfy you fully.

**SECOND**—Our low prices must always give you fullest value for your money—must enable you to get more, save more, profit more on every purchase.

**THIRD**—Our stocks must always be complete, our service fast and reliable.

On these two pages, in picture and story, we have tried to show you what **ALLIED's** way of doing business means to you. We honestly believe that it will pay you to do all of your radio buying at **ALLIED**.

We shall continue to serve you to your complete satisfaction—to fill your orders completely, promptly, and at the lowest possible prices—so that now, as always, you can depend on **ALLIED** for Everything in Radio.



Our service lives up to its reputation for promptness and care. The most modern methods of safety-first packing are employed to assure the arrival in perfect condition of the equipment you order. On every shipment we save you time and trouble because we insist on speed plus accuracy. Here is further evidence of **ALLIED's** leadership. Here is still another way in which you benefit by making **ALLIED** your complete Radio Buying Headquarters.



Because we are located at the very heart of America's transportation system, we can give you much faster service. And because every department of our organization—stock, shipping, engineering, correspondence—is centralized in one great building—we can ship your whole order from one central location without delay. **ALLIED** saves you time when time counts! Thus you'll find that it will pay you to consolidate your purchases—to do all of your radio buying from **ALLIED**—America's Foremost Radio Supply House.



We use the most modern methods of transportation and communication—airplane, railroad, truck transport, telegraph, telephone—all to serve you faster and better. Distance is no obstacle when you do your radio buying at **ALLIED**. In every part of America—from coast to coast, from border to border—**ALLIED** customers get full satisfaction from **ALLIED's** fast service because they know that **ALLIED** brings them what they want when they want it.



Write to us for authoritative advice and helpful suggestions on your radio buying problems. Our trained staff of intelligent, friendly correspondents answers all your inquiries promptly—in a helpful, personal way. You'll always like our personal service.



It's always easy to order from your **ALLIED** Catalog. For instant reference to any item in this catalog, see the complete easy-to-use index on pages 198-199. For complete, simplified How-to-Order information, including shipping suggestions, express and parcel post tables, etc., turn to page 197.

## GUARANTEE

**WE GUARANTEE 100% VALUE IN PRICE, QUALITY, AND SERVICE.** Every item in our catalog is guaranteed to conform exactly to the description and illustration. We guarantee that our merchandise conforms to the standards of the Radio Manufacturers' Association and will perform in the manner intended for such apparatus. Whatever you buy from us must satisfy you in every way—or you may return it of once for exchange, repair, or refund, as you wish.

—**ALLIED RADIO CORPORATION**





Tunes 3 Bands



Built-in Aerial



With Tone Control

## Knight 6 TUBE 3 BAND AC-DC

Here's our idea of the kind of radio value you've always wanted—the lowest-priced Six Tube (with rectifier) 3-Band Radio of this or any other season! Here are "expensive set" features, too! Spread-band tuning for better all-wave coverage! Noise-reducing RF circuit! New cabinet beauty, too—and it's all yours at a price that's gentle on your budget!

**Foreign Programs Direct** are a big thrill with this **Knight 6** Superhet. Tunes 540 to 1650 KC for all standard Broadcasts; covers 5.25 to 10.25 MC and 11.5 to 16 MC for Foreign Short Wave, police, amateur, and aviation signals. The wonderful new spread-band feature s-p-r-e-a-d-s stations farther apart for easier Short-Wave tuning.

**Plays Anywhere**—works from 110-120 volts, 40-60 cycles AC, or from 110-120 volts DC. Includes built-in high-gain loop aerial. Just plug in and play perfectly! (Also has outside aerial connection for Short-Wave and long-distance reception.)

**1942 Superhet Circuit** is RCA and Hazeltine licensed. Uses the following tubes: 6SA7, 2-6SK7, 6SQ7, 25L6, 25Z6 Rect. New noise-reducing RF circuit increases sensitivity, reduces background noise. Automatic Volume Control keeps volume uniform on all programs and prevents fading.

**Lifelike Tone** is the feature that will impress you most in the **Knight 6**. The unusual power of the Beam Power output stage is beautifully handled by a special 5½-inch full-toned Electro-Dynamic Speaker. Variable Tone Control is provided, so that you yourself may emphasize bass or treble exactly as you prefer.

**1942 Styling** is reflected in the beautiful cabinet of the **Knight 6**. It is fashioned of selected walnut veneers, hand-rubbed to a lustrous finish. The lattice treatment of the speaker grille is an effective new style note. Size: 19½" long, 10½" high, 10" deep. Complete with tubes. For 110-120 volts AC, 40-60 cycles, or 110-120 volts DC. Shpg. wt., 17 lbs.

D-109. Value, \$38.95.

**NET PRICE EACH, \$21.95**

**NET PRICE, LOTS OF 3, EACH...**

**\$20<sup>95</sup>**

49-581, 220 Volt Adapter. NET..... 60c



Tune Your Favorite Stations Automatically



Thrill to Foreign Reception

You've seldom seen such beauty, so many fine new features, such value as you get in this Two Band **Knight 7** (with rectifier). Know all the thrills of Foreign reception, the convenience of AC-DC versatility and Automatic Tuning, the enjoyment of golden tone—everything you want in a radio—at an amazingly low price!

**Foreign Reception.** The **Knight 7** tunes 8.9 to 12.1 MC to bring you all the important Foreign Short Wave programs. Covers 540 to 1720 KC for powerful coverage of all American and Canadian standard Broadcast stations.

**Plays Anywhere.** Plays with equal efficiency from 105-125 volts, 50-60 cycles AC, or 105-125 volts DC. Has built-in loop aerial—all you do is just plug in and play. (Also has outside aerial connection.)

**Tune Favorite Stations** just by pressing a button. Fast and accurate every time. For regular tuning, the 8-inch top-tuning "Eye-line" Slide-Rule Dial makes it easy to log your programs on either band.

**Power Plus!** Up-to-the-minute tube types are used in the RCA and Hazeltine licensed circuit as follows: 6SA7 Osc.-Conv. (dual-purpose); 6SK7 IF; 6SQ7 Det.-AVC (dual-purpose); 6SQ7 1st Audio; 2-25L6GT as Push-Pull Output; 25Z6GT as Rect. AVC keeps volume uniform; prevents fading.

**Glorious Tone** with rich depth and glowing reality is assured on every program you tune. The **Knight 7** insures this tonal achievement by coupling the big push-pull power output of the circuit with a 6-inch oval-shaped Electro-Dynamic Speaker of new design, noted for its fidelity or

production. Variable Tone Control is also provided to let you select any degree of treble or bass emphasis you may desire.

**Handsome** is the word for the 1942 table model cabinet of the **Knight 7**. Note the new continental-type style now all the vogue in radio. See the rich walnut veneer woods used throughout. Check the fine proportions; size: 16" long, 10½" high, 7" deep. The **Knight 7** is offered complete with tubes, for operation from 105-125 volts AC, 50-60 cycles, or 105-125 volts DC. Shpg. wt., 17 lbs.

D-110. Value, \$38.95.

**NET EACH, \$21.95.**

**NET, LOTS OF 3, EACH.....**

**\$20<sup>95</sup>**

49-581, 220 Volt Adapter.....NET 50c

## Knight 7 TUBE 2 BAND AC-DC



*Knights'* **BIG 2-BAND "HEADLINER" VALUE!**



**Knigh 6 TUBE 2 BAND AC-DC SUPERHET**

Compare the performance—compare the appearance—compare the price—and we know you'll agree the "Headliner" offers you more for your money than any other radio in its class! Here's dependable Foreign reception! Here's versatile operation from AC or DC with six tubes that work like seven! Here's the kind of plastic beauty that will grace any room in your home! It's no wonder, then, that we've named this **Knigh 6** (with rectifier) our "Headliner" Value for 1942!

**Foreign Reception!** A true Two-Band Radio at the price you'd generally pay for just a one-band set. You get not only full coverage of American and Canadian standard Broadcasts on 535 to 1660 KC, but thrilling reception of news and entertainment direct from abroad! The Foreign Band covers 5.7 to 18.3 MC (right down to 16.5 meters)! And it's easy to tune either band with the big, fully-illuminated Airplane vernier dial that's clearly calibrated.

**High-Efficiency Loop Aerial** is built right into the "Headliner" for up-to-the-minute convenience. No more aerial or ground troubles. You just plug in and play! There's connection provision also for outside aerial when you tune Short Wave or long-distance domestic stations.

**Plays Anywhere!** The "Headliner" works with equal efficiency from 110-120 volts, 40-60 cycles AC or 110-120 volts DC (can also be used from 220 volts with adapter listed below). Connect it anywhere; play it anywhere. You won't want to be without this thrilling radio companion once you hear it!

**Superhet Power**—the kind you get only from the finest RCA and Hazeltine licensed circuit—is yours in the "Headliner." You get exceptional sensitivity and full 2 watts output from six full-working tubes (including rectifier) used as follows: 12SA7GT as Converter; 12SK7GT as IF; 12SQ7GT as Det.-AVC (dual-purpose); 12SQ7GT as 1st Audio; 35L6GT as Output; 35Z5 as Rect.

**And for "Extras"** the "Headliner" has Automatic Volume Control to keep the volume uniform on all programs; a 5 1/4-inch full-response Electro-Dynamic Speaker delivers natural, lifelike tone that compares with costlier models; Beam Power Output for remarkable reserve power, far in excess of what you will normally use; smooth Wave-Band Switch for changing from Foreign to domestic band; 5 Tuned Circuits for increased sensitivity.

**A Style Sensation**—that's the best way to describe the "Headliner." It will add charm to the finest room. Has a streamlined plastic-molded design, with simple classic lines and attractive recessed speaker grille. Available in a choice of soft Ivory or gleaming Walnut. Size: 10 1/4" long, 7 1/4" high, 5 1/2" deep. Comes complete with tubes, exactly as described above. For 110-120 volts, 40-60 cycles AC or 110-120 Volts DC. Shpg. wt., 8 lbs.

**D-107. Walnut.** Value, \$21.50.

**NET EACH, \$11.95.**

**YOUR PRICE, \$1135**  
**LOTS OF 3, EACH.....**

**D-108. Ivory.** Value, \$23.50.

**NET EACH, \$12.85.**

**YOUR PRICE, \$1220**  
**LOTS OF 3, EACH.....**

**49-581. 220 Volt Adapter for above sets. NET..... 60c**







## NOVEL NEW RADIO-LAMPS



## Knight RADIO-BED LAMP

Say good-bye to sheep-counting at night! Let this clever **Knight Bed Lamp-Radio** lull you to sleep with soft slumber music—and wake you up in the morning with a brisk musical salute to start the day right. Combined with this unique personal radio is a built-in bed lamp, scientifically designed to be kind to your eyes. What's more, ingenious cabinet design lets you use this new instrument as a regular table model set, too—with the dial in proper position for easy tuning. Here's the latest radio sensation for everyone—and a boon companion for stay-abeds.

**Enjoyable Reception.** You can tune the entire Broadcast Band from 540 to 1680 KC for complete coverage of your favorite stations. The five-tube (with rectifier) Superhet radio operates with equal efficiency from 110-120 volts, 40-60 cycles, AC or DC. Just plug into any outlet.

**Latest Features Built-in.** There's a built-in Loop Antenna—no more fuss with trailing aerial or ground wires. There's a full-sized five-inch Dynamic speaker to give you wonderful tone quality on every program. There's a big 3" x 2" Airplane dial illuminated for easy tuning. And for real reading ease and comfort there's a built-in bed lamp of the latest high-power tubular type with plastic diffusing lens. You couldn't ask for greater luxury!

**A Table Model Radio, Too!** The handsome one-piece molded plastic cabinet is a marvel of modern design. For headboard use it has two handy non-marring, rubber-covered hooks. Dial is at bottom of cabinet, easily accessible while you lie at rest. For table use, simply turn the cabinet on its side, and all controls are on front face, equally easy to tune. You can shift the set to either position in an instant. Cabinet is offered in a choice of deep-toned walnut or rich ivory. Size: 9 1/2" wide, 5 1/2" deep, 7 1/2" high.

**Superhet Circuit.** The powerful RCA licensed Superhet circuit uses latest tube types: 12SA7GT, 12SK7GT, 12SQ7GT, 50L6GT, 35Z5GT. Full Automatic Volume Control prevents fading or blasting. Beam Power Output gives you sufficient power for all programs.

**Knight Bed Lamp Radio Complete** with tubes and bed lamp bulb, in cabinet at left above. For 110-120 volts, 40-60 cycles AC or DC. Shpg. wt., 8 lbs.

**D-118, Walnut.**

**D-119, Ivory.**

**NET PRICE EACH, \$12.85.**

**NET, LOTS OF 3, EACH** .....

**\$1220**

## Knight RADIO-LAMP

Here's a practical, brand-new innovation that delights everyone—that's made a big hit everywhere! Here, in a wonderful combination of beautiful styling that will add rich charm to any room—is a modern **Table Lamp** that makes reading easier, more pleasant—plus a superbly-toned powerful Radio Receiver—all in one strikingly-beautiful, streamlined compact unit! And the cost is scarcely more than you'd pay for a quality Table Lamp alone!

**The Luxury Lamp.** Designed for better light, for better sight. Beautifully styled to grace the finest home interiors. The base is molded of beautiful cream-color bakelite in smooth rhythmic lines, set off by a rich, gold-colored base trim. The lamp shade, with its graceful contour, is of rich cream-color rayon. Shade diameter is 16 inches. Overall lamp height is 21 1/2"; base, 5 1/2" diameter. Lamp with 6-inch reflector bowl has a three-way switch offering selective lighting of 50, 100 or 150 watts.

**The Superhet Radio.** There's luxuriously convenient radio entertainment waiting for you in the precision-built 5-Tube Radio (including rectifier) incorporated in the novel **Knight Lamp—Radio Combination.** You can read your book or newspaper under the scientifically correct light and enjoy your favorite programs at the same time. You'll be amazed at the splendid power and tonal fidelity.

**Works Anywhere.** Both Lamp and Radio operate on 110-220 volts AC (40-60 cycles) or on DC current. That means you can plug in anywhere and enjoy fine light and perfect radio reception. You'll like the efficient Loop aerial that's built right into the receiver—it does away with aerial and ground; all you have to do is plug in and play.

**Powerful Superhet Circuit.** You get full band coverage of all standard American and Canadian Broadcast plus Police Calls, from 535 to 1720 KC. The cleverly-engineered RCA licensed circuit uses the following tubes: 12SA7, 12SK7, 12SQ7, 35L6GT, 35Z5GT—each a full-working tube. Other features include: Automatic Volume Control to keep volume uniform on all programs; latest Dynamic Speaker with adequate baffle for clear, faithful tone quality; easy-to-tune rotor dial built into lamp base.

**Radio-Lamp Complete.** We offer this sensational **Knight Radio-Lamp Combination** complete with tubes, as illustrated and described. For 110-120 volts, 40-60 cycles AC or DC. (Sold less light bulb.) Shpg. wt., 12 lbs.

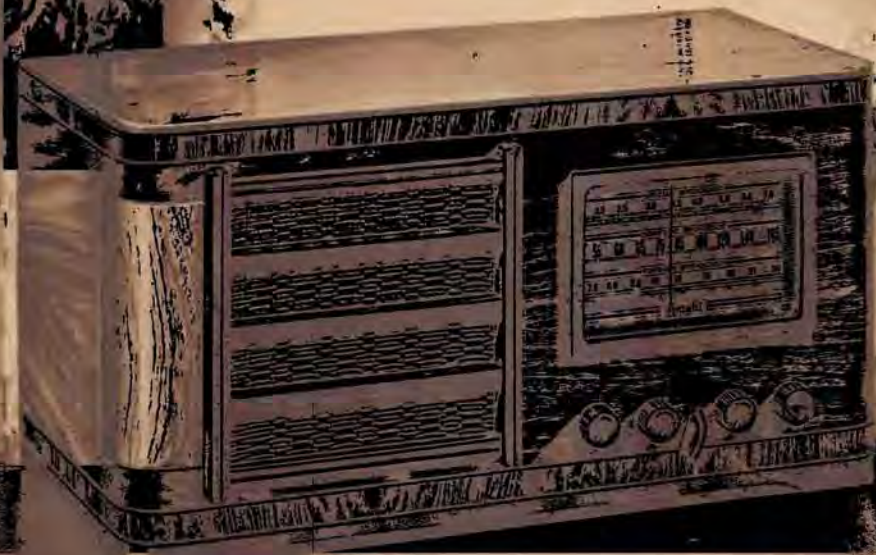
**D-120. NET PRICE EACH, \$17.52.**

**NET, LOTS OF 3, EACH** .....

**\$1617**



OUR FINEST AC-DC RADIO!



## Knight 8-TUBE 3 BAND AC-DC SUPERHET

Let this new **Knight** All-Wave Superhet demonstrate to you what modern radio at its best can be! For here is a deluxe instrument, especially designed to incorporate the newest and best features for wonderful distance-reach, rich and faithful tone quality, and splendid world-wide reception. Try it yourself on our liberal Trial and Money-Back Guarantee offer (see page 11)—we know you'll agree with every claim we make for it.

**Foreign Reception.** Hear the news first-hand by overseas Short Wave! Never has the news been so important! And you'll thrill to the way in which the **Knight 8 Tube** (with rectifiers) AC-DC Superhet brings you the world's programs. Tunes three full wave-bands covering all major radio channels: 2.25 to 7.2 MC and 7.5 to 24 MC for Short Wave reception of foreign and domestic programs, Amateur, Aviation, and Police signals; and 535 to 1650 KC for powerful reception of American and Canadian standard Broadcast programs. The big  $6\frac{3}{4}$ " long Slide-Rule dial is clearly calibrated and exceptionally easy to read and tune.

**RF on All Wave Bands.** A feature of the finest radio receivers—tuned RF on all wave bands adds substantially to tuning range and distance reach. Increases sensitivity tremendously—brings in stations with remarkable freedom from noise and distortion.

**AC or DC Operation.** The **Knight 8** operates with equal efficiency from 110-120 volts, 40-60 cycles AC, 110-120 volts DC, or (with adapter listed below) from 220 volts.

**New Rotatable Loop Aerial**—built right in. Convenient knob on instrument panel permits you to rotate antenna loop to proper position for best sensitivity on Broadcast band. Receiver also has provision for outside aerial for stronger Short Wave reception.

**Outstanding Superhet Design.** Licensed by RCA and Hazeltine. Uses following ultra-efficient tubes. 6SK7GT as R.F.; 6SK7GT as I.F.; 6SA7GT (dual-purpose) as Osc.-Mod.; 6J5 as AVC; 6SQ7GT as Det.-1st Audio (dual-purpose); 25L6GT as Power Output; 2—25Z6GT Rectifiers. Multi-purpose tubes mean extra power and efficiency.

**Extra-Value Features.** Here's positive proof of what we mean by "more for your money." There's a rugged 3-gang tuning condenser for greater stability of operation and finer selectivity. Full Automatic Volume Control maintains steady volume level. There's connection for Television, Frequency Modulation or record player unit.

**More Features For Better Tone.** A full 8-inch Electro-Dynamic speaker reproduces every sound with the rich tonal depth characteristic of the better radios. Bass Compensation and Bass Booster build up the bass response to provide perfect tonal balance. And variable Tone Control lets you select bass or treble emphasis as you desire.

**Beautiful Table Cabinet.** Here's wonderful "eye-appeal"—a full-sized table cabinet of select walnut veneers on hardwood. Note the richness of detail—the handsome speaker grille, the smooth contrasting grain effect. Size:  $22\frac{1}{2}$ " wide,  $11\frac{1}{4}$ " high,  $10\frac{1}{2}$ " deep.

**Set Complete.** Supplied complete with tubes in the table cabinet shown above. For 110-120 volts, 40-60 cycles, AC or DC. Shpg. wt., 28 lbs.

D-111. Value, \$67.50.

NET PRICE EACH, \$33.85.

NET PRICE, LOTS OF 3, EACH.....

49-581. 220 Volt Adapter for above. Wt., 1 lb. NET ..... 60c

**\$31<sup>95</sup>**

JUST CHECK THESE  
1942 FEATURES!

**Foreign Reception.** Keep up with the news as it happens! Hear it first—and hear it direct. TRF on all bands means better radio reception for you.



**Rotatable Loop Aerial.** Built right in. Just plug set into nearest outlet and play at once. Rotating feature provides for greater sensitivity and better signal pickup.



**Superior Tone.** Bass Compensation and Bass Boost for correct tonal response. Personal Tone Control, too. And a big Electro-Dynamic Speaker!





# *Knight is the Radio for Your Money!*

SEE IT!



HEAR IT!



TRY IT!



The KNIGHT 15-Tube FM-AM Radio Phonograph Combination—a magnificent new luxury instrument—the leader of the 1942 KNIGHT line. For description, see pages 22-23.



# PROVE IT YOURSELF WITH OUR 15 DAY TRIAL AND MONEY-BACK GUARANTEE

When you buy your new 1942 radio, you want to be sure that you are getting the most for your money . . . the most in performance, beauty, features . . . the most in value. ★ That is why we ask you to make this simple test: ★ Check the features of any 1942 *KNIGHT RADIO*. ★ Check its tuning range, tube complement, speaker size, power-output, appearance. ★ Check its price against any other set in the same class. ★ We know you'll find more quality, more honest value in *KNIGHT* every time. We know you'll decide on *KNIGHT*. ★ Our fifteen-day trial will prove to you that *KNIGHT RADIOS* satisfy . . . that on every count *KNIGHT* gives you most for your money. ★ Order your own 1942 *KNIGHT* now for complete and lasting radio enjoyment. See it! Hear it! Try it yourself! **YOU** be the judge.

(Note: You save, no matter whether you buy one *KNIGHT* Radio at the single-set price or three at our special lots-of-three prices. The lots-of-three price applies on orders made at any one time, for any three sets—whether of the same model or assorted—to bring you bigger savings.)



Poinstaking craftsmanship . . . richness of detail . . . harmony of design . . . all this contributes to the distinguished styling of every new 1942 *KNIGHT* Radio.



*KNIGHT* Radios possess a wonderful richness of tone quality that will be a source of deep and lasting pleasure to every *KNIGHT* owner. You get the most for your money in tone quality in *KNIGHT* Radios.



*KNIGHT* Radios have all the newest features for finest efficiency . . . for recreating broadcast studio performance. You get more for your money in *KNIGHT*.

## 15 DAY TRIAL AND MONEY-BACK GUARANTEE

Order any *KNIGHT RADIO* on our regular terms. Try it out under your own operating conditions. Check it in all ways. And then, if within 15 days—**for any reason**—you are not fully satisfied with your choice, you may return the set to us, and we will promptly refund your full purchase price, less transportation charges. This powerful Guarantee is further supplemented by the regular Radio Manufacturers' Association Guarantee against defect in materials and workmanship.

ALLIED RADIO CORPORATION



YOUR BEST BUY IN A 7 TUBE AC RADIO



## Knight 7 TUBE 2 BAND AC SUPERHET

- Foreign Reception
- 6" Dynamic Speaker
- With RF Stage
- Phono, F-M Connection
- With Tone Control
- 3½ Watts Output
- Slide-Rule Dial
- Ready for Television

We've looked everywhere, and we can't find another 7 Tube Radio that offers you so much quality, so many features, such all-around value! Just name your 1942 radio wish, and here it is—rich concert-hall tone, beautiful styling, and wonderful operating features—plus Foreign reception—all at a price you've never believed possible! We want you to be the judge—try this **Knight 7** (including rectifier) on our 15 Day Trial and Money-Back Guarantee (see page 11). You'll agree it's a "Best Buy"!

**Foreign Reception** direct, with thrilling power and clarity, is yours with the **Knight 7**. It's the kind of radio you want to own in these stirring times! Two full tuning bands give you coverage of all important channels. The giant 6"x4" Slide-Rule Dial is easy to tune, covering the following ranges: 4.8 to 18.3 MC for all important overseas programs and general Foreign and domestic Short Wave; 535-1650 KC for regular Broadcast reception of all American and Canadian stations from coast-to-coast.

**RF on Both Bands.** An exclusive deluxe feature found only in radios selling at much higher prices. Gives you greatly increased sensitivity and a real power wallop. Reaches out farther—brings in more stations—and at the same time cuts out interfering noises. Makes possible consistently dependable reception on both bands. It's a feature you'll applaud.

**High-Gain Loop Aerial** is built right into the **Knight 7**. You don't need to connect aerial or ground for strong regular broadcast reception. Just plug in and play! You'll like this perfected 1942 convenience feature. (There's also provision for connecting outside aerial when you want better Short-Wave results or longer-distance reception.)

**RCA and Hazeltine Licensed Superhet circuit**—the finest used in any 1942 7-Tube radio—incorporates the following efficient tube types: 6SK7 as RF; 6SA7 as Osc.-Mod. (dual-purpose); 6SK7 as IF; 6SQ7 as Det.-1st Audio (dual-purpose); 6SQ7 as AVC; 6V6GT as Output; 80 as Rect. Multi-purpose tubes add the equivalent of nine tube power and efficiency. Automatic Volume Control keeps volume uniform on all programs; prevents fading. Has provision for connecting Television or Frequency Modulation adapters; same connection may be used for attaching a Record Player.

**You'll Thrill** to the tone quality of this **Knight 7**. The circuit develops an undistorted output of 3 full watts, which is flawlessly reproduced by the 6-inch Electro-Dynamic Speaker. There's a real listening treat in store for you. You'll be amazed at the way this **Knight 7** makes each program sound just like the original—full, rich, true-to-life. And don't forget the Personal Tone Control that lets you choose the bass or treble emphasis you want.

**You'll Like** the distinctive, rich lines of the **Knight 7** table model cabinet. You'll like its beautifully-matched walnut veneer woods, its charming lattice treatment of the speaker grille, and its lustrous hand-rubbed finish. You'll like its fine proportions, too; size: 19½" long, 10½" high, 10" deep.

**Knight 7 Table Model Complete.** The **Knight 7** Tube 2 Band AC is offered as described, complete with tubes in the beautiful new table model cabinet illustrated. For 105-130 volts, 50-60 cycles, AC. Shpg. wt., 24 lbs.

D-125. Value, \$44.50.

NET PRICE EACH, \$23.95.

NET PRICE, LOTS OF 3, EACH

**\$22<sup>85</sup>**



**Foreign Reception**—keep up with these stirring times—get your news direct from abroad—with the powerful 2-Band **Knight 7**!



**Built-in Loop Aerial**—perfected high-gain type—no more aerial or ground to worry about. Place the set anywhere—plug in and play!



**Tone Control**—you'll glory in golden tone! You'll like the Personal Tone Control that gives you the tone-emphasis you desire.





### **Knight 7 TUBE AUTOMATIC PHONO-RADIO**

We present the **Knight 7** in a magnificent new Automatic Phonograph-Radio Combination that is your key to a whole world of pleasure from radio or records—at an amazingly low price! **Automatic Record Changer:** Enjoy forty minutes of continuous record entertainment without leaving your favorite chair! Changer plays up to twelve 10-inch or ten 12-inch records at a single loading. Features gentle-action; includes new featherweight Crystal pickup with lifetime needle. **Powerful 2 Band Radio**—has all the features described on page 12: 2 Band Range; RF Stage; Loop Aerial; 3 Watts Output; Tone Control; Television—FM provision, etc. Incorporates a heavy-duty 10-inch Concert Dynamic Speaker for flawless reproduction of both radio and records. **Handsome Modern Console**—gracefully proportioned, beautifully finished; has hinged lid; size: 32" high, 26½" wide, 15" deep. Complete with tubes and lifetime needle. For 105-130 volts, 60 cycles A.C. Shpg. wt., 62 lbs.

**D-185.** Value, \$89.50.  
**NET EACH, \$47.50. LOTS OF 3, EACH.....**

**\$44<sup>95</sup>**

**WITH RECORDER.** Same as above but with additional mechanism built-in for making your own quality home recordings. Includes Radio, Record Changer-Recorder mechanism; Shure Crystal microphone and stand; steel record-cutting needle and six 6½" recording blanks. Shpg. wt., 78 lbs.

**D-186.** Value, \$129.50.  
**NET EACH, \$69.50. LOTS OF 3, EACH.....**

**\$65<sup>85</sup>**

### **Knight 7 TUBE CHAIRSIDE MODEL**

Here is the last word in radio comfort, beauty and convenience—the **Knight 7** in a luxurious new Chair-side Model. Placed next to easy chair or sofa, this new model makes the ideal radio for sheer comfort, convenience and beauty. It is magnificently styled and flawlessly built. All surfaces are of select walnut veneers, richly finished in a high-lustre. Speaker grille is simply but beautifully designed, with proper baffle area for best acoustical results. The Chairside cabinet measures: 16" wide, 24" high, 22" deep. The **Knight 7** 2 Band AC chassis housed in the Chairside Model has all of the fine features described on page 12, but includes special 10" Dynamic Speaker. Has 2 Band Range, Built-in Loop Aerial; RF on Both Bands; 3 Watts Output; Tone Control, AVC, F-M and Television Connection, Slide-Rule Dial, etc. A high-quality 1942 model that combines real convenience and the last word in radio luxury with the best radio performance you could ask for, at a surprisingly low price that will please you. The **Knight 7** Tube 2 Band Chairside Radio is offered complete, as illustrated and described above. For operation from 105-130 volts, 60 cycles A.C. Shpg. wt., 40 lbs. A rare value in a remarkably efficient and convenient 1942 radio receiver.

**D-180.** Value, \$57.50.  
**NET PRICE EACH, \$29.95.**

**YOUR NET PRICE, LOTS OF 3, EACH.....**

**\$28<sup>45</sup>**

### **Knight FM RADIO ADAPTER**

Permits you to receive Frequency Modulation (FM) programs, when used with an amplifier or with the audio system and speaker of your present radio set. Recommended for use only with a good quality receiver and speaker. Tunes 41.2 to 50.4 MC to cover the FM band. Brings you radio's newest miracle—static-free, high-fidelity radio reception. Tuning is accomplished by means of a large Slide-Rule Dial, aided by an Electric Tuning Eye for absolute accuracy. The FM Adapter uses eight new type tubes (including rectifier and tuning eye); has 3-gang tuning condenser and sensitive RF stage. Adapter is easy to connect; plugs right into the phono connection of your present receiver. FM programs are reproduced through the audio system and speaker of your radio. Comes complete in attractive walnut veneer cabinet; size: 12¾" long, 7¾" high, 6¾" deep. For 110-120 volts, 40-60 cycles AC. Complete with tubes. Shpg. wt., 12 lbs.

**D-136. YOUR NET PRICE.....**

**\$24<sup>95</sup>**

(Note: To receive FM, there must be a Frequency Modulation radio broadcasting station within 35 miles of you.)







## Knight 8 TUBE 2 BAND AC SUPERHET

- Push-Button Tuning
- Phono, FM Connection
- Tone Control
- 8" Dynamic Speaker
- RF On Both Bands
- Ready For Television
- Full-Acting AVC
- 3½ Watts Output

Here's a value-giving 8 Tube Radio (with rectifier and Electric Eye) you can't equal anywhere at the price! On every count, this **Knight 8** scores with the latest features—Foreign Reception—Automatic Tuning—Built-in Loop—beautiful tone, big power, and splendid appearance. It's your 8 Tube "Buy" for 1942—a value you won't duplicate anywhere at our low price!

**Foreign Reception Direct** gives you never-ending listening thrills. The **Knight 8** tunes 4.8 to 18.5 MC to bring you overseas Short Wave. Covers 535 to 1700 KC for regular Broadcast reception of all American and Canadian stations from coast-to-coast. You get all the extra enjoyment of full two band radio reception at no more than the price you'd pay elsewhere for an ordinary one-band receiver.

**Push-Button Tuning.** Tune any six of your favorite stations automatically just by touching a button. It's delightfully easy—brings your station in right on the head each time! Manual tuning is easy, too, with the big 6"x4" Airplane Dial. The Electric Eye helps tune in stations perfectly; when dark sector of eye is narrowest, you know your program is tuned in with precision for maximum enjoyment.

**Built-in Loop Aerial.** Forget about aerial and ground wires with the high-gain built-in loop aerial. Just place the set where you want it; plug in and play! There's nothing like it for wonderful convenience. (Also has outside aerial provision for S-W and long-distance tuning.)

**1942 Superhet Circuit.** Fully licensed by the famous RCA and Hazeltine laboratories, the **Knight 8** uses these newest tubes: 6SK7 as RF; 6SA7 as Osc.-Mod. (dual-purpose); 6SK7 as IF; 6SQ7 as Det.-1st Audio (dual-purpose); 6J5 as AVC; 6V6GT as Output; 80 as Rect.; 6U5 as Electric Eye.

**All These "Plus" Features.** Ready for Television and Frequency Modulation when they come—has plug-in provision for Television and F-M adapters; same connection may be used for attaching Record Player. RF Stage on both bands multiplies sensitivity amazingly—increases distance-reach, reduces noise. (It's the kind of feature you'll find only in the very finest modern receivers.) Incorporates full-acting Automatic Volume Control to prevent fading and to keep volume uniform on all programs.

**Glorious Tone Quality.** Because the power output is better than 3 watts undistorted (more than you'll get in most eight tube sets) and because a splendid new type of 8-inch Electro-Dynamic Speaker is employed, tonal reproduction is superbly realistic and full-bodied. You'll never grow tired of **Knight 8** tonal performance. And you'll like the personal Tone Control that gives you regulation from deepest bass to highest treble in accordance with your desires.

**1942 Table Model.** The choicest of walnut veneers have been selected for this beautiful table model cabinet. The design reflects an unusual beauty achieved by graceful proportions and enhanced by contrasting graining and the simple but attractive grille. The cabinet is hand-rubbed to a rich, lustrous piano finish and is designed to enhance any room in your home. Size: 21" long, 10" deep, 10½" high.

**Knight 8 Table Model Complete.** The **Knight 8** is offered as described above, complete with tubes, in beautiful table model cabinet. For 110-120 volts, 60 cycles, AC. Shpg. wt., 26 lbs.

D-126. Value, \$52.50.

NET PRICE, EACH, \$27.85.

NET PRICE, LOTS OF 3, EACH.....

**\$26<sup>50</sup>**



With Personal  
Tone Control



Built-in High Gain  
Loop Aerial



Enjoy The Thrill  
Of Powerful  
Foreign Reception



## Knight 8 TUBE CHAIRSIDE AUTOMATIC PHONO-RADIO

Just relax—and enjoy yourself! Here's the most inviting instrument of the season—the newest type of Chairside Phonograph-Radio with built-in Automatic Record Changer. You'll fall in love with this beautifully styled model that's fashioned of choice walnut veneers throughout. Radio tuning dial is conveniently placed on top surface; Automatic Changer is also accessible from top and operates with lid closed or open. You'll like the handy side shelf which will hold many of your record albums. The Chairside Model measures 17 $\frac{1}{4}$ " wide, 25 $\frac{1}{4}$ " high, 29" deep. **8 Tube Radio**—has all of the features described on page 14; includes 2 Band Range, Automatic Tuning, RF Stage, Built-in Loop, Tone Control, AVC, 3 $\frac{1}{2}$  Watts Output, 8" Dynamic Speaker, etc.

**Automatic Record Changer**—plays fourteen 10" or ten 12" records at single loading. Has newest gentle-action mechanism, and featherweight Crystal pickup with lifetime needle. The **Knight 8 Chairside Phono-Radio** is offered for complete entertainment from radio or records, with tubes and lifetime needle. For operation from 110-120 volts, 60 cycles A.C. Shpg. wt., 70 lbs.

**D-187.** Value, \$104.50.

**NET PRICE, EACH, \$57.50.**

**NET PRICE, LOTS OF 3, EACH..... \$5475**



Enjoy the luxurious entertainment of this finest of Automatic Record Changers —plays fifty minutes at a single loading!

## Knight 8 TUBE AUTOMATIC CONSOLE PHONO-RADIO

Here is the **Knight 8** in a magnificent new Phonograph-Radio Combination that will satisfy the most discriminating of music lovers. Choose your entertainment—from records or radio—then relax for continuous, luxurious enjoyment! Here's your big opportunity to own the Automatic Combination you've always wanted—at a truly low price you can now afford!

**Automatic Record Changer.** Know the luxury of dependable automatic record-changing! Enjoy fifty minutes of continuous entertainment without stirring from your chair! The new gentle-action Changer plays fourteen 10" or ten 12" records at single loading. The featherweight, low-pressure Crystal pickup is equipped with a lifetime needle. Saves record life; reduces needle scratch.

**8 Tube 2 Band Radio.** You get the same fine radio with the same deluxe features described on page 14. Has 2 Band Range; RF on Both Bands; Built-in Loop Aerial; Push-Button Tuning; Tone Control; AVC; FM, Television Connection, etc. Incorporates a 12-inch Concert Dynamic Speaker that reproduces both recorded and radio entertainment with all the vivid reality of the original performance. You get one of the finest 1942 radio receivers in this superb, modestly-priced Combination.

**Handsome Console.** The graceful proportions, lustrous finish, fine matched walnut veneers and tasteful styling of this 1942 console, will enhance any room setting. Has convenient hinged lid. Size: 36" high, 31" wide, 17" deep. Complete with tubes and lifetime needle. For 110-120 volts, 60 cycles A.C. Shpg. wt., 86 lbs.

**D-188.** Value, \$117.50.

**NET PRICE, EACH, \$67.50.**

**NET, LOTS OF 3, EACH..... \$6395**







## Knight 9 TUBE 3 BAND AC SUPERHET

- Foreign Reception
- 8" Dynamic Speaker
- Tone Control
- With Electric Eye
- With RF Stage
- Full 6 Watts Output
- Full-Acting AVC
- Big Airplane Dial

Our very finest table model radio! And here's why: you get full 3-Band Reception (Foreign Tuning)—built-in Loop Aerial—Push-Button Tuning—6 Watts Push-Pull Output—8-inch Electro-Dynamic Speaker—a luxurious new table model cabinet design—everything that belongs in a Deluxe radio! And the tone quality will win applause from the most critical listeners! You'll be quick to recognize this outstanding table model value. Judge it for yourself on our 15 Day Trial Money-Back Guarantee—see page 11—and be sure that you're getting the most in radio for your money.

**Get Foreign Broadcasts Direct** for new listening thrills. The **Knight 9** (with rectifier and Electric Eye) tunes 3 full bands covering everything of importance that's broadcast. Tunes 1.7 to 6 MC and 5.6 to 19 MC for thrilling Short Wave reception, including Foreign and domestic programs, amateur, aviation and police signals. Covers 540-1650 KC for powerful coast-to-coast American and Canadian standard Broadcast programs. You're master of the air-waves with this powerful receiver.

**Just Push a Button** to tune your favorite stations quickly and accurately! Manual tuning is easy, too, with the big 6"x4" Airplane Dial that's clearly calibrated on each band. Electric Eye is incorporated for precision tuning of every program to make your listening pleasure complete.

**Forget Aerial and Ground** with the new high-gain built-in Loop Aerial! Just place the **Knight 9** wherever you desire; plug it in and play! (Also has special outside aerial provision for more powerful Short-Wave results and for longer-distance tuning.)

**RCA and Hazeltine Licensed** 1942 Superhet circuit uses the following tubes: 6SK7 as RF; 6SA7 as Osc.-Mod. (dual-purpose); 6SK7 as IF; 6SQ7 as Det.-AVC-1st Audio (triple-purpose); 6SQ7 as Inverter; 2-6K6GT as Push-Pull Output; 80 as Rect.; 6U5 as Electric Eye. Note the multi-purpose tubes—they mean extra power and efficiency.

**Check All These:** The **Knight 9** has plug-in provision for Television and FM adapter, as well as phono connection. RF Stage multiplies sensitivity—increases distance-reach, reduces noise. Automatic Volume Control prevents fading, keeps volume uniform on all programs. You'll find every useful, worthwhile feature in this quality receiver to insure your listening enjoyment.

**Concert-Hall Tone** is the best way to describe the tonal performance of the **Knight 9**. The mighty push-pull 6 watts output is translated by a heavy-duty 8-inch Dynamic Speaker into superbly realistic tone that exactly mirrors the original performance. You'll like the Personal Tone Control, too, that enables you to emphasize bass or treble as you yourself desire. There's no finer tone quality possible in a table model receiver than that which is consistently and beautifully developed by the **Knight 9**.

**You'll Be Proud** of the appearance of the **Knight 9** in your home. Its 1942 styling is carried out luxuriously in choice walnut veneers with contrasting striped trims. The simple grille treatment is a delightful touch. The lustrous hand-rubbed finish is characteristic only of the very finest cabinetry, worthy of the quality receiver it houses. Size of cabinet: 22 $\frac{3}{4}$ " long, 10 $\frac{1}{2}$ " deep, 11 $\frac{1}{4}$ " high.

The **Knight 9** is offered as described above, complete with tubes in beautiful table model cabinet. For 110-120 volts, 50-60 cycles AC. Shpg. wt., 32 lbs.

D-127. Value, \$69.95.

NET PRICE EACH, \$33.85.

NET PRICE, LOTS OF 3, EACH

**\$31<sup>95</sup>**



World-Wide Range



Push-Button Tuning



Built-In Loop Aerial



Personal Tone Control





## 9 TUBE CONSOLE AUTOMATIC PHONO-RADIO

Here's the last word in Deluxe Complete Home Entertainment, yet the price is modest for the quality you get. Enjoy radio or records beautifully reproduced with all the living reality of the broadcast and recording studio. Enjoy the luxury of the newest **Automatic Record Changer** that gives you more than fifty minutes of uninterrupted playing (takes fourteen 10" or ten 12" records at a single loading); features gentle-action and the new featherweight Crystal pickup with lifetime needle. **9 Tube Radio** is same as described on page 16—has 3 Band Range, Push-Button Tuning, Built-in Aerial, Tone Control, 6 Watts Output, and special **12-inch Concert Dynamic Speaker**. The gorgeous walnut console is splendidly proportioned and beautifully finished. Has hinged lid. Size: 36" high, 17" deep, 31" wide. The **Knight 9 Console Phono-Radio** comes complete as described, with Radio, Record Changer, tubes and lifetime needle. For operation from 110 volts, 60 cycles AC. Shpg. wt., 89 lbs.

D-189. Value, \$139.50.

NET EACH, \$74.50. NET, LOTS OF 3, EACH . . .

**\$7085**

**WITH RECORDER.** Same as above, but has additional mechanism built in for making your own home recordings. Includes Radio, Record-Changer-Recorder mechanism; Shure Crystal microphone and stand; steel record-cutting needle and six 6½-inch recording blanks. For 110 volts, 60 cycles AC. Shpg. wt., 94 lbs.

D-190. Value, \$174.50.

NET EACH, \$94.50. LOTS OF 3, EACH . . . . .

**\$8950**

## 9 TUBE CHAIRSIDE PHONO-RADIO

We're proud of this outstanding value in a luxurious new Chairside Model that combines the Deluxe 1942 **Knight 9 Tube Radio** with the latest type Automatic Record Changer Phonograph. Both radio and phonograph controls are easily accessible on the top surface of the handsome chairside cabinet which measures just 25¼" high, 17¼" wide and 27" deep. Fashioned of choice walnut veneers, it has a built-in shelf for storing your record albums, and an attractive speaker grille opening. The **Automatic Record Changer** is of the new gentle-action type; has featherweight Crystal pickup with lifetime needle. Plays fourteen 10" or ten 12" records at a single loading for more than fifty minutes of uninterrupted entertainment. **9 Tube Radio** has all of the fine features described on page 16—3 Band Range, Push-Button Tuning, Built-in Aerial, 6 Watts Output, 8" Dynamic Speaker, etc. Here you have the luxurious convenience of chairside design with the finest achievements in modestly-priced radio and automatic phonograph performance. The **Knight Chairside Phono-Radio** comes complete with 9 Tube Radio, Automatic Changer and lifetime needle, as illustrated. For 110-120 volts, 60 cycles AC. Shpg. wt., 73 lbs.

D-191. Value, \$117.50.

NET EACH, \$62.50.

NET, LOTS OF 3, EACH . . . . .

**\$5925**

## Knight 9 TUBE RADIO CHASSIS

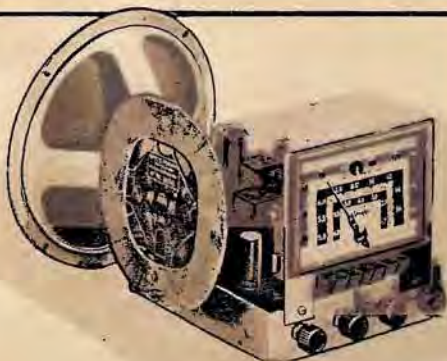
The **Knight 9 Tube 3 Band Radio** is also available in chassis form only, as illustrated at right. Makes a wonderful 1942 replacement for obsolete radios. Has all of the remarkable features described on page 16: World-wide 3-Band Reception; built-in Loop Aerial; Push-Button Tuning; Television, Phono and F-M Connection; Tone Control; AVC; 6 Watts Push-Pull Output; Airplane Dial, Electric Eye, RF Stage, etc. Size: 8½" wide x 9" deep x 8" high. Comes complete with tubes, special heavy-duty 12-inch Dynamic Speaker, escutcheon and knobs. A remarkable value in a fine replacement chassis—your opportunity to own a superb 1942 built at an unusually low price! Ideal for installation in custom-built cabinets and furniture, or for cabinets now housing an obsolete radio. Includes instructions and everything necessary for easy, proper installation. For operation from 110-120 volts, 50-60 cycles, A.C. Shpg. wt., 25 lbs.

D-149. Value, \$47.50.

NET PRICE, EACH, \$25.75.

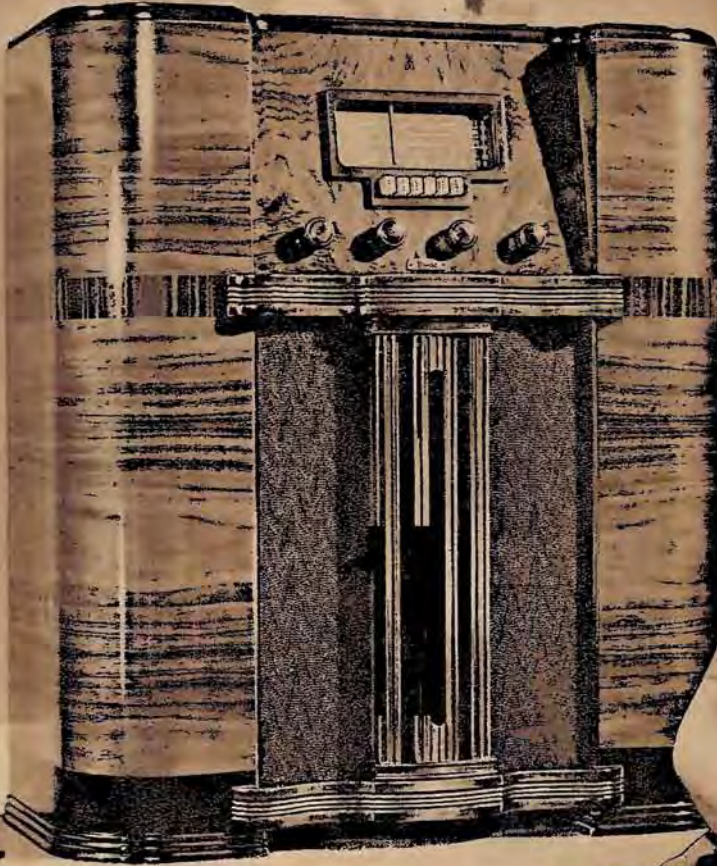
NET PRICE, LOTS OF 3, EACH . . . . .

**\$2445**





# Knight's INEST CONSOLE MODEL RADIO...



## Knight 12 TUBE 5 BAND CHASSIS

To meet the widespread demand for a custom-type replacement radio chassis, the **Knight 12** is also made available in deluxe chassis form, with matching Concert-Dynamic Speaker, as illustrated at left. Makes an ideal radio replacement for an obsolete receiver in a fine cabinet that you are reluctant to discard. Interior decorators and architects will find the **Knight 12** chassis well-suited to custom-installation requirements, and easy to install in concealed locations, in custom furniture, etc.

**Custom Quality.** The **Knight 12** chassis has all of the remarkable features described on page 19: 5-Band Reception; S-p-r-e-a-d Band Tuning; Loop Aerial; Push-Button Tuning; Giant Slide-Rule Dial; RF on all Bands; 10 Watts undistorted Output; Automatic Volume Expansion; Bass Compensation; Tone Control; Automatic Volume Control; 3 Gang Condenser; Television, FM, Phono Connection; 12-inch Concert Electro-Dynamic Speaker, etc. The chassis is ruggedly constructed, reflecting superb craftsmanship in every radio and mechanical detail; measures 12 $\frac{3}{8}$ " long, 8 $\frac{1}{2}$ " deep, 8 $\frac{1}{2}$ " high.

**Chassis Complete.** The **Knight 12** Tube 5 Band Chassis is supplied complete with tubes, 12-inch Dynamic Speaker, built-in loop aerial, dial, escutcheons, push-buttons, and knobs. For 110-120 volts, 50-60 cycles AC. Shpg. wt., 32 lbs.

D-150. Value, \$74.50.

NET PRICE EACH, \$39.95.

NET PRICE, LOTS OF 3, EACH.....

**\$37<sup>95</sup>**





# BEAUTIFUL... SUPER-POWERFUL...

## Knight 12 TUBE 5-BAND AC SUPERHET

- World-Wide Range
- Built-in Loop Aerial
- Volume Expander
- Bass Compensation
- Push-Button Tuning
- RF On All Bands
- With Tone Control
- Big Slide-Rule Dial
- Ready for Television, FM
- 12" Dynamic Speaker
- Giant 10 Watts Output
- Spread-Band Tuning

Here is our finest **Knight Radio** for 1942! By any standard of quality, by any measurement of value, this **Knight 12** (with rectifier) is radio at its deluxe best—priced to give you the most for your money. Here's cabinet beauty in the custom class! Here's the super-power and coverage to bring you the programs of all the world! Here's unsurpassed magnificence of tone! And here's every worthwhile and important feature for 1942!

**Tune All the World!** Five full tuning bands give you complete coverage of all the world's important radio stations. Covers the following ranges: (1) Regular American and Canadian Broadcast band, 540-1712 KC; (2) domestic Short-Wave, Police, Amateur, Ships and Airplane band, 3.0-9.0 MC; (3) general Short-Wave coverage, 8.5-23.5 MC; (4) S-p-r-e-a-d band for night-time European and South American reception, 9.4-9.8 MC; (5) S-p-r-e-a-d band for afternoon European and South American reception, 11.0-12 MC.

**S-p-r-e-a-d Band Tuning.** A wonderful tuning feature that provides twenty times more space between dial calibrations, giving important Foreign bands a wide tuning range. S-p-r-e-a-d-s out the tuning area on the dial so you can log foreign stations just like locals.

**Push-Button Tuning.** Tune any six of your favorite stations automatically—just by pushing a button. It's easy to set; works accurately. You'll also like the convenience of the manually-tuned giant  $7\frac{1}{2} \times 3\frac{1}{2}$ " Slide-Rule Dial that shows all the tuning ranges clearly.

**Built-in Loop Aerial** of the newest design does away with outside aerial and ground wires. Works on both Broadcast and Short Wave. Loop can be directionally "tuned" to each station for perfect reception by rotating to position where reception is strongest. (Connection is also provided for external aerial for stronger Short-Wave and longer-distance reception.)

**1942 Super Circuit.** RCA and Hazeltine licensed, with the latest tube types teamed up powerfully as follows: 6SK7 as TRF; 6SA7 as 1st Det.; 6J5 as Osc.; 6SK7 as 1st IF; 6SK7 as 2nd IF; 6SQ7 as 2nd Det.; 6SQ7 as Driver; 2-6V6GT as Push-Pull Power Output; 6SQ7 as AVE; 6SK7 as AVE; 5U4 as Rect.

**Every 1942 Deluxe Feature** is built into the **Knight 12**. RF on all bands means enormously increased sensitivity and reduced background noise. Double-tuned IF's assure consistently dependable reception on all five bands. (These are custom-built set features.) Automatic Volume Control prevents fading, keeps volume uniform on all programs; rubber-floated 3-gang tuning condenser gives sharper selectivity. And the **Knight 12** is ready for whatever tomorrow will bring. Has provision for connecting Television or FM Adapter. Same provision also accommodates Record Player attachment.

**Concert-Hall Tone**, glorious in its faithful quality, capturing every overtone, every variation of the harmonic register—is apparent always in **Knight 12** reception. Develops an amazing undistorted output of 10 full watts. This giant volume is beautifully handled by the 12-inch Concert Electro-Dynamic Speaker which is especially designed for the most faithful reproduction. For added enjoyment there is Personal Tone Control.

**Automatic Volume Expansion**, (AVE) and Automatic Bass Compensation (ABC) are sensational built-in features of the **Knight 12** circuit. AVE automatically restores the proper contrast between loud and soft passages on all musical programs (this contrast is partially lost in transmission). ABC automatically emphasizes the bass notes on low volume and subdues them for proper contrast on loud volume. AVE and ABC are important refinements, working automatically in the receiver circuit, to reproduce tone with a reality that has never before been attainable at such a low price.

**Magnificent Console.** The **Knight 12** is handsomely presented in a new console that is truly a furniture masterpiece. Selected walnut veneers are featured; front-face is softly curved at ends; instrument panel is pleasingly slanted; the speaker grille is attractively styled and forms a perfect baffle area. The entire console is richly finished and beautifully hand-rubbed. Measures  $36\frac{1}{4}$ " high,  $31\frac{1}{4}$ " wide,  $13\frac{1}{4}$ " deep.

The **Knight 12** Tube 5 Band AC Superhet is offered complete with tubes in the console illustrated at the left. For operation on 110-120 volts, 50-60 cycles AC. Shpg. wt., 82 lbs.

D-181. Value, \$117.50.

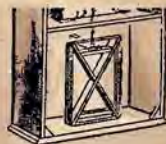
NET PRICE EACH, \$62.50.

YOUR PRICE, LOTS OF 3, EACH

**\$59<sup>95</sup>**



Tunes All The World  
On Five Full Bands



With The New Built-In  
Reliable Loop Aerial



S-p-r-e-a-d Bands for  
Easy Foreign Tuning



Push-Button Tuning  
For Favorite Stations



12" Dynamic Speaker  
AVE and ABC Control

## Knight 14 TUBE FM-AM CONSOLE

The newest and latest in radio—a deluxe 4 Band Console model that tunes not only all Standard broadcasts but the sensational new "three-dimensional" high-fidelity Frequency Modulation programs as well! It's tomorrow's radio, here for you today!

**4 Full Bands.** The **Knight 14** (with rectifier and Electric Eye) tunes the new "stateless" Frequency Modulation broadcasts on 41 to 50 MC. Tunes all standard Broadcast American stations on 540 to 1720 KC. Covers all the important Foreign and domestic Short-Wave channels on 2.7 to 7.5 and 7 to 22 MC.

**Mighty 14 Tube Circuit.** Licensed by RCA, Hazeltine and Armstrong—incorporates every new feature and advantage. Uses: 2-6U6GT, 6SJ5, 2-6H6, 6SK7, 6SA7, 2-6AC7, 6SU7, 2-6SF5, 6U5, 5Y3G. Includes: built-in loop aerial for Broadcast, Short-Wave and FM reception; push-button tuning for any 6 favorite stations; giant Slide-Rule Dial; RF Stage on Broadcast band; Double-tuned IF's; 2 Tone Controls—one for bass and one for treble; AVC; 3 Gang Condenser; Phono and Television attachment provision; provision for outside antenna for stronger reception, etc.

**High-Fidelity!** Power output of the special Inverse-Feedback circuit is more than seven watts undistorted. It is reproduced as high-fidelity tone by a special 12-inch Hi-Fi Dynamic Speaker with a frequency response of up to 10,000 CPS. You'll thrill to the vivid reality of regular Broadcast programs; you'll never cease to marvel at the noise-free "three-dimensional" quality of FM tone! The unique Dual Tone Control permits accentuating high or low tones as desired. One control actually boosts the bass on low volume, the other controls the upper register. Mixing the two controls obtains the exact tonal response suited to the program you are tuning.

The **Knight 14** FM-AM Receiver is offered in beautiful Console as illustrated (same as 12 Tube Console—see full description above) complete with tubes. For 105-125 volts, 50-60 cycles AC. Shpg. wt., 87 lbs.

D-182. Value, \$157.50.

NET EACH, \$84.50. NET, LOTS OF 3, EACH

**\$79<sup>95</sup>**

(Note: To receive FM programs there must be an FM station within 35 miles of you.)





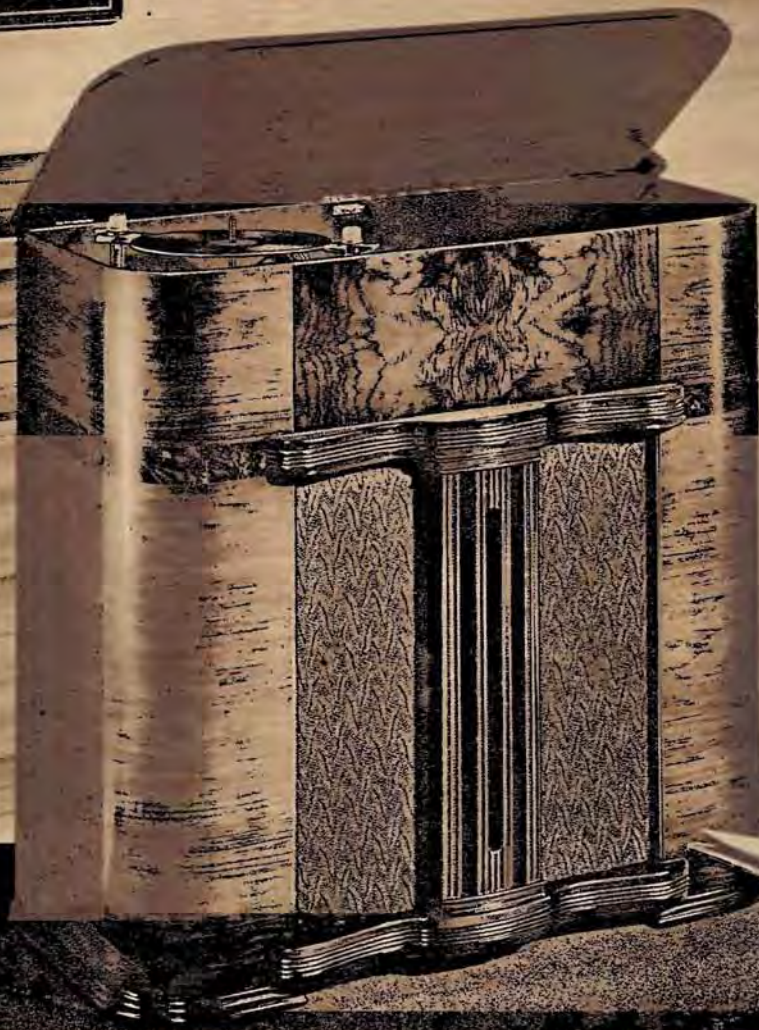
*Enjoy* RADIO  
OR RECORDS!



## LATEST AUTOMATIC CHANGER

Know the luxury of record entertainment played by the finest of new Automatic Changers. Gentle-acting, silent, dependable, it plays fourteen 10" or ten 12" records at a single loading—for more than fifty minutes of continuous, supremely enjoyable entertainment from your favorite records . . . !

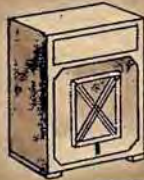
You get higher-fidelity reproduction, less noise, longer record life, with the new low-pressure Crystal pickup that's equipped with the finest type of lifetime playback needle.



Five Band  
World-Wide  
Reception



Push-Button  
Tuning of Your  
Favorite Stations



Latest Built-in  
Rotatable  
Loop Aerial



Band S-p-r-e-a-d  
Tuning for Easy  
Short Wave Logging



12" Dynamic Speaker  
For Wide-Fidelity  
Reproduction



HERE'S THE DELUXE COMBINATION OF  
THIS OR ANY OTHER SEASON!

## Knight 12 TUBE AUTOMATIC PHONO-RADIO

- 5 Full Wave Bands
- RF On All Bands
- 12" Dynamic Speaker
- Push-Button Tuning
- 10 Watts Output
- With Tone Control
- Built-in Loop Aerial
- Volume Expander
- Bass Compensation

This—the finest 12 tube instrument of them all—is your key to the whole wide world of musical pleasures. Name your entertainment! Radio? Super-powerful as never before, with the thrill of world-wide 5 band reception. Records? As you have never dreamed they could be played—luxuriously, effortlessly—by an Automatic Record Changer that is more gentle than human hands. And when this **Knight** plays, you hear both records and broadcasts reproduced with stirring realism, with a fidelity of tone that seems to bring the original rendition right into your home. All this is yours... all this and the beauty of a distinguished console you'll be proud to own!

**Thrilling Foreign Reception.** Five full wave-bands—packed with entertainment and excitement—are at your command in the **Knight 12** (including rectifier). The mighty Superhet circuit of the **Knight 12** s-p-r-e-a-d-s out the important Short-Wave bands for the most dependable, easiest-to-tune reception you've ever experienced. Tunes 3.0-9.0 MC for domestic Short-Wave, police, amateur, ship and aviation signals; 8.5-23.5 MC for general Foreign Short-Wave; 9.4-9.8 MC Spread band for night-time European and South American reception; 11.0-12.0 MC Spread band for afternoon European and South American reception. Tunes coast-to-coast American and Canadian standard Broadcast reception from 540 to 1720 KC. Here's complete mastery of everything important that's broadcast in the world of radio today—yours to enjoy now and through the years.

**Automatic Push-Button Tuning.** Tune any six of your favorite Broadcast stations just by touching a button. Operates quickly—unerringly—every time. In addition, there's a beautiful big  $7\frac{1}{2} \times 3\frac{1}{2}$ " Slide-Rule Dial for easy manual tuning—shows each band clearly. There's no greater tuning ease and convenience in all radio!

**Radio's Finest Superhet.** Powerful, dependable, deluxe 1942—that's the RCA and Hazeltine licensed Superhet circuit used in the **Knight 12**. Uses the latest type tubes as follows: 6SK7 as RF; 6SA7 as 1st Det.; 6J5 as Osc.; 6SK7 as 1st IF; 6SK7 as 2nd IF; 6SQ7 as 2nd Det.; 6SQ7 as Driver; 2-6V6GT as Push-Pull Power Output; 6SQ7 as AVE; 6SK7 as AVE; 5U4 as Rect. Here's one of radio's finest and most powerful circuits.

**All These Features:** New high-gain built-in Loop Aerial that can be "tuned" by rotation for best results; RF on all bands for enormously increased sensitivity and reduced background noise; Double-tuned IF's for consistently dependable reception on all five bands; Automatic Volume Control to prevent fading and to keep volume uniform; 3 Gang Tuning Condenser for sharpest selectivity; provision for attaching Television or FM adapter.

**Deluxe Record Changer** plays fourteen 10-inch or ten 12-inch records at a single loading. Relax and enjoy more than fifty minutes of uninterrupted entertainment! Any record may be rejected by pressing a button; last record repeats until phono is shut off. Has smooth acting precision-built motor; new featherweight Crystal pickup with lifetime needle gives maximum record life and finest tone quality.

**Every Tonal Shading** is mirrored by the **Knight 12**—every note, every subtle nuance from radio or records, is re-created for you with all the vital realism of the studio performance. This superb tonal performance is made possible by a special 12-inch Electro-Dynamic Speaker which handles the giant 10 watts output of the circuit with amazing fidelity. Tone Control is included so that you can emphasize bass or treble at will. AVE and ABC (see below) provide properly balanced tone on every program.

**Automatic Volume Expansion (AVE)**, and Automatic Bass Compensation (ABC)—broadcast studio equipment features—are built into the **Knight 12**. AVE automatically restores the proper contrast between loud and soft passages on both radio and records. ABC automatically emphasizes the bass notes on low volume and subdues them for proper balance on loud volume. These features work automatically to achieve high-fidelity reproduction of the original performance.

**Gorgeous Console Cabinet.** A beautiful creation of the most skilled design and careful craftsmanship. Superbly built of finest walnut veneers with convenient hinged lid, handsomely shaped grille, and smoothly rounded end panels. Rubbed to a gleaming piano finish. Measures: 36" high, 36" wide,  $17\frac{1}{2}$ " deep. It is a console for lovers of good furniture—an instrument for lovers of fine music.

**Combination Complete.** The **Knight 12** is supplied complete with Automatic Record Changer and life time needle, built-in Loop Aerial, 12-inch Dynamic Speaker and tubes. For operation from 110-120 volts, 60 cycles AC. Shpg. wt., 114 lbs.

D-195. Value, \$165.00.

NET PRICE EACH, \$92.50.

NET PRICE, LOTS OF 3, EACH

**\$87<sup>75</sup>**

## Knight 12 TUBE COMBINATION WITH RECORDER

The **Knight 12** as described above is also available with Home Recorder mechanism added for making your own quality records. You can have a world of extra entertainment making records of music and voices over the microphone, recording programs off-the-air, using the mike for Home Broadcasting. Includes: **Knight 12** Tube AC Radio complete; Automatic Record Changer-Recorder mechanism; Shure Crystal microphone, stand and cord; steel record-cutting needle, lifetime playback needle, and six  $3\frac{1}{2}$ -inch recording blanks. With complete instructions. For operation from 110-120 volts, 60 cycles AC. Shpg. wt., 119 lbs.

D-196. Value, \$200.00.

NET PRICE EACH, \$112.50. NET, LOTS OF 3, EACH

**\$106<sup>50</sup>**





THE SUPREME ACHIEVEMENT IN

*Custom-Style*  
INSTRUMENTS

Here is **Knight's** supreme achievement in musical performance and breath-taking beauty . . . instruments to bring inspiration and infinite enjoyment to those who appreciate the finest things in life . . .



HIGH-FIDELITY

Know the keen enjoyment of both radio and records reproduced with a stirring sense of tonal reality that is made possible only by high-fidelity components, matched flawlessly to bring you the purest, finest tone you've ever heard! Enjoy High Fidelity at its finest in these Deluxe Instruments!



**Knight 15 TUBE 3 BAND FM-AM RADIO WITH**

- Tunes "Staticless" FM**
- High-Fidelity Amplifier**
- DeLuxe Phono Changer**
- Tunes Standard Broadcast**
- 12" High-Fidelity Speaker**
- 10 Watts Power Output**

Here are the finest Knight instruments ever built—the custom crafted, precision-made **Knight 15** (with rectifier and Electric Eye)—yours to enjoy for a lifetime! Here is all of the elegance of the finest period furniture; here is not only powerful High-Fidelity reception of all standard Broadcast and Short Wave programs, not only magnificent Automatic Changer Phonograph entertainment—but brilliant reception of the sensational new Frequency Modulation programs as well! Frequency Modulation (FM) is the newest marvel of radio—a thrilling new kind of high-fidelity broadcasting that eliminates static, that's miraculously clear and lifelike. FM stations are springing up all over the country; soon, many sections will enjoy this "staticless" high-fidelity reception. Buy now for the future—invest in the most complete and luxurious Home Entertainment instrument you have ever seen or heard.

**Regular Broadcast and New FM** ranges are covered by the Custom **Knight 15**. Tunes 540 to 1650 KC for standard Broadcast (AM)

reception. Covers 4.8 to 17 MC for important Foreign Short Wave Broadcasts, including the new 60 meter South American band. Frequency modulation is tuned on 40 to 50 MC. The big Slide-Rule Dial shows each range clearly. Electric Eye is incorporated for precision tuning on all bands. Push-button automatic tuning is provided for any six favorite stations. Incorporates new high-gain built-in Loop Aerial which operates effectively on each band.

**High-Fidelity Tuner.** The **Knight 15** incorporates two separate chassis—the Tuner and the Amplifier. The Superhet Tuner is of high-fidelity design, fully licensed under RCA, Hazeltine, and Armstrong patents. Uses the following tubes: 6SG7 as RF; 6AB7 as Mod.; 6J5 as OSC.; 2-6SG7 as IF's; 2-6SL7 as Limiters; 6HG as Discriminator; 2-6SR7 as 1st and 2nd Audio; 6SR7 as Inverter; 6U5 as Electric Tuning Eye. RF Stage on all bands increases sensitivity enormously for powerful, noise-free reception. Full Automatic Volume Control keeps volume uniform on all programs.



TUNE FM AND AM

It is fitting that the **Knight 15**—the Radio of Tomorrow—should tune not only standard Broadcast and Foreign and domestic Short Wave, but the marvelous new Frequency Modulation (FM) programs as well. Now you can have the thrill of this new type of high-fidelity, staticless reception!



AUTOMATIC CHANGER

Enjoy the luxurious pleasure of matchless record entertainment without interruption! Know the delightful convenience of the superb Garrard Automatic Record Mixer-Changer!

**"The Rokeby" FM-AM PHONO-RADIO COMBINATION**

The Custom **Knight 15** is available in the "Rokeby" Chippendale Console model as illustrated directly above. Scrupulously faithful to authentic Chippendale details, the "Rokeby" is custom crafted of choicely grained mahogany veneers, in a rich panel-design effect, with handsome hardware trims and lovely beaded overlays. The cabinet finish is characteristic of the very finest furniture money can buy. Record Changer and Radio Dial are easily accessible behind the upper panels; space for record album storage and speaker grille opening are behind the two lower panels. Cabinet size: 40" wide, 38" high, 18" deep. The "Rokeby" comes complete with 15 Tube 3 Band FM-AM Radio, Garrard RC-30 Record Changer, 12" Speaker and tubes. For operation from 105-125 volts, 60 cycles AC. Shpg. wt., 175 lbs.

**D-199, Value \$495.00**

**YOUR NET PRICE, EACH** .....

**\$275<sup>00</sup>**



# HIGH-FIDELITY RADIO-PHONOGRAPHS



*The Kensington*



## HAND-CRAFTED

Here is cabinetry of authentic design, with authoritative craftsmanship in every detail—even in the richly antiqued hardware. Each cabinet is fashioned of selected 1" woodst throughout, to insure finest acoustical results. The richly figured mahogany veneer surfaces are painstakingly hand-rubbed to a rich, exquisitely lustrous finish.



## HIGH-FIDELITY AUTOMATIC PHONOGRAPH

- Push-Button Tuning**
- Custom Cabinets**
- RF On All Bands**
- Dual Tone Controls**
- Built-in Loop Aerial**
- Full-Action AVC**

**High-Fidelity Amplifier.** The custom-built audio amplifier of the **Knight 15** is designed for high-fidelity reproduction of both radio and record entertainment. Uses 2-6K6GT as mighty push-pull Output Stage; 5Z3 as Rect. Giant power output is 10 full watts, velvety-clear and undistorted (15 watts maximum). The use of Dual Tone Controls, one for bass and one for treble, provides perfect acoustic balance.

**Deluxe Garrard RC-30 Mixer-Changer.** This world-famous Automatic Record Changer is yet another indication of the custom-quality built into the **Knight 15**. Plays eight 10" and 12" records in any combination with no adjustment necessary; gives you the luxurious thrill of uninterrupted entertainment. Has featherweight Crystal pickup (needle pressure only one ounce) and lifetime needle. Frequency response is 30 to 10,000 CPS for true high-fidelity reproduction.

**The Glory of Knight Tone** as you hear it over these masterpiece instruments, transports you into the broadcast studio, into the record-

ing studio! Each note is vibrant with reality, each tonal shading is translated with thrilling fidelity. Here are the instruments that satisfy the most sensitive and critical ear! It cannot be otherwise, for here is custom quality, here are high-fidelity components—Hi-Fi Tuner and Amplifier—coupled with a new 12-inch High-Fidelity Dynamic Speaker with specially treated center cone—for a frequency response up to 12,000 CPS! Yes! you'll thrill to the clear tone of standard Broadcast, the staticless purity of FM, the full-throated beauty of your favorite recordings! Yours will be the enjoyment of the ultimate in Phono-Radio tone quality when you possess the **Knight 15!**

**Custom-Built Cabinets.** The **Knight 15** is available in a choice of two superbly-styled mahogany Chippendale cabinets (detailed descriptions below). They are authentic in their period design, hand-crafted in every detail, and fashioned of choice woods—to do full justice to the fine instruments they house—and to bring an enduring beauty into your home.



## DELUXE DUAL CHASSIS

Quality-built throughout, the heart of the **Knight 15** is the Dual Chassis mechanism for both radio and record entertainment. This view shows the separate High-Fidelity Tuner and Amplifier chassis, as well as the High-Fidelity 12-inch Concert Dynamic Speaker. Here is truly one of the very fine expressions of custom radio quality. Here is built-for-a-lifetime dependability, quality, and performance!

## "The Kensington" FM-AM PHONO-RADIO COMBINATION

Here is the magnificent **Knight 15** in the "Kensington" Chippendale Chest model (shown directly above). Authentic in its period design, it features choice swirl-grained mahogany veneers throughout, exquisitely hand-finished. Beautifully proportioned design is characteristic of finest Eighteenth Century cabinetry—with custom quality in every detail. Record Changer is mounted in paneled drawer that slides forward on roller bearings; Radio Dial is accessible behind upper right-hand panel. Generous record album space is provided behind hinged lower left-hand panel; speaker opening is behind hinged lower right-hand panel. Cabinet size: 40" wide, 38" high, 18" deep. The "Kensington" is supplied complete with 15 Tube 3 Band FM-AM Radio, Garrard RC-30 Record Changer, 12" Speaker and tubes. For 105-125 volts, 60 cycles AC. Shpg. wt., 175lbs.

**D-198.** Value, \$495.00.

**YOUR NET PRICE, EACH.....**

**\$27500**



**COMPLETE HOME ENTERTAINMENT**

**HIGH-FIDELITY  
FM-AM AUTOMATIC  
PHONO-RADIO**



Enjoy an uninterrupted program of recorded music—the fine Automatic Record Changer of the **Knight 14** does all the work for you. There's nothing like it for playing convenience.



The giant 7" x 2½" Slide-Rule dial has separate, clearly legible scales for easy tuning of AM, FM, and Short Wave stations. There's Push-Button Tuning, too, for extra ease and convenience.



Enjoy high-fidelity tone from the special Hi-Fi FM Dynamic speaker with remarkable wide-range response up to 10,000 CPS. Know the luxury of superb tonal quality!



Built-in loop aerial works on all bands for splendid reception without trailing antenna and ground wires. Plug in and play! It's still another "extra value" 1942 feature.

## **Knight 14 TUBE FM-AM PHONO-RADIO**

Those who are satisfied only with the best will recognize at once the superlative achievement represented by this distinguished new **Knight** musical instrument. A Radio-Phonograph masterpiece with Automatic Record Changer . . . a High-Fidelity FM receiver . . . a powerful 14-tube All-Wave AM Superhet Radio . . . a magnificent, richly-designed console cabinet. You've seldom seen a comparable instrument at any price, and now **ALLIED** brings it to you in all its glory at a price that represents a very modest investment for years of undiminished pleasure.

**FM—The New Radio Miracle.** Radio of the future is here now with Frequency Modulation as brought to you by the **Knight 14**. Static and noise interference are gone forever. Frequency Modulation programs are tuned on the 41-50 MC wave-band and are reproduced with complete high-fidelity by the magnificent audio system built into the **Knight 14**.

**Foreign Reception.** In addition to FM, the **Knight 14** tunes three full bands: 2.7-7.5 and 7.0-22 MC for Short Wave foreign and domestic programs, 540-1720 KC for regular standard Broadcast (AM) programs. The giant Slide-Rule dial and Electric Eye assure accurate tuning.

**Automatic Push-Button Tuning.** At the touch of a button you can tune any of six of your favorite Broadcast stations. Buttons are quickly and easily adjusted; once set, they require no further attention.

**RF on Broadcast Band.** The secret of ultra-sensitive radio reception. Gives you unchallenged mastery of every point on the dial with extra sensitivity and power.

**High-Fidelity Circuit.** The Armstrong licensed FM circuit and RCA licensed Superhet circuit of the **Knight 14** (with rectifier and tuning eye) have been engineered for true high-fidelity. Fourteen newest tube types are employed: 6SJ5, 2-6U6GT, 6SK7, 6SA7, 2-6AC7, 6SJ7, 2-6H6, 2-6SF5, 6U5, 5Y3G. The audio circuit delivers full 6 watts undistorted Push-Pull output (10 watts max.) "Custom set" circuit features include: Inverse Feedback, 3-gang heavy-duty condenser, Automatic Volume Control, dual Tone Control, built-in loop aerial operating on all bands, Television connection, etc.

**Finest Automatic-Changing Phonograph.** For recorded entertainment at its very best, the **Knight 14** includes deluxe record-playing equipment. The automatic changer accommodates fourteen 10" or ten 12" records for fifty minutes of uninterrupted music. The new lightweight Crystal pickup assures longer record life, with a wide-range response.

**Brilliant Tone Quality.** The splendid new 12" High-Fidelity FM Dynamic speaker with wide-range response up to 10,000 CPS, the mighty Push-Pull Power Output, and such features as dual Tone Control (separate control of bass and treble registers), Bass Compensation, and Bass Boost, give you an acoustically correct tonal balance for every program you must hear for yourself to believe.

**Luxurious Console.** Tastefully designed and carefully executed in beautifully-grained walnut veneers. Its graceful proportions and lustrous finish, its quiet but impressive dignity, fittingly complement the radio masterpiece it houses. Size: 36" wide, 36" high, 17½" deep.

**Knight 14 Tube Combination Complete** with tubes. In cabinet shown above. For 105-125 volts, 60 cycles AC. Shpg. wt., 119 lbs.

**D-197.** Value, \$197.50. **NET PRICE, EACH, \$117.50.**  
**NET PRICE, LOTS OF 3, EACH** .....

**\$112.50**



## Knight 8 TUBE PHONO-RADIO WITH RECORDER

Your **Complete Home Entertainer**—a wonderful new instrument bringing everything you could ask for in radio and recording! Combines (1) A powerful Superhet radio for splendid reception; (2) A superb Home Recorder to make your own records; (3) A high-grade Electric Phonograph to play all recordings; (4) A Home Broadcaster—complete with a fine quality Crystal Microphone; (5) New beauty of styling in a handsome table cabinet.

**Make Records at Home!** It's simplicity itself. Just set the recording head on a blank disc (up to 10" size) and you're ready to cut your own records. Features quality Magnetic recording head, heavy-duty turntable, rugged rim-drive motor. Electric Eye indicator monitors recording level. The Crystal Microphone enables you to record music or voice with excellent fidelity. You can also record favorite programs right off-the-air.

**Great Superhet Receiver.** Tunes 550-1650 KC. for all standard Broadcast programs. Features: mighty five watts undistorted Push-Pull output (7 watts max.)—more than ample power for every need; built-in loop aerial; 6" x 3½" Slide-Rule dial; Automatic Volume Control; Electric Tuning Eye; new 6" Electro-Dynamic speaker for rich, full-bodied tone. RCA and Hazeltine licensed Superhet circuit uses latest tubes: 12SA7GT, 12SK7GT, 2—12SQ7GT, 2—35L6GT, 35Z6, 6U5.

**Fine Record Player.** For delightful reproduction of all recordings, the **Knight 8** (with rectifier and tuning eye) Combination uses the high-quality recording motor-turntable unit and a light-weight Crystal pickup; powerful Push-Pull Output and big Dynamic speaker combine to give you amazing record-reproducing fidelity.

**Handsome Table Cabinet.** Of richly-grained walnut veneers on hardwood. Lid closes on both 10" and 12" records. Size: 17½" x 11½" x 13½". Supplied complete with tubes and with Crystal Microphone, recording needle, six blank discs, playback needle, and instructions. For 105-125 volts, 60 cycles AC. Shpg. wt., 40 lbs.

D-176.

NET PRICE, EACH, \$47.50.

NET PRICE, LOTS OF 3, EACH .....

**\$4585**

## Knight 6 TUBE PORTABLE PHONO-RADIO-RECORDER

Dozens of new thrills are in store for you in this remarkable new instrument! For here is Complete Home Entertainment at a price that will astound you! Make your own records through the Microphone . . . Take Recordings off-the-air . . . Play all phonograph records . . . Make your own Home Broadcasts . . . Enjoy powerful radio reception. Get all this at a price you'd ordinarily pay for a good table model radio alone. You've never seen such value before!

**Make Your Own Records!** Anyone can do it! Just set the recording head on the blank disc (up to 10" size) and cut your own quality records. Make home recordings over the Crystal microphone supplied; make recordings of your favorite radio programs. It's simple as ABC with the efficient, simplified recording mechanism. Consists of a heavy-duty rim-driven motor with 10-inch weighted turntable. Has quality magnetic cutting head with automatic switching arrangement. Head has adjustment to cut any coated home recording blanks properly. A neon level indicator shows visually the proper sound level for recording.

**The Radio Receiver.** Tunes 535-1720 KC for all American and Canadian Standard Broadcast and police calls. Features: built-in loop—no aerial, no ground needed; big 3½" x 3½" Airplane Dial; AVC to keep volume uniform; 3 watts output—plenty of power for every purpose; 5-inch Electro-Dynamic Speaker for superb tonal results. RCA licensed Superhet uses: 6A8GT Converter, 6K7GT IF Amp., 2—6Q7GT as Microphone Amp. and Diode, 6K6GT Power Output, 6X5GT Rectifier.

**The Record Player.** You get a perfect-playing phonograph in the **Knight 6** (with rectifier) Combination. The extra-heavy turntable, designed for recording purposes, assures uniform speed and smoothness not found in ordinary home phonographs. The 1½-ounce Crystal pickup reproduces all records with rare fidelity.

**Beautiful Portable Model.** You'll like the practical portable carrying case. It is sturdily built and covered in brown alligator-grain simulated leather. Has strong carrying handle. Size: 17½" x 15½" x 11½". The **Knight 6** Combination comes complete as described, including tubes, Crystal microphone, steel recording needle, six 6½-inch double-side blank recording discs, lifetime playback needle, and instructions. For 110-120 volts, 60 cycles AC. Shpg. wt., 41 lbs.

D-174.

NET PRICE, EACH, \$46.50.

NET, LOTS OF 3, EACH .....

**\$4485**







## Knight 5 TUBE PHONO-RADIO

Radio plus recorded entertainment is yours at truly low cost in this new **Knight 5 Tube** (with rectifier) Radio-Phonograph. Thrill to the crisp, clear reproduction of your favorite radio programs; enjoy the exciting reproduction of your favorite recordings. The **Knight 5** brings you both—together with beautiful styling and newest radio-phonograph features—at a price far lower than you'd expect.

**Splendid Phono Performance.** For enjoyable reproduction of all 10" and 12" recordings, the **Knight 5** incorporates finest quality phono components. The powerful, silent 78 RPM self-starting motor is equipped with a heavy 9" turntable. The newest light-weight Crystal pickup (needle pressure only 1½ oz.) provides better performance and assures longer record life. Includes quick-action phono-radio switch, needle cup, and pickup arm-rest.

**Powerful Superhet Circuit.** The radio portion of the **Knight 5 Tube Phono-Radio** incorporates an efficiently-engineered, sensitive Superhet circuit licensed by RCA. Tunes the entire Broadcast band from 535 to 1720 KC, bringing you outstanding reception of all standard Broadcast programs plus upper channel Police Calls. Extra-value circuit features include: full Automatic Volume Control for uniform volume level on all programs; heavy-duty 5-inch Dynamic speaker for rich, lifelike tone quality; big 4" square illuminated Airplane dial for easy tuning. Latest efficient tubes are employed as follows: 12A8GT as Conv.-Osc. (dual-purpose); 12K7GT as IF Amp.; 12Q7GT as triple-purpose Diode Det.-AVC-1st Audio; 35L6GT as Power Output; and 35Z5GT Rectifier.

**Built-in Loop Aerial.** No more trailing aerial or ground wires. Built-in Loop provides splendid signal pickup, yet enables you to place the **Knight 5** anywhere in the room. Just plug into the nearest electric outlet and play!

**Table Model Complete.** You'll be proud of the lovely table cabinet which houses the **Knight 5**. Select, richly-grained walnut veneers are employed in a neat, tasteful design. Hinged lid closes over all records. Size: 14½" x 11½" x 10". Supplied complete with tubes. For 110-120 volts, 60 cycles AC. Shpg. wt., 22 lbs.

**D-170.**

**NET PRICE, EACH, \$22.75.**

**NET, LOTS OF 3, EACH**.....

**\$2185**

## Knight LOW-COST PHONO-RADIO

Value-plus is the keynote of this popular **Knight 5 Tube** (with rectifier) Phono-Radio. Value such as you've seldom seen—a quality instrument bringing you splendid radio and phonograph performance at a smashing low price! Plus-features for better operation and extra convenience. Here's the value leader for complete home entertainment.

**Thrilling Phono Performance.** You'll marvel at the way in which the **Knight 5** brings you splendid reproduction of all 10" and 12" recordings—popular or symphonic. Rugged, self-starting 78 RPM motor is smooth-operating and silent. Has lightweight Crystal pickup (only 1½ oz. needle pressure), needle-cup and pickup arm-rest.

**Powerful Superhet.** For sensitive, selective reception over the complete Broadcast band and upper Police channels. Tunes 535 to 1720 KC. RCA licensed, the Superhet circuit features Automatic Volume Control, new heavy-duty Dynamic speaker; built-in Loop Aerial—no trailing aerial or ground wires; latest tube types: 12A8GT, 12K7GT, 12Q7GT, 35L6GT, 35Z5GT.

**Complete in Plastic Cabinet.** A truly streamlined beauty—its smooth lines, striking speaker grille, neat molded controls will highlight any setting. Size: 9¾" x 12¾" x 6½". Supplied complete with tubes in Ivory or Walnut cabinet as illustrated at left center. For 110-120 volts, 60 cycles AC. Shpg. wt., 15 lbs.

**D-171. Walnut Model.**

**NET EACH, \$17.25.**

**NET, LOTS OF 3, EACH**.....

**\$1660**

**D-172. Ivory Model.**

**NET EACH, \$18.50.**

**NET, LOTS OF 3, EACH**.....

**\$1775**

## Knight PORTABLE PHONO-RADIO

For complete radio and record entertainment with the added convenience of easy portability, the **Knight 5 Tube** (with rectifier) Low-Cost Phono-Radio, described directly above, is also offered in the striking portable case pictured at left. Covered in handsome, airplane-luggage cloth with grey tweed effect and contrasting top and side bands. Control panel has protective lid; hinged top will close over 10" or 12" records. Size: 13" x 15" x 8¾".

**Complete Radio and Phonograph.** Includes all features of model described above. Superhet circuit, AVC, new Dynamic speaker, Crystal pickup, etc. Supplied complete with tubes. For 110-120 volts, 60 cycles AC. Shpg. wt., 17 lbs.

**D-173.**

**NET PRICE, EACH, \$23.25.**

**NET, LOTS OF 3, EACH**.....

**\$2235**







### THE Knight "DUET" WITH AUTOMATIC CHANGER

The perfect instrument for deluxe record reproduction. A complete phonograph with built-in Seeburg Automatic Record Changer, 2.5 watt Amplifier, and lightweight Pickup—all in a handsome walnut cabinet.

**Seeburg Record Changer.** This famous changer gives you uninterrupted recorded entertainment for almost an hour. Plays 14-10" or 10-12" records at a single loading. Self-starting motor is constant-speed 78 RPM type. For wide-range tone quality and longer record life, a light-weight Crystal Pickup is used (needle pressure only 1 oz.). A 4000-play rare-metal needle is included.

**Special Amplifier.** For full-volume and wide-range response, the "Duet" includes a built-in 3-tube amplifier. Employs Inverse Feedback circuit and provides full 2.5 watts output, capably handled by the 5" Dynamic Speaker.

**Handsome Cabinet.** You'll like the striking simplicity of design. Constructed of choice walnut veneers on hardwood, rubbed to a lustrous finish. Plays all records with lid closed. Size: 17½" wide, 14½" deep, 10½" high.

The "Ouet," complete with tubes, record changer, and long-playing needle. For 110-120 volts, 60 cycles AC. Shpg. wt., 40 lbs.

96-280  
NET EACH, \$32.75. **\$3125**  
NET, LOTS OF 3, EACH....

### THE Knight "CLASSIC" WITH LIGHTWEIGHT PICKUP

An amazingly low-priced, completely self-contained Record Player and Amplifier combined. New lightweight Crystal Pickup assures better record reproduction with less wear. Check these quality features:

**Deluxe Amplifier.** The 3-tube Inverse Feedback amplifier develops exceptional fidelity and volume. Uses specially-matched 5-inch Dynamic Speaker to bring out the full beauty of tone from each record.

**Finest Components.** The new Astatic offset-head Crystal Pickup has a needle pressure of only 1 oz. for splendid reproduction and longer record life. Latest 78 RPM constant-speed rim-drive self-starting motor with 9-inch turntable plays both 10- and 12-inch records. A 4000-play rare metal needle is also supplied. With volume control, automatic stop, etc.

**Attractive Cabinet.** A very handsome table cabinet of choice walnut veneers, hand-rubbed to a rich finish. Plays all records with lid closed. Cabinet measures: 14½" wide, 12½" deep, 9½" high. You'll be proud to own it.

**Knight "Classic" Complete.** One of our most popular record player-amplifiers. Complete with tubes and long-playing needle. For 110-120 volts, 60 cycles AC. Shpg. wt., 19 lbs.

96-281  
NET EACH, \$20.25. **\$1925**  
NET, LOTS OF 3, EACH....

### THE Knight "MUSICALE" WITH AUTOMATIC CHANGER

A smashing feature value! A completely self-contained Record Player with Automatic Changer and Amplifier housed in an attractive walnut grain metal case.

**Automatic Record Changer.** Almost an hour of uninterrupted entertainment while you lounge in your chair! Plays 12-10" or 10-12" records at a single loading. Features: 78 RPM constant-speed motor, feather-weight pickup with long-playing needle, single adjustment.

**Beam Power Amplifier.** An efficiently designed three-tube amplifier with strong Beam Power Output. Has matched six-inch oval Electro-Dynamic speaker. Includes volume control and full-range tone control.

**Modern Case.** Completely contained in a neat, walnut-grained open-face cabinet with monk's cloth grille. 12" long, 9" high, 11" deep.

**Knight "Musicale" Complete** with tubes, record-changer, and long-playing needle. For 110 volts, 60 cycles AC. Shpg. wt., 16 lbs.

96-370.  
NET EACH, \$21.95. **\$2085**  
NET, LOTS OF 3, EACH....

96-371. WIRELESS AUTOMATIC RECORD PLAYER. Similar to above, but less amplifier. Has two-tube wireless unit; plays through any radio set without direct connection. 12 lbs. NET..... **\$18.50**



## NEW PORTABLE AMPLIFIED ELECTRIC PHONOGRAPHS

### PHONOLA MODEL 100-K

A wonderfully priced, compact portable electric phonograph with built-in amplifier. Excellent for tourists, campers, students, etc. Incorporates latest features for enjoyable and dependable record reproduction.

**Built-in Amplifier.** The efficiently-designed 2-tube amplifier furnishes a power output of 1.8 watts. Has matched 4-inch speaker with fine tonal response.

**Phono Components.** The rim-drive 78 RPM constant-speed motor with 9-inch turntable provides splendid facilities for playing all 10-inch and 12-inch records. Crystal pickup in balanced tone arm assures good quality reproduction and low record wear. Has combination on-off switch and volume control; built-in needle-cup with cover.

**Smart Luggage-Type Case.** An exceptionally handsome portable case; finished in maroon straw-grain fabric. With sturdy carrying handle. Plays 10-inch records with lid closed. Size: 17¼"x11¼"x5¼". Carrying weight only 10 lbs.

**Phonola Portable Complete.** With tubes. For 110-120 volts, 60 cycles AC. Wt., 12½ lbs.

96-355  
NET EACH, \$16.72. **\$1550**  
NET, LOTS OF 3, EACH....

### KNIGHT DELUXE PHONO

A wonderful new Record Player and Amplifier with unusually generous Power Output and new Automatic start-and-stop feature.

**Beam Power Amplifier.** Uses 12Q7GT, 50L6GT and a 3525GT rectifier to furnish splendid 4 watt undistorted output. Has matched Dynamic speaker to handle the full output without distortion.

**Automatic Start-and-Stop.** A brand new feature! Motor starts automatically when tone arm is placed in record groove, and stops automatically when record is through. Lightweight Crystal Pickup fitted with rare-metal tipped 1000-play needle. Heavy-duty motor is constant-speed, 78 RPM synchronous type. Accommodates all 10- and 12-inch records.

**Handsome Carrying Case.** A richly-finished Portable case you'll be proud to carry. Covered with weatherproof simulated tan leather. Lid has storage space for 12 records. Size: 15" wide, 13½" deep, 8" high. Plays all records with lid closed. Carrying weight, only 14½ lbs.

**Knight Deluxe Complete.** Supplied complete with tubes and needle. For 110 volts, 60 cycles AC. Shpg. wt., 18 lbs.

96-380  
NET EACH, \$17.75. **\$1685**  
NET, LOTS OF 3, EACH....

### KNIGHT SUPER PHONO

One of the very finest Portable Electric Record Player and Amplifier units we know of—and priced far lower than what you'd expect to pay. Note the deluxe features!

**Built-in Amplifier.** A powerful two-tube amplifier coupled to a full 6½ inch Electro-Dynamic speaker furnishes actual auditorium volume and pure, undistorted tone quality. Has generous baffle area for finest response.

**Deluxe Components.** The die-cast, straight-arm Crystal Pickup is exceptionally light in weight for longer record life. Has built-in pilot light for greater convenience. Powerful self-starting 78 RPM induction-type motor is equipped with automatic stop. Plays all 10- and 12-inch records with lid closed. Includes variable volume control, tone control, pickup arm-rest, and needle-cup.

**Luxurious Case.** A beautifully proportioned Portable case with simulated leather covering in Sun Tan Saddle color. Has slide-out drawer for record storage. Size: 16½"x15½"x7¼". Carrying weight, only 13 lbs.

**Knight Super complete** with tubes. For 110 volts, 60 cycles AC. Shpg. wt., 15 lbs.

96-385  
NET EACH, \$18.95. **\$1795**  
LOTS OF 3, EACH.... **27**



OUR GREATEST FARM RADIO VALUE

PLAY BATTERY SETS  
FROM A-C CURRENT  
with PORTA-POWER



## Knight 4 TUBE 1.4 VOLT FARM RADIO

- 6" Dynamic Speaker
- Full-View Airplane Dial
- 750-850 Hour Pack
- Full-Acting A.V.C.
- 1942 Superhet Circuit
- Tunes Police Calls

Because we've been offering the best values in Farm Radios right from the early days, we've got a real reputation to uphold. We're staking that fine reputation on this new **Knight 4 Tube Farm Radio** because we honestly feel that it's the lowest-priced quality Farm Radio and the best value you'll be able to discover anywhere! It has what you want—it's a "Ben Franklin" for thrift—it's a powerful, dependable performer even in remote locations—it's just about the most handsome Farm Radio you've ever laid eyes on! Just check these value facts:

**Economy Leader.** Low initial cost—low upkeep—that's what you get in this **Knight 4**. "A" drain is only .25 amperes; "B" drain is only 11 milliamperes. The single-unit dry "AB" power pack that fits right inside the cabinet, is guaranteed to last for at least 750 hours (in most cases works up to 850 hours actually) before requiring replacement. You get a full season of radio enjoyment—with the set playing every day—at a cost of less than two cents a day! Now that's real Farm Radio economy and a performance record that's hard to beat!

**Latest Superhet Circuit.** You've got a real radio thrill coming when you tune this **Knight 4**. Covers the full 535-1720 KC range powerfully, to bring you all American and Canadian standard Broadcast programs, as well as the popular 1712 KC Police Channel. The Superhet circuit is licensed by RCA; uses the following tubes: 1A7GT as Conv.-Osc. (dual-purpose); 1N5GT as IF; 1H5GT as Det.-AVC-1st Audio (triple-purpose); 1Q5GT as Power Output. The secret of the better power and performance of the **Knight 4** is in the use of the multi-purpose tubes which deliver five and six tube set results.

**Remarkably Life-like Tone.** There's a full 6" Dynamic Speaker of the latest design used in the **Knight 4**. Has extra-heavy construction; makes a world of difference in the tone quality. Reproduces every program with a natural depth of tone that will delight you always.

**Additional Features.** Automatic Volume Control is incorporated to prevent fading and to keep volume steady on all programs. Tuning is delightfully easy with the entirely new type of giant Airplane Dial that's clearly calibrated in kilocycles. There's an "on-off" indicator included that shows you when the set is in operation.

**Striking Cabinet Design.** Good-taste is written all over the fine cabinet we've chosen to house the **Knight 4**. Choice walnut veneers are used throughout. Ends are softly rounded; speaker grille opening is simple but beautiful; dial escutcheon is walnut plastic molded. The cabinet is generously proportioned and has space for conveniently holding the complete "AB" power pack. The cabinet measures: 18 1/2" long, 10 1/4" deep, 9 3/8" high.

**Knight 4 Complete.** The **Knight 4 Tube 1.4 Volt Superhet** is offered complete with tubes as described above, but less "AB" pack. Shpg. wt., 13 lbs. **\$14.95**

**D-140.** Value, \$24.95.

**NET PRICE EACH** .....

**D-141.** As above, but complete with 750-850 hour "AB" pack. Wt., 34 lbs. **\$18.45**

**NET PRICE** .....

**80-836.** Replacement 750-850 hour "AB" pack. 1 5/8" x 7" x 4 1/4". 21 lbs. **NET \$3.67**

(When High-line comes, electrify with Porta-Power, described at right.)

Here is a new type of Power Unit that will double the utility of any 1.4 volt, 2-3 volt, or 6 volt Farm Radio. Permits you to play any of these sets direct from 110 volts AC. Easy to connect; just plug in and play. If the high lines have come into your locality, or if you have moved to where AC current is available, you'll want one of these Porta-Power units to replace your radio batteries with AC. Works with real efficiency and dependability.

FOR 1.4  
VOLT SETS

### TYPE U

Permits you to operate any 1.4 (or 1.5) volt midjet or portable radio from 105-125 volt, 50-60 cycle current. Eliminates batteries entirely. For use with sets having up to 5 tubes. Fits right into battery compartment. Size is only 2 x 3 1/2 x 6". Has sockets for every type of battery plug. Insert battery plugs into Porta-Power and play radio from 105-125 volts AC. Has copper-sulfide rectifier for "A" current; type 6F5GT tube for "B" current. Supplied with 6-foot AC cord, plug and "on-off" switch. Shpg. wt., 4 lbs. **\$4.41**

**NET** .....

### HEAVY-DUTY MODEL

**Type G.** Works same as above but for larger home and portable sets with 4, 5, and 6 tubes. Size: 3 1/2 x 5 x 6". More rugged than Type U. Shpg. wt., 5 lbs. **\$5.58**

**80-171. NET** .....

### TYPE L

FOR 2-3  
VOLT SETS

Porta-Power for 2, 2.5 or 3-volt radios, using from 4 to 8 tubes. Eliminates all "A", "B", and "C" batteries. Works from 105-125 volts, 50-60 cycles AC. Delivers: 0.5, 90, 112.5 and 135 volts of "B" from 4.5 to 22.5 adjustable "C". Split "C" is obtained from external resistors. Just plug in and play any 2, 2.5 or 3-volt radio receiver from 105-125 volts AC. Size: 6 3/4 x 4 x 5 1/4". With 6-foot cord, plug, and "on-off" switch. Shpg. wt., 6 lbs. **\$5.85**

**NET** .....

### TYPE P

FOR 6  
VOLT SETS

This Porta-Power unit converts practically any 4 to 10 tube 6-volt battery radio for operation direct from 105-125 volts, 50-60 cycles AC. Delivers two separate 6 volts at 1.5 amperes each. May be connected in series for 12 volts, or in parallel for 3 amperes. Exceptionally quiet in operation. Supplied with cord, plug and switch. If you now have AC current, you can put your 6 Volt Radio to work again inexpensively, with this fine efficient power adapter unit. Size: 3 3/4 x 5 1/2 x 6 1/4". Shpg. wt., 8 lbs. **\$8.20**

**80-173. NET PRICE** .....



**PLAYS ON BATTERIES OR FROM AC-DC CURRENT!**



## **Knight 6 TUBE 1.4 VOLT-110 VOLT AC-DC SUPER**

- 3-Way Operation
- Sensitive RF Stage
- Big Airplane Dial
- Full-Acting A.V.C.
- 3 Gang Condenser
- 5" Dynamic Speaker

Here's the Farm Radio that's built with an eye to the future! Works from self-contained batteries, from 110-125 volts AC, or from 110-125 volts DC. It's the new 1942 type of Farm Radio that you can't beat anywhere for powerful reception in any location, for dependable, thrifty operation, for life-like tone quality! You get all this—plus three-way operation at no more than the cost of an ordinary battery radio!

**Three-Way Operation.** You can operate the **Knight 6** from its self-contained batteries; plug it into any 110-125 volt, 40-60 cycles, AC outlet; operate it from 110-125 volts DC. Either way, it's just as powerful, just as economical to operate. Here is a Farm Radio that's designed for the future. If you move to the city, or if the high line comes your way, just plug it into the light socket and enjoy the same fine reception you get on battery operation!

**Unusually Powerful Circuit.** The **Knight 6** (with rectifier) features RIF stage—an expensive set feature—for extra sensitivity in tuning distant stations. Reception is enjoyable even in remote localities where ordinary Farm Radios are unsatisfactory. The cleverly-engineered RCA and Hazeltine licensed Superhet circuit uses newest 1.4 volt low-drain tubes as follows: 1H5GT as Det.-AVC-1st Audio; 1A7GT as Conv.-Osc.; 1N5GT as IF; 1N5GT as RF; 3Q5GT as Output; 3Z5GT as Rectifier. The multi-purpose tubes develop the power and efficiency of many 7- and 8-tube sets.

**Long Distance Range.** Tuning range covers the entire standard American Broadcast band. Tunes 540 to 1650 KC. Tuning is unusually simple with the attractive big Airplane Dial; calibrations are extra large for easy logging. Full Automatic Volume Control maintains constant, unvarying volume level on all stations; prevents annoying fading or blasting. A heavy-duty, rubber-mounted 3-gang condenser provides fine sensitivity and selectivity.

**Thrifty to Operate.** On either batteries or AC-DC, the **Knight 6** is a "current-miser." The battery pack is good for approximately 650-700 hours of service before requiring replacement. You'll appreciate this amazing economy. Inexpensive battery pack is easily obtainable.

**Splendid Tone.** You'll enjoy unusual fidelity and richness of tone as programs are recreated through the Beam Power circuit and reproduced by the special 5-inch Dynamic Speaker. Here's tone quality that matches the finest city radio performance. You'll get a real listening thrill out of this exceptionally true-toned Farm Radio.

**Charming Table Cabinet.** The **Knight 6** is fittingly presented in one of the outstanding Farm Radio designs of the year. Generously proportioned, it is fashioned of select, walnut veneers, with contrasting grain effect, and a beautiful lattice grill treatment. Cabinet has space to hold "AB" pack. Size: 19½" long, 10" deep, 10" high.

**Set Complete.** The **Knight 6** Tube Farm Radio in table model cabinet is offered complete with tubes as illustrated and described. For 1.4 volt battery operation, or 110-125 volts, 40-60 cycles AC, or 110-125 volts DC. Less Batteries. Shpg. wt., 15 lbs.

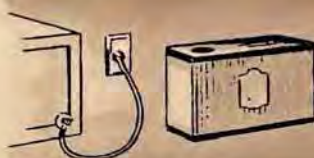
**D-145.** Value, \$37.50.  
**NET PRICE EACH**.....

**D-146.** As above, but with 650-700 hour Battery Pack. Shpg. wt., 36 lbs.  
**NET PRICE EACH**.....

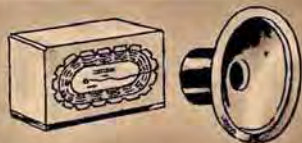
**80-836.** Replacement Battery Pack for above set. **NET \$3.67.**

**\$21<sup>95</sup>**

**\$25.45**



You're set for the future with this **Knight 6!** Enjoy it now from its economical self-contained battery pack—then, when the high line comes, just plug in and operate it dependably from electric socket!



Special 3-gang tuning condenser means greater sensitivity and fine selectivity.

Latest type heavy-duty dynamic speaker assures faithful tone quality.



## Knight 5-TUBE AUTO RADIO

All the pleasures of dependable radio reception while you drive—the luxury and convenience of Custom-Type Speaker Installation—and the features of a quality-built set are now within the range of every car owner. Here for the first time in the low-priced field is the Auto Radio you've been waiting for!

**Custom Speaker Installation.** The Knight 5 (with rectifier) is a cleverly designed two-unit instrument. The speaker and audio amplifier are combined in a compact steel case designed to fit behind the dashboard speaker grille provided in most newer model cars. The tuning unit and dial are housed in a second compact unit that mounts neatly against the lower edge of the car dash panel. The two units are connected by an inconspicuous cable.

**Fits All Popular Cars.** The Speaker unit is equipped with special mounting brackets for concealed installation behind the dash speaker grille in practically all cars made since 1939. Fits perfectly in Chevrolet—1940, '41, '42; Ford—1939, '40, '41, '42; Plymouth—1939-42; Dodge—1939-42; Pontiac—1939-42; Buick—1937-42; Studebaker—1940-42; Chrysler—1939-42; etc. In older cars the speaker may be mounted on the firewall for an equally attractive installation.

**All-Electric Radio.** The Superhet circuit of the RCA licensed Knight 5 has a built-in dependable vibrator power supply for all-electric operation. Uses latest tube types: 6SA7, 6SK7, 6SQ7, 6K6G7, 6X5GT. Tuning range is 535-1650 KC for powerful coverage of all standard Broadcast programs.

**Newest Auto Radio Features.** The Knight 5 is unusually easy to tune; the big illuminated Slide-Rule Dial is clearly calibrated, and the molded tuning and volume control knobs are always easily within reach. Other valuable features include: full Automatic Volume Control; full 1.6 watts undistorted output; rugged 5" Electro-Dynamic speaker; low battery drain; suppressorless operation.

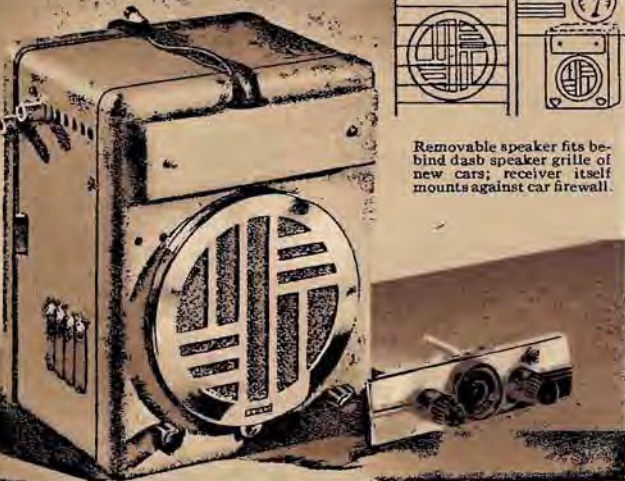
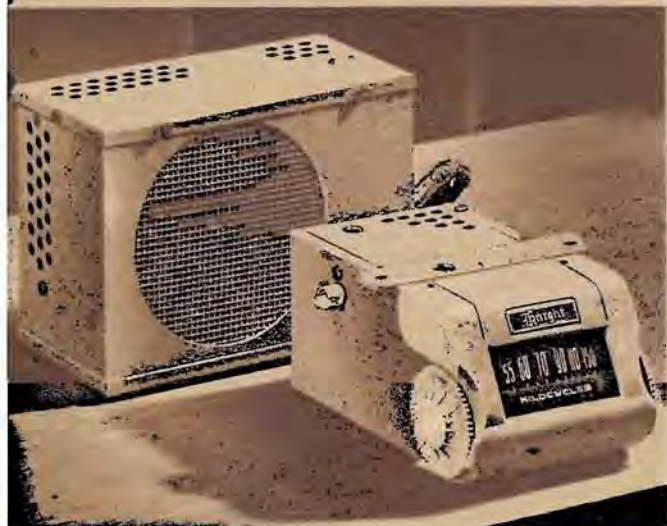
**Smart, Modern Design.** The Tuning Unit has an attractive front face of molded grey Tenite with matching molded knobs and a sturdy metal body; size: 6 1/2" x 3 3/4" x 3 3/4". Speaker unit is in a grey finished metal case, only 7" x 5" x 3 3/4". The Knight 5 is supplied complete with tubes and mounting brackets. Sbgp. wt., 9 1/2 lbs.

**D-130, NET EACH, \$16.75. \$15.95 NET, LOTS OF 3, EACH**

Tuning control unit mounts neatly against lower edge of dash.

Speaker-Audio unit fits behind dash grille provided in new cars.

Speaker-Audio unit fits on fire-wall in older cars less dash grille.



Removable speaker fits behind dash speaker grille of new cars; receiver itself mounts against car firewall.

## 7-TUBE DELUXE AUTO RADIO

The pace-setter for value!—A 7-tube Deluxe Superhet (with rectifier), giving you custom-type installation, push-button tuning, bigger power output, and 1942's newest features.

**One Push-Button Automatic Tuning.** Automatic tuning of any of five predetermined stations all from a single button. Just press Selector button until you have desired program. Regular manual tuning, too.

**Fits Any Car.** The 6" removable Dynamic speaker unit mounts behind dash grille in newer cars or may be left in receiver case for single-unit mounting in older cars. Tuning mechanism mounts in car panel space or at edge of dash.

**Deluxe Superhet.** Amazing RCA licensed Superhet circuit with expensive set features: 6 watts undistorted push-pull output; flat AVC; local-distance sensitivity switch; Tone Control; three-circuit permeability tuning system. Tubes are: 3—6SK7, 6SA7, 6K6G, 6SQ7, 6N7G.

**Knight Deluxe 7,** complete with tubes, in neat metal case, 11" x 8 1/2" x 7 3/4", with removable speaker, tuning mechanism, and hardware. Requires either of tuning control heads below. Sbgp. wt., 23 lbs.

**D-132, Value, \$56.50, NET EACH, \$29.95. \$28.45 NET, LOTS OF 3, EACH**

### SPECIAL CONTROL MOUNTING KITS

**D-260, Universal Control.** For mounting tuning mechanism to lower edge of dash instrument panel. 2 lbs.

**D-261, Custom Control.** For mounting tuning mechanism in panel of cars equipped with radio control compartment. Specify make, model, and year of car. 2 lbs.

**EITHER KIT, NET, \$1.47**

## Knight 6-TUBE AUTO RADIO

Push-button tuning plus splendid performance and enjoyable tone quality—all at the lowest price in the field for a quality-built Auto Radio. That's the Knight 6 Tube Auto Radio—the set for every car, the set you can afford.

**Push-Button Tuning.** A distinct contribution to greater safety on the road and to greater convenience in tuning. Just press a button for any of five favorite stations. You can also tune stations manually by means of the big new 5" long Slide-Rule dial.

**Easy to Install.** The Knight 6 will fit any make and model automobile. Single unit construction makes installation exceptionally simple. Entire unit mounts neatly to lower edge of dashboard panel.

**All-Electric Operation.** The Knight 6 Tube Auto Radio (with rectifier) is built for all-electric operation; has an efficient built-in vibrator supply. RCA and Hazeltine licensed Superhet circuit uses latest tubes: 2—6K7GT, 6A8GT, 6Q7GT, 6K6GT, 6X5GT. No suppressors required.

**Latest Auto Radio Features.** Tuning range covers 535-1550 KC for powerful reception of all standard Broadcast programs. Features: Full Automatic Volume Control; 2 watts undistorted output; Electro-Dynamic speaker; RF stage for added sensitivity; low-drain operation.

**Compact Design.** The Knight 6 is completely contained in a rugged metal case finished in grey; measures: 12" deep, 6 1/4" wide, 5 1/4" high. Supplied complete with tubes. Sbgp. wt., 14 lbs.

**D-131, Value, \$29.95, NET EACH, \$18.95. \$17.95 NET PRICE LOTS OF 3, EACH**





## Knight 5-TUBE PORTABLE

Radio wherever you go—powerful, dependable, enjoyable radio reception when you travel, in camp, on picnics, and in any room at home or in the office. Wonderful three-way operation from batteries, from 110 volts AC, from 110 volts DC—that's what you get, together with a host of worthwhile new features, in this new **Knight 5 Tube** (with rectifier) 3-Way Portable Radio—and at the year's lowest price for a quality-built set of this type.

**Plays Perfectly Anywhere.** The **Knight 5** operates with equal efficiency from the self-contained batteries or from 110 volts AC or DC. When there's electric current available, just plug in and play. In the country, just switch to battery power supply. Everything is built in—including a dependable loop aerial.

**Splendid Radio Reception.** Tunes 540-1630 KC for powerful coverage of the complete standard Broadcast band. The **Knight 5** is easy to tune, too—because the big Airplane dial is clearly and legibly calibrated.

**Economical Operation.** Performance on batteries is just as powerful and enjoyable as when you plug in on electric current, yet battery drain is held down to the minimum. Batteries will give you about 150-200 hours of service before replacement is necessary.

**Newest Superhet.** Low-drain tubes are employed in an RCA licensed Superhet circuit. Uses: 1A7GT as Osc.-Conv.; 1NSGT as I.F.; 1H5GT as Det.-AVC-1st Audio; 1T5GT as Output; 1I724GT Rectifier. The multi-purpose tubes add to powerful performance. Other value-giving circuit features include: full Automatic Volume Control; an efficient new five-inch Dynamic speaker for finest tone quality; smooth-acting switch for quick shift from battery to AC or DC operation.

**Attractive Styling.** A handsome luggage-type case you'll be proud to take anywhere. Covered in rich, beautiful two-tone brown and tan leatherette. With carrying handle and personal identification tag. Size: 13"x9 1/4"x5 1/4". Carrying weight, only 14 lbs. The **Knight 5 Tube 3-Way Portable** is supplied complete with tubes and batteries in open-face carrying case shown at right above. For operation from 105-125 volts, 50-60 cycles, AC or DC, or from batteries. Shipp. wt., 16 lbs.

D-160. Value \$26.50.  
**NET PRICE EACH, \$17.35.**  
**NET, LOTS OF 3, EACH..... \$16.45**  
 80-821. Extra Battery Kit, 6 lbs. **NET..... \$2.41**



### HINGED LID MODEL

Illustrated at left. Identical to Model D-160 described at left, but in deluxe case with protective drop lid. Case is handsome two-tone brown and tan leatherette-covered. Operates from batteries, AC or DC. Includes built-in loop, AVC, 5" Speaker; latest Superhet circuit. See description at left for circuit details. Shipping wt., 21 lbs. A superb Portable value.

D-161. Value, \$29.95.  
**NET EACH, \$19.45.**  
**NET, LOTS OF 3, EACH. \$18.45**

## Knight 7-TUBE 2-BAND PORTABLE

Meet the leader! The finest portable radio made—giving you not only powerful 3-Way performance from batteries, AC, or DC, but, in addition, the thrill of 2-Band reception—Short Wave as well as standard Broadcast! Note our low price, too—it's actually lower than what is often asked for 1-band portables.

**Three-Way Operation.** You can operate the **Knight 7** (with rectifier) from its self-contained batteries, from 110 volts AC, from 110 volts DC. All three ways you get splendid radio reception. The **Knight 7** is economical, too. The batteries supplied will furnish up to 200 hours of entertainment before replacement.

**Everything Built-In.** No aerial, no ground, no complicated connections to worry about. The efficient built-in loop aerial picks up programs with fine sensitivity.

**2 Band Range.** Here's a Portable that tunes more than just the Broadcast band. Covers 5.8-18 MC to bring you the added thrill of Short Wave reception. And, of course, you get strong standard Broadcast reception on the 340-1650 KC range.

**New 3-Way Circuit.** The cleverly designed RCA and Hazeltine licensed Superhet circuit brings you the latest advances in Portable design. New tube types are used: 1A7, 2-1N5, 1H5, 3Q5, 50L6, 35Z5.

**RF Stage on both bands** results in many times the sensitivity of ordinary portables. A three-gang condenser (found only in expensive radios) contributes to razor-edge tuning selectivity. Automatic Volume Control keeps volume uniform on all programs.

**Sparkling Tone Quality.** You'll get more enjoyment out of your favorite programs because the new 5 1/2-inch Dynamic Speaker affords exceptional depth of tone.

**Deluxe Case** is finished in two-tone brown and tan leatherette. Has a sturdy carrying handle and protective slide-away lid; with leather identification tag. Size is only 14" wide, 10" high, 6 1/4" deep. Carrying weight is 16 lbs. Supplied complete with tubes and batteries. For operation from 105-125 volts, 50-60 cycles AC, or 105-125 volts DC or from batteries supplied. Shipp. wt., 19 lbs.

D-165. Retail Value, \$44.95.  
**NET PRICE EACH, \$26.75.**  
**NET PRICE, LOTS OF 3, EACH..... \$25.45**  
 80-832. Extra Battery Kit, 9 lbs. **NET..... \$2.77**



### NEW 3-WAY PORTABLES



# New DELUXE 3-IN-1 PO TABLE

PLAY IT—  
ENJOY IT  
ANYWHERE!



Play It From  
Batteries



Play It From  
AC or DC Outlet



Play It—Enjoy It  
Out-of-Doors



Play It Indoors  
Have Fun Anywhere

## Knight 6-TUBE 3-WAY PORTABLE

Enjoy perfect radio entertainment wherever you go with this remarkably versatile new **Knight 3-way Portable** model. It's the radio for everyone—a deluxe 6-tube (with rectifier) Superhet with extra features you won't find in any other portable at our amazingly low price. It's economical to operate, richly true-toned, easy to carry, and beautiful to look at. Here's the best buy for America-on-the-go!

**Three-Way Operation.** Complete radio entertainment anywhere—anytime! Use the **Knight 6** at home or in the office, on 105-125 volts, 50-60 cycles AC or DC. Enjoy equally fine reception in the country, in camps, on trips, anywhere outdoors, from the self-contained battery power supply. From electric current or from batteries—either way—it's just as efficient, just as economical to operate. For extra convenience there's the Loop Aerial—built right into the cabinet for splendid program pickup.

**Powerful Tuned R.F. Stage.** A wonderful feature—usually found only in the most expensive home radios, the T.R.F. stage of the **Knight 6** circuit affords extra selectivity and sensitivity in tuning distant stations. Now you can get dependable performance in remote locations where ordinary portables fail.

**RCA and Hazeltine Licensed.** The powerful Superhet circuit incorporates the newest features from radio's foremost engineering laboratories. Uses newest low-drain tubes as follows: 1N5GT as RF; 1N5GT as IF; 1A7GT as triple-purpose Conv.-Osc.-Det.; 1H5GT as triple-purpose 2nd Det.-AVC-1st Audio; 3Q5GT as Power Output; 3Z5GT Rectifier. You get the performance of many 7- and 8-tube sets with the multi-purpose tubes used in the **Knight 6**. Every tube employed contributes to better, more powerful reception with greater economy.

**Splendid Radio Reception.** Tunes the complete standard Broadcast band from 540 to 1650 KC—powerfully and dependably. Has a big 4-inch square clock-type dial (dual-calibrated in kilocycles and meters) for easy station-logging. Other "expensive-set" features include: a rugged 3-gang tuning condenser for finest selectivity; full Automatic Volume Control for uniform, non-fading volume level; convenient electric current-battery switch.

**A Real "Battery Miser."** Here's a real economizer! The low-drain tubes give you longer battery life and save you money. The battery pack furnishes 200-250 hours of service before replacement is needed. Here's the kind of portable radio economy you'll like.

**"Home Radio" Tone Quality.** You'd imagine you were listening to a fine table model home radio receiver when you hear the **Knight 6**. The big 5½" PM Dynamic speaker easily handles full volume on every type of program, giving you rich, faithful reproduction. You'll admire the tone wherever this portable plays.

**Attractive Luggage-Type Case.** The **Knight 6** resembles a fine piece of expensive luggage. The handsome leatherette-covered carrying case has a rich two-tone brown and tan finish. Has protective drop-front lid and personal leather name tag. Size: 12¾" x 9¾" x 6½". Carrying weight (with batteries), only 15 lbs. For battery operation or for 105-125 volts, 50-60 cycles AC or DC. Complete with tubes and batteries. Shpg. wt., 17 lbs.

D-162. Value, \$34.95.

NET EACH, \$21.95.

NET, LOTS OF 3, EACH.....

**\$2085**

80-832. Extra Battery Kit. Shpg. wt., 9 lbs.  
NET.....\$2.77



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ALLIED RADIO CORPORATION, 833 W. JACKSON BLVD., CHICAGO, ILL.





# RADIO

## A GREAT NAME IN RADIO TUBES

## GUARANTEED FOR 6 FULL MONTHS

RCA Radiotrons are universally known as the quality line of perfect tubes sold in the famous red and black factory-sealed cartons. ALLIED stocks all RCA tubes for quick shipment; new types are available immediately after release. Save and profit more by our quantity prices; these prices apply to orders for one type or any assortment of tube types.

RCA Radiotrons are guaranteed to give perfect service for six months from date of purchase. We will promptly replace any tube that does not give complete satisfaction. (Burned-out or broken tubes are not replaceable.) For helpful RCA Tube Sales Aids, see listings on following page. Av. shpg. wt.: 1 tube—8 oz.; additional tubes, 4 oz. each.

Type	Stock No.		NET EACH		Type	Stock No.		NET EACH		Type	Stock No.		NET EACH	
	No.	List	1-14	15-UP		No.	List	1-14	15-UP		No.	List	1-14	15-UP
00A	6-000	\$2.30	\$1.24	\$1.15	5Z3	6-081	\$1.05	\$0.57	\$0.52	*6N7	6-161	\$1.55	\$0.84	\$0.77
0A4G	6-002	1.90	1.03	.95	*5Z4	6-082	1.25	.67	.62	GN7G	6-162	1.55	.84	.77
*OZ4	6-003	1.55	.84	.77	GA3	6-083	1.90	1.03	.95	GP5G	6-163	.80	.43	.40
0Z4G	6-004	1.55	.84	.77	GA4/LA	6-084	1.55	.84	.77	GP5GT	6-164	.75	.40	.37
1A4P	6-005	1.55	.84	.77	GA6	6-086	1.55	.84	.77	GP7G	6-165	2.30	1.24	1.15
1A5C	6-007	1.55	.84	.77	GA7	6-087	.95	.51	.47	*GQ7	6-166	1.25	.67	.62
1A5GT	6-008	1.05	.57	.52	GA7S	6-088	2.30	1.24	1.15	GQ7G	6-167	.85	.46	.42
1A6	6-009	1.25	.67	.62	*GA8	6-089	1.25	.67	.62	GQ7GT	6-168	.85	.46	.42
1A7G	6-010	1.55	.84	.77	GA8G	6-090	.95	.51	.47	*GR7	6-169	1.55	.84	.77
1A7GT	6-011	1.25	.67	.62	GA8GT	6-091	.95	.51	.47	GR7G	6-170	1.05	.57	.52
1B4P	6-012	1.25	.67	.62	GA8S/6N5	6-092	1.55	.84	.77	GR7GT	6-171	.85	.46	.42
1B5/25S	6-013	1.25	.67	.62	*GA9	6-093	1.90	1.03	.95	*GS7	6-172	1.55	.84	.77
1B7GT	6-015	1.25	.67	.62	GAC5G	6-094	1.25	.67	.62	GS7G	6-173	1.55	.84	.77
1C5G	6-016	1.55	.84	.77	GAC5GT	6-095	1.05	.57	.52	*GSA7	6-174	.95	.51	.47
1C5GT	6-017	1.55	.67	.62	*6AC7/1852	6-096	2.30	1.24	1.15	GA7GT	6-175	1.05	.57	.52
1C6	6-018	1.25	.67	.62	GA6DG	6-097	1.55	.84	.77	*GSC7	6-176	1.25	.67	.62
1C7G	6-019	1.25	.67	.62	GA7DG	6-098	1.55	.84	.77	*GSF5	6-178	.95	.51	.47
1D5GP	6-020	1.25	.67	.62	GA6E5GT	6-100	1.25	.67	.62	GSF5GT	6-179	.95	.51	.47
1D5GT	6-021	1.25	.67	.62	GA6E6G	6-101	1.25	.67	.62	*GSF7	6-180	1.25	.67	.62
1D7G	6-022	1.55	.84	.77	GA6E7GT	6-102	1.25	.67	.62	*GS7G	6-181	1.25	.67	.62
1D8GT	6-023	1.90	1.03	.95	GA6F6G	6-104	1.55	.84	.77	*GSJ7	6-182	1.05	.57	.52
1E5GP	6-025	1.55	.84	.77	*GA7	6-105	2.30	1.24	1.15	GSJ7GT	6-183	1.05	.57	.52
1E7G	6-026	2.30	1.24	1.15	GB4G	6-107	1.90	1.03	.95	*GSK7	6-184	.95	.51	.47
1F4	6-027	1.25	.67	.62	GB5	6-108	1.90	1.03	.95	GSK7GT	6-185	1.05	.57	.52
1F5G	6-028	1.25	.67	.62	GB6G	6-109	1.05	.57	.52	GSN7GT	6-186	1.25	.67	.62
1F6	6-029	1.55	.84	.77	GB7	6-110	1.25	.67	.62	*GSQ7	6-187	.95	.51	.47
1F7GV	6-030	1.55	.84	.77	GB7S	6-111	2.30	1.24	1.15	GSQ7GT	6-188	1.05	.57	.52
1G4GT/G	6-032	1.25	.67	.62	*GB8	6-112	1.90	1.03	.95	*GSR7	6-189	1.05	.57	.52
1G5G	6-033	1.25	.67	.62	GB8G	6-113	1.25	.67	.62	*GSS7	6-190	.95	.51	.47
1G6GT/G	6-035	1.55	.84	.77	*GC5	6-114	1.05	.57	.52	GT7G	6-192	1.25	.67	.62
1H4G	6-036	.95	.51	.47	GC5G	6-115	.95	.51	.47	GU5/6G5	6-193	1.25	.67	.62
1H5G	6-037	1.25	.67	.62	GC5GT	6-116	.95	.51	.47	GU7G	6-195	.95	.51	.47
1H5GT	6-038	1.05	.57	.52	GC6	6-117	.95	.51	.47	6-196	1.90	1.03	.95	
1HG	6-039	1.25	.67	.62	GC7	6-118	2.30	1.24	1.15	6-197	1.25	.67	.62	
1J5G	6-040	1.90	1.03	.95	GC8G	6-119	1.55	.84	.77	6-198	1.05	.57	.52	
1J6G	6-041	1.25	.67	.62	GD6	6-120	.95	.51	.47	6-199	1.25	.67	.62	
1LA4	6-042	2.30	1.24	1.15	GD7	6-121	2.30	1.24	1.15	6W7G	6-201	1.55	.84	.77
1LA6	6-043	2.30	1.24	1.15	GD8G	6-122	1.55	.84	.77	*GX5	6-202	1.55	.84	.77
1LB4	6-044	2.30	1.24	1.15	GE5	6-123	1.05	.57	.52	6X5G	6-203	1.05	.57	.52
1LH4	6-045	2.30	1.24	1.15	GE6	6-124	1.90	1.03	.95	6X5GT	6-204	.95	.51	.47
1LN5	6-046	2.30	1.24	1.15	GE7	6-125	2.30	1.24	1.15	6Y5	6-205	2.30	1.24	1.15
1N5G	6-047	1.55	.84	.77	*GF5	6-126	1.05	.57	.52	6Y6G	6-206	1.55	.84	.77
1N5GT	6-048	1.25	.67	.62	GF5G	6-127	1.05	.57	.52	6Y7G	6-207	1.55	.84	.77
1N6G	6-049	1.25	.67	.62	GF6	6-128	.95	.51	.47	GZ5	6-208	2.30	1.24	1.15
1P5GT	6-050	1.55	.84	.77	*GF6G	6-129	1.05	.57	.52	GZ7G	6-209	1.90	1.03	.95
1Q5G	6-051	1.55	.84	.77	GF7	6-130	.85	.46	.42	6Z7Y5G	6-210	1.25	.67	.62
1Q5GT	6-052	1.55	.84	.77	GF8	6-131	1.55	.84	.77	7A4	6-211	1.25	.67	.62
1R5	6-053	1.55	.84	.77	GF8G	6-132	1.25	.67	.62	7A5	6-212	1.25	.67	.62
1S4	6-054	1.55	.84	.77	GG6G	6-133	1.25	.67	.62	7A6	6-213	1.25	.67	.62
1S5	6-055	1.55	.84	.77	*GH6	6-135	1.05	.57	.52	7A7(LM)	6-214	1.25	.67	.62
1T4	6-056	1.55	.84	.77	GH6G	6-136	1.05	.57	.52	7A8	6-215	1.25	.67	.62
1T5GT	6-057	1.55	.84	.77	GH6GT	6-137	1.05	.57	.52	7B4	6-216	1.25	.67	.62
1V	6-058	.95	.51	.47	*GJ5	6-138	.85	.46	.42	7B5(LT)	6-217	1.25	.67	.62
2A3	6-059	1.90	1.03	.95	GJ5G	6-139	.95	.51	.47	7B6(LM)	6-218	1.25	.67	.62
2A4G	6-060	2.80	1.51	1.40	GJ5GT	6-140	.85	.46	.42	7B7	6-219	1.25	.67	.62
2A5	6-061	.95	.51	.47	*GJ7	6-141	1.25	.67	.62	7B8(LM)	6-220	1.25	.67	.62
2A6	6-062	.95	.51	.47	GJ7G	6-142	1.05	.57	.52	7C5(LT)	6-221	1.25	.67	.62
2A7	6-063	1.05	.57	.52	GJ7GT	6-143	1.05	.57	.52	7C6	6-222	1.25	.67	.62
2B7	6-064	1.25	.67	.62	GJ8G	6-144	1.55	.84	.77	7C7	6-223	1.25	.67	.62
2V3G	6-811	2.80	1.51	1.40	6K5G	6-145	1.05	.57	.52	7E6	6-224	1.25	.67	.62
2X2/879	6-810	2.30	1.24	1.15	GK6G	6-146	1.05	.57	.52	7E7	6-225	1.55	.84	.77
3A8GT	6-068	2.30	1.24	1.15	GK6GT	6-147	.95	.51	.47	7F7	6-226	1.55	.84	.77
304	6-069	1.55	.84	.77	*GK7	6-148	1.05	.57	.52	7G7/1232	6-227	1.90	1.03	.95
3Q5GT	6-070	1.55	.84	.77	GK7G	6-149	1.05	.57	.52	7H7	6-228	1.90	1.03	.95
354	6-071	1.55	.84	.77	GK7GT	6-150	.95	.51	.47	7J7	6-229	1.90	1.03	.95
*5T4	6-073	1.90	1.03	.95	*GK8	6-151	1.25	.67	.62	7Q7	6-232	1.25	.67	.62
5U4G	6-074	.95	.51	.47	GK8G	6-152	1.25	.67	.62	7Y4	6-234	1.25	.67	.62
5V4G	6-075	1.55	.84	.77	GK8GT	6-153	1.25	.67	.62	10	6-235	2.80	1.51	1.40
*5W4	6-076	1.05	.57	.52	6L5G	6-154	1.05	.57	.52	12A5	6-237	2.30	1.24	1.15
5W4GT	6-077	.85	.46	.42	*6L6	6-155	1.90	1.03	.95	12A7	6-238	1.90	1.03	.95
5X4G	6-078	1.05	.57	.52	6L6G	6-156	1.90	1.03	.95	12A8GT	6-239	.95	.51	.47
5Y3G	6-079	.65	.35	.32	*6L7	6-157	1.55	.84	.77	12B8GT	6-240	1.55	.84	.77
5Y4G	6-080	.70	.38	.35	6L7G	6-158	1.55	.84	.77	*12C8	6-241	1.90	1.03	.95
					6N5	6-092	1.55	.84	.77	12F5GT	6-242	.95	.51	.47
					6N6G	6-160	2.30	1.24	1.15	*12H6	6-243	1.05	.57	.52

\*Metal Type. †Miniature Type.  
‡Lokalt Type.



# TUBES



Type	Stock No.	List	NET EACH		Type	Stock No.	List	NET EACH		Type	Stock No.	List	NET EACH	
			1-14	15-UP				1-14	15-UP				1-14	15-UP
12J5GT	6-244	\$0.95	\$0.51	\$0.47	*25L6	6-285	\$1.55	\$0.84	\$0.77	50	6-324	\$2.30	\$1.24	\$1.15
12J7GT	6-245	1.05	.57	.52	25L6G	6-286	1.25	.67	.62	50L6GT	6-326	1.05	.57	.52
12K7GT	6-246	.95	.51	.47	25L6GT	6-287	1.05	.57	.52	50Y6GT	6-327	1.05	.57	.52
*12K8	6-247	1.55	.84	.77	25N6G	6-288	2.30	1.24	1.15	50Z7G	6-328	1.25	.67	.62
12Q7GT	6-249	.85	.46	.42	25Y5	6-289	2.30	1.24	1.15	53	6-330	1.55	.84	.77
*12SA7	6-250	.95	.51	.47	25Z5	6-290	.95	.51	.47	55	6-331	1.05	.57	.52
12SA7GT	6-251	1.25	.67	.62	*25Z6	6-291	1.25	.67	.62	56	6-332	.75	.40	.37
*12SC7	6-252	1.25	.67	.62	25Z6G	6-292	.95	.51	.47	57	6-333	.85	.46	.42
*12SF5	6-253	1.05	.57	.52	25Z6GT	6-293	.95	.51	.47	58	6-334	.85	.46	.42
12SF5GT	6-254	1.05	.57	.52	26	6-294	.70	.38	.35	59	6-335	1.55	.84	.77
*12SF7	6-255	1.25	.67	.62	27	6-295	.65	.35	.32	70L7GT	6-337	1.90	1.03	.95
*12SG7	6-256	1.25	.67	.62	30	6-296	.95	.51	.47	71A	6-338	.85	.46	.42
*12SJ7	6-257	1.05	.57	.52	31	6-297	.95	.51	.47	75	6-339	.80	.43	.40
12SJ7GT	6-258	1.05	.57	.52	32	6-298	1.25	.67	.62	76	6-340	.85	.46	.42
*12SK7	6-259	.95	.51	.47	32L7GT	6-299	1.90	1.03	.95	77	6-341	.85	.46	.42
12SK7GT	6-260	1.05	.57	.52	33	6-300	1.25	.67	.62	78	6-342	.85	.46	.42
12SN7GT	6-261	1.25	.67	.62	34	6-301	1.25	.67	.62	79	6-343	1.55	.84	.77
*12SQ7	6-262	.95	.51	.47	35	6-302	.95	.51	.47	80	6-344	.65	.35	.32
12SQ7GT	6-263	1.05	.57	.52	†35A5(LT)	6-303	1.25	.67	.62	81	6-345	1.90	1.03	.95
*12SR7	6-264	1.25	.67	.62	35L6GT	6-304	.95	.51	.47	82	6-346	1.25	.67	.62
12Z3	6-265	.95	.51	.47	†35Z3(LT)	6-305	1.25	.67	.62	83	6-347	1.25	.67	.62
14A7/12B7	6-266	1.90	1.03	.95	35Z4GT	6-306	.75	.40	.37	83V	6-348	1.90	1.03	.95
15	6-268	1.90	1.03	.95	35Z5GT	6-307	.80	.43	.40	84/6Z4	6-349	1.05	.57	.52
*1851	6-269	.....	2.10	2.10	36	6-309	.95	.51	.47	85	6-350	.85	.46	.42
19	6-270	1.25	.67	.62	37	6-310	.80	.43	.40	89	6-351	.95	.51	.47
20	6-271	2.80	1.51	1.40	38	6-311	1.05	.57	.52	112A	6-355	.95	.51	.47
22	6-272	2.30	1.24	1.15	39/44	6-312	.95	.51	.47	117L7GT	6-356	2.30	1.24	1.15
24A	6-273	.85	.46	.42	40	6-313	1.55	.84	.77	117N7GT	6-357	2.30	1.24	1.15
*25A6	6-274	1.90	1.03	.95	41	6-314	.80	.43	.40	117P7GT	6-358	2.30	1.24	1.15
25A6G	6-275	1.05	.57	.52	42	6-315	.80	.43	.40	117Z6GT	6-359	1.55	.84	.77
25A6GT	6-276	1.05	.57	.52	43	6-316	1.05	.57	.52	183/483	6-360	1.90	1.03	.95
25A7G	6-277	1.55	.84	.77	45	6-317	.75	.40	.37	485	6-361	1.90	1.03	.95
25A7GT	6-278	1.55	.84	.77	†45Z3	6-318	1.05	.57	.52	874	6-817	.....	1.50	1.50
25AC5GT	6-280	1.55	.84	.77	45Z5GT	6-319	1.05	.57	.52	884	6-813	.....	2.00	2.00
25B5	6-281	2.30	1.24	1.15	46	6-320	1.05	.57	.52	885	6-814	.....	2.00	2.00
25B6G	6-282	1.90	1.03	.95	47	6-321	1.05	.57	.52	886	6-815	2.80	1.51	1.40
25B6GT	6-283	1.90	1.03	.95	48	6-322	2.80	1.51	1.40	VOLTAGE REGULATOR TUBES				
25B8GT	6-284	1.90	1.03	.95	49	6-323	1.25	.67	.62	6-536. Type VR105/30.	\$1.25			
25C6G	6-284	1.90	1.03	.95	6-537. Type VR150/30. EACH									

\* Indicates Metal Type.

† Indicates Loktal Type.

‡ Miniature Type.

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**Fig. A. RCA Service Engineer's Pencil.** Barrel has standard resistor color-code guide. Non-metallic screwdriver beneath the cap. FREE with order for 90 RCA tubes, or sold separately. Shpg. wt., 6 oz. **\$1.85**

**Fig. B. Engineer's Fountain Pen.** Stainless steel point. Resistor drums on barrel. FREE with order for 175 RCA tubes. Sold separately. **99-010. NET. \$3.50**

**Three-color Pencil.** Automatically changes to color lead desired. Resistor color code guide on barrel. FREE with order for 115 RCA tubes. Sold separately. **\$2.35**

**Fig. C. Decalomania.** An attractive three-color decalomania transfer sticker for window of your store or car. FREE with order for RCA tubes. Ask for 37-056.

**Fig. D. Price Cards.** Shows prices for all RCA tubes. Also includes complete interchangeable tabulation for obsolete types and brands. FREE with order for RCA tubes. Ask for 37-057.

**Fig. E. Dummy Carton.** Exact duplicates in color and size of the famous RCA Radiotron sealed tube carton. 25 of these cartons are offered FREE with your order for 10 RCA tubes. Ask for 37-058.

**Fig. E. Giant Illuminated Carton.** Add brilliance to your window or counter display. Giant 18" carton is exact replica in red and black of the famous RCA Radiotron Sealed Tube Carton. Mounted on heavy black 8½" square base. Translucent sides brilliantly illuminated by 60 watt lamp which is included. With your next order for 75 RCA Tubes, ask for your FREE Giant Illuminated Carton. Also sold separately. Wt., 8 lbs. **\$1.50**

**Fig. F. Outdoor Metal Sign.** Identify your store in the public mind as an authorized RCA Radio Tube Dealer. Permanent metal sign increases sale of preferred RCA Radiotron Tubes; flashes far-reaching message in brilliant red, black and white lettering. Sturdy construction with durable enamel coating prevents corrosion. FREE with your order for 50 RCA Tubes, or sold separately. Wt., 5 lbs. **78-101. NET. \$1.00**

**Fig. G. Tube Test Stickers.** Roll of 2000, 1¼" x ¾". Imprinted with your name, address, and city. Records condition of tubes for future reference. Space provided for condition of tube, date sold or date tested. Processed to prevent charring. Your next order for 50 RCA Radiotron Tubes entitles you to FREE roll of Tube Test Stickers. Also sold separately. Wt., 1 lb. **\$1.00**

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**RC-14.** A new, revised manual containing full technical specifications for RCA receiving tubes. Brought up to the minute to cover the very latest tube types. Includes circuit diagrams, a concise discussion of vacuum tube theory and applications, a special section on resistance-coupled amplifier operating conditions, and other technical information. Invaluable to radio servicemen and experimenters. This important book should be in your radio library. 225 pages. Free with order for 25 RCA tubes. Wt., 1 lb. **37-575. NET. 25¢**

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A handy chart in pamphlet form. Shows the electrical characteristics and pin arrangement of all RCA receiving tubes. Starts with the earliest type 00-A, and covers all tubes manufactured since then. This characteristics chart is the latest edition. **37-059. FREE with order for RCA tubes.**

## SERVICEMAN'S CASE

Compact, sturdy case for carrying tools, tubes, wire, parts, etc. Designed to hold pliers and screwdrivers on inside of lid. Compartment for soldering iron and heavy tools. A really invaluable piece of serviceman's equipment that you can get without cost because it's FREE with purchase of 200 RCA tubes. Also sold separately. Wt., 5 lbs. **78-102. NET. \$4.00**



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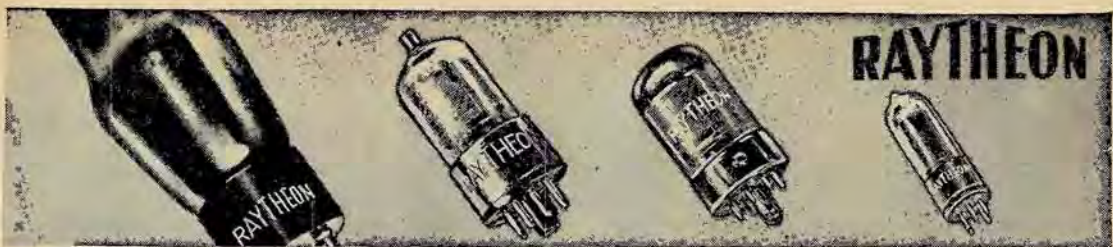
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Every Raytheon tube is fully guaranteed against any electrical or mechanical defect for a period of six months from date of purchase. We will immediately replace any tube that does not give you completely efficient and satisfactory performance. (This offer, of course, does not apply to burned-out or broken tubes.) Note our attractive extra discount in the listings on these two pages for tubes purchased in quantities of 15 or more. This discount applies whether you order Raytheon tubes of one type or of assorted types. Build up your order to 15 or more tubes for bigger savings. Shpg. wt.: 1 tube—8 oz.; additional tubes, 4 oz. each.

Type	Stock No.	List	NET EACH		Type	Stock No.	List	NET EACH		Type	Stock No.	List	NET EACH	
			1-14	15-UP				1-14	15-UP				1-14	15-UP
00A	4-000	\$2.30	\$1.24	\$1.15	3A8GT	4-068	\$2.30	\$1.24	\$1.15	*6H6	4-135	\$1.05	\$0.57	\$0.52
01A	4-001	.85	.46	.42	3Q5GT/G	4-070	1.55	.84	.77	6H6G	4-136	1.05	.57	.52
0A4G	4-002	1.90	1.03	.95	13S4	4-071	1.55	.84	.77	6H6GT	4-137	1.05	.57	.52
*024	4-003	1.55	.84	.77	4A6G	4-072	2.15	1.16	1.07	*6J5	4-138	.85	.46	.42
024G	4-004	1.55	.84	.77	*5T4	4-073	1.90	1.03	.95	6J5GT/G	4-140	.85	.46	.42
1A4P	4-005	1.55	.84	.77	SU4G	4-074	.95	.51	.47	*6J7	4-141	1.25	.67	.62
1A4T	4-006	1.55	.84	.77	SV4G	4-075	1.55	.84	.77	6J7G	4-142	1.05	.57	.52
1A5GT/G	4-008	1.05	.57	.52	*5W4	4-076	1.05	.57	.52	6J7GT	4-143	1.05	.57	.52
1A6	4-009	1.25	.67	.62	5W4GT/G	4-077	.85	.46	.42	6J8G	4-144	1.55	.84	.77
1A7G	4-010	1.55	.84	.77	5X4G	4-078	1.05	.57	.52	6K5G	4-145	1.05	.57	.52
1A7GT	4-011	1.25	.67	.62	5Y3G	4-079	.65	.35	.32	6K6GT/G	4-147	.95	.51	.47
1B4/951	4-012	1.25	.67	.62	5Y4G	4-080	.70	.38	.35	*6K7	4-148	1.05	.57	.52
1B5/255	4-013	1.25	.67	.62	5Z3	4-081	1.05	.57	.52	6K7G	4-149	1.05	.57	.52
1B7G	4-014	1.25	.67	.62	*5Z4	4-082	1.25	.67	.62	6K7GT	4-150	.95	.51	.47
1C5G	4-016	1.55	.84	.77	6A3	4-083	1.90	1.03	.95	*6K8	4-151	1.25	.67	.62
1C5GT	4-017	1.25	.67	.62	6A4/LA	4-084	1.55	.84	.77	6K8G	4-152	1.25	.67	.62
1C6	4-018	1.25	.67	.62	6A5G	4-085	2.80	1.51	1.40	6K8G	4-153	1.25	.67	.62
1C7G	4-019	1.25	.67	.62	6A6	4-086	1.55	.84	.77	6L5G	4-154	1.05	.57	.52
1D5GP	4-020	1.25	.67	.62	6A7	4-087	.95	.51	.47	*6L6	4-155	1.90	1.03	.95
1D5GT	4-021	1.25	.67	.62	*6A8	4-089	1.25	.67	.62	6L6G	4-156	1.90	1.03	.95
1D7G	4-022	1.55	.84	.77	6A8G	4-090	.95	.51	.47	*6L7	4-157	1.55	.84	.77
1D8GT	4-023	1.90	1.03	.95	6A8GT	4-091	.95	.51	.47	6L7G	4-158	1.55	.84	.77
1E4G	4-024	1.25	.67	.62	6A85/	4-092	1.55	.84	.77	6N6G	4-160	2.30	1.24	1.15
1E5GP	4-025	1.55	.84	.77	6N5	4-093	1.90	1.03	.95	*6N7	4-161	1.55	.84	.77
1E7G	4-026	2.30	1.24	1.15	*6A87	4-094	1.25	.67	.62	6N7G	4-162	1.55	.84	.77
1F4	4-027	1.25	.67	.62	1853	4-094	1.25	.67	.62	6P5G	4-163	.80	.43	.40
1F5G	4-028	1.25	.67	.62	6AC5G	4-095	1.05	.57	.52	6P5GT	4-164	.75	.40	.37
1F6	4-029	1.55	.84	.77	6AC5GT	4-096	2.30	1.24	1.15	6P7G	4-165	2.30	1.24	1.15
1F7GH	4-030	1.55	.84	.77	*6AC7/	4-096	1.55	.84	.77	*6Q7	4-166	1.25	.67	.62
1G4G	4-031	1.25	.67	.62	1852	4-097	2.30	1.24	1.15	6Q7G	4-167	.85	.46	.42
1G4GT	4-032	1.05	.57	.52	6AD6G	4-097	1.55	.84	.77	6Q7GT	4-168	.85	.46	.42
1G5G	4-033	1.25	.67	.62	6AD7G	4-098	1.55	.84	.77	*6R7	4-169	1.05	.57	.52
1G6G	4-034	1.55	.84	.77	6AE5G	4-099	1.65	.89	.82	6R7G	4-170	1.05	.57	.52
1G6GT	4-035	1.55	.84	.77	6AE5GT	4-100	1.25	.67	.62	6R7GT	4-171	.85	.46	.42
1H4G	4-036	.95	.51	.47	6AE6G	4-101	1.25	.67	.62	*6S7	4-172	1.55	.84	.77
1H5G	4-037	1.25	.67	.62	6AE7GT	4-102	1.25	.67	.62	6S7G	4-173	1.55	.84	.77
1H5GT	4-038	1.05	.57	.52	6AF5G	4-103	1.25	.67	.62	*6SA7	4-174	.95	.51	.47
1H6G	4-039	1.25	.67	.62	6AF6G	4-104	1.55	.84	.77	6SA7GT/G	4-175	1.05	.57	.52
1J5G	4-040	1.90	1.03	.95	6AF7G	4-105	2.30	1.24	1.15	*6SC7	4-176	1.25	.67	.62
1J6G	4-041	1.25	.67	.62	6AL6G	4-106	6.80	3.67	3.40	6SD7GT	4-177	1.25	.67	.62
1LA4	4-042	2.30	1.24	1.15	6B4G	4-107	1.90	1.03	.95	*6SF5	4-178	.95	.51	.47
1LA6	4-043	2.30	1.24	1.15	6B5	4-108	1.90	1.03	.95	6SF5GT	4-179	.95	.51	.47
1LB4	4-044	2.30	1.24	1.15	6B6G	4-109	1.05	.57	.52	*6SJ7	4-182	1.05	.57	.52
1LH4	4-045	2.30	1.24	1.15	6B7	4-110	1.25	.67	.62	6SJ7GT	4-183	1.05	.57	.52
1LNS	4-046	2.30	1.24	1.15	*6B8	4-112	1.90	1.03	.95	*6SK7	4-184	.95	.51	.47
1NSG	4-047	1.55	.84	.77	6B8G	4-113	1.25	.67	.62	6SK7GT/G	4-185	1.05	.57	.52
1NSGT	4-048	1.25	.67	.62	*6C5	4-114	1.05	.57	.52	*6SQ7	4-187	.95	.51	.47
1NGG	4-049	1.25	.67	.62	6C5G	4-115	.95	.51	.47	6SQ7GT/G	4-188	1.05	.57	.52
1P5GT	4-050	1.55	.84	.77	6C5GT	4-116	.95	.51	.47	*6SR7	4-189	1.05	.57	.52
1Q5GT/G	4-052	1.55	.84	.77	6C6	4-117	.95	.51	.47	6T5	4-191	1.25	.67	.62
1R5	4-053	1.55	.84	.77	6C8G	4-119	1.55	.84	.77	6T7G/	4-192	1.25	.67	.62
1S4	4-054	1.55	.84	.77	6D6	4-120	.95	.51	.47	6G6G	4-193	1.25	.67	.62
1S5	4-055	1.55	.84	.77	6D8G	4-122	1.55	.84	.77	6U6GT	4-194	1.25	.67	.62
1T4	4-056	1.55	.84	.77	6E5	4-123	1.05	.57	.52	6U7G	4-195	.95	.51	.47
1TSGT	4-057	1.55	.84	.77	6E6	4-124	1.30	1.03	.95	*6V6	4-196	1.90	1.03	.95
1V	4-058	.95	.51	.47	*6F5	4-126	1.05	.57	.52	6V6GT/G	4-198	1.05	.57	.52
2A3	4-059	1.90	1.03	.95	6F5G	4-127	1.05	.57	.52	6V7G	4-199	1.25	.67	.62
2A4G	4-060	2.30	1.24	1.15	*6F6	4-128	.95	.51	.47	6WSG	4-200	1.90	1.03	.95
2A5	4-061	.95	.51	.47	6F6G	4-129	1.05	.57	.52	6W7G	4-201	1.55	.84	.77
2A6	4-062	.95	.51	.47	6F7	4-130	.85	.46	.42	*6X5	4-202	1.55	.84	.77
2A7	4-063	1.05	.57	.52	6F7G	4-131	1.55	.84	.77	6X5GT/G	4-204	.95	.51	.47
2B7	4-064	1.25	.67	.62	6F8G	4-132	1.25	.67	.62	6Y6G	4-206	1.55	.84	.77
2E5	4-065	1.25	.67	.62	6G6G	4-133	1.25	.67	.62	6Y7G	4-207	1.55	.84	.77
2X2/879	4-067	2.30	1.24	1.15	6H4GT	4-134	1.90	1.03	.95					

\*—Indicates Metal Tube. †—Indicates Loktal Tube. ‡—Indicates Miniature Tube. G—Indicates Glass Octal.  
GT/G—Indicates Bantam Octal; Replaces Equivalent G or GT Types.





Type	Stock No.	List	NET EACH		Type	Stock No.	List	NET EACH	
			1-14	15-UP				1-14	15-UP
6Z7G	4-209	\$1.90	\$1.03	\$0.95	25L6GT/G	4-287	\$1.05	\$0.57	\$0.52
6Z5G	4-210	1.25	.67	.62	25Y5	4-289	2.30	1.24	1.15
7A4	4-211	1.25	.67	.62	25Z5	4-290	.95	.51	.47
7A5	4-212	1.25	.67	.62	*25Z6	4-291	1.25	.67	.62
7A6	4-213	1.25	.67	.62	25Z6GT/G	4-293	.95	.51	.47
7A7	4-214	1.25	.67	.62	26	4-294	.70	.38	.35
7A8	4-215	1.25	.67	.62	27	4-295	.65	.35	.32
7B4	4-216	1.25	.67	.62	30	4-296	.95	.51	.47
7B5	4-217	1.25	.67	.62	31	4-297	.95	.51	.47
7B6	4-218	1.25	.67	.62	32	4-298	1.25	.67	.62
7B7	4-219	1.25	.67	.62	32L7GT	4-299	1.90	1.03	.95
7B8	4-220	1.25	.67	.62	33	4-300	1.25	.67	.62
7C5	4-221	1.25	.67	.62	34	4-301	1.25	.67	.62
7C6	4-222	1.25	.67	.62	35/51	4-302	.95	.51	.47
7C7	4-223	1.25	.67	.62	35A5	4-303	1.25	.67	.62
7E6	4-224	1.25	.67	.62	35L6GT/G	4-304	.95	.51	.47
7E7	4-225	1.55	.84	.77	35Z3	4-305	1.25	.67	.62
7F7	4-226	1.55	.84	.77	35Z4GT	4-306	.75	.40	.37
7G7/1232	4-227	1.90	1.03	.95	35Z5GT/G	4-307	.80	.43	.40
7H7	4-228	1.90	1.03	.95	35Z6G	4-308	1.25	.67	.62
7J7	4-229	1.90	1.03	.95	36	4-309	.95	.51	.47
7L7	4-230	1.90	1.03	.95	37	4-310	.80	.43	.40
7N7	4-231	1.90	1.03	.95	38	4-311	1.05	.57	.52
7O7	4-232	1.25	.67	.62	39/44	4-312	.95	.51	.47
7R7	4-233	1.90	1.03	.95	40	4-313	1.55	.84	.77
7Y4	4-234	1.25	.67	.62	41	4-314	.80	.43	.40
10	4-235	2.80	1.51	1.40	42	4-315	.80	.43	.40
12A	4-236	.95	.51	.47	43	4-316	1.05	.57	.52
12A5	4-237	2.30	1.24	1.15	45	4-317	.75	.40	.37
12A7	4-238	1.90	1.03	.95	45Z5GT	4-319	1.05	.57	.52
12A8GT	4-239	.95	.51	.47	46	4-320	1.05	.57	.52
12B8GT	4-240	1.55	.84	.77	47	4-321	1.05	.57	.52
12C8	4-241	1.90	1.03	.95	48	4-322	2.80	1.51	1.40
12F5GT	4-242	.95	.51	.47	49	4-323	1.25	.67	.62
12J5GT	4-243	.95	.51	.47	50	4-324	2.30	1.24	1.15
12J7GT	4-244	1.05	.57	.52	50C6G	4-325	1.90	1.03	.95
12K7GT	4-245	.95	.51	.47	50L6GT	4-326	1.05	.57	.52
12K8GT	4-246	.95	.51	.47	50Y6GT/G	4-327	1.05	.57	.52
12Q7GT	4-248	1.25	.67	.62	50Z7G	4-328	1.25	.67	.62
*12SA7	4-249	.85	.46	.42	52	4-329	2.80	1.51	1.40
12S4GT/G	4-251	1.25	.67	.62	53	4-330	1.55	.84	.77
*12S7C	4-252	1.25	.67	.62	55	4-331	1.05	.57	.52
*12S7F	4-253	1.05	.57	.52	56	4-332	.75	.40	.37
*12SF5GT	4-254	1.05	.57	.52	57	4-333	.85	.46	.42
*12S7J	4-257	1.05	.57	.52	58	4-334	.85	.46	.42
*12S7JGT	4-258	1.05	.57	.52	59	4-335	1.55	.84	.77
*12SK7	4-259	.95	.51	.47	70A7GT	4-336	2.30	1.24	1.15
*12SK7GT/G	4-260	1.05	.57	.52	70L7GT	4-337	1.90	1.03	.95
*12SQ7	4-262	.95	.51	.47	71A	4-338	.85	.46	.42
*12SQ7GT/G	4-263	1.05	.57	.52	75	4-339	.80	.43	.40
*12SR7	4-264	1.25	.67	.62	76	4-340	.85	.46	.42
12Z3	4-265	.95	.51	.47	77	4-341	.85	.46	.42
11A47/12B7	4-266	1.90	1.03	.95	78	4-342	.85	.46	.42
14H7	4-267	1.90	1.03	.95	79	4-343	1.55	.84	.77
15	4-268	1.90	1.03	.95	80	4-344	.65	.35	.32
19	4-270	1.25	.67	.62	81	4-345	1.90	1.03	.95
20	4-271	2.80	1.51	1.40	82	4-346	1.25	.67	.62
22	4-272	2.30	1.24	1.15	83	4-347	1.25	.67	.62
24A	4-273	.85	.46	.42	83V	4-348	1.90	1.03	.95
*25A6	4-274	1.90	1.03	.95	84/6Z4	4-349	1.05	.57	.52
25A6G	4-275	1.05	.57	.52	85	4-350	.85	.46	.42
25A7G	4-276	1.05	.57	.52	89	4-351	.95	.51	.47
25A7GT	4-277	1.55	.84	.77	V99	4-352	2.80	1.51	1.40
25AC5G	4-278	1.55	.84	.77	X99	4-353	2.80	1.51	1.40
25AC5GT	4-280	1.55	.84	.77	117L7GT/117M7GT	4-356	2.30	1.24	1.15
25B6G	4-282	1.90	1.03	.95	117N7GT	4-357	2.30	1.24	1.15
25B8GT	4-283	1.90	1.03	.95	117Z6GT	4-359	1.55	.84	.77
25C6G	4-284	1.90	1.03	.95	884	4-813	2.00	2.00	2.00
*25L6	4-285	1.55	.84	.77	885	4-814	2.00	2.00	2.00
					950	4-366	1.90	1.03	.95
					*1851	4-269	2.10	2.10	2.10
					XXD	4-370	1.55	.84	.77
					XXL	4-371	1.55	.84	.77

### SPECIAL SOUND TUBES

Precision constructed tubes selected for Amplifier Equipment. Reduce hum, microphonics and noise pickup in high gain amplifier circuits.

Type	Stock No.	List	NET EACH		
			1-14	15-UP	
SS-5U4G	4-500	\$1.25	\$0.67	\$0.62	
SS-5V4G	4-501	1.90	1.03	.95	
SS-5Y3G	4-502	.95	.51	.47	
SS-6C5G	4-503	1.25	.67	.62	
SS-6C8G	4-504	1.90	1.03	.95	
SS-6F6G	4-505	1.05	.57	.52	
SS-6F8G	4-506	1.55	.84	.77	
SS-6J7G	4-507	1.25	.67	.62	
SS-6J7GT	4-508	1.25	.67	.62	
SS-6K6G	4-509	1.25	.67	.62	
SS-6L6G	4-510	2.30	1.24	1.15	
SS-6L7G	4-511	1.90	1.03	.95	
SS-6W6G	4-512	2.80	1.51	1.40	
SS-6N7G	4-513	1.90	1.03	.95	
SS-6V6G	4-514	1.55	.84	.77	
SS-6X5G	4-515	1.25	.67	.62	
SS-83	4-516	1.55	.84	.77	

### SPARTON TUBES

182B/482B	4-362	\$1.90	\$1.03	\$0.95
183/483	4-360	1.90	1.03	.95
485	4-361	1.90	1.03	.95

### SPECIAL GASEOUS RECTIFIERS

BA	4-525	\$6.55	\$3.54	\$3.27
BH	4-526	3.70	2.00	1.85
BR	4-527	2.70	1.46	1.35

### VOLTAGE REGULATORS

VR90-30	4-535	\$2.30	\$1.24	\$1.15
VR105-30	4-536	2.30	1.24	1.15
VR150-30	4-537	2.30	1.24	1.15

### RAYTHEON RESISTANCE TUBES

Type	No.	Type	No.	Type	No.
*1A1	4-550	BK49C	4-560	L55D	4-570
*1B1	4-551	K49D	4-561	M73B	4-571
42A	4-552	L49B	4-562	165R	4-572
K42B	4-553	L49C	4-563	165R4	4-573
BK42B	4-554	L49D	4-564	185R	4-574
L42B	4-555	K55B	4-565	185R4	4-575
L42C	4-556	K55C	4-566	185R8	4-576
49A	4-557	K55D	4-567	NB2	4-577
K49B	4-558	L55B	4-568	NB8	4-578
K49C	4-559	L55C	4-569		

List. 85c. Lots of 15, EACH... 42c  
 NET EACH... 46c  
 \*These two types list at \$1.25.  
 NET EACH... 67c

### RAYTHEON PANEL BULBS

No.	Type	Volts	Amps.	EA.	10 FOR
52-705	R40	6-8	.15	9c	\$0.54
52-735	R40A*	6-8	.15	9c	.54
52-706	R41	2.5	.50	9c	.54
52-707	R42	3.2	.50	12c	.71
52-708	R43*	2.5	.50	9c	.54
52-709	R44*	6-8	.25	9c	.54
52-710	R45*	3.2	.50	12c	.71
52-711	R46	6-8	.25	9c	.54
52-713	R48	2.0	.06	15c	.88
52-714	R49*	2.0	.06	15c	.88
52-738	R49A*	2.1	.12	18c	1.06
52-715	R50†	6-8	.20	10c	.59
52-741	R292	2.9	.17	12c	.71
52-743	R292A*	2.9	.17	12c	.71
52-716	R51†*	6-8	.20	7c	.41
52-720	R55†*	6-8	.40	7c	.41

### AUTOMOTIVE TYPES

\*Miniature bayonet base; all others screw base. †Small round bulb.

### HEARING-AID TUBES

Miniature tubes, 1½" high by .550" dia. Fil. Voltage 1.25 at .033 amps. †Metal Shell Base, 5 prong. Fits Amphenol socket below. \*Standard Octal. Removable Base. Leads in glass envelope may be wired into circuit.

Type†	No.	Type*	No.	EACH
CK501	4-585	CK501X	4-590	\$3.00
CK502	4-586	CK502X	4-591	
CK503	4-587	CK503X	4-592	
CK504	4-588	CK504X	4-593	
CK505	4-589	CK505X	4-594	

40-123. Molded socket for above. Mounts in ½" hole. For † series only. NET... 10c



# KNIGHT

## FAMOUS FOR

### NO FINER TUBES MADE

**Knight Radio Tubes are RCA Licensed, embodying latest developments in vacuum tube design. Knight tubes are unsurpassed for dependable construction, superior performance and long life—low priced to undersell competition. Knight tubes are factory-tested; encased in attractive tamper-proof cartons. The Knight line includes octal base, miniature, all-glass, all-metal, and GT octal base types. For greater economy buy Knight tubes in quantities of 15 or more.**

### GUARANTEED FOR SIX MONTHS

**Knight tubes are guaranteed against electrical or mechanical defect for six months. Knight tubes must give you complete satisfaction and efficient performance! We will promptly replace any tube that does not operate properly. (Burned-out or broken tubes are not replaceable.) This fine guarantee helps sell more Knight tubes, assures customer satisfaction. For larger savings buy Knight tubes in quantities of 15 or more. Av. shpg. wt.: 1 tube—8 oz.; additional tubes, 4 oz. each.**

Type	Stock No.	List	NET EACH		Type	Stock No.	List	NET EACH		Type	Stock No.	List	NET EACH	
			1-14	15-UP				1-14	15-UP				1-14	15-UP
0A4G	9-002	\$1.97	\$0.84	\$0.76	1T5GT	9-057	\$1.55	\$0.69	\$0.62	6D6	9-120	\$.95	\$0.41	\$0.37
*0Z4	9-003	1.55	.64	.58	1V	9-058	.95	.43	.39	6D8G	9-122	1.55	.69	.62
0Z4G	9-004	1.55	.64	.58	2A3	9-059	1.90	.84	.76	6ES	9-123	1.05	.48	.43
1A4P	9-005	1.55	.69	.62	2A4G	9-060	2.80	1.10	.99	*6F5	9-126	1.05	.48	.43
1A5G	9-007	1.55	.48	.43	2A5	9-061	.95	.43	.39	6F5G	9-127	1.05	.48	.43
1A6	9-009	1.25	.58	.52	2A6	9-062	.95	.43	.39	6F5GT	9-128	.95	.43	.39
1A7G	9-010	1.55	.62	.56	2A7	9-063	1.05	.48	.43	*6F6	9-129	1.05	.48	.43
1A7GT	9-011	1.25	.58	.52	2X2/879	9-067	2.30	1.01	.91	6F6G	9-130	.85	.39	.35
1B4P	9-012	1.25	.56	.50	3A8GT	9-068	2.30	1.01	.91	6F7	9-131	1.55	.69	.62
1B5/255	9-013	1.25	.58	.52	3Q5GT	9-070	1.55	.69	.62	6F8G	9-132	1.25	.58	.52
1B7GT	9-015	1.25	.58	.52	3S4	9-071	1.55	.69	.62	6G6G	9-133	1.25	.58	.52
1C5GT/G	9-017	1.25	.58	.52	5U4G	9-074	.95	.43	.39	*6H6	9-135	1.05	.48	.43
1C6	9-018	1.25	.58	.52	5V4G	9-075	1.55	.69	.62	6H6G	9-136	1.05	.48	.43
1C7G	9-019	1.25	.58	.52	*5W4	9-076	1.05	.48	.43	6H6GT	9-137	1.05	.48	.43
1D5GP	9-020	1.25	.58	.52	5W4GT	9-077	.85	.39	.35	*6J5	9-138	.85	.39	.35
1D7G	9-022	1.55	.69	.62	5Y3G	9-079	.65	.30	.27	6J5G	9-139	.95	.43	.39
1D8GT	9-023	1.90	.86	.78	5Y4G	9-080	.70	.32	.29	6J5GT	9-140	.85	.39	.35
1E7G	9-026	2.30	1.01	.91	5Z3	9-081	1.05	.44	.40	*6J7	9-141	1.25	.56	.50
1F4	9-027	1.25	.58	.52	*5Z4	9-082	1.25	.58	.52	6J7G	9-142	1.05	.48	.43
1F5G	9-028	1.25	.58	.52	6A3	9-083	1.90	.85	.77	6J7GT	9-143	1.05	.48	.43
1F6	9-029	1.55	.69	.62	6A6	9-086	1.55	.69	.62	6J8G	9-144	1.55	.69	.62
1F7GV	9-030	1.55	.69	.62	6A7	9-087	.95	.43	.39	6K5G	9-145	1.05	.48	.43
1G4G	9-031	1.25	.58	.52	*6A8	9-089	1.25	.58	.52	6K6G	9-146	1.05	.48	.43
1G6G	9-034	1.55	.69	.62	6A8G	9-090	.95	.41	.37	6K6GT	9-147	.95	.40	.36
1H4G	9-036	.95	.41	.37	6A8GT	9-091	.95	.43	.39	*6K7	9-148	1.05	.48	.43
1H5G	9-037	1.25	.53	.48	6A8S/6N5	9-092	1.55	.59	.53	6K7G	9-149	1.05	.48	.43
1H5GT	9-038	1.05	.48	.43	*6A8T/1853	9-093	1.90	.71	.64	6K7GT	9-150	.95	.41	.37
1H6G	9-039	1.25	.58	.52	6AC5G	9-094	1.25	.52	.47	*6K8	9-151	1.25	.58	.52
1J6G	9-041	1.25	.58	.52	6AC5GT	9-095	1.05	.52	.47	6K8GT	9-152	1.25	.58	.52
1L4A	9-042	2.30	1.01	.91	*6AC7/1852	9-096	2.30	1.01	.91	6L5G	9-154	1.05	.48	.43
1L4B	9-043	2.30	1.01	.91	6AE5GT	9-100	1.25	.58	.52	*6L6	9-155	1.90	.84	.76
1L4C	9-044	2.30	1.01	.91	6AF6G	9-104	1.55	.66	.60	6L6G	9-156	1.90	.84	.76
1L4D	9-045	2.30	1.01	.91	6B4G	9-107	1.90	.85	.77	*6L7	9-157	1.55	.69	.62
1L4E	9-046	2.30	1.01	.91	6B5	9-108	1.90	.85	.77	6L7G	9-158	1.55	.69	.62
1L5	9-047	1.55	.62	.56	6B7	9-110	1.25	.58	.52	*6N7	9-161	1.55	.69	.62
1N5G	9-048	1.25	.58	.52	*6B8	9-112	1.90	.84	.76	6N7G	9-162	1.55	.69	.62
1N5GT	9-049	1.25	.58	.52	6B8G	9-113	1.25	.58	.52	6P5GT	9-164	.75	.37	.33
1P5GT	9-050	1.55	.69	.62	*6C5	9-114	1.05	.48	.43	*6Q7	9-166	1.25	.58	.52
1Q5GT	9-052	1.55	.69	.62	6C5G	9-115	.95	.43	.39	6Q7G	9-167	.85	.39	.35
1R5	9-053	1.55	.62	.56	6C5GT	9-116	.95	.46	.41	*6R7	9-168	.85	.37	.33
1S4	9-054	1.55	.69	.62	6C6	9-117	.95	.43	.39	6R7G	9-169	1.55	.64	.58
1S5	9-055	1.55	.62	.56	6C8G	9-119	1.55	.69	.62					
1T4	9-056	1.55	.62	.56										

\*Metal Type. †Loktal Type. G—Octal Glass Type. GT—Small Octal Glass Type. ‡Miniature Type.



NET EACH  
**35c**  
LOTS OF 15 ASSORTED EACH **31c**

### "KNIGHT" BALLAST RESISTORS

Exact duplicate, top-notch quality metal shell, ballast tubes for replacement in AC-DC sets. Identical to originals in electrical characteristics and base connections. Will operate efficiently by maintaining normal voltage across primary of power transformer within allowable limits. Requires no rewiring; simply remove old defective ballast tubes and replace with proper Knight Preferred Ballast. Types are listed numerically and cover those most commonly used. Low prices mean extra profits to Dealers. Av. shpg. wt., 1 tube—8 oz.; additional tubes, 4 oz. each. \*These tubes have glass envelopes.

No.	Type	Replaces	No.	Type	Replaces
9-800	K23B	BK23B	9-820	K55CP	K55CP, K55CPR
9-801	K36B	BK36B	9-821	L55B	2VR-215, BL55B, L55BG
9-802	K42B	BK42B, K42BG	9-822	L55C	L55, S5C
9-803	K42C	BK42C, 95K2	9-823	L55S1	L55S1
9-804	K49C	BK49C	9-824	L55S2	L55S2
9-805	L42B	L42B, BL42B, L42BG	9-825	M55B	BM55B
9-806	L42C	L40C, 69-2037, BL42C	9-826	K70B	K70B
9-807	M42B	BM42B, M42BG	9-827	K74B	K72B, K73B
9-808	K749B	50B2, 50B2MG	9-828	K74C	K74C, K72C, K73C
9-809	K49B	BK49B W-43357, 135K1	9-829	K80B	K79B, K78B
9-810	K749C	50A2MG	9-830	K87B	K90B, K86B
9-811	K49D	BK49D, K49CB	9-831	K92B	K92B, K85B
9-812	K49D	BK49D, 334A	9-832	*100-70	100-70
9-813	L49B	2UR224, 69, 2033, L49BG	9-833	*100-77	100-77
9-814	L49C	L49-5.5C	9-834	105A	K105A
9-815	L49CJ	100-37 (Glass or metal)	9-835	*165R4	165R4
9-816	L49D	3CR-241	9-836	*200R	200R
9-817	M49B	8593, BM49B, M49BG	9-837	*320R	320R
9-818	K55B	BK55B, 3613, 55KB	9-838	*320R4	320R4
9-819	K55C	K55C, BK55C, K55CG			

### JFD ADJUSTABLE BALLAST KIT



Handy kit of adjustable AC-DC ballasts designed to replace more than 2700 different types of ballast tubes now in use. Kit contains 2 type "A," 2 type "B," and 1 type "C" tubes, tools, and booklet.

**FREE REPLACEMENT GUIDE WITH KIT**  
Kit includes new revised 80-page Belt and Ballast Book. Gives all replacement information for 2700 ballasts and valuable technical data. Shpg. wt., 2 lbs.  
**9-875. Ballast Tube Kit. NET \$2.94**

**REPLACEMENT TUBES FOR ABOVE**  
Individual replacement tubes for above kit. Keep your stock complete. Wt., 8 oz. each.  
9-885. Ballast A. } NET EACH **59c**  
9-886. Ballast B. }  
9-887. Ballast C. }



# TUBES

## HIGH QUALITY



Type	Stock No.	List	NET EACH		Type	Stock No.	List	NET EACH		Type	Stock No.	List	NET EACH	
			1-14	15-UP				1-14	15-UP				1-14	15-UP
6R7G	9-170	\$1.05	\$0.48	\$0.43	12A5	9-237	\$2.30	\$1.01	\$0.91	31	9-297	\$0.95	\$0.41	\$0.37
*6S7	9-172	1.55	.69	.62	12A7	9-238	1.90	.84	.76	32	9-298	1.25	.56	.50
6S7G	9-173	1.55	.69	.62	12A8GT	9-239	.95	.43	.39	32L7GT	9-299	1.90	.84	.76
*6SA7	9-174	.95	.41	.37	12B8GT	9-240	1.55	.69	.62	33	9-300	1.25	.56	.50
*6SC7	9-176	1.25	.56	.50	*12C8	9-241	1.90	.84	.76	34	9-301	1.25	.56	.50
*6SF5	9-178	.95	.43	.39	12F5GT	9-242	.95	.43	.39	35/51	9-302	.95	.41	.37
*6SJ7	9-182	1.05	.48	.43	12J5GT	9-244	.95	.43	.39	†35A5 (LT)	9-303	1.25	.52	.47
*6SK7	9-184	.95	.41	.37	12J7GT	9-245	1.05	.48	.43	35L6GT/G	9-304	.95	.43	.39
6SK7GT	9-185	1.05	.43	.39	12K7GT	9-246	.95	.41	.37	†35Z3 (LT)	9-305	1.25	.52	.47
*6SQ7	9-187	.95	.38	.34	12Q7GT	9-249	.85	.37	.33	35Z4GT	9-306	.75	.33	.30
6SQ7GT	9-188	1.05	.47	.42	*12SA7	9-250	.95	.41	.37	35Z5GT/G	9-307	.80	.35	.32
*6SR7	9-189	1.05	.47	.42	12SA7GT	9-251	1.25	.56	.50	36	9-309	.95	.41	.37
6T7G	9-192	1.25	.58	.52	*12SC7	9-252	1.25	.56	.50	37	9-310	.80	.36	.32
6U5/6G5	9-193	1.25	.51	.46	*12SF5	9-253	1.05	.48	.43	38	9-311	1.05	.47	.42
6U7G	9-195	.95	.43	.39	12SF5GT	9-254	1.05	.48	.43	39/44	9-312	.95	.41	.37
*6V6	9-196	1.90	.84	.76	*12SJ7	9-257	1.05	.48	.43	41	9-314	.80	.35	.32
6V6G	9-197	1.25	.51	.46	12SJ7GT	9-258	1.05	.48	.43	42	9-315	.80	.35	.32
6V6GT	9-198	1.05	.48	.43	*12SK7	9-259	.95	.41	.37	43	9-316	1.05	.46	.42
*6X5	9-202	1.55	.67	.60	12SK7GT	9-260	1.05	.48	.43	45	9-317	.75	.33	.30
6X5G	9-203	1.05	.41	.37	*12SQ7	9-262	.95	.38	.34	45Z5GT	9-319	1.05	.46	.42
6X5GT/G	9-204	.95	.41	.37	12SQ7GT	9-263	1.05	.48	.43	46	9-320	1.05	.46	.42
6Z7G	9-209	1.90	.84	.76	12Z3	9-265	.95	.43	.39	47	9-321	1.05	.46	.42
6ZY5G	9-210	1.25	.58	.52	19	9-270	1.25	.56	.50	49	9-323	1.25	.54	.48
†7A4	9-211	1.25	.52	.47	24A	9-273	.85	.38	.34	50	9-324	2.30	1.00	.90
†7A5	9-212	1.25	.52	.47	*25A6	9-274	1.90	.84	.76	50L6GT	9-326	1.05	.46	.42
†7A6	9-213	1.25	.52	.47	25A6G	9-275	1.05	.48	.43	56	9-332	.75	.33	.30
†7A7 (LM)	9-214	1.25	.52	.47	25A6GT	9-276	1.05	.48	.43	57	9-333	.85	.39	.35
†7A8	9-215	1.25	.52	.47	25A7G	9-277	1.55	.69	.62	58	9-334	.85	.39	.35
†7B4	9-216	1.25	.52	.47	25A7GT	9-278	1.55	.69	.62	59	9-335	1.55	.69	.62
†7B5 (LT)	9-217	1.25	.52	.47	25B5	9-281	2.30	.99	.89	70L7GT	9-337	1.90	.84	.76
†7B6 (LM)	9-218	1.25	.52	.47	25B8GT	9-283	1.90	.84	.76	71A	9-338	.85	.39	.35
†7B7	9-219	1.25	.52	.47	*25L6	9-285	1.55	.69	.62	75	9-339	.80	.35	.31
†7B8 (LM)	9-220	1.25	.52	.47	25L6G	9-286	1.25	.50	.45	76	9-340	.85	.38	.34
†7C5 (LT)	9-221	1.25	.52	.47	25L6GT/G	9-287	1.05	.47	.43	77	9-341	.85	.38	.34
†7C6	9-222	1.25	.52	.47	25Z5	9-290	.95	.43	.37	78	9-342	.85	.38	.34
†7C7	9-223	1.25	.52	.47	*25Z6	9-291	1.25	.56	.50	80	9-344	.65	.27	.24
†7E6	9-224	1.25	.52	.47	25Z6G	9-292	.95	.38	.34	81	9-345	1.90	.84	.76
†7E7	9-225	1.55	.69	.62	25Z6GT	9-293	.95	.38	.34	83	9-347	1.25	.56	.50
†7F7	9-226	1.55	.69	.62	*1852	9-096	2.30	1.01	.91	84/6Z4	9-349	1.05	.47	.42
†7GT/1232	9-227	1.90	.84	.76	*1853	9-093	1.90	.71	.64	85	9-350	.85	.39	.35
†7Q7	9-232	1.25	.52	.47	26	9-094	.70	.30	.27	89	9-351	.95	.43	.39
†7Y4	9-234	1.25	.52	.47	27	9-295	.65	.28	.25	117L7GT	9-356	2.30	.99	.89
10	9-235	2.80	1.25	1.12	30	9-296	.95	.41	.37	117N7GT/G	9-357	2.30	.99	.89
										117Z6GT	9-359	1.55	.69	.62

\*Metal Type. †Loktal Type. G—Octal Glass Type. GT—Small Octal Glass Type.



### HYTRON BANTAM JR. MINIATURE TUBES

Tiny 1.4 volt tubes only 2 3/8" high. Highly-sensitive and compact bantam tubes for hearing-aid amplifiers and experimental circuits, etc. Low "B" drain. With sockets. Have extra resistor to permit use in 70 ma. circuits. Shpg. wt., 6 oz.

No.	50 Ma. Fil.	Use	NET
S-000	HV113-HV123	Triode	\$1.75
S-001	HV115-HV145	Pentode	2.50
S-002	HV125-HV155	Pentode	2.50



### CLAROSTAT METAL TUBE RESISTORS

Octal base resistors replace tubes starting with letters BK, BL, K, L, M. Operate regardless of pilot lamp combination, or if lamp burns out. Not affected by line voltage variations; Ideal for replacement work. Wt., 8 oz.

Stock No.	Numbers	End-Letter	NET EACH
S-200	10-23	A,B,C,D	59c.
S-201	23-55	A,B,C,D	
S-202	23-55	F,G,H	
S-203	60-92	A,B,C,D	
S-204	60-92	F,G,H	
S-205	92-105	A,B,C,D	

37-535. Plug-in Resistor Manual. FREE with order; or sold separately. . . . 15c



### GENUINE G-E MAZDA PILOT AND FLASHLIGHT BULBS

General Electric Mazda clear pilot light bulbs. Famous the world over for their quality dependability, and long life. Standard bead coloring. Type 40, Brown bead; types 41, 43, 50, 51, and 55, White bead; types 42 and 45, Green bead; types 44 and 46, Blue bead; types 48 and 49, Pink bead. Cheaper than foreign-made bulbs in the long run. \*Indicates miniature bayonet base. †Indicates small round bulb. Av. shpg. wt., 3 oz.

RADIO PILOT LIGHT BULBS						
Stock No.	Lamp No.	Volts	Amps	NET EACH	Box of 10	
52-306	41	2.5	.50	\$0.09	\$0.54	
52-308	43*	2.5	.35	.09	.54	
52-307	42	2.5	.35	.12	.71	
52-305	40	6-8	.15	.09	.54	
52-315	50†	6-8	.20	.10	.59	
52-316	51*†	6-8	1.0	.07	.41	
52-320	55*†	6-8	.40	.07	.41	
52-313	48	2.0	.06	.15	.88	
52-314	49*	2.0	.06	.15	.88	
52-309	44*	6-8	.25	.09	.54	
52-311	46	6-8	.25	.09	.54	
52-310	45*	3.2	.35	.12	.71	
52-312	47*	6-8	.15	.09	.54	

MAZDA FLASHLIGHT BULBS						
Stock No.	Lamp No.	Cell	Volts	Amp.	NET EACH	Box of 10
52-331	223	2	2.2	0.35	\$0.09	\$0.54
52-334	233	2	2.3	0.27	.09	.54
52-300	13	3	3.8	0.30	.09	.54
52-301	14	2	2.5	0.30	.09	.54
52-302	31	5	6.2	0.30	.10	.59
52-327	136	1	1.3	0.60	.10	.59
52-339	248	2	2.4	0.80	.10	.59
52-342	605	3	6.0	0.50	.10	.59
52-325	112	1	1.1	0.22	.09	.54
52-330	222	2	2.2	0.25	.09	.54
52-344	PR-2	2	2.4	0.50	.13	.76
52-345	PR-3	3	3.6	0.50	.13	.76
52-328	195	2	1.93	0.45	.15	.90

G-E TYPE S6 115 VOLT PILOT LAMPS		
52-349	6 Watt	NET . . . . . 15c
52-347	3 Watt	NET . . . . . 25c
TYPE C. As above, but cone shaped; 2 1/2" length, 7 watts. Wt., 4 oz.		
52-355	Clear	
52-356	White	
52-357	Red	EACH . . . . . 10c

TUBULAR 120 VOLT 4-WATT PILOT LAMP		
52-350	NET . . . . .	36c



# NEON LAMPS - LINE CORDS - REGULATORS



## GENERAL ELECTRIC NEON GLOW LAMPS

### T-2 TINY NEON LAMP

One of the smallest neon lamps made; only 1 1/2" high x 1/4". For any voltage above 90 V. DC or 65 V. AC at 3 ma. Requires current limiting resistance; suggested resistances: .2 meg. for 105-125 V., .5 meg. for 210-250 V. Less resistor. Shpg. wt., 3 oz.  
**52-370. 25 FOR \$1.80. NET EACH... 8c**  
**52-371.** With .2 meg. resistance. 1/25 watt.  
**52-372.** With .5 meg. resistance. 1/10 watt.  
**10 FOR \$1.17. NET EACH... 13c**



### T-2 UNDER-PANEL MOUNTING

Clip holds bulb up against 1/4" or 3/8" hole in panel. 1 1/4" long; depth, with terminals, 1 3/8". Wt., 3 oz.  
**52-382. 10 FOR \$1.08. EACH... 12c**



### T-2 WITH SWITCHBOARD LAMP BASE

T-2 lamp with standard octagon switchboard lamp base. Requires external resistor. 1 1/4" long x 3/8". Shpg. wt., 3 oz.  
**52-380. 10 FOR \$1.89. EACH... 21c**



### PANEL MOUNTING

With bakelite body for panels up to 3/8" thick; 1/2" dia. mounting hole. .2 meg. resistor built-in. 2" behind panel, 3/8" in front. Wt., 7 oz.  
**52-381. NET EACH... 59c**

## STANDARD AC-DC LINE CORD RESISTORS



A 6-foot line cord with built-in resistor which supplies proper filament voltage for tubes wired in series across the 115 volt power lines. Replaces worn-out cords on AC-DC sets. Tinned copper terminal on resistance lead. Wt., 1 lb.

Stock No.	Ohms	Stock No.	Ohms	NET EACH
49-510	360	49-517	220	30c
49-511	350	49-518	200	
49-512	330	49-519	180	
49-513	310	49-520	160	
49-514	290	49-521	150	
49-515	280	49-522	135	

**49-523.** 280 ohm cord with built-in aerial for Wireless Phonographs. NET... 44c

## UNIVERSAL AC-DC LINE CORD



Consists of 6 resistance values up to 330 ohms. Select proper resistance required and clip off remaining leads.  
**49-530. NET... 52c**

## "MAKE-UR-OWN" RESISTANCE CORDS

Now resistance cords can be tailor-made to meet any requirement. Consist of color-coded line cord wires with asbestos-covered resistance wire. Simply divide total resistance needed by 30 or 60 to determine length in feet needed.

Length	30 Ohms Per Ft.		60 Ohms Per Ft.	
	Stock No.	NET	Stock No.	NET
5 Feet	49-561	20c	49-571	20c
25 Feet	49-562	90c	49-572	90c

## 220-110 VOLT AC-DC LINE CORD



Permits operation of any 110 Volt AC-DC receiver from 220 Volt line. With plug and receptacle attached. Shpg. wt., 1 lb.

**49-580.** For sets using .15 amp. tubes.  
**49-581.** For sets using .3 amp. tubes.  
**NET EACH... 60c**



Low wattage, neon-filled lamps that glow a bright orange red. Innumerable applications: as signals on test equipment, ignition or panel-board indicators, fuse indicators, stroboscopic illuminants, on electric ranges and operable radio sets, as night lights, in coin-operated machines, on fire alarm boxes, etc. Average useful life, 3000 hours. Non-heat-producing; not affected by vibration. For 105-125 volts AC or DC. Average shpg. wt., 4 oz.

### EXTRA 10% DISCOUNT IN LOTS OF 10 EDISON TYPE BASE

No.	Type	Finish	Watts	EACH
52-800	G10	Clear	1/2	36c
52-801	G10	Clear	1	36c
52-802	G10	Clear	1 (210-250V.)	36c
52-803	S14	Clear	2	45c
52-804	S14	Orange	2	49c
52-805	S14	Red	2	49c
52-806	S14	Clear	3	54c

### CANDELABRA BASE

52-807	T4 1/2	Clear	1/2	36c
52-808	G10	Clear	1/2	41c
52-809	G10	Clear	1	41c

## ARGON GLOW LAMPS

**52-810.** Type S-14. Edison base; clear glass; 2 1/2 watts. NET... 45c  
**52-811.** Type T-4 1/2. Candelabra base; clear glass; 1/4 watt. NET... 41c

## G-E RESISTORLESS TYPE

A neon type unit for use in voltage regulators, test instruments, noise silencers, and any high frequency equipment. There is no resistor in base of lamp. Can be matched to any test panel or instrument. Ideal panel indicator light. Has double contact bayonet base. Wt., 4 oz.



Stock No.	Type	Finish	Watts	EACH
52-812	T4 1/2	Clear	1/2	41c
52-813	G10	Clear	1	
52-814	G10	Clear	1	
52-815	S14	Clear	2	49c

## PORCELAIN SOCKETS

For neon lamps. Edison base types are for standard bulbs. Handy screw terminals. Metal shell over hard rubber. Shpg. wt., 8 oz.

Stock No.	Base	Mount	EACH
52-850	Edison	Clear	11c
52-851	Edison	Sub-panel	16c
52-852	Candelabra	Sub-panel	26c
52-853*	Bayonet	Sub-panel	21c

See page 165 for panel mounting sockets for candelabra base bulbs.

## GENUINE G.E. TUNGAR BULBS



The well-known, efficient G.E. Tungar Bulbs. Used in many standard chargers. Replace Rectigon bulbs of same rating. Shpg. wt., 2 lbs.

Stock No.	G.E. Type	Amps.	Fig.	EACH
9-900	277465	2	A	\$2.94
9-901	195528	2	B	3.94
9-902	289381	0.5	C	3.94
9-903	189048	6	D	6.97
9-904	189049	6	D	6.97
9-905	217283	15	D	7.35

## MALLORY BIAS CELLS



Designed principally to bias first audio tubes in high gain amplifiers. Eliminate necessity of using high capacity cathode bypass condensers. Illustration shows single bias cell in No. 9-955 holder listed below. May also be used to furnish initial bias for RF IF, and AVC circuits. Size, only 1 1/2" by 3/4". Noiseless; non-reactive at audio frequencies. Provide a no-current potential of 1 or 1 1/2 volt ± 10%. Cells may be used in series for higher voltages. Eliminate distortion. Will last indefinitely if not overloaded. Holders below permit easy mounting. Shpg. wt., 3 oz.

**9-950. 1 Volt Type. NET EACH... 18c**

**9-951. 1 1/2 Volt Type. EACH... 18c**

**37-023.** Mallory circular. Complete data on Mallory bias cells. FREE ON REQUEST.

## BIAS CELL HOLDERS

For mounting Mallory bias cells above. Have convenient terminals. Av. shpg. wt., 3 oz.

Stock No.	Type	For	EACH
9-955	GB11A	1 cell	6c
9-956	GB11B	1 cell	9c
9-957	GB12	2 cells	12c
9-958	GB13	3 cells	15c
9-959	GB14	4 cells	21c

## VOLTAGE REGULATORS

### CLAROSTAT LINE VOLTAGE REGULATOR

Adjusts line voltage for all 110 Volt radios. Protects against fluctuating voltages. Keeps set voltage constant, even with line voltage increase to 140 volts. Plugs into wall outlet; set cord plugs into regulator. Shpg. wt., 1 lb.



No.	Type	Watts
9-920	A.	Up to 60
9-921	B.	60 to 150
9-922	C.	100 to 150
9-923	C.	150 to 200
9-924	D.	200 to 250

List, \$1.00. NET EACH... 59c

## CLAROSTAT REPLACEMENT LINE BALLASTS

Exact duplicates for sets indicated. Maintain normal voltage for line fluctuations from 90 to 135 volts. (Other ballasts can be supplied for almost any radio. When ordering, send in defective ballast and deposit for fast service.) Shpg. wt., 1 lb.



**9-930.** For Stewart-Warner 900 series.  
**9-931.** For Stewart-Warner 950 series.  
**9-932.** For Stewart-Warner R100 series.  
**9-933.** For Brunswick receivers.  
**9-934.** For Majestic 70 series.  
**9-935.** For Majestic 180 series.  
**9-936.** For Majestic 300 series.

List, \$1.75. NET EACH... 98c

## UNIVERSAL RESISTOVOLT

An automatic voltage regulator. Maintains a constant potential of 110 or 220 Volts, AC or DC, preventing tube burnouts, and assuring more stable performance. Easy to install—just plug in between line cord and wall outlet. Shpg. wt., 1 lb.



**9-970. Heavy-Duty** for sets from 5 to 9 tubes. NET EACH... 56c

## CONTINENTAL VOLTACON

A versatile new plug-in type voltage regulator that protects any radio from over-voltage. Adjusts to any of three positions covering voltage ranges between 115-120 volts, 120-125 volts, 125-130 volts. Adjustment is quickly made by turning barrel of unit; no further attention is required after initial adjustment is made. For use with any 4 to 10 tube radio, drawing not more than 100 watts. Shpg. wt., 1 lb.



**9-980. NET... 73c**



# HICKOK

# QUALITY TEST EQUIPMENT

## 188X FM-AM UNIVERSAL SIGNAL GENERATOR



Designed for the servicing of FM as well as AM receivers, this signal generator represents the most advanced design in test equipment. Continuous fundamental coverage from 100 KC to 110 MC in 7 ranges with an accuracy better than 1/2%. Provides 12 outputs: RF with 750 KC sweep, RF with 150 KC sweep, both to 133 MC, RF with 30 KC sweep, RF modulated at 400 cycles, RF unmodulated, AF 100-10,000 cycles, AF 400 cycles fixed, synchronized sweep voltage for scope use and 4 crystal-controlled outputs with an accuracy of .01%: 100-15,000 KC modulated at 400 cycles, 100-15,000 KC unmodulated, 1000 KC-100 MC modulated at 400 cycles, and 1000 KC-100 MC unmodulated. Meter reads: -10 to +38 db, and 0-140

volts in 3 ranges. With tubes, crystal cables, and manual 13x13x7". For 110 V., 60 cycles. Wts., all models, 26 lbs. **\$72.32**

**84-100. CASH PRICE.....**

Time Payments: \$14.46 down, \$7.96 monthly for 8 months.

**84-101. Model 188. Same as 188X but less crystal and crystal tube which may be added any time. CASH PRICE..... \$62.92**

Time Payments: \$12.58 down, \$6.92 monthly for 8 months.

## MODEL 177X SIGNAL GENERATOR

**84-102. Model 177X. Same as the Model 188X but less the db meter. With crystal. CASH PRICE..... \$62.03**

Time Payments: \$12.40 down, \$6.83 monthly for 8 months.

**84-103. Model 177. Same as the Model 188X but less both db meter and crystal. CASH PRICE..... \$52.33**

Time Payments: \$10.46 down, \$5.76 monthly for 8 months.

## 510X DYNAMIC MUTUAL CONDUCTANCE TUBE-SET TESTER

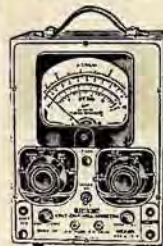


A desirable combination of a complete set tester and tube tester all in one instrument. The Model 510X indicates Dynamic Mutual Conductance in micromhos as well as "Replace-7-Bad" on a large, easily read 5-inch meter with multi-colored scales. Tests all receiving tubes, including those with filaments up to 117 volts, as well as loktal, octal, miniature, gas rectifiers, magic eyes, battery tubes, pilot lamps, and ballasts. Each element tested separately. Positive short tests made with tube hot or cold. Sensitive noise test. Also tests for gas content. Includes tube chart. The Model 510X measures volts, ohms, milliamperes, capacity, inductance, decibels, and leakage. Accuracy is within ±1 1/2%. The four voltage ranges are: 0-20-200-500-1,000 AC and DC. Sensitivity is 1,000 ohms per volt on all ranges. Electronic rectifiers assure a linear scale. The three overlapping resistance ranges cover 0-25 megohms. .1 ohm easily read. No batteries used. DC ma. 0-20-200. Capacity range: .0001 to 24 mfd. 14"x13 1/2"x6". Removable cover. Less 83 and 5W4 tubes. For 110 V., 60 cycles. Wt., 21 lbs.

**84-107. CASH PRICE..... \$71.74**

\$14.34 down, \$7.89 monthly for 8 months.

## MODEL 202 ELECTRONIC AC-DC VOLT-OHM-MILLIAMMETER



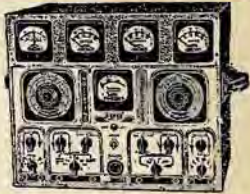
Here is a new instrument having features which make it indispensable for the servicing of present-day complex circuits. Makes all AC, DC, AF, and most resistance measurements while the set is in operation without disturbing the most delicately balanced circuit. Circuit design of the instrument provides protection against accidental overloads.

AVC, AFC, FM discriminator voltages, stage gain, etc., may be measured with the circuit in operation. The output voltage of the oscillator in a receiver may be checked throughout its entire range in checking for "dead spots." Exceptionally high and low values of resistance may be accurately read on the large 5" square meter. Ranges: 0-.5-2-10-50-250-1,000 V. AC with input impedance of approximately 2.5 megohms on all ranges; 0-2.5-10-50-250-1,000 V. DC with an input impedance of 14 megohms; 0-2.5-10-50-250-1,000 ma. DC; resistance from .1 ohm to 1,000 megohms in 5 ranges with a single zero adjustment for all ranges. Shielded test prods. Self-contained power supply uses 1 each: 6X5GT, 6J5, 6SQ7, VR150-30. Pilot light indicator. With all tubes. 10 1/2"x8"x7". For 110 V., 50-60 cycles. Shpg. wt., 17 lbs.

**84-106. CASH PRICE..... \$46.30**

\$9.26 down, \$5.93 monthly for 8 months.

## MODEL 155 METERIZED DYNAMIC TRACEOMETER



Features Meterized Dynamic Signal Tracing at its best. Any one or all five channels may be used at the same time without disturbing set operation. Five precision meters allow the tracing and measurement of the signal in any five circuits simultaneously. Design of vacuum-tube voltmeter circuits prevents meter damage from overload. Measures signal in microvolts at any RF or IF point in set. Indicates all DC, AVC, AFC, power supply, etc., voltages and all AF or AC voltages in any circuit. Measures oscillator voltage over entire range. Allows measurement of actual wattage consumption of any AC system up to 300 watts. Self-contained speaker provides audible test. The Model 155 Traceometer affords complete voltage stabilization of all circuits against line fluctuation.

## FOR RAPID SERVICING OF FM-AM AND TELEVISION RECEIVERS

The RF-IF section covers 100 to 1800 KC. Ranges are: 0-5,000-25,000-100,000 microvolts and 0-5-2.5-10-25 volts. Oscillator section covers 600 to 1700 KC, 1.75-15 MC; voltage ranges are: 0-3-1.5-7.5-30.0 and 150 volts. The DC voltmeter section ranges are: 0-2.5-5-25-50-250 and 500 volts with a zero-center. Input impedance is 18 megohms. The AF section covers 0-1-1.5-10-50-100 and 500 volts at an input impedance of 2 megohms. The RF-IF, Oscillator and AF sections have jacks for oscilloscope or phone monitoring. A 5-ampere fuse on front panel protects entire instrument, including the wattmeter. With 4 special low-capacity shielded leads and complete, detailed operating instructions. 13"x16"x10". Wt., 50 lbs. For 110 V., 60 cycles AC. **\$126.42**

**84-115. CASH PRICE.....**

Time Payments: \$25.28 down, \$13.91 monthly for 8 months.

## 530 DYNAMIC MUTUAL CONDUCTANCE TUBE TESTER



The Model 530 is a tube tester of the true Dynamic Mutual Conductance type. Two scales are provided, one reading micromhos and the other, a direct-reading "Good-7-Replace" scale. Mutual conductance scale has three ranges: 0-3,000, 0-6,000, and 0-15,000 micromhos. Poor tubes which pass when tested

in the ordinary emission type tube testers, are easily detected in the Model 530. The instrument has a 4-inch square meter with multi-colored illuminated dial. Tests all tubes, including those rated at 117 volts, as well as octal, loktal, miniature, gas rectifiers, grid-controlled rectifiers, magic eyes, battery tubes, pilot lights and ballasts. Tests for shorts with tube hot or cold. Also tests gas content of a tube. Sensitive noise test. Calibrated line indication. Line voltage adjustment from 96 to 130 volts. Convenient roll-type tube chart with directive arrows permits rapid setting of controls. Counter Model, 14"x16"x6". Portable Model, 14 1/2"x13"x6". For 110 V., 60 cycles. Complete operating instructions supplied. Less 83 and 5W4 tubes. Wt., 22 lbs.

**84-104. Counter Model. \$58.80**

\$11.76 down, \$6.47 monthly for 8 months.

## OTHER FINE HICKOK TEST INSTRUMENTS

We can supply all HICKOK INSTRUMENTS. Complete HICKOK literature, 37-969, and time payment blanks will be mailed on request. Send deposit and references with order on time payment purchases.

**84-108. Model 19X. Crystal Controlled Microvolt Generator. Range, 100 KC to 120 MC. 400 cycle, 1 volt output. Built-in VTVM. 30 lbs. \$94.08**

CASH.....

\$18.80 dn., \$10.35 mo. for 8 mo.

**84-109. Model 110. AC-DC Vacuum Tube Voltmeter. 0-1.5-3-15-75-150-750-7,500 V. DC; also 0-1.5-3-50-150 V. AC. Shipping wt., 21 lbs. \$64.68**

CASH.....

\$12.94 dn., \$7.12 mo. for 8 mo.

**84-110. Model 133. Radio set and dry battery tester. V.O.M. with sensitivity of 25,000 ohms per volt. Wt., 9 lbs. \$48.51**

CASH PRICE.....

\$9.79 dn., \$5.34 mo. for 8 mo.

**84-111. Model 210S. Jumbo zero current, volt-ohm-milliammeter. Infinite ohms per volt. Size: 13"x16"x7". 35 lbs. \$67.91**

CASH.....

\$13.58 dn., \$7.47 mo. for 8 mo.

**84-112. Model 900. All-purpose appliance tester. For general AC circuit analyzing. Indicates voltage, current and wattage. Shpg. wt., 11 lbs. \$38.81**

CASH.....

\$7.76 dn., \$4.27 mo. for 8 mo.

**84-113. Model 4955S. Accurate V.O.M. AC and DC sensitivity of 1000 ohms per volt. Zero to 10 meg. Size: 7"x4 1/2"x3 1/2". Shpg. wt., 5 lbs. \$29.69**

CASH PRICE.....

\$5.94 dn., \$3.27 mo. for 8 mo.

## MODEL RFO-5 3 INCH OSCILLOGRAPH

An ideal instrument for the laboratory or the service shop. It offers complete visual analysis of a signal from the antenna post to the voice coil of a receiver or amplifier. This is made possible by sensitive amplifiers and a built-in demodulator. Stage by stage measurements for gain, the localizing of distortion and hum are easily made. A calibrated screen allows quantitative measurements of voltage gain. Visual type VTVM reads .2 to 1,000 V., AC.



## FOR FM, AM AND TELEVISION

The RFO-5 has a self-contained frequency modulated oscillator, 100 to 900 KC sweep (basic frequency, 23 MC) and a 10-30 KC sweep (basic frequency, 100 KC). The wide band oscillator can be modulated externally by a phono pickup, mike or AF oscillator to provide a frequency modulated transmitter for checking FM receivers. No external oscillator is required as the 2nd harmonic of 23 MC falls in the center of the 42-50 MC FM band. Has return trace eliminator, fuse protection, pilot light and phasing control. Size, 11"x13"x15 1/4". For 110 V., 60 cycles. 50 lbs. **\$102.02**

**84-114. CASH PRICE.....**

Time Payments: \$20.40 down, \$11.23 monthly for 8 months.

ALLIED RADIO CORPORATION, 833

JACKSON BLVD. CHICAGO, ILL.



RCA

## R. C. A. TEST EQUIPMENT



## 165 JUNIOR VOLTOHMYST

The Model 165 Junior Volt-ohmmeter is a push-pull electronic voltmeter and ohmmeter suitable for use in the laboratory, service shop, and in many industrial applications. It is light in weight and extremely easy to operate. The rugged meter has been designed to withstand great mechanical shock and is provided with complete overload protection for DC voltage and resistance measurements. It is capable of providing highly accurate readings despite fluctuations in line voltages. Accuracy is also maintained when tubes are changed. Another feature of the Junior Volt-ohmmeter is its extremely high input resistance held constant at 11,000,000 ohms.

## PUSH-PULL ELECTRONIC VOLTMETER-OHMMETER

The circuit is accurately balanced and highly stable. The DC ranges are 5-10-100-300-1,000 volts with a constant input resistance of 11,000,000 ohms for all ranges. The AC voltmeter ranges are: 0-10-30-100-300-1,000 volts at 1,000 ohms per volt. Uses a copper-oxide rectifier in an isolated AC circuit. The electronic ohmmeter measures from .1 ohm to 1,000 megohms in 6 ranges. No zero reset required when changing scales and no leads to short. Meter accuracy is  $\pm 2\%$  at full scale. The matched pair multiplier resistors are accurate to  $\pm 1\%$ . Sturdy welded steel case in crystalline glass. Has a black leather handle. Size:  $9\frac{1}{2} \times 5\frac{1}{2} \times 5\frac{1}{2}$ " inches. With tubes and 3 test leads. For 105-125 V., 50-60 cycles. Shpg. wt., 14 lbs.

84-020. NET PRICE.....\$37.50

## 160-B 5-INCH OSCILLOGRAPH

This fine instrument incorporates all of RCA's skill and vast experience in the manufacturing of oscillograph equipment. Incorporates the famous RCA type 5B P1/1802-P1 5-inch cathode-ray tube which produces a large, clear trace on its screen. This is a decided advantage when detailed observations of phenomena must be studied. Controls of the Model 160-B, including intensity and spot centering, are all conveniently located on the front panel of the instrument. While designed for general purpose work, the 160-B may also be used for engine-pressure measurements, and many similar industrial and laboratory testing applications.



## WIDE RANGE SENSITIVE AMPLIFIERS

Deflection sensitivity of vertical amplifier is .013 volt RMS per inch; horizontal amplifier is .56 volt RMS per inch. Both amplifiers have an input of 500,000 ohms. Vertical amplifier frequency response, 3 cycles to 50 KC sine wave, permitting square wave response, 7-2000 cycles; horizontal amplifier, 5 cycles to 100 KC sine wave. Both amplifiers have maximum signal input of 500 volts RMS. Horizontal sweep is 4-22,000 cycles. The sturdily constructed cabinet, finished in blue-gray baked wrinkle, is beautifully styled in true RCA manner. Size,  $14\frac{1}{2} \times 8 \times 9\frac{1}{2}$ " inches. Complete with all tubes. For 105-125 volts, 50-60 cycle operation. Shpg. wt., 40 lbs.

84-023. NET CASH PRICE.....\$142.50

Terms: \$28.50 down, \$15.68 monthly for 8 months.

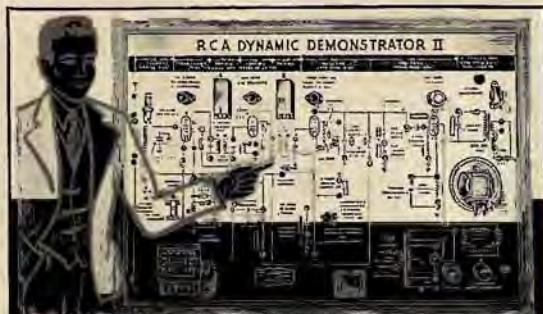


## 155-A 3" OSCILLOGRAPH

RCA's finest general-purpose 3-inch oscillograph. A precision instrument designed to meet present-day requirements and applications. Greater portability is achieved through reduced size and weight. All controls mounted on front panel for convenient operation. Ideal for alignment, hum, distortion, and wave-form measurements. Amplifier response, flat from 20 to 90,000 cycles. Amplifier gain is 40. Timing axis, 15-22,000 cycles. Sensitivity without amplifier, 20 volts RMS per inch deflection; with amplifier, 5 volt RMS per inch deflection. Uses an improved type RCA 3AP1-906-P1 cathode ray tube with Aquadag coating and a medium-persistence screen. Produces large, clear image. Cabinet has a blue-gray baked lacquer finish. Size:  $15 \times 8 \times 14$ " inches. Beautiful etched finish front panel. Streamlined carrying handle. Power consumption, 50 watts. Complete with tubes. For 110 volts, 50-60 cycles. Shpg. wt., 32 lbs.

84-022. CASH.....\$72.50

\$14.50 down, \$7.98 mo. for 8 mos.



## RCA DYNAMIC DEMONSTRATOR II

The RCA Dynamic Demonstrator II, when used with modern test instruments, permits both qualitative and quantitative analysis of radio circuit conditions. It is the perfect demonstrator for teaching radio in Technical High Schools, Vocational Schools, and Colleges. It permits a visual and/or audible demonstration of the operation of a radio receiver. A signal can be checked in the various stages from the antenna through the coupler. Dramatically shows modern signal tracing methods for locating stage source of hum, noise and distortion. All of this can be accomplished with practically no effect on the signal itself. Dynamic gain measurements are readily made. Permits checking of parts and leads for presence or absence of signal. Enables the instructor to clearly demonstrate the proper method of circuit alignment, oscillator tracking, etc. The Demonstrator is a 5 tube modern super-heterodyne receiver in operating condition. Most parts of the set are arranged in functional sequence in conjunction with the large schematic diagram on the face of the board. Pin jacks for voltage readings, etc., are brought out at various operating points. The circuit uses 1-6SA7, 1-6SK7, 1-6SQ7, 1-6F6G, and 1-5Y3G. Size:  $41 \times 29 \times 12$ " inches. For 110 V., 60 cycles. Shpg. wt., 30 lbs.

98-560, Model 172.....\$75.00

Terms: \$15.00 down, \$8.25 monthly for 8 months.

Write for RCA Technical Bulletin IP-4017. 37-051. FREE.



## 158-D 5" OSCILLOGRAPH

This precision instrument is especially well suited for servicing television receivers. In its construction, future television progress has been anticipated, thereby minimizing obsolescence. The 5-inch screen produces a large image of unusual clarity. All controls are located on the front panel. A special attenuator prevents changes in frequency characteristics at various input levels. Synchronization is available for either positive or negative peaks. It is ideal for viewing sawtooth waves, synchronizing and blanking impulses, etc. Vertical amplifier sensitivity, .04 V. RMS/inch; frequency response, 5 cycles to 500 KC. Sensitivity horizontal amplifier, .56 V. RMS/inch; frequency, 5 cycles to 100 KC; sweep from 4 to 22,000 cycles. Cabinet is finished in blue-gray baked wrinkle lacquer. Complete with tubes and special input cable. Size,  $14\frac{1}{2} \times 8 \times 9\frac{1}{2}$ " inches. For 110-120 V., 50-60 cycles. Shpg. wt., 30 lbs.

84-036.....\$160.00

NET CASH.....\$160.00

\$32.00 down, \$17.60 mo. for 8 mos.



## MODEL 161 SIGNALYST

The Model 161 Signalyst is a modern precision signal generator designed to meet present day requirements as well as the future demands of television, facsimile, FM, etc. The instrument provides accurate fundamental frequencies from 100 KC to 120 MC which are covered in 10 bands. Circuit consists of an oscillator stage, a buffer-modulator stage, and an output meter.

ing circuit. It handles all radio receiver alignment jobs—broadcast, short-wave, or special-purpose. Eliminates the necessity of relying on unstable harmonics. The 3-color easy-to-read dial has calibration accuracy better than 1%. The scale is approximately 90 inches long. Circuits are aligned at the end of each band to within .05% accuracy. The coaxial cable output minimizes stray leakage. Built-in heterodyne detector permits crystal calibration for extreme accuracy of dial setting. Internal 400 cycle modulation and 400 cycle output are available. The built-in meter in conjunction with the ladder-type attenuator provides direct reading of output in microvolts. Regulated plate and screen voltage supplies provide excellent stability. The beautiful brush chrome metal case measures  $9\frac{1}{2} \times 8 \times 14$ " inches and has a convenient leather carrying handle. Panel is in brush and bright chrome. Complete with tubes. For 105-125 volts, 50-60 cycles. Shpg. wt., 24 lbs.

84-024. NET CASH.....\$107.50

Terms: \$21.50 down, \$11.83 monthly for 8 months.

## 171 STATION ALLOCATOR

The 171 Station Allocator is an oscillator which has been especially designed to facilitate the re-setting of buttons on push-button operated radios. The 8 buttons on the Allocator may be set up to tune any frequency between 405 and 1700 KC. Tuning is accomplished with adjustable magnetic core inductors wound on polystyrene forms and fixed condensers using polystyrene dielectric. This type of construction gives remarkably stable operation and reduces frequency drift to a minimum—an absolute necessity in order to obtain uniformly accurate frequency settings every time.



## FOR AC OR BATTERY OPERATION

The Allocator may be operated from self-contained batteries or from 115 V., 60 cycle lines. This makes the unit particularly well suited for re-setting push-buttons in auto sets when AC is not available. A switch on the Allocator provides either CW or 400 cycle modulated output. Modulation is obtained through a neon lamp which also serves as pilot light. High and low outputs are available on separate pin-jacks. Steel case with carrying handle measures  $5 \times 8 \times 3\frac{1}{2}$ " inches. Complete with tubes but less batteries. Shpg. wt., 5 lbs.

84-025. NET PRICE.....\$17.50

84-026. Battery Kit for above. NET.....\$3.03



# R.C.A. TEST EQUIPMENT



## 154 AUDIO OSCILLATOR

The RCA Model 154 Beat-Frequency Audio Oscillator is an instrument that will find innumerable uses in the shop or laboratory of every radio service engineer. It provides an excellent and accurate means for testing loudspeakers, PA systems, locating cabinet rattles, running fidelity characteristic curves on receivers or amplifiers, etc. Due to the functional design, it will find many more important service applications in the electronic as well as the industrial field. The large  $8\frac{3}{4}$  inch logarithmic type dial is spread over approximately 160 degrees. This large size in combination with the clear, easily read numerals permits extremely accurate settings to be made. The Model 154 has provision for 3 output impedances.

Output frequency coverage of the Model 154 is 30 to 15,000 cycles,  $\pm 1$  db. from 30 to 10,000 cycles and down 2 db. at 15,000 cycles. Output impedances, 250, 500, and 5,000 ohms. Output voltage, 5.2 volts at 250 ohm load to 37.5 volts at no load. Power output is 125 milliwatts. Hum level, -60 db. below maximum output. Distortion less than 5% RMS over entire range. The attractive gray wrinkle finished cabinet with special snap handle measures  $9\frac{1}{2}$ " high  $\times$   $13\frac{3}{4}$ " long  $\times$   $6\frac{1}{2}$ " wide. Supplied complete with RCA tubes. For 110-120 volts, 50-60 cycle operation. Has fuse protection. SHGP. wt., 19 lbs.

### COVERS FROM 30 TO 15,000 CYCLES

Output frequency coverage of the Model 154 is 30 to 15,000 cycles,  $\pm 1$  db. from 30 to 10,000 cycles and down 2 db. at 15,000 cycles. Output impedances, 250, 500, and 5,000 ohms. Output voltage, 5.2 volts at 250 ohm load to 37.5 volts at no load. Power output is 125 milliwatts. Hum level, -60 db. below maximum output. Distortion less than 5% RMS over entire range. The attractive gray wrinkle finished cabinet with special snap handle measures  $9\frac{1}{2}$ " high  $\times$   $13\frac{3}{4}$ " long  $\times$   $6\frac{1}{2}$ " wide. Supplied complete with RCA tubes. For 110-120 volts, 50-60 cycle operation. Has fuse protection. SHGP. wt., 19 lbs.

**84-034. NET CASH** ..... **\$57.50**

Terms: \$11.50 down, \$6.33 monthly for 8 months.



## 167A TEST OSCILLATOR

The Model 167A is one of the finest test oscillators ever offered. This dependent instrument, with its wide frequency range and its unusually high output, has been especially designed to meet every requirement in the servicing of receivers. The giant  $6\frac{1}{2}$ -inch dial, over 50 inches in length, is easy to read and has a calibration accuracy of 2%. The high-frequency range alone utilizes a 10-inch scale. Included with the Model 167A is a 36-inch, low-capacity output cable to permit connection of the instrument to any desired point in the receiver or amplifier under test. High stability and maintenance calibration accuracy are achieved through proper shielding, metal-type tubes and a correctly engineered electron-coupled circuit.

The Model 167A is one of the finest test oscillators ever offered. This dependent instrument, with its wide frequency range and its unusually high output, has been especially designed to meet every requirement in the servicing of receivers. The giant  $6\frac{1}{2}$ -inch dial, over 50 inches in length, is easy to read and has a calibration accuracy of 2%. The high-frequency range alone utilizes a 10-inch scale. Included with the Model 167A is a 36-inch, low-capacity output cable to permit connection of the instrument to any desired point in the receiver or amplifier under test. High stability and maintenance calibration accuracy are achieved through proper shielding, metal-type tubes and a correctly engineered electron-coupled circuit.

### SIX-BANDS FROM 100 TO 30,000 KC

The RF range of the Model 167A is from 100 KC to 30,000 KC and is covered in 6 bands—all fundamental frequencies. Harmonics of the last band are used for ultrahigh-frequency work. The audio modulation frequency is 400 cycles. An output of 8 volts is available for testing audio circuits, loudspeakers, etc. Maximum RF output on low range is .01 volt; medium range, .25 volt; and high range, 1 volt. Minimum signal is 2 microvolts. Output impedances are 10, 750, and 4,000 ohms. Blue-gray, wrinkle lacquer-finished metal cabinet,  $13\frac{3}{4}$ "  $\times$   $9\frac{1}{4}$ "  $\times$   $6\frac{1}{2}$ ". With special snap handle and large, soft rubber feet. With tubes. For 110-120 V., 50-60 cycles. Shpg. wt., 16 lbs.

**84-028. NET** ..... **\$39.95**

Terms: \$11.50 down, \$6.33 monthly for 8 months.



## MODEL 9572 CRYSTAL CALIBRATOR

The RCA Model 9572 is a crystal-controlled oscillator producing two modes of oscillation, one at 100 KC, the other at 1,000 KC. Switch permits selection of either frequency. In the 100 KC position the Model 9572 produces a wide range of strong, reliable harmonics from 100 KC to 20,000 KC in 100 KC steps. In the 1,000 KC position, harmonics are produced from 1,000 KC to 50,000 KC in 1,000 KC steps. Accuracy is guaranteed to be within .05%. Temperature coefficient is 20 cycles/1,000 KC/°C. Calibrating, temperature furnished with each individual unit. This instrument provides an ideal means for determining the frequency accuracy of test oscillators, for checking and calibrating the frequencies of receivers and transmitters, etc. With one RCA 955 acorn tube. Size is only  $5\frac{1}{2}$ "  $\times$   $2\frac{1}{4}$ "  $\times$   $2\frac{1}{4}$ ". For 110-120 volts, 50-60 cycles. Shpg. wt., 2 lbs.

**84-039. NET** ..... **\$34.95**

TRACES THE SIGNAL FROM THE ANTENNA RIGHT TO THE SPEAKER



## MODEL 162 RCA-RIDER CHANALYST

One of the most remarkable instruments ever devised. Based on the new signal tracing method of set analysis. Will make it possible for you to service receivers with greater speed and accuracy. Customers will react favorably to the speedy and accurate service you can offer them. You'll get repeat jobs. You'll get new jobs. The first test instrument that gives true dynamic and functional testing of radio receivers. Tests each circuit while the receiver is operating—all without interfering with the performance of the receiver. Traces the signal from antenna to loudspeaker. Greater profits will quickly pay for it on ALLIED'S time payment plan. 12 tubes; RF-IF channel covers 95 KC to 1700 KC in 3 bands; oscillator channel coverage to 15 MC; AF channel, resistance-capacity coupled. Each channel employs Cathode-ray tuning eye. Has wattage indicator and wide range, zero center reading, electronic voltmeter. 4 ranges, 0 to 500 volts. Voltmeter input impedance, 11,000,000 ohms. Checks each tube; measures line wattage; makes gain-per-stage measurements; checks operating voltages; measures oscillator frequency in superhets; checks condensers; localizes distortion noise and intermittents, etc. Complete with all tubes and shielded cables with special probe handles. Case measures  $10\frac{3}{4}$ "  $\times$   $16\frac{1}{2}$ "  $\times$   $9\frac{1}{2}$ ". For 105-125 volts, 50-60 cycle. Shpg. wt., 28 lbs.

**84-029. NET CASH** ..... **\$107.50**

Terms: \$21.50 down, \$11.83 monthly for 8 months.

**84-030. AF Adapter for Chanalyst.** Permits more accurate measurement of AF gain in receivers having high plate circuit hum level. It filters out the 60 and 120 cycle hum without materially attenuating the 400 cycle AF test signal. It is for use between AF cables and the input jack of the Chanalyst. 8 oz. **NET** ..... **\$1.75**



## 164 CHANALYST CONVERTER FOR UHF TRACING

This Model 164 Converter in conjunction with the Chanalyst described at left permits signal tracing to be extended into the ultra-high-frequency ranges. These ranges include Television, Frequency Modulation and Facsimile. One of the features of this Converter is a new type of probe. Its capacity is one-half of one micro-micro-farad, and it will not appreciably load or detune even high frequency circuits. This permits signal tracing in the UHF spectrum without upsetting the electrical condition of the circuit being tested. The Converter tuning range is 1600 KC to 80 MC, covered by 4 bands. Uses 270° dial scales with accuracy of  $\pm 1\%$ . Polystyrene coil forms and air trimmers insure a stability of operation. Metal cabinet finished to match Chanalyst. Size:  $10\frac{1}{4}$ "  $\times$   $9\frac{1}{4}$ "  $\times$   $9\frac{1}{4}$ ". With tubes and cables. For 117 V., 60 cycles. Shpg. wt., 18 lbs.

**84-032. CASH** ..... **\$55.00**

**84-032. CASH** ..... **\$55.00**

\$11.00 down, \$6.05 mo. for 8 mos.

## OTHER RCA TEST INSTRUMENTS

New test equipment, including new tube testers and a Senior Voltohmmyst, will be announced by RCA after publication of this catalog. We will be able to supply any of these new instruments as soon as they are available following announcement in the National Trade Magazines. The listing below is only representative of other RCA test equipment for industrial, government, and service requirements. ALLIED can supply all RCA test instruments. For additional information on RCA test units write for free descriptive literature, 37-052. Most RCA test equipment is available on easy time payment terms. On time payment orders please send a 20% deposit; include three credit references and employment information. Forms for your signature will be forwarded promptly.

**84-035. Model 157 Crystal Calibrator.** A crystal-controlled oscillator supplying fundamentals at 250 and 2,000 KC. Accuracy, .05%. Ideal for calibration work, etc.  $5\frac{1}{2}$ "  $\times$   $2\frac{1}{4}$ "  $\times$   $2\frac{1}{4}$ ". 2 lbs. **NET CASH** ..... **\$46.50**

Terms: \$9.30 down, \$5.12 monthly for 8 months.

**84-037. Model 159 Oscillator.** For visual RF and IF alignment work in television receivers. Covers a frequency range of 7.5 to 15 MC and 43 to 91 MC.  $9\frac{1}{4}$ "  $\times$   $13\frac{3}{4}$ "  $\times$   $6\frac{1}{2}$ ". 21 lbs. **NET CASH** ..... **\$130.00**

Terms: \$26.00 down, \$14.30 monthly for 8 months.

**84-038. Model 9558 Frequency Modulator.** For use with an oscillator and oscillograph to align receivers visually.  $6\frac{1}{2}$ "  $\times$   $9\frac{1}{4}$ "  $\times$   $4\frac{1}{2}$ ".  $5\frac{1}{4}$  lbs. **NET** ..... **\$27.50**

## 170 AUDIO CHANALYST

The Model 170 is an audio version of the famous RCA-Rider Chanalyst described above. It is indispensable for use in matching up a new sound installation or locating trouble in an existing system. Permits a complete analysis of amplifier operating conditions. A speaker is provided for listening tests and can be used as a sound source for microphone testing.

The Model 170 measures noise and hum levels, resistance and impedance operating levels, gain, AF (AC) and DC voltage, and microphone output. Has one high and one low gain amplifier channel, flat from 20 to 10,000 cycles, each with an electronic eye. An oscillator channel offers outputs at 60, 150, 400, 1000, 2500, 5000, and 10,000 cycles. Electronic 8-range voltmeter to 1000 volts with dB scale from -20 to +49 DB. Ohmmeter reads to 400 megohms in 4 ranges. Measures impedance to 400,000 ohms. Size:  $12\frac{1}{4}$ "  $\times$   $9\frac{1}{4}$ "  $\times$   $18\frac{1}{4}$ ". For 110-120 V., 60 cycles. Shpg. wt., 40 lbs.

**84-033. NET CASH** ..... **\$225.00**

Terms: \$45.00 down, \$24.75 monthly for 8 months.

37-053. RCA Technical Bulletin Number 1P-4054—Sent FREE.





# TRIPLET QUALITY TEST EQUIPMENT

## MODEL 1213 DYNAMIC TUBE TESTER



A new Tube Tester by Triplett which carries the "Red Dot" Lifetime guarantee. A unique feature of the 1213 is the hinged card index tube chart. It permits a rapid and convenient means for locating the various tube types. Sections of the chart can be quickly changed when new tubes are added, thus keeping them in their proper order. New tube listings for each section will be mailed promptly to registered owners.

### MAKES TELEVISION TUBE TESTS

The Model 1213 tests all Locals, Bantam Jr. high voltage including the 117 V. series, Single End types, Octal, Magic Eyes, Pilot Lamps, Ballasts, Metal, Glass, MG, Gas Rectifiers, Filaments, and the new miniature type tubes. Filament Spray Shield Television, and the new Dualcathode obsolescence-proof. It has a fully balanced circuit with leakage test for cathode-beater and inter-elements (with short test between any two elements), provisions for checking open filaments, hot leakage check, and separate tests of full-wave rectifiers. Bad tubes are easily identified and rejected. Has 3" Triplett "Red Dot" Lifetime guaranteed meter with a "Good-Bad" scale. A separate meter is used for line voltage control. The attractive case of the Model 1213 is finished in brown suede enamel. Size is 7 7/8" x 6 1/2" x 5 5/8". The three-tone panel is brown, tan and red with silver markings. Has sturdy snap-on case cover. For 115 volts, 60 cycles AC. Shpg. wt., 14 lbs. **\$23.72**

84-550 NET.

## WIDE-RANGE VOLT-OHM-MILLIAMMETERS

### MODEL 1200-A 2,000 OHMS PER VOLT

A compact universal AC-DC V-O-M featuring a Triplett "Red Dot" Lifetime guaranteed instrument. Twin meters in single case have separate AC and DC movements. DC meter reads: 0-10-50-250-500-1000 volts at 2000 ohms per volt; 0-1-10-50-250 ma.; 0-1500 ohms-1.5-3 meg. Has an additional "Back-up" low-ohm scale of 0-500 ohms with 15 ohm center scale reading. AC meter reads: 0-10-50-250-500-1000 volts. Voltage scales are direct reading. Sturdy metal case with brown suede enamel finish. Size, 7 7/8" x 6 1/2" x 3 5/8". With leads and batteries. Wt., 12 lbs. **\$23.56**



### MODEL 1200-C—5,000 OHMS PER VOLT

Same as Model 1200-A, but with these extra ranges: 0-5000 V. AC and DC; 0-250 microamps, and 0-10 amps. DC; 0-1-10-25 amps. AC, and 0-7.5 megohms in place of the 0-3 megohm scale. Wt., 13 lbs. **\$35.28**

### MODEL 1200-E—25,000 OHMS PER VOLT

Similar to Model 1200-A, but with these extra ranges: 0-2500 V. AC and DC; 0-50 microamps, and 0-10 amps. DC. Resistance ranges are: 0-1,000-40,000 ohms, 0-4-40 megohms. Shpg. wt., 13 lbs. **\$31.36**

84-553. NET.

## HANDY POCKET-SIZE VOLT-OHM-MILLIAMMETERS



Model 666-H Model 666-S

### NEW MODEL 666-S

A modern-styled, compact instrument that provides the answer to all requirements for a low-cost V-O-M. It incorporates the testing capabilities of larger, more costly equipment. Uses a Triplett "Red Dot" Lifetime guaranteed meter with a compensated copper-oxide rectifier for AC measurements. Ranges are: 0-2.5-10-50-250-1,000-5,000 V. DC at 10,000 ohms per volt; 0-100 microamps, 0-1-10-100 ma., 0-1-10 amps. DC; 0-400-40,000 ohms, 0-4 megohms; 0-2.5-10-50-250-1,000-5,000 V. AC at 1,000 ohms per volt. Self-contained battery. Panel and dial markings are in white and red to distinguish between AC, DC and ohms scales. Black molded case and panel, 3 1/8" x 5 7/8" x 2 1/8". With battery and test leads. Shpg. wt., 4 lbs. **\$16.34**

84-554. NET.

### STANDARD MODEL 666-H

A new and improved instrument built around a 3" sensitive, accurate "Red Dot" Lifetime guaranteed meter. Provides the following scales: 0-10-50-250-1,000-5,000 V. AC-DC at 1,000 ohms per volt; 0-10-100-500 ma. DC; 0-300-250,000 ohms. Scales are in three colors to facilitate reading. Higher resistance readings may be obtained with external battery. A compensated copper-oxide rectifier assures accurate AC voltage readings. Complete with battery and specially insulated test leads with clips, tested at 11,000 volts. Black molded case and panel. Size: 3 1/8" x 5 7/8" x 2 1/8". Shpg. wt., 4 lbs. **\$15.65**

84-555. NET.

### MODEL 666—1000 VOLTS

Similar to Model 666-H above but has following ranges: 0-10-50-250-500-1,000 V. DC at 1,000 ohms per volt; 0-1-10-50-250 ma. DC; 0-300-250,000 ohms; 0-10-50-250-500-1,000 V. AC. With provisions for higher resistance readings by means of external batteries. Size and appearance same as Model 666-H. Complete with battery, test leads, and accessories. Wt., 4 lbs. **\$15.09**

84-556. NET.

### CARRYING CASE

84-560. Attractive leather carrying case with handle for the above instruments. Holds tester and accessories. 2 lbs. **\$3.96**

NET.

"LOOK FOR THE RED DOT"

**LIFETIME GUARANTEE**  
The "Red Dot" on Triplett test equipment is your positive guarantee that the measuring instrument will give you a lifetime of service. All Triplett Instruments are built to give the very highest standards of performance.

## SIGNAL GENERATORS

### MODEL 1232-A

6 bands cover from 115 KC to 30.5 MC. Calibrated coils assure accuracy. The large 180° dial opening improves readability. Scale length is over 50". Triple shielding minimizes leakage. Perfect attenuation. 400 cycle audio note available. The 7 7/8" x 6 1/2" x 5 5/8" metal case is finished in brown suede enamel. Panel is finished in brown, tan and red. Snap-on cover. For 110 V., 60 cycle AC. Wt., 18 lbs. **\$32.18**

84-565. NET.

### MODEL 1231-A

Same as above but for battery operation. Uses 1-22 1/2 volt and 3-flashlight cells which can be obtained anywhere. Size and appearance identical with the Model 1232-A. With batteries and accessories. Ideal for portable use. Shpg. wt., 15 lbs. **\$29.66**

84-566. NET.



### 1632 SIGNAL GENERATOR

A new wide-range Signal Generator featuring high accuracy and stability. Provides continuing fundamental coverage on 10 bands from 100 KC to 120 MC. A meter is incorporated for measuring input into the multiplier and attenuator. Ideal for making stage gain measurements. Has heterodyne detector for checking calibration. The output is fed through a coaxial cable to minimize losses. Has a regulator tube and air-trimmer capacitors. Provides the following outputs: internal modulated, unmodulated, AF and provision for external modulation. Metal case, 15" x 9" x 6 1/4". For 115 V., 60 cycles AC. Shpg. wt., 31 lbs. **\$86.08**

NET. \$17.22 down, \$9.47 monthly for 8 months.

## MODEL 1200-F AUTOMATIC VOLT-OHM-MILLIAMMETER

The Model 1200-F is a push-button operated, automatic V-O-M providing maximum speed and minimum switching. Only one button need be pressed for any range. The self-locking buttons are color-coded for the various scales. Depressing one button releases any other. The Model 1200-F provides the following ranges: 0-10-50-250-500-1,000 V. DC at 25,000 ohms per volt; 0-10-50-250-500-1,000 V. AC at 1,000 ohms per volt; 0-50 microamperes, 0-1-10-50-250 ma. DC; 0-1,000-300,000 ohms and 0-3-30 megohms. A built-in condenser permits output readings using the AC scales. Meter is a 4" Triplett "Red Dot" Lifetime guaranteed instrument. The plug-in rectifier simplifies replacement in case of accidental damage. The attractive metal case with rich brown suede enamel finish measures 7 7/8" x 6 1/2" x 5 5/8". Snap-on cover has elastic strap inside for carrying accessories and instructions. Three-tone panel in brown, tan and red. Supplied complete with all accessories including batteries. Shpg. wt., 13 lbs. **\$30.03**

84-570. NET.

NET.



## ULTRA-SENSITIVE VOLT-OHM-MILLIAMMETER

### MODEL 1600-E

A new impressive tester with a DC sensitivity of 25,000 ohms per volt. It is furnished in two styles—for panel mounting or for portable use. Ranges are: 0-10-50-250-1,000 V. DC at 25,000 ohms per volt; 0-50 microamperes, DC; 0-1-10-50-250-500 ma. DC; 0-10-50-250-1,000 V. AC at 1,000 ohms per volt; 0-500-200,000-200,000 ohms and 0-2-20 megohms. Rectifier incorporates a plug-in copper oxide element which is pre-calibrated to a factory standard. Factory calibration is duplicated when rectifier is plugged into tester. It is unnecessary to return instrument to factory for recalibration. The 7" Triplett "Red Dot" Lifetime Guaranteed meter has each scale in contrasting colors. The dial is distinctive and shows up scales and pointer prominently. The streamlined case is maroon, and the panel is ivory trimmed in maroon. Size is 15" x 9" x 4". Complete less 1-22 1/2 V. battery for 20 meg. range. Supplied with all accessories in carrying case. Ideal for portable or shop use. Shpg. wt., 13 lbs. **\$27.51**

84-571. NET.

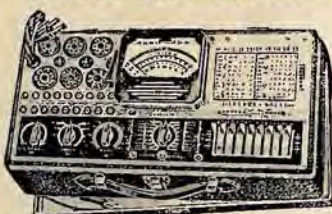
84-572. Illustrated. As above, less case. 13 lbs. NET. **\$22.64**





# TRIPLETT Quality TEST EQUIPMENT

## MODEL 1183 COMBINATION TESTER



The Model 1183 is one of the most versatile test instruments on the market today. It combines in one compact carrying case a Volt-Ohm-Milliammeter, a modern up-to-date Tube Checker and a Free-Point Tester. The Volt-Ohm-Milliammeter section provides the following ranges; 0-10-50-250-500-1,000 V. DC at 10,000 ohms per volt; 0-1-10-50 ma. DC; 0-10-50-250-500-1,000 V. AC. Meter is a 4" Triplett "Red Dot" Lifetime guaranteed instrument. Tests all present-day tubes including Loktal, Miniature and Bantam Jr. A neon bulb shows the slightest inter-element shorts and leakages while cathode is hot. The flexible lever-type tube switching gives individual control for each tube prong. Speed roll chart can be spun from one end to the other in less than 4 seconds. The Free-Point Tester makes all series and parallel meter connections. Has sockets for all present day tubes. Plug adapters for Loktal, Bantam Jr., and Miniatures are not supplied. See page 56. The metal case measures 14 1/4" x 7 3/4" x 4 1/2". Leather handle. Removable cover. For 110-125 V. 60 cycles AC. Shipping wt., 21 lbs.

**\$53.74**

**84-507. NET CASH PRICE.**

Time Payments: \$10.74 down, \$5.32 monthly for 8 months.

## MODELS 1613 & 1612 TUBE TESTERS

The 1613 has a 7" meter. Features the "Red Dot" Lifetime guarantee. Full assurance against obsolescence is made possible by a filament transformer variable in steps from 1.1 to 110 volts. Has a fully balanced RMA tube testing circuit with leakage test for cathode to heater, or between any two elements. Checks for open filaments. Separate tests for multi-section tubes. Will not pass tubes which do not operate properly in a radio set or amplifier. Provides for Loktal, "S," Miniatures, Bantam Jr., and Magic-Eye tubes, 117 V. series, ballasts, gas rectifiers, and pilot lamps, as well as the older types of tubes. Has a noise-test phone jack and a separate line voltage meter.



The illuminated roll chart provides maximum simplicity of operation. It can be spun from one end to the other in less than four seconds. Heavy-metal case has a baked silver-gray suede enamel finish. Size is 15 1/2" x 11 3/4" x 6 1/2". For 115 volts, 60 cycles AC. Shpg. wt., 42 lbs. **\$37.57**

**84-508. PORTABLE. NET.**

## COUNTER MODEL 1612

Same as the Model 1613 described above, but less cover and carrying handle. Streamlined heavy-metal case with silver-gray enamel finish. Size 15 1/4" x 11 3/4" x 6". For 115 volts, 60 cycles. Wt., 38 lbs. **\$32.18**

**84-509. NET.**

## 1672 VIBRATOR TESTER



The Model 1672 through its rotary switches offers many anti-obsolescence features. It is designed to thoroughly check all 6-volt vibrators. Dial has 3 scales: 0-10 V, showing input to vibrator, a "Good-Bad" merit scale, and a 0-100 scale for checking output of vibrator under standard input conditions. The new roll chart assures fast operation. Instrument is fused. Metal case with rich brown suede electro-enamel finish measures 14 1/2" x 7 3/4" x 4 1/2". Operates from 6 volt storage battery (not supplied). With accessories including clips. Shpg. wt., 21 lbs.

**\$32.18**

**84-510. NET.**

## MODEL 1280 HIGH VOLTAGE TESTER



An ideal instrument for testing high voltages such as those encountered in television receivers, transmitters, etc. Every precaution has been taken to safeguard the operator of this tester. Metal contacts and instrument parts are removed a minimum of one inch with sides of the case. The Model 1280 will measure 0-2,500-10,000 V. DC at 25,000 ohms per volt. The same ranges are available in AC at a sensitivity of 5,000 ohms per volt. Also measures 0-50-500-5,000 microamperes DC. Tester incorporates a Triplett "Red Dot" Lifetime Guaranteed 4" instrument. Red enamel finish. 7 3/4" x 6 3/4" x 5 3/8". Has snap-on cover. Accessories include a set of insulated test leads tested at 25,000 volts. Shpg. wt., 10 lbs.

**\$33.98**

**84-536. NET.**

## INSTRUMENT CURRENT TRANSFORMER



This handy, portable transformer can be used with the Triplett Model 670 AC Ammeter at right, or with any other 0-5 AC ammeter. It provides 6 ranges; the maximum, 250 amps. with one primary turn through the center opening. Others are 2.5, 10, 25, 50 and 125 amps. at the binding post terminals. Insulated black molded case and panel is 6" x 5 1/4" x 2 1/4". Frequency range, 25 to 133 cycles. Capacity: 2 volt amperes. Wt., 5 lbs.

**\$22.87**

**84-511. NET.**

## A TRIPLETT TESTER FOR EVERY PURPOSE

We can supply all Triplett test equipment units. Write for free catalog, 37-080, describing complete Triplett line. Time payment terms are available on Triplett units over \$40.00. See page 46 for additional Triplett test and appliance equipment.

## LEVER SWITCHING TUBE TESTER MODEL 1620

A sensational new development in Tube Testers by Triplett. Every precaution has been taken to provide against obsolescence. The flexible lever-type switching system gives individual control of each tube prong. Filament voltages are available from 1.1 to full line voltage. A neon bulb shows the inter-element shorts and leakages while cathodes are hot. The "Red Dot" Lifetime guaranteed 7" meter has a "Good-Bad" scale in colors. Wood case with natural finish measures 18 1/2" x 10 3/4" x 6 3/4". Speed roll chart for rapid reference. For 110 V., 60 cycles AC. Shpg. wt., 25 lbs.



**\$40.81**

**84-513. CASH PRICE.**

**\$8.16 down, \$4.49 monthly for 8 months.**

## MODEL 1621 TUBE TESTER

Similar to the Model 1620 described above. Has a 4" square Triplett "Red Dot" meter. Size: 12 1/2" x 7" x 10". Wt. 27 lbs. Less carrying case. For 110 volts, 60 cycles AC. **\$37.57**

**84-514. NET.**

**84-515. Carrying case for 1621.... \$5.39**

## 625-T PORTABLE VOLT-OHM-MILLIAMMETER

A highly sensitive 21-range volt-ohm-milliammeter with many outstanding features. It provides the following ranges: 0-2.5-10-50-250-1,000-5,000 volts DC at 10,000 ohms per volt; 0-100-1,000 ma., 0-1-10-100 ma., 0-1-10 amps. DC; 0-50-ohms (shunt-type circuit), 0-40,000 ohms, 0-4 megohms; 0-2.5-10-50-250-1,000-5,000 volts AC at 1,000 ohms per volt. The attractively designed black molded case and panel afford complete protection for high voltage testing. Has a "Red Dot" Lifetime guaranteed meter with scales over 4 1/2" long in contrasting colors for AC and DC markings. Size of case is 6x5 1/2 x 2 1/4". Convenient handle. Complete with all accessories. Shpg. wt., 7 lbs.



**\$21.56**

**84-535. NET.**

## HANDY "LITTLE TRIPPLETS"



**\$9.70 EACH**



Matched units with 3" Lifetime Guaranteed "Red Dot" meters. Red molded cases. In single units or in combination for every servicing or electrical analyzing problem. 3 3/4" x 5 3/4" x 2 1/4". Ivory panels. Shpg. wt., 4 lbs.

**84-520. MODEL 670. Fig. A. An AC Ammeter.** This handy little tester has wide uses in countless fields. Self-contained current transformer permits measurements on the following ranges: 0-1-2.5-5-10-25 amperes AC. For operation on 60 cycles AC only.

**84-521. MODEL 671. Fig. B. An AC Milliammeter** invaluable for radio service, laboratory or experimental work. It permits complete AC milliamperes measurements to be made on eight ranges. The ranges are: 0-5-10-25-50-100-250-500-1,000 milliamperes AC.

**84-522. MODEL 672. Fig. B. An AC Voltmeter** particularly adapted for testing electrical appliances, motors, etc. The three ranges are: 0-150-300-750 volts AC. These three ranges are those most used in AC voltage measurement work in shop or field.

**84-523. MODEL 673. Fig. B. Rectifier-type AC Voltmeter.** Ideal for use where limited power is available. Also fine for output measurement work. The eight ranges are: 0-5-10-25-50-100-250-500-1,000 volts AC.

**84-524. MODEL 674. Fig. A. A DC Ammeter.** Self-contained shunts. No external shunts are required with this meter. The five ranges are: 0-1-2.5-5-10-25 amperes DC.

**84-525. MODEL 675. Fig. B. A DC Milliammeter** covering all needs in radio servicing and other fields. Ranges are: 0-1-5-10-25-100-250-500-1,000 ma. DC.

**84-526. MODEL 676. Fig. B. A DC Microammeter.** Has self-contained shunts for 5 DC ranges. Can be used for 20,000 ohms per volt work by using external resistors. 0-50-100-250-500-1,000 microamperes DC.

**84-527. MODEL 677. Fig. E. A 10-range DC Voltmeter.** 1,000 ohms per volt. All resistors are self-contained. Ranges: 0-1-2.5-5-10-25-50-100-250-500-1,000 Volts DC.

**84-528. MODEL 678. Fig. B. An Ohmmeter** with self-contained batteries. Ranges: 0-1,000-10,000 ohms; 0-1-1-10 megohms.

**NET EACH INSTRUMENT..... \$9.70**

**84-529. Carrying case for any 3 "Little Triplets."** 10 1/2" x 8 1/2" x 3 1/2". 2 lbs. **\$2.71**

**NET..... \$2.71**



## 432A DIRECT-READING TUBE TESTER



The famous Model 432-A is a direct-reading tube tester which incorporates a square leatherette case and a 3" Triplett "Red Dot" Lifetime meter with a 3-color "Good-Bad" direct-reading scale. Meter has 2 high-quality sapphire jewel bearings. A separate shadow-type AC meter permits accurate line voltage adjustments. An emission type circuit is used for its reliability and ease of operation. The proper voltages as specified by the R. M. A. and the tube manufacturers, are applied to the tube under test. Unsatisfactory tubes are easily detected. The Model 432-A quickly and accurately checks metal, glass, sprayshield, metal-glass, gas rectifier, octal, Loktal, Bantam Jr., high-voltage series, 1.4 V. midjets, miniatures, and ballast tubes. Separate plate tests can be made on diodes and rectifiers. A sensitive neon bulb determines the slightest inter-element leakages and shorts. Revised tube charts are furnished free to all registered owners. Attractive black leatherette case with handle and removable cover for counter or portable use. Has roomy compartment for tools and accessories. 10 1/2" x 9 1/2" x 6 3/4". For 110 V., 60 cycles AC. Shpg. wt., 18 lbs.

**84-700. NET.....\$20.31**  
**84-701. Model 432-C. As above but less tool compartment. NET PRICE.....\$19.26**

## 432A-742 TUBE TESTER AND VOLT-OHM-MILLIAMMETER



An outstanding quality test instrument at a price within the reach of everyone. It combines the Model 432-A direct-reading Tube Tester (described above) with an accurate high grade Volt-Ohm-Milliammeter. Uses a 3" Triplett "Red Dot" meter with lifetime guarantee. Ranges of the Volt-Ohm-Milliammeter section are: 0-10-50-250-500-2,500 V. DC at 1,000 ohms per volt; 0-1-10-100 ma. DC; 0-500 (with 25 ohms at center scale)—100,000 ohms; 0-1.5 megohms and 0-10-50-250-500-2,500 V. AC. The ohmmeter circuit is battery-operated (batteries not supplied) and provides highly accurate resistance measurement scales. Has zero adjustment. Black leatherette-covered case, suitable for both counter and portable use. Removable hinged cover and large compartment for test leads, etc. Silver and black panel. Uses 1—1 1/2 V. Burgess No. 1 and 1—22 1/2 V. Burgess No. 4156. Size 13" x 10" x 7". For 110-125 V., 60 cycles AC. Shpg. wt., 22 lbs. Less batteries.

**84-707. NET.....\$28.96**

## 860 "Big Boy" VOLT-OHM-MILLIAMMETER

International new AC-DC Volt-Ohm-Milliammeter designed in keeping with modern demands for professional-type test equipment. In spite of its many outstanding features, the Model 860 is priced exceptionally low. It incorporates a Triplett 7-inch "Red Dot" Lifetime guaranteed meter with long, easy-to-read 6-inch scales. The D'Arsonval movement is equipped with two genuine sapphire jewel bearings. DC voltage sensitivity is 5,000 ohms per volt. The Model 860 provides 16 ranges as follows: 0-10-50-250-500-1,000 volts DC at 5,000 ohms per volt; 0-1-10-100 ma. DC; 0-1,500 ohms (shunt-type circuit); 0-750,000 ohms; 0-7.5-15 megohms; 0-10-50-250-1,000 volts AC at 1,000 ohms per volt. A bar type pointer knob permits convenient selection of the various AC, DC, and resistance ranges. Has a knob-operated control for zero adjustment on the resistance ranges. A special chart supplied with the instrument permits decibel readings against AC volts to be made. Ranges are from -20 to +55. Tester has an up-to-the-minute three-tone metal case with maroon body and red panel with white markings and trim. Case size is 11 1/2" x 7 1/2" x 4 1/2". Has strong, leather strap handle. Furnished complete with test leads and battery for 1,500 ohms range. With brackets to permit addition internally of 1-22 1/2 volt battery for 750,000 ohm and 7.5 megohm ranges, or 2-22 1/2 volt batteries which will permit readings on all ranges including 0-15 megohms. See below for batteries. Shpg. wt., 18 lbs.

**84-702. NET.....\$19.26**  
**80-510. No. 4156 Burgess 22 1/2 volt battery. NET EACH... 64c**



## 557 BATTERY-OPERATED SIGNAL GENERATOR



A battery operated direct-reading all-wave Signal Generator covering from 110 KC to 20,000 KC in 5 bands on fundamentals. Unexcelled for field servicing and a valuable service shop bench instrument. Individually calibrated plug-in type coils, set a new standard for obtaining laboratory accuracy at low cost. Instrument is completely shielded against all static and magnetic fields. Strong signals, both modulated and unmodulated, are available. Perfect attenuation and stability are outstanding features. Free from frequency drift due to output attenuation or battery voltage changes. Black leatherette case 12" x 6 1/2" x 5 1/4". With coils, tubes, batteries and instructions. Shpg. wt., 12 lbs.

**84-708. NET.....\$20.37**

## POCKET VOLT-OHM-MILLIAMMETERS

738



739



### MODEL 739 AC-DC

The Model 739 is a pocket-type volt-ohm-milliammeter with AC and DC ranges. It uses a precision Triplett 3-inch square "Red Dot" Lifetime guaranteed meter. Movement has two high-quality sapphire jewel bearings. Ranges are: 0-15-150-750-1,500 volts DC with a sensitivity of 1,000 ohms per volt; 0-500 ohms (shunt-type circuit); center of scale reads 25 ohms; 0-500,000 ohms (series-type circuit); 0-1-5-15-150 ma. DC; 0-15-150-750-1,500 volts AC. External batteries may be used for higher resistance measurements. The sturdy molded case with round corners is 3 1/4" x 5 1/4" x 2 1/4". Modernistic silver and black panel. All accessories, including test leads, alligator clips, battery, are furnished. Wt., 5 lbs.

**84-703. NET.....\$10.67**

### MODEL 738 DC

A pocket volt-ohm-milliammeter for DC voltage, current, and resistance measurements. Uses a 3" Triplett "Red Dot" Lifetime guaranteed meter. Reads: 0-15-150-750-1,500 volts at 1,000 ohms per volt; 0-1-5-15-150 ma. DC; 0-500-500,000 ohms. Pocket size meter in black case with rounded corners, measures 3 1/4" x 5 1/4" x 2 1/4". Modernistic silver and black panel. With test leads, alligator clips, and battery. Shpg. wt., 5 lbs.

**84-704. NET.....\$8.08**

## POCKET DC VOLT-OHMMMETERS MODEL 511

A handy pocket-size instrument for DC voltage and resistance testing. Uses a square Readrite meter with full open dial. Reads 0-3-30-300 V. DC and 0-10,000 ohms. Wood case, 2 3/4" x 2 3/4" x 2". Furnished with self-contained 3 volt battery and leads. Shpg. wt., 3 lbs.

**84-705. NET.....\$3.09**

### MODEL 510

Similar to the Model 511 described above but has scales reading 0-300 V. DC and 0-10,000 ohms. Black wood case only 2 3/4" x 2 3/4" x 2". With self-contained 3-volt battery for ohmmeter circuit and test leads, 3 lbs.

**84-706. NET.....\$2.44**

## TRIPLETT APPLIANCE TESTERS

### 1270A CIRCUIT ANALYZER

The Model 1270A is an advanced electrical circuit analyzer that measures the wattage consumption, amperes and line voltage of all household appliances and small motors. Ideal for refrigerators, washers, radios, irons, etc. Low scale range of 0 to 20 watts permits checking the smallest of appliances. Ranges of the Model 1270A are: 0-20-500-1,000-2,000-4,000 watts AC; 0-260 ma., 0-6.5-13-26 amperes AC, and 0-130-260 V. AC. Instrument is fused to prevent damage from accidental overload. The Model 1270A uses a 4" square Triplett "Red Dot" Lifetime guaranteed Dynamometer type meter. Black suede enameled metal case measures 7 1/2" x 6 1/2" x 5 1/2". With a detachable strap handle and removable cover. For 2 or 3 wire, 60 cycle AC. For testing 3-wire 220 volt systems, use 84-516 set of two 3-wire male and female connector cables listed below. With leads for 2-wire circuits. Shpg. wt., 14 lbs.

**84-501. NET.....\$32.18**

**84-516. Pair of 3 wire male and female connector cables, 4 lbs. PER SET..\$8.62**

### 2000 DUAL TESTER

Combination watt-voltmeter to test power consumption of radio receivers, electric iceboxes, household appliances, and motors under actual operating conditions. The tester contains a wattmeter and a voltmeter of the twin instrument type. Line voltage and wattage may be read simultaneously. Wattmeter ranges are 100 watts at 220 volts and 750 watts at 110 volts. Current rating of the Model 2000 is 7.5 amperes. The dual voltmeter scale provides readings of 0-130 and 0-260 volts AC. Tester has two toggle switches, one to control the two voltmeter scale readings, and the other to protect the wattmeter during the starting period of the motor load. Leather carrying case; 6 1/2" x 4 1/2" x 3 1/4". 6 lbs.

**84-504. NET.....\$20.84**

### MODEL 2001

**84-505. Same as Model 2000 but has switch to permit use with any current transformer having a 5 amp. secondary for higher wattmeter readings. NET.....\$22.28**

### MODEL 2002

**84-506. Same as Model 2000 but reads to 10 amperes Wattmeter ranges are 0-1500-3000 watts. NET.....\$21.20**







# PRECISION TEST EQUIPMENT

## SERIES EV-10 VACUUM-TUBE MULTI-RANGE V.O.M. AND SET TESTERS



This instrument presents a new departure in test equipment. It is a multi-range, electronic volt-ohm-decibel-milliammeter plus a vacuum tube voltmeter. 7" bakelite cased meter. Provides complete testing functions of eight separate units. Features high accuracy and simplicity of operation. The 8 zero-center reading V.T.V.M. ranges are:  $0 \pm 3$ ,  $\pm 6$ ,  $\pm 12$ ,  $\pm 60$ ,  $\pm 300$ ,  $\pm 600$ ,  $\pm 1,200$  and  $\pm 6,000$  volts DC. Input resistance over 13 megohms up to  $\pm 600$  volts and over 26 megohms on  $\pm 1,200$  volt range. Resistance ranges are: 0-2,000-200,000 ohms; 0-2-20-200-2,000 megohms. 0-2-12-60-300-1,200 ma., 0-12 amps. DC, and -26 to +70 db. in 8 ranges. Has 6 circuit probing, zero-center V.T.V.M. ranges:  $0 \pm 3$ ,  $\pm 6$ ,  $\pm 12$ ,  $\pm 60$ ,  $\pm 300$ ,  $\pm 600$  volts DC through a special coaxial cable test probe. With tubes, probes, battery, etc. Size:  $12 \times 10 \frac{1}{2} \times 6$ ". For 115 V., 60 cycles. Shpg. wt., 20 lbs.

**84-400. EV-10-MCP.** In heavy gauge metal case. **\$48.95**  
**CASH PRICE.**  
 Terms: \$9.79 down, \$5.39 monthly for 8 months.

**84-417. EV-10-P.** As above in portable wood case. **CASH...\$52.87**  
 Terms: \$10.57 down, \$5.82 monthly for 8 months.

## 920 MUTUAL CONDUCTANCE TUBE AND MULTI-RANGE SET TESTERS

A Dynamic Mutual Conductance Tube Tester plus a V.O.M. and 33 range Set Tester. Uses a large  $4 \frac{1}{2}$ " square meter; 400 microamperes full scale sensitivity. Tests all Loktals, Bantam Jr., "S" Television amplifiers, Regular octals (MG, G, and Metals), Glass miniature, Hearing aid, Button-type 7 pin, and Ballast tubes. Tests miniature screw base and bayonet type pilot lights. Accommodates all filament voltages from 1.4 to 120 volts. Sensitive Neon indicator will detect shorts and leakages. Built-in double window roller tube chart. Ranges are: 0-12-60-300-600-1,200-3,000 V. AC and DC at 1,000 ohms per volt; 0-1.2-12-120-600 ma. DC; 0-12 amps. DC; 0-400-100,000 ohms; 0-1-10 megohms; 6 db. ranges from -10 to +64; 6 output ranges. Tests radio batteries under load. For 110 V., 60 cycles. Shpg. wt., 21 lbs.

**84-407. 920P. Portable.** Hardwood case,  $12 \times 13 \times 6$ ".  
**84-408. 920C. Counter Type.** Size,  $16 \times 12 \times 8$ ". **\$58.75**  
**CASH PRICE, EITHER MODEL.....**  
 Terms: \$11.75 down, \$6.47 monthly for 8 months.



## 844 VOLT-OHM-DECIBEL-MILLIAMMETER—34 RANGES

Features a  $4 \frac{1}{2}$ " precision type meter having a sensitivity of 400 microamperes. Ranges: 0-12-60-300-600-1,200-6,000 V. AC and DC at 1,000 ohms per volt; 0-1.2-12-60-300-1,200 ma. DC; 0-12 amps. DC; 0-400-100,000 ohms; 0-1-10 megs.; -12 to +70 db. in 6 steps and 6 output ranges same as AC volts. Walnut-finished hardwood case with removable cover and carrying handle. Provision for mounting ohmmeter batteries ( $4 \frac{1}{2}$ " and 45 volts) inside of case. Overall size,  $9 \frac{1}{2} \times 10 \frac{1}{2} \times 6$ ". Less batteries and test leads. Uses 1-80-515 and 1-80-517 batteries. See page 123. Wt., 9 lbs. **\$26.41**  
**84-401. 844P. NET.....**  
**84-402. MODEL 844L.** In hardwood case as illustrated below. Without cover and compartment.  $7 \frac{1}{2} \times 8 \frac{1}{2} \times 4 \frac{1}{2}$ ". **\$24.45**  
 Less batteries. **NET.....**

## 845 41-RANGE TESTERS

A compact multi-range tester. Uses a  $4 \frac{1}{2}$ " 200 microamp meter. Ranges are: 0-12-60-300-600-1,200-6,000 V. AC and DC at 1,000 ohms per volt and same ranges DC at 5,000 ohms per volt; 0-2,000-200,000 ohms; 0-2-20 megohms; 0-300-microamps; 0-1.2-12-60-300-1,200 ma., 0-12 amps. DC; -12 to +70 db. and 6 output ranges. Uses 1-80-515 and 1-80-517 batteries (not supplied). See page 123. In hardwood case,  $7 \frac{1}{2} \times 8 \frac{1}{2} \times 4 \frac{1}{2}$ ". **\$28.37**  
**84-403. Series 845L. NET.....**  
**84-404. Series 845P. Port.** **\$30.33**  
 able case. Wt., 9 lbs. **NET.....**

## SERIES 856 44-RANGE SUPER-SENSITIVE TESTERS

**84-405. MODEL 856P.** Same as 845 above but reads: 0-3-12-60-300-600-1,200-6,000 V. AC and DC at 1,000 ohms per volt and same ranges DC at 20,000 ohms per volt; 0-60-300 microamps, 0-3-30-120-600 ma., 0-12 amps. DC; 0-6,000-600,000 ohms; 0-50 megohms; -12 to +70 db. Portable wood case,  $9 \times 10 \times 6$ ". With batts. **\$39.15**  
**57.83 down, \$4.31 monthly for 8 months.**  
**84-406. MODEL 856L.** Same as 856P but less cover. Size,  $7 \frac{1}{2} \times 8 \frac{1}{2} \times 4 \frac{1}{2}$ ". **\$37.19**  
**9 lbs. CASH PRICE.....**  
**57.44 down, \$4.09 monthly for 8 months.**

WE CAN SUPPLY ALL "Precision" PRODUCTS  
 Send for Complete Precision literature.  
**37-105. Precision Catalog—Sent FREE**

## E200 SIGNAL GENERATOR



A Precision Signal Generator covering from 90 KC to 88 MC in 6 bands. Direct-reading full-vision dial,  $6 \frac{1}{2}$ " dia. A vernier permits reading to 1 part in 1,000. Designed for Servicing by Signal Substitution, the E200 supplies AVC voltage which is adjustable to the actual AVC voltage developed by the receiver. A switch provides 4 outputs, unmodulated RF, 400 cycle 0-100% modulated RF, external modulated RF, and 400 cycle audio. Has calibrated RF attenuator. In black ripple steel case. Size,  $12 \frac{1}{2} \times 10 \frac{1}{2} \times 6$ ". With tubes, Co-axial cable, and a book describing the method of Servicing by Signal Substitution. For 115 V., 60 cycles. 20 lbs. **\$39.15**  
**84-409. CASH PRICE.....**  
**57.83 down, \$4.31 monthly for 8 months.**

## SERIES 832 31-RANGE AC-DC TESTER

A new all-purpose test instrument at a remarkably low price. Incorporates all of the fine features found in Precision's line of testing equipment. Uses a large  $3 \frac{1}{2}$ " meter with full length, easily read scales. A rotary selector switch makes instantly available the desired range. Two polarized pin jacks provide all measurements with the exception of the high AC and DC voltages. Shunts and multipliers are held to an accuracy of 1% or better. Ranges are: 0-6-30-150-300-600-1,200 volts DC at 1,000 ohms per volt; 0-12-60-300-600-1,200-2,400 volts AC at 500 ohms per volt; 0-1.2-12-120-600 ma.; 0-5,000, 500,000 ohms with self-contained battery, 0-5 megs. with external battery; -10 to +62 db. Complete with internal battery. Walnut finished hardwood case,  $7 \frac{1}{2} \times 4 \frac{1}{2} \times 3 \frac{1}{2}$ ". Shpg. wt., 4 lbs. **\$16.61**  
**84-410. NET.....**



## SERIES 834, TO 6,000 VOLTS

**84-411.** Same as 832 but reads: 0-12-60-300-600-1,200-6,000 V. AC and DC at 1,000 ohms per volt; 0-1.2-12-60-600 ma.; 0-5,000-500,000 ohms; 0-5 megohms; -10 to +70 db; 6 output ranges same as AC volts. Hardwood case,  $7 \frac{1}{2} \times 4 \frac{1}{2} \times 3 \frac{1}{2}$ ". Shpg. wt., 4 lbs. With battery. **NET.....\$19.55**

## SERIES 910 DYNAMIC MUTUAL CONDUCTANCE TUBE TESTERS

The 910 employs an exclusive circuit which effectively tests all receiving tubes. The automatic push-button system affords extreme flexibility for non-obsolete tube analysis and ability to accommodate future tube releases. Dual selector switches locate terminals of all filaments. Uses 3" square meter. Accommodates all filament voltages from 1.4 to 120 volts. Accurately tests all Loctal, Bantam Jr., "S" Television amplifiers, Octals (MG, G, and M), Spray shield and Glass types. Roll-type tube chart. Hardwood case. Size:  $12 \frac{1}{2} \times 13 \frac{1}{2} \times 6$ ". For 115 V., 60 cycles. Shpg. wt., 20 lbs.

**84-412. 910P. Portable.**  
**84-413. 910C. Counter.** **\$37.19**  
**16" x 12" x 8". CASH.....**  
**57.44 down, \$4.09 monthly for 8 months.**  
**84-414. Model 910MCP.** In open portable-type metal case as illustrated below. Size:  $12 \frac{1}{2} \times 10 \frac{1}{2} \times 6$ ", 19 lbs. **\$33.27**  
**NET.....**



## 912 TUBE TESTER WITH 4 1/2" METER

A dynamic mutual conductance tube tester with many outstanding features. Uses a large  $4 \frac{1}{2}$ " square meter. The 912 tests all tubes with filaments from 1.4 to 117 volts. The flexible automatic push-button system and the dual free-point filament terminal selection assures obsolescent-free operation. A sensitive neon bulb checks cathode and inter-element leakage and shorts. Tests all portable radio batteries under load. Line voltage adjustment is read directly on meter. The double window roller tube chart provides speedy reference. In open portable metal case,  $12 \times 10 \frac{1}{2} \times 6$ ". For 115 V., 60 cycles. 19 lbs.

**84-416. MODEL 912-MCP.** **\$37.19**  
**CASH PRICE.....**  
**57.44 down, \$4.09 monthly for 8 months.**  
**84-415. MODEL 912P.** Same as 912MCP but in hardwood portable case with cover,  $12 \times 13 \times 6$ ". Shpg. wt., 19 lbs. **\$41.11**  
**CASH PRICE.....**  
**58.22 down, \$4.53 monthly for 8 months.**







# DEPENDABLE TEST EQUIPMENT



## MODEL 411 SUPERTESTER

The Dependable Model 411 is one of the most versatile instruments ever produced. It is ideal for television and radio servicing, ham work and general industrial use. Outstanding features are: bakelite jacks providing a large safety margin when measuring high voltages; high current ranges, both A.C. and D.C. for motor work; low ohmmeter range for voice coils; high resistance contacts, etc., and high ohmmeter ranges for checking leaky condensers. Uses a 3" square meter with a sensitivity of 5,000 ohms per volt. Ranges are: 0-10-100-250-1,000-5,000 volts A.C. and D.C.; 0-200 microamps D.C.; 0-10-100 ma. D.C.; 0-400-40,000-4,000,000 ohms; -10 to +69 db. in 5 steps; 0-1-10-25 amps, D.C.; 0-500 ma. A.C. and 0-2.5-5-25 amps, A.C. Output meter ranges same as A.C. volts. Center reading on low ohm range is 5 ohms. With batteries. Wood case measures 7 1/2" x 5 1/2" x 3 1/2". Wt., 3 lbs.

**84-200. MODEL 411. NET. \$17.49**  
**84-201. MODEL 411P. Same as Model 411 but in a portable hinged cover. \$19.35**  
 solid walnut case. NET.

## 414P UNIVERSAL MULTITESTER



The Series 414 is a multi-range tester offering many unique advantages. The 4 1/2" D'Arsonval meter has a 450 microampere movement. A new system for AC measurements provides higher accuracy and greater sensitivity than is obtainable with copper oxide rectifiers. The rectifier in the Model 414P is more rugged, more sensitive, simpler to replace, and more economical. It is not subject to the frequency, wave form and temperature errors inherent in copper-oxide rectifiers. AC scales coincide with the DC scales and so prevent crowding. An outstanding advantage of the 414 is its use as a direct-reading capacity meter. Ranges are: 0-0.3-3-30-300 mfd. in 5 ranges. 5 ohmmeter ranges provide readings from 0 to 15 megohms. Center of low ohm scale reads 2.5 ohms. 5 AC and DC voltage scales from 0 to 5,000 volts. Sensitivity is 2,000 ohms per volt. Six DC current ranges read up to 25 amperes. Also reads inductance from .25 to 1,000 millihenries, and from .25 to 10,000 henries. Supply line and meter are fused. For 115 V., 60 cycles. Shpg. wt. 9 lbs.

**84-202. Model 414P. Portable model. Size: 9 1/2" x 12 1/2" x 6". Solid maple case. NET. \$25.97**  
**84-203. Model 414. Open face bench type. Size: 9 1/2" x 9 1/2" x 5 1/2". NET. \$23.47**



## 432 TROUBLE SHOOTER

Here is an instrument that is priced lower than any other type of D'Arsonval volt-ohm-milliammeter. The 432 has the following ranges: 0-5-10-500-1,000 volts D.C. at 1,000 ohms per volt; 0-500-50,000-500,000 ohms with self-contained batteries; and 0-1-10 ma. DC. Center scale reading of low-range ohmmeter circuit is 10 ohms. Not necessary to use test prods for zero-adjusting the 3 ohmmeter ranges. Has an attractive etched panel and a hard wood case with natural finish. 6" x 3" x 2 1/4". Wt., 3 lbs.

**84-204. NET. \$6.61**



## 802 TUBE AND SET TESTER

A high-grade instrument combining an ultra-modern tube tester and a V.O.M. The 4 1/2" rectangular D'Arsonval meter with sapphire jewels has extra-long multiple scales in 3 colors. Tube tester section tests all old and new tubes, including miniatures, according to RMA standards and provides filament voltages up to full line voltage; tests all ballasts; hot inter-element short and leakage tests on each individual element; continuous line voltage regulation from 103 to 135 volts; a noise and hum test and individual tests of multi-purpose tubes. Meter protected by fuse. Unique AC voltage measurements have linear scales to coincide with DC ranges. Self-contained power supply. The V.O.M. ranges are: 0-10-50-500-1,000 V. DC at 1,000 ohms per volt; 0-1-10-100-1,000 ma. DC; 0-10 amps. DC; 0-500-5,000 ohms; 0-1-10 megohms; 0-10-50-500-1,000 V. AC; -8 to +55 db. in 4 ranges and 4 output ranges, same as the AC volt scales. Low ohm scale reads 5 ohms center. Also checks condenser leakage. Panel in frosted silver, black and blue. Case with hinged cover; 12" x 12 1/2" x 6". Power line is doubly fused. For 115 V., 60 cycles. With test leads. Wt., 12 lbs.

**84-205. NET PRICE. \$29.35**

## 802A TUBE TESTER AND PLUG-IN SET ANALYZER

The Model 802A is a combination tube tester and plug-in set analyzer. It incorporates all of the desirable features of the Model 802 described above plus a plug-in type analyzer unit which is built into the cover of the instrument. The plug-in set analyzer permits voltage, current and resistance measurements to be made at the terminals of the sockets in the receiver. Most measurements can be made while the receiver and circuits are in operating condition. It is not necessary to remove the chassis from the cabinet. The Model 802A is supplied with all accessories, including latch lock adapters, rectifier tube, batteries, test leads, etc. Size: 12" x 12 1/2" x 6". For 115 V., 60 cycles. Shpg. wt., 13 lbs.

**84-206. CASH PRICE. \$40.67**  
**\$8.13 down, \$4.48 monthly for 8 months.**



## 433 SPEED MULTIMETER

A Dependable Multimeter in extremely compact form. Uses a 3" square meter with a guaranteed accuracy within 2%. Has long, easy-reading scales. Exceptionally low price without sacrifice of high quality. Ohmmeter shorting switch allows convenient zero ohms adjustment. Makes it unnecessary to short test leads. Ranges are: 0-5-50-500-1,000 V. DC at 1,000 ohms per volt; 0-1 ma. DC; back up low ohm scale, 0-500 ohms; conventional, 0-500,000 ohms. The instrument is housed in a handsome hard wood case, 6" x 3" x 2 1/4". Weighs only 21 ounces. Bezel fully etched front panel with frosted silver finish. With self-contained battery. Shipping weight, 2 lbs.

**84-207. NET. \$6.81**



## 446 AC-DC MULTITESTER

The 446 is the equivalent of 25 separate units housed in a single case of convenient size. The 3-inch square D'Arsonval meter with bakelite case has a sensitivity of 1,000 ohms per volt. Ranges are as follows: 0-5-50-250-500-2,500 volts DC; 0-1-10-100-1,000 ma. DC; 0-10 amps. DC; 0-10-100-500-1,000 volts AC; 0-500-100,000 ohms, 0-1 megohm; -8 to +15, +12 to +35, +26 to +49, +32 to +55 db. and 4 output ranges same as the AC volts. Easily read scales on the multi-colored dial. The low range ohmmeter scale is of the low-drain back-up type and reads as low as .1 ohm. Center of the scale reads 10 ohms, making it ideal for measuring voice coils, shorted turns, poor contact resistance, etc. A selector switch on the attractively finished front panel provides convenient operation. Case measures 3" x 8 1/2" x 5". Comes with self-contained batteries for ohmmeter ranges. Shpg. wt., 4 lbs.

**84-208. NET. \$10.73**

## 446P AC-DC MULTITESTER

Same as above, but in portable solid walnut case with hinged cover and latch. Set of high-quality test probes included. Case has compartment for test prods, pliers, screwdrivers, etc. Instrument also has a convenient carrying handle. Overall dimensions of case: 8 1/2" x 6 1/2" x 4 1/2". Shpg. wt., 4 1/2 lbs.

**84-209. NET. \$12.25**

## 413 AC-DC POCKET MULTITESTER

A V.O.M. with a 3" 2,500 ohm-per-volt meter. Reads 0-10-50-250-1,000-5,000 Volts DC; 0-10-100-1,000 ma. DC; 0-10 amperes, DC; 0-500-100,000-1,000,000 ohms and 0-400 microamps DC; 0-10-50-250-1,000-5,000 Volts AC; -10 to +69 db. in 5 steps, and 5 output meter ranges, same as AC volts. Wood case, 3 1/2" x 2 1/2" x 1 1/2". With batteries. Shpg. wt., 3 lbs.

**84-210. NET. \$13.67**

## 413P MULTITESTER

Identical to the Model 413 described above except that it is supplied with a hand-rubbed, piano finish, solid walnut case, with hinged cover and latch. Has compartment for test leads which are furnished.

**84-211. NET. \$15.63**



## 456 AC-DC UNIVERSAL TROUBLE SHOOTER

The 456 is "tops" in a miniature AC-DC V.O.M. The accurate D'Arsonval meter has a sensitivity of 1,000 ohms per volt. Accuracy guaranteed within 2%. Ranges are: 0-5-50-500-1,000 V. DC; 0-1-10 ma. DC; 0-5,000-500,000 ohms; 0-5-50-500-1,000 V. AC, and -12 to +8, +8 to +28, +28 to +48, and +34 to +54 db. With self-contained battery for all ohmmeter ranges. Has special ohmmeter shorting switch which eliminates the necessity of shorting test lead prods when making zero adjustments. In hard wood case, 6" x 3" x 2 1/4". Shpg. wt., 3 lbs.

**84-212. NET. \$8.57**

## 456P TROUBLE SHOOTER

Same as the Model 456 described above except housed in a portable hinged-cover case of solid walnut, hand-rubbed. Size of case is 6 1/2" x 3 1/2" x 4 1/4". Shpg. wt., 3 1/2 lbs.

**84-213. NET. \$9.75**

FOR COMPLETE INDEX SEE PAGES 18-19





# DEPENDABLE EQUIPMENT



## 661 ELECTRONIC MULTITESTER

The Model 661 is an electronic AC-DC vacuum tube voltmeter, ohmmeter and capacity meter, offered at the price of a voltmeter alone. This instrument permits you to make tests on any AM, FM, television, or amplifier circuit while the circuit is "hot." You can make these tests without disturbing circuit constants. A D'Arsonval type meter provides clear, quick readings on the 4 1/4" scale. Meter is accurate to 2% of full scale and multiplier resistors to within 1%. Circuit used affords maximum protection against burnout of meter. Ranges of the 661 are: 0-6-30-150-600-1,500-6,000 volts DC, sensitivity on high ranges is 160 megohms—low ranges, 16 megohms; 0-6-30-150-600-1,500-6,000 volts AC, sensitivity on high ranges, 160 megohms—low ranges, 16 megohms with input capacity of only .00005 mfd.; 0-1,000-10,000-100,000 ohms, 0-1-10-100-1,000 megohms; 0-001-.01-.1-1-10-100-1,000 mfd. No test leads to short and no resetting when changing ranges. No danger of shock on the low capacity and high ohm ranges. The attractively finished case measures 9 1/4" x 9 1/4" x 7 1/4". With 2 high-voltage test leads and a special signal-tracing probe for making measurements without disturbing circuit. For 115 V., 60 cycles. Shpg. wt., 10 lbs. **\$34.25**

84-214. NET.....



## 702 SIGNAL GENERATOR

Continuously variable from 95 KC to 25 MC in 5 bands on fundamentals and to 100 MC on harmonics. Calibrations are etched directly on the panel. Tuning is direct or by planetary drive. Output unmodulated or modulated 30% at 400 cycles. Automatic shorting of coils not in use prevents dead spots. 400 cycle supply is available for external use, 6 volt maximum. Has provisions for applying external modulation from outside sweep circuit for oscilloscope work. Excellent shielding by leaded steel case and chassis. Leakage eliminated by separate shielding of coil assembly, attenuator and RF circuits. Attenuation in approximate microvolts by five step ladder-type attenuator, 1 to 500,000. Power supply is electrostatically shielded and thoroughly filtered which eliminates feedback through the line. Doubly fused. Size, 8" x 11 3/4" x 5". For operation on 115 V., 50-60 cycles. Shpg. wt., 15 lbs. **\$24.94**

84-215. NET.....

## 415 COIN-MACHINE TESTER



Here is an instrument specifically designed to meet the requirements of coin machine servicing. It quickly and economically tests the electrical circuits of pin-ball games, "juke" boxes, phonographs, and other coin machine devices and accessories. 3" D'Arsonval type meter. Tests for opens, shorts, socket voltages, AC and DC supply voltages; continuity and resistance of relays, contacts, coils, resistors, chokes, and transformers; condenser leakage, etc. Jacks are provided for headphone testing. Switch selects desired range. Attractive hardwood case, 6" x 3" x 2 1/4". Shpg. wt., 3 lbs. **\$10.24**

84-229. Model 415. NET.....  
84-231. Model 415P. As above but in hinged cover portable case, 6" x 4 1/2" x 4". Shpg. wt., 3 lbs. NET.....\$11.51



## 803 TUBE TESTER AND V-O-M

A combination tube tester and V-O-M in one compact, portable unit. It employs the famous Dynotimum circuit for testing all types of receiving tubes and provides for filament short and leakage tests for individual tube elements. Checks at standard RMA plate voltages and loads. Also has provisions for testing ballast tubes. The 4 1/2" D'Arsonval meter with sapphire bearings has extra-long multiple scales in three colors. Meter is fuse protected. The V-O-M provides the following ranges: 0-10-50-500-1,000 V. DC at 1,000 ohms per volt; 0-1-10-100-1,000 ma., 0-10 amps. DC; 0-500-5,000 ohms; 0-1-10 megohms; 0-10-50-500-1,000 V. AC; -8 to +35 db. in 4 ranges and 4 output ranges. Has provision for checking condenser leakage. Medium and low ohms ranges are battery-operated. High ranges have self-contained power supply. Case with compartment, 14 1/4" x 13" x 6". With test leads. 115 V., 60 cycles. Wt., 13 lbs. **\$35.23**

84-217. NET CASH.....  
\$7.05 down, \$5.00 monthly for 6 months.

## 803A TUBE-SET TESTER

This combination consists of the Model 803 Tube Tester and V-O-M described above plus the Model 506 Plug-in Analyzer described below, built into the cover of the instrument. It permits measurements to be made at the socket terminals of set. Supplied with latch lock adapters, rectifier tube, batteries, test prods, etc. Size: 14 1/4" x 13" x 6". For 115 V., 60 cycles. Shpg. wt., 15 lbs. **\$46.55**

84-218. NET CASH.....  
\$9.31 down, \$5.12 monthly for 8 months.

## 506C ANALYZER UNIT



An improved multiple selector circuit system which, when used with a V-O-M, will provide a comprehensive free point, set tester. Permits voltage, current, resistance, and capacity metering at all socket terminals. Has a 10-wire cable and a spare terminal on the panel. Case is 3" deep

—panel size, 5 1/2" x 7 1/2". With toggle latch, plug and 7 adapters. 3 1/2 lbs. **\$12.40**

84-220. NET.....  
84-219. Model 506. Same as Model 506C described above but less case. NET. \$11.42

## 417 APPLIANCE TESTER



The Model 417 measures voltage, current, and watts on either AC or DC. All measurements are on 4 easily read scales. Ranges of the Model 417 are as follows: 0-250 volts AC or DC; 0-30-120-600-3,000 watts at 120 volts AC or DC; 0-60-240-1,200-6,000 watts at 240 volts AC or DC; 0-1-5-25 amperes AC or DC. With power-factor classification chart and correction curves for power-factor

and line voltage. Size, 6" x 3" x 2 1/2". Shpg. wt., 3 lbs. **\$10.54**

84-221. NET.....  
84-222. Model 417P. Portable in hinged cover case. 6" x 4 1/2" x 4". 3 lbs. ....\$11.71

WE CAN SUPPLY ALL "Dependable" PRODUCTS. Send for Complete Literature.  
37-049. RCP Literature—Sent FREE



## MODEL 309C TUBE TESTER

A new Dynotimum Tube Checker providing reliable performance at low cost. 3" square D'Arsonval meter. Tests metal, M.G., glass, gas rectifiers, octal, octal, single ended, bantam jr. and miniature tubes. Gives filament voltages up to full line voltage. Tests are made under RMA specified plate voltages and loads; considered the finest co-relative test. Provision for audibly checking noisy tubes. A Neon indicator is used for hot inter-element shorts and leakages. Line voltage is adjustable from 105 to 135 volts and is indicated directly on meter, assuring accurate readings. Size 9" x 12" x 5". For 115 V., 60 cycles. Shpg. wt., 10 lbs. **\$17.59**

84-223. Model 309C. Counter Model. NET.....  
84-224. Model 309P. Portable Model. Size, 11 1/4" x 12" x 7". 12 lbs. NET. ....\$19.55



## MODEL 310P

The famous Dynotimum Tube Tester combined with the Rolindex Chart in one convenient instrument. Tube tester characteristics are identical with Model 309 listed above. A free tube setting and information service will be supplied for one year to all registered owners. Neon lamp indicates shorts and leakages; jewel light indicates "on" or "off." Line voltage is indicated directly on the 3" square meter. Size 13 1/4" x 13" x 4 1/4". Shpg. wt., 12 lbs. **\$25.43**

84-225. Portable-Counter Model. NET.....  
84-226. Identical with above, except with 4 1/2" rectangular meter. 14 lbs. NET \$27.39

## MODEL 310C COUNTER TESTER

Sloping front, 3" meter and Rolindex chart. Includes free new tube listing service. Size, 11 1/2" x 13 1/2" x 7 1/2". **\$23.47**

84-227. NET.....  
84-228. As above but with 4 1/2" meter. NET.....\$25.43

## MODEL 313C

A push-button operated tube tester and merchandiser which will enhance any sales counter. The 9" rectangular meter is highly impressive and attractive. Incorporates all the fine features of the Model 310, described above, including the speedy Rolindex tube chart. Full tube data service with one new roll chart is supplied free for one year. Beautifully finished case measures 11" x 18 1/2" x 7 1/2". For 105-135 volts, 60 cycles. Shpg. wt., 18 lbs. **\$32.29**

84-216. NET.....  
84-230. Model 313P. Same as the Model 313C above except in combination portable-counter case with compartment for tubes, tools, etc. Leatherette finish. Size: 12" x 18 1/2" x 9". Shpg. wt., 20 lbs. NET.....\$35.23



# Supreme Test Equipment

## MODEL 589 AND 599 TESTERS

Quality instruments by Supreme incorporating exclusive engineering and design features that anticipate tube and circuit characteristics for years to come. You can buy these instruments with full confidence that they cannot become obsolete. Only Supreme provides the filament *Varivolt* system; allows the selection of any filament voltage from 1/2 to highest value used. Supreme continues the "double floating" filament return selector circuit which re-connects all sockets for possible future tube base changes. Tube tester in both instruments provides a sensitive leakage test of all tubes, present and future.

### MODEL 599 TUBE AND SET TESTER

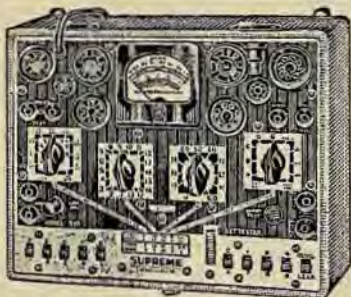
The Supreme 599 combines all the features of the 589 described at left, with a multi-range Volt-Ohm-Milliammeter. It is ideally suited for any type of radio service work. The various ranges are as follows: 0-6-15-150-600-1,500 V. DC at 1,000 ohms per volt; 0-6-15-150-600 V. AC; 0-6-60-600 ma. DC; 0-200-20,000 ohms, 0-2-20 megohms, and 0-6-15-150-600 output voltage ranges. Readings as low as .2 volts are easily read on both the AC and DC scales. The copper-oxide rectifier for AC ranges is fully protected from overload damage. Low range of ohmmeter reads 3.5 ohms at center scale. Also has provision for providing portable "A" and "B" batteries under load. The 599 provides an excellent means for checking leakage of paper condensers by means of the highly sensitive 20 megohm range. This is a much better method than using a neon lamp as the ohmmeter is calibrated. Leakage in electrolytic type condensers can also be readily checked. Case, size, weight, etc., identical with the Model 589 described at left. With instructions. For 115 V., 60 cycle AC.

**84-805. NET CASH PRICE.....\$42.63**  
Terms: \$5.00 down, \$4.29 monthly for 10 months.

### MODEL 589 IN METAL CABINET

**84-806. Model 589.** With 7" meter in metal cabinet for counter or shop use. Wt., 20 lbs. **CASH PRICE.....\$53.85**  
Terms: \$5.00 down, \$4.54 monthly for 12 months.

**84-807. Model 589.** With 9" meter in metal cabinet for counter or shop use. Wt., 20 lbs. **CASH PRICE.....\$56.59**  
Terms: \$7.00 down, \$4.71 monthly for 12 months.



### 589 TUBE AND BATTERY TESTER

The 589 Supreme Tester provides a complete test of all of the newest as well as all of the older type tubes. Each tube is tested under proper load and correct anode potential. 3" meter with direct-reading scales. The Supreme 589 also checks all 1.5, 4.5, 6, 45 and 90 volt portable radio batteries. Brown luggage-type case with removable cover. Size is 11 1/4" x 9 1/4" x 5 1/4". For 115 V., 60 cycles AC. Shpg. wt., 12 lbs.

**84-800. NET CASH.....\$32.83**  
\$4.00 down, \$4.10 monthly for 8 months.

### 589 IN METAL CABINET

**84-801. Model 589.** With 7" meter in metal cabinet. Wt., 14 lbs. **NET.....\$43.07**  
\$5.00 down, \$4.33 monthly for 10 months.

**84-802. Model 589.** With 9" meter in metal cabinet. Wt., 14 lbs. **NET.....\$46.01**  
\$5.00 down, \$4.66 monthly for 10 months.



### METAL CABINETS

Models 589 and 599 testers are also available in attractive metal cases with 7" or 9" illuminated meters. They may be used in either a vertical or horizontal position by simply reversing the instrument panel. The large meter scales are easily read 4 or 5 feet away from the instrument. Both large meter models have two neon lamps; one has the recommended RMA 200,000 ohm sensitivity; the other has a sensitivity of 2,000,000 ohms which is useful for checking inter-element leakages in tubes where exceptionally low noise and hum level is necessary, such as in high-gain audio amplifiers, etc.



### MODEL 504A PORTABLE LAB.

A portable testing laboratory combining an up-to-date Tube Tester with a 29-range Multi-meter. Push-button selector system. The 504A provides correct filament voltages from 1/2 to full line voltage. Improved circuit accurately tests all types of tubes. A neon lamp provides two leakage tests. 4" square meter has "Good-7-Bad" scale. The Multi-meter reads 0-5-25-100-250-500-1,000-2,500 volts DC at 1,000 ohms per volt; 0-500 microamps, 2.5-10-50-250 ma. and 0-1-10 amperes DC; 0-5-10-50-250-1,000 volts AC; 0-5-10-50-250-1,000 volts AC for output meter use. Ohmmeter has 5 ranges: 0-200-2,000-20,000 ohms, 0-2-20 megohms. Dry batteries tested under load. Condition indicated on "Good-7-Bad" scale. Condenser leakage test on "Good Capacitor-Bad Capacitor" scale with voltages from 25 to 450. Oak case, hinged cover; black panel, aluminum trim, red and ivory fittings. Size, 14 1/2" x 12 1/2" x 6". For 110-130 V., 60 cycles AC. Wt., 21 lbs. **\$71.05**

**84-810. CASH PRICE.....\$71.05**  
\$8.00 down, \$5.98 monthly for 12 months.



### POCKET MULTIMETERS

**MODEL 542, Fig. A.** Here is an extremely compact, portable pocket laboratory at a very low price. Has a knife-edged pointer to reduce parallax to a minimum. The 3" square meter has an accurate 200 microamps movement, with a sensitivity of 5,000 ohms per volt. The 24 ranges of the instrument are as follows: 0-3-60-150 ma., DC; 0-6-150-300-1,500 volts DC; 0-2,000-20,000-200,000 ohms and 0-2 megohms; 0-6-30-150-600 volts AC; 4 decibel ranges from -6 to -50, and 4 output ranges which are the same as the AC volt scales. All of the ohmmeter ranges, including the 0-2 megohm range, are operated by self-contained batteries. The durable black molded bakelite case has attractive metal panel. Size only 3" x 5 1/2" x 2 1/2"; weighs only 23 ounces. Supplied complete with self-contained batteries. Wt., 2 lbs. **\$17.59**

**84-815. NET.....\$17.59**

**MODEL 543, Fig. B.** A compact instrument at a remarkably low price. It uses a full size 3" one ml meter with a sensitivity of 1,000 ohms per volt. A single rotary type switch provides the following ranges: 0-15-150-600-3,000 V. DC; 0-6-60-600 ma., DC; 0-15-150-600-3,000 V. AC and 0-2,000-20,000 ohms. Complete with self-contained batteries. Case measures 3 1/2" x 5 1/2" x 2 1/2". Shpg. wt., 2 lbs. **\$13.47**

**84-816. NET.....\$13.47**

### MODEL 592 SET TESTER

Double meter sensitivity. Meter movement is 40 microamperes, providing a sensitivity of 25,000 ohms per volt. Also provides voltage tests at 1,000 ohms per volt. 4" square precision meter. Larger wire on moving coil and larger hair springs provide maximum protection. Test prods remain in one pair of pin jacks for all readings except the high amperage range which is provided with special heavy-duty binding posts. Speedy, dependable operation is obtained by the use of 14 push-button switches; simply push one button on each side of meter, and any one of 46 ranges is instantly available. Button switches are of the self-locking industrial type. Forty-six ranges are as follows: 0-70-700 microamps, 0-7-35-140-350 ma.; 0-1-4-14 amps, DC; 0-3.5-7-35-140-350-700-1,400 volts DC at 25,000 ohms per volt and duplicated at 1,000 ohms per volt; 0 to 500-5,000-50,000-500,000 ohms, 0-5-50 megohms, all from self-contained battery supplied with instrument; 0-7-35-140-350-700-1,400 volts AC; 6 Output ranges, -10 to +46 db. Size, 7 1/2" x 9" x 6 1/2". Wt., 10 lbs. **\$47.53**

**84-820. CASH PRICE.....\$47.53**  
\$6.00 down, \$4.74 monthly for 10 months.

### MODEL 547 MULTIMETER

Incorporates the most convenient method of range and circuit selection. Has a large 7" illuminated meter. The 36 ranges are 0-6-30-150-300-600-3,000 V. DC at 1,000 ohms per volt; 0-6-30-150-300-600 ma., DC; 0-6-30-150-300-600-3,000 V. AC; 0-2,000-20,000-200,000 ohms, 0-2-20 megohms; 10 + 4 + 18 + 32 + 38 + 44 db; 0-2-2-20 mid., and 0-6-30-150-300-600-3,000 output volts. Beautiful oak carrying case with large compartment for test leads and other accessories. 13 1/4" x 11 1/2" x 5". For 115 V., 60 cycles AC. Shpg. wt., 12 lbs.

**84-825. NET CASH PRICE.....\$39.15**

Terms: \$5.00 down, \$4.87 monthly for 8 months.

**84-826.** Same as above but in metal case. **CASH.....\$36.75**  
Terms: \$5.00 down, \$4.53 monthly for 8 months.

### 549 ELECTRONIC VOLTMETER

**84-830.** A 28-range volt-ohm-milliammeter. Reads to 6,000 V. DC; 500 V. AC; 1,000 megohm; 15 amps DC. Has high input impedance of 15,000,000 ohms on DC volts. Center-reading voltage scales. Oak case. **\$45.81**  
Shpg. wt., 10 lbs. **CASH.....\$45.81**  
\$5.00 down, \$4.64 monthly for 10 months.

**84-831.** Model 549 Electronic Voltmeter. Same as 84-830 but in attractive metal case. Wt., 10 lbs. **CASH.....\$43.07**  
\$5.00 down, \$4.33 monthly for 10 months.



**ALLIED can supply all Supreme test units.** This equipment is available on convenient time payments. Write for application blank. Send deposit with order for quick service.

**37-077. Literature on Supreme Instruments—Sent FREE.**

LOWEST PRICES—HIGHEST QUALITY—BEST SERVICE



# SUPREME Test Equipment

## DYNAMIC SIGNAL TRACERS



### MODEL 562 AUDOLYZER

The Supreme Audolyzer is the fastest low-priced dynamic test instrument on the market. This new tester actually allows you to hear the demodulated signal from a station or test oscillator at consecutive points as it passes through the receiver. It not only determines the presence or absence of the signal in any part of the set, but it also indicates the quality of the signal, whether it is distorted, whether there is hum, etc. In none of these tests is the receiver de-tuned by the application of the probe. Consists of a high-gain tuned amplifier, covering all RF, IF, and SW frequencies in 5 bands, 100 KC to 15 MC. This enables you to determine the unknown frequency—oscillator, RF, or IF, to which any circuit is tuned. Complete with demodulator, audio system, and built-in speaker. Also contains a vacuum tube voltmeter with ranges of 0-1-3-10-30-100-300 and 1,000 volts DC, with an input impedance of 15 megohms. Also reads 0-200-2,000-20,000 ohms, and 0-2-20 megohms. Meter is center-reading type, eliminating the necessity of shifting test leads for polarity changes. Leaky, shorted or open condensers can quickly be located without unsoldering them from the circuit. Vacuum tube voltmeter permits gain measurements to be made. AVC and AFC circuits are readily checked while set is operating. Size, 17 $\frac{1}{2}$ " x 9 $\frac{1}{4}$ " x 12". For 115 V., 60 cycles AC. Shpg. wt., 32 lbs. **\$85.75**

**84-835. NET CASH**.....

**\$10.00 down, \$7.19 monthly for 12 months.**



### MODEL 561 OSCILLATOR

The Model 561 offers five types of signal outputs: (1) Variable audio from 15 to 15,000 cycles; (2) Unmodulated RF from 65 KC to 20.5 MC on fundamentals and to over 60 MC on harmonics; (3) Variable audio modulated RF over same range; (4) Frequency modulated RF for visual alignment with a scope; (5) Means for varying the percentage of audio modulation from 0 to 80%. Response is flat  $\pm 1$  db. from 30 to 10,000 cycles, and down 2 db. at 15 and 15,000 cycles. Power output is 150 milliwatts, and the open circuit voltage is 35 volts. Output controllable from 0 to maximum. Harmonic distortion is less than 5% over entire range. Push-buttons permit selecting 50-500-5,000 or 50,000 ohms output impedances. The 5 RF oscillator ranges are selected by push-buttons. Air-dielectric trimmers and iron-core inductors permit accurate calibration at both ends of each band within  $\frac{1}{2}$  of 1% at all frequencies. 6" illuminated dials with shadow-type indicators eliminate parallax. Ladder-type attenuator is variable from  $\frac{1}{2}$  to 100,000 microvolts. Has built-in vacuum tube voltmeter. The attractive case measures 17 $\frac{1}{2}$ " x 9 $\frac{1}{4}$ " x 12". For 115 V., 60 cycles AC. Shpg. wt., 33 lbs. **\$91.63**

**84-836. NET CASH**.....

**\$11.00 down, \$7.65 monthly for 12 months.**



### MODEL 560A VEDOLYZER

A new technique developed by Supreme for dynamic trouble diagnosing. Actually shows wave-form of the signal at any stage of its journey through any receiver. Tests are made where application of ordinary test equipment would be useless. Checks actual operating and signal voltages without disturbing receiver circuits. Easily and accurately determines AVC and AFC performance, oscillator feedback and injection voltages, RF signal and DC operating grid voltages, location, amplitude and frequency of hum. The Vedolyzer contains (1) A broad-band amplifier with a band width from 20 cycles to 2.5 MC. Works into either internal scope or both scope and internal vacuum tube voltmeter. (2) 3" RF and AF oscilloscope with all circuits and controls necessary to measure modulation factor and distortion and view RF and AF wave forms. (3) Balanced bridge vacuum tube voltmeter with the following ranges: 0-2-5-20-60-200-600-2,000-6,000 V. DC. 0-3-9-30-90-300-900-3,000 V. AC; Ohms, 0-1,000-10,000; 0-1-1-10-100-1,000 megohms. Has decimal-type meter scales. All of the above ranges are selected by means of push-buttons. (4) Wave analyzer and frequency meter from 65 KC to 6.5 MC. (5) Multiple probe output for checking stages simultaneously. For 115 V., 60 cycles AC. Size, 17 $\frac{1}{2}$ " x 13" x 12 $\frac{1}{2}$ ". Shpg. wt., 40 lbs. **\$139.65**

**84-837. NET CASH**.....

**\$15.00 down, \$11.69 monthly for 12 months.**



### 546 3" OSCILLOSCOPE

A real necessity in every up-to-date service shop and laboratory. The use of a cathode-ray tube having a 3" screen provides a more practical instrument than one using a smaller tube. Intermittent operation of a set, hum, sensitivity, over load, wave form distortion, etc., are quickly and easily checked. Visual alignment of RF and IF stages, checking the demodulation characteristics of second detectors and stage-by-stage gain measurements are a few of the uses. Ideal for use with "signal tracing" instruments. All necessary controls are conveniently grouped on the front panel of the instrument. Sensitive, wide range linear amplifiers produce undistorted output. Supplied complete with instructions. For 115 V., 60 cycles AC. Size, 12 $\frac{1}{2}$ " x 13 $\frac{1}{2}$ " x 7 $\frac{1}{2}$ ". Shpg. wt., 24 lbs. **\$70.07**

**84-824. NET CASH PRICE**.....

**Terms: \$8.00 down, \$5.89 monthly for 12 months.**

### MODEL 571 OSCILLATOR

The 571 Signal Generator features extreme accuracy and stability. High "Q" coils plus air-dielectric condensers reduce error to less than  $\frac{1}{2}$  of 1%. Five bands cover from 65 KC to 20.5 MC on fundamentals. Accurate harmonics are available up to 60 MC. All five fundamental ranges are used on two basic scales. An illuminated dial with a hairline eliminates parallax. Two modulation output levels, 30% and 75% at 400 cycles. RF output on all bands can be controlled from 1 V. to 5 microvolt through a double shielded attenuator. Output may be modulated externally by a phono-pickup or a Frequency Modulator. Oak case, 10 $\frac{1}{2}$ " x 8 $\frac{1}{2}$ " x 8 $\frac{1}{2}$ ". Black metal panel with silver and red trim. Completely equipped with tubes, accessories and detailed instructions. For 115 V., 60 cycles AC. Shpg. wt., 19 lbs. **\$43.07**

**84-839. NET CASH PRICE**.....

**Terms: \$5.00 down, \$4.33 monthly for 10 months.**



## FAMOUS DU MONT CATHODE-RAY EQUIPMENT



### MODEL 164 3" OSCILLOGRAPH

Designed for radio service and laboratory use. It has also found great application in field work due to its small size, light weight, and low power consumption. Uses a standard 3" tube with a green, medium-persistence screen. Has separate vertical (V) and horizontal (H) amplifiers. Input impedance V is 1 meg.; H is 8 meg. Frequency range, both V and H, 15 to 30,000 cycles. Sensitivity of V is .25 RMS volt/inch; H is 4 RMS volt/inch. Sweep, 15 to 30,000 cycles. With tubes. Black, wrinkle-finished case, 11 $\frac{1}{2}$ " x 7 $\frac{1}{2}$ " x 13". For 115 V., 40-60 cycles. Shpg. wt., 25 lbs. **\$58.31**

**84-750. NET**.....

### 168 5" OSCILLOGRAPH

The Type 168 5-inch oscillograph has a two-stage vertical amplifier. Single stage horizontal amplifier. Connection may be made to vertical plates direct or through one or two stages. Large 5" screen and removable calibrated scale allow accurate quantitative measurements. Two independent power supplies. Sweep circuit range from 15 to 30,000 cycles per second. Size: 15 $\frac{1}{2}$ " x 8" x 14". For 115 V., 40-60 cycles. With tubes. Net., 40 lbs. **\$124.95**

**84-751. NET**.....



### MODEL 208 5" OSCILLOGRAPH

A 5" instrument incorporating many desirable features and improvements. Intensifier type tube insures good trace brilliance. The sensitive wide frequency range amplifiers present a constant input impedance to signals of all frequencies. Cathode-loaded input circuit permits undistorted setting, input impedance vertical (V) and horizontal (H) amplifiers is 2 megohms with 15 mmfd. load to signal source. Frequency range, V and H, is 2 to 100,000 cycles. Voltage gain, V, is 2,000; H is 43. Sensitivity of V is .01 RMS volt/inch; H is 5 RMS volt/inch. Sweep circuit, from 2 to 50,000 cycles. With all tubes. Size: 14 $\frac{1}{2}$ " x 8 $\frac{1}{2}$ " x 19 $\frac{1}{2}$ ". For 115 V., 40-60 cycles. Shpg. wt., 67 lbs. **\$164.39**

**84-752. NET**.....

### 175A 5" OSCILLOGRAPH

Similar to the Model 208 above, but with controls added to the sawtooth oscillator to permit single-sweep control of the horizontal deflection. This makes instrument ideal for the study of non-recurrent transient signals. With tubes. Size: 17" x 12" x 23 $\frac{1}{4}$ ". For 115 V., 40-60 cycles. Shpg. wt., 69 lbs. **\$226.38**

**84-753. NET**.....

### 185 ELECTRONIC SWITCH

The Model 185 Electronic Switch is an extremely valuable supplementary instrument for use with cathode-ray oscillographs. It has been designed for simultaneous studies of such signals as input and output signals of amplifiers, of both phases of push-pull amplifiers, for voltage and current measurements in AC circuits, etc. The 185 consists of 2 amplifiers in parallel, alternately biased to cut-off by a square-wave generator whose frequency may be varied over wide limits. A balance control permits 2 signals to be superimposed for direct comparison or separated for individual study. Switching rate is continuously variable from 6 to 2,000 times per second. There is no phase distortion from low frequency limit to 25,000 cycles per second. Voltage gain is 15 times for both amplifiers. Supplied complete with all tubes. Black wrinkle-finished metal cabinet with convenient carrying handle measures 11 $\frac{1}{2}$ " x 7 $\frac{1}{2}$ " x 13". For use on 115 V., 40-60 cycles lines. Shipping wt., 23 lbs. **\$70.07**

**84-754. NET**.....

**\$70.07**

We can supply all Du Mont cathode-ray equipment. Literature on request. Please mention instruments in which you are interested.

ALLIED RADIO CORPORATION, 833 W. JACKSON BLVD., CHICAGO, ILL.

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# MILLION POPULAR-PRICED TEST EQUIPMENT



## DD TUBE & CONDENSER TESTER

The Model DD tests all tubes including the latest Loktal, "S", Bantam Jr. and "hearing-aid" peanut tubes. The filament switch covers from 1.4 to 110 volts with spare positions for future tubes. The exact condition of the tube under test is clearly indicated on the English-reading "Good-Bad" scale of the accurate D'Arsonval meter. A sensitive neon bulb is used for checking shorts and leakages up to two megohms with tube hot. Tests bypass and electrolytic condensers for shorts and leakage. Also provides for continuity checks. All test circuits are insulated from line. A separate control is used for line voltage adjustments. The Model DD is built to precision standards. Size is 9" x 9" x 5". Has carrying handle and removable cover. With full instructions. For 105-125 V., 60 cycles. Instrument is fused. Shpg. wt., 12 lbs.

**\$18.95**  
84-900. NET

## "J" VACUUM TUBE VOLTMETER

A vacuum tube voltmeter with zero-center and zero left voltage scales. Ranges: 0-3-15-30-120-300-600-1,200-3,000. Input impedance, 10 megohms on all ranges. Zero center scales permit positive and negative voltage readings with same prod. Ideal for FM alignment. Ohmmeter reads: 0-1,000-10,000-100,000 ohms; 0-1-10-100-1,000 megohms. Reads as low as .1 ohm. One zero setting and no leads to short on any range. AC volts: 0-60-120-300-600-1,200-3,000. At 1,500 ohms per volt, also measures -15 to +6 db. Rugged 4 1/2" meter with 2% accuracy. With tubes, shielded lead and special prod. Size, 7 1/4" x 7" x 10". For 115 V., 60 cycles. Wt., 10 lbs.

**\$34.95**  
84-903. NET



## RTL "300" CIRCUIT TESTER

A 46 range push-button controlled V.O.M. and V.T. V.M. Ranges on 7.5 meter are: 0-120-120-300-600-1,200 V. DC at 5,000 ohms per volt and AC at 1,000 ohms per volt; 0-6,000 V. DC and AC at 12-1,000 ohms per volt; 0-3-30-120-300 ma., 0-1-10-100 megohms. Also 1-10 mega.; 6 outputs: 6 DB and 6VU. Also 2 V.T.V.M. ranges, 0-10-20 V. DC. Case, 1 1/2" x 5 1/2" finished in grey wrinkle with carrying handle. Panel is 3 tone grey, white and red. Accuracy within 2% on DC scales, 4% on AC. For 115 V., 60 cycles. With test leads. Less batteries. 10 lbs.

**\$39.25**  
84-930. CASH PRICE.

57.85 down, \$4.32 monthly for 8 months.

84-931. Battery Kit for above. \$1.50



## MODEL Q SIGNAL GENERATOR

Covers 55 KC to 30 MC in 6 bands on fundamental and to 50 MC on harmonics. Over 40% of full-vision, easy-reading scales. Provisions for external, internal (40% at 400 cycles), or no modulation. Output from zero to approximately 100,000 microvolts. Has dual attenuators. Separate audio output is available. With tubes. Size: 10 x 10 x 7". For 115 V., 60 cycles. Wt., 12 lbs.

**\$24.95**  
84-901. NET

## MODEL SG SIGNAL GENERATOR

Has same range and outputs as Model Q above. Heavy chassis construction with welded joints. Individual coils and air-trimmers for greatest accuracy. Attenuation does not affect frequency. Size: 16 1/2 x 9 1/2 x 8 1/2". For 115 V., 50-60 cycles. Wt., 20 lbs.

**\$38.95**  
84-902. NET

## MODEL GM MULTIMETER

Designed to provide the Serviceman a large accurate meter for shop use. Alnico permanent magnet in giant 5 1/2" meter provides life-long ruggedness and accuracy. Ranges are: 0-6-120-300-1,200-3,000 V. AC at 800 ohms per volt; and DC at 1,000 ohms per volt. 0-500-500,000 ohms. 0-5 megohms, 0-1-3-30-300-600 ma., and 0-12 Amperes DC. Decibel scale. -10 to +10 provides means for riding gain on audio channels or for measurement work. Zero adjusters and 2 batteries are provided, making it unnecessary to alter zero adjustment when changing ohm ranges. Has sloping panel for easy reading from any angle. Size, 9" wide, 13" high. Wt., 12 lbs.

**\$23.95**  
84-904. NET

## MODEL Z POCKET MULTIMETER

The Model Z is a multi-range pocket-size test instrument. Meets the needs of the serviceman for a complete tester of sturdy construction. High degree of accuracy. Self-contained battery. Ranges: 0-6-120-300-1,200-3,000 V. DC at 1,000 ohms per volt; 0-6-300-3,000 V. AC at 800 ohms per volt; 0-1-30-300 ma. DC; 0-2,000-500,000 ohms; -10 to +12 decibels. Zero ohmmeter adjuster same for both ohmmeter scales. Single rotary switch selects all ranges except 3,000 V. AC and DC. Metal case with art panel. Size, 2 x 3 1/2" x 6". Supplied complete with self-contained battery. Shipping weight, 5 lbs.

**\$9.45**  
84-905. NET

84-906. As above, but in portable case with hinged cover, 4 x 5 x 3". With handle and compartment for test leads, etc. NET. \$10.95

## CARRON SIGNAL GENERATOR

A laboratory type precision signal generator featuring metered output. Covers range from 60 KC to 45 MC in six steps on fundamentals. A built-in meter indicates the signal intensity applied to the receiver directly in microvolts. Output may be varied from a fraction of a microvolt to one volt. The low attenuator output resistance minimizes errors. RF output has 400 cycle 30% internal modulation. External modulation to 50%. Dial has 6 1/2 feet of space for each band. Individual calibration charts for each range. In grey wrinkle-finish case with beautiful grey, brown and gold panel. Size: 9" x 9" x 7". For 115 V., 60 cycles. Complete with tubes. Shpg. wt., 15 lbs.

**\$43.12**  
84-490. NET

## LOW-PRICED POCKET TEST INSTRUMENTS



## VOLT-OHMMETERS

Fig. A. MODEL 271 SIMPLEX. An exceptionally compact, pocket-size test unit. Scale is marked 0.3, 0-30, 0-300 volts, DC and 0-10,000 ohms. Attractively finished black bakelite case, 1 1/2" x 2 1/4" x 3 1/4". Meter is of the magnetic vane type having a two-inch dial. Has pin jacks for quick selection of desired scale. Self-contained batteries included. With 30-inch polarized test leads and instructions. Shpg. wt., 1 lb.

**\$3.19**  
84-300. NET

Fig. B. MODEL 10-N-300. Ranges are: 0-300 V. DC and 0-10,000 ohms. Magnetic vane type meter with 2" dial. Ranges selected by means of jacks and a plug. Hardwood case. Size: 2 1/4" x 2 1/4" x 1 1/4". Uses 2 self-contained dry cells. With 24" leads and batteries. Wt., 1 lb.

**\$2.49**  
84-301. NET

## "363" UNIVERSAL AC-DC V.O.M.

A sensitive high grade moving vane type meter is used with a 2" dial. Ranges are: 0-15-150-450 V. AC or DC; 0-15 ma. AC and DC, and 0-20,000-100,000 ohms. Provision has also been made to measure capacity of condensers from .01 to 20 mfd. Separate rheostat for ohmmeter zero adjustment. Ranges selected by tip plug. No batteries required. Black bakelite case with removable metal back measures 1 1/2" x 2 1/4" x 3 1/4". With 30" test leads. For 115 V. AC or DC. Wt., 1 lb.

**\$6.31**  
84-302. NET

## "272" PRECISION VOLT-OHMMETER

An accurate instrument in compact form. Designed with sufficient ranges to cover practically all of the test requirements of service work. Sensitive meter is of the D'Arsonval moving coil type with a 2-inch dial. Sensitivity, 1,000 ohms per volt with an accuracy of  $\pm 2\%$ . Ranges selected by means of small plug and jacks. Ranges are: 0-5-50-500-1,000 V. DC, 0-500,000 ohms. Black bakelite case, 1 1/2" x 2 1/4" x 3 1/4". 30" test leads. With batteries. Wt., 1 lb.

**\$6.37**  
84-303. NET

## AUTO IGNITION ANALYZER

Checks cam angle and condition of coil, battery, condenser, etc. A new tube is included for checking leakage in the ignition system. Size, 1 1/2" x 2 1/4" x 3 1/4". Wt., 1 lb.

**\$6.91**  
84-304. NET

## MIDGET PYROMETER

Ideal for determining temperatures of coil, tinning pots, small ovens, hot compounds, etc. Ranges: 0-700-2,000 degrees F. A jack and plug change range. Millivoltmeter has 2" scale, 2% accuracy. Meter hand compensated for room temperature. A welded iron constantan thermocouple extends approx. 12" from case. 1 1/2" x 2 1/4" x 3 1/4". Shpg. wt., 1 lb.

**\$5.70**  
84-305. NET



# SERVICE Instruments



## SPRAGUE DELUXE TEL-OHMIKE

An up-to-the-minute, obsolescence-proof condenser and resistor analyzer that sets a new vogue in test equipment design. The Tel-Ohmike measures capacity on direct-reading scales from .00001 mfd. to 2,000 mfd.; covers range from the minimum capacity of trimmer condensers to the capacity of the largest motor-starting condensers. The characteristics of all air, mica, paper, oil, wet and dry electrolytic condensers are easily and quickly measured. Direct-reading scales permit resistance measurements up to 5 megohms. Leakage resistance, an important factor of condensers, can accurately be determined up to 10,000 megohms. A magic eye is used to show bridge balance. DC volt-milliammeter with switch and pin jacks, may be used for measurements external to Tel-Ohmike. 8 position switch selects: 0.15-150-500-1,500 V. DC, 0.1-5-15-50 ma. DC. For 115 V., 60 cycles. Size, 17 1/2" x 9" x 6". Shpg. wt., 16 lbs. **\$39.95**  
**84-002. CASH PRICE.**  
**\$7.39 down, \$4.39 monthly for 8 months.**

## STANDARD TEL-OHMIKE

**84-003.** This Tel-Ohmike is exactly like the unit above but is supplied less the meter. Direct-reading scale indicates power factor values up to 50%. Metal case, 13 1/2" x 9" x 6". For 115 V., 60 cycles. **\$29.70**  
 Shpg. wt., 15 lbs. NET.

## AEROVOX 95 LC CHECKER

Measures condensers and inductance under actual operating conditions. Parallel connected capacitors may be checked individually. Open, shorted, or intermittent capacitors are easily spotted. The 6-band built-in oscillator covers from 26 MC. Permits aligning RF and IF circuits. Case size, 10 1/2" x 7 1/2" x 5 1/2". With tubes and accessories. For 115 volt. AC or DC. 8 lbs.  
**84-150. NET.**



**\$28.91**

## 75 BRIDGE

Checks capacity of condensers at their rated voltages from .0001 to 100 mfd. Measures 0-1 megohm. Meter ranges are: 0-60-300-600 V. DC at 1000 ohms per volt; 0-6-60 ma. DC and 0-60 millivolts. Has built-in vacuum tube voltmeter and variable power supply. Size, 10 1/2" x 7 1/2" x 8". For 115 V., 60 cycles. Wt., 13 lbs.  
**84-151. CASH PRICE.**  
**\$7.00 down, \$3.86 monthly for 8 months.**



**\$35.03**

## RADEX POCKETRACER SIGNAL GENERATOR



An extremely useful, compact instrument designed for quick analysis of circuit difficulties. Working on the multi-vibrator principle, it generates RF and AF signals which are highly directional. It permits a rapid method for determining what particular stage of a receiver is defective. Also excellent for aligning RF and IF circuits. Quickly enables you to find the point where ignition noise enters an auto set. Less Penlite battery listed below, 5 1/2" long, 3/4" dia. Wt., 1 lb. **\$1.96**  
**84-480. NET.**  
**53-031. Penlite battery. 4c**

## MORRISON SIGNAL TRACER



Can be used with any good amplifier for tracing the signal through any radio receiver. Quickly shows where signal stops or becomes weak. Locates noisy or defective parts from antenna to voice coil of speaker. Contains tube and volume control. With leads which attach to any audio amplifier employing 6.3 volt tubes. Complete, less amplifier. Size, 6 1/2" long, 1 1/2" diameter. With instructions. Wt., 1 lb. **78-040. NET.**  
**\$8.77**

## POPULAR SOLAR CAPACITOR ANALYZERS

### QCA QUICK CHECK



Measures capacity, indicates leakage, RF impedance, power factor, plus dynamic checking for opens, shorts and intermittents in condensers while set is operating—condensers do not have to be disconnected from circuit. Capacity measurements are made by the Wien Bridge method. Three ranges cover .0002 to 70 mfd. Has built-in oscillator and power supply for testing condensers under actual working conditions. Unit may also be used as a continuity meter. Supplied complete with tubes and test leads, ready to operate. Case size, 5 1/2" x 6 1/2" x 4 1/2" high. For 115 V., 60 cycles. Shpg. wt., 8 lbs.  
**84-173. Model QCA. NET.**  
**\$22.44**

### MODEL CE EXAM-ETER



Performs all functions of the QCA model described at left and incorporates many added features. Built-in vacuum tube voltmeter reads 0-600 volts DC in 3 ranges and 0-30 volts AC. Has variable DC voltage supply from 0 to 550 volts. Measures capacities from .00001 to 2000 mfd.; resistance up to 10,000 megohms. Measurements are read directly on scale. The Model CE gives the complete story of a condenser at a glance, eliminates all guess work. Supplied with tubes, test leads and instruction manual. Size: 8 1/2" x 11 1/2" x 5 1/2". For 115 V., 60 cycle. Wt., 15 lbs.  
**84-170. Model CE. NET.**  
**\$39.10**  
**CASH PRICE**  
**\$7.82 down, \$4.30 monthly, for 8 months**

## SOLAR CB CAPACITY ANALYZER

One of the most popular instruments for quickly and accurately determining the capacity of any electrolytic, paper, mica, or air condenser between .00001 and 70 mfd. A 6E5 tube is used as a bridge-balance indicator; capacity of condenser under test is shown directly on accurately calibrated color-coded scale. Extended Wien bridge circuit used for capacity measurements. Also measures power factor of any standard electrolytic condenser, directly on a scale, in percentage, and detects defective condensers. Has 2 resistance scales 0-2 megohms for measuring resistors, etc., and 0-1000 megohms for checking insulation resistance. Tests are made at voltages up to 450 V. DC provided by built-in power supply. Checks all types of condensers for leakage, shorts, intermittents. Attractive cabinet 9 1/2" x 7 1/2" x 6 1/2". Uses 1-4V and 1-6E5. Complete with tubes. Shpg. wt., 9 lbs. **\$23.27**  
**84-171. Model CB-1-60. For 115 V., 60 cycles. NET.**  
**84-172. Model CB-2-U. For 110-220 V., 25-60 cycles. NET.**  
**\$27.93**



## CORNELL-DUBILIER CAPACITOR ANALYZERS

### MODEL BF-50



This instrument quickly and accurately measures important characteristics of all types of capacitors. Range from .00001 to 240 mfd. Will determine the exact condition of all paper, mica, and electrolytic condensers, including AC motor starting types. Employs a Wien bridge. For 115 volts, 50-60 cycles. With test leads. Less tubes; requires 12A7 and 6E5. Size: 6 1/2" x 12" x 9 1/2". Shpg. wt., 10 lbs. **\$24.40**  
**84-451. NET.**

### MODEL BN BRIDGE



An ultra-compact condenser bridge for Servicemen and Technicians. Quickly and accurately measures capacity of paper, mica, electrolytic, and air condensers from .00001 mfd. to 50 mfd. This instrument indicates by means of a visual eye tube the power factor of electrolytic condensers. Also has many other uses such as continuity meter or check test on defective condensers for opens, shorts, high, low power factor, etc. Walnut bakelite case. Size 3 1/2" x 5" x 3". Less tubes (12A7 and 6AF6G). For 115 volt, 60 cycles. AC Shpg. wt., 3 lbs. **\$9.70**  
**84-450. NET.**

## ACCURATE CAPACITOR DECADES

Provide accurate standards over a wide range of capacity. Ideal for Servicemen, Lab Technicians, Schools, etc. Have 600 V. DC—220 V. AC rating. May be used individually or in groups of two or three decades. They all incorporate high-quality capacitor standards. Each decade is furnished with an accurate calibration chart giving exact capacity values for all scale markings, extending use to more precise measurements. Capacity tolerance is within  $\pm 5\%$ . Average shpg. wt., 4 lbs.

Stock No.	Model	Ranges in Mfd.	NET
84-452	CDA-5	.0001 to .011 mfd. in .0001 mfd. steps.	\$5.29
84-453	CDB-5	.01 to 1.1 mfd. in .01 mfd. steps.	5.29
84-454	CDC-5	1.0 to 10 mfd. in 1.0 mfd. steps.	9.40



## RADEX POCKETRACER SIGNAL GENERATOR



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**53-031. Penlite battery. 4c**

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**\$8.77**

## CARRON AUDIO BEAT FREQUENCY OSCILLATOR

This instrument is indispensable for providing overall fidelity checks on audio amplifiers and receivers, determination of modulation capabilities, checking for speaker rattle, etc. Covers from 20 to 16,000 cycles per second. Has sinusoidal wave form with maximum distortion under 2%. Output flat within 1.8 db. over range. Has a 5-volt RMS output into a 100,000 ohm load. Grey wrinkle finish metal cabinet 7" x 7" x 9". Full-visual dial. Has built-in 60-cycle calibrator. Uses 2-6SJ7, 2-6CS, 1-5Z4, 1-6U5. Complete with tubes. For 115 V., 60 cycles. Wt., 10 lbs. **\$27.45**  
**83-200. NET.**



### KIT OF PARTS FOR ABOVE

**83-201.** Kit contains oscillator unit, filter, variable condenser, drilled chassis, panel and cabinet, hardware, etc. Wt., 9 lbs. NET.....**\$11.27**  
**83-202. Tubes and Parts.** Contains resistors, condensers, transformer, sockets, 2-6SJ7, 2-6CS, 1-5Z4, 1-6U5 tubes. NET.....**\$11.93**  
**37-100.** Descriptive literature covering above—Sent FREE.



# TRIPLETT PANEL METERS AND METER ACCESSORIES

## TRIPLETT PRECISION PANEL METERS



A very popular line of accurate and fully dependable meters, offered in a variety of sizes and ranges. DC meters have rugged D'Arsonval movement, fully protected against vibration, and accurate within 2%. Polished sapphire bearings set in adjustable screws.

Every Triplet Meter features a metal dial finished in white enamel, with large, easily-read scales in black. Zero adjusting screw accessible from front of meters. In molded bakelite cases. Av. shpg. wt., 1 1/4 lbs. **37-081.** Triplet Meter literature, FREE on request.



METER DIMENSIONS	Model	Flange	Body Dia.	Scale	Model	Flange	Body Dia.	Scale
	221	2 1/4"	2 3/8"	2 3/8"	321	3 1/4"	2 3/4"	2.37"
	227A	2 3/8"	2 3/4"	2 3/8"	327A	3 3/8"	2 3/4"	2.37"
	231	2 1/4"	2 3/8"	2 3/8"	331	3 1/4"	2 3/4"	2.14"
	237A	2 3/8"	2 3/4"	2 3/8"	337A	3 3/8"	2 3/4"	2.14"

227A-327A DC  
237A-337A AC

### DC MILLIAMMETERS

321	327A	EACH	Ma.	221	227A	EACH
66-100	66-120	<b>\$5.04</b>	0-1	66-150	66-170	<b>\$4.16</b>
66-101	66-121		0-1.5	66-151	66-171	
66-102	66-122		0-5	66-152	66-172	
66-103	66-123		0-10	66-153	66-173	
66-104	66-124		0-15	66-154	66-174	
66-105	66-125		0-25	66-155	66-175	
66-106	66-126		0-50	66-156	66-176	
66-107	66-127	<b>\$4.16</b>	0-100	66-157	66-177	<b>\$3.23</b>
66-108	66-128		0-150	66-158	66-178	
66-109	66-129		0-200	66-159	66-179	
66-110	66-130		0-250	66-160	66-180	
66-111	66-131		0-300	66-161	66-181	
66-112	66-132		0-500	66-162	66-182	
66-113	66-133		0-750	66-163	66-183	

### AC AMMETERS

331	337A	EACH	Amps.	231	237A	EACH
66-300	66-320	<b>\$4.16</b>	0-1	66-340	66-350	<b>\$3.23</b>
66-301	66-321		0-2	66-341	66-351	
66-302	66-322		0-3	66-342	66-352	
66-303	66-323		0-5	66-343	66-353	
66-304	66-324		0-10	66-344	66-354	
66-305	66-325	<b>\$5.04</b>	0-25	66-345	66-355	<b>\$4.16</b>
66-306	66-326		0-50	66-346	66-356	
66-307	66-327		0-75			

### DC VOLTMETERS (125 Ohms Per Volt)

321	327A	Volts	EACH
66-370	66-400	0-5	<b>\$4.16</b>
66-371	66-401	0-10	
66-372	66-402	0-15	
66-373	66-403	0-25	<b>\$5.04</b>
66-374	66-404	0-50	
66-375	66-405	0-100	
66-376	66-406	0-150	<b>\$5.04</b>
66-377	66-407	0-250	
66-378	66-408	0-300	
66-379	66-409	0-500	<b>6.66</b>

### DC AMMETERS

321	337A	Amps.	EACH
66-440	66-450	0-1	<b>\$4.16</b>
66-441	66-451	0-5	
66-442	66-452	0-10	
66-443	66-453	0-25	<b>\$4.16</b>
66-444	66-454	20-0-20	
66-445	66-455	30-0-30	

### AC VOLTMETERS

331	337A	EACH	Volts	231	237A	EACH	
66-200	66-220	<b>\$4.16</b>	0-5	66-250	66-270	<b>\$3.23</b>	
66-201	66-221		0-10	66-251	66-271		
66-202	66-222		0-15	66-252	66-272		
66-203	66-223		0-25	66-253	66-273		
66-204	66-224		0-50	66-254	66-274		
66-205	66-225		0-100	66-255	66-275		
66-206	66-226	<b>\$5.04</b>	0-150	66-256	66-276	<b>\$4.16</b>	
66-207	66-227		5.94	0-300	66-257		66-277
66-208	66-228		7.90	0-500	66-258		66-278

### (1000 Ohms Per Volt)

321	327A	Volts	EACH
66-420	66-430	0-10	<b>\$5.94</b>
66-421	66-431	0-150	<b>6.31</b>
66-422	66-432	0-300	<b>7.18</b>
66-423	66-433	0-500	<b>7.90</b>

### AC MILLIAMMETERS

331	337A	Ma.	EACH
66-470	66-490	0-10	<b>\$4.86</b>
66-471	66-491	0-15	<b>\$4.16</b>
66-472	66-492	0-50	
66-473	66-493	0-100	
66-474	66-494	0-250	<b>\$4.16</b>
66-475	66-495	0-500	

### TRIPLETT 7-INCH AC-DC FOUNDATION KIT



An accurately-built 7-inch foundation instrument having 25,000 ohms-per-volt DC sensitivity when used with the 66-505 kit below. Dial scale reads: 0-10-50-250-1,000 volts at 25,000 ohms per volt; 0-50-250 microamperes, 0-1-10-50-250 ma. DC; 0 to 500 ohms (backup circuit), 0-20,000-200,000 ohms; 0-2 meg. resistance scale; AC scale reads 0-10-50-250-1,000 volts at 1,000 ohms per volt. Black dial scale, markings in color. Wt., 3 lbs. **66-500. NET. \$19.76**

TYPE 726. NET. \$19.76

TYPE 426. Has white dial scale. Readings as above. 4" square. Wt., 3 lbs. **66-501. NET. \$12.05**

### ESSENTIAL PARTS KIT

Consists of all the parts necessary to build a complete AC-DC Volt-Ohm-Milliammeter with either of the meters listed above. Also includes black metal cabinet and test leads. With diagrams. Wt., 3 lbs. **66-505. NET. \$12.05**

### PORTABLE FRAME FOR 3" METERS

Metal frame for mounting 3" meters with 2 3/4" bodies. Baked black enamel finish. Completely drilled. Binding posts on top for connecting test leads. Overall height 3 3/4", width 4", depth at base, 3 1/4". Less meter. Shpg. wt., 1 lb. **66-506. NET. \$9.8c**

### ALDEN TUBE LEAKAGE AND SHORT TESTER

For 4, 5, 6 and 7 prong tubes. Will indicate any leakage as high as 1 megohm. Operates from AC line. Has jacks for using as a continuity tester. With neon lamp, grid lead, cord and plug. Wt., 2 lbs. **78-070. NET. \$2.06**

### CONTINENTAL CARBON TYPE A PRECISION RESISTORS



A new type one-watt carbon resistor, impregnated, and hermetically sealed in glass. For high resistance voltmeter multipliers and circuits requiring real stability. 1 1/2" x 1/4" dia.

**SPECIFY VALUES DESIRED**

Ohms	Ohms	Ohms	Ohms	Ohms
100	4450	10000	75000	400000
200	4950	13500	85000	450000
400	5000	15000	90000	490000
500	5500	20000	100000	500000
1000	5950	25000	150000	600000
1450	7450	30000	200000	750000
2000	8500	40000	240000	800000
2950	8950	50000	250000	900000
3500	9950	60000	300000	1000000

\*These units allow for the 50 ohms internal resistance of the milliammeter.

1-960. Accuracy within 2%. EA. **29c**

1-980. Accuracy within 5%. EACH. **18c**

### RESISTANCE WIRE ON HANDY SPOOLS

High-grade alloy wire for use in constructing extra-sensitive test apparatus, meters, etc. Sleeve-protected spool prevents wire from raveling or tangling. Convenient small quantities and wide variety meet all needs. Shpg. wt., 8 oz., per spool.

Wire Size	Ohms Per Ft.	BARE		DSC	
		No.	Ft.	No.	Ft.
14	04603	49-700	24	49-730	18
16	07318	49-701	33	49-731	24
18	1164	49-702	46	49-732	29
20	1850	49-703	81	49-733	40
22	2941	49-704	126	49-734	57
24	4678	49-705	190	49-735	79
26	7438	49-706	277	49-736	96
28	1183	49-707	399	49-737	113
30	1879	49-708	560	49-738	134
32	2990	49-709	765	49-739	155
34	4756	49-710	1092	49-740	180
36	7560	49-711	1482	49-741	208
38	12,02	49-712	1881	49-742	231
40	19,11	49-713	2308	49-743	261

**EACH SPOOL NET. \$31c**

### COPPER-OXIDE RECTIFIERS

**5 MA. CAPACITY**  
Miniature type. Converts DC meters drawing less than 5 ma. to AC instruments. 1/4" x 1/2" x 1/8". Shpg. wt., 6 oz. **68-030. NET. \$2.59**

**20 MA. CAPACITY**  
3/8" round, 1 1/4" long. Converts DC meters drawing not over 20 ma. to AC. **68-031. NET. \$1.95**

**50 MA. CAPACITY**  
1" dia., 1 1/2" long. Heavy-duty type for use where current may rise to 50 ma. **68-032. NET. \$1.75**

### CONANT RECTIFIERS

Type B. Full-wave rectifier. Input 10 volts R.M.S.; output 5 ma. Size, 1/4" x 1/2" x 3/8", 6 oz. **68-040. NET. \$2.06**

**TYPE "M"**  
Miniature full-wave rectifier for converting DC meters for AC use. Input 10 volts R.M.S.; output 30 ma. 6 oz. **68-041. NET. \$2.06**

**TYPE "H"**  
Half-wave rectifier. Input, 5 volts R.M.S.; output, 30 ma. 1/2" diameter, 3/8" overall length. With 6-32 mounting screw and 3" leads, Shpg. wt., 6 oz. **68-042. NET. \$8c**

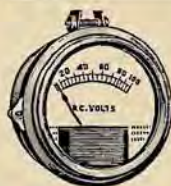
### UNIVERSAL ADAPTER KIT

For making any adapter required for test purposes. Contains one each: 4, 5, 6, 7, and 8 octal prong waler separators and 12 contacts. Select separator needed and insert contacts required, according to element of tube or circuit under test. Parts may be used over and over again. In leatherette case. Wt., 1 lb. **61-500. NET. \$50c**



# Readrite

# PANEL METERS AND METER ACCESSORIES



Standard Type

Zero Adjustment

## READRITE PANEL METERS

### MODEL 55

Efficient and low-priced. Accuracy within 5%. DC meters are polarized vane, solenoid type. Require 2 1/2" mounting hole. Have easy-reading white dial and nickel-finish metal shell. Clamp included to hold meter tight against panel. Standard terminals protrude from rear of case. 2 1/4" dia. rim. For outside flange mounting use No. 65A flange ring below. Av. shpg. wt., 1 lb.

### MODEL 95

Here is an important addition to the line of Readrite meters. Model 95 is housed in a black lacquer-finished square case. Measures 2 1/2" x 2 1/2". Wrinkle, nickel, and chrome finishes are also available on special order. Meters require a 2 1/8" diameter hole for mounting.



Less Zero Adj.

37-803. Readrite Meter Literature—SENT FREE

## DC VOLTMETERS

Volts	Resist. Ohms	MODEL 55		MODEL 96	
		Without Zero Adjustment	With Zero Adjustment	Without Zero Adjustment	With Zero Adjustment
		Stock No.	NET Each	Stock No.	NET Each
0-1	18	67-000		67-050	
0-3	135	67-001	<b>65c</b>	67-051	<b>82c</b>
3-0-3	250	67-002		67-052	
0-5	310	67-003		67-053	
0-6	550	67-004		67-054	
0-8	850	67-005	<b>65c</b>	67-055	<b>82c</b>
0-10	1475	67-006		67-056	
0-15	2700	67-007	<b>82c</b>	67-057	<b>\$1.00</b>
0-25	1625	67-008	<b>65c</b>	67-058	<b>.82</b>
0-25	7720	67-009	<b>\$1.79</b>	67-059	<b>1.97</b>
0-50	3250	67-010	<b>.82</b>	67-060	<b>1.00</b>
0-50	15440	67-011	<b>2.12</b>	67-061	<b>2.29</b>
0-100	6500	67-012	<b>.97</b>	67-062	<b>1.15</b>
0-100	30888	67-013	<b>2.12</b>	67-063	<b>2.29</b>
0-150	9750	67-014	<b>1.15</b>	67-064	<b>1.32</b>
0-150	46320	67-015	<b>2.12</b>	67-065	<b>2.29</b>
0-300	92640	67-016	<b>2.12</b>	67-066	<b>2.29</b>
0-500	154400	67-017	<b>2.91</b>	67-067	<b>3.09</b>
0-750	231600	67-018	<b>3.57</b>	67-068	<b>3.73</b>
0-8-160	16200	67-019	<b>1.47</b>	67-069	<b>1.65</b>
0-60-300	92640	67-020	<b>2.91</b>	67-070	<b>3.09</b>
0-15-60					
300-600	180000	67-021	<b>3.56</b>	67-071	<b>3.73</b>

## DC AMMETERS

Amps.	Type	Stock No.	NET Each	Stock No.	NET Each	Stock No.	NET Each
0-1	380	67-130		67-150		67-180	
0-3	336	67-131		67-151		67-181	
0-5	381	67-132	<b>65c</b>	67-152	<b>82c</b>	67-182	<b>88c</b>
0-10	338	67-133		67-153		67-183	
0-25	382	67-134	<b>\$0.97</b>	67-154	<b>\$1.15</b>	67-184	<b>\$1.21</b>
0-50	383	67-135	<b>1.47</b>	67-155	<b>1.65</b>	67-185	<b>1.71</b>
1-0-1	101	67-136		67-156		67-186	
3-0-3	303	67-137		67-157		67-187	
6-0-6	606	67-138		67-158		67-188	
10-0-10	110	67-139	<b>65c</b>	67-159	<b>82c</b>	67-189	<b>88c</b>
20-0-20	220	67-140		67-160		67-190	
30-0-30	330	67-141	<b>\$1.29</b>	67-161	<b>\$1.47</b>	67-191	<b>\$1.53</b>
50-0-50	550	67-142	<b>1.47</b>	67-162	<b>1.65</b>	67-192	<b>1.71</b>

## RESISTANCE METER



**MODEL 501**  
Direct reading: 0-10,000 ohms, 0-4 1/2 volts. Measures resistance and checks continuity in radio and electrical circuits. Requires 3 small flashlight cells. 10 oz.  
**67-386. NET..... 97c**

## ACCESSORY KIT

Portable kit for above consists of service test leads, flashlight cells, and meter cabinet. For lab. or servicing. Wt., 2 lbs.  
**67-387. NET..... \$1.44**

## RESISTORS

**No. 503 Resistor.** 1150 ohms resistance to increase No. 501 ohmmeter reading to 60,000 ohms when used with 2 1/2 V. battery.  
**67-391. NET..... 65c**

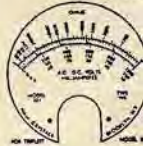
**No. 504 Resistor.** 2,300 ohms, center-tapped, for use with 45 V. "B" to increase reading of No. 501 ohmmeter to 100,000 ohms.  
**67-392. With tip jacks. 4 oz. \$1.47 NET.....**

## OUTPUT METER MODEL 575



Indicates output voltages for correct alignment of RF and IF stages. Ranges: 0-5, 0-50 volts. Has copper-oxide rectifier. In 4 1/2" black metal case. 4 lbs.  
**67-390. \$5.35 NET.....**

## METER DIAL SCALES



For converting 0-1 ma. meters to multimeters. Upper scales are in ohms. H1C is for AC-DC volts, ma. H2C has DC volts-ma., and also backup ohms scale. H3C is for DC volts-ma. All scales are: 0-250-1000. H4C is DC volts-ma., scale: 0-150-300-600. Wt., 2 oz.

**Scale H1C**  
Triplett 321  
Weston 301  
Jewell 88  
**68-000**  
**68-001**  
**68-002**

**Scale H2C**  
**68-003**  
**68-004**  
**68-005**  
**Scale H3C**  
**68-006**  
**68-007**  
**68-008**

## MALLORY PANEL LIGHT



Excellent for lighting panel-type meters. Requires single 1/2" mounting hole. Uses min. screw base bulb. Wt., 5 oz.  
**52-520. NET..... 38c**

## UNIVERSAL OUTPUT-METER ADAPTER



For connections to meters, controls, etc., for test purposes. Pull out tube, slip adapter over proper prong, replace tube. 50" lead with phone tip. For connecting output meter to plate when aligning sets. 8 oz.  
**61-501. NET..... 21c**

## DC MILLIAMMETERS

Ma.	Resist. Ohms	MODEL 55		MODEL 95	
		Less Zero Adj.	With Zero Adj.	Less Zero Adj.	With Zero Adj.
		Stock No.	NET Each	Stock No.	NET Each
0-5	2160	67-200	<b>\$1.47</b>	67-220	<b>\$1.65</b>
0-10	700	67-201	<b>1.29</b>	67-221	<b>1.47</b>
0-15	295	67-202	<b>.65</b>	67-222	<b>.82</b>
0-25	85	67-203	<b>.65</b>	67-223	<b>.82</b>
0-50	22	67-204		67-224	
0-100	6.6	67-205	<b>65c</b>	67-225	<b>82c</b>
0-150	4.4	67-206		67-226	
0-200	2.6	67-207		67-227	
0-300	8	67-208	<b>\$0.65</b>	67-228	<b>\$0.82</b>
0-400	46	67-209	<b>.65</b>	67-229	<b>.82</b>
0-20-100	175-30	67-210	<b>1.29</b>	67-230	<b>1.47</b>
0-15-150	305-24	67-211	<b>1.29</b>	67-231	<b>1.47</b>

## AC VOLTMETERS\*

Volts	No.	MODEL 55		MODEL 95	
		Each	Each	Each	Each
0-4	67-270	<b>\$1.79</b>	67-300	<b>\$2.03</b>	
0-6	67-271	<b>1.79</b>	67-301	<b>2.03</b>	
0-10	67-272	<b>1.79</b>	67-302	<b>2.03</b>	
0-15	67-273	<b>1.79</b>	67-303	<b>2.03</b>	
0-150	67-274	<b>2.91</b>	67-304	<b>3.15</b>	
0-300	67-275	<b>3.56</b>	67-305	<b>3.79</b>	
0-600	67-276	<b>4.20</b>	67-306	<b>4.44</b>	
0-750	67-277	<b>5.03</b>	67-307	<b>5.26</b>	
0-10-140	67-278	<b>2.91</b>	67-308	<b>3.15</b>	

## PLUG-IN LINE TYPE

0-150 [67-280] \$2.91.....

## AC AMMETERS\*

Amps.	No.	MODEL 65		MODEL 95	
		Each	Each	Each	Each
0-1	67-320		67-330		
0-3	67-321		67-331		
0-5	67-322	<b>\$1.79</b>	67-332	<b>\$2.03</b>	
0-10	67-323		67-333		
0-50	67-324	<b>\$2.44</b>	67-334	<b>\$2.66</b>	

\*Readrite AC meters are of the double-vane repulsion type.

## AC MILLIAMMETERS\*

Ma.	No.	MODEL 55		MODEL 95	
		Each	Each	Each	Each
0-25	67-350		67-360		
0-50	67-351		67-361		
0-100	67-352	<b>\$1.79</b>	67-362	<b>\$2.03</b>	
0-250	67-353		67-363		
0-500	67-354		67-364		

## 65A FLANGE RING

Converts any Readrite Model 55 meters to flange mounting. 4 oz.  
**NET..... 9c**



## INDUCTION AMMETER

Indicates automobile starter current. 400-0-400 amp. D.C. Wt., 1 lb.  
**67-385. \$1.97**



## KNIGHT TUBE TESTER MODERNIZER KIT

Modernize your old tube tester! Provides these filament voltages: 25-30-35-50-70-85-117. Only two wires connect to tube checker. Amphion voltage selector switch mounts on panel or in spare socket hole. Transformer, 3 1/2" x 1 1/4" x 1 1/4", mounts under panel or in tool compartment. For 105-117 volts, 60 cycle. Wt., 1 1/2 lbs.  
**62-090. NET..... \$1.55**



## TUBE CHECKER TRANSFORMER

For building or modernizing tube checkers. Provides the following voltages: 1 1/2, 2, 2.5, 5, 6.3, 7.5, 12.5, 25, 30, 35, 50, 70, 85, 117. Size: 3 1/2" x 2 1/4" x 2 1/4". Operates from 105-117 volts, 50-60 cycle. Wt., 2 lbs.  
**62-091. NET..... \$1.49**

## BEEDE 701 DC MILLIAMMETER

Rugged D'Arsonval type moving coil meters of high quality. Accuracy within 2%. Flush-mounting type housed in 2 1/4" metal case with 3/4" diameter flange. Use natural sapphire jewel bearings; zero pointer adjustment on meter face. 0.8-0.1 in. center-reading type. Shpg. wt., 2 lbs.  
**68-050. 0-1 Ma. NET \$3.88**  
**68-051. 1-0-1 Ma. EACH.....**





# KNIGHT-METER KITS-ADAPTERS

## KNIGHT-"RADIO CITY" METER KITS



### 3" 1000 OHM-PER-VOLT METER

High grade 1 ma. foundation meter of the D'Arsonval type. 1,000 ohms per volt. In 3" square bakelite case. Has easy-to-read calibrations and scales. Scales are: 0.5-50-250-500-2,500 volts DC; 0-10-100-500-1,000 volts AC; 0-1-10-100-1,000 ma. DC; 0-1-10 amps. DC; 0-50-100-500-1,000,000 ohms; —8 to +15; +12 to 35; +26 to +49; and +32 to +55 db.

With operating instructions and wiring diagrams. An easily-assembled high-quality unit. Shpg. wt., 1 lb.

**68-200. METER ONLY. NET..... \$3.23**



### PARTS KIT FOR DC RANGES

**68-201.** Includes all necessary parts: Drilled metal panel— $7\frac{1}{2} \times 4\frac{1}{2}$ " switch, 13 jacks, rheostat, 2 knobs, 12 resistors (6 wire wound),  $3-1\frac{1}{2}$  volt batteries, solder. With instructions and diagrams. 2 lbs. **\$3.09 NET.**

### PARTS KIT FOR AC RANGES

**68-202.** Makes complete AC-DC meter when used with DC kit. Complete assembly designed to fit in case, 68-210 below. Includes all necessary parts: copper oxide rectifier, jack, bracket, knobs, resistors, rheostat, jack, diagrams, etc. 8 oz. **NET..... \$1.57**

### 4 1/2" 5000 OHM-PER-VOLT METER KIT



A foundation meter with a sensitivity of 200 microamperes. The  $4\frac{1}{2}$ " size permits easy reading on the 3-color multi-range scale. D'Arsonval movement on two sapphire bearings. Accuracy is within 2%. Scales read: 0-10-100-250-1,000-5,000 V. DC at 5,000 ohms per volt; 0-200 microamps DC; 0-10-100-1,000 ma. DC; 0-1-10-25 amps DC; 0-40-40,000-4,000,000 ohms; 0-10-100-100-5,000 V. AC; 0-500 ma. AC; 0-2.5-5-25 amps AC.  $7\frac{1}{2}$  volt battery for the 4 megohm range supplied with kit below.

Meter will also read to 40 megohms with  $67\frac{1}{2}$  volt battery (space in case for latter). A chart is supplied showing how to obtain direct measurement of condenser capacities and inductance in henries. Less batteries, panel, resistors, case, etc. Shpg. wt.,  $1\frac{1}{2}$  lbs.

**68-203. METER ONLY. NET..... \$7.30**



### PARTS KIT FOR VOLT-OHM-MILLIAMMETER RANGES

Complete kit of parts for constructing instrument illustrated with above ranges when used with 68-203 meter. Includes a drilled etched metal panel  $8" \times 10"$ ; 2 batteries,  $1-4\frac{1}{2}$  volt,  $1-3$  volt. Individually calibrated multipliers, wire-wound shunts, selector switch, ohmmeter zero adjust rheostat, rectifier, jacks, knobs, brackets, etc. Use case 68-211 listed below. Instructions and diagrams included. Less  $67\frac{1}{2}$  volt battery. Wt., 2 lbs.

**68-204. NET..... \$9.55**

### INSTRUMENT CASES FOR ABOVE



Open face hardwood case for housing meters, test equipment, etc. Panel size,  $4\frac{1}{2} \times 8\frac{1}{2}$ " or  $8\frac{1}{2} \times 5\frac{1}{2}$ " overall. Walnut finish. Rubber bumper feet.

**68-210. NET..... \$8.80**

Walnut finished case. Takes  $8 \times 10"$  panel. Overall,  $10\frac{1}{2} \times 8\frac{1}{2} \times 3\frac{1}{4}"$ . Sturdy leather handle; rubber feet. Shpg. wt., 3 lbs.

**68-211. \$1.71 NET.....**



## AMPHENOL UNWIRED ADAPTERS



### LOKTAL

Kit of 5 adapters to test any loktal tube except 7E7 or 7F7 on any tube checker. Convert loktals to counterparts in octal series. Socket tops coded black, green, gray, blue and yellow. Unwired. Shpg. wt., 1 lb.

**61-520. NET..... \$1.47**

**61-521.** Same adapters as above but wired. With instructions. Wt., 1 lb. **\$2.94 NET.**

### UNIVERSAL TYPE

A new type of adapter. The top consists of a standard bakelite socket. Any top and any bottom with 61-575 or 61-576 shall make the adapter you need. The adapter shell is brass, finished in black. It is  $1\frac{1}{2}"$  long. Both the top socket and bottom plug may be easily snapped into shell adapter after wiring. Shpg. wt., 6 oz.

### SOCKET (Top)

40-054.	4 Holes.....	EACH
40-055.	5 Holes.....	6 $\frac{1}{2}$ c
40-056.	6 Holes.....	8c
40-057.	7S.....	10c
40-058.	8 Octal.....	15c
40-060.	Loktal.....	15c
61-556.	For Hytron Bantam Jr.....	15c
61-557.	For RCA Miniatures.....	15c

### PLUG (Bottom)

61-570.	4 Prong.....	EACH
61-571.	5 Prong.....	1
61-572.	6 Prong.....	6 $\frac{1}{2}$ c
61-573.	7S.....	8c
61-574.	8 Octal.....	8c
61-575.	Adapter Shell.....	9c
61-576.	Same as above but with side hole for bringing out leads.....	12c



### FOR SINGLE-ENDED TUBES

For testing single-ended tubes (control grid at base). Consists of 5 unwired adapters with instructions. Shpg. wt., 1 lb. **\$1.47 NET.**

**61-522. NET..... \$2.94**

**61-523.** Same as above completely wired. With instructions. Wt., 1 lb. **\$2.94 NET.**

### SPECIAL LOKTAL ADAPTERS

Special adapters for 7E7 and 7F7 loktal tube base. Wired. With instructions. Wt., 4 oz. **61-530. For 7E7 tube. EACH..... \$9.90**

**61-531. For 7F7 tube. EACH..... \$9.90**



### FOR SPEAKER AND PHONES

Adapter slips under power tube; speaker or phones connect to screw terminals. For PM or Magnetic speaker, headset, or both.

**61-586. For all 4 prong tubes. EACH..... \$9.80**

**61-585. For all 5 prong tubes. EACH..... \$9.80**

**61-587. For all 8 prong tubes. EACH..... \$9.80**

Note: For push-pull tubes use two adapters.

## ADAPTERS FOR PHONES-SPEAKER-MIKE & PHONO

A complete group of adapters enabling you to add extension speaker, headphones, record player, or home microphone to almost any radio. Easily installed in tube socket; will not affect normal operation of radio. Consist of coupler in molded bakelite base, shielded wire, and hardware. Supplied complete with easy-to-follow instructions. There is a type below for practically any need. Shpg. wt., each, 8 oz.

### FOR MIKE AND PHONO

Adapts radio for connection of phonograph player or pickup as well as "Home Broadcaster" type microphones.

61-600.	5 Prong.....	NET EACH
61-601.	6 Prong.....	72c
61-602.	7 Prong.....	72c
61-603.	8 Prong.....	72c

## KNIGHT-"RADIO CITY" TUBE-TESTER KIT

An accurate, reliable foundation meter which, with the parts kit listed below, may easily be assembled as a professional type tube tester. Offers an exceptional opportunity for instruction in radio classes in schools and colleges, NYA vocational classes, and Government schools. Also ideal for the engineer or serviceman who wants to save money. The 3" square meter with D'Arsonval movement is accurate within 2%. Calibrated for direct reading: "Good-Bad," and also has 50-division uniform calibration for reference. With parts kit below will test metal, M. G., glass, gas rectifiers, octal, loktal, miniature tubes, etc. Neon indicator is used for shorts and leakages. Wiring diagram included. Shpg. wt., 3 lbs.

**68-215. Meter Only. NET..... \$3.23**



### COMPLETE KIT OF PARTS

Contains fabricated panel, power and shunt rheostats, sockets, jacks, knobs, transformers, selector switches, resistors, neon light, rectifier tube, control grid cap with lead, mounting bracket, line cord and plug. With detailed wiring diagram, tube test data, and instructions. Shpg. wt., 8 lbs. **68-216. NET..... \$9.65**

**SLOPING COUNTER CASE FOR ABOVE**  
**68-220.** An attractive sloping front counter case to accommodate the complete tube tester when assembled. Of heavy wood, finished in black fabricoid. Size:  $9\frac{1}{2} \times 12 \times 3\frac{1}{2}"$ . **\$1.76** Shpg. wt., 3 lbs. **NET.....**

### PORTABLE CASE FOR ABOVE

**68-221.** Combination portable and counter-type case with removable hinged cover and compartment for spare tubes and tools. Fabricoid covered;  $11\frac{1}{2} \times 12 \times 7"$ . **\$3.77** Shpg. wt., 4 lbs. **NET.....**

## BUD ANALYZER PLUG AND ADAPTERS

This molded bakelite analyzer plug with small-base adapter-kit brings your present analyzer up-to-date. Consists of: 8 prong plug; cable plug and socket; 9 wire cable; dual grid stud; and 61-620-1-2-3-4 adapters below. Wt., 3 lbs.

**61-610. \$6.47 NET.....**

**61-611.** Analyzer plug only. Small 8 prong octal base plug which plugs into adapters. Dual grid studs. **\$1.18** Wt., 1 lb. **NET.....**

**61-612.** 8 prong analyzer plug, as described above, with 5 feet of 9 wire cable attached. Wt., 2 lbs. **\$3.23** **NET.....**

### ADAPTERS ONLY

Stock No.	Prongs	NET EACH	
61-620.	8 to 4	68c	
61-621.	8 to 5		
61-622.	8 to 6		
61-623.	8 to 7L		
61-624.	8 to 7S		
61-625.	8 to Loktal. NET.....		68c
61-626.	8 to Bantam Jr. NET.....		59c

## PHONO ADAPTERS & SWITCH

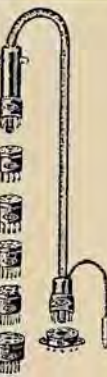
Enable you to connect any record-player or pickup to radio sets not having phono pickup connection. Shpg. wt., 8 oz.

**61-650.** For sets using 5 prong tube (without grid cap on top) as detector or first audio such as 27, 37, 56, 76, etc.

**61-651.** For sets using a glass or metal type 6H6 as the second detector stage.

**61-652.** For sets using metal or metal-glass octal base first audio amplifier tubes such as the 6C5, 6J5, etc.

**61-653.** For screen grid cap tubes, such as the 2A4, 6J7, 6R7, 6Q7, 6F5, etc. **NET EACH..... \$7.90**





# MALLORY REPLACEMENT VIBRATORS

## FAMOUS EXACT DUPLICATE VIBRATORS

This listing shows complete line of Mallory 6, 12, 32, and 110 volt vibrators. For use in auto and home radio sets. Order your vibrator by type number if original is a Mallory. If your model is not shown, order your vibrator from ALLIED giving make, model number, and tube lineup of set, and type number of original vibrator.

Mallory No.	Stock No.	List Price	NET EACH	Mallory No.	Stock No.	List Price	NET EACH	Mallory No.	Stock No.	List Price	NET EACH
4-4	56-000	\$1.75	\$1.03	G253	56-035	\$6.00	\$3.53	508P	56-073	\$2.50	\$1.47
201	56-001	6.50	3.97	253T	56-036	3.95	2.32	509P	56-074	2.50	1.47
F204	56-002	6.75	3.97	253Y	56-037	2.95	1.73	510P	56-075	3.00	1.76
205	56-003	6.50	3.82	264	56-038	4.95	2.91	514	56-076	4.95	2.91
Z10	56-004	7.50	4.41	270B	56-039	5.95	3.50	716	56-077	4.95	2.91
F211	56-005	7.50	4.41	271HD	56-040	5.95	3.50	722A	56-078	4.95	2.91
Z20B	56-006	4.00	2.35	271	56-041	5.95	3.50	725	56-079	5.50	3.23
F220C	56-007	5.00	2.94	273C	56-042	5.50	3.23	G725	56-080	6.50	3.82
Z21	56-008	3.95	2.32	273D	56-043	5.50	3.23	728A	56-081	4.95	2.91
F221	56-009	4.45	2.62	275	56-044	5.95	3.50	742	56-082	4.95	2.91
Z22	56-010	5.50	3.23	275XS	56-045	7.50	4.41	743	56-083	4.95	2.91
Z23	56-011	5.95	3.50	277S	56-046	5.95	3.50	744	56-084	3.95	2.32
F223	56-012	5.95	3.50	285XS	56-047	7.00	4.12	745	56-107	12.00	7.06
Z24	56-013	7.00	4.12	P285Y	56-048	4.95	2.91	G745	56-108	15.00	8.82
Z25	56-014	5.95	3.50	286S	56-049	5.50	3.23	M745	56-109	15.00	8.82
Z26	56-015	5.95	3.50	G286S	56-050	5.50	3.23	825	56-085	4.50	2.65
Z27	56-016	7.50	4.41	289S	56-051	4.95	2.91	826	56-110	3.95	2.32
Z30	56-017	7.25	4.26	F290	56-052	5.50	3.23	F826	56-086	4.95	2.91
Z35	56-018	5.95	3.50	292	56-053	3.45	2.03	G826	56-111	4.95	2.91
H240	56-019	6.50	3.82	294	56-054	2.95	1.73	839	56-087	3.45	2.03
Z45	56-020	4.95	2.91	294SW	56-056	2.95	1.73	850	56-088	2.95	1.73
Z45A	56-021	4.95	2.91	F294	56-057	4.45	2.62	G850	56-089	3.95	2.32
Z45C	56-022	4.95	2.91	297	56-058	2.95	1.73	852/294C	56-055	2.95	1.73
Z45SW	56-023	4.95	2.91	297	56-059	3.95	2.32	853	56-091	2.95	1.73
G245	56-105	5.95	3.50	F297	56-060	4.95	2.91	854	56-092	2.95	1.73
W245	56-024	4.95	2.91	299	56-061	3.95	2.32	860	56-093	2.95	1.73
W245A	56-025	4.95	2.91	302S	56-062	6.50	3.82	863	56-094	2.95	1.73
Z46	56-026	4.95	2.91	311S	56-063	7.50	4.41	866	56-095	2.95	1.73
Z46A	56-027	4.95	2.91	F311	56-064	7.50	4.41	868	56-096	2.95	1.73
W246	56-028	4.95	2.91	500P	56-065	2.50	1.47	869	56-097	2.95	1.73
Z47	56-329	4.95	2.91	501P	56-066	2.50	1.47	901M	56-098	2.50	1.47
F247	56-030	5.50	3.23	F502P	56-067	5.95	3.50	902M	56-099	2.50	1.47
Z48	56-031	4.95	2.91	503	56-068	3.95	2.32	903M	56-100	2.50	1.47
Z49	56-032	4.95	2.91	504	56-069	3.95	2.32	951P	56-101	5.25	3.09
G249	56-106	5.95	3.50	505P	56-070	2.50	1.47	952W	56-102	4.95	2.91
F251	56-033	4.45	2.62	506P	56-071	3.95	2.32	953W	56-103	4.95	2.91
Z53	56-034	3.95	2.32	507P	56-072	2.50	1.47	954	56-104	4.95	2.91



### USE YOUR MALLORY ENCYCLOPEDIA

See the new Mallory Encyclopedia for aid in selecting the proper vibrator for any set. The latest edition, listed on page 61, gives models and gives thousands of full data. Covers thousands of models of auto radios; valuable data numbers. Shows how to build an efficient, inexpensive vibrator tester. Get your copy now.

### FREE VIBRATOR GUIDE

Write for a FREE copy of the Mallory Vibrator Guide. Contains complete listing by sets of vibrator replacements for thousands of auto radios; valuable data on vibrator and automobile set installation, noise suppression, practical servicing, and testing. 37-012. Vibrator Guide. Sent FREE on request.

Select the vibrator you want from set or part number below. For price, see chart above which shows prices for all Mallory vibrators.

Name and Model or Part Number	Mallory No.	Name and Model or Part Number	Mallory No.	Name and Model or Part Number	Mallory No.	Name and Model or Part Number	Mallory No.
<b>AIRLINE</b>		<b>EMERSON</b>		<b>L'TATRO (Cont.)</b>		<b>SEARS-ROEBUCK</b>	(Cont.)
6U, 62-118, 62-166...	253	965, 667	296	R, S, Q 5636, O, P		7149 (6 prong)...	296
102	299	678, 101F7, 34F7...	222	4626; M 4616 (2nd Ser.)	285X S	Part No. 14840, 5113, 6303...	249
87	292	6A...	253Y	AO, 23, 099, SP, TP67...	744		742
62-199, 5Y (25Y1)...	286S	<b>ERA-SENTINEL</b>		<b>MAJESTIC</b>		<b>SIMPLEX</b>	
62-202, 62-236, 62-242, 62-263...	294	10M, 10MP, 11M, 100X, 144X, 197X, 144XE, 5500...	294	66, 116, 116A, 118, 118P, 40-18805...	220B	T (Early)...	292
<b>ARVIN</b>		600, 602, 603...	292	<b>MOTOROLA</b>		T (Late), GB, PB, TA...	245C
15, 25, 35, 45 1st Ser...	296	<b>FAOA</b>		Part No. 48A3333...	902M		248
10A, 15, 16, 20A, 20B, 25, 30A, 30B, 35, 45 2nd Series...	292	101, 102, 104, 104B, 166 Motoset...	221	Part No. 48K12312...	903M	<b>SPARTON</b>	
7, 17, 18, 27, 28, 33, 37, 38, 39, 42, 44C...	294	Part No. 90.63...	253Y	34, 35, 45, 50, 60, 65, 80, 90, Part No. 2404, 3316, 48A3333B, 48K11026...		Part No. B5417, 53592...	292
61B, 62B, 517B, 617B, 627B, 527B...	245	<b>FIRESTONE</b>		55, 55A, 56T, 56Y...	901M	36...	222
Part No. 17-14747...	850	54, 64, R131, R133, 1314, R1332, R1431, R143, R178, S7407-9...	294	77...	231	<b>STEWART-WARNER</b>	
<b>ATWATER KENT</b>		<b>FORD</b>		Part No. 1784...	246	Part No. 83800...	294
666, 776, 126, 136, 237Q, 416, 446, 437Q, 536...	294	Majestic 40-18805...	220B	Dual 6, Twin 8...	253	Part No. 84904, 84995...	285X S
<b>AUDIOLA</b>		Part No. 38-5036...	500P	496BT1...	246A	<b>UNITED MOTORS</b>	
C6, 64, 74...	294	Part No. 41-3170...	505P	Super 6, 44A, 66, 77A 61, 88...	270B	<b>BUICK-GLOS-</b>	
62S7, 33S6-7 (2nd)	292	Part No. 41-3398...	208P	Part No. 41-2015...	302S	<b>PONTIAC</b>	
43, 67, 73, 4B, 6C...	246	6F1, 6F1D, 6MP490...	850	<b>PHILCO</b>		Part No. 5039661, 5041245...	273C
<b>BELMONT</b>		<b>G. E.</b>		Part No. 38-5036...	500P	Part No. 5041376...	273D
Part No. 126-1, 126-6, 660 (Vibrator only), Part No. 142-1, 142-1	294	B40, C41, B52...	271*	Part No. 41-3170D...	501P	Part No. 7235951...	716
<b>BOSCH</b>		C60...	253	Part No. 38-5640...	F502P	7238525...	221
140A, 45A, 45C, 160, Part No. V1-951...	271	N51, FA60-1, FA80, C61...	248	Part No. 41-3170...	505P	Part No. 5035120...	222
150 (1st Series)...	271	D72, N-60, M58, M60 U51, U55...	224	Part No. 41-3170-3...	506P	Part No. 1213671...	
50 (2nd Series)...	210	4SR1A2, M1-7630...	294	Part No. 41-3186...	507P	Part No. 11213732, 8638...	863
178, 73G-7-8, 838...	294	GA62, JA64...	854	Part No. 41-3186...	508P	Part No. 7237244...	
79C...	253	<b>GRUNOW</b>		83-0025, 83-0026...	509P	7238829...	868
180HB, 189HR...	249	614, 618, 5A B, 508-9, 625...	294	Part No. 41-3307...	509P	Part No. 5050673...	852
<b>CHEVROLET</b>		Part No. 35211...	273D	Part No. 41-3222...	951P	Part No. 1213446...	249
Part No. 1207758...	221	<b>KNIGHT</b>		Part No. 41-2015...	P285Y	Part No. 5054500...	
Part No. 5037916...	222	F9451, F9541, F9551, G9515, G9517, G9599, G9881, G9982, T, A9820, A9820, A9820, B10550, U6, B10575, E10786, E10882-3-4-5-6-7...	292	<b>RCA-VICTOR</b>		7232741...	514
Part No. 5040000...	273C	A9728-9-0, A9776-7-8, A9860-2-3-4-5-6-6, A10508, B10545-6-7-8-9, B10553, L7, X6, 24, 25, 6P...	294	AR-4229...	271*	Part No. 1214832...	742
Part No. 5050673...	273D	A9811-12, H9817...	245C	BC-6, BT6-5...	245A	<b>WELLS-GARDNER</b>	
Part No. 1212966...	869	Part No. P1414...	285X S	M34, M105, M116...	249	GU, GS, 26S1, 26U1...	253
Part No. 7239439, 1215198...	839	Part No. M1236...	850	M109, H6, M70...	286A	V62Z, Z6Z1, 06Z...	292
<b>CROSLEY</b>		Part No. F4...	246	M123...	294	072, 072A, 06W, 06X...	210
5A1, 98, 99, 102, 103, 4A1, 5A3, A155, 6B1, Part No. G7-38000...	223	Part No. 480...	245	Part No. 121419...	224	Part No. 19A25...	294
626-7-9, 634-1...	247	Part No. 1381...	F251	Part No. 13688...	W245A	Part No. 19A30, 19A33, P19A30, P19A26...	248
6615, 435, 546, 636...	246	<b>L'TATRO</b>		AVR10, AVR15 (6V), M1-7815, EG45A...	743	25V1 (5Y)...	286S
Part No. G10-38000	850	GA, J665, J465, H465, K665...	271	Part No. 30666...	728A	5C6, C6, C6A, C6B...	952W
<b>DELCO</b>				Part No. 14309...	722A	<b>ZENITH</b>	
2035, 4036...	221			Part No. 7780...	725	Part No. 190-1, 190-2, Part No. P7142-1...	292
4037, 4038...	222			Part No. 1140...	G286S	Part No. 190-5, 190-6, 190-16, 78-141...	246
626-7-9, 634-1...	273C			AVR8A, AVR8B...	G249	Part No. 190-7, 190-9, Part No. 190-4, 190-13, 190-14...	294
650-1-2-3, 631A...	294			RC-9, M1-7814...	725	Part No. 190-11, 190-15...	853
R6010-11-12, R6015...	245A			<b>SEARS-ROEBUCK</b>		Part No. 190-8...	W246
				7128; 101.582, 101.594 chassis...	294		
				7117, 1859A, 1859...	271		

\*Use 56-150 special adapter. NET 59c

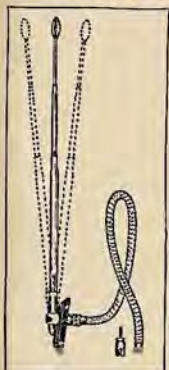




# AUTO RADIO AERIALS *Knight*

## ICA LIFETIME RUSTPROOF AUTO AERIALS

## KNIGHT AUTO AERIALS

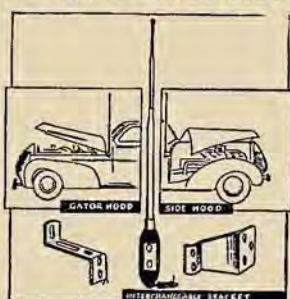


### ROCKER AERIALS

A new adjustable swivel type aerial. For installation on modern streamlined car. Angle easily adjusted. Weatherproof concealed mounting mechanism. Easy to install; requires drilling of only two small holes. Has 36" shielded cable and universal plug-in attachment. Comes assembled, ready for mounting.

**97-005.** 2-Section. Extends 23" to 49". Shpg. wt. 2 lbs. **NET.....\$2.35**

**97-001.** 3-Section. Extends 23 1/2" to 72". Shpg. wt. 2 lbs. **NET.....\$2.65**



### UNI-MOUNT UNDERHOOD TYPE

Constructed of the finest Admiralty Brass with triple-chrome plating. Guaranteed rust-proof for life of car. Equipped with "static discharge" ball tip. Noiseless, rattlerproof construction. Dual brackets of special design permit either underhood or alligator-type mounting. Easily installed without drilling holes in body of car.

**97-005.** The "WASP." 2-section telescopic. Extends from 23" to 49". With dual brackets and 36" shielded, low-loss lead-in. Shpg. **\$1.91** wt. 2 lbs. **NET.....**

**97-006.** The "CLIPPER." 3-section telescopic. Extends from 23 1/2" to 72". Dual mounting brackets; shielded 36" lead-in. Wt. **\$2.62** 2 lbs. **NET.....**

**97-007.** The "NEW YORKER." 3-section telescopic. Extends 31 1/2" to 96". With dual mounting brackets and shielded, 36" low-loss lead-in. **\$2.94** in. Wt. 2 1/2 lbs. **NET.....**



### SIDE COWL

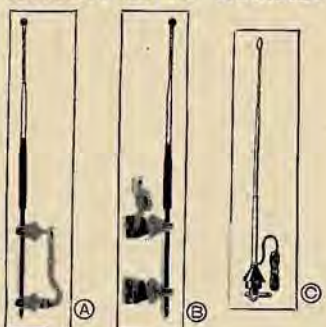
Made of Admiralty Brass with triple-chrome plating. Rustproof. 36" shielded cable. Wt. 2 lbs.

**97-010.** "CHANCELOR." 3-section. 20" to 65". **NET.....\$2.32**

**97-011.** "COMMODORE." 3-section. 23 1/2" to 72". **NET.....\$2.62**

**97-012.** "PRESIDENT." 3-section. 31 1/2" to 96". **NET.....\$2.94**

**97-013.** "COUNSELOR." 4-section. 32" to 108". **NET.....\$3.50**



### SIDE COWL AERIALS—FIG. A

Mount on side cowl of car. Triple-chrome plating prevents rusting. Spring contacts on all telescopic joints eliminate rattling. Balckite insulators. 36" shielded lead-ins. Av. wt., 2 lbs.

**97-100.** 3-section telescopic. 20" to 60". **NET.....\$1.98**

**97-101.** 3-section telescopic. 23 1/2" to 72". **NET.....\$2.29**

**97-102.** 3-section telescopic. 31 1/2" to 96". **NET.....\$2.55**

### UNDERHOOD COWL AERIALS—B

Telescopic; of heavy Admiralty Brass and stainless steel. Triple-chrome plated and rust-proof. The 97-105 model has a single mounting bracket; other two models have two brackets. Low-loss lead-in. Av. shpg. wt., 2 lbs.

**97-105.** 3-section. Extends from **\$1.98** 20" to 60". **NET.....**

**97-106.** 3-section. Extends from 23 1/2" to 72". **NET.....\$2.29**

**97-107.** 3-section. Extends from 31 1/2" to 96". **NET.....\$2.55**

### FENDER MOUNT CONCEALED AERIAL

Specially designed to fit any of the new model streamlined cars. Fittings are constructed so that they may be adapted to any fender contour of any type car and are fully concealed underneath fender. Antenna and lead fittings are permanently weatherproof and secure. Ruggedly constructed of Admiralty Brass tubing with triple chrome plating. Guaranteed to be rust-proof. Comes completely assembled. Easy to install. Equipped with 48" shielded low-loss lead, mounting clamps, and brackets. Lead is weatherproofed. Shpg. wt., 2 lbs.

**97-020.** 3-Section. Extends from 3" to 50". **NET.....\$3.50**

### DISAPPEARING COWL TYPE AERIALS

Disappears out of sight between side of cowl and kick pad of car. Manually operated. Easily and quickly installed. Single hole mount only 1/2" in diameter. Made of Admiralty Brass tubing, triple-chrome plated. Noiseless, rattlerproof, and rust-proof. Will not interfere with vision. Has "static discharge" ball on top. Equipped with 36" length of shielded, low-loss lead-in. Has universal plug attachment. Fittings will match those of all late cars. Wt., 2 lbs.

**97-025.** "REGAL." 2-section. Extends from 3" to 50". **NET.....\$2.94**

**97-026.** "DE LUXE." 3-section. Extends from 3" to 60". **NET.....\$3.23**



### HINGE-TYPE AERIALS—FIG. C

Triple-chrome plated over heavy brass and stainless steel. Telescopic. Rustproof and rattlerproof. Mount directly on hinge-pin of car door. No drilling. With heavy-duty lead-in cables. Gives high signal pickup. Wt., 2 lbs.

**97-110.** 2-section. 25" to 48". 36" cable. **NET.....\$1.59**

**97-111.** 3-section. 20" to 62". 36" cable. **NET.....\$1.98**

**97-112.** 3-section. 23 1/2" to 72". 36" cable. **NET.....\$2.12**

### ICA DELUXE SIGNAL GAINER

Adjustable impedance matching unit. Connects between car antenna and receiver. Has pointer knob and calibrated dial for best signal-to-noise ratio. Wt., 1 lb.

**46-200.** **NET.....\$1.15**



### SHIELDED AERIAL LEAD-IN

No. 20 conductor, low-loss, copper-shielded cable.

Dia.	5 Foot Length		25 Foot Length	
	No.	NET	No.	NET
1/2"	49-401	24c	49-402	\$1.05
3/8"	49-411	35c	49-412	1.65

### SHIELDED LOOM

For effective shielding.

Inside Dia.	5 Foot Length		25 Foot Length	
	No.	Net	No.	NET
3/8"	49-421	27c	49-422	\$1.18
1/2"	49-431	35c	49-432	1.48

### ASSEMBLED LEAD-IN CABLES

Flexible cable, shielded loom protected, covered overall with black processed braid.

No. Length Type of Terminals **NET**

49-450. 2 Ft. Male Connector & Gnd. Lead 35c

49-451. 2 Ft. Male & Female Connectors. 35c

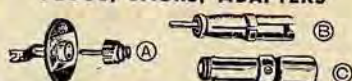
49-452. 3 Ft. Male Bayonet, Lug End. 41c

49-453. 4 Ft. Male & Female Connector. 47c

49-454. 4 Ft. With Chrysler Fittings. 56c

49-455. 6 Ft. Male Connector & Gnd. Lead 59c

### PLUGS, JACKS, ADAPTERS



Convenient fittings for terminating auto radio antenna lead-in cables. Av. wt., 1 oz.

**FOR MOTOROLA—Fig. A**

**46-210.** Pin Plug. **NET.....7c**

**46-211.** Shielded Jack. **NET.....13c**

**LEAD-IN ADAPTERS—Fig. B**

**46-215.** For Philco, Motorola, etc. 15c

**46-216.** For Buick Sets. **NET.....21c**

**46-217.** Fig. C. Lead-in adapter to convert Motorola lead to Delco fittings. **NET.....15c**

### COPPER SHIELDING

Flexible copper shielding for interference circuits, auto wiring, etc. Av. wt. per ft., 4 oz.

Dia. Open	5 Foot Length		25 Foot Length	
	Stock No.	NET	Stock No.	NET
1/2"	49-351	12c	49-352	\$0.45
3/8"	49-361	15c	49-362	.55
1/4"	49-371	18c	49-372	.70
3/4"	49-381	25c	49-382	1.05

### AERIAL BOOSTER COILS

This efficient booster coil connects in series with aerial lead-in and materially increases signal strength. Easily installed. Shpg. wt., 3 oz.

**46-205.** For any type auto set.

**46-206.** For Motorola sets, with special fittings. **EACH.....26c**



### VIBRATOR CONDENSERS

Working voltage, 1600 DC. Conservatively rated. Types marked \* have one lead. Shpg. wt., 4 oz.



No.	Fig.	Mfd.	Size	EACH
10-610	A	.01	1 1/2" x 1/2" x 1/4"	
10-611	A	.02	1 1/2" x 1/2" x 1/4"	
10-612	A	.007	1 1/2" x 1/2" x 1/4"	
10-613	A*	.01	1 1/2" x 1/2" x 1/4"	
10-614	A*	.02	1 1/2" x 1/2" x 1/4"	
10-615	B	.01	1 1/2" dia. x 2"	
10-616	B	.02	1 1/2" dia. x 2"	
10-617	B	.005	3/8" dia. x 1 1/2"	
10-618	B	.007	3/8" dia. x 1 1/2"	



# AUTO AERIALS AND ACCESSORIES

## LATEST WARD AUTO RADIO AERIALS FLEX-ANGLE—FITS COWL AND FENDER



**Model E3-68.** New type aerials which fit cowl and fender contours. Sturdy, two-foot single-mount type for easy installation. Simple nut attachment at the base enables antenna to be adjusted through a range of 16° overall so that a vertical antenna can be used with any cowl or fender shape. It's complete with 48" standard waterproof High Q lead and positive-contact Ward "UNI-PLUG" for connecting with all radios. Three sections extend 65". Requires a minimum of time, tools and labor to install. The Flex-Angle Aerial is ideal for use with all autos, such as Buick, Pontiac, Oldsmobile, Chrysler, Plymouth, etc. Shpg. wt., 2 lbs. **\$2.50**

**97-200. NET**.....**\$2.50**  
**97-201. Model E4-90. 4-section, 90" long. NET**.....**\$3.20**



## BI-FLEX—CONCEALED FENDER & COWL TYPE

New and easy-to-mount auto aerial property fits all modern cars. Lower part concealed by fender. Automatically adjustable for upper and under surfaces. A minute-man installation that eliminates laborious hand fitting. Supplied with 48" double water-proof lead and bayonet adapter. Three chrome-plated type collapsible sections. Concealed lengths: 97-202, 15 3/4"; 97-203, 18 1/2". For use on all cars, such as Pontiac, Chrysler, Buick, Oldsmobile, Plymouth, etc. Wt., 2 1/4 lbs.

**97-202. Model OB3-45. 3-section, 45" maximum length. NET**.....**\$3.09**  
**97-203. Model OB3-62. 3-section, 62" maximum length. NET**.....**\$3.20**

## AUTO RADIO FILTERS SINGLE CAPACITORS



Metal-cased compact by-pass condensers designed for installation on all sources of interference, such as generators, ammeters, horns, etc., to eliminate troublesome noise. Use 1 mfd. directly on generator. 1/2 mfd. on ammeter, horn, etc.; 1/4 mfd. on small accessories.

Stock No.	Mfd.	Size	Ea.	10 For
56-510	1/4	3/4" x 1 3/8"	14c	\$1.26
56-511	1/2	1" x 2 1/8"	24c	2.16
56-512	1	1 1/4" x 2 1/2"	30c	2.70

## DOME LIGHT FILTER

56-515*	1/2	1 1/4" x 3"	29c	\$2.61
56-516†	1/2	1 1/2" x 2"	24c	2.16

\*Choke and condenser. †Condenser only.



## FORD V-8 CONDENSERS

Especially designed to fit the Ford V-8 distributor-head. Special bracket for distributor head bolts. Eliminates interference. Wt., 8 oz.

**56-520. Fig. A. For 1934-36. NET**.....**\$1.9c**  
**56-521. Fig. B. For 1937-41. EACH**.....**19c**



## "A" LINE RF FILTER

Eliminates line noises such as hum, hash, or ripple entering auto set through "A" line or other leads. Especially required for auto sets without built-in filters. In metal case. 2x1 1/4 x 7/8". Wt., 8 oz. **NET**.....**82c**

## DELUXE CERAMIC SIDE COWL TYPE

Patented side cowl antennas in 3 and 4 section models using new low-loss ceramic stanchions. Easily mounted on Torpedo and Chrysler bodies with special conversion parts supplied at no extra cost. Scientifically designed for highest signal-to-noise ratio. Shielded lower stanchion minimizes interference. "UNI-PLUG" fits all Motorola and bayonet connectors. With 36" waterproof cable.

**97-204. Model EXXL. 3-section. Extends to 63". Wt., 2 lbs. NET**.....**\$2.20**

**97-205. EXL. 3-sec. Extends 37 1/2" to 93". Wt., 2 lbs. NET**.....**\$2.50**

**97-206. 151L. 4-sec. Extends 29 3/4" to 100". Wt., 2 lbs. NET**.....**\$2.91**

## STANDARD BAKELITE

**97-207.** Same as 97-204 above, but with molded bakelite stanchions. Has 36" waterproof cable; bayonet adapter. 3-sec. extend to 63". 2 lbs. **NET**.....**\$1.79**  
**97-208.** As 97-205, but with bakelite stanchions. 3-sec., 93". 2 lbs. **NET**.....**\$2.06**

## TRI-MOUNT TYPE COWL ANTENNA

Ward Tri-Mount Auto Aerials are specially engineered for all underhood, upperhood and alligator installations. Made in two convenient sizes; a 2 section model opening to 48", and a 3 section model opening to 65". Both are otherwise identical. Come completely assembled with combination upperhood, underhood bracket, 3 foot water-proof shielded lead-in, and bayonet type connector. Chrome type finish throughout, including base. Equipped with anti-static adapter.

**97-209. TD2-48. 2-section, 48" long. Wt., 2 lbs. NET**.....**\$1.68**

**97-210. TD3-68. 3-section, extend to 65". 2 lbs. NET**.....**\$2.09**

**56-500. Special Alligator Bracket. For Oldsmobile. Shpg. wt., 4 oz. NET**.....**9c**

**56-501. Special Underhood Bracket. For Ford and Mercury. Wt., 4 oz. NET**.....**9c**

## MOTOR NOISE FILTER

Assures noise-free radio reception. Combination high-frequency filter and adjustable balancing circuit. Eliminates suppressors. Interference is "balanced out" regardless of frequency, by means of manual inductance control. Housed in shielded metal container 3 3/8 x 2 3/8"; with bracket. Connects in series with antenna at set. Wt., 1 lb. **NET**.....**\$1.18**

**56-530. NET**.....**\$1.18**



## AUTO REMOTE CONTROL CABLE AND HOUSING FITTINGS

Exact duplicates for most auto radios. Match old fitting with illustrations and refer to list below for correct item. For .130" cables.

Stock No.	Type	NET	Stock No.	Type	NET
56-600	1	6c	56-609	11	6c
56-601	2	6c	56-610	12	11c
56-602	3	7c	56-611	13	7c
56-603	4	6c	56-612	A	6c
56-604	5	7c	56-613	B	6c
56-605	6	11c	56-614	D	6c
56-606	7	6c	56-615	E	6c
56-607	8	6c	56-616	F	6c
56-608	9	11c			

**56-617. Type H. For Motorola. .130". NET EACH**.....**29c**  
**56-618. Type H. For Motorola. .150". NET EACH**.....**29c**



## KNIGHT AUTO RADIO SUPPRESSOR UNITS

For use on any automobile engine. Will cut out practically all ignition interference. Wt., 6 oz.

Stock No.	Description	Price
56-650. A.	Spark Plug Type.	EACH 10c
56-651. B.	Distributor Type.	
56-652. C.	Cable Type.	10 For 90c
56-653. E.	Short Type.	
56-654. F.	Elbow Type.	10 For 90c
56-655.	Spark Plug Type for New Ford Cars.	
56-656. D.	50,000 ohm. Ford V8 Dist. Brush Type '33-'35 models.	10 For 90c
56-657. D.	Special small type, 50,000 ohm. For 1936 to 1940 Fords.	

**YOUR PRICE, EACH**.....**10c**



## WIRE-WOUND SUPPRESSORS

Eliminates motor noise. Low resistance. 6 oz.

**56-669.** Plug type. Fig. A. **NET**.....**30c**  
**56-670.** Distributor type. Fig. B. **NET**.....**30c**  
**56-671.** Elbow type. Fig. C. **NET**.....**30c**

## DISTRIBUTOR SUPPRESSOR

**56-672.** Rated at 10,000 ohms. Ideal for use where only one suppressor is needed on distributor. 8 oz. **NET**.....**33c**  
**10 For \$2.97. EACH**.....**33c**



## SUPER DISTRIBUTOR FILTER

Ignition noise filter. Mounts in distributor lead of car. Shpg. wt., 8 oz. **NET**.....**\$1.47**

**56-673. NET**.....**\$1.47**

## FRONT WHEEL NOISE SUPPRESSOR

Eliminates static noise of car's front wheels. Easily installed.

**56-680. PAIR**.....**10c**  
**56-681.** With plate for hub cap attachment. **PAIR**.....**18c**

## ANTENNA CONNECTOR

For Auto Radio Sets. Terminates Ant. leads. **ANT.**.....**4c**

**41-740. EACH**.....**4c**  
**41-741. Package of 12**.....**43c**

## FUSE HOLDERS

**41-735.** Cadmium-plated type separable metal container. Used extensively for auto sets. Takes 1" or 1 1/4" fuse. Measures 2 1/4" x 3/4". **Wt., 4 oz. EACH**.....**5c**

**41-736. Package of 12**.....**50c**

**41-790.** Large size replacement type fuse holder. Measures 2 1/2" x 3/4". Takes 3AG standard fuses. **Wt., 4 oz. EACH**.....**12c**

**41-791. Package of 12**.....**\$1.29**



## CABLE AND HOUSING

Exact cable and housing used by leading factories. Housing Parkerized to prevent rust.

### CABLE ONLY (A)

.130"	.150"	Lgth.	NET
56-700	56-710	18"	\$0.28
56-701	56-711	24"	.35
56-702	56-712	30"	.43
56-703	56-713	36"	.51

### HOUSING ONLY (B)

56-720	56-730	18"	\$0.28
56-721	56-731	24"	.35
56-722	56-732	30"	.43
56-723	56-733	36"	.51



# ACCESSORIES

## STAR AND CROWE CUSTOM-MATCHED PLATES



Standard matching auto dash panels. These are panel kits only, consisting of panel, preassembly plates, knobs and all necessary hardware, less cables. Used with control mechanism listed to the right, they will make complete control mounting kits to match your dash. **NOTE:** Order CROWE panels with CROWE accessories and STAR panels with STAR accessories. If your car is not listed, give make and year of car, and name, model, and tube lineup of set when ordering. Average shpg. wt., 10 oz.



STAR Stock No.	Car Model and Year	CROWE Stock No.
57-000	Buick 1938.....	57-400
57-001	Buick 1939.....	57-401
57-002	Buick 1940.....	57-402
57-003	Buick 1941.....	57-403
57-010	Chevrolet 1936.....	57-410
57-011	Chevrolet 1937.....	57-411
57-012	Chevrolet 1938.....	57-412
57-013	Chevrolet 1939.....	57-413
57-014	Chevrolet Std. 1940.....	57-414
57-015	Chev. Deluxe 1940.....	57-414
57-016	Chevrolet 1941.....	57-415
57-030	Chrysler 1939.....	57-425
57-031	Chrysler 1940.....	57-426
57-032	Chrysler 1941.....	57-427
57-040	De Soto 1939.....	57-435
57-041	De Soto 1940.....	57-436
57-042	De Soto 1941.....	57-437
57-050	Dodge 1936.....	57-445
57-051	Dodge 1937.....	57-446
57-052	Dodge 1938.....	57-447
57-053	Dodge 1939.....	57-448
57-054	Dodge 1940.....	57-449
57-055	Dodge 1941.....	57-450
57-065	Ford Deluxe Early '36.....	57-460
57-066	Ford Deluxe Late '36.....	57-461
57-067	Ford Deluxe 1937.....	57-462
57-068	Ford Deluxe 37.....	57-463
57-069	Ford 1938.....	57-464
57-070	Ford Std. '39.....	57-465
57-072	Ford Deluxe '39.....	57-466
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57-117	Oldsmobile '39.....	57-517
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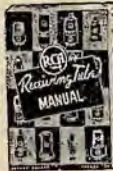
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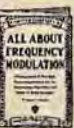
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1

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Outdoor Events



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2

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\$ 40.00	\$ 8.00	Simply add 10% to unpaid balance. For example, if the balance is \$32.00, then the carrying charges is \$3.20 and the total is \$35.20. + \$5.20 or \$40.40.	\$ 4.40
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80.00	16.00		8.80
100.00	20.00		11.00
120.00	24.00		13.20
150.00	30.00		16.50
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200.00	40.00		22.00
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3

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4

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You don't have to be an expert to get proper P.A. results with *KNIGHT* Sound Equipment! Anyone who can tune an ordinary radio set can operate any *KNIGHT* Sound System. Everything is designed for quick connection; microphones and speakers have plugs attached; complete easy-to-understand instructions are furnished. Thousands of satisfied users applaud the convenience and easy operation of *KNIGHT* Public Address Systems.

*KNIGHT* Portable Sound Systems are really portable. We mean, that for their output, they're more compact in size and considerably lighter in weight than most Public Address equipment. And they're smarter-looking, too. We've pioneered the Portable P.A. System (look at the new "Bantam"—page 69—for example). In *KNIGHT* P.A. Portables, you get (1) the very last word in easy-carrying, (2) easy setting-up, and (3) easy operation.



# IT'S EASY FOR ANYONE TO SELECT THE PROPER *KNIGHT* SOUND SYSTEM!

## HOW TO SELECT YOUR PA COMPONENTS

### HOW TO SELECT YOUR AMPLIFIER



The amplifier is the heart of any sound system. You need know only three things about its selection: (1) The **usable power output** available; (2) Frequency response—the ability to reproduce the tonal range; (3) The degree of accommodation for mikes, phono and speakers, and the type of control facilities. To determine how much power you need, refer to the chart at bottom of page. Every well-designed amplifier delivers a certain amount of **usable power**, comparatively free from distortion. It will also deliver a larger (peak) output, but this is only useful on occasional passages. Make sure the amplifier you use has the right amount of **usable power**. With regard to frequency response, for average requirements, a tonal range of 70 to 7000 cycles per second is acceptable. Anything wider will give you better than average results. Your requirements will determine how many mikes, phono speakers, etc., you will need. Make sure the amplifier you select provides adequately for your requirements.

### HOW TO SELECT YOUR SPEAKERS & Baffles



Just refer to chart at bottom of page for the recommended size and number of speakers you will need for any given installation. Generally it is better to use more than the minimum number of speakers specified to do the job, because you get better spread and adequate sound coverage. The Chart also indicates proper baffle choice. Three types are generally used: (Fig. A) **Flat type**, for widest sound spread; cases, inclined wall baffles and boards are in this group; (Fig. B) **projector type**, for directing sound farther out along a narrower channel; (Fig. C) **trumpet type**, for focusing sound in a narrow far-reaching beam. For maximum results, choose the type of baffle that best answers your need.

### HOW TO SELECT MICROPHONES

All the modern microphones we offer are satisfactory for average use, and you don't have to worry too much about the type you pick. But there are some particular advantages in different types of mikes that you ought to know about. At the present time there are four general types of microphones that are widely used. They are the new **Uni-Directional** types which incorporate the one-direction pickup principle, and the **Crystal**, **Dynamic**, and **Velocity** types. (Complete descriptions of leading makes of each of these microphone types will be found on pages 93-96.)

**Uni-Directional Microphones.** These are the finest; new type mikes for PA use. Because they pick up sound from one direction only, they give excellent results where excessive feedback (howling) or poor acoustics are encountered. Uni-Directionals are available in Crystal, Dynamic and Dynamic-Velocity types. **Standard Crystal & Dynamic Mikes.** These types pick up sound from all directions and give good results where feedback and room acoustics are not critical problems. The Dynamic type is considered somewhat more rugged and is well-adapted for outdoor and portable work. Crystal mikes are, however, widely used with satisfaction for most general PA work.

**Velocity Mikes.** This type is bi-directional, picking up sound from front and back only (they are dead at sides). They give better results than standard Crystal and Dynamic types where excessive feedback and poor room acoustics are encountered. However, the Velocity mike is not as effective as the Uni-Directional type in reducing feedback.



Uni-Dir.



Crystal



Dynamic



Velocity

## HOW TO USE THE CHART

It's easy to use the chart that's shown at bottom of this page. To quickly determine the **KNIGHT** Sound System best suited for your needs: (1) Measure the length and the width of the area you desire to cover. (2) Multiply these two figures to determine the total number of square feet to be covered. (3) Locate on the chart in the column headed "Applications" the use for which your system is intended. (4) Run your finger across until you reach the column including the square foot area obtained in Step 2. (5) The system you need is that indicated at the top of the appropriate column.

**Example:** Suppose you want a **KNIGHT** Sound System for a ballroom measuring 100 feet long and 50 feet wide. This is a total of 5,000 square feet (100 x 50 = 5,000). Reference to the chart shows that you require a 14 or 15 watt system with 2-12" speakers in wall baffles. If the location happens to be unusually noisy, order the next larger system—the 20 watt unit shown in the next column.

**NOTE A.** If you know how many persons will be present and do not wish to measure the area, allow about 6 square feet per person.

**B.** If your location includes a balcony, or if you wish to place extension speakers in adjacent rooms, add these areas to the main area for the total.

**C.** If your system is to cover a number of applications, choose the system required for the **largest area**. A larger system will easily cover smaller areas, but the reverse is not true.

**D.** If you wish to cover two applications simultaneously—e.g., school auditorium and the athletic field—first find the size of the system required to handle the auditorium alone; then find the size required for the field. Be sure to choose a system having a power output equivalent to the sum of both (or use two separate amplifiers).

## THIS CHART SHOWS YOU HOW TO CHOOSE THE RIGHT SYSTEM.

You don't have to feel any hesitation about ordering the Public Address equipment you need. We've taken the mystery out of PA selection for you. If you study the easy-to-understand chart below, and read the simple facts we give above about all the essential PA components, you'll be able easily to choose the right Sound System that will best serve all of your Public Address requirements.

**ALLIED'S** engineers are always ready to help you. If your requirements are specialized and are not covered by the chart, write to our Sound Engineering Division, giving complete details and (if possible) enclose a rough sketch. Competent advice and price quotations based on careful study of your needs, will reach you promptly. Don't hesitate to write to us on any type of Public Address problem.

Applications	7 Watts (See p. 68)			14-18 Watts (See pages 70, 71, 76)			20-30 Watts (See pages 69, 72, 77)			60 Watts (See pages 74-75)		
	Area sq. ft.	Spkr.	Baffle	Area sq. ft.	Spkr.	Baffle	Area sq. ft.	Spkr.	Baffle	Area sq. ft.	Spkr.	Baffle
Armories and Barracks....	1000 to 2900	1-8"	Wall	2900 to 7200	2-12"	Wall	7200 to 14,000	2-12"	Proj.	14,000 to 39,000	2-4 Knight Trumpets	
Auditoriums & Banquet Halls.....	1000 to 4000	1-8"	Wall	4000 to 7800	2-12"	Wall	7800 to 20,000	2-12"	Wall	20,000 to 66,000	4-12"	Proj.
Ballrooms & Dance Halls..	1000 to 2900	1-8"	Wall	2900 to 6000	2-12"	Wall	6600 to 14,000	2-12"	Proj.	14,000 to 39,000	4-12"	Proj.
Carnivals & Fairs.....				1000 to 3600	2-12"	Proj.	3600 to 8000	2-12"	Proj.	8000 to 50,000	2-4 Knight Trumpets	
Churches.....	1000 to 2900	1-8"	Wall	2900 to 7800	4-8"	Wall	7800 to 20,000	8-8"	Wall			
Factory Paging (Noisy).....	500 to 1150	1-8"	Proj.	1150 to 2400	2-12"	Proj.	2400 to 6500	2-4 12"	Proj.	6500 to 12,300	2-4 Knight Trumpets	
Funeral Parlors.....	500 to 1150	1-12"	Bass Reflex	1150 to 3000	1-12"	Bass Reflex	3000 to 6500	2-12"	Bass Reflex	6500 to 12,500	4-12"	Bass Reflex
Night Clubs & Taverns....	1000 to 2900	1-8"	Wall	2900 to 7200	2-12"	Wall	7200 to 14,000	2-12"	Wall			
Outdoor Adv. & Meetings.....				1500 to 4800	2-12"	Proj.	4800 to 10,000	2-12"	Proj.	10,000 to 66,000	2-4 Knight Trumpets	
Roller Skating Rinks.....							2000 to 6000	2-4 12"	Proj.	6000 to 39,000	2-4 Knight Trumpets	
Stadiums, Athletic Fields, Race Tracks.....							3000 to 8000	2-12"   2 Trumpets	Proj.	8000 to 50,000	4-6 Knight Trumpets	
Store & Office Paging, Classrooms....	1000 to 4000	1-8"	Wall	4000 to 7800	2-12"	Wall	7800 to 20,000	2-12"	Proj.	20,000 to 50,000	4-12"	Proj.

Areas given are those of Grandstand or Bleachers.



# Knight 7 WATT DeLuxe SYSTEMS



COVERS UP TO 700 PERSONS  
COVERS UP TO 4000 SQ. FEET



DEMONSTRATORS



SCHOOLS



RESTAURANTS



AUCTIONEERS

**Choice of Mikes:** In place of mke shown, you can have your choice of 99-332 V-1 Velocity or 99-334 Knight 631 Dynamic, at \$4.00 additional. See pages 91 to 93 for descriptions.

- With Inverse Feedback
- Universal Mike-Phono Input
- Bass-Treble Tone Control
- Beam Power Output Stage
- Built-in Field Supply
- Fully Fused for Protection
- Illuminated Control Panel
- With Mike-Phono Fader

**\$10<sup>85</sup>**  
7 Watt Amplifier, less tubes

## 7 WATT "Little Giant" PORTABLE

Here's your "Best Buy" in a compact and versatile Portable Sound System! You get more for your money in quality, features, and service. Prove it to yourself—try this top-notch system for 15 days (see page 66), and get the kind of PA satisfaction you want!

**Easy to Use.** Just set it up and use it in a jiffy! You don't have to be an expert to get perfect results.

**Universal Input.** Takes any high-impedance microphone or phono. Has microphone-phono fader; controls volume, and fades from mike to phono as you want it.

**Inverse Feedback.** Permits you to work system at higher output with better quality and less distortion.

**Tone Control.** You can emphasize bass or treble to suit yourself. Helps reduce feedback.

**Illuminated Panel.** Used only in quality equipment. Fully lighted slant panel gives you easy visibility anywhere.

**All These "Plus" Features.** Has socket provision for extra PM or magnetic speaker or headphones. You can't make a wrong connection because both mike and speaker receptacles are polarized. Amplifier is fuse-protected.

**Complete Portable System.** Comes complete in compact single-unit portable case, 13 $\frac{1}{4}$ " x 13 $\frac{3}{4}$ " x 10 $\frac{1}{2}$ ". Carrying weight, 31 lbs. Includes: Knight 7-watt amplifier, with tubes; Shure Crystal microphone on desk stand, with 25-foot cable and plug; 8-inch Dynamic speaker with 30-foot cable and plug. For operation on 110-120 volts.

60 cycles AC. Shpg. wt., 36 lbs. **\$2650**

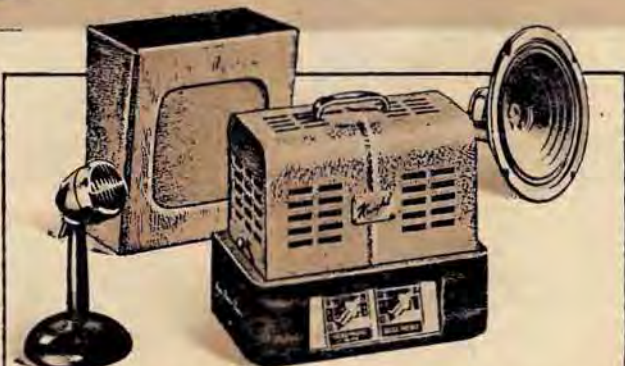
93-013. NET PRICE.....

93-020. Extra 8' Speaker, transformer, 30' cord and plug, in portable case. Shpg. wt., 10 lbs. NET.....\$8.45

For 25 cycle operation (all 7 Watt Systems), add \$6.00

### AMPLIFIER SPECIFICATIONS

**Output:** Full 7 watts usable power (12 watts peak); hum is inaudible (67 db. below rated output); **Output Impedance:** 4000-4500 ohms direct from plate -- of tube; supplies field excitation to one 1235 ohm speaker; **Input Channels:** Two on fader (one for mike, one for phono); **Tone Control:** for bass and treble; **Gain:** on microphone, 100 db., on phono, 70 db.; **Frequency Response:** 70-7000 CPS; **Tubes:** 1-6SC7, 1-6L6G, 1-5Y3G; **Line Drain:** 70 watts; **Fused:** for operation from 110-120 volts, 60 cycles AC. Size: 10" x 8 $\frac{1}{4}$ " x 6 $\frac{1}{4}$ ". E.R.P.I. Licensed.



## Knight 7 WATT DeLuxe ALL-PURPOSE SYSTEMS

If you're looking for a dependable PA System to take care of those smaller, permanent installations, you'll be right with these "Little Giant" Systems. Don't take our word for it. Our 15 Day Trial Offer gives you a chance to prove it for yourself. System 93-014 is ideal for permanent installations. System 93-015 is offered less baffle, to work with present baffle equipment or with baffle of your own choice.

**Complete All-Purpose System.** Includes: 1-Knight 7 Watt Amplifier with tubes; 1-Shure Crystal Microphone, 25-foot cable and plug on desk stand; 8' Speaker with 30-foot cable and plug; wall baffle; complete operating instructions. For 110-120V., 60 cycles AC. Shpg. wt., 34lbs.

93-014. NET PRICE..... **\$2415**

93-015. Basic System. Same as above but less baffle. Wt., 32lbs.

NET PRICE..... **\$22.65**

93-021. Extra 8' Speaker with 30-foot cable, plug and transformer.

Shpg. wt., 6 lbs. NET..... **\$4.50**

For Floor Stand (94-000, page 93) in place of Desk Stand, add \$2.60

### 7 WATT AMPLIFIER ONLY

The Knight 7 Watt "Little Giant" amplifier is also available separately, with all features as described at left. Makes an ideal nucleus for assembling your own sound system, or a fine replacement for obsolete amplifiers. Comes complete with protective steel cover and handle. Has streamline base with slant-protected illuminated instrument panel. Has wiring diagram on base plate. Two-tone grey-crackle finish. Size: 10" x 8 $\frac{1}{4}$ " x 6 $\frac{1}{4}$ ". Less tubes, Shpg. wt., 12 lbs.

93-011..... **\$10.85**

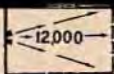
NET.....

93-010. Amplifier with RCA tubes. Wt., 14 lbs. NET..... **\$12.90**





# Sensational NEW 20 WATT "Bantam" PORTABLE



COVERS UP TO 2,000 PERSONS  
COVERS UP TO 12,000 SQ. FEET



LECTURES



RENTALS



SCHOOLS



ORCHESTRAS

CHURCHES

HOTELS

STORES

CAFES

NIGHT CLUBS

TAVERNS

CLUBS

EVANGELISTS



- 20 Watts—Smallest Ever!
- Only 24" x 10 1/4" x 10 1/4"
- Three Input Channels
- With Tone Control
- Built-in Phono
- Dual Phono Input
- Inverse Feedback
- Universal Input
- Elliptical Speakers

**\$64<sup>95</sup>**

Complete 20 Watt  
Portable System, with Phono

**EASY TERMS—15 DAY TRIAL**  
See Details on Page 66

They said it couldn't be done—but here it is—the very **first** moderate-powered Sound System in the **compact portable form** everyone in PA has wanted for years! It's new, it's complete, it's ingenious. See for yourself the thought, the hard-headed research that has gone into the design of the 20 Watt "Bantam" to make it the first truly practical portable on the market. Look at the illustrations—notice the simplicity of the design; see how the weight balance is perfectly distributed; note the clever hinges we've developed to eliminate speaker case rattling. We've worked out every detail for you so that you will find the "Bantam" the most practical portable you've ever used—easy to carry, easy to transport, easy to set up and use.

**You've Wanted the "Bantam" For These Uses, Sound Men**—here's the perfect Rental System—all the power you need for most jobs—yet in a new portable form that's easy to transport, that sets up anywhere in a few minutes, and saves you time and money. **Schools**—there's never been anything like the "Bantam" for convenience; transfer it in a jiffy from classroom to classroom; use it in auditorium or gym; it's unbelievably flexible and practical, yet it has all the power you need. **Orchestras**—here's quality, plus a portability you'll appreciate; takes up less space than a suitcase in a car, no bigger than a small instrument case. **Lecturers, Demonstrators**—here's the logical PA System for your needs—easiest to carry, quickest to set up and use.

**Amplifier Specifications:** The specially-designed amplifier unit with phono tap is housed in the compact center section of the case. Amplifier has 20 watts **usable** power output (26 watts peak); hum is inaudible (55 db below rated output). Output impedance, 4 and 8 ohms; supplies field excitation for the two 2500 ohm speakers included in the system. Has three input channels; one for high-gain mike with individual control; two for phonograph, with fader. Includes bass-treble tone control. Gain on microphone is 127 db., on phono 70 db. Frequency response is 50-10,000 CPS. Tubes used are: 1—6SJ7, 1—6SC7, 2—6L6, 1—5T4. Linc Drain is 160 watts. Fully fused; for 110-120 volts, 60 cycles AC. E.R.P.I. licensed.

**Inverse Feedback.** You get greater output and better tone quality. You can work the system at higher output levels because distortion and hum are cut down.

**3 Input Channels.** Use high-impedance mike along with any two phono pickups. You control mike and one pickup separately. Phonos are on fader.

**Bass-Treble Control.** Gives you the tone emphasis you want on mike and phono; reduces feedback. Turn knob to right for high notes, to left for low notes.

**Built-in Phono.** The "Bantam" includes built-in phono; has gear-drive G.I. 78 RPM motor and new low-pressure Shure Crystal pickup.

**New Elliptical Speakers.** Latest type elliptical-shaped Dynamic Speakers make it possible to achieve exceptional case compactness and wide-fidelity tone.

**Complete "Bantam" Portable.** Includes: 1—Knight 20 Watt Amplifier, with tubes and built-in phono; 1—Shure Crystal PA Microphone with 25-foot cable on desk stand; 2—10" Elliptical Speakers with 25 foot cables and plugs attached; complete instructions. Entire system is housed in a compact, beautiful case, finished in brown air-luggage cloth, size is only 24" long, 10 1/4" high, 10 1/4" deep. For 110 volts, 60 cycles AC. Shpg. wt., 48 lbs.

**NET CASH PRICE \$64<sup>95</sup>**  
Terms: \$12.99 down, 57.15 monthly for 8 months.  
If Floor Stand is desired in place of Desk Stand on above system, add \$2.60

## AN EXCLUSIVE Knight TRIUMPH! MOST COMPACT PA EVER BUILT!



### SETS UP IN A JIFFY!

You'll marvel at the easy way you can set up this cleverly designed system! The compact case opens fan-like into three sections as illustrated. The end sections house the speakers and serve as specially designed baffles; they lift away quickly and easily from the center section; hardware is designed rigidly to eliminate rattles. The center section houses the amplifier and phonograph units. Space is provided for storing turntable, cables, mike and stand. Amplifier section is only 10 1/4" x 10 1/4" x 10"; can be set anywhere.

### COMPACT AS A SUITCASE

The entire "Bantam" System, when assembled as one case, contains everything necessary for operation—yet it measures only 24" long, 10 1/4" wide, and 10 1/4" deep—actually smaller than an ordinary suitcase. You'll find the "Bantam" easy to carry because of its functional proportions and perfect weight distribution; it's easy to transport by car; takes up minimum space.





# Knight 14 WATT DeLuxe SYSTEMS WITH



COVERS UP TO 1100 PERSONS



LECTURES



SCHOOLS



ORCHESTRAS

Demonstrations  
Sole Meetings  
Auctioneers



## \$19<sup>95</sup>

Amplifier, less tubes and phono top

**15 DAY TRIAL OFFER**  
You Be The Judge!  
See Details on Page 66

### JUST CHECK THESE FEATURES:

- Inverse Feedback
- 2 Input Channels
- Universal Input
- With Series Mixer
- Bass-Treble Control
- Beam Power Output
- Safused Speaker
- Speaker Selector
- Illuminated Panel
- Optional Phono Top
- Dual Output Sockets
- Fused For Safety

## Knight 14 WATT PORTABLE SYSTEM

Here's the kind of Portable PA System you'd plan for yourself—with all the features and built-in performance you need—at the price you want to pay. The power rating is 14 usable watts and that means you get 14 watts without a sign of "cracking up." This popular power rating covers hundreds of important PA uses (see chart on page 67). The features are practical, and you'll actually use them on the job. The price will give you the biggest surprise because it's low for the quality you get—but our 15 Day Trial Offer will convince you that you're getting a supreme PA value.

**Easy to Set Up and Use.** The 14 Watt Portable is as easy to operate as any ordinary radio set. You don't have to be an expert to get perfect results. It sets up in just a few minutes because it's really designed for convenient portability and easy operation; anyone can get the right operating results every time. There's nothing to add—nothing more to buy—the 14 Watt Portable is complete!

**Inverse Feedback.** An "expensive-equipment" feature. Gives you greater output, better tone quality. You can work the system at higher output levels because distortion and hum are cut down to a minimum. It's a feature you'll appreciate.

**2 Input Channels.** You can use any high-impedance Crystal, Dynamic, or Velocity mike, along with any phono pickup. Each input channel has separate control, and both channels may be mixed or blended as desired.

**Bass-Treble Control.** Gives you the tone emphasis you want, on both mike and phono. Helps cut down feedback. Easy to use: turn knob to right for high notes; to left for low notes.

**Universal Output.** Amplifier has built-in output transformer with a wide range of output impedances. You can use any variety and number of extra speakers. Line tap permits use of speakers at greater distances.

**Speaker Selector.** You can match additional dynamic speakers of any make instantly by adjusting the special output selector. No guesswork—you just set where volume and quality are best—it's as simple as that!

**Safused Speaker.** An exclusive Knight feature. Speaker supplied with System is specially fused for protection against overload. Absolutely prevents any electrical damage to the speaker.

**Illuminated Panel.** Another exclusive Knight feature that's a real practical help. Panel is slanted for easy control and inset for protection. It is fully flood-lighted so you can operate even in dark places.

**Optional Phono Top.** Originated by Knight. You can buy the system with matched built-in phono top; has rim-drive 78 RPM motor, 9" turntable, new Shure offset-head Low Pressure Crystal pickup, switch, arm-rest, needle-cup. Say goodbye to trailing wires, extra phono cases, etc.

**And These "Plus" Features.** More for your money, and here's the proof: Grip-tite receptacle prevents accidental mike plug removal; Dual Output Receptacles—six contact type—for positive connection. Fuse—protects the amplifier; AC input is tapped for line voltage adjustment to safeguard output level; has diagram on base plate.

### COMPLETE 14 WATT PORTABLE SYSTEM

Complete System includes: 1—Knight 14 Watt Amplifier with tubes (less phono top); 1—Shure PA Crystal Microphone with 25-foot cable, on desk stand; 1—12" Safused Dynamic Speaker with 30-foot cable and plug; complete instructions. All components fit in compact split-carrying case, 22 1/2" x 19 3/4" x 15". Weight is only 53 lbs. For 110 volts, 60 cycles AC. Less phono top. Shpg. wt., 63 lbs.

**93-034, NET-CASH PRICE. \$4325**  
Terms: \$8.65 down, \$4.76 monthly for 8 months.





# THE FEATURES YOU WANT - *At Low Cost!*



COVERS UP TO  
6500 SQ. FEET



PAGING



TAVERNS



RENTALS

Restaurants  
Clubs • Lodges  
Hotels • Stores



## Knight 14 WATT ALL-PURPOSE SYSTEMS

Here is a choice of fine moderate-powered Sound Systems for permanent types of installations.

The 93-035 System includes inclined wall baffle which is easy to mount and which gives better tone quality and proper coverage. This system is easy to install, attractive in appearance to fit any surroundings—and will give dependable results under the toughest conditions.

The 93-036 System is offered in basic form, less the baffle, for installations where baffle equipment is already available or where another type of baffle is desired. (See note at right). For optional accessory equipment, such as phono top, additional speakers, microphone floor stand, etc., see the listing at bottom left of this page.

With Wall Baffle. Includes: Knight 14 Watt amplifier with tubes (less phono top); Shure Crystal PA Mike with 25-foot cable, on desk stand; 12" Dynamic Speaker in Standard Wall Baffle, 30-foot cable and plug. For 110 volts 60 cycles AC. Shpg. wt., 55 lbs.

93-035. NET PRICE..... **\$3815**

93-036. Same as above but without the wall baffle. (See note below.) Shpg. wt., 50 lbs.

NET PRICE..... **\$36.25**

NOTE: To determine the proper baffle for your particular installation, see the detailed explanation on baffle selection that appears on page 67.

### AMPLIFIER SPECIFICATIONS

Output: Full 14 watts usable power (18 watts peak); hum is inaudible (55 db. below rated output); Output Impedance: 4, 6, 8, 300 ohms on selector; designed for PM or for self-excited Dynamic Speakers; Input Channels: Two, one for mike, one for phono, on individual controls; Tone Control: for bass and treble; Gain: on microphone, 125 db., on phono, 75 db.; Frequency Response: 60-8000 CPS; Tubes: 1-6S17, 1-6SC7, 2-6V6G (Beam Power), 1-5Y3G; Line Drain: 75 watts; Fused: fully fused for operation from 110-120 volts, 60 cycles AC; Amplifier Size: 16 1/4" x 10 1/4" x 9 1/4". E.R.P.I. Licensed.

### OPTIONAL EQUIPMENT FOR ALL 14 WATT SYSTEMS

- 93-045, Phono Top for 14 Watt Systems, For 110 volts, 60 cycles AC. Shpg. wt., 11 lbs. NET..... **\$7.75**  
 93-040, Extra 12" Speaker with 30-foot cord and plug. Shpg. wt., 12 lbs. NET.... **\$7.75**  
 93-041, Extra 12" Speaker in standard wall baffle, 30-foot cord and plug. Shpg. wt., 15 lbs. NET..... **\$9.65**  
 93-042, Extra 12" Speaker in Economy All-Steel Projector with mounting bracket, 30-foot cord and plug. Shpg. wt., 20 lbs. NET. **\$14.95**  
 NOTE: For Floor Stand (94-000, page 93) in Place of Desk Stand, add \$2.60.

### CHOICE OF MICROPHONES

The Shure Crystal Microphone shown with the systems on these pages will meet most needs. You can, however, have your choice of 99-332 V-1 Velocity, or 99-334 Knight 631 Dynamic at \$4.00 additional. To determine choice of mike which will best fit your own needs, see detailed mike selection explanation on page 67. For complete description of above microphones, see pages 91-93.



### Knight 14 WATT DELUXE AMPLIFIER

Do you need a quality replacement amplifier to improve results from your present equipment? Are you looking for a nucleus to build up your own sound system? Here's the amplifier you want! We sincerely believe that you can't match this Knight 14 Watt Amplifier at the price we ask, for its tone quality, its features, its attractiveness and its rugged dependability. Let's check the facts! Here's what you get: 2 (not one) Input Channels, each with individual controls; Inverse Feedback (a deluxe feature) for greater output and better tone quality; Bass-Treble Control for the kind of tone emphasis you want; High-Gain—125 db. on mike, 75 db. on phono; Frequency Response—60 to 8000 CPS, with negligible hum; Illuminated Panel—a quality feature—gives you easy control even in dark locations; Handsome Appearance—smart-looking streamlined two-tone grey steel case, with sturdy chrome carrying handles. Top cover and bottom plate are easily removable for quick access to tubes and components. All controls and input-output receptacles are located for quick, easy accessibility. Has diagram on base plate. Dimensions: 16 1/4" long, 10 1/4" high, 9 1/4" deep. For 110 volts, 60 cycles AC. Less tubes. Shpg. wt., 25 lbs.

93-031. NET PRICE..... **\$1995**

93-030. Amplifier as described above, but with RCA tubes. Shpg. wt., 27 lbs.

NET PRICE..... **\$22.85**

For 25 cycles, 110 volt operation, add \$7.00.



# Knight 30 WATT DeLuxe SYSTEMS -



COVERS UP TO  
3000 PERSONS



HALLS



CHURCHES



ORCHESTRAS

CLUBS  
PAGING  
RENTALS  
ARMORIES

## ALL THESE 1942 PA FEATURES:

- Illuminated Panel
- Safused Speakers
- 3 Input Channels
- Inverse Feedback
- Universal Mike Input
- Optional Phono Top
- Universal Output
- Bass-Treble Control
- Silencer Mike Jacks
- Speaker Selector
- Beam Power Tubes
- Fuse-Protected
- Take-Down Stand
- E. R. P. I. Licensed

## Knight 30 WATT PORTABLE SYSTEM

"What type of Sound System do you need to fill 90% of your PA Requirements?" That's the question we asked thousands of PA users. And here's the answer—we've developed for you the most popular of all Sound Systems—the Knight 30 Watt Portable! You get far-reaching power punch. You get the right kind of tone quality. And you've been looking for just the features this system has. We want you to check and compare. We know you'll agree that here's the answer to 90% of your PA needs!

**3 Input Channels.** Only the most costly amplifiers have this feature. You can use any two high-impedance microphones and any high-impedance phono pick-up. And you have perfect control of each channel because there's a three-position mixer circuit with three individual controls that give you any degree of blending or mixing you may require.

**Stabilized Inverse Feedback.** An important feature you'll be quick to appreciate. Gives you greater power with less hum and noise—and that means remarkably improved tone quality. Found only in the better type of amplifier equipment, Inverse Feedback multiplies power and efficiency.

**Bass-Treble Control.** Gives the right kind of tonal emphasis—turn it right for high notes, to left for low. Minimizes feedback, too; compensates for varying acoustical conditions. Not just an ordinary tone control, but a real asset to you in your PA applications. You'll notice the difference in performance!

**Simple to Operate.** You don't have to be an expert to set up and operate this portable system. It's so easy to use, so fool-proof in operation, that anyone can get satisfactory results. The 30 Watt System is completely housed in a split-carrying case of compact and handsome design. Measures only 22 1/2" x 19 1/4" x 15". Carrying weight is only 55 lbs. complete. Whether indoors or outdoors, you'll find the 30 Watt Portable easy to set up in a jiffy!



**\$28<sup>95</sup>** Amplifier,  
less tubes,  
meter & phono

**15 DAY FREE TRIAL  
EASY PAYMENT TERMS  
See Page 66 For Details**

**Safused Speakers.** Exclusive with Knight. Speakers are specially fused for protection against overload. Absolutely prevents any electrical damage to the speakers. It's a safety-first speaker feature found in no other system on the market—more proof of Knight extra value.

**Optional Phono Top.** A real advantage. You can buy the 30 Watt System with built-in phono top—no extra cases, no trailing wires to fuss with. Includes: rim-drive 78 RPM motor, 9" turntable, new Shure Low Pressure Crystal pickup, switch, arm-rest, needle-cup and plug-in connections. The optional phono top is another Knight "First."

**Extra-Value Features.** You get the advantages of a special Universal Output Selector, which permits instant matching to additional speakers or line. There's no guessing or figuring; just set where tone and volume sound best. Silencer jacks check hum when mike is removed. Six-contact speaker sockets make connection easy; have safety jumpers which automatically turn off amplifier when speaker plugs are removed. Amplifier is protected by fuse; AC input is tapped to assure full output even when line voltage varies. Wiring diagram appears inside amplifier base.

**Lighted, Slant-Protected Panel.** Another Knight "First"—never before incorporated in equipment selling at this price. You asked for it and here it is—a fully illuminated instrument panel, slant-tilted but set-in for protection—to give you wonderfully easy operating control anywhere. No more guessing; no more fumbling in the dark.

**15 Day Trial.** Prove the quality of the Knight 30 Watt Deluxe System to yourself. Take advantage of our 15 Day Trial Offer (see Page 66) and judge for yourself. We know you'll agree that there isn't a finer PA value on the market today.

## COMPLETE 30 WATT PORTABLE SYSTEM

Complete System includes: 1—Knight 30 Watt Deluxe amplifier with tubes; 1—Shure Crystal PA Microphone with Take-down Mike Stand (can be used as short or tall Floor Stand or as Banquet Stand) and 25-foot cable and plug; 2—12' Safused Dynamic Speakers with 30-foot cables and plugs; and operating instructions. Less phono top and V.I. meter. Entirely self-contained in portable carrying case as illustrated. For 110 volts, 60 cycles, AC. Shpg. wt., 70 lbs.

**YOUR CASH PRICE COMPLETE..... \$64<sup>95</sup>**

**Time Payment Terms: \$12.95 down, \$7.15 monthly for 8 months.**  
(See other 30 Watt Systems on next page. Also complete listings of accessories, including phono top, V.I. meter, etc.)



# AMERICA'S PUBLIC ADDRESS FAVORITES

20,000  
COVERS UP TO  
20,000 SQ. FEET



SPORTS  
SCHOOLS  
THEATRES  
PARKS  
STORES  
FACTORIES  
AUCTIONS

## Knight 30 WATT ALL PURPOSE SYSTEMS

To meet varying requirements, we offer a choice of 30 Watt Systems below, in combinations to meet practically any need. Each system includes all of the fine features described on the opposite page.

**System with Wall Baffles.** Includes: Knight 30 Watt Amplifier with tubes, less phono top and V.I. meter; 1—Shure Crystal Microphone on 94-000 floor stand with 25-foot cable and plug; 2—12-inch Safused Dynamic Speakers in wall baffles with 30-foot cables and plugs; complete instructions. A splendid choice in an all-purpose PA System. For 110 volts, 60 cycles AC. Shpg. wt., 68 lbs. **\$62.25**  
**93-135. NET CASH PRICE.....**

**System Less Baffles.** Same as 93-135, but does not include the wall baffles. Shpg. wt., 58 lbs. **\$57.50**  
**93-136. NET PRICE.....**

**System with All-Steel Projectors.** Same as 93-136, but with 2—All-Steel Projectors and brackets added. Shpg. wt., 70 lbs. **\$71.50**  
**93-137. NET PRICE.....**  
(See Baffle Selection Explanation on Page 67.)

### OPTIONAL ACCESSORIES

**93-045.** Phono Top. For 110 volts, 60 cycles AC. Shpg. wt., 10 lbs. NET. **\$7.75**  
**85-000.** V.I. Meter. Shpg. wt., 2 lbs. NET. **\$4.75**  
**93-210.** Monitor Speaker. Wt., 1 lb. NET. **\$4.25**

Terms: \$12.45 down, \$6.85 monthly for 8 months.



### 30 WATT AMPLIFIER ONLY

If you're looking for a quality high-power replacement Amplifier for use with your present equipment, you can make no better choice than this popular Knight full 30 Watt Amplifier. You get real, usable features, plenty of versatility, dependable power and the kind of tone quality you need. Has all the features described on page 72. Housed in an all-steel case, in two-tone grey crackle. Has lighted, slant-protected control panel. Top cover is easily removable. For 110 volts, 60 cycles AC. (Optional equipment such as phono top, V.I. meter, etc. may be selected from complete listings above.) Less phono top and tubes. Shpg. wt., 29 lbs. **\$28.95**  
**93-131. NET PRICE.....**

**93-130.** Amplifier, as above, but with RCA tubes. Shpg. wt., 31 lbs. NET. **\$33.75**  
For 110 Volt, 25 cycle operation, add, \$10.00.

### AMPLIFIER SPECIFICATIONS

**Output:** Full 30 watts usable power (35 watts peak); hum is inaudible (55 db. below rated output); **Output Impedance:** 4, 6, 8, and 500 ohms on selector; designed for use with PM or self-excited Dynamic Speakers; **Input Channels:** Three, two for high-gain mikes, one for phono, on individual controls; **Tone Control:** for bass and treble; **Gain:** on microphone, 128 db., on phono, 80 db.; **Frequency Response:** 50-10,000 CPS; **Tubes:** 2-6SJ7, 2-6SC7, 2-6L6G, 1-5U4G; **Line Drain:** 185 watts; **Fused:** fully fused for operation from 110-120 volts, 60 cycles AC; **Amplifier Size** 16 1/4" x 10 1/4" x 9 3/4". E. R. P. I. Licensed.

**CHOICE OF MIKES:** The microphones shown with the systems on these pages will meet most needs. You can, however, have your choice of 99-332 V-I Velocity, or 99-334 Knight 631 Dynamic at \$4.00 additional. To determine choice of mike which will best fit your own needs, see detailed mike explanation on page 67. For complete descriptions of above microphones, see pages 91-93.

### THE 30 WATT "JIFFY" RENTAL SYSTEM

Here's a system that solves the toughest of all PA installation problems! No more speaker installation worries! Just walk in with this Portable System, and set it up in a jiffy. Don't worry about putting up speakers. The ingenious fold-down speaker tripod stands (see illustration at right) take care of it for you. Just mount the speaker cases on them and place wherever you want them. Stands can be extended from 46 to 78 inches; have adjustable swivels.



### COMPLETE "JIFFY" SYSTEM

Includes: Knight 30 Watt Amplifier with Phono top and tubes (less V.I. meter); 2—12' Safused Dynamic Speakers; Shure "Uni-plex" low-feedback microphone; take-down stand; compact portable case (22 1/2" x 19 1/4" x 15" closed); and 2—tripod speaker stands as described. With all necessary cables and instructions. For 110 volts, 60 cycles AC. Shpg. wt., 90 lbs. **\$97.75**  
**93-128. NET CASH PRICE.....**

**\$19.55 down, \$10.76 monthly for 8 months.**



# Knight 60 WATT DeLuxe SYSTEMS-ALL



COVERS UP TO  
12,000 PERSONS



STADIUMS



SKATING RINKS

SCHOOLS  
THEATRES  
CHURCHES  
MORTUARIES

SEE OUR EASY TERMS  
15 DAY TRIAL OFFER  
Full Details on Page 66

**\$72<sup>50</sup>** Amplifier, less  
tubes, meter &  
phono top

## FEATURES

- New! Biased Power!
- Inverse Feedback
- Power Driver
- Speaker Selector
- 6 Input Channels
- 2 Tone Equalizers
- Optional Phono
- 2 Phone Inputs
- Silencer Inputs
- Safety Fused
- Lighted Panel
- Master Control
- Universal Output

## AMPLIFIER SPECIFICATIONS

**Output:** 60 watts usable power output (peak 90 watts); hum is inaudible (60 db. below rated output); **Output Impedance:** 2, 4, 6, 8, 250 and 500 ohms on selector; designed for FM or self-excited Dynamic Speakers; **Input Channels:** Six, four for high-impedance mikes, two on faders; for phono **Tone Controls:** attenuator-type, one for treble, one for bass; **Gain:** on mike, 130 db., on phono, 80 db.; **Frequency Response:** 40-10,000 CPS; **Tubes:** 4-6SJ7, 2-6SN7GT, 1-6J5, 1-6F6, 2-6L6G, 1-83, 2-5U4G; **Line Drain:** 295 watts; **Fused:** fully fused for operation from 110-120 volts, 60 cycles AC; **Amplifier Size:** 19 1/4" x 14 1/4" x 11 1/4". E.R.P.I. Licensed.

## Knight 60 WATT DELUXE AMPLIFIER

Here's the "Niagara" of amplifiers—a full 60 Watt powerhouse with a tremendous output of sound that you can call on any time to deliver without ever a sign of "cracking up." Here's giant power for the biggest space-conquering job—yet you get velvety-clean, crisp reproduction!

**New! Bias Power Circuit!** Here's a new milestone in PA engineering—pioneered by Knight—proved in the field! For the first time in PA, the tremendous power potentiality of the 6L6G tube is fully realized. This is achieved by a new circuit development that provides a means for stabilizing the voltage applied to the 6L6G tubes. Thus, with two 6L6G tubes, you actually get the equivalent usable high-power formerly obtained with four tubes. Get the tremendous proof of Bias Power performance. Our 15 Day Trial will convince you!

**Inverse Feedback.** Gives you greater output—better tone quality. You can work the system at higher volume levels because distortion and hum are cut way down.

**Power Driver.** Assures you of gigantic reserve power to permit operation at peak levels with minimum distortion. You can actually hear the difference!

**6 Input Channels.** You can use any four high-impedance mikes along with any two phono pickups. Two of the microphone channels have individual controls; the remaining two are each combined on a single fader control with one each of the phono channels. Allows mixing and fading action as desired.

**Dual Tone Controls.** Give the tonal emphasis you want; help cut down feedback. Separate controls for bass and treble. Bass control, turned to farthest left, makes speech crisper and clearer for fine outdoor results. Gives you truly flexible control.

**Speaker Selector.** Speaker selector switch is provided for quick matching of any number and variety of speakers. Just set where volume and tone are best.

**Extra Features.** Has professional-type slanted, fully-illuminated Control Panel. Includes: Headphone Monitor Jacks; Silencer Jacks; Booster Outlet; Fused; diagram on base plate. Handsome all-steel case, finished in two-tone grey.

**60 Watt Amplifier Only.** Amplifier only as described, but less Phono Top, V.I. Meter, and tubes. For 110 volts, 60 cycles AC. Shpg. wt., 65 lbs. **\$72<sup>50</sup>**

**93-180.** Amplifier complete with RCA tubes. Shpg. wt., 68 lbs. **NET \$80.50**  
(For 110 volts, 25 cycles, add \$17.50.)

See Opposite Page For Optional and Accessory Equipment.



## 60 WATT PORTABLE SYSTEM

Here's the best answer to your need for high-powered PA, in convenient portable form. You can fill the biggest requirements with this 60 Watt Portable System in a jiffy, because it's easy to get it out on the job, quick to set up, and simple to operate for satisfactory results anywhere in the field. You can own this outfit and make it pay for you now, because only a few dollars down buys this giant-power Portable System.

**60 Watt Portable System Complete:** Includes Knight 60 Watt Deluxe Amplifier with tubes (less phono top and V.I. meter); portable case for amplifier with compartment for cables—2 1/2" x 17 1/4" x 17 1/4"; 1—Knight-Electro-Voice 631 Dynamic microphone with 25-foot cable and plug on take-down floor stand; 2—Knight Safused heavy-duty 12" Dynamic Speakers with 30-foot cables and plugs in split carrying case—21" x 13 1/2" x 10 1/2". With instructions. For 110 volts, 60 cycles AC. Shpg. wt., 140 lbs. **\$124<sup>75</sup>**

**93-190. NET CASH PRICE.....**  
\$24.95 down, \$13.73 monthly, for 8 months.

**93-215.** Extra Split-Speaker Case, complete with 2—12" Safused Dynamic Speakers, each with 30 foot cables and plugs. Recommended for larger coverage. Shpg. wt. 25 lbs. **NET PRICE.....\$22.95**



# THE POWER YOU'LL EVER NEED - *At Low Cost!*

COVERS UP TO  
65,000 SQ. FEET

ARMY CAMPS

FACTORY PAGING

ORCHESTRAS  
SHIPYARDS  
BAND SHELLS  
AIRPORTS



## Knight 60 WATT ALL-PURPOSE SYSTEMS

For larger, permanent installations, both indoors or outdoors, we offer a choice of 60 Watt Deluxe Systems as listed below. The 93-184 All-Purpose System, equipped with 4-12 inch Speakers in Kainer All-Steel Projectors, is ideal for covering large areas where sound must be projected over considerable distances or to overcome high noise levels. Recommended for skating rinks, armories, arenas, factories, warehouses, athletic fields, etc. The 93-185 Basic System, including 4-12 inch speakers without baffles, enables you to make use of your existing baffle equipment, to mount speakers in concealed custom installations, or to make any baffle choice you prefer (see page 97 for baffle selection).

**Blased Power Circuit.** This new Knight development assures you of huge power that is absolutely usable right up to its tremendous rated output without the least trace of "cracking up" as you turn up the volume.

**Six Input Channels.** Everything you could ask for; you can use any four high-impedance mikes and two phono pickups. Imagine it—here you have broadcast studio control of all six channels—only the most costly amplifiers have this feature.

**Inverse Feedback.** Another great feature that makes this system a "standout." Gives you greater output and better tone quality, because it cuts down hum and distortion.

**Dual Tone Equalizers.** Two separate controls permit desired variation of bass or treble tones—helps cut down feed-back—makes reproduction clearer and crisper.

**Power Driver.** Assures you of huge, usable reserve power for better reproduction on peaks. Another feature found only in the most expensive professional type amplifiers.

**Speaker Selector Switch.** You can match additional speakers to the system instantly and easily. Just set where tone quality and volume are best—no bother, no guessing.

**Safused Speakers.** Speakers can't be damaged by accidental overload; they're fuse-protected. Have smooth response which reduces reflection and reverberation.

**Extra Features:** Headphone Monitor Jacks; Silencer Jacks; Booster Stage Outlet; diagram on base plate; Fused. Beautiful all-steel case, with illuminated panel.

**Optional Equipment. Phono Top**—matched to the amplifier—available at small extra cost. **V.I. Meter or Monitor Speaker**—use as optional units, one for visual checking of output, the other for listening test.

**Complete 60 Watt System With Projectors.** Includes: 1—Knight 60 Watt Deluxe Amplifier with tubes (less phono top and V.I. meter); 1—Knight-Electro-Voice 631 Dynamic Microphone with 25-foot cable and plug, on floor stand; 4—Knight Safused heavy-duty 12" Dynamic Speakers in Kainer Steel Projectors with mounts, with 30-foot cables and plugs attached; complete instructions. For 110 volts, 60 cycles AC. Shipping weight, 205 lbs.

93-184. NET CASH PRICE..... **\$15750**

Terms: \$31.50 down, \$17.33 monthly for 8 months.

**Complete 60 Watt System, Less Projectors.** Same as 93-184, but does not include the All-Steel Projectors or mounts. Shpg. wt., 140 lbs.

93-185. NET CASH PRICE..... **\$128.75**

Terms: \$25.75 down, \$14.17 monthly for 8 months.

### OPTIONAL ACCESSORY EQUIPMENT

93-187. Phono Top for above. With new low-pressure Shure Crystal pickup. For 110 volts, 60 cycles AC. Shpg. wt., 15 lbs. NET..... **\$12.45**

85-000. V.I. Meter for use with above. Shpg. wt., 2 lbs. NET..... **\$4.75**

93-210. Monitor Speaker for above. Shpg. wt., 2 lbs. NET..... **\$4.25**

### CHOICE OF MICROPHONES

The microphones shown with the systems on these pages will answer most requirements. However, you may have your choice of 99-332 V-I Velocity or 99-304 Astatic DN Dynamic at \$1.50 additional; or 99-400 A perite Velocity or 99-355 Shure Uniplex Crystal at \$9.50 additional. (See page 67 for explanation on how to choose mike; see pages 91-93 for complete microphone descriptions.)



## 60 WATT "STADIUM" SYSTEM

Here's the system you'll choose if you're looking for an outfit to give you tremendous, penetrating coverage. The special All-Steel Trumpets supplied are designed to give you a powerful directional effect projecting sound over great distances. The 60 Watt "Stadium" System is recommended for the following applications which call for tremendous coverage: large stadiums, airports, high-power industrial paging; large skating rinks, circuses, bandshells, beaches, docks, freight yards, railway terminals, etc. Our 15 Day Trial Offer will convince you of the superiority and value of this super-powered 60 Watt "Stadium" System.

**60 Watt "Stadium" System Complete.** Includes Knight 60 Watt Deluxe Amplifier with tubes (less phono top and V.I. meter—see accessory listing at right), 1—Knight-Electro-Voice Type 631 Dynamic Microphone with 25-foot cable and plug, on Floor Stand; 4—Kainer heavy-duty All-Steel Trumpets, each complete with 15 Watt Driver Units and mounting brackets, with 30-foot cables and plugs; instructions. For 110 volts, 60 cycles AC. Shpg. wt., 215 lbs.

93-186. NET CASH PRICE..... **\$18750**

537.50 down, \$20.63 monthly, for 8 months.

**NOTE:** For special-purpose, Industrial or Institutional hi-power installations, consult our Sound Engineering Division. Recommendations will be supplied promptly; no charge or obligation for service.



# Knight 15-18 WATT De Luxe 6V.-110V. SYSTEMS



COVERS UP TO 4800  
SQUARE FEET OUTDOORS  
8000 SQ. FEET INDOORS

SOUND TRUCKS CARNIVALS

BEACHES CHURCHES

Also: Street Advertising  
Political Rollies • Schools  
Evangelists • Resorts

**15 DAY TRIAL OFFER—EASY TERMS**  
Just A Few Dollars Down  
Buys These Systems

- \* Inverse Feedback
- \* Illuminated Panel
- \* Safused Speakers
- \* Built-in Phono
- \* Stand-by Switch
- \* Dual Input Channels
- \* Bass-Treble Control
- \* Speaker Selector
- \* Beam Power Output
- \* Locking Mike Socket

## Knight 15-18 WATT ALL-PURPOSE SYSTEMS

We've gone "all-out" for Value in this popular low-priced Mobile Sound System! And you can prove it for yourself. Try out this System on our 15 Day Trial Offer (see page 66) and get real PA satisfaction—big usable output, handy operation, battle-ship ruggedness, and the kind of tone quality that spells "tops" in PA performance!

**Compact, Complete.** You get everything built-in—with phono included—ready to work from any 6 volt storage battery or from 110 volt AC line. Nothing like it for completeness!

**Easy to Operate.** It's easy to set up and use this Mobile Sound System. You don't need technical knowledge or previous PA experience. You can't make a wrong connection. All accessories plug in simply. Just set it up and get perfect results right from the start!

**Inverse Feedback.** This important feature gives you greater output, better tone quality; reduces hum and distortion so you can operate at higher volume. It's a quality PA feature.

**Safused Speakers.** Fused so they can't be damaged by over-load. An exclusive Knight development that gives you absolute speaker protection at all times.

**Two Input Channels.** Amplifier takes any high-impedance mike in addition to the built-in phono pickup. Each channel has individual volume control permitting mixing or blending.

**Bass-Treble Control.** Gives you just the tonal emphasis you want; cuts down feedback; assures clearer speech with greater penetration for outdoor work. Not just a gadget—but a truly useful feature you'll appreciate.

\$ **49**<sup>95</sup> Amplifier with phono top, less tubes.

**Speaker Selector.** Permits quick, accurate matching of additional speakers. Simply set selector where volume and tone quality are at their best. No guessing—no bother.

**Stand-By Switch.** Saves the battery, but keeps filaments ready for quick use. Adds extra hours of use from battery; a valuable economy feature you'll find useful in the field.

**And These "Extras."** Grip-tite Mike Socket; separately fused on 6 and 110 volts; change over from 6 Volts to 110 Volts just by changing power cables; lighted control panel same as in professional type equipment. Nothing has been overlooked; you get the most for your money.

**Complete 15-18 Watt Mobile System.** Includes 1—Knight 15-18 Watt 6 Volt-110 Volt Amplifier with tubes and built-in phono equipment; Shure Crystal PA Microphone with Desk Stand and 25 foot cable and plug; 2—12" Safused PM Dynamic Speakers with 30-foot cables and plugs; 2—All-Steel projectors; complete instructions. For 110 volts, 60 cycles AC, or 6 volts DC. Shpg. wt., 80 lbs.

93-052. NET CASH PRICE..... \$79.95

Terms: \$15.99 down, \$8.80 monthly for 8 months.

93-053. Same as above, but less projectors. NET PRICE..... \$69.95

## CHOICE OF MICROPHONES

The Shure Crystal Microphone shown with above systems will fill most requirements adequately. However, in place of Shure Crystal mike shown with 15-18 Watt Systems above you may have your choice of 99-332 Velocity or 99-334 Knight 631 Dynamic at \$4.00 additional; or 99-408 Amperite Velocity or 99-355 Shure Uniplex Crystal at \$12.00 additional. For complete descriptions of above microphones, see pages 91 to 93. See page 67 for explanation on how to select proper microphone.

For 94-000 Floor Stand in place of Desk Stand shown above, add \$2.60.



## "Utility Master"

### 15-18 WATT UNIVERSAL SYSTEM

Here's a system with which to cut yourself a real slice of profits. Rent it—sell it—operate it. 15-18 Watt Amplifier is same as described at left; with tubes and phono equipment. Accessories supplied include: Shure Crystal PA Mike with shoulder mount and 3-way stand, with 25 foot cable and plug; 4—12" Safused PM Dynamic Speakers; 2—Kainer steel projectors with mounting brackets; 1—car-top mounting platform for projectors; 1—Dual-speaker case (21" x 13 1/4" x 19 1/4" closed); 2—30 foot cords and plugs for speakers which mount in projectors; 2—100 foot cords and plugs for speakers which mount in dual case; complete instructions. For 6 volts DC or 110 volts AC. Shpg. wt., 135 lbs.

93-054. NET CASH PRICE..... \$112.95

\$22.59 down, \$12.43 monthly for 8 mos.

## AMPLIFIER SPECIFICATIONS

**Output:** Full 15 watts (6 volts), 18 watts (on AC) usable power output (23 watts peak); hum is inaudible (60 db. below rated output); **Output Impedance:** 4, 6, 8, and 500 ohms on selector; designed for PM Speakers; **Inputs:** Two, one for high impedance mike, one for built-in phono with individual controls; **Tone Control:** One bass-treble control; **Gain:** on microphone, 125 db., on phono, 75 db.; **Frequency Response:** 60-8000 CPS; **Tubes:** 1—6SJ7, 1—6SC7, 2—6L6G, 2—6X5G; **Line Drain:** AC—120 watts, DC—19 Amps total; **Fused:** fully fused for operation on 6 volts DC, or 110 volts, 60 cycles AC; Size: 16 1/4" x 11 1/2" x 10 1/4". E.R.P.I. Licensed.



### 15-18 WATT AMPLIFIER ONLY

Use this Universal Amplifier to build yourself a truly all-purpose System that you can use anywhere. You don't have to lose those outdoor or rural jobs, because here you have an amplifier which operates with equal efficiency from 6 volts or from 110 volts. Amplifier has all features described above. Supplied in sturdy, streamlined steel case, in two-tone grey finish; chrome carrying handles. With phono top. For 6 volts DC or 110 volts, 60 cycles AC. Less tubes. Shpg. wt., 30 lbs.

93-051. NET PRICE..... \$49.95

93-050. Amplifier as above, but with RCA tubes. Shpg. wt., 32 lbs. NET..... \$54.25



# Knight 30 WATT DeLuxe 6V.-110V. SYSTEMS



COVERS UP TO 10,000  
SQUARE FEET OUTDOORS,  
20,000 SQ. FEET INDOORS



BAND SHELLS



RINKS



PICNICS



ARMORIES

Cornivals • Fairs • Airports  
Sound Trucks • Sports Events  
Shipyards • Army Barracks



**\$74<sup>50</sup>**

Amplifier, with  
Phono Top, less  
tubes and meter.

- 110 V. AC or 6V.
- 4 Input Channels
- Electronic Mixing
- 2 Tone Equalizers
- Speaker Selector
- Safused Spokers
- Beam Power Tubes
- Inverse Feedback
- Built-In Phono
- Stand-by Switch
- Remote Control
- Universal Output
- Silencer Jacks
- Lighted Panel

## Knight 30 WATT ALL-PURPOSE SYSTEMS

This is the finest Mobile Sound System ever offered at this price! It's engineered right and built-right for Mobile service. Don't confuse it with ordinary equipment that can't "take it." Check the features, the easy operation, the ruggedness, the quality of this system for yourself. Our 15 Day Trial Offer will convince you!

**Works Anywhere.** Work it from any 6 volt storage battery; run it from 110 volts, 60 cycles AC. Whichever way you use it, we guarantee full 30 watts output. And it's just child's-play to set up and operate.

**Four Input Channels.** You can use any two high-impedance mikes along with phono pickup on amplifier and one additional phono pickup. You can control each mike separately. Phonos are operated by fader control, allowing you to blend as desired.

**Inverse Feedback.** Gives you greater output — better tone quality. You can work the system at higher output levels because distortion and hum are cut down to a minimum.

**Dual Tone Controls.** They give you the tonal emphasis you want; help cut down feedback. One control varies bass; the other varies treble. Bass control turned to farthest left makes speech reproduction crisper and clearer.

**Speaker Selector Switch.** Matches any additional speakers instantly—no guessing. Just set for best volume and tone quality.

**6 Volts or 110 Volts in a Jiffy.** You can change the System from 6 volts to 110 volts in an instant. Just change plugs at rear.

**15 DAY TRIAL OFFER—EASY TERMS**  
Just a Few Dollars Down  
Buys These Systems—See Page 66

**Extra Features.** Has illuminated Control Panel; Safused Speakers; stand-by Economizer Switch; Silencer Jacks check hum when mike plug is removed; six-contact Dual Speaker Outlets; Fused on 6 and 110 volts; diagram inside base plate; Headphone Monitor Jacks.

**Compact Single Unit Design.** Amplifier, high-grade single-speed motor, Low-Pressure Crystal pickup, 6 volt and 110 volt power supplies, and all controls and connecting receptacles are assembled in one compact modern steel case; size, 19 1/2" x 14 1/4" x 13 1/4".

**Complete Deluxe Mobile System.** Includes: 1—Knight 30 Watt Deluxe Amplifier with AC and battery cables; built-in phonograph motor and pickup; 6 volt and 110 volt power supplies, and tubes; 1—Knight Electro-Voice 631 Dynamic Microphone with 25-foot cord and plug with either desk stand or shoulder mount (specify choice); 2—Knight 12-inch Safused PM speakers with 30 foot cords and plugs; instructions. For 6 volts DC or 110 volts AC, 60 cycles. Shpg. wt., 90 lbs.

**93-152. Complete Knight 30 Watt System** (less V. I. meter and **\$10275**  
steel projectors).  
**NET CASH PRICE** .....

\$20.55 down, \$11.31 monthly for 8 mos.

**93-153.** Same as 93-152, but with 2—Kainer steel projectors and mounting brackets (as in large illustration above) added. Shpg. wt., 130 lbs.  
**NET PRICE** .....

\$23.35 down, \$12.85 monthly for 8 mos.

### OPTIONAL ACCESSORIES

85-000, V. I. Meter. NET ..... \$4.75  
93-210, Monitor Speaker. NET ..... \$4.25  
85-001, Remote Control. NET ..... \$2.95  
93-220, Car-Top Platform. NET. \$4.41  
For Floor instead of Desk Stand add \$.240

### CHOICE OF MICROPHONES

You may have your alternate choice of 99-332V-1 Velocity or 99-304 DN Dynamic at \$1.50 additional; or 99-400 Amperite or 99-355 Uniplex Crystal, at \$9.50 additional.

### AMPLIFIER SPECIFICATIONS

**Output:** 30 watts usable (37 peak); hum is inaudible (60 db. below rated output); **Output Imp.** 2, 4, 6, 8, 250, and 500 ohms on selector switch; for PM Speakers; **Input Channels:** Four, two for high-impedance mikes, each with individual controls, two for phono on fader control; **Tone Controls:** Two, attenuator type, one for treble, one for bass; **Gain:** on microphone, 135 db., on phono, 80 db.; **Response:** 40—10,000 CPS; **Tubes:** 2—6S7, 1—6SA7, 1—6SC7, 2—6L6G, 2—6X5G. **Drains:** 140 Watts, 24 Amps, D.C.; **Stand-by Switch:** saves battery. **Size:** 19 1/2" x 14 1/4" x 13 1/4". E.R.P.I. Licensed.



### 30 WATT PORTABLE SYSTEMS

Here's the 30 Watt Mobile System in handy Portable form; comes in two compact cases—one for amplifier (with compartment for cables, etc.), 22 1/2" x 17 1/4" x 17 1/4"; the other a split-case for the speakers, 21" x 13 1/4" x 10 1/4". Includes: 1—Knight 30 Watt Amplifier complete with tubes and phono top; 2—12" Safused PM Speakers with 30 foot cables and plugs; two carrying cases; 1—Knight-Electro-Voice 631 Dynamic Microphone with 25 foot cable and plug; 1—take-down floor stand; instructions. Shpg. wt., 120 lbs. Less V. I. Meter. **93-160. NET CASH PRICE** .....

\$117.75  
\$23.55 down, \$12.96 monthly for 8 mos.

**93-161, Special All-Duty System.** "Tops" for instant mobile installations or for quick indoor or outdoor set-ups. Includes all equipment described above, plus 2—95-231 Kainer Marine Horns with 15 watt driver units and mounts and 30 foot cords and plugs; car-top speaker platform; 100 foot cables on speakers in cases; and shoulder mike mount. Shpg. wt., 170 lbs.  
**NET CASH PRICE** .....

\$162.50  
\$32.50 down; \$17.88 monthly for 8 mos.

### 30 WATT AMPLIFIER ONLY

Make your present PA equipment universal in operation and in addition, get the high power you need for those bigger outdoor and indoor jobs. Amplifier has all features described above. In streamlined all-steel case; finished in two-tone grey with chrome trim and chrome carrying handles. Has illuminated panel with attractive control plates. With phono top. For 6 volts DC or 110 volts AC. Less V. I. meter and tubes. Shpg. wt., 60 lbs.  
**93-151. NET PRICE** .....

\$74.50

**93-150.** Amplifier as above, but with RCA tubes. Shpg. wt., 62 lbs. **NET PRICE** \$79.65





# SOUND EQUIPMENT FOR THE MODERN ORCHESTRA

GLENN MILLER'S  
ORCHESTRA

## POPULAR ORCHESTRA SYSTEM

We went out and talked to orchestra leaders, asked them what they were looking for in a Sound System. And here's the result of our research—a low-cost, dependable, and complete Portable Sound System that's "right in the groove." The same high-quality workmanship which went into the Knight PA System used by Glenn Miller's Orchestra, is yours at a popular price you can afford. We've thought of everything any orchestra would want—and you'll find in this System the power, the versatility, the convenience you need. There's nothing to wrestle with—it sets up in a hurry—works right and does right by your outfit, both on voice and instruments. It's easy to carry, too—a feature you'll really appreciate. You get full 30 watts output—and that will take care of practically any size job—whether barn-dance, swanky ballroom, theatre, resort, bandshell, etc. And it will do real justice to your vocals, your ensembles, and your arrangements, because it's quality-designed for wide-range tonal reproduction.

**Specifications:** 30 Watt Deluxe Amplifier (see page 73) features: Inverse Feedback; has individual controls for each of the two microphones supplied—permits blending of vocalist and background. Includes: tone control; mike silencer jacks; line fuse; uses 2—6SJ7, 2—6SC7, 2—6L6G, 1—5U4G. Two microphones supplied are: Electro-Voice V-1 Velocity type for best instrumental pickup; Electro-Voice 630 Dynamic—ideal for vocal work. Each mike has 25-foot cord and plug, and both mount on adjustable floor stands included. There are two 12-inch Dynamic speakers, with 30-foot cords and plugs. Speakers and amplifier mount in single, split-type portable case; 22½" x 19¼" x 15".

**93-162.** Complete 30 Watt Orchestra System with Amplifier and tubes, 2—12" Speakers, 2 Microphones, 2 Floor Stands and Portable Case as described above. With necessary cables and instructions. For 110 volts, 60 cycles AC.

Shipping weight, 78 lbs. **\$8750**

**NET PRICE** .....

Terms: \$17.50 dpwn, \$9.63 monthly, for 8 months.

## HIGH-FIDELITY PHONOGRAPH



### HIGH-FIDELITY MOTORS & PICKUPS

**PRESTO MODEL 11-A DUAL-SPEED MOTOR.** (Fig. A). A professional phonograph motor and turntable designed for constant-speed playback of either 78 or 33½ RPM records up to 16-inch size. Induction-type heavy-duty motor drives heavy, balanced 12-inch turntable through an exclusive rubber tire on turntable rim. Simple lever makes easy change from 78 to 33½ RPM. Mounted on brown metal base. Mounting space required is 14½" x 12½"; 5" below panel. For 110 volts, 60 cycles AC. Shpg. wt., 20 lbs.

**85-100, NET PRICE**..... **\$55.00**

**ASTATIC FP-38 HIGH-FIDELITY CRYSTAL PICKUP.** (Fig. B). An excellent Low Pressure Crystal pickup of radically new design. Provides finest high-fidelity reproduction. Needle pressure is only one ounce; preserves record life. Includes permanent sapphire stylus; protective U-shaped guard prevents injury to stylus. High-fidelity response, 30-10,000 CPS. High-impedance type. Plays both 10 and 12-inch records. Staturey bronze finish. Shpg. wt., 2 lbs.

**65-100, NET PRICE**..... **\$9.70**

**BRUSH PL-25 HIGH-FIDELITY CRYSTAL PICKUP.** (Fig. C). The finest high-fidelity Crystal pickup available. Has featherweight one-ounce needle pressure which minimizes record wear and needle scratch. Includes permanent sapphire point needle, especially polished and contoured to fit record grooves perfectly, resulting in minimum scratch and greater fidelity. Frequency response is 30 to 10,000 CPS. Has attractive staturary bronze finish. Tangent head type to assure correct needle tracking. Shpg. wt., 7 lbs.

**65-000, NET PRICE**..... **\$16.17**

### Knight 20 WATT HIGH-FIDELITY AMPLIFIER

It's here at last—America's finest deluxe truly high-fidelity Phonograph Amplifier—especially designed for those who are not satisfied with ordinary phonograph record reproduction. Designed solely for phonograph record reproduction, and intended for use only with high-quality accessory components, it is outstanding for its ability to impart to all recordings depth and faithfulness that are truly astounding. Developed for home use or for Schools, Recording Studios, Broadcast Stations, Theatres, Clubs, Dining Salons, etc.

**AMPLIFIER SPECIFICATIONS.** The Knight 20 Watt Deluxe Phono Amplifier has every advanced feature for high-fidelity reproduction. Includes **Inverse Feedback** which imparts triode qualities to the 6L6G Beam Power output stage and yet preserves the well-known efficiency of the 6L6G tubes; improves tone quality and reduces hum and noise. Has continuously-variable **Automatic Volume Expansion**—this fine feature automatically builds up the louder passages to their true volume value, maintaining the correct balance between the loud and soft passages of the original recording. **Bass and Treble Equalizers** are incorporated; they actually add emphasis or attenuate highs and lows individually. **Dual Phono Input** on fader control permits the use of two turntables. **Master Control** reduces internal amplifier noise and hum. **Output Impedance** is 2, 4, 6, 8, 250 and 500 ohms to match any speaker. **Hum Level** is negligible: 60 db. below rated output. **Gain** is 80 db., sufficient for use with any type of high-impedance pickup. **Frequency Response** is high-fidelity—flat within ± 2 db., 30 to 12,000 CPS. Tubes used are: 1—6L7, 1—6H6, 1—6C8G, 2—6L6G, 1—5Z3. Amplifier size: 17¼" x 11¼" x 9¾". Power drain is 165 watts.

**93-101.** High-Fidelity 20 Watt Phonograph Amplifier only. Less tubes. Shpg. wt., 30 lbs. **\$3175**

**NET PRICE**.....

**93-100.** Amplifier with RCA tubes. Shpg. wt., 32 lbs. **NET**..... **\$36.25**

**IMPORTANT**—To achieve High-Fidelity results, it is essential to match this Amplifier with High-Fidelity accessory components. See listings at right.



**GLENN MILLER ORCHESTRA**

REGISTERED PATENT  
VICTOR RECORDING WORKS

Allied Radio Corporation  
637 West Jackson Boulevard  
Chicago, Illinois

Gentlemen:

We, naturally, have an opportunity to use and hear many kinds of sound systems and, therefore, feel that we should tell you about the excellent results we have had with our new Knight system.

Our chief requirement for a sound system is high fidelity of reproduction. We want just out of the system exactly what we put in with no distortion or other noise. When using different instruments and under varying acoustical conditions, I want just as much power and clear tone.

We were particularly impressed by the reduced feedback or howling which we often encountered with so many other systems. You have certainly done wonders in reducing this condition in Knight equipment.

Having about as an eq. we also wanted a system which could be carried around easily and do set up in a hurry. Your system to build a set which is so simple to set up and operate.

You can count on me as a satisfied user. It is Knight for me from now on.

GLENN MILLER  
GLENN MILLER  
GLENN MILLER

N. Y. OFFICE  
3302 B.K.O. BLDG.  
NEW YORK CITY

N. Y. OFFICE  
COTTSWOLD-BENTON BLDG.  
TENAFLY, N. J.



**Knight 4 WATT PHONO AMPLIFIER**

Now, for the first time, you can get a high-quality AC-DC amplifier around which to build your own record-reproducing unit at economical cost. Measures only 4" wide, 8" long, and 7" high, exclusive of tubes. Overall height with tubes inserted is only 6 1/2". Uses 1-6C8G, 2-25L6G, 1-25Z5 tubes, and 1 ballast. Will operate from any 110 volt, AC or DC outlet; produces full 4 watts output. Amplifier has innut for high-impedance crystal pickup. Output is 3000-4000 ohms for operation with a PM Speaker having an output transformer. Has tone control. Less tubes, 8 lbs. **\$585**

- 93-001. Amplifier, with Extended Leads. Same as above, but with controls located on 36" leads for mounting on cabinet or motorboard. Shpg. wt., 9 lbs. Less tubes. **\$6.50**
- NET PRICE.....
- 93-005. Tube Kit for above amplifiers. NET... **\$2.47**
- 82-022. Jensen 8" PM Speaker for use with above amplifiers. Shpg. wt., 4 lbs. Less transformer. NET... **\$3.38**
- 64-801. Output transformer to match above speaker or any speaker to phono amplifiers. NET..... **\$1.03**

**Knight VOLUME EXPANDER**

Builds up the louder passages of recordings to their true volume, maintaining a correct balance between the loud and soft passages of the original. Uses 1-6N7G, 1-6K7G, 1-6H6G, 1-6X5G. With volume and expansion controls. (Not a record player—for use as record-playing accessory only.) 1 1/4" x 6 1/4" x 8 1/4". For 110 V., 50-60 cycles, AC. Shpg. wt., 12 lbs. Less tubes. **\$11.25**



- 83-320. Your Price **\$11.25**
- 83-321. Tube Kit... **\$2.06**



**ORCHESTRA RECORDER**

No progressive orchestra is complete without a quality Recorder. Essential for rehearsal work, for instruction, for vocal improvement, etc. Make orchestral recordings take the place of expensive personal auditions to get new business. Recorder is Presto Dual-Speed Model K8, fully described on page 83.

**96-000. NET PRICE.....\$275.00**



Glenn Miller and Marion Hutton

**EQUIPMENT FOR THOSE WHO WANT THE BEST...**



**SPEAKERS AND RECORD CHANGERS**

**JENSEN MODEL BR BASS REFLEX ENCLOSURE (Fig. D).** Especially designed for housing any high-fidelity 12-inch loudspeaker. Improves tonal performance; adds octaves to low frequency response and greatly improves middle and high frequencies. Cabinet is ruggedly constructed of heavy wood with attractive brown lacquer finish and decorative trim. Size: 30 1/4" x 23 1/4" x 12 1/2". Shipped knocked-down; easy to assemble; with hardware. Shpg. wt. 47 lbs. **\$15.58**

**JENSEN HIGH-FIDELITY MODEL JCP40 DUAL LOUDSPEAKER (Fig. E).** A new speaker achievement—actually two speakers in one with built-in frequency dividing network. Especially developed for high-fidelity reproduction. The 12-inch PM "woofer" section handles the low frequencies; the cone type PM "tweeter" handles the highs. Frequency response, 50-10,000 CPS, with substantial contribution even in the 12,000 CPS region. Handles 8-10 watts of audio power. Voice-coil impedance, 6 ohms. Shpg. wt., 16 lbs. **\$17.35**

**GARRARD RC-30 RECORD CHANGER (Fig. G).** One of the finest Automatic Record Changers made. Plays up to eight 10" or 12" records inter-mixed, at 78 RPM. Includes high-fidelity type Crystal Pickup with one-ounce needle pressure and permanent sapphire-point needle for minimum record wear. Response of pickup is 30 to 7500 CPS. Size: 15" x 11 1/4" x 5 1/2" above and below panel. For operation from 110-130 volts, 60 cycles AC. Shpg. wt., 20 lbs. **\$44.10**

**GENERAL INDUSTRIES C-125L RECORD CHANGER (Fig. F).** A moderately-priced, dependable Automatic Changer suitable for high-fidelity work. Equipped with new low-pressure crystal pickup. Plays twelve 10" or ten 12" records automatically at 78 RPM; lever changes from one size to the other. Response of pickup is 30 to 7,000 CPS. Size: 14" x 14"; mechanism requires 5/8" above and 3 1/2" below base plate. For 110 volts, 60 cycles AC. Shpg. wt. 35 lbs. **\$19.65**

**HIGH-FIDELITY RADIO TUNERS**

**MEISSNER AM TUNER (Fig. H).** A high quality straight AM Tuner. Uses Tuned RF circuit having a total of four-tuned circuits to provide excellent sensitivity and selectivity. 5/4" Slide-Rule dial. Tuning range covers standard broadcast band from 530 KC to 1500 KC. Ferrocart RF coils. Has AVC. Built-in power supply. Output impedance from low-gain coupling stage is 2500 and 10,000 ohms. Black wrinkle-finished steel cabinet. 8 1/4" x 8 3/4" x 12 1/2". Tubes: 3-6K7, 1-6H6, 1-6F8G, 1-5Z4. For 110V., 60 cycles AC. Less tubes, 11 lbs. **\$37.25**

**KNIGHT 3-BAND TUNER CHASSIS (Fig. I).** Tunes 3 full bands: 1.7-6 MC; 5.6-19 MC; 540-1650 KC. Includes: built-in loop antenna; push-button tuning; 6 1/4" x 4" dial; seven tube Superhet circuit (including rectifier); AVC; RF Stage, tuning eye, etc. Chassis type for mounting in your own cabinet; size: 8 1/2" wide, 9" deep, 8 1/2" high. Complete with tubes. **\$28.75**

**HALLICRAFTERS FM/AM TUNER (Fig. J).** Receives both Amplitude-Modulated broadcasts and the new high-fidelity Frequency-Modulated (FM) programs. Incorporates eight tubes in a superhet circuit, including rectifier. Tunes 540-1650 KC for AM Broadcasts, and 40-51 MC for FM reception. Has "S" Meter. Easy to use. In steel case for rack panel mounting; panel size: 19" x 8 1/4". Complete with tubes. For operation from 110 volts, 60 cycles AC. Shpg. wt., 70 lbs. **\$74.50**

97-530. Model S-31 FM/AM Tuner. NET..... **\$74.50**  
97-531. As above, but in chassis form. NET **\$69.50**





**1100 Watt Complete**  
 with 25' cord and 1/2" speaker  
 \$11.50

Dear Sirs: We have a special offer on our 1100 Watt Complete System. This system is designed for use in churches, schools, homes, and other places where a clear, powerful sound is desired. It includes a 1100 Watt Amplifier, a 25' cord, and a 1/2" speaker. The price is \$11.50. This is a great value for the quality and power of the system. We have a limited supply of these systems, so order now to avoid disappointment.

Let us tell you more about our 1100 Watt Complete System. This system is designed for use in churches, schools, homes, and other places where a clear, powerful sound is desired. It includes a 1100 Watt Amplifier, a 25' cord, and a 1/2" speaker. The price is \$11.50. This is a great value for the quality and power of the system. We have a limited supply of these systems, so order now to avoid disappointment.

The 1100 Watt Complete System is designed for use in churches, schools, homes, and other places where a clear, powerful sound is desired. It includes a 1100 Watt Amplifier, a 25' cord, and a 1/2" speaker. The price is \$11.50. This is a great value for the quality and power of the system. We have a limited supply of these systems, so order now to avoid disappointment.

We have a limited supply of these systems, so order now to avoid disappointment.

Yours truly,  
 Kenneth Jones,  
 1100 Watt Complete System



### Knight HEARING-AID SYSTEM

For use in churches, theaters, schools, lodges, etc., to bring new enjoyment to the hard-of-hearing, at remarkably low cost, with absolute freedom from annoying hum, noise or buzz. Can be quickly installed anywhere by anyone from clear easy-to-follow instructions provided. Individual listeners may vary volume to suit their own requirements by means of small volume control boxes. 30 Watt Amplifier (full description on page 68) below. Responsible to hook up wires. Sound pickup unit (Fig. A) is special high sensitivity static-velocity type with 25 foot cord and plug for 110 volts, 60 cycles AC.

**93-200. Knight Hearing-Aid System with tubes and instructions.** (Select accessories below.) 25 lbs. **\$26.75**

**85-015. Fig. B. Hearing-Aid Volume Control Box.** Permits use of hearing aid in any room. Includes 25' cord and 1/2" speaker. 25 lbs. **\$1.65**

**59-155. Fig. C. Crystal Earphone with 5ft. cord...** **\$2.92**

**59-157. Fig. D. Longnote Phone with 5 ft. cord...** **\$3.82**

### Knight "ECCLESIA" CHURCH SYSTEM

A new, complete loud-speaker system designed and priced to fit the requirements of the modern church. Not just an ordinary assembly of parts, but a specially designed and matched system based on long experience and study of Church needs. Now, every church, large or small, can afford this high-quality "Ecclesia" loud-speaker system. It is supplied as a complete assembly, easy to install and of the utmost simplicity in operation. No previous experience or special skills required to obtain satisfactory results right from the start.

What "Ecclesia" Will Do For Your Church: The possession of an "Ecclesia" System is of inestimable value to your church, enabling the congregation to hear with greater ease and to participate to the fullest in the inspiration of the church services. The "Ecclesia" System will reinforce sermons and choir with excellent results. It will provide a clear, powerful sound for all church functions. To add excellent hearing-aid facilities for hard-of-hearing church members. Additional speakers may easily be added to cover overflow crowds, social functions, etc. The use of the optional piano top listed below offers many interesting applications; useful for record entertainment at church socials; ideal for smaller churches without organs, permitting the reproduction of record or piano, recorded organ music, etc. Every church can afford the moderately priced "Ecclesia" System.

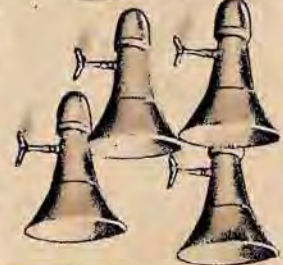
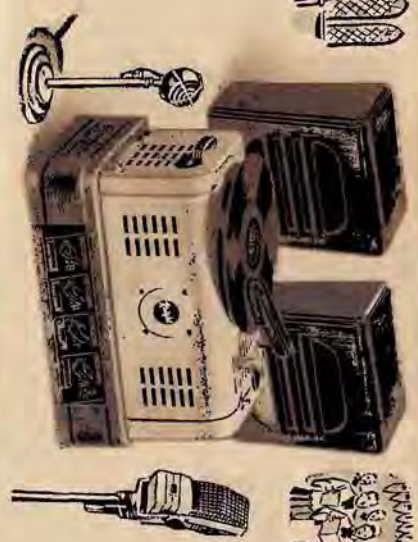
"Ecclesia" Specifications: Amplifier has 30 watts output; (see page 73 for full description). Features two separate microphone inputs with individual controls; however, Reed-Talk, the Queda standard control is supplied on each stand. The input stand has 30 foot cords in walnut wall baffles. For 110 volts, 60 cycles AC.

**93-170. NET PRICE \$16.90 down, \$8.30 monthly for 8 months.**

"Ecclesia" System Complete, Includes: Knight 30 Watt Deluxe Amplifier with tubes; Shure Unimark Crystal microphone and desk stand; Electro-Voice V-1 Velocity mike on floor stand—each with 25 foot cord; 2-12" Knight Speakers with 30 foot cords in walnut wall baffles. For 110 volts, 60 cycles AC. **\$84.50**

NET PRICE \$16.90 down, \$8.30 monthly for 8 months.

**93-045. 15" Mono Top for the "Ecclesia" System.** For 110 volts, 60 cycles AC. Shipping wt., 15 lbs. **NET \$7.75**



### Knight "ECCLESIA" CHIMES SYSTEM

Bring the spirit of your church into your community with this special "Ecclesia" System designed for powerful outdoor broadcast of chimes, organ music or choir. Available in two sizes: 12-inch and 18-inch. The 12-inch system will carry to your community, choir and solo music, organ recitals, chimes, and sermons; it can be used to create a festive atmosphere on church holidays, etc. In addition, with the accessories listed at right, it can also serve for sound reinforcement for church socials, for first-aid applications, etc.

**Easy to Install and Operate.** The "Ecclesia" Chimes System is designed for easy installation. It is quick, simple installation by anyone. It's easy to operate, too! There's no special skill needed.

**Fits Your Church Budget.** The "Ecclesia" System is designed for the best value of money and cordials. At a truly budget-minded price, it places within the reach of even the smallest church, all the advantages, dignity and prestige of powerful church chimes broadcast as well as other useful sound reinforcement applications.

### SUNCO CHIMES RECORDS

Two-sided 78 RPM 12-inch acetate records; vibro-harp and chimes.

#### List of Titles

1. Rock of Ages—Lead Kindly Light
  2. Evening Star—Goin' Home
  3. Beautiful Isle of Somewhere—Whispering Hope
  4. Abide With Me—Nearer My God to Thee
  5. Sweet Hour of Prayer—Face to Face
  6. End of a Perfect Day—Day is Dying in the West
  7. Stand Up, Stand Up for Jesus—How Firm a Foundation
  8. Bell Ringing—Centenary Chimes
  9. Westminster Chimes—Doxology
  10. Largo (Handel)—Weggedel
- 93-230. Specify Titles. NET, EACH \$3.00**





## Knight BASIC SCHOOL SYSTEM

Every school, large or small, can now afford its own Centralized Sound System. Here is the complete low-cost answer to the school demand for a dependable and versatile system that will provide adequate coverage and fine tone quality. (Lack of ready funds need not delay your purchase—for Easy Terms, see page 66.)

**For Voice and Record Transmission.** This 30 Watt School System permits the transmission of speech and recordings to any individual speaker or to any group of speakers at will. Selection of desired speakers is made by means of a compact switch box, containing twenty-five switches, each controlling a separate speaker. Permits the relaying of educational talks and programs, of emergency calls, musical and educational recordings, etc. Installation and operation are simple. Practical for any size school.

**Use Up To 25 Speakers.** The Knight Basic School System is built around the Deluxe 30 Watt Amplifier (full description on page 73) which is capable of driving up to 25 dynamic speakers. Affords coverage of classrooms, auditorium, gymnasium, study-hall, cafeteria, etc. Unusually flexible and versatile.

**Basic School System.** Includes: 1—Knight 30 Watt Amplifier with built-in Phono Top and RCA tubes; Shure Crystal Microphone with 25 foot cable and plug, on desk stand equipped with switch; 1—8" Dynamic Speaker in wall baffle with volume control for monitor use to check program broadcasts at point of control; special 25-position Selector Switch Box. With instructions. (See below for accessories.) Shpg. wt., 65 lbs.

93-171. NET CASH PRICE..... **\$875**  
 Terms: \$16.35 down, \$9.00 monthly for 8 months.

## ADDITIONAL SCHOOL SYSTEM EQUIPMENT

- 93-206. Standard 8-inch Dynamic Room Speaker, in wall baffle as illustrated above. Use one of these speakers in each Classroom, Study-Hall or wherever program coverage is desired. Wt., 8 lbs. NET..... **\$4.95**
- 93-207. 12-inch Speaker for auditorium or gymnasium; in wall baffle. Handles more power for bigger coverage. Shpg. wt., 9 lbs. NET..... **\$7.75**
- 47-591. Special 2-conductor speaker connecting cable. 100 Feet..... **\$2.18**
- 85-010. Switch Box only. 12" x 9" x 4 3/4". Wt., 5 lbs. NET..... **\$27.50**  
 (Bring radio broadcasts into the classroom—see Radio Tuners on page 79.)

## Knight SCHOLASTIC RECORDER

Progressive educational institutions have been quick to grasp the advantages of Recording Equipment as an aid to learning; ideal for speech correction work, in musical and language instruction, in dramatic work, etc. The low-cost Knight Scholastic Recorder makes possible the ownership of this quality equipment by any school.



This low-priced complete Dual-Speed Recorder is actually three instruments in one: (1) an easily-operated Recorder; (2) an efficient Record Player; (3) a complete 3 watt Public Address System. Enables your students to make their own records of speech, singing, etc., or to take educational programs "off the air." Plays back the recordings you make, as well as all commercial 10" or 12" records. Employs crystal cutting head and low-pressure crystal playback pickup. Cuts records up to 10" in diameter, outside to inside, grooving 110 lines per inch. Equipped with powerful dual-speed induction motor, with internal rim drive; cuts at either 78 or 33 1/2 RPM.

The Knight Scholastic Recorder is supplied complete, ready for operation. Has Shure Crystal microphone with desk stand. An efficient 6" Electro-dynamic speaker is mounted at front of case. Amplifier uses five tubes. Has selector switch for instant shift from "Recording" to "Playback" or "PA"; Volume control and on-off switch; Tone Control; and separate motor switch. In airplane luggage cloth case; size: 16" x 16" x 14" high. With tubes. For 110 volts, 60 cycles AC. Shpg. wt., 40 lbs.

96-210. Knight Recorder Complete..... **\$54.75**  
 NET PRICE.....

# THE Knight "SOLO KING"

Amplify your musical instruments—get distinctive new musical effects and wide-penetrating coverage with these "Solo King" Systems. Help to put new pep into swing arrangements, to bring up feature passages, for fades, overtones, treble endings, etc. **Tiny Contact Pickups** (Fig. A) may be attached to your own string or reed instrument with adhesive tape or special clamp (see page 93). **Special Electric Guitar** comes complete with its own built-in pickup. Has provision for easy attachment to system.

## 14 WATT BASIC "SOLO KING" SYSTEM

Consists of: 14 Watt High-Gain Amplifier, 12-inch Speaker with 30 foot cable and plug, housed in a compact portable case, 22 1/2" x 19 1/4" x 15". (See complete amplifier description on pages 70-71.) Case has space to accommodate an additional speaker. System includes Foot-Pedal Volume Control (Fig. B) which leaves your hands free to play, yet allows you to produce tremolos, fading effects, etc. System is designed for easy operation; no technical knowledge is required. Includes complete instructions. For 110 volts, 60 cycles AC. **\$45.95**  
 With tubes. Less Contact Pickup. (See accessories below.) Shpg. wt., 59 lbs.

93-037. NET CASH PRICE..... **\$45.95**  
 TERMS: \$9.19 down, \$5.06 monthly for 8 months.

## 7 WATT BASIC "SOLO KING" SYSTEM

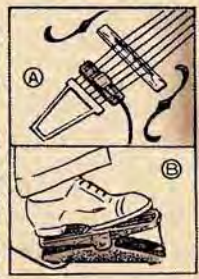
An ideal Economy "Solo-King" System for small orchestras and soloists. Has good output and surprisingly fine tone quality. Consists of Knight 7 Watt amplifier and tubes (see page 68); foot-pedal volume control and 25 foot cable and plug; one 8" Speaker with 30 foot cord and plug; all in a single carrying case 13 3/4" x 13 3/4" x 10 1/2". Wt. 32 lbs.

93-016. NET PRICE..... **\$28.50**

## "SOLO KING" ACCESSORIES

- 85-800. Amperite SKH Kontak Pickup with 15 foot cable and plug, for use with above systems. (See page 93 for description.) Shpg. wt., 2 lbs. NET PRICE..... **\$7.06**
- 85-850. Knight Contact Mike with 15 foot cord and plug. (See page 93.) Shpg. wt., 2 lbs. NET PRICE..... **\$5.85**
- 85-050. Standard Electric Guitar. Illustrated above. Has 19" scale. Comes complete with built-in high impedance magnetic Pickup unit. Has 7 1/2 foot cord and plug for quick attachment to PA system. Shpg. wt., 5 lbs. NET PRICE..... **\$10.75**
- 85-051. Carrying Case for above Guitar. Shpg. wt., 5 lbs. NET PRICE..... **\$1.95**
- 85-055. Finger-Pick Set for Guitars. Shpg. wt., 2 lbs. NET PRICE..... **85c**
- 85-056. Instruction Book for Electric Guitars. Shpg. wt., 1 lb. NET PRICE..... **75c**

14 Watt System



7 Watt System





**STANDARD**

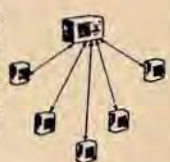


**DE LUXE**

## AUTOMATIC • DEPENDABLE • INSTANTANEOUS SYSTEMS FOR EVERY PURPOSE

### MASTER SELECTIVE SYSTEMS — FILL 90% OF ALL INTERCOM REQUIREMENTS

Your intercommunication problems can now be solved—dependably, economically—with the Knight Master Selective Systems. Master Selective systems consist of one Master Station and as many Sub-Station units as are required, up to a total of five or ten. You can build up your system progressively—beginning with the Master Station and one Sub-Station, and adding other Sub-Stations as the need develops. Master Station may call any Sub-Station individually, for completely private conversation, or may call all Sub-Stations simultaneously for paging, general announcements, etc. Sub-Stations may call Master Station but not each other. Operate with full efficiency with as much as 2,000 feet of cable on each Sub-Station.



Master Selective Systems feature: **Silent Operation**—shuts out all sounds from Sub-Station locations when system is not in use. **Far-Reaching Power**—voice will carry clearly 25 to 30 feet from Sub-Station unit. Person called at Sub-Station may answer from same distance without leaving his work as there are no switches to operate when answering calls. Volume easily adjusted from a whisper to full room volume. **Remarkable Economy**—complete system can be operated for only 15 to 20 cents per month for electric current. **Operate Anywhere**—work from 110-115 volts AC or DC. **Handsome Design**—All Master Station units are housed in rich walnut-finished cabinets; Standard Sub-Stations have metal cabinets; deluxe Sub-Stations have walnut cabinets.

#### STANDARD MODELS

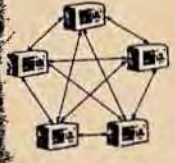
- Standard models have 1-watt output; person at Sub-Stations may answer from distance up to 25 feet. Handles one to five Sub-Stations. Master Station in roll-top walnut-finished cabinet. 9 3/4" x 8" x 5 3/4"; Sub-Stations in metal cabinets. 7" x 5 3/4" x 3 3/4".
- 95-800. Standard Master Station.** Shpg. wt., 12 lbs. **\$15.95**  
Complete with tubes and instructions; less cable.
  - 95-801. Standard Sub-Station.** Shpg. wt., 5 lbs. **NET. \$5.75**
  - 49-600. Connecting Cable.** **NET PER 10 FEET. 19c**
  - 95-810. MASTER STATION FOR 10 SUB-STATIONS.** For use with from one to ten Sub-Stations. Use Sub-Stations and cable listed above. Shpg. wt., 12 lbs. **NET. \$19.95**

#### DE LUXE MODELS

- 2 1/4 watts output. Handles up to 10 Sub-Stations. Picks up voice 50' from Sub-Station. Master Station in walnut-finished cabinet. 12" x 6" x 5 3/4"; Sub-Stations in walnut-finished cabinets. 7 1/2" x 6" x 4".
- 95-815. Deluxe Master Station.** Complete with tubes, junction box, and instructions. Shpg. wt., 14 lbs. **\$28.50**  
**NET.**
  - 95-816. As above but with privacy earphone.** Lifting earphone automatically disconnects loudspeaker. Shpg. wt., 15 lbs. **\$36.50**  
**NET.**
  - 95-817. Deluxe Sub-Station Unit.** Shpg. wt., 6 lbs. **NET \$8.95**
  - 49-601. Connecting Cable.** **NET PER 10 FEET. 35c**

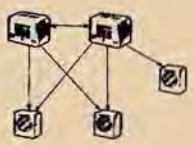
#### SUPER-SELECTIVE SYSTEMS

Here is an unusually versatile, low-cost intercommunication system offering complete privacy of conversation and flexibility to meet all kinds of requirements in industry, offices, institutions, etc. Consists entirely of Master Station units so that several separate two-way conversations may be carried on simultaneously without cross-talk. Up to 2000 feet of cable may be used between stations. Any station may talk to any other station at will. Silencing feature eliminates all sound pickup when stations are not actually in use. Variable volume controls permit regulation from a whisper to full room volume. Housed in handsome walnut-finished cabinets: Standard Models are 9 3/4" x 8" x 5 3/4"; Deluxe Models are 12" x 6" x 5 3/4". For operation from 110-115 volts AC or DC.



#### COMBINATION SYSTEMS

Affords the ultimate in flexibility. Consists of Master Stations and Sub-Stations in any combination desired. Master Stations may call any other Master or Sub-Station; Sub-Stations may answer but cannot originate calls. All Masters may have Sub-Stations in common, or any Master may have individual Sub-Stations. Diagram illustrates typical installation: two Masters have two Sub-Stations in common, and one Master has its own Sub-Station; first Master cannot listen-in to the single Sub-Station at right. Standard Master station units have walnut cabinets, 9 3/4" x 8" x 5 3/4"; Sub-Stations have metal cabinets. 7" x 5 3/4" x 3 3/4". Deluxe units are all in walnut cabinets; Master units, size: 12" x 6" x 5 3/4"; Sub-Station units, size: 7 1/2" x 6" x 4". For operation from 110 volts AC or DC.



#### STANDARD MODELS

- The standard models of the Super-Selective Systems have 1 watt power output. From two to five Station units may be used. In systems using five units, two separate two-way conversations may be held simultaneously without cross talk. Shpg. wt., 12 lbs. each unit.
- 95-825. Standard Super-Selective Unit.** Complete with tubes. **NET EACH. \$18.95**
  - 49-602. Connecting Cable for 95-825 units.** **PER 10 FEET. 60c**
  - 95-830. 10 STATION SUPER-SELECTIVE UNIT.** Identical with above, but for any number of stations from two to ten. Shpg. wt., 13 lbs. **NET EACH. \$20.95**
  - 49-603. Connecting Cable for 95-830 units.** **PER 10 FEET. 90c**

#### DE LUXE MODELS

- The deluxe models of the Super-Selective Systems have 2 1/4 watts power output. Up to ten stations may be used to permit five simultaneous two-way conversations with complete privacy.
- 95-835. Deluxe Super-Selective Unit.** With tubes, junction box, 6 foot cable, and instructions. 14 lbs. **EACH \$28.50**
  - 95-836. As above but with privacy earphone.** Lifting earphone disconnects loudspeaker. 15 lbs. **EACH \$36.50**
  - 49-603. Connecting Cable.** **NET PER 10 FEET. 90c**

#### STANDARD MODELS

- Standard Combination Systems have 1 watt output. From two to five units may be used to provide unusually versatile installations.
- 95-850. 1 Watt Master Station.** Complete with tubes and instructions. Shpg. wt., 14 lbs. **NET EACH. \$19.95**
  - 95-851. Sub-Station unit.** Shpg. wt., 6 lbs. **NET. \$5.25**
  - 49-610. Cable for connecting 95-850 Masters.** **PER 10 FT. 70c**
  - 49-611. Cable for connecting Sub-Stations to Masters.** **10 FT. 15c**
  - 95-860. 10 STATION COMBINATION UNIT.** Identical to 95-850 but any combination of 10 units may be used. Sub-Stations and cable listed above. Shpg. wt., 15 lbs. **NET. \$23.50**
  - 49-612. Cable for interconnecting 95-860 Masters.** **PER 10 FT. 98c**

#### DE LUXE MODELS

- Deluxe units have 2 1/4 watts output. Up to ten units may be used, in any combination of Masters and Sub-Stations.
- 95-865. Deluxe 10-Station Master Unit.** 15 lbs. **NET. \$31.75**
  - 95-866. As above but with privacy earphone.** Lifting earphone disconnects loudspeaker. **WT., 16 lbs. NET. \$38.75**
  - 95-867. Deluxe Sub-Station Unit.** Shpg. wt., 6 lbs. **NET. \$7.95**
  - 49-612. Cable for interconnecting deluxe Masters.** **10 FT. 98c**
  - 49-611. Cable for connecting Sub-Stations to Master.** **10 FT. 15c**

**HOW TO ORDER CABLE.** (A) For Master-Selective Systems and Sub-Stations of Combination Type Systems: Measure from Master to each Sub-Station, including distance above floor, walls, partitions, etc. Combine distances to all Sub-Stations to determine total cable needed. (B) For Super-Selective Systems and Master-Stations of Combination Type Systems: Measure from first Master to second, second to third, etc.



Knight Intercommunication Systems are ideal for use in stores, offices, warehouses, garages, factories, homes, schools, hospitals, etc. We can supply Knight Systems covering 20, 30, 40, 50, or more stations in any of the types described above, and shall be glad to quote prices on complete systems to meet your requirements.





# COMPLETE PORTABLE RECORDER SYSTEMS



## PRESTO MODEL K DUAL-SPEED RECORDER

A high-quality recorder, record player, and public address system complete in a single carrying case. Exceptionally light and compact. Contains many features usually found only in most expensive units. Ideally suited to the requirements of schools and private instructors in speech, music, dramatics, law, etc. Excellent for use in sales training and for recording business conferences. Will record for 15 minutes continuously on a 13 3/4" disc. Also records on 6, 8, 10 and 12 inch discs. Recording speeds, 33 1/2 and 78 RPM. Cuts outside in or inside out at 112 lines per inch. Can be connected to any home radio for recording complete programs. Will play back all types of commercial records and home or professional recordings up to 13 1/2" dia. As a PA system will serve audiences up to about 500 people. Amplifier frequency response is flat within 2 db from 50 to 8,000 cycles. Has equalizer for 33 1/2 RPM recording. Response of magnetic cutting head and magnetic playback unit, 80 to 5,000 CPS. 12" heavy cast metal, rubber-tired turntable is rim-driven by metal pulley-mounted directly on shaft of heavy-duty constant-speed motor. Turntable speed held constant to within .4%. Carrying case in dark grey leatherette. Size: 19 1/2 x 15 1/2 x 14". For 110 V., 60 cycle AC operation. Tubes: 3—6XQ7, 1—6N7, 2—45's, 1—80 rectifier. Sbgp. wt., 59 lbs.

96-000. With tubes, less mike and stand. NET.....

**\$275.00**

85-900. Shure crystal mike, 25' cable, plug, and floor stand for above. Mike response, 30 to 10,000 CPS. In satin chrome case. Floor stand adjustable from 35" to 68". Base is in grey crackle with red enamel trim. Combined shgp. wt., 18 lbs. NET.....

**\$12.75**

We can supply all Presto equipment, including professional recorders such as Models Y, 75-A, C, 6-D, etc. Write for information and professional discounts. State your needs in full for a prompt reply. 37-110. Presto Recording Equipment Catalog—FREE



## KNIGHT DUAL-SPEED RECORDER

A new, high-quality, dual-speed deluxe recorder. Actually three instruments in one: (1) an easily operated recorder; (2) an efficient record player; (3) a complete Public Address system. An ideal unit for use in schools, in the home, for business conferences, etc. Plays back your own recordings as well as all standard 10" or 12" commercial records. Employs crystal cutting head and 1 1/4 oz. crystal playback pickup. Cuts records up to 10" in diameter, outside to inside, grooving 110 lines per inch. Record driving pin automatically retracts when playing commercial records. Dynamically balanced, weighted turntable rim-driven at 78 and 33 1/2 RPM by powerful constant-speed motor. The Knight Portable Recorder is supplied complete with Shure crystal microphone, desk stand, 6" electro-dynamic speaker, and tubes. Uses: 1—6J7GT pre-amplifier; 1—6Q7GT driver; 1—6K6GT output; 1—3W4 rectifier; 1—6U5 electric-eye volume indicator. Has selector switch for "Recording," "Playback," or "PA." Housed in a durable case finished in striped airplane luggage cloth; size: 16" x 16" x 10 3/4". For 110 volts, 60 cycles AC. Shgp. weight, 40 lbs.

96-210. Deluxe Recorder. NET.....

**\$5475**

### SINGLE SPEED MODEL

96-211. Knight Deluxe Single Speed Recorder. Identical to dual speed model described above except operates at 78 RPM only. NET.....

**\$49.50**



## WILCOX-GAY PORTABLE RECORDERS

### DUAL-SPEED "RECÓRDIO PRO"

A combination radio, recorder, phonograph and PA system for schools, churches, business houses, recording studios, etc. Consists of a master unit and one or more turntable units. Use of two turntable units permits continuous recording or playback. Master unit contains: (1) 6-watt amplifier; (2) 2-band radio receiver; (3) Special 12" elliptical electro-dynamic speaker; and (4) Tone equalizer for 33 1/2 RPM recordings. Turntable unit consists of a 10" dynamically balanced turntable rim-driven at 33 1/2 and 78 RPM; 1 1/2 oz. crystal pickup; crystal recording head with cutting depth adjustment. Records on plastic or acetate discs up to 10" dia. Manually plays all type records up to 12" dia. For 110V., 60 cycles.

96-316. Fig. A. Turntable A-102. In sturdy airplane luggage case, 16 1/2 x 9 1/2 x 16". With connecting cables. Shipping weight, 26 lbs. NET.....

**\$40.00**

96-315. Fig. B. Master Unit A-101. In sturdy airplane luggage case, 19 1/2 x 16 1/2 x 10 1/2" overall. Tubes: 1—6J7, 2—6K6; 1—6A8; 2—6Q7; 2—6K6; 5W4 rectifier; and 1—6U5-6G5 tuning indicator. With tubes, crystal microphone, "hand-table" stand and 12 ft. shielded cable. Shipping weight, 26 lbs. NET.....

**\$85.00**

### MODEL A-103 DUAL-SPEED

An attractive portable model especially designed for those who want a compact, high-quality type recorder, playback unit, and PA system. Its handsome airplane luggage-style carrying case houses a finetuned phonograph unit—plus the famous Wilcox-Gay recording assembly. Records from microphone or any radio receiver at 78 or 33 1/2 RPM. Records on plastic and acetate discs up to 10" diameter. Plays manually all recorded discs and commercial records up to 12" size. Heavy-duty recording assembly with crystal head cuts outside-in at 118 lines per inch. High-fidelity crystal playback unit is balanced to 1 1/2 oz. needle pressure. Self-contained recording amplifier uses: 1—6J7GT, 1—6Q7GT, 1—6B6GT, 1—5W3G, 1—6U5-6G5 volume level indicator. 12" elliptical, electro-dynamic speaker gives wide-range reproduction from limited cabinet size. Continuous tone control automatically set for full range when recording. 10" weighted turntable. Crystal microphone and table stand are both included. Size: 18 x 9 x 17". For 110 volt, 60 cycle AC operation. Shipping weight, 37 lbs.

96-317. Complete with tubes, microphone, cord reel, and case with record storage space. NET.....

**\$63.96**

## KNIGHT STANDARD RECORDER AND PLAYBACK UNIT

Here's a really low-cost instrument for complete home entertainment that makes recordings, plays records, or works as a portable PA system! Designed for easy portability, it plays all phonograph records up to 12"; records on discs up to 10" in diameter. 2 watt recording amplifier uses: 1—12J7GT, 1—12Q7GT, 1—50L6GT, 1—35Z5GT, and 1—6N5 electric-eye volume indicator. Self-Starting motor with dynamically balanced, weighted, rim-driven turntable maintains constant 78 RPM speed. Anyone can operate the Knight standard portable recorder; no technical knowledge is required. Recording mechanism is simple in design and foolproof. Lowering magnetic-type recording head onto record automatically engages recording feed mechanism which instantly disengages when head is raised again. Recording feed is set at 110 lines per inch, working from outside in. Adjustments for arm height, cutting depth and needle angle are conveniently located on recording arm. 1 1/2 oz. low-pressure crystal playback pickup assures excellent reproduction with a minimum of record scratch and greatly increased record life. Amplifier has volume control, tone control and selector switch for "Record," "Playback," or "PA"; speaker is high-quality 5" PM dynamic type. Housed in a handsome portable case, 18 1/2 x 16 1/2 x 13". Supplied with latest home-recording crystal microphone on desk stand with 7-foot cord; can be used as hand mike. For 110 volt, 60 cycle AC. Wt., 30 lbs.

96-220. NET.....

**\$4175**





Here is the largest selection of nationally famous recording discs available today. We specialize in this field, and our large stock of high quality discs is complete and fast-moving—assuring you of fresh discs and prompt service always. Buy in quantities and save more.



HIGHEST QUALITY PROFESSIONAL BLANKS

The finest professional recording blanks made today, designed especially for the exacting requirements of commercial recording studios, broadcast stations, and other professional users. The new glass-base and steel-base blanks, developed and perfected since the diversion of aluminum to National Defense needs, are especially recommended. All aluminum discs are listed subject to prior sale.

FAMOUS PRESTO DISCS

"GREEN SEAL"

Aluminum base, coated on both sides with a special Presto "Q" material. A mirror smooth surface permits clean cutting with low surface noise. .051" thickness overall. Assure excellent frequency response on all recordings.

No.	Dia.	Wt.	NET
69-000	6"	6 oz.	\$0.40
69-001	8"	10 oz.	.55
69-002	10"	10 oz.	.80

"GLASS BASE" TYPES

Glass base gives exceptionally smooth surface. "Q" coating on both sides. Discs give crisp, quiet cut. .105" thick overall. Shipped express only.

69-005	12"	2 lbs.	\$1.25
69-006	16"	3 lbs.	2.50

OVERSIZE "GREEN SEAL"

For making master records in processing. Discs 1/4"-1 1/2" larger than standard size records. Aluminum base. Smoothly coated on both sides.

69-010	11 1/2"	2 lbs.	\$1.25
69-011	13 1/2"	2 lbs.	1.80
69-012	17 1/2"	3 lbs.	3.00

"ORANGE SEAL" STEEL BASE

Steel base .036" thick with smooth Presto "Q" coating on both sides. Will not buckle. Overall thickness, .046". For high-grade professional recording.

69-020	7"	10 oz.	\$0.45
69-021	8"	10 oz.	.55
69-022	10"	12 oz.	.80
69-023	12"	12 oz.	1.00

Write for Presto Quantity Discounts to Studios, Schools, etc.

GOULD-MOODY GLASS BASE DISCS

Newly perfected glass base discs, mirror-smooth on both sides. For highest quality professional use; very low surface noise. Shipped express only.

69-051	12"	2 lbs.	\$0.93
69-052	16"	3 lbs.	1.86

SEMI-PROFESSIONAL RECORDING BLANKS

Especially suited for recording programs "off-the-air," performances of speech and music students, etc. For use with all types of recorders. Especially recommended for better home recordings. Recording time in minutes, 110 lines per inch at 78 RPM: 6"-1 1/2", 6 1/4"-2, 8"-3, 10"-4 1/2", 12"-5 1/2". Very attractively priced.

PAPER BASE

PRESTO "MONOGRAM"

High-quality double-faced discs with an even coating of Presto "Q" material on paper base. Thickness, .05".

No.	Dia.	Wt.	NET
69-030	6"	4 oz.	\$0.20
69-031	8"	6 oz.	.35
69-032	10"	6 oz.	.50
69-033	12"	8 oz.	.70
69-034	16"	10 oz.	1.50

Write for Presto quantity prices.

\*RECORDISC "ORANGE LABEL"

Cellulose nitrate coating on processed paper bond base. Double-faced.

69-110	6 1/2"	5 oz.	9c
69-111	8"	8 oz.	13c
69-112	10"	10 oz.	20c

\*FREE ALBUMS WITH RECORDISC PURCHASES

With every purchase of ten Recordisc blanks listed above and at right, we offer a free album containing ten pockets for convenient storage. Has durable cardboard cover and heavy kraft pockets. Specify stock number of size wanted. 96-810. For 6 1/2" discs. 96-811. For 8" discs. 96-812. For 10" discs.

NEW AUDIODISCS

"RED LABEL" GLASS BASE

Made especially for professional recording requirements. Glass base with exceptionally smooth coating on both sides providing for superior frequency response and minimum of surface noise. Single-hole drilled. Shipped express only.

No.	Dia.	Wt.	NET
69-070	10"	1 1/2 lbs.	\$1.00
69-071	12"	2 lbs.	1.25
69-072	16"	3 lbs.	2.50

"YELLOW LABEL" DISCS

An extensive line of general-purpose recording discs, especially suitable for studio and school use. Smooth coating on both sides over glass or steel base, as indicated. Fine quality discs; single-hole drilled. †Glass base, others steel.

69-080	6"	10 oz.	\$0.40
69-081	8"	14 oz.	.55
69-082	10"	1 lb.	.80
69-090	11 1/2"	1 1/2 lbs.	.80
69-083	12"	1 1/2 lbs.	1.00
69-091	12"	2 lbs.	1.00
69-092	16"	3 lbs.	2.00

"BLUE LABEL" DISCS

Smoothly coated aluminum base discs. Long-lived; low needle scratch; coated both sides. .024-.027" thick.

69-100	6"	8 oz.	25c
69-101	8"	10 oz.	35c
69-102	10"	10 oz.	50c
69-103	12"	12 oz.	85c

Write for Audiodisc quantity discounts to schools, studios, etc.

SHIPPING CONTAINERS FOR GLASS BASE DISCS

Specialty constructed containers assuring safety in transit of valuable transcriptions on glass base discs. Each container holds one to three discs. Shipping wt., 2 lbs.

No.	Container for	Net
96-800	12" discs.....	39c
96-801	16" discs.....	39c

\*RECORDISC ALLOY BASE "BLUE LABEL"

Nitrate coating on heavy alloy metal base. Mirror-smooth coating on both sides. Excellent quality low-cost discs.

No.	Dia.	Wt.	NET
69-120	6 1/2"	10 oz.	16c
69-121	8"	12 oz.	23c
69-122	10"	14 oz.	33c
69-123	12"	1 lb.	56c

KNIGHT HEAVY-DUTY

High-grade steel base discs, nitrate coated on both sides. Splendid frequency response. Assure very fine cuttings.

69-130	6 1/2"	10 oz.	14c
69-131	8"	12 oz.	21c
69-132	10"	14 oz.	29c
69-133	12"	1 lb.	50c

HOME RECORDING DISCS

Quality discs especially selected for home recording. Assure good frequency response, low surface noise. These discs are ideal for use on all types of home recording instruments.

FLEXIBLE BASE DISCS

KNIGHT

Bond base, non-inflammable, coated both sides. Of fine quality; Underwriters' approved. Include labels. Av. shipping weight, 2 lbs. per pkg.

No.	Dia.	Quan.	NET
69-150	6 1/2"	Pkg. of 6	\$0.35
69-151	8"	Pkg. of 6	.59
69-152	10"	Pkg. of 6	.88
69-153	12"	Pkg. of 6	1.75

WILCOX-GAY

Double-faced, non-inflammable paper-base discs for excellent quality home recordings. With labels. Av. shpg. wt., 2 lbs. per pkg.

No.	Dia.	Quan.	NET
69-160	6 1/2"	Pkg. of 6	\$0.60
69-161	8"	Pkg. of 6	1.00
69-162	10"	Pkg. of 6	1.50

Write for attractive quantity prices on above discs.

\*RECORDISC "YELLOW LABEL" BLANKS

low. Av. wt., 2 lbs. per pkg.

No.	Dia.	Quan.	NET
69-170	6 1/2"	Pkg. of 6	39c
69-171	8"	Pkg. of 6	60c
69-172	10"	Pkg. of 6	98c

METAL BASE DISCS

The discs listed below consist of metal alloy bases smoothly coated on both sides to provide very quiet, clean cutting.

KNIGHT

Non-inflammable coating on both sides of steel base. 6 1/2" and 8" are .032" thick; 10"—.036". Excellent response. Av. shpg. wt., 12 oz.

No.	Size	1-12	12up
69-180	6 1/2"	12c	11c
69-181	8"	18c	17c
69-182	10"	24c	23c

HOWARD

Special lacquer coating on both sides of alloy metal base. Hardness processed; re-inforced edges. With 5-pocket album. Wt., 4 lbs. per pkg.

No.	Dia.	Quan.	NET
69-200	6 1/2"	Pkg. of 5	\$1.00
69-201	8"	Pkg. of 5	1.50
69-202	10"	Pkg. of 5	2.00

\*RECORDISC "GREEN LABEL"

album with purchase of 10 records; see note bottom left.

No.	Dia.	Wt.	NET
69-210	6 1/2"	10 oz.	13c
69-211	8"	12 oz.	19c
69-212	10"	14 oz.	26c

Heavy-gaugemachined steel base smoothly coated with Underwriters' approved slow-burning compound. Double-faced. Carefully polished surface assures uniform cutting. For excellent quality recordings. \*Free

RECORDING AND PLAYBACK NEEDLES

Carefully selected cutting and playback needles for home recording. Assure excellent recording and reproduction. See opposite page for illustrations and further details.

CUTTING NEEDLES

Knigh flat-shank steel needles. Special alloy steel polished to razor-sharp edge. Cut all coated blanks with reduced surface noise.

65-900	EACH.....	15c
65-803	Pkg. of 5 in protective cover.	59c

NET.....

65-801. Stellite needle. Cuts with minimum of surface noise. EACH... \$1

65-810. Permo alloy professional-type cutting needle; unusually sharp tip. Provides 3 to 5 hours of service. EACH..... \$1.18

PLAYBACK NEEDLES

"Wako" Sapphire Needle. A shadowgraphed needle which will play more than 2500 discs. Does not wear discs; provides excellent frequency response.

65-820	NET EACH.....	73c
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Knigh Steel Needles. Quality steel playback needles designed especially for use with average type of home recording disc. Tested by shadowgraph process to assure perfect point.

65-826	Pkg. of 50.	7c
NET.....		
10 Pkgs. NET.....		63c

PERMO MICRO-MATCHED POINTS

Cutting stylus good for 400 6" discs; playback needle good for 4,000 plays. Platinum-metals points.

65-811. Per set of 2... \$1.79

RECORD MAILING ENVELOPES

Heavy envelopes with cardboard inserts, flap, sealing string. Provide for safety of valuable discs in transit.

65-500	For 6" disc. Shpg. wt., 2 lbs. 12 For.....	39c
65-501	For 8" disc. Shpg. wt., 3 lbs. 12 For.....	49c
65-502	For 10" disc. Shpg. wt., 5 lbs. 12 For.....	59c
65-503	For 12" disc. Shpg. wt., 5 lbs. 12 For.....	79c

RECORD LABELS

Neatly styled gummed record labels; have blank spaces for filling in title, date and recorder. Fit all discs.

65-521	Shpg. wt., 2 oz. 50 For.....	25c
65-522	Shpg. wt., 8 oz. 250 For.....	90c





**RECORDING NEEDLES**

**HOW TO SELECT THE PROPER RECORD-CUTTING NEEDLE**

**Sapphires**—These needles have the finest and hardest point. They are of the low friction type and take an extremely fine polish. Give 5 hours of service; can be resharpened. Sapphires are the most economical type to use. **Stellite**—These needles are constructed of a hard metal alloy. They cut about as well as sapphire and can be resharpened also. Give 2 hours of cutting service. **Steel**—Recommended where cost is a major consideration. While cut is not as sharp and quiet as obtained from sapphire, steel needles are satisfactory for many purposes. Cannot be resharpened. Give cutting service of 20 minutes.

**SAPPHIRE CUTTING NEEDLES—FIG. A**

**65-800. KNIGHT.** Precision-ground and polished, high quality sapphire cutting needles. Have long life and excellent fidelity. For all acetate or other coated type discs. **EACH.....\$3.25**

**65-850. PRESTO.** Finest quality, sharpest recording needles available. Accurately ground and polished. For use on acetate and similar discs. **EACH.....\$6.00**

We resharpen sapphire needles at \$1.95 each.

**STELLITE & ALLOY CUTTING NEEDLES—FIG. B**

A fine quality metal recording needle made of a special high tensile alloy called stellite. Cuts all coated blanks with a minimum of surface noise.

**65-801.** Can be resharpened for 50c. **EACH.....\$1.00**

**65-802.** Cannot be resharpened. **NET EACH.....60c**

**65-810.** Permo alloy low-cost professional cutting needle. Low surface noise. **NET.....\$1.18**

**STEEL CUTTING NEEDLES—FIG. C**

Flat shank steel needles. Special alloy steel hand-polished to a razor edge. For cutting coated discs.

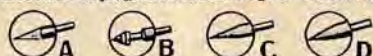
**65-803. KNIGHT.** 5 needles in a point-point-protecting cover. **PACKAGE OF 5.....59c**

**65-804. RECOTON.** Diamond-dust-polished steel needle. Twice the life of most steel needles. **PACKAGE OF 5, NET.....95c**

**65-851. PRESTO.** Long shank for use in Professional I-B head. **PKG. OF 3, NET.....\$1.00**

**65-852. PRESTO.** Short flat shank for all other heads. **PKG. OF 3, NET.....\$1.00**

**65-880. RCA Victor Steel Homs Recording Needles.** For pregrooved discs. **Pkg. of 8.....25c**



**PLAYBACK NEEDLES FOR COATED DISCS**

**65-815. RECOTON SAPPHIRE.** Fig. A. **Plays 6000 to 10,000 records. NET.....\$3.60**

**65-820. "WALCO" SAPPHIRE NEEDLE.** Fig. B. Shadowgraphed. **Plays 2500 discs. NET.....73c**

**65-825. REO SHANK STEEL NEEDLES.** Fig. C. .002" at point; shadowgraphed. **Pkg. of 100. NET.....38c**

**65-826. KNIGHT STEEL NEEDLES.** Fig. C. High-grade steel; accurately ground points. Shadowgraphed. **Pkg. of 50, 7c. 10 Pkgs. NET.....63c**

**65-853. SPECIAL TRANSCRIPTION NEEDLE.** Fig. O. A semi-permanent metal alloy needle, giving 50 hours of service. **NET.....69c**

**RECORD-MAKING ACCESSORIES**

**69-900. Cutting Lubricant.** For use on disc before cutting. Reduces surface noise. For acetate or aluminum discs. 4-oz. bottle. **NET.....29c**

**69-901. Record Permitteris.** Use on disc after cutting. Preserves record. 4 oz. **NET.....29c**

**RECORD THREAD REMOVER**

Rotary brush sweeps up thread cut by recording stylus. Has flange with hole to fit center spindle of turntable. Screw adjustment permits regulating pressure of brush on disc. For all recorders with 10" turntable, including changer-recorders. **Shpg. wt. 2 lbs. 69-920. NET.....98c**

**69-921.** Record thread remover for 12"-16" turntables. Less center-spindle flange and screw adjustment. **NET.....\$2.25**



**ASTATIC**



Use with 3-watt amplifier. 24" leads. Wt., 1 lb.

**65-125. Fig. A. X-26 Crystal Head.** With 75 V. applied, records to 5,000 CPS.  $1\frac{1}{2} \times \frac{3}{4} \times 3\frac{1}{4}$ "

**65-126. Fig. A. X-29A Crystal Head.** With 120 V. applied records to 6,500 CPS.  $1\frac{3}{4} \times \frac{3}{4} \times 3\frac{1}{4}$ "

**65-127. Fig. A. X-26 With flange bracket;** for replacement in Knight, Wilcox-Gay, G.I. etc.

**65-130. Fig. C. X-42 Crystal Head.** Records to 5,000 CPS with 75 V. applied.  $\frac{3}{4} \times 1\frac{1}{2} \times 3"$

**65-128. Fig. B. M-41-8 Magnetic.** 8 ohms. With 3 V. applied, records to 7,000 CPS.  $1\frac{1}{2} \times 1\frac{1}{2} \times 3\frac{1}{4}$ "

**65-129. Fig. B. Model M-41-500 Magnetic Head.** Same as 65-128, but 500 ohms. **\$6.76 NET EACH.....**

**65-131. Matching Transformer.** Crystal Head to line; ratio, 60,000 to 500 ohms. For "constant-velocity" response.....**\$4.11**

**65-950. Knight Transformer.** Ratio, 4,000 to 4-8 ohms. "Constant-amplitude" response.....**75c**

**65-122. Recording Equalizer.** Fixed network for crystal cutting head. **NET.....\$1.47**

**SHURE**



A high-quality, wide-range magnetic cutting head with many new features. Ideal for home recording. Operates directly from voice coil output circuit of any radio or amplifier with power input of  $\frac{1}{4}$  to  $\frac{1}{2}$  watt. Impedance, 10 ohms at 400 cycles; DC resistance, 4 ohms. Response, 30 to 7000 CPS. Records on practically all recording materials. Accommodates steel, alloy, or sapphire cutting needle. Fits directly into General Industries recording mechanism. Has 2 tapped holes for adaptation to other mountings. 36" flexible leads. Length, overall, 3 $\frac{1}{2}$ "; length, base screw, 3 $\frac{1}{4}$ ". Shpg. weight, 8 oz.

**65-300. Model 44A. NET.....\$6.76**



**MAGNA RECORDING AND PLAYBACK PICKUP**

Records and plays back from any radio or amplifier with output of 3 watts or more. Install on turntable, and radio or mike programs can be recorded and played back instantly. For use with pre-groover, records only. Employs "Alnico" steel magnet. Needle pressure, 3 oz. Has splendid frequency response of 60 to 5500 CPS. 10,000 ohms impedance; for connection to plate of output stage for cutting, or direct to audio grid for playback. Length, 9". Shpg. wt., 1 lb. **65-201. NET.....\$2.95**



**KNIGHT RECORDING V. I. METER**

3" square bakelite meter designed especially for monitoring purposes. For 8 and 500 ohm magnetic heads, or crystal cutters with transformers. Meter reads to +25 db. and to 200 V. Direct-reading scales indicate "too low," "recording level," "too high." Metal case,  $\frac{1}{2} \times 1\frac{1}{2} \times 4\frac{1}{2}$ " hole,  $2\frac{1}{2} \times 4\frac{1}{2}$ " meter hole,  $2\frac{1}{2}$ " case, 1 lb. **65-002. Meter \$7.95 only. NET.....**

**65-300. Case 98c only. NET.....98c**

**RECORDING BOOKS**



**37-640. FUN WITH A RECORDER.** 30 amusing skits in radio script form. 1 lb. **NET.....70c**

**37-660. TECHNIQUES OF RECORDING.** By Goldsmith and Geisel. 16 chapters on the art of recording. Wt. 1 lb. **NET.....98c**

**37-641. HOW TO MAKE GOOD RECORDINGS.** A complete handbook on modern techniques. Wt. 1 lb. **NET.....90c**

**GROOVE MAGNIFIER**



type stand. Wt.,  $\frac{1}{2}$  lb. **69-925. NET.....75c**

For viewing record grooves and needles. Very easily adjusted for focus. Lens dia., 1". Magnifying power,  $7\frac{1}{2}$  times. Tripod

**GROOVE MICROSCOPE**

For use in determining quality and depth of record grooves and condition of needles. Easily adjustable focus. Magnifying power, 15 times. Illuminates disc surface by self-contained No. 1 battery and small bulb. Finished in black. With complete instructions. Shpg. wt., 1 lb. **69-926. NET.....\$2.25**



**KNIGHT RECORDING UNIT**

Designed for those who wish to assemble their own Recorder-Phonograph instruments. The Knight Recording Unit is ruggedly built; adjustments have been held to a minimum to insure simple, easy operation by anyone. Heavy weighted turntable is rim-driven at 78 RPM by a powerful self-starting motor. The high-quality magnetic cutting head is adjustable for depth of cut, needle angle, and arm height; cuts 110 lines per inch from outside to inside. Has positive worm and gear drive for the cutting head. The Crystal playback pickup is of the  $\frac{1}{2}$  oz. low-pressure type for better fidelity. Records on any disc up to 10"; will play all phonograph records up to 12". Operates from any 6-8 ohm voice coil circuit supplying 3 watts power. Size:  $13\frac{1}{2} \times 12\frac{1}{2}$ ";  $2\frac{1}{2}$ " above board,  $4\frac{1}{2}$ " below. Here's a really dependable, complete recording mechanism at a very low price. It's easy to operate and will provide excellent recordings together with convenient playback facilities. For 110 volts, 60 cycles AC. Shpg. wt., 19 lbs. **95-204. NET.....\$13.75**



**PRESTO 11-A MOTOR**

A professional dual-speed recording motor and turntable assembly for custom-built radio-phonographs, centralized sound systems, portable transcription-playback units, sound effects reproducing equipment, or wherever a high-grade recording and playback unit is required. Operates at either 78 or 33 $\frac{1}{3}$  RPM; has quick-action changeover feature. 12" turntable is rim-driven through exclusive rubber tire-drive; hand-machined for perfect dynamic balance. Motor is suspended in live rubber for quiet operation. Plays 16" transcriptions without "wows" or change of pitch due to drag of pickup. Maintains speed with accuracy within 4% at both 78 and 33 $\frac{1}{3}$  RPM. Size overall:  $14\frac{1}{2} \times 12\frac{1}{2}$ ";  $1\frac{1}{2}$ " above motor board,  $5\frac{1}{2}$ " below. Brown enamel finish. For 110 V., 60 cycle AC. Shpg. wt., 13 lbs. **85-100. NET.....\$55.00**



# BASIC RECORDING EQUIPMENT



## GENERAL INDUSTRIES RECORDING AND PLAYBACK ASSEMBLIES

### COMBINATION RECORD-CHANGER AND RECORDER

Combination recorder and record-changer in a single basic unit. Operates at 78 RPM. Records on acetate and composition discs up to 10" in diameter. Plays all "home recorded" and commercial records up to 12" dia. manually. Changer handles twelve 10" or ten 12" records. Will change automatically any commercial record or "home recording" with center run-in grooves, and with or without lead-in grooves. Non-jamming record handling fingers. Has eject button and manual playing position. Only one lever to move when shifting from 10" to 12" records. Crystal-type recording head cuts at 110 lines per inch, working from outside-in. Has convenient depth-of-cut adjustment. Works with any good radio or amplifier having 3 watts output or more. Pickup is 1 1/4 oz. low pressure crystal type with response of 30-7000 CPS. Rim-driven 10" weighted turntable has retractable record driving pin. Induction motor is self-starting and dynamically balanced. Rubber-mounted. Base plate is 14x14". Mechanism extends 5 1/2" above, and 3 1/2" below top of panel. Comes with on-off switch and all mounting hardware. For 110 V. 60 cycle AC operation. Brown trident finish. Shipping weight, 30 lbs. **\$2700**

96-101. Model GI-RC130L. NET

### SINGLE-SPEED BASIC RECORDING UNIT

An ideal basic mechanism with which to assemble your own Recorder-Phonograph unit. Cuts records up to 10" dia. outside-in at 110 lines per inch. Plays records up to 12" dia. The cutter feed mechanism simply requires lowering the cutter arm over the record disc to start the recording operation. Cutting arm has adjustment for depth of cut. A retractable record driving pin on turntable permits playing standard records without further adjustment. The powerful 78 RPM induction type motor employs an internal rim-drive to the turntable. Motor is rubber insulated from base plate and turntable for quiet operation. Assembly includes: motor; 10" weighted turntable, dynamically balanced; cutting mechanism; crystal cutting head which will operate from any radio receiver or audio amplifier capable of supplying 3 watts of power; high impedance 1 1/4 oz. low pressure crystal pickup; cutter rest; base plate with formed down edges. Dimensions: 15" wide and 10" front to back; extends 2 1/2" above base, 3" below. For 110 volts, 60 cycle AC operation. Shpg. wt., 17 lbs. **\$1650**

96-103. Model GI-R70L. NET.

96-102. As above but has 2 oz. medium-pressure playback pickup. NET.....\$16.50

### DUAL-SPEED BASIC RECORDING UNIT

A deluxe, dual speed, basic recording and playback unit, especially suited for smartly styled custom-built installations. Operates at 33 1/2 and 78 RPM. Records on all composition and acetate discs up to 10" in diameter. Plays back composition, acetate and commercial records up to 12" diameter. Crystal recording head cuts at 110 lines per inch from outside-in. Has convenient depth of cut adjustment in arm. Will work from any radio or amplifier having 3 watts output or more. Only necessary to lower cutting arm over record to start recording. Pickup is 1 1/4 oz. low-pressure crystal type. Rim-drive dual speed motor is dynamically balanced for extra smooth running. 10" weighted turntable has retractable record drive-pin; no record slippage. Entire unit is shock mounted. Comes in attractive walnut grain finish on steel base plate with plastic trim on pickup and cutter arms. Base plate measures 15" W. by 11 1/2" front to back. Mechanism extends 2 1/2" above, and 3" below top of panel. Complete with speed-change dial and all mounting hardware. For 110 V., 60 cycles. Shpg. wt., 20 lbs. **\$1950**

96-105. Model GI-R90L. NET.

96-104. As above but has 2 oz. medium-pressure playback pickup. NET.....\$19.50



### KNIGHT 14 WATT RECORDING AMPLIFIER

For use with all types of recorders. Inverse feedback imparts triode characteristics to output tubes. The amplifier has two input channels, one for any high gain microphone and one for phono each with individual control. Also has bass-treble tone control. 14 watts output (18 watts peak). Output is 4, 6, 8 and 500 ohms on selector. Response, 60-8000 CPS. Mike gain, 125 db.; phono, 75 db. Tubes: 1-6SJ7, 1-6SC7, 2-6V6G, 1-5Y3G. Fused. For use from 110-120 volts, 60 cycles AC. Size: 16 1/4" x 10 1/4" x 9 3/4". Less tubes and V.I. meter. Shpg. wt., 25 lbs. **\$23.55**

96-202. NET.....\$23.55

96-201. Complete with tubes. NET.....\$26.48

85-002. Knight Recording V. I. Meter. NET.....\$7.95



## REK-O-KUT EQUIPMENT

### RECORDING UNITS

Each includes cutter, carriage, drive mechanism, and feed screw. For any radio or amplifier with 3 watts or more. Record out-to-in at 100 lines per inch. Have chip-collector. Construction permits interchange of practically any cutting head. Response of each, 50-6500 CPS. Less motor.

12" Size. Wt., 8 Lbs.

96-152. Has Astatic X-29A crystal head. **\$37.00**

96-150. Has M-41-8 Astatic 8 ohm magnetic head... **\$37.00**

96-151. Has M-41-500. 500 ohm mag. head..... **\$37.00**

16" Size. Wt., 11 Lbs.

96-155. Has Astatic X-29A Crystal. **\$44.50**

96-153. Has M-41-8 Astatic 8 ohm magnetic head... **\$44.50**

96-154. Has M-41-500. 500 ohm mag. head..... **\$44.50**

### PROFESSIONAL MOTORS

Highest quality professional type assembly consisting of a powerful constant-speed motor and a 12" precision machined and balanced turntable, weighing 12 lbs. Sturdy cast-iron framework. Speed shift arm with idlers for 78 or 33 1/2 RPM operation. 1" dia. turntable shaft has oil groove for force-feed lubrication while operating. Space is provided on the framework for one of the Rek-O-Kut recording units described at left. For motor board 16 1/2" x 14 1/2". Extends 4" above and 3 1/2" below mounting panel. For 110-120 V., 60 cycles AC. Shpg. wt., 27 lbs. **\$49.50**

96-156. NET.....\$49.50

96-157. As above but has 16" balanced turntable. For motor board 23 1/2" x 21 1/2". Extends 5" above and 7 1/2" below mounting panel. Wt., 40 lbs. **\$109.50**

### PRESTO 16 INCH DUAL-SPEED MOTOR

Heavy-duty type professional recording and playback motor. Used by leading broadcast stations, transcription makers, etc. Consists of a dynamically balanced 16" turntable rim-driven through a special rubber tire by a powerful synchronous motor at 78 or 33 1/2 RPM. Both are assembled on a cast-metal base. Speed can be changed instantly by moving motor carriage to engage either section of drive pulley. Speed is maintained to an accuracy of 4%. Maximum noise level originating within turntable is 50 db. below maximum program level. Size of cast-metal base, 18 1/2" x 20". Extends 5" below, and 2 1/2" above base. Can be used with Rek-O-Kut units listed at left or any similar recording assemblies. Wt., 55 lbs. **\$155.00**

96-005. NET.....\$155.00

## WEBSTER-CHICAGO RECORD-CHANGER-RECORDERS

This unit will automatically play 12-10" or 10-12" commercial records or "home recordings" with center run-in grooves. Provides over an hour of continuous entertainment with one loading of 12" records. Rejects any record desired and permits optional playing of records manually. 1 oz. crystal cartridge insures long record life and high-fidelity reproduction. Positive action trip mechanism insures instant changeover as soon as needle reaches end of record. Push buttons provided for 10" to 12" changeover. Records on acetate or plastic discs up to 10". Crystal cutter records outside-in at 98 lines per inch from

any radio or amplifier with 3 watts output or more. 10" turntable, worm-gear driven by constant speed motor, at 78 RPM. Brown enamel finish. Size, 13 1/2" x 14 1/2". Extends 5 1/2" above and 5" below mounting panel. For 115 V., 60 cycle operation. Shpg. wt., 30 lbs. **\$37.93**

96-090. NET.....\$37.93

### DELUXE MODEL

96-091. As above but plays 15 to 17 mixed 10" and 12" records. Size, 13 1/2" x 17 1/2". Shpg. wt., 35 lbs. **\$55.86**

NET.....\$55.86





# AUTOMATIC RECORD CHANGERS With New Low Pressure Pickups



## POPULAR SEEBURG RECORD CHANGER

A high quality Automatic Record Changer. Made by a leading manufacturer with a reputation for precision products. Will play fourteen 10" or ten 12" records automatically. Provides up to 50 minutes of continuous entertainment when loaded with 12" records. Repeats last record. Single control acts as on-off switch and rejects any record at will. Has positive trip mechanism. Tangent arm with 1 1/2 oz. low pressure crystal pickup is counterbalanced for minimum record wear and gives excellent frequency response. Smooth, gentling record selector blades cannot damage or harm records. The entire mechanism features precision machining throughout. Sturdy self-starting 78 RPM motor is designed for trouble-free service. Mounting base is 14" wide, 14" long. Mechanism extends 5 3/4" above board, 3" below. For 110 volts, 60 cycles AC. Brown-winkle finish. Shpg. wt., 26 lbs.

**96-203. NET.....\$1675**  
**PORTABLE CASE.** Designed for 96-203 Changer above. Beautifully finished in maroon-stripped airplane luggage cloth. Sturdily built, with strong carrying handle. Has record compartment; motor board cut for Seeburg Changer. Size: 13 1/2" W x 17" D x 10 3/4" H. Shipping weight, 13 lbs.  
**98-905. NET.....\$8.60**



## GENERAL INDUSTRIES GI-C125L CHANGER

Exceptionally well-designed, positive and quiet in operation. Plays twelve 10" or ten 12" records automatically. Will furnish up to 50 minutes of uninterrupted entertainment when fully loaded with 12" records. Only a single lever to move when changing from one size record to another or to set for manual operation. Record handling fingers are of the non-jamming type; extend only to edge of record lead-in space, preventing marring of record. Records may be rejected by simply pressing "Reject" button. Tripping mechanism operated by either run-in or oscillating grooves. Means are provided for guiding pickup needle into the playing grooves on records without lead-in grooves. Sturdy base plate, 14" x 14" x 3/4". Mechanism extends 5 3/4" above and 3 1/2" below base. 1 1/2 oz. low-pressure crystal pickup gives better tracking and less record wear. Pickup has excellent frequency response. With AC switch, but less cord. 78 RPM. 110 V., 60 cycles AC. Shpg. wt., 25 lbs.

**96-100. NET.....\$1965**  
**98-901. PORTABLE CASE.** Sturdy airplane luggage type maroon stripe case for the G.I. Record Changer. With large record compartment; has carrying handle. Size, 13" x 15" x 13". Shipping weight, 15 lbs.  
**NET.....\$7.95**



## RCA MODEL 9932 RECORD CHANGER

One of the finest values ever offered those seeking a compact high-quality record changer. Handles all commercial records. Automatically plays ten 12" or twelve 10" records. Crystal pickup has permanent sapphire stylus. True-tracking tone arm counterbalanced to a maximum needle pressure of 2 oz. Has reject and manual playing provisions. Plays without attention for nearly one hour with a single loading of 12" records. Last record repeats until shut off. New feature permits removal of records from turntable without the necessity of turning record support levers. Turntable is driven at 78 RPM by powerful constant-speed type induction motor. Exclusive new safety clutch prevents possible damage to records or mechanism as the result of misoperation or playing of warped or faulty records. Size of mounting plate, 14 1/2" x 13 1/2". Mechanism extends 4" above and 3 1/4" below mounting plate. For 115 V., 60 cycle AC operation. Shipping weight, 15 lbs.

**96-130. NET.....\$1761**  
**98-900. PORTABLE CASE.** Sturdy airplane luggage-type maroon-stripped case for 96-130 Changer. With large record compartment and motor board cut for above changer; has carrying handle. Shipping wt., 13 lbs.  
**NET.....\$7.95**



## WEBSTER-CHICAGO RECORD CHANGERS STANDARD CHANGER

This highly popular Webster-Chicago Model 5571 Record Changer has many outstanding features, including jam-proof mechanism and a minimum number of working parts. Plays ten 12" or twelve 10" records automatically. Provides nearly an hour of continuous entertainment with a loading of 12" records. Rejects any record desired and permits optional playing of records manually. Counter-balanced tone-arm contains 1 oz. crystal cartridge designed to use removable steel, metal-alloy, or long-life sapphire-type needles. Insures long record life and permits high-quality reproduction with a minimum of scratch. Push-buttons provided for 10" to 12" changeover, for record rejection, and manual playing operations. Positive action trip-mechanism insures instant changeover as soon as needle reaches end of record, whether records have oscillating or spiral run-in center grooves. Accurate pickup positioning on records with or without lead-in grooves. Motor is smooth-running, heavy-duty constant-speed type and drives balanced and weighted turntable at 78 RPM. Entire unit is rubber-mounted for noise-free operation. Installs in small space. Finished in hammered-bronze enamel. Size of mounting plate, 14" x 14". Mechanism extends 5 1/2" above and 5" below mounting plate. For 110 V., 60 cycle AC operation. Shpg. weight, 25 lbs.

**96-080. NET.....\$23.23**  
**96-081.** Same as Model 5571 except 1 oz. pickup is equipped with permanent sapphire stylus.  
**NET.....\$26.17**  
**98-903.** Sturdy portable case for either model above. Wt., 15 lbs. **NET.....\$8.45**



## DELUXE CHANGER

The new Model 5591 Deluxe Record Changer offers the maximum in dependable versatility. Will play a 1 1/2" stack of 10" and 12" records intermixed (15 to 17 records). A single loading of 12" records provides more than an hour of continuous entertainment. Mechanism stops automatically after last record has been played. Records can also be played manually, and any record rejected during automatic operation. 1 oz. counterbalanced tone arm contains crystal cartridge which takes any steel, alloy or sapphire needle. Insures long record life and permits high-quality reproduction with a minimum of scratch. Positive action trip-mechanism insures instant changeover as soon as needle reaches end of record. Motor is heavy-duty, smooth-running, constant-speed type and drives balanced and weighted turntable at 78 RPM. Entire unit is rubber-mounted for noise-free operation. Main mounting plate is of heavy die-cast construction, assuring complete rigidity. Construction is exceptionally compact and permits quick, easy installation in small space. Finished in hammered-bronze enamel. Size of mounting plate, 13 1/2" x 17 1/2". Mechanism extends 5 3/4" above and 4 3/4" below mounting plate. For 110 V., 60 cycle AC operation. Shpg. wt., 30 lbs.

**96-082. NET.....\$44.10**  
**96-083.** Same as Model 5591 except 1 oz. pickup is equipped with permanent sapphire stylus.  
**NET.....\$47.04**  
**98-904.** Sturdy airplane luggage type portable case for either changer above. Maroon striped. Compartment for storing records. With handle.  
**NET.....\$8.45**



## GARRARD DELUXE RC-30

Provides all the quality and performance demanded by those who prefer the finest. The ideal Record Changer unit for such exacting applications as high-quality phono-radio combination instruments for the home, studios, high-fidelity PA installations, etc. The RC-30 will play eight 10" and 12" records, intermixed in any combination, and you need make no adjustments whatsoever. You simply load the records and snap a switch—the RC-30 does the rest, smoothly and silently. Not affected by warpage or variations in thickness of records. There are no moving parts operating between records. Exclusive record spindle prevents slippage and skidding. Constant-speed, silent-running motor has regulator which permits speed regulation from 60 to 90 RPM. Once the exact speed has been determined, the motor maintains even speed without "wows." Accurately machined bushings, fittings, and bearings are used throughout. Low pressure pickup (only one ounce) has permanent jewel stylus and true-tangent ball-bearing jeweled mount tone arm. No needle changing is ever necessary. Records last longer, too, because of greatly reduced needle pressure. Output, .85 V. Response, 30 to 10,000 CPS. Over-all size of unit: 15" long x 11 1/2" deep, 5 1/2" clearance above and 4 1/2" below mounting plate. For 110-130 volts, 50-60 cycles AC. Shpg. wt., 20 lbs.

**96-050. NET.....\$44.10**  
**98-902. Portable Case for Above Changer.** Size: 15 1/2" x 12 1/4" x 13 1/2". Maroon striped airplane luggage cloth. Shpg. wt., 13 lbs.  
**NET.....\$8.50**  
**PHONO ADAPTER**  
**59-230.** Will connect any changer or phono-graph to any radio set not equipped with phono-input. Shpg. wt., 1 lb. **NET.....\$8c**



# QUALITY PICKUPS

## LOW PRESSURE PICKUPS

These new crystal pickups feature basically different design resulting in truly new concepts of performance. Needle pressure is only one ounce. You get better reproduction with greatly decreased surface noise! Low needle pressure gives you greatly increased record life too! Preserves your valuable recordings.

## SUPPLIED WITH SAPPHIRE STYLUS

The built-in permanent sapphire stylus does away with annoying needle changes. Special protective U-shaped guard and internal hold-down spring absorb shock and prevent damage to stylus. Functionally-curved offset arm assures low tracking error with balanced sidewall pressure. Model FP-8 frequency range is 30-5000 CPS with .85 V. output; supplied with LP-6 cartridge. Model FP-18 has range of 30-7000 CPS with .85 V. output, with LP-21 diecast metal cartridge. Model FP-38 has range of 30-10,000 CPS; output, .65 V. with LP-23 cartridge. For 10" and 12" records. Finish is rich maroon. High impedance. Length overall, 9 3/4". Mounting center distance, 8". With 24" shielded cable for easy connection. Shpg. wt., 2 lbs.

65-101. Model FP-8.  
65-102. Model FP-18. NET  
65-100. Model FP-38. EACH... \$9.70

## SEMI-LOW PRESSURE PICKUP

A replaceable-needle type crystal pickup with many of the advantages of the low-pressure type pickups above. Needle pressure is only 1 1/4 ounces with the lightest moving system possible to use with replaceable needles. Frequency range is 30-4500 CPS with output of .6 volts. Balanced arm with low tracking error results in lower surface noise and better reproduction. For 10" and 12" records. With L-40 cartridge. Shpg. wt., 1 1/2 lbs.

65-103. Model FL-48. NET... \$7.35

## MOBILE AB-8M

A crystal pickup designed for sound trucks, airplanes, cars, trains and other mobile units. Mechanically counter-balanced to prevent "groove-jumping." Has hinged head for rapid change of needle. Output, 2 1/2 V. For 10" or 12" records. Needle pressure, 2 3/4 oz. Has offset head for proper tracking. Length, 10 3/4"; mtg. center distance, 8". With locking arm rest and 24" shielded cable. Black finish. 2 1/4 lbs.

65-104. NET... \$7.35

## MODEL AB-B

Crystal Pickup. With spring axial cushion to prevent effects of motor vibration. Response, 50 to 5000 CPS. Head is offset for proper tracking. Needle pressure, 2 3/4 oz.; output, 2.5 V. With B-2 cartridge. For 10" or 12" records. Mtg. center distance, 8". Brown finish. With 4 ft. cable and arm rest. Shipping wt., 2 1/2 lbs.

65-105. NET... \$5.88

## STANDARD MODELS

Carefully balanced crystal pickups. Audio response, 60-5000 CPS. With ball-bearing swivel base. Needle pressure, 2 3/4 oz.; output, 2.5 V. Cushioned arm. B-2 cartridge. 4 ft. shielded cable and arm rest; 2 1/2 lbs.

65-106. 5-8. For 10" and 12" records. \$5.88 NET.  
65-107. 5-12. For 10" to 16" records. \$7.35

## ASTATIC



## 16" LOW PRESSURE

Low pressure, crystal pickup with permanent sapphire stylus. HP-16 output, .85 V.; range, 30-7000 CPS. HP-36 output, .65 V.; range, 30-10,000 CPS. Needle pressure, only 1 oz. For records up to 16". Length 15". Mtg. ctrs., 12". With 24" shielded cable and arm rest. Wt., 2 lbs.

65-108. HP-16.  
65-109. HP-36.  
EACH... \$14.70

## MODEL O7

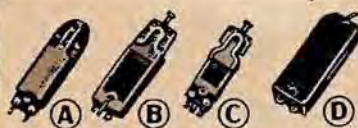
Die-cast arm with offset crystal head assures minimum tracking error and surface noise. Easy to load; vibration-proofed. For 10" to 12" records. Response 70 to 4500 CPS. Needle pressure, 2 3/4 oz.; output, 2.9 V. 4 ft. cable. Locking arm rest. M22 cartridge. Shpg. wt., 1 1/2 lbs.

65-110. O7. Black  
65-111. O7S. Brown. EACH... \$3.82

## ASTATIC TRU-TAN

Offset crystal head. Response, 50 to 7000 CPS. Arm pivots on ball-bearings. Rotating head facilitates needle loading. Pressure, 2 3/4 oz.; output, 2.5 V. With B2 cartridge. Black finish. Shpg. wt., 3 lbs.

65-112. B-10. For 10" and 12" records. \$10.29 NET.  
65-113. B-16. For records to 16". NET. \$13.23



## ASTATIC REPLACEMENT CARTRIDGES

Precision built. B type cartridges in bakelite housing. LP, L, and M cartridges in die-cast metal cases. \*\*For record changers. Wt., 8 oz.

Stock No.	Model	Fig.	Used in	NET
65-150	LP-6	A	FP-8	\$4.70
65-151	LP-21	A	FP-18	4.70
65-152	LP-23	A	FP-38	4.70
65-153	L-40	A	FL-48	3.95
65-154	L-22	C	AL-8	3.94
65-155	L-25	B	FL-58	3.94
65-156	L-26	C	D9-SL8	3.95
65-157	M-22	C	O-7	2.94
65-158	B-2	D	S-8, S-12, B-10, B-16, AB-8, AB8M	2.94
65-159	B-4	D	**	2.94



## UNIVERSAL CARTRIDGE

65-350. Fig. A. Shure Model W27C. Replaces haketite encased crystal cartridges in any standard pickup. With parts for big screw, or pin terminals. 2 1/4" long, 3/4" wide, 3/4" high. NET... \$2.94

## TONE EQUALIZER

65-121. Fig. B. Varies response characteristics of crystal pickup for bass, medium, or high. Size, 2" x 7/8". Single hole mount. Wt., 1 lb. NET... \$1.76

## SCRATCH FILTER

65-120. Fig. C. For use with any magnetic or crystal pickup. Sealed metal case, 1 3/4" x 2 1/4" x 3/4". Wt., 1 lb. NET... 88c



## ASTATIC MODEL SL-8

A straight-arm crystal pickup particularly suited for playing lightly cut home recordings. Die-case and cushioned arm finished in statutory brown. Needle pressure, 2 3/4 oz.; output, 1.4 V. across 1/2 megohm load. Response, 70-4500 CPS. For 10" and 12" records. With L-26 cartridge. Length, 9 1/2"; height, 1 1/2". Wt., 1 1/2 lbs.

65-114. NET... \$2.91

## MODEL D9

A low-cost statutory pickup. With high-performance standards. Die-cast Tru-Tan arm; plays all 10-12" records. Response, 70-4500 CPS. Needle pressure, 2 3/4 oz.; output, 1.4 V. across 1/2 megohm load. Statuary brown finish. With locking arm rest. With L-26 cartridge. Length, 9 1/2"; 1 1/2 lbs.

65-115. NET... \$2.91

## KNIGHT AUTOMATIC RECORD CHANGER WITH LOW-PRESSURE PICKUP

A high quality Automatic Record Changer at an astoundingly low price. Will play twelve 10" or ten 12" records automatically. Provides up to 50 minutes of continuous entertainment when loaded with 12" records. Single lever acts as on-off switch, and reject, automatic, or manual control. Crystal pickup is counter-balanced. Uses Astatic L-40 1 1/4" oz. pickup. New, gentle-acting record selector cannot damage or harm records even if warped. The entire mechanism features precision machining throughout. Sturdy self-starting 78 RPM motor is designed for trouble-free service. Mechanism extends 3 1/2" above hoard, 3" below. Has extra rigid mounting plate. For 110 volts.

\$14.75

Changer above. Beautifully finished in maroon-striped, airplane luggage cloth. Sturdily built, with strong carrying handle. Has record compartment. Sbgg. wt., 13 lbs. NET... \$6.50



## KNIGHT

A low-pressure, accurately balanced crystal pickup at a sensationally low price. Needle pressure is only 1 1/4 ounces which greatly prolongs record life and reduces surface noise. Cartridge is set at a tangent for proper needle tracking. Frequency response is 40-4500 CPS. Crystal is of the high-impedance type with an output of .6 volts at 1000 CPS. Replaceable needle held in chuck by thumb-screw. Ideal for use with sapphire needles. Single hole mounting greatly simplifies installation. Length is only 8". Pivot and swivel mounting for easy needle loading. Handsomely finished in brown enamel. With 24" cable. Shpg. wt., 1 1/2 lbs.

65-200. NET... \$2.45

vice. Mounting base is 12" wide, 10 1/4" deep. Last record repeats until machine is turned off. 60 cycles AC. Brown hammerloid-enamel finish. Sbgg. wt., 9 lbs.

96-225. Special Price...

98-906. Portable Case. Designed for 96-225

Changer above. Beautifully finished in maroon-striped, airplane luggage cloth. Sturdily built, with strong carrying handle. Has record compartment. Sbgg. wt., 13 lbs. NET... \$6.50



## GARRARD



### H-6 ONE OUNCE PICKUP

The Garrard H-6 Deluxe Crystal Pickup incorporates every latest engineering improvement. Same as used in type RC-30 record changer. Arm is of all-metal construction, finished in lacquered brown. It is perfectly balanced and has jewelled mount and pivot. Special curve of arm provides true tangent position, insuring proper tracking and maximum fidelity of reproduction.

#### WITH PERMANENT SAPPHIRE NEEDLE

High-quality sapphire stylus will give years of normal playing use without replacement. Very latest crystal cartridge balanced to 1 oz. needle pressure gives superb tonal quality, also reduces scratch and record wear to an absolute minimum. Frequency response, 65-7000 CPS. Output at 1000 CPS, .85 V. For records up to 12" dia. Furnished complete with mounting base, shielded pickup leads, drilling template and mounting instructions. Shpg. wt., 4 lbs.

**65-050. NET.....\$9.70**  
**65-051. NET.....\$9.70**  
 Same as 65-050 above in every respect except has exceptionally wide frequency response of 30 to 10,000 CPS. Shipping weight, 4 lbs. NET.....\$9.70

### CARTRIDGES

Shure Crystal Type Will replace other flat type cartridges and give improved performance. Genuine Birmorh Crystals. 2 3/4" L. 3/4" W. 3/16" D. Shpg. wt., 4 oz.

**65-351. Model W42AN** and other make pickups with 1 oz. or more pressure. 1.4 V. output. Permanent sapphire stylus. NET.....\$2.94

**65-352. Model W42A.** Same as Model W42AN but less needle. With set screw and thumb screw. NET.....\$2.35

**65-353. Model W40A** for Shure 97AN and other make pickups with 2 oz. pressure or more. 3 V. output. With thumb screw. Less needle. NET.....\$2.35

### CRYSTAL PICKUPS

Crystal pickups of entirely new basic design. Have high output, low pressure. New bearing seats overcome "pinch" effect. Offset head corrects tracking error. The results are instantly recognizable in the superb realism of reproduction. Surface scratch is reduced to an absolute minimum, and record life is increased materially. Modern streamlined plastic arm in mahogany finish blends harmoniously with modern radio cabinets. Has playing radius of 7 1/4", sufficient for records up to 12" dia. Overall length, 8 3/4". Mounts in a single 1/2" or 3/4" hole. 14' shielded cable attached, ready for installation.

**65-301. Model 97AN 1-Ounce Crystal Pickup.** Complete with arm rest and permanent sapphire needle. Range, 60-7000 CPS. 1.4 V. output at 1000 CPS. Uses W42AN cartridge (listed at left). Shpg. wt., 12 oz. NET.....\$3.82

**65-302. Model 97A.** Same as Model 97AN above, but less needle. With set screw and thumb screw. Wt., 11 oz. NET.....\$3.23

**65-303. Model 95A Semi-La-Pressure Pickup.** Same as Model 97A, above, but has 2 oz. needle pressure and 3 V. output at 1000 CPS. For use with any removable needle. Light weight moving system assures better performance and less record wear than with conventional pickups. Excellent for replacement of original equipment. Uses W40A cartridge (listed at left). With set screw, thumb screw and arm rest. Wt., 14 oz. NET.....\$3.23



### WEBSTER-RACINE PICKUPS

#### NEW SERIES AJ1

**65-401. Fig. A.** 1 1/2 oz. crystal pickup. Response 40-8500 CPS. Output .5 V. Brown bakelite arm. For 10"-12" records. With permanent metal replaceable needle. NET.....\$3.82

#### SERIES B2

**65-400. Fig. B. Model X-82-A-3-D.** 2 oz. crystal pickup. 40 to 8500 CPS. Impedance at 1000 CPS, 80,000 ohms. Output 1.8 V. for 10 and 12" records. Shpg. wt., 2 lbs. NET.....\$3.23

**65-405. Replacement crystal for X-82 pickup. NET.....\$2.32**

#### SERIES 80

**65-402. Fig. B. Model GX-80A-3-D.** Tangent crystal pickup. Response 50-7000 CPS. Needle pressure 2.5 oz. Impedance at 1000 CPS, 200,000 ohms. Output 1.8 V. for 10-12" records. Wt., 1 1/2 lbs. NET.....\$2.91

**65-406. Replacement crystal for GX-80 pickup. NET.....\$2.12**

#### MAGNETIC UNIT

**65-403. Fig. C.** Magnetic pickup. Damped for excellent response. 1 V. output at 1000 CPS. Impedance, 18,000 ohms. Wt., 1 1/2 lbs. NET.....\$4.70



### RCA QUALITY PICKUPS

**65-252. Fig. A. RCA 9911 Senior Crystal Pickup With Automatic Switch.** Self-contained switch starts turntable when pickup is lowered on record. Motor stops automatically when record is finished. For 10 and 12" records. Range 70-7000 cycles. Output 1 1/2 V. Needle pressure 3 oz. Top needle loading. Brown wrinkle finish. With needle box and pickup rest. Wt., 2 lbs. NET.....\$4.67

**65-267. Crystal replacement cartridge for above. NET.....\$2.50**

**65-251. Fig. B. RCA 9868 Improved Junior Crystal Pickup.** For 10 and 12" records. Range 70-7000 cycles. Output 1.5 V. Needle pressure 2.7 oz. Polished brown molded housing blends with any cabinet. Wt., 1 1/2 lbs. NET.....\$3.20

**65-266. Crystal replacement cartridge for above. NET.....\$2.20**

**65-250. Fig. C. RCA 9891 Junior Crystal Pickup.** Same as 9868 above, except finished in brown wrinkle. Wt., 1 1/2 lbs. NET.....\$2.91

**65-265. Crystal replacement cartridge for above. NET.....\$2.20**



### AUDAX

#### NEEDLE CUPS

**46-800. Fig. A.** Unbreakable needle cup of attractive brown plastic. Fits 1 1/4" round hole. 6 oz. NET.....5c

**46-801. Fig. B.** Polished metal needle cup with spring hinge cover. For 1 1/4" hole. NET.....8c

**12 Fer.....48c**  
**12 Fer.....77c**

#### PHONO PICKUP CABLE

Fig. C. Belden type 8431. Shielded cable, cotton braid covered.

**47-611. 10 FEET.....25c**  
**47-612. 25 Feet for 59c**

For additional phono equipment including motors, phono pickups, record changers, needles, etc., see pages 84-90, 206-208.



### WEBSTER CHICAGO

#### MAGNETIC PICKUP

The Webster-Chicago 5583 Pickup uses the very latest type magnetic principle assuring results in brilliance of tone and life-like reproduction not obtainable with other types. The magnetic structure utilizes newly developed alloys for improved output level. It is practically independent of temperature or other climatic effects. The new tone arm obtains its free action in any direction by means of a jointed head mounting together with a swivel base. High output impedance—5000 ohms. Needle pressure 3 ounces. Output voltage 1.4 V. Overall length of tone arm 9 1/2". Equipped with shielded cable 18' long. Streamlined design. Shpg. wt., 1 lb.

**65-430. NET.....\$4.41**

#### BRUSH HI-FIDELITY PICKUPS

By reason of extraordinary reduction in the inertia of the vibratory mechanism, these Brush pickups greatly extend the range of sound frequencies which may be satisfactorily reproduced. This, combined with the built-in polished sapphire stylus and low 1 oz. pressure, all serve to greatly reduce record wear and background noise. The Brush pickups below will not only give finest reproduction from the records of today, but will also reproduce the finest recordings that will become available tomorrow.

**65-000. Fig. A. Model PL-25 Crystal Pickup.** Wide response, flat within ±2.5 db. from 30-6000 cycles. Has slight rise to 10,000 CPS. Sapphire stylus. For 10"-12" records. Wt., 7 lbs. NET.....\$16.17

**65-020. High Impedance Equalizer** for above. Wt., 1 lb. NET.....\$1.47

**65-001. Fig. B. Model PL-20 Crystal Pickup.** Audio response, flat within ±2.5 db. from 30-6000 cycles. Has slight rise to 10,000 CPS. Sapphire stylus. For 10"-16" records. Wt., 8 lbs. NET.....\$22.05



# GENERAL INDUSTRIES PHONO MOTORS



**SPECIAL VALUE!**

## KNIGHT RIM-DRIVE MOTOR

A dependable motor at a sensationally low price. Suitable for all types of compact record playing equipment. The 9" turntable is rim-driven by a new 78 RPM constant-speed self-starting motor. Uniform speed is maintained even with variations in record drag, line voltage or operating temperature. Motor is shock-mounted to prevent vibration reaching the turntable; insures quiet operation. Dimensions are 4 1/2" L. x 4 1/4" W. x 2 3/4" D. below plate. For 110 volts, 60 cycles. Wt., 7 lbs. **85-400. NET. \$2.45**



## GREEN FLYER MOTORS

### SINGLE SPEED 78 RPM

**Model A.** Heavy-duty 78 RPM motor. Silent, spiral-cut gears sealed in oil. With 10" turntable, mtg. plate, speed lever, and hardware. Size, 6 1/2" x 3 1/2" x 3 3/4" D. below plate. For 110 volts, 60 cycles. Shpg. wt., 10 lbs. **85-200. List, \$14.60. NET. \$8.76**

**85-201.** Same as above, but with 12" turntable. **NET. \$9.06**

**Model V.** Identical to Model A above except with screw type speed regulator and less mounting plate. Motor size, 5 1/2" x 3 3/4" x 3 3/4" D. Shpg. wt., 8 lbs. **85-202. NET. \$7.65**

### 2 SPEED 78-33 1/2 RPM

**Model D.** A heavy-duty motor. Has 12" turntable, speed control, speed change lever, and hardware. 8 3/4" L., 5 1/4" W., 3 3/4" D. below plate. For 110 v., 60 cy., 13 lbs. **85-210. List, \$20.15. NET. \$12.09**

**85-211.** As above but with 10" turntable. List, \$19.65. **NET. \$11.79**

**85-212. Model H.** Same as Model D but has heavier motor. With 12" turntable. Shpg. wt., 16 lbs. **NET. \$13.11**

**85-215. Universal Model N.** 12" turntable and speed regulator. 9 3/4" L. x 5 1/4" W. x 3 3/4" D. below plate. For 110 V., 50-60 cycles AC or 110 V. DC. Wt., 13 lbs. **NET. \$15.15**

### 6 VOLT 2 SPEED MOTOR

**Model R.** Operates from 6 volts DC at 2.8 A. at 78 or 33 1/2 RPM. Has 12" turntable. 8 3/4" x 5 1/4" x 3 3/4" Shpg. wt., 14 lbs. **85-220. List, \$26.50. NET. \$15.90**

Weighted 12" turntables can be supplied with any of above motors at \$1.80 extra.

## CX AND KX GEAR DRIVE MOTOR

**Model CX.** Provides dependable performance at low cost. 78 RPM direct-drive, self-starting motor is of the induction type. Fan-cooled; ventilated to prevent overheating. Fully enclosed gears and bearings run in a bath of oil. 10" turntable and motor rubber-cushioned from mounting plate. With hardware and rubber drive washer for turntable. Dimensions: 4 1/4" L. x 4 1/4" W. x 3 1/4" D. below plate. For 110 volts, 60 cycles. Shpg. wt., 6 lbs. **85-250. NET. \$5.94**

**85-251. Model CX** with 12" turntable. **WT., 7 lbs. NET. \$6.24**

**Model KX.** Like Model CX above, but with 8" turntable and slightly smaller motor **85-255. NET. \$4.86**



## RCA SYNCHRONOUS MOTOR

The same compact phono motor as used in RCA portable record players. Ideal for use in all types of portable record-playing equipment, for modernizing or wherever space is limited. Plays records up to 12". Synchronous type; manual-starting. Operates at 78 RPM from 105-125 volts, 60 cycles AC, without wows or mechanical vibration. Power consumption, 10 watts. With 7" turntable. Motor is only 7" in dia., 2 1/4" D. Shpg. wt., 5 lbs. **85-450. RCA No. 33343. NET. \$3.50**

## NEW ALLIANCE MOTORS



### MODEL 80 RIM-DRIVE MOTOR

**Fig. B.** A dependable self-starting 78 RPM friction-drive motor suitable for most record playing needs. Sturdy motor with oversize bearings has forced ventilation and excellent regulation for uniform speed. Motor and idler-wheel plate are rubber-cushioned to assure quiet operation. With 8" turntable. Size: 4 1/2" L. x 3 1/4" W. x 3 1/4" D. below plate. An exceptional value in a high quality motor. For 110 volts, 60 cycles. Wt., 3 1/2 lbs. **85-410. NET. \$2.94**

**85-411. Model 80,** with 10" turntable. 110 V., 60 C. **NET. \$3.26**

**85-415. Model 80,** for 110 volts, 50 cycles. With 8" turntable. **NET. \$3.53**

**85-416. Model 80,** for 220 volts, 60 cycles. With 8" turntable. **NET. \$3.53**

**85-417. Model 80,** for 220 volts, 50 cycles. With 8" turntable. **NET. \$3.53**

### MODEL 60 GEAR DRIVE MOTOR

**Fig. A.** Self-starting, constant-speed 78 RPM motor for dependable performance. Laminated-bakelite gears helically cut for quiet operation; enclosed for protection. Large bearings and forced ventilation prevent overheating. Size: 4 1/2" L. x 3 1/4" W. x 3 1/4" D. below plate. Has 9" turntable. For 110 V., 60 cycles. Shpg. wt., 5 1/2 lbs. **85-420. NET. \$5.00**

**85-421. Model 60,** with 10" turntable. **NET. \$5.29**

## STROBOSCOPE

Accurately checks 78 and 33 1/2 RPM speed. Essential for best recording and playback results. 6" in dia. Use under light of 25, 50 or 60-cycle bulb. Wt., 6 oz. **69-510. NET. 7c**



## HEAVY-DUTY "BLUE-FLYER"

**Model E.** A heavy-duty 78 RPM induction-type motor for recording and playback use. Has weighted 12" turntable, speed regulator and hardware. Silent operating, spiral-cut gears are made from laminated bakelite. Finished in attractive blue crackle enamel. 7 1/2" L. x 3 1/4" W. x 4 1/4" below plate. For 110 volts, 60 cycles. Wt., 15 lbs. **85-225. NET. \$13.11**

**85-226.** Same as above but with standard 12" turntable. **NET. \$11.61**

### TURNTABLES ONLY

For use with all Green Flyer and Blue Flyer motors listed directly above.

**85-230. 10" turntable. NET. 75c**

**85-231. 12" turntable. NET. \$1.05**

**85-232. 12" weighted turntable. 2.55**

**69-500. Automatic Stop.** For use with all G. I. Turntables. **NET. 99c**

**69-501. Automatic Stop.** For 8", 9" or 10" turntables. **NET. 66c**



## MODEL RX RIM-DRIVE MOTOR

A 78 RPM rim-driven, self-starting, induction motor. 8" turntable. Motor insulated for quiet operation. Will not overheat in closed case or cabinet. Drive pulley, idler, and turntable mounted in one plane for perfect alignment. 2 1/4" deep below mounting plate. For 110 volts, 60 cycles AC. Wt., 6 lbs. **85-260. NET. \$4.08**

**85-261.** With 10" turntable. **NET. \$4.23**

## NEW MODEL LX RIM DRIVE

Essentially the same as the Model RX above but more compact in design and lighter in weight. 78 RPM. 2" deep below mounting plate. With 8" turntable. For 110 V., 60 cycles AC. Wt., 5 lbs. **85-265. NET. \$2.70**



## G.I. RM4 RECORDING MOTOR

Newly developed rim-drive 78 RPM heavy-duty motor with 10" weighted turntable. Excellent for use in recording or "constant-speed" playback work. Turntable has retractable pin for holding recording disc while being cut and sliding back. Self-starting, dynamically balanced motor is rubber-insulated from both mounting plate and turntable for quiet operation. Maintains constant speed even under heavy "drag" imposed while recording. Oil-less bronze bearings throughout. Drive pulley, idler wheel, and turntable aligned in one plane. Designed for steady and dependable operation. Will not overheat in closed cases or cabinets. Depth below plate, 2 1/4". With mounting plate and hardware. For 110 volts, 60 cycles. Shpg. wt., 15 lbs. **85-270. NET. \$6.72**

## Knight PORTABLE PLAYER

This fine unit will bring you hours of enjoyable recorded entertainment at exceptionally low cost. Quickly and easily attached to any radio set or amplifier. Plays all 10- and 12-inch standard phonograph records. Has sturdy, self-starting 78 RPM motor. One ounce low-pressure crystal pickup reduces record wear; response 40-6500 CPS. Additional features include volume control, pickup arm rest, and built-in needle cup. Attractive leather-covered case with hinged lid and carrying handle. Lid can be closed during playing operation. 15" wide, 12" deep, 6 1/4" high. For 110 volts, 60 cycles AC. Shpg. wt., 10 lbs. **96-250. NET. \$9.95**





# POPULAR CRYSTAL MIKES

# SHURE UNI-DIRECTIONAL MIKES



### ASTATIC T-3

An excellent wide-range crystal mike for general application in Recording, PA and Sound Installations, and Transmitting Equipment. Response is substantially uniform from 30 to 10,000 CPS, providing ample range for most speech and musical requirements. Output level, -52 db. Tilting-head provides effective means of controlling acoustic feedback. Bullet-type case fitted with stand-type plug and connector, finished overall in polished chrome. Has  $\frac{3}{8}$ "-27 thread. With 25-foot shielded cable. Less stand. Wt., 2 lbs. **99-300. List, \$25.00. NET, \$14.70**

**Model GT-3.** Same as above on "Grip-to-talk" desk stand,  $8\frac{1}{2}$ " high, with 8' cord. Wt., 5 lbs. **99-301. NET, \$17.64**

### ASTATIC JT-30TT

Semi-directional crystal type with fixed-angle head for optimum usefulness. Designed to provide good performance at low price. Used extensively for PA Work, Home Recording and Amateur Radio Stations. Has uniform response from 30 to 6000 CPS; output, -52 db. Internal suspension construction prevents pickup of extraneous vibrations and noises from case, stand, or floor. Housed in a compact, two-tone opalescent gray finished case, threaded  $\frac{3}{8}$ "-27 to fit all stands. Equipped with 25-foot cable and concentric connector. Wood handle and interlocking metal base included; permit use as desk or hand microphone. Wt., 3 lbs. **99-302. List, \$15.50. NET, \$9.11**



### SHURE CRYSTAL

**Model 708A.** Semi-directional type with smooth wide-range frequency response of 30-6000 CPS. Output, -49 db. Die-cast case finished in iridescent gray with chrome type trim.  $\frac{3}{8}$ "-27 thread. 7 foot cable and connector. Wt.  $2\frac{1}{2}$  lbs. **99-363. NET, \$10.29**

**99-364.** As above but with 25 foot cable. **NET, \$11.17**

### SHURE 750-B HANDMIKE

"Military-type" crystal mike—fits palm of hand. Output, -32.5 db. Die-cast case, iridescent gray finish. On-off thumb switch and 7 foot cable. Wt., 1 lb. **99-365. NET, \$13.23**

### ASTATIC N-30

Designed especially for modern PA work, the N-30 features exceptionally smooth response and faithful reproduction. Frequency response of 30-10,000 CPS is substantially flat and free from peaks. Output, level -52 db. below 1 volt per bar. Die-cast case with tilting swivel mount permits adjustment for either semi-directional or directional type pickup. Finished in bright chrome. Concentric cable connector provides means of quick interchange of cable. Case, 2" diam.,  $4\frac{1}{2}$ " overall height. With 25-foot low-capacity shielded cable with locking connector and spring protector. Wt., 2 lbs. **99-303. NET, \$10.29**



### SHURE CRYSTAL MICROPHONES

Popular, high-quality crystal microphones at moderate cost. Have excellent response. Suitable for all general types of Public Address, Recording, and Amateur Radio Station Work.

**Model 7A.** (Fig. A) A new economy microphone having Shure quality. Smooth wide-range response from 30 to 10,000 CPS. Output, -53 db. This mike is ideal for low-price PA installations, paging and call-systems, etc. In a satin-chrome case,  $\frac{3}{8}$ "-27 thread. Complete with 7 ft. cable Shpg. wt., 3 lbs. **99-350. NET, \$9.70**

**99-351.** As above, but with 25 ft. cable. **NET, \$10.58**

**Model 705A, "Rocket" Mike.** (Fig. B) Famous for its smooth wide-range, from 30 to 10,000 CPS. Tilting head easily aimed at source of sound. Output, -58 db. 25 ft. shielded cable with concentric Rich satin-chrome finish.  $\frac{3}{8}$ "-27 thread. 3 lbs. **99-352. List, \$25.00. NET, \$14.70**

**Model 70H, "Super-Level."** (Fig. C) A superior microphone of the pressure-actuated type. Response 30-10,000 CPS. High output of -47 db. makes it ideal for all low-gain speech equipment for crisp reproduction. Chrome-finished case, with built-in cable connector.  $\frac{3}{8}$ "-27 thread. With 7 ft. shielded cable. 2 lbs. **99-353. List, \$22.50. NET, \$13.23**

**99-354.** As above but with 25 ft. cable. **NET, \$14.11**



These new Shure Uni-Directional Microphones are the effective solution to feedback problems for every type of microphone application. Dead at the rear; eliminate pickup of reverberation, audience and background noise. Overcome all types of troublesome room acoustics. Permit more volume. Allow closer placement of microphone and speakers. For all difficult PA installations; will improve PA results in low-ceiling rooms, rooms with tile or brick walls, etc.

### "UNIPLEX" CRYSTAL

**Model 730A.** The lowest-priced true cardioid Uni-Directional microphone available. Gives excellent high quality reproduction, practically flat from 30 to 10,000 CPS. Output level is -63 db. at front; but at rear is down additional 15 db. Tilting head. Widely used in all difficult PA installations; in churches, low-ceiling rooms, night clubs, rooms with tile walls, etc. Wide-angle response from the front, but dead at the rear; makes microphone placement easy because feedback is reduced. Satin chrome finish. Head  $3\frac{1}{4}$ " dia.,  $3\frac{3}{4}$ " deep. 25-ft. dual-shielded cable and connector. Wt., 4 lbs. List, \$35.50. **99-355. NET, \$20.87**

### "UNIDYNE" DYNAMIC

**Model 55C.** Most effective solution to sound pickup problems in public address, broadcasting and recording. Smooth wide-angle response from the front, yet is dead at the rear. Covers 40 to 10,000 CPS. Output, -55 db. For indoor and outdoor use. Satin chrome finish. Head tilts through 90° angle,  $\frac{3}{8}$ "-27 thread. Head size,  $4\frac{1}{4}$ " high,  $3\frac{1}{4}$ " wide,  $3\frac{3}{4}$ " deep. High impedance model. With 25-ft. shielded cable. Includes internal transformer. Wt.,  $\frac{4}{4}$  lbs. List, \$49.50. **99-356. NET, \$29.11**

**Model 55A.** As above, but for 35 to 50 ohm circuits. **99-357. NET, \$27.64**

### MODEL 555 "BROADCAST" UNIDYNE

Similar to the Unidyne above in appearance. Model 555A output into 50 ohms, -62.8 db. Model 555C output to load of 100,000 ohms or more, -55.5 db. Built-in transverse vibration isolation unit. Satin chrome tilting head.  $\frac{3}{8}$ "-27 thread. With 18" stub cable. Shpg. wt.,  $4\frac{1}{2}$  lbs. **99-359. Model 555C for high impedance circuits. EACH, \$38.81**

### ECONOMY CRYSTAL MIKES

Dependable crystal mikes. Ideal for use with Home Recorders, Window Demonstration Sound Systems, Paging Systems, Amateur Radio Transmitters, etc.

**99-360.** Shure Model 717A Handmike. Fig. A. Tenite plastic case.  $2\frac{1}{2}$ " diam. x 6". Smooth response. Output, -49.7 db. With 7ft. cord. Wt., 1 lb. **NET, \$5.85**

**99-361.** Shure Model 707A, Fig. B. Iridescent gray diecast case, polished trim. Smooth response. Output, -49.7 db. Standard  $\frac{3}{8}$ "-27 thread in handle. Diam.  $2\frac{3}{8}$ ", 5" overall. With 7 foot cord. Wt., 2 lbs. **NET, \$5.85**

**99-362.** 707A with 25 ft. cord. **\$6.76**

### Ideal For Home Recording



**Fig. A. Electro-Voice V-2.** Response is essentially flat from 35-11,000 CPS; output, -64 db. Housing and case design eliminates cavity resonance. Cradle mounting;  $\frac{3}{8}$ "-27 thread. With 20-foot cable and on-off switch. Model V2 is a high quality, bi-directional microphone; excellent for use where wide smooth response, with low feedback is required. Shpg. wt., 4 lbs. **99-330. High Impedance. NET EACH, \$22.05**

**Fig. B. Electro-Voice V-1.** Combines high-quality performance and extremely compact size. Ideal for use with portable PA equipment to satisfy varying installation requirements. Cradle type suspension with built-in on-off switch. Response from 40 to 10,000 CPS. Output level, -65 db.  $\frac{3}{8}$ "-27 thread. With 20-foot cable and cable connector. Light gunmetal finish. Has built-in shock-absorber; reduces vibration effect. Shpg. wt., 4 lbs. **99-332. High Impedance. NET EACH, \$16.17**

**Fig. C. Amperite Velocity Mikes.** A high quality velocity mike. Acoustic Compensator helps in reducing feedback. Picks up sound from front and back only; "dead" at sides. Heavy-cast gunmetal-finished case; hand-hammered ribbon; genuine Alnico magnet. Range from 40 to 11,000 CPS. Has connector plug and 25 feet of cable. On-off switch; cradle mounting; shock absorber. Threaded  $\frac{3}{8}$ "-27. Output, -65 db. Shpg. wt., 4 lbs. **99-400. RBHK. High Impedance. NET EACH, \$24.70**

**99-401. RBMK. 200 Ohm. NET EACH, \$24.70**



# DYNAMIC MICROPHONES



## KNIGHT-ELECTRO-VOICE 631

An unusually high-quality dynamic microphone built to ALLIED's specifications by Electro-Voice. Designed to give excellent performance with Knight Sound Systems, the Model 631 is also ideally suited for original or replacement equipment use in any type of Sound System installation. Head is boused in case guaranteed for life against flaws or defects. Head has fixed tilt of 22° for proper use by speakers or vocalists; magnet, 25% nickel. Diaphragm is made of high-tensile heat treated duralumin alloy that will not "crush" or damage, no matter how intense the sound pressure applied. Fitted with special acoustic baffle for use where directional pickup is desired; improves high-frequency response for crisp reproduction. Frequency response is 40 to 10,000 CPS; output level is -55 db. Light gunmetal finish. High impedance. With 25-foot shielded, rubber covered cable and connector. Has standard 3/4"-27 thread. Shpg. wt., 4 lbs. **\$13.23**  
99-334. NET.....

## ELECTRO-VOICE DYNAMIC MICROPHONES

### MODEL 630

Response, 30 to 9,000 CPS, with a 5 db rise on upper frequencies. High impedance. Output, -55 db. Tilting head. Built-in on-off switch. Gunmetal finish. 3/4"-27 thread. With 20-foot cable. Shpg. wt., 4 lbs. **\$16.17**  
99-335. NET.....  
99-336. As above, but in chrome. **\$17.64**  
99-337. Model 630LL. Same as 99-335, but can be used with up to 500-foot cable. Connects to grid; no input transformer required. With 25-foot cable. **\$16.17**  
NET.....

### MODEL 640

For finest performance. Response, 30-12,000 CPS; output, -52 db. High impedance. Has steel tilting cradle. Gunmetal finish. 3/4"-27 thread. With 20-foot cable and connector. Shpg. wt., 4 lbs. **\$17.64**  
99-338. NET.....  
99-339. As above, but in chrome. **\$19.11**  
99-340. Model 640LL. Same as 99-338, but for use with up to 500-foot cable. Connects to grid. With 25-foot cable. **\$17.64**  
NET.....

### NEW CARDAK

A dynamic mike designed to reduce feedback wherever used. Enables selection of correct directional response for every installation. Response variable from uni-directional, which eliminates sound from rear, to bi-directional, which eliminates side-wall reflected sound. Response flat from 30 to 10,000 CPS; output, -52 db. Tilt-type mount; 3/4"-27 thread. On-off switch. Chrome finish. With 20-foot cable. Shpg. wt., 4 lbs. **\$17.64**  
99-341. High Impedance. **\$17.64**  
99-342. 50 Ohms. **\$17.64**  
NET EACH..... **\$32.34**



## DYNAMIC MIKES

### ASTATIC DN

A semi-directional, all-purpose dynamic microphone. Has "unitary" moving coil together with quality Alnico magnets; audio response is substantially flat from 50-7,000 CPS. Output, -55 db. Tilting head, permits semi- or non-directional positioning for best pickup. Ideal for PA use, recording, call systems, etc. Two-tone opalescent grey and chrome finish. With stand-type plug and connector, 25-foot shielded cable. Has 3/4"-27 thread. Moving system is highly damped to prevent peaks. Shpg. wt., 2 1/2 lbs. **\$13.23**  
99-304. High Impedance. **\$13.23**  
NET.....  
99-305. 50 Ohms. NET. **\$11.76**



### AMERICAN D5-T

An all-purpose dynamic type microphone. Suitable for all installations requiring high quality reproduction. Response, 40-8,500 CPS. Output, -52 db. Semi-directional; with tilting bracket; 3/4"-27 thread. Chrome finish. With 25 feet of shielded cable and locking type connector. Wt., 4 lbs. **\$21.02**  
99-450. High Impedance. **\$21.02**  
NET.....  
99-451. 50 Ohms. **\$17.79**  
NET.....



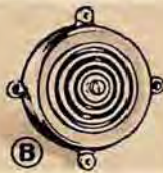
### AMPERTITE PRESSURE-GRADIENT DYNAMIC

Uni-directional mike; reduces feedback. -55 db. Response, 40-10,000 CPS. 25-ft. cable and switch. Chrome finish. Wt., 3 lbs. **\$18.82**  
99-403. PGL. 200 ohms. **\$18.82**  
99-402. PGH. High Imp. **\$18.82**  
NET EACH.....  
As above, but flat from 70 to 8,000 CPS. 12-ft. cable. **\$14.70**  
99-405. PGAL. 200 Ohms. **\$14.70**  
99-404. PGAH. High Imp. **\$14.70**  
NET EACH.....



### RCA AEROCRYSTAL

New lightweight, compact crystal microphone assuring excellent reproduction of voice and music. Wide range audio response, essentially flat from 30 to 10,000 CPS; output, -35 db. Moisture-proofed. Satin chrome finish. 1/4" pipe thread. 3/4"-27 adapter. 1/2" cable. Size: 2 1/2" x 3" x 3 3/4". Shipping weight, 2 1/2 lbs. **\$8.70**  
99-430. Model MI-6205. General Purpose Mike. **\$8.70**  
NET.....  
99-431. Model MI-6202. As above but has speech range of 30 to 5,000 CPS. Brown case with chrome front grill. With 12-foot cable. Wt., 2 1/4 lbs. **\$8.10**  
NET.....



## CARBON MICROPHONES

### ELECTRO-VOICE

**Fig. A.** Double-button carbon mike in streamlined case. Impedance, 200 ohms per button. Excellent frequency response of 40 to 8,000 CPS. Unusually flat. Output, -42 db. Live rubber cushioning. Efficient floating type metal diaphragm insures long life. Gunmetal finish. 3/4"-27 thread. With 6-foot cable. Shpg. wt., 2 lbs. **\$4.70**  
99-343. NET.....

**Fig. B.** An outstanding value in a double-button carbon mike. Designed especially for ring and spring suspension. Impedance, 200 ohms per button. Response, 45 to 7,000 CPS., is crisp and clean. Duralumin diaphragm. Gunmetal finish. Attractive grill front. With screw terminals. Shpg. wt., 2 lbs. **\$3.23**  
99-344. NET.....

### UNIVERSAL LAPEL

**Fig. C.** Very high sensitivity. Light weight, excellent voice response, and general compactness of design make this a perfect "watch model" mike. Suitable for use in inter-office systems, dictaphones, PA systems, small transmitters, experimental work, etc. Single button type. Impedance, 200 ohms. Equipped with new low hiss carbon button and pure gold-spot-center diaphragm. Enclosed in durable black bakelite case. Only 1 1/4" diameter, 1/2" thick. Weighs 1 1/2 oz. Output, -38 db. Has screw terminals at rear for cable connection. No larger than an average size watch. A really remarkable value in a surprisingly efficient lapel mike. Shipping weight, 1/4 lb. **\$1.76**  
99-470. NET.....

## SPECIAL PURPOSE MICROPHONES

**Fig. A.** Universal Carbon Handi-Mike. Single button microphone. 100 ohms impedance. Output, -38 db. Close-talking type. Attractive balanced-grip, polished chrome body with on-off switch. 6-foot cable. Wt., 1 1/2 lbs. **\$5.88**  
99-471. NET.....

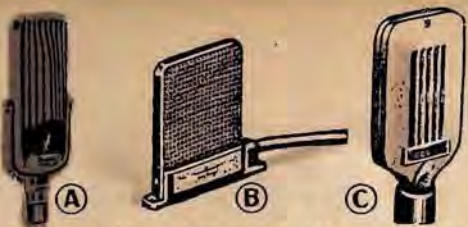
**Fig. A.** Universal Crystal Handi-Mike. Response, 50 to 5,000 CPS. High-impedance type. Output, -53 db. Polished chrome body with on-off switch. With 6-foot cable. Shpg. wt., 1 1/4 lbs. **\$10.88**  
99-472. NET.....

**Fig. B.** Astatic Lapel Crystal Mike. For speakers, lecturers, etc. Light in weight and inconspicuous; has spring-clip to grip lapel. Response, 30 to 10,000 CPS; output, -62 db. Statuary bronze finish. 1 1/2" dia., 3/4" thick; net wt., 6 oz. With 25-foot cable. Shpg. wt., 1 lb. **\$14.70**  
99-306. NET.....

**Fig. C.** Astatic Model 218. A concealed-placement crystal mike widely used in dictograph and detective work. 2 1/2" dia., x 3/4" deep; weighs only 7 oz. High impedance. Output, -46 db. Excellent response in speech frequencies. Finished in telephone black. 8-foot cable and spring clip. Wt., 1 1/4 lbs. **\$13.23**  
99-307. NET.....

**Fig. D.** Astatic Model VP Vibration Type. Inertia type pickup for production testing of moving and reciprocating machinery, motors, etc. Voltage output directly proportional to amplitude of motion. High-impedance. Response most efficient on frequencies up to 2,000 CPS. Output may be observed visually or audibly. Chrome-finished case, 2" dia., 1 1/4" deep; with 6" extension rod and 8-foot cable. Shpg. wt., 1 1/4 lbs. **\$14.70**  
99-308. NET.....





### BRUNO NO-VOLTAGE MICROPHONES

New no-voltage microphones. The only high impedance mikes that can be used with up to 1000 ft. of cable without appreciable loss of high frequencies. All are Velocity type of very latest design.

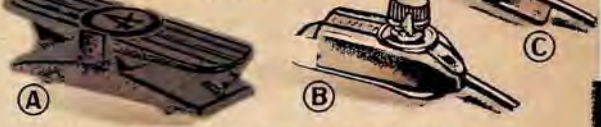
**Model WS. Fig. A.** Covers large areas. Directional fins act as funnel for incoming sound waves. Ideal for theater work where performer is constantly changing position. Output, —45 db.; 80 to 12,000 CPS; size, 7" x 3 1/4" x 2". Silver crystalline finish. Less cable, 3/4"-27 threads. Shpg. wt., 4 lbs. **99-500. NET. \$8.73**

**Model SS. Fig. B.** Extremely compact. Only 1/2" thick, 2 1/4" high, 2 1/4" wide. Mount on sounding boards of musical instruments, conceal for detective work, use on desks for paging, wear on lapel for hearing aids and portable uses. Output, —55 db.; 80 to 8,000 CPS; weighs 4 oz. Gunmetal finish. 3 ft. cable and plug. **99-501. NET. \$8.73**

**Model HS. Fig. C.** Hand or desk type. Permits close-talking with minimum pickup of extraneous noise. Output, —55 db.; 80 to 8,000 CPS. Silver crystalline finish. Size: 4 x 2 x 1/4". Rubber coupling fits any stand. With 10 ft. cable. Shpg. wt. 1 lb. **99-502. NET. \$5.17**

**41-910.** 25-ft. cable with connector for above mikes. **NET \$1.62**

### MUSICAL INSTRUMENT MIKES



### AMPERITE KONTAK MICROPHONES

For all string instruments such as guitar, violin, piano, or for wind instruments. Easily installed without tools. Any number up to five can be wired in parallel for complete manual control of orchestration. Output, —40 db.

#### STANDARD MODELS

**Fig. C.** Frequency response 60 to 6,000 CPS. High impedance. SKH for use with high-gain amplifiers. KR output sufficient for direct use with most radio sets (after 1935) or with low-gain amplifiers. 15-ft. cable. Less volume control. Wt., 2 lbs. **99-406. SKH. Low-output \$7.06**  
**99-407. KR. Hi-output NET EACH. \$7.06**

**Type KKH. Fig. B.** Like 99-406 but with volume control. High impedance 25-ft. cable. **99-408. NET. \$10.58**

**41-900. Fig. A.** Foot volume control for all models. 2 lbs. **NET \$7.06**  
**41-901. Kontak Clamp, Clamps Mike to String Inst. 4 oz. NET. \$5.9c**  
**41-902. Kontak Strap, For flat-top guitars. Wt., 4 oz. NET. \$5.9c**

#### DELUXE MODELS

**Fig. C. Type KTH.** Faithfully reproduces music over the entire usable range from 40 to 9,000 CPS. Used by many famous bands. Increases timbre, makes new effects possible. High impedance. Low output, for high-gain amplifiers. 25-ft. cable. A professional unit. Wt., 2 lbs. **99-409. NET. \$12.94**

**Type KKKH.** As above, but with hand volume control. High impedance, low output type. **99-410. NET. \$16.46**

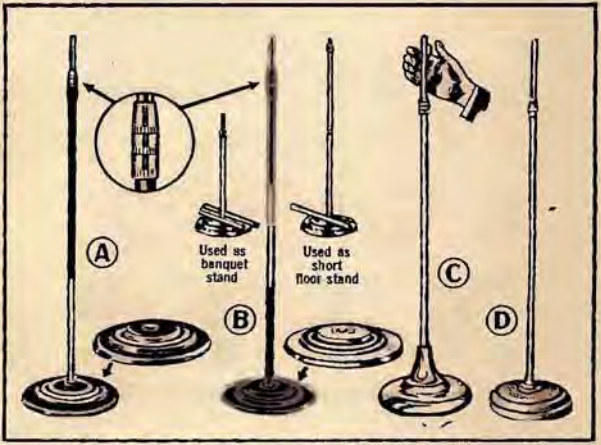


### ECONOMY MUSICAL INSTRUMENT MIKES

**Fig. A.** Can be used on any musical instrument. Easily mounted on body of instrument. Reproduces vibrations as instrument is played. Gives mellow, rounded tone. Will work with all amplifiers and most modern radio sets. Response, 80-5,000 CPS; output, —28 db. High impedance. With volume control and 15 foot cable. Size, 3" x 1" x 3/4". Shpg. wt., 1 lb. **99-520. NET. \$7.06**

**Fig. B.** As above, but without built-in volume control. Quickly installed. Size, 1 1/8" x 1" x 3/4". Shpg. wt., 1 lb. **99-521. NET. \$5.29**

**94-025. Bridge Clamp.** Shpg. wt., 4 oz. **NET. \$5.9c**



### QUALITY MICROPHONE FLOOR STANDS

Unusually attractive, exceptionally durable floor stands in an extensive selection to suit every need. Heavy bases prevent tipping. All models are easily adjustable; positive action adjustable lock clutch prevents extended section from slipping. All chrome parts highly polished. Available in 6 types.

#### STANDARD ADJUSTABLE

**Fig. A.** A very popular adjustable floor stand for use with any microphone with standard 3/8"-27 thread. Ruggedly built. Telescoping upper stem, section is chrome finished; easily adjusted from 35" to 68". Lower section is grey enameled. New "easy-grip," positive-action clutch. Heavy 8 lb., 10" diameter, three-step base is finished in grey crackle. Wt., 12 lbs. **94-000. NET. \$3.75**

#### STANDARD 3-WAY TAKE DOWN

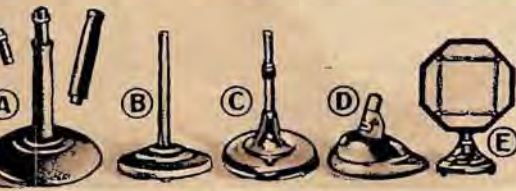
**Fig. B.** A versatile stand for use as 14" banquet stand, 45" floor stand, or tall floor stand adjustable to 59". New "easy-grip" clutch. Attractive three-step base finished in grey crackle; center step has red enamel ring. Lower sections of stem enameled in dark grey; top adjustable section is polished chrome finish, 10" dia., 8-lb. base. 3/8"-27 thread. Shpg. wt., 12 lbs. **94-001. NET. \$4.35**

#### DELUXE ADJUSTABLE

**Fig. A.** Similar in design to standard adjustable model above, but even more handsome in appearance. Highly polished chrome-finished telescoping stem quickly adjusts from 35" to 68"; new "easy-grip" clutch locks stem firmly in place. Heavy three-step base is chrome-finished, with center step in beautiful contrasting black enamel. Base weighs 10 lbs. and is 10" in diameter. Standard 3/8"-27 thread. Shpg. weight, 12 lbs. **94-004. NET. \$4.65**

#### DELUXE 3 WAY TAKE DOWN

**Fig. B.** A new triple-purpose stand; may be used as a 14" banquet stand, a 45" short floor stand, or a tall floor stand adjustable to 59". Ideal for use with portable systems. Provides correct height for any purpose in a jiffy. Positive locking. New "easy-grip" clutch. Stem finished in chrome. Three-step chrome base, with center step in black enamel. Base is 10" in diameter; weighs 10 lbs. Standard 3/8"-27 thread. Shipping wt., 17 lbs. **94-002. NET. \$5.95**



### DESK AND BANQUET MIKE STANDS

Popular mike stands for banquet table and executive's desk. Wide selection permits suiting personal preference. Attractively designed.

**3 WAY MIKE STAND**  
**Fig. A.** Portable stand; converts to 8" banquet stand, mike handle, or desk stand. Has 6" dia. grey crackle base, 4 1/2" grey crackle handle, and 2" chrome plated stem. 3/8"-27 thread. Shpg. wt., 7 lbs. **94-010. NET. \$2.29**

**ADJUSTABLE BANQUET**  
**Fig. C.** Extends 8 1/2" to 12". 3/8"-27 thread, 7 1/2" dia. base. Chrome finish. 8 lbs. **94-007. NET. \$3.35**

**10" DESK STAND**  
**Fig. B.** Stem is chrome finish; base is two-tone finish of grey crackle and baked red enamel. 3/8"-27 thread. 6 lbs. **94-005. NET. \$1.15**

**SHURE 536A DESK STAND**  
**Fig. D.** Fits Shure connector-type mikes; adapter plate and tubing for other makes. Iridescent grey. Base: 2 1/2" x 5" x 7". Wt., 1 1/2 lbs. **94-035. NET. \$2.06**

**94-006.** As above, but all chrome. Center step of base is black enamel. **NET. \$1.59**

**FOR CARBON MIKE**  
**Fig. E.** Octagonal ring, 5 1/2" in dia. Black wrinkle finish. With 8 springs. Wt., 4 lbs. **94-008. NET. \$1.47**

#### SHOULDER MIKE CARRIER

A real necessity for all PA work where both hands must be free. Especially useful for switchboards, mobile PA, etc. Durable wire mounts fit comfortably over shoulders. Weights only 11 oz. Fits any mike; has 3/8"-27 thread on flexible gooseneck. Black wrinkle finish. Fine for Mobile PA; permits the operator to talk while driving or read announcements from script, while on the move. 2 lbs. **94-030. NET. \$1.55**



#### UNIVERSAL MIKE BOOM

Attaches to any floor mike stand. Moves horizontally or vertically; has universal adjustment, no locks to fumble with. Permits quick, definite positioning of mike anywhere within six foot sphere. Shpg. wt., 3 lbs. **94-026. NET. \$4.41**

#### NEW "TRIGGER-CLUTCH" HEAVY-DUTY

**Fig. C.** Ruggedly-built stand with new "trigger clutch." Slight pressure on trigger telescopes stand until trigger is released; for upward adjustment simply slide stem. Extends from 38" to 69". Heavy polished chrome stem and base. Heavy 15-lb. base, 10 1/2" dia. 3/8"-27 thread. Shpg. wt., 21 lbs. **94-020. NET. \$8.82**

#### LIGHTWEIGHT ADJUSTABLE

**Fig. D.** A lightweight stand ideal for portable recorders, PA systems, etc. Attractive baked enamel stem and base; with locking positive-action clutch. Telescoping stem extends from 33" to 59"; standard 3/8"-27 thread. Has 7 lb. base, 9" in diameter. Wt., 10 lbs. **94-003. NET. \$2.75**



# MICROPHONE CONNECTORS



## SINGLE CONDUCTOR CONNECTORS

### CABLE TYPE CONNECTORS

Indestructible, pressure type. Machined-brass, chrome finish. Laminated bakelite insulation.  $\frac{3}{4}$ "-27 threads. Average shipping wt., 3 oz.

**41-955.** Fig. A. Male with coupling threads. NET.....24c  
**41-956.** Fig. A. Same as 41-955, but spring contact. NET.....29c  
**41-957.** Fig. A. Same as 41-956, but shorting type. NET 29c  
**41-958.** Fig. C. Female with coupling ring. NET.....29c  
**41-920.** Couples two cables both with 41-958 connectors; replaces costly plug-and-cable adapters. Both ends male,  $\frac{3}{4}$ "-27. NET.....42c  
**41-959.** Fig. D. Female angle-type; connects cable at right angles to amplifier. NET.....35c  
**41-962.** Fig. E. Phone plug adapter. Screws into 41-958. Plugs into standard phone jacks. NET.....26c

### CHASSIS TYPE CONNECTORS

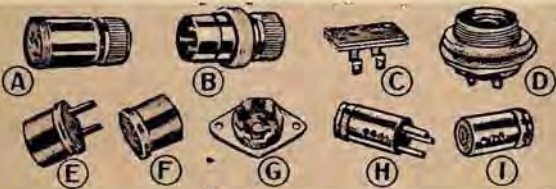
**41-965.** Fig. B. Male type single conductor chassis and mike connector. Non-shorting type. A built-in unit in many amplifiers and mikes. Takes 41-958 connector. Requires  $\frac{3}{4}$ " mtg. hole. 3 oz. NET. 18c  
**41-966.** Fig. B. Same as 41-965 but has tempered heavy coil spring contact for all applications where most positive connection is desired. Requires  $\frac{3}{4}$ " mtg. hole. Takes 41-958 connector. 3 oz. NET. 24c  
**41-967.** Fig. B. Like 41-966 but shorting type; grounds circuit automatically when mike plug is removed; prevents open circuit noise. Takes 41-958 connector. Requires  $\frac{3}{4}$ " mtg. hole. 3 oz. NET.....26c

### TRIPLE CONNECTORS

Fig. F. Connect two mikes or speakers in parallel. Standard  $\frac{3}{4}$ "-27 thread. Bakelite enamel finish. Keep several on hand. Shpg. wt., 4 oz.

**41-921.** 3-female type.  
**41-922.** 2-male and 1-female type.  
**41-923.** 1-male and 2-female type.

NET EACH.....\$1.15



## TWO AND THREE CONTACT CONNECTORS

### HEAVY DUTY TYPE

Three contact type. Chrome-plated brass; spring cord protector;  $\frac{3}{4}$ "-27 threads. Wt., 3 oz.

**41-970.** A. Female.  
**41-971.** B. Male. EACH 59c

### MINIATURE TYPE

Bakelite plugs with metal shells; 3-contact.  $\frac{1}{8}$ " dia. Wt., 2 oz.

**41-973.** I. Female.  
**41-974.** H. Male. EACH 18c

### TWO CONTACT TYPE

Wafer type with standard tube prongs and metal shell. 2 oz.

**41-980.** E. Male.  
**41-981.** F. Female. EACH 10c

### CHASSIS TYPE

**41-972.** Fig. D. Female-type. Takes male plug, Fig. B. Mounts in  $\frac{1}{8}$ " hole in any panel to  $\frac{1}{4}$ " thick. Wt., 3 oz. NET.....29c

**41-975.** Fig. G. Female chassis connector with mtg. plate; takes Fig. H. plug. Mtg. centers,  $\frac{1}{4}$ ". Requires  $\frac{3}{4}$ " hole. Wt., 3 oz. NET.....18c

**41-982.** Fig. C. Wafer bakelite type with firmly imbedded contacts. Fits two-contact male connector 41-980 listed at left.  $1\frac{1}{2}$ " long,  $\frac{3}{4}$ " wide, with mounting holes. Wt., 3 oz. NET.....50c



## MALLOY PLUGS AND EXTENSION JACKS

### 2-WAY PLUGS AND JACKS

Bakelite insulation. Insulated tip. Cable type. Wt., 5 oz.

### PLUGS

**41-641.** Fig. A. Type 75. 29c  
 Bakelite shell. NET.....  
**41-640.** Fig. B. Type 75N. Shielded nickel shell. NET 44c  
**41-937.** Fig. C. Type 75A. Shielded nickel shell and built-in cable clamp. NET.....73c

### JACKS

**41-938.** D. Type 100. 59c  
 Fiber shell; for 41-641 plug. NET.....  
**41-939.** E. Type 100N. Nickel shell; for 41-640 plug. NET 73c  
**41-940.** Fig. F. Type 100A. Nickel shell; cable clamp; for 41-937 plug. NET..\$1.03

### 3-WAY PLUGS AND JACKS

Well-insulated; for 3-way circuit connection. Shpg. wt., 6 oz.

### PLUGS

**41-941.** A. Type 76. Bakelite shell. NET.....44c  
**41-942.** Fig. C. Type 76A. With shielded nickel shell and built-in cable clamp. NET.....88c

### JACKS

**41-943.** D. Type 101. With fiber shell; for 41-941 plug. NET.....88c  
**41-944.** F. Type 101A. Nickel shell; has cable clamp for 41-942 plug. NET.....\$1.32

### MIDGET CHASSIS JACK

**41-985.** Fig. G. For  $\frac{3}{4}$ " hole. Phosphor bronze spring contacts. Wt., 3 oz. NET.....28c

# MICROPHONE ACCESSORIES



## MICROPHONE TRANSFORMERS

### EXTERNAL INPUT

Couples all low impedance microphones (up to 200 ohms) to high impedance amplifier grid circuit. Response, 60-8000 CPS. Has special balanced winding. Fully shielded. Designed for high-gain work. Supplied complete with connecting leads Wt., 3 lbs.

**41-915.** NET.....\$3.53

### CABLE TYPE

Thordarson T14476 transformer; offers a convenient method of connecting 200-250 ohm mikes to high impedance amplifiers. Connects in series with mike cable and amplifier input. Response,  $\pm 1.5$  db. from 30 to 15,000 CPS. Overall dia., only 1" Wt., 1 lb.

**41-916.** NET.....\$8.53

## MIKE PRE-AMP.

Permits use of any high-impedance mike with low-gain amplifiers or converts any radio into a FA system. Pcs 1-1-35 25GT and 1-12J7GT. Brown metal case,  $4\frac{1}{2}$ " x  $3\frac{1}{2}$ " x 7". With tubes. For 110V., 60 cycles. Shpg. wt., 4 lbs.

**35-500.** NET.....\$5.75  
**41-993.** Mike plug for above. 3 oz. 5c



## MICROPHONE SWITCHES

Compact on-off switch; fits between any mike and stand having  $\frac{3}{4}$ "-27 threads. Has slide-type switch. With cable-clamp. Knock-out hole in back for cable. Chrome-plated case. Easily installed. A necessity for all types of PA work. Shpg. wt., 1 lb.

**41-925.** NET.....\$1.18

Type A83A. Plug-in type switch for Shure connector-mounting mikes listed on pp. 91-93. Easy to install. No wiring. Switch Off and On by bakelite knob. Fits all mike stands with  $\frac{3}{4}$ "-27 thread. Ideal for PA or Communication system use. 2 lbs.

**41-930.** NET.....\$2.35

Compact, fully shielded, unbreakable switch for installation between microphone and mike connector.  $\frac{3}{4}$ "-27 thread. Push-to-Talk release for stand-by; or slide switch forward for permanent connection. Polished chrome finish. 1 lb.

**41-950.** NET.....59c



## MIKE STAND SWIVELS

Fig. A. Permits 90° tilt of mike. Chrome-finished. Shpg. wt., 8 oz.

**41-926.** Male has  $\frac{1}{4}$ " pipe; female has  $\frac{3}{4}$ "-27 to fit stand.  
**41-927.**  $\frac{3}{4}$ "-27 to  $\frac{3}{4}$ "-27. 53c  
 NET EACH.....

## CARBON GRANULES

Fig. C. No. 100 size. Highest quality for best reproduction. Sufficient to re-fill two carbon buttons. Wt., 6 oz.

**41-990.** NET.....47c

## MICROPHONE SPRINGS

Fig. D. High quality tempered steel springs for mounting microphone in ring holder. Maximum flexibility without stretch. Shpg. wt., 4 oz.

**41-991.** Set of 8. NET.....17c

## SHOCK ABSORBER

**41-951.** Fig. B. Live rubber in chrome shell.  $\frac{3}{4}$ "-27 threads.  $1\frac{1}{4}$ " x  $\frac{3}{4}$ " dia. 6 oz. NET.....59c

## MICROPHONE COVER

A universal type protective cover for all types of microphones. Made of finest oiled silk treated to withstand all kinds of weather conditions. Microphone may be used while cover is on. Complete mike protection against moisture, dust, etc. With drawstring. Size 4" x 6". Shpg. wt., 6 oz.

**41-995.** NET.....29c



## MICROPHONE CABLES

### MICROPHONE CABLE HIGH-IMPEDANCE

For crystal, dynamic and velocity mikes. Shielded, rubber-covered. Shpg. wt., 2 oz. per ft.

### Single Conductor.

**48-501.** 25 ft. coil.....\$1.15  
**48-502.** 100 feet.....\$4.25

### Double Conductor.

**48-541.** 25 ft. coil.....\$1.55  
**48-542.** 100 feet.....\$5.95

### LENZ SUPER-FLEXIBLE

Tinsel-center conductor; unbreakable. Shielded, rubber-covered.

**49-161.** 25 ft. coil.....\$1.40  
**49-162.** 100 feet.....\$4.85

### MIKE EXTENSIONS

A much needed accessory that every PA man will welcome. Adds additional length to any mike cable instantly to handle any installation. Consists of 25 foot length of shielded and rubber-covered high-impedance mike cable (48-501 at left) with the male and female connectors attached (41-955, 41-958 at upper left). Connectors have  $\frac{3}{4}$ "-27 threads. Shpg. wt., 2 lbs.

**41-911.** NET.....\$1.90  
**41-912.** As above but 2-contact male and female connectors (41-980 and 41-981) at left above. NET.....\$1.60



# FINER BAFFLES FOR BETTER TONE QUALITY



## DELUXE WOOD BAFFLES

Attractive wall baffles, finished in bandsome hardwood walnut-veneer. Excellent for all indoor installations, for paging systems, school-rooms, stores, offices, auditoriums, etc. Have attractive, harmonizing gold grille cloth; grille opening is protected by trim reinforcing bars. Measures 16 1/2" high, 14 1/2" wide, and 6 1/2" deep at base; 8 1/2" deep at top. Built for 12" speakers. Acoustically correct and free from resonant rattles. Shpg. wt., 10 lbs.  
**93-500. For 12" speakers. NET. \$4.25**  
**93-501. For 8" speakers. 12" x 10 1/4" x 5". Shpg. wt., 6 lbs. NET. \$2.49**

## BAFFLE MOUNTING KIT

For use with all wall baffles. Permits quick, easy installations. Consists of two screw eyes and two special wall hooks. Wt., 1/2 lb.  
**45-845. NET. 12c**

## QUALITY FABRIKOID WALL BAFFLES

**DELUXE BAFFLES.** Well designed baffles finished in attractive tan fabrikoid covering. Inclined front panel projects sound for correct coverage. Sturdily constructed of selected plywood to prevent rattles. Have very attractive black and gold grille cloth. With speaker mounting bolts. Average wt., 8 lbs.  
**93-510. For 12-inch spkrs. 17" H. x 14" W. x 9" D. NET. \$2.95**  
**93-511. For 10" spkrs. 14" H. x 12" W. x 7" D. NET. \$2.45**  
**93-512. For 8" spkrs. 11" H. x 9 1/4" W. x 6" D. NET. \$1.90**

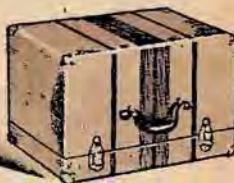
**STANDARD BAFFLES.** Inclined face provides correct coverage over greatest area. Ruggedly built of strong plywood covered with durable dark brown leatherette fabrikoid. Rigid construction. With spkr. mtg. bolts. Wt., 6 lbs.  
**93-520. For 12" spkrs. 17" high x 13 1/4" wide x 8" deep. NET. \$1.98**  
**93-521. For 10" spkrs. 14" x 12" x 7". NET. \$1.80**  
**93-522. For 8" spkrs. 11" high x 9 1/4" wide x 6" deep. NET. \$1.55**  
**93-523. For 6" spkrs. 9" high x 8" wide x 5" deep. NET. \$1.35**

## ILLUMINATED

### ORGANETTE BAFFLE

A sensational new illuminated baffle ideal for show-business—for theaters, night clubs, taverns, restaurants, etc. Wired to accommodate two standard 110 volt lamps which reflect light through handsome colored translucent plastic panels recessed in walls of cabinet. Grille bars of organ pipe design finished in brilliant gold lacquer. Rich acoustic cloth grille. Cabinet size: 17" wide, 15" high, 8" deep; finished in natural grain walnut. Accommodates all standard 12" cone speakers. With line cord and plug; less bulbs. Shpg. wt., 10 lbs.  
**93-530. NET. \$8.82**

## PORTABLE CARRYING CASES FOR EVERY NEED



### DUAL SPEAKER CASE

Persons carrying two 12" speakers. Case divides into separate units, serving as baffles when speakers are in use. Has airplane cloth covering and carrying handle. Speaker grilles backed with metal screen. Heavy plywood construction; snap-type trunk clasps; metal feet on bottom of each section. Extremely compact and portable. With speaker mounting bolts and cable wind-up brackets. Size inside closed, 20" x 12 3/4" x 9 1/2". Shpg. wt., 12 lbs.  
**93-600. NET. \$6.25**

### SINGLE SPEAKER CASES

Speaker opening with grille cloth is backed with metal screen. Removable back has snap-type trunk clasps. Built of heavy plywood. Rubber feet. With spkr. mtg. bolts and cable bracket. Wt., 9 lbs.  
**93-601. For 12" speaker. 12 3/4" x 12 3/4" x 9 1/2". \$4.10**  
**93-602. For 8" speaker. 12 3/4" x 12 3/4" x 9 1/2". Will also carry Knight 7 watt amplifier or any similar sized unit. \$4.10**

### SPEAKER-AMP. CASE

For housing complete PA system. Will accommodate Knight 14 to 30 watt Deluxe amplifiers and one or two 12-inch speakers. May also be used with other amplifiers having similar dimensions. Heavy plywood construction; both parts serve as speaker baffles. Speaker openings have cloth grille. Attractive airplane-luggage finish. With spkr. mtg. bolts and cable brackets. Carrying handle. Inside size: 21 1/4" x 13 3/4" x 14". Wt., 21 lbs.  
**93-603. NET. \$7.45**

### AMPLIFIER CASE

Cleverly designed case built to house any 1942 Knight Deluxe amplifier. (Also suitable for other amplifiers of similar dimensions.) Has special "false bottom" compartment for carrying microphone, cable, speaker extension cords, etc. Heavy plywood with reinforced corners; covered in attractive airplane-luggage cloth. Inside measurements: 21 1/4" L x 16 1/2" H x 16 1/4" W; lid 14" H. An unusually practical case. Shpg. wt., 15 lbs.  
**93-604. NET. \$6.50**



### PHONOGRAPH CASES

Attractively designed cases for housing phonographs. Of sturdy plywood to withstand long, hard usage. 93-605 has storage compartment, with pull-out strap, to accommodate about 15 records. Blank motor board may easily be cut to fit any motor. Handsome airplane-luggage finish with tan tweed effect. Inside size: 16 3/4" x 13" x 9 1/4". Shipping weight, 14 lbs.  
**93-605. NET. \$5.25**  
**93-606.** As above, but accommodates two phono motors. Size: 36 1/2" x 12 3/4" x 9". Less record compartment. Shpg. wt., 15 lbs.  
**NET. \$7.35**



**NO MORE SPEAKER INSTALLATION WORRIES!**

### PORTABLE BAFFLE STANDS

Take the worry out of your Portable PA installations! Use these ingenious stands for quick speaker set-up. Locking-type swivel permits adjustment for proper coverage. Telescoping steel sections extend from 46" to 78". Collapsible tripod base easily set to support light or heavy baffles. Black enamel finish. Less baffle. Average shpg. wt., 15 lbs.  
**93-300.** For Kainer Projectors on page 97 and other baffles with 1/2" pipe-thread mounting hole. **\$6.85**  
**93-301.** For Economy Projectors on page 97. **\$6.85**  
**93-302.** For speaker cases listed above. **\$6.85**



### CAR TOP PLATFORM

For mounting baffles, projectors, or horns on roof of auto. Unnecessary to drill holes; will not mar car finish. Varnished maple, fully weather-proofed. Vacuum cups and straps hold platform firmly. Size of platform: 7 1/2" x 46". Shpg. wt., 3 lbs.  
**93-220. NET. \$4.41**

### BAFFLE MOUNT

For use with Economy Projectors listed on p. 97. Saddle-top fastens to baffle; tilts to any angle. 12" high with cast mounting base 7" in dia. Black wrinkle finish. Heavy construction. Wt., 8 lbs.  
**93-303. \$2.15**





# FAMOUS Jensen SPEAKERS



## TYPE "J" COAXIAL HI-FI SPEAKERS—FIG. A

A new achievement in speaker design offering true high-fidelity reproduction. Each reproducer consists actually of two PM speakers with built-in frequency-dividing network. Especially recommended for FM receivers, high-quality phono equipment, full-range PA systems, and other uses where the absolute in high-fidelity is desired. For full frequency response, use with bass reflex cabinets below.

### TYPE JHP-52—15 INCH

The 15" PM "Woofer" handles all frequencies from 50-5,000 CPS. 5 1/2" PM "Tweeter" handles frequencies from 4,000-12,000 CPS. Range control switch lowers high-frequency cut-off in four steps. Handles 12-14 watts. Impedance, 500 ohms. Wt., 23 lbs. **\$29.11**

### TYPE JCP-40—12 INCH

Replaces any type of 12 inch speaker. Frequency response, 50 to 10,000 CPS. With cross-over network. Handles 8 to 10 watts. Impedance, 6 ohms. Ideal as replacement and modernizing unit where higher fidelity response is desired at a moderate price. Shpg. wt., 16 lbs. **\$17.35**

### TYPE JHP-50—15 INCH

Coaxial PM speaker with cross-over network. Range, 50-12,000 CPS. Handles 12-14 watts. Imp., 8 ohms. 20 lbs. **\$22.64**

### COAXIAL ACCESSORIES

**82-055, QSP, H. F. PM Speaker** as used in 15" coaxials. Range, 4000-15,000 CPS. 16 ohms imp. 5 1/2" dia., 3 1/4" deep. **\$7.64**

**82-057, H. F. Level Control.** Connects to JHP-50 and JCP-40. Adjusts level of H. F. speaker. Wt., 1 lb. **NET...\$2.35**

**82-058, A40-1 Network.** Dividing network; cross over, 4,000 CPS. With H. F. range control switch. Wt., 10 lbs. **NET...\$15.29**

**IMPORTANT INFORMATION ABOUT PM SPEAKERS**  
As a result of the allocation of materials during the National Emergency, it may not be possible to maintain deliveries of PM type speakers. In the event the PM Speaker you order cannot be furnished, we will (A) ship an equivalent AC field coil speaker with field supply, COD for difference, or (B) hold your order until the PM is available. Please specify preference.

## FIELD COIL DYNAMICS—Figs. B & C

Fully dustproofed. Excellent response. Less transformers (see below).

Stock No.	Model	Size	Watts	Field Coil		Wt. Lbs.	NET
				Res.	Watts		
*82-080	H5-S	5"	3	1800	2	2	\$1.76
*82-081	E6-RS	6"	5	2500	4	3	2.70
*82-082	E6-RS	6"	5	1800	4	3	2.70
*82-083	C8-RS	8"	8	2500	8	6	6.03
*82-084	C8-RS	8"	8	1250	8	6	6.03
*82-085	C10-RS	10"	9	2500	8	7	6.32
*82-086	C10-RS	10"	9	1250	8	7	6.32
*82-000	B12-X	12"	12 1/2	2500	10	11	11.02
*82-001	B12-X	12"	12 1/2	1250	10	11	11.02
*82-002	A-12	12"	15	2500	14	18	14.70
*82-003	A-12	12"	15	5400	14	18	14.70
*82-004	B15-X	15"	15	1250	10	16	12.35
*82-005	A-15	15"	17	5400	14	21	15.88

\*4 ohm voice coils; others, 8 ohms. 1800 ohm fields tapped at 300 ohms. Correct field resistance for FS-10 Field Supply listed below. Correct field resistance for FS-1 and FS-4 Field Supplies below.

## EXTENDED RANGE SPEAKERS

High fidelity speakers with a range to 10,000 CPS. Especially recommended for home and studio use, in FM receivers, wide-range phonographs, monitoring units, etc. Also suited for all PA installations where extended frequency range is desired. For best results, use with type BR and CA bass reflex cabinets below.

Stock No.	Model	Size	Voice Coil Ohms/Watts	Field Res./Watts	Wt. Lbs.	NET
*82-070	PM8-CT	8"	6 5	PM Type 4	4	\$6.76
*82-071	G8-RT	8"	6 5	1250 8	5	5.88
*82-072	G10-RT	10"	6 6	1250 8	6	6.17
*82-073	PM12-CT	12"	6 7	PM Type 7	7	9.41
*82-074	G12-RT	12"	6 7	1250 10	7	6.61

\*Use FS-10 Field Supply Unit described at right.

## PERMANENT MAGNET DYNAMICS—Figs. B, C

PM field assemblies of highly magnetized alloy; require no field voltage.

Stock No.	Model	Size	VC	Watts	Wt. Lbs.	NET
*82-020	PM3FS	5"	4	2.5	1	\$1.88
*82-021	PM6ES	6"	4	3.5	2	2.35
*82-022	PM8DS	8"	4	5	3	3.38
*82-023	PM8C	8"	6	8	4	5.88
*82-024	PM10GS	10"	6	10	5	4.70
*82-025	PM12C	12"	6	9	6	8.23
*82-026	PM12GS	12"	6	9	6	1.88
*82-027	PM12B	12"	8	14	13	16.76

## AC OPERATED FIELD SUPPLIES

**MODEL FS-10.** Fig. E. Supplies 10 watts of field power to 1250 ohm field. With 1-117Z6GT tube. 3 1/4" L. x 2 1/2" W. x 4" H. Shpg. wt., 2 1/2 lbs. **\$2.50**

**MODEL FS-11.** Will excite two 10 watt 1250 ohm fields in series. Also delivers 28 watts at 240 volts DC. With 1-80 tube. 6" L. x 4 1/2" W. x 5 3/4" H. Shipping weight, 6 lbs. **\$6.17**

**MODEL FS-1.** Delivers 45 watts DC at 300 volts. With fuse, terminal strips, and 1-5Z3 tube. 10 1/2" L. x 4 1/4" W. x 7 1/4" H. Shpg. wt., 18 lbs. **\$21.27**

**MODEL FS-4.** Fig. O. Delivers 120 watts output. DC output, 300 volts at 400 ma. at full load. 14 1/2" L. x 10" W. x 7" H. With plugs, receptacles, and 2-5Z3 tubes. Wt., 26 lbs. **\$38.21**

## ADJUSTABLE MATCHING TRANSFORMERS

Permit accurate matching of one or more speakers to any output circuit or line. Have terminals with flexible lead for instant selection of proper impedance. Tube types tapped at 4500, 7000, 10,000 and 14,000 ohms, all CT. Line types are tapped at 500, 1000, 1500 and 2000 ohms. For single or multiple speaker use.

Stock No.	Type	[Mtg. ctrs.]	Watts	[VC Ohms]	Lbs.	NET
For Jensen Speakers PM3FS, PM6ES, PM8C, PM8ES, H55						
64-800	Tube	2 1/2"	2.5-3.5	4	1	\$0.73
For Jensen Speakers E6RS, PM8DS						
64-801	Tube	2 1/2"	7	4	2	\$1.03
64-802	Line	2 1/2"	7	4	2	1.17
For Jensen Speakers PM8C, PM10C, PM12C, PM12GS						
64-803	Tube	2 1/2"	6-10	6	2	1.65
64-804	Line	2 1/2"	6-10	6	2	1.65
For Jensen Speakers C8RS, C10RS, PAHS, FABS						
64-805	Tube	2 1/2"	8	8	3	1.65
64-806	Line	2 1/2"	8	8	3	1.65
For Jensen Speakers PM8CT, PM12CT, G8RT, G10RT, G12RT, JCP40						
64-807	Tube	3 1/2"	7	6	2	2.20
64-808	Line	3 1/2"	7	6	2	2.20
For Jensen Speakers PM10GS, G10RS						
64-809	Tube	2 1/2"	8	6	2	1.03
64-810	Line	2 1/2"	8	6	2	1.17
For Jensen Speakers PM10H, B12X, A12, JHP50, B15X, PM12H, PM12B, A12PM, PM15B						
64-811	Tube	3 1/2"	10-15	8	3	2.20
64-812	Line	3 1/2"	10-15	8	3	2.20
For Jensen Speakers A15PM, A15						
64-813	Tube	2 1/2"	17	8	4	3.53
64-814	Line	2 1/2"	17	8	4	3.53

## BASS REFLEX ENCLOSURES

### MODEL BR

The Bass-Reflex speaker enclosure has established new standards of speaker performance. Type BR units are ideally suited for use in the home, the studio, or for general PA applications. Specifically designed for use with Jensen loudspeakers, but can also be used with other speakers if desired. Will greatly improve middle and high frequency response and add octaves in the low frequency range. Beautifully finished in rich brown lacquer. Shipped in knocked-down form and can be easily assembled. All necessary hardware included.

### MODEL CA

Model CA bass-reflex cabinets are the ultimate in speaker enclosure performance and appearance. Handsomely designed and finished, these cabinets are constructed throughout of genuine striped walnut. Provide full bass-reflex performance; improve middle, high and low frequency response of speaker. Excellent for use with the Jensen Coaxial Hi-Fi speakers above for high fidelity phono, radio or PA installations. Can be used also with any other speaker for better tonal performance. Shipped completely assembled.

Stock No.	Type	Speaker Size	Enclosure Size	Lbs.	NET
95-001	BR81	8"	17 1/4" x 23 3/4" x 11 1/4"	35	\$11.11
95-002	BR101	10"	21 1/2" x 28" x 12 1/4"	38	13.32
95-000	BR121	12"	23 1/2" x 30 1/4" x 12 3/4"	47	15.58
95-003	BR151	15"	25" x 33 1/4" x 13 3/4"	60	18.23
95-004	BR181	18"	27 1/4" x 36" x 15 5/8"	80	26.93
95-005	CA-12	12"	27 1/4" x 31 1/2" x 12"	40	27.10
95-006	CA-15	15"	27 1/4" x 31 1/2" x 14"	44	31.90



## HOW TO SELECT THE PROPER BAFFLE



### FLAT BAFFLES

Spread sound over the widest possible area. This group includes: flat boards, cases, wall type and reflex enclosures, and cabinets. See pages 95, 96, and 99.



### PROJECTORS

Direct the sound in a comparatively wide beam to a definite area. Tone is crisp. For athletic fields, paging, assembly halls, sound truck installations, etc.



### TRUMPETS

Direct sound in narrow beam to the most distant point. For stadiums, race tracks, parks, sound trucks, etc. Gives crisper, clearer, more penetrating tone.



(A)



(B)

### ECONOMY DELUXE BAFFLE FIG. A

Extremely rugged, 2-piece, 12" speaker baffle spun from 20 gauge alloy-metal. Has screened breather for efficient back-pressure release. "Air-Foam" insulated. Overall length, 20". Bell diameter, 17", with 11" flare. Malleable mounting bracket fixture is securely welded to baffle, and threaded for 1/2" pipe. No rivets to pull loose. Finished in baked grey enamel. Supplied less bracket, and less speaker. Uses 95-207 crowfoot or 95-208 wall bracket, listed in extreme right hand column. Wt., 8 lbs. **\$7.13**  
95-210 NET.

### UNIVERSITY CHANDELIER FIG. B

The ideal baffle for uniform 360° coverage. Will accommodate any 12" speaker. Rubber-tire rims prevent resonant rattles and vibration. Rubber mounting for speaker. Ideal for use in churches, clubs, dance halls, auditoriums, etc. Completely weather-proofed for permanent, outdoor installation. Radial water proof breather. Formed from durable spun alloy metal. Size, 29" high, with 25" dia bell. With suspension loop. Will replace 2 to 4 ordinary projectors. Wt., 25 lbs. **\$22.64**  
95-151 NET.

### ECONOMY PROJECTOR

**ALL STEEL** projector baffle for wide-beam sound projection. Gives adequate speaker protection. Popular for use in sound trucks, auditoriums, athletic fields, etc. Water-tight speaker housing has correct backpressure release holes. Excellent response. Takes 12" speaker. Use adapter rings listed below for 8" and 10" speakers. Durably made of heavy gauge steel. Bell measures 17" in diameter. Overall length, 20". Durable grey finish. Has suspension loops. May be used with 93-303 bracket (see page 95), for wall or auto top mounting. Shpg. wt., 10 lbs. **\$5.30**  
95-300 NET.

81-580. Reducer ring for using 8-inch speaker in above baffle.

81-581. Reducer for 10" type. NET EACH. .65c

## PROJECTOR BAFFLES



### KAINER ALL-STEEL PROJECTORS

Extra rugged, all-steel projector baffles, for any 12" speaker, with or without matching transformer attached. Spun from 20-gauge steel in only two pieces. Has screened breather for proper back pressure release. "Air-Foam" insulation. Overall length, 20", bell diameter, 17", flare length, 11". Mounting bracket fixture is of malleable iron and is welded to baffle, threaded for 1/2" pipe. Baked grey wrinkle finish. Less bracket. See below. 8 lbs. **\$7.91**  
95-205. Deluxe Projector. NET  
95-206. Like 95-205, but with suspension cyrings instead of mounting fixture. 8 lbs. . . . **\$7.68**  
95-207. Adjustable crowfoot bracket. . . . **\$1.62**  
95-208. Fixed-angle wall bracket (illustrated with smaller projector) . . . . . **65c**

### PROJECTORS FOR 6" OR 8" SPEAKERS

Constructed as above, but for smaller speakers. Less bracket. Shpg wt., average, 5 lbs.  
95-215. 6" Projector. 10" bell. NET. **\$4.85**  
95-216. 8" Projector. 14" bell. NET. **\$7.91**  
95-208. Fixed-angle wall-mounting bracket (as illustrated with smaller projector). NET. . . . . **65c**

## TRUMPET BAFFLES AND UNITS



### DRIVER UNITS

81-540. Knight 15-watt 8" PM dynamic driver unit. 8 ohm VC. 7 lbs. NET. **\$6.59**

81-541. Knight 15-watt 8" electro-dynamic driver unit. 6-8 ohm VC, 1500 ohm, 12 watt field. Wt., 8 lbs. NET. **\$4.62**

64-903. Line Transformer for either above 1 1/2 lbs. NET. **\$1.32**

82-100. Jensen PAH-8 15-watt 8" PM driver unit. 8 ohm VC. Shpg. wt., 11 lbs. NET. . . . . **\$10.88**

82-101. Jensen FAB-S 15-watt 8" electro-dynamic driver unit. 8 ohm VC. 1250 ohm, 10 watt field. 12 lbs. NET. . . . . **\$10.88**

64-806 Line transformer for Jensen units. 2 lbs. NET. **\$1.65**



### JENSEN PERI-DYNAMIC

95-030. Popular trumpet with "Peri-Dynamic" construction. Special design gives crispness to voice and music. No back-radiation. Made of heavy sheet steel. Mechanical vibration and feedback reduced to a minimum. Blue-gray lacquer finish. Has loops for overhead mounting. Overall length, 30". Bell opening dia., 2 1/2". Complete with Jensen PAH-8 driver unit, listed at left. Less stand. Wt., 30 lbs. NET. **\$34.10**

95-031. Same as above except with Jensen FAB-8 unit listed at left. Less stand. Wt. **\$34.10**  
30 lbs. NET.

95-032. Adjustable cast-metal crowfootstand 5 lbs. NET **\$2.94**



### KAINER TRUMPET

A rugged spun-steel trumpet for distant sound projection. Takes 8" units at left. Allows gradual expansion of sound-wave front, preventing disturbance from eddy currents. Bell diameter, 24", length of horn, 36". Made of heavy-gauge steel. Threaded for standard 1/2" pipe. Baked grey enamel. Less bracket. 13 lbs.

95-220. Trump. **\$22.31**  
et only NET.

95-221. Trumpet as above, with Knight 15-watt driver unit 81-540 at left. Less bracket. Shpg. wt. 18 lbs. **\$27.55**  
NET.

95-222. Adjustable crowfoot bracket. 5 lbs. NET. **\$1.94**



### WEATHERPROOF

Sturdy spun-steel trumpet for outdoor installations. Overall length, 17 1/4", height from base, 27", bell opening, 2 3/4" diameter. For any 8" speaker. With adjustable mounting bracket, 1/2" pipe thread. Grey finish. Weatherproof construction permits operation in driving rain. Exceptionally rugged, yet surprisingly light weight. Shpg. wt., 25 lbs.

95-230. Trumpet. NET. **\$18.32**

95-231. Trumpet as above, complete with Knight 8" PM driver unit 81-540 at left. Shpg. wt., 33 lbs. **\$23.56**  
NET.

### BAFFLE COVERS

Quality weatherproof covers for protecting projectors or trumpets against rain, snow, dust, etc. Ideal for use indoors or outdoors. Made of durable waterproof cloth. Simply slip over bell opening when projector or trumpet is not in use. Supplied with handy draw string fastener, permitting cover to be fitted around bell. Very easy to install. Shpg. wt., 1 lb.

Stock No.	For	NET
81-800	10-16" bell	\$0.95
81-801	16-18" bell	1.00
81-802	20-24 1/2" bell	1.50



### NEW JENSEN "SPEECH MASTERS"

A new PM reproducer designed for most effective speech reproduction. Uses famous Peri-Dynamic principle. Ideal for Intercommunicating and Public Address monitoring uses; for Short Wave listening, and for Amateur, Commercial, Police, and Aviation use. Speech output, 5 watts. Comes in desk and panel mounting types. Double dust proofed. Tilt base on desk types. 36" cord. Attractive hammered grey finish, with satin trim. 6 1/4" H, 5 1/4" D, 5" Dia. Less transformer. 6 lbs. **\$5.85**

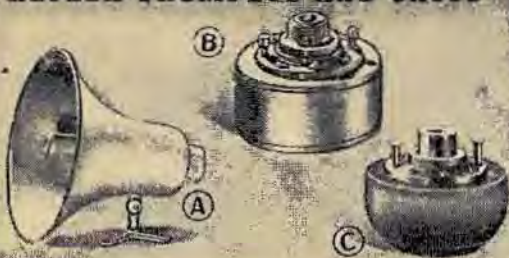
82-040. AP-10 Desk Type with 4 ohm voice coil. NET **\$5.85**

82-041. AP-10 Desk Type with 45 ohm voice coil. NET **\$5.85**

82-042. AP-11. Same as 82-040 above, except less base and swivel but with eyelets for panel mounting. Requires 4 1/4" cutout. Extends 4 1/4" from front of panel to back of speaker. With screws and **\$4.76**  
drilling template. Shpg. wt., 4 lbs. NET.



## REFLEX TRUMPETS AND UNITS



### REFLEX TRUMPETS

Offer all the advantages of "straight" trumpets, but reflex design reduces length to a minimum. Produce more sound for same wattage input and protect sound in a narrow beam for most efficient coverage. Rubber rims eliminate resonance. \*Indicates acoustic length.

#### JENSEN TYPE "H" HYPLEX TRUMPETS, FIG. A

Steel construction; weatherproof. Baked gray lacquer finish. Physical length: H-20, 16 1/2"; H-24, 20 1/2". Less driver units and mounts.

Stock No.	Type	*Length	Bell	Cutoff	Wt.	NET
95-020	H-20	48"	20 3/4"	165CPS	18 1/4	\$15.88
95-021	H-24	60"	24 3/4"	140CPS	21 1/4	19.40
95-022	EA-6					Adjustable stand for above. Wt., 5 lbs. \$2.94

#### UTAH REFLEX TRUMPETS, FIG. A

Constructed of heavy-gauge steel, finished in baked-on art-enamel. Fully weatherproof. Physical length: 21D, 17"; 25D, 20". Supplied with sturdy ratchet-lock mounts. Less driver units.

Stock No.	Type	*Length	Bell	Cutoff	Wt.	NET
95-100	21-D	48"	21"	140CPS	16	\$14.41
95-101	25-D	58"	25"	115CPS	20	20.29

#### KAINER REFLEX TRUMPETS, FIG. A

Weatherproof steel trumpets. Grey hammerlike finish. Length: RT-21, 19"; RT-25, 20". With mounting brackets but less driver units.

Stock No.	Type	*Length	Bell	Cutoff	Wt.	NET
95-200	RT-21	48"	21"	140CPS	16	\$13.58
95-201	RT-25	58"	25"	115CPS	20	21.98

### DRIVER UNITS FOR ALL REFLEX TRUMPETS

For use with Kainer or Utah trumpets above (For Jensen trumpets, see annular units below). They feature higher conversion efficiency, uniform frequency response, and low distortion at high power levels.

#### UNIVERSITY PM DRIVER UNITS, FIG. B

Exclusive rim-centering feature assures permanent alignment of voice coils; adds 20% to efficiency. Units factory guaranteed against breakdown for one year. 15 ohm voice coils.

Stock No.	Type	Response	Watts	Wt.	NET
81-570	MD-8	80-5000 CPS	12	5	\$12.61
81-571	SAH	70-5000 CPS	25	7	19.40
81-572	PAH	60-5500 CPS	25	10	29.10

#### JENSEN "ANNULAR" DRIVER UNITS, FIG. B

Employ the exclusive Jensen "annular" principle in which the diaphragm is clamped at periphery and center. For use with Jensen Hypex trumpets only. U-20 is PM type; UF-20 is 1250 ohm field coil type; use with field supplies listed at right. 16 ohm voice coils.

Stock No.	Type	Response	Watts	Wt.	NET
82-110	U-20	100-5000 CPS	15	11	\$19.11
82-111	UF-20	100-5000 CPS	15	12	19.11

#### UTAH PM DRIVER UNIT, FIG. C

This new PM driver unit in conjunction with the reflex trumpets above offers maximum efficiency, wide frequency coverage and high power handling capacity. It is dustproof and weatherproof. 25-watt rating. 16-ohm voice coil. Shipping weight 12 lbs.

Stock No.	Type	Response	Watts	Wt.	NET
81-075	NET				\$24.99

### CINAUDAGRAPH SPEAKERS



Well-known to all users of PA equipment. Cinaudagraph speakers have an enviable reputation for top performance under all conditions. Every step of assembly is under careful supervision of skilled artisans. All parts are fitted into fixtures of micrometer accuracy. This painstaking adherence to closest tolerances, coupled with advanced design of cone and voice coil results in speakers with exceptionally high power handling capacity. The voice coils on the 10" and 12" models are wound on a specially treated "ACIM" form. Polyfibrous cones, moisture- and dust-proof construction, assure trouble-free operation. Voice coils, 6-8 ohms. \*With built-in 110 V. AC field supply and tube.

Stock No.	Mfrs. Type	Size	Watts Norm.	Peak	Field Res.	Watts	Sh. Wt.	NET
81-200	PM6-7	6 1/2"	4	10	PM	PM	2 1/2	\$ 2.50
81-210	REG-B	6 1/2"	4	8	2500	5	3	1.91
81-201	PM8-9	8"	6	13	PM	PM	5	3.97
81-211	PE8-10A	8"	8	14	1000	9	6	4.12
81-202	PM10-10	10 1/2"	9	14	PM	PM	6	5.00
81-203	PM10-12	10 1/2"	9	16	25	PM	7	5.88
81-212	PE10-12A	10 1/2"	10	16	1000	10	7	5.29
81-204	PM12-18	12"	15	23	PM	PM	12	16.17
81-205	PM15-18	15"	15	23	PM	PM	20	17.64
81-213	PA18-40	18"	35	45	*	*	85	70.56

Matching transformers for above speakers. Output types are universal; line types are tapped at 500, 1000, 1500 ohms. Av. wt., 2 lbs.

For	Outp.	NET	Line	NET	For	Outp.	NET	Line	NET
6 1/2" Spkr	62-350	50.59	62-355	50.59	12" Spkr	62-353	\$1.62	62-358	\$1.62
8" Spkr	62-351	.88	62-356	.88	15" Spkr	62-354	2.06	62-359	2.46
10 1/2" Spkr	62-352	1.32	62-357	1.32	18" Spkr	62-318	4.41	62-319	4.41

## UTAH BI-DIRECTIONAL SPEAKERS



Completely dustproofed, bi-directional PM speakers embodying the latest in speaker design. The back wave as well as the front wave is utilized in order to deliver perfect voice reproduction. These speakers are especially well suited for call and paging systems in schools, factories, institutions, etc. Cone resonance and response have been matched to the grey, molded, non-metallic case to give the ultimate in voice clarity. Low frequency response has been reduced to prevent voice distortion. The sturdy swivel base makes installation easy and permits speaker to be turned in any direction after mounting. Model W-800 has line transformer for connecting 1 to 8 speakers across a 250 or 500 ohm line. Model W-801 has transformer for 9 to 20 speakers. Will handle 8 watts normal, 12 watts peak. Shpg. wt., 6 1/4 lbs.

81-050	Model W-800					
81-051	Model W-801	NET EACH				\$8.23

81-052. Model W-810. Wall reproducer similar to the ones shown above except that the frequency response has been extended to reproduce the musical scale as well as voice. Case is of grey, molded, non-metallic material. Ideal as an additional speaker in the home, for coin-operated phonographs, etc. Handles 8 watts. Voice coil 6-8 ohms. Less output transformer. Shpg. wt., 4 lbs. NET

64-909	Universal line transformer for above	NET				76c
64-908	Universal output transformer for above	NET				76c



### SPEAKER VOLUME CONTROLS

#### JENSEN "L" PADS, FIG. A

High Quality "L" Pads for use across speaker voice coils. Controls have an "off" and "on" position with gradual, smooth control of volume. Shafts 1" long. With knob and indicator plate. Handle up to 5 watts. For 6-ohm voice coil. Wt., 1 lb.

33-940	Type ST276	88c
Type ST411	As above but handles 15 watts. For 8 ohm VC.	
33-941	NET	\$2.35

#### JENSEN LEVEL CONTROL D

82-057. Type ST-686. A properly designed variable "L" pad for use with any speaker. Ideal for use as a remote volume control in any PA installation. 16 ohms, 15 watts. With knob and indicator dial plate. NET

82-057	NET	\$2.35
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#### UTAH "L" PADS, FIG. B

Heavy-duty pads to control volume in all high-level circuits. Wire-wound. 15 watts. Mount in 1/2" hole. 1/4" shaft. Wt., 2 lbs.

Type	Stock No.	Ohms
LA-8	33-900	8
LA-16	33-901	16
LA-500	33-902	500
LA-1000	33-903	1000

NET EACH		\$1.91
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#### ENCLOSED CONTROL, FIG. C

33-920. An enclosed speaker volume control designed for convenience of installation; essentially constant impedance. Controls volume in any speaker voice coil circuit. Rated at 10 watts. Includes indicator plate and knob. 3" round case. Wt., 2 lbs. NET

33-920	NET	\$2.06
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### KNIGHT UNIVERSAL AC FIELD SUPPLIES

81-552. FIG. A. Strap mts. Output, 13 watts (100 ma. at 130 V.). Fits any 8" to 12" speaker with bolt on field pad. Strap is 12"x7/8" may be cut or bent to fit any speaker. Chassis is 4 1/4"x3 1/4"x2". For 110 volt, 50-60 cycles. With 6-foot cord and plug and 1-3525GT tube. Wt., 3 lbs. NET

81-552	NET	\$2.65
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81-551. FIG. B. Chassis type. Supplies 11.5 watts of filtered DC (up to 100 ma. at 115 volts). Has socket and plug for making necessary connections. Size overall, 4 1/2" high, 3 1/4" long, 2" wide. With 6-foot AC cord and plug and 1-11724GT rectifier tube. For 110 volt, 50-60 cycle operation. Shpg. wt., 2 lbs. NET

81-551	NET	\$3.15
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81-550. FIG. C. Chassis type. 20 watts (165 ma. at 123 volts). Can be used with 2 speakers, each requiring 10 watts. Has socket and plug. Size, 4 1/2"x4 1/2". With 2-11724GT tubes, AC cord and plug. For 110 V., 50-60 cycles. 3 lbs. NET

81-550	NET	\$4.25
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### SPEAKER EXTENSION CORDS

Handy accessory consists of 30-foot two-conductor rubber-covered extension cord fitted with two-prong male connector on one end, two-prong female connector on other end. Shpg. wt., 3 lbs.

49-550	NET	\$1.10
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49-551. For field coil dynamics. 30-foot 4-cond. cable, 6-prong male plug on one end—6-prong socket on the other. Wt., 3 lbs. NET

49-551	NET	\$2.10
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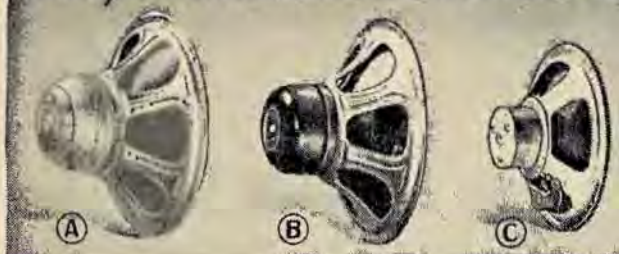


# Knight DYNAMIC PA SPEAKERS

**GUARANTEED FOR ONE FULL YEAR**  
Every Knight PA Speaker listed below is guaranteed for one year against defects in materials or workmanship. Any Knight Speaker which does not operate properly will be promptly replaced or repaired free of charge. (Guarantee does not cover burn-out from overload, damage by water, or abuse).

## A WORD ABOUT PM SPEAKERS

As a result of the allocation of materials during the National Emergency, it may not be possible to maintain deliveries of PM type speakers. In this event, we will therefore (A) ship an equivalent AC supply, or (B) hold your order until the PM speaker can be supplied. Specify preference when ordering.



### 8-INCH—5 WATTS

**Fig. C.** An exceptional PM speaker for moderate power requirements wherever a high quality, efficient speaker is desired. Normal rating, 5 watts. Employs heavy 12 oz. magnet in entirely new type of construction to assure maximum sensitivity and excellent fidelity. Standard 6-8 ohm voice coil. Less transformer, 4 lbs. **NET \$2.95**  
**81-500.** NET.....**\$2.95**  
**81-505.** Same as above but with 6 watt 1235 ohm field. Used in Knight 7 w. systems. Less trans. 4 lbs. **NET.....\$2.35**  
**81-506.** As above but with 6 watt, 2500 ohm field. Use with 81-552 field supply. Less transformer, 4 lbs. **NET.....\$2.35**  
**81-552.** 13-watt—110 volt AC operated field supply for 81-506 above. With 35Z5GT rectifier tube. 2 lbs. **NET.....\$2.65**  
**64-910.** 500 ohm line trans. **NET.....61c**  
**64-911.** Univ. plate trans. Wt., 1 lb. **NET.....76c**

### 12-INCH—13 WATTS

**Fig. B.** A heavy-duty PM speaker with remarkable power-handling capacity and excellent frequency response. For public address work and other uses demanding good response. Normal rating, 13 watts; peak, 20 watts. 20-ounce magnet; 6-8 ohm bakelized voice coil. Less output transformer. Wt., 6 1/2 lbs. **NET.....\$7.67**  
**81-520.** As above but with 2000 ohm 7.5 watt field. Use with 81-552 field supply below. Less transformer. Wt., 6 1/2 lbs. **NET.....\$4.77**  
**81-552.** A field supply designed for use with 81-520 field coil speaker above. Delivers up to 13 watts. Also fits any 8" to 12" speaker with bolt on back of speaker pot. Has 40 mfd. filter. For 110 V. AC. With 35Z5GT tube. Wt., 2 lbs. **NET.....\$2.65**  
**64-912.** 500 ohm line trans. **NET.....61c**  
**64-913.** Univ. plate trans. Wt., 1 lb. **NET EACH.....84c**

### 12-INCH—16 WATTS

**Fig. B.** PM Type. Extra efficiency and power capacity; normal rating, 16 watts; peak 24 watts. Has excellent fidelity. Heavy-duty 31-oz. magnet; 8-ohm special bakelized voice coil. Dustproof type construction. Less output transformer. 8 1/2 lbs. **NET.....\$8.86**  
**81-522.** NET.....**\$8.86**  
**81-523.** Similar to above but has 1500 ohm 9 watt field. Requires only the addition of the AC field supply listed below to substitute for any Permo-Dynamic speaker application. Less trans. Wt., 8 1/2 lbs. **NET.....\$5.95**  
**81-552.** Field supply designed for use with 81-523 field coil speaker above. Delivers 13 watts of excitation. Strap mounting type fits on speaker. With 6 foot AC line cord and 35Z5GT rectifier tube. Wt., 2 lbs. **NET.....\$2.65**  
**64-914.** 500 ohm line trans. **NET.....61c**  
**64-915.** Univ. plate trans. 2 lbs. **EACH.....\$1.11**

### GIANT 12"—20 WATTS

**Fig. A.** PM Type. Built to provide life-like fidelity at high volume over the entire range. Normal rating, full 20 watts; peak, 30 watts. Has extra-heavy 4 lb. magnet; 8 ohm bakelized voice coil; specially treated cone. Dustproof. Less output transformer. Wt., 13 lbs. **NET.....\$16.20**  
**81-525.** NET.....**\$16.20**  
**81-526.** Similar to above but has 1240 ohm 10.3 watt field. Requires only the addition of the AC field supply listed below to substitute for any PM speaker application. Less trans. Wt., 13 lbs. **NET.....\$9.27**  
**81-552.** Field supply designed for use with 81-526 field coil speaker above. Delivers 13 watts of excitation. Strap mounting type. Fits on speaker. With 6 foot AC line cord and 35Z5GT rectifier tube. Wt., 2 lbs. **NET.....\$2.65**  
**64-916.** 500 ohm line trans. **NET.....61c**  
**64-917.** Univ. plate trans. 2 lbs. **EACH.....\$1.22**



## UTAH DYNAMIC SPEAKERS

### NEW FIELD COIL DYNAMIC SPEAKERS

Require only the addition of the AC field supply at right to substitute for any PM speaker. All feature standard weather-resistant construction. 8 ohm voice coils. Supplied less output transformer. See listing below.

Stock No.	Model	Size	Watts Normal	Peak	Field Watts Res.	Wt.	NET
81-020	8AC30	8"	12	18	9 1500	7 1/4	\$ 5.14
81-021	10AC12	10"	9	14	7.5 1950	6 1/4	3.53
81-025	12AC12	12"	10	15	8 1950	6	4.12
81-026	12AC20	12"	13	20	7.2 2000	7	5.29
81-027	12AC40	12"	16	24	9 1500	9	6.61
81-028	12AC75	12"	21	32	10.3 1240	13	10.29

### PERMO-DYNAMIC SPEAKERS

The last word in PM design. Highly sensitive and efficient. VC, 8 ohms; 6-8 ohms for models marked \*. Less transformers. (See below.)

Stock No.	Model	Size	Watts	Magnet	Wt.	NET
81-000	*GRP	8"	10	20 oz.	4 1/2 lbs.	\$ 5.44
81-001	H8P	8"	12	31 oz.	6 1/2 lbs.	7.94
81-010	*E12P	12"	13	20 oz.	6 1/2 lbs.	8.53
81-011	F12P	12"	16	31 oz.	8 1/2 lbs.	9.85
81-012	G12P	12"	17	46 oz.	9 1/2 lbs.	12.94
81-013	GS12P	12"	20	64 oz.	12 1/2 lbs.	18.67

### FREQUENCY MODULATION PM SPEAKERS

For FM use. 8-ohm voice coils. Response to 9500 CPS. Less trans.

Stock No.	Model	Size	Watts	Magnet	Wt.	NET
81-040	FP820	8"	10	20 oz.	4 1/2 lbs.	\$6.03
81-041	FP1020	10"	11	20 oz.	5 1/2 lbs.	7.06
81-042	FP1220	12"	13	20 oz.	6 1/2 lbs.	8.82

### ADJUSTABLE TRANSFORMERS

Universal plate and line transformers for Utah speakers. Line type are tapped at 500-1000-1500-2000 ohms; output type 2000-25,000 ohms.

Stock No.	Type	For Speakers	Shp. Wt.	NET
64-900	Line	G8P, 12AC12, 12AC20, 10AC12, E12P, FP series	1 lb.	\$1.03
64-901	Output	G8P, 12AC12, 12AC20, 10AC12, E12P, FP series	1 lb.	1.03
64-902	Line	H8P, 8AC30	1 1/2 lbs.	1.32
64-903	Output	H8P, 8AC30	1 1/2 lbs.	1.32
64-904	Line	F12P, G12P, 12AC40	1 1/2 lbs.	1.32
64-905	Output	F12P, G12P, 12AC40	1 1/2 lbs.	1.32
64-906	Line	GS12P, 12AC75	2 1/2 lbs.	1.62
64-907	Output	GS12P, 12AC75	2 1/2 lbs.	1.62



### UTAH "DUOTONE" 15" DUAL SPEAKER

**Fig. A.** A new dual speaker combination; consists of a 15" field-coil "woofer" with 10.3 watt, 1240-ohm field, and a 6" PM "tweeter" mounted concentrically. Has crossover network and input autoformer to couple from 1 to 4 speakers to a 500 ohm line. Especially suited for PM and all high-fidelity PA requirements. Handles 22 watts normal; 33 watts peak. Shpg. wt., 20 lbs. **NET.....\$23.37**  
**81-060.** NET.....**\$23.37**

### BAFLEX ENCLOSURES

**Fig. B.** Attractive satin-brown finished cabinets. Can be used with any type speaker; improve bass response. Sturdily built; will not vibrate. Size: 24" x 17 1/2" x 11 1/4". 12" size, 31" x 22 1/2" x 12 1/4". **95-105.** For 8" speakers. Shpg. wt., 27 lbs. **NET.....\$12.64**  
**95-106.** For 12" speakers. Shpg. wt., 47 lbs. **NET.....\$15.29**

### UTAH AC FIELD SUPPLY

A universal AC operated field supply. With 117 volt, 60 cycle AC input, the DC output is 12 watts at 105 ma. Small size permits mounting in speaker baffle. Less 50Y6GT rectifier, line cord, and plug for field connection. Complete with Utah P9356 ballast tube. Size: 5 1/4" L x 4 1/4" W x 4 1/4" H. Shpg. wt., 2 lbs. **NET.....\$2.79**  
**81-070.** NET.....**\$2.79**

### KNIGHT SPECIAL VALUE 12-INCH AC FIELD-COIL DYNAMIC

A 12" heavy duty dynamic speaker with built-in AC operated field supply at a remarkably low price. Designed for faithful reproduction of voice or music. Will handle up to 9 watts of audio without distortion. Voice coil 6 ohms. With 6 ft. cord and plug. Less 11Z6GT tube and transformer. Wt., 10 lbs. **NET.....\$5.95**  
**81-530.** NET.....**\$5.95**  
**81-531.** Same as 81-530 above but less field supply. Has 1200 ohm field coil. Requires 9 watts excitation. Voice coil impedance 6 ohms. Less transformer. Wt., 8 lbs. **NET.....\$4.95**  
**62-333.** Line transformer.  
**62-334.** Univ. plate transformer. Shpg. wt. 1 1/2 lbs. **NET EACH.....93c**





# MAGNETIC & DYNAMIC SPEAKERS

## KNIGHT GUARANTEED DYNAMIC SPEAKERS

**YOUR GUARANTEE**

All Knight Speakers are guaranteed against any mechanical or electrical defects for **one year** from date of purchase. This guarantee is in addition to the standard R.M.A. guarantee.

### PM DYNAMIC SPEAKERS

High-quality permanent-magnet dynamic speakers with exceptional reproducing characteristics. Require no field current excitation. Excellent for replacement in A.C., A.C.-D.C., auto, or battery sets, and for PA systems, call systems, etc. Less output transformers; have provision for mounting transformers.

(Although we are maintaining very large stocks, PM speakers may not be available throughout the National Emergency; we suggest the use of field coil speakers wherever possible.)

Stock No.	Size	Voice Coil	Watts	Shpg. Wt.	EACH
81-600	3 1/2"	3-5 Ohms	2.5	1 1/2 lbs.	\$1.68
81-601	5"	3-5 Ohms	3	2 lbs.	1.72
81-602	6"	3-5 Ohms	3 1/2	2 1/2 lbs.	1.85
81-603	6"	6-8 Ohms	4	3 lbs.	1.96
81-604	8"	6-8 Ohms	7	4 lbs.	2.25
81-605	10"	6-8 Ohms	9	5 lbs.	3.63
81-606	12"	6-8 Ohms	10	6 lbs.	4.32

### UNIVERSAL OUTPUT TRANSFORMERS FOR ABOVE

62-300.	For 3 1/2", 5", 6" models; 3-5 ohm VC.	NET.....	65c
62-301.	For 6" model; 6-8 ohm voice coil.	NET.....	65c
62-302.	For 8" model; 6-8 ohm voice coil.	NET.....	65c
62-303.	For 10" and 12" models; 6-8 ohm VC.	NET.....	84c

## KNIGHT MAGNETIC SPEAKERS



### 5", 6", AND 8 1/2" TYPES

Well-designed magnetic speakers with rigid, pressed-steel frame and large-sized magnet. DC resistance is 1000 ohms. Rugged type; provide excellent frequency response.

81-610.	5".	NET.....	\$1.10
81-611.	6".	NET.....	\$1.25
81-612.	8 1/2".	NET.....	1.75



### 3-INCH MAGNETICS

For use in pocket-sized midset sets, intercom systems, and compact SW receivers. Rigid pressed-steel frame; full-sized magnet and coil, 2 3/4" mtg. centers. Small in size but very efficient. Wt., 1 lb.

81-614.	With flange.	NET.....	\$1.05
81-613.	Less mounting flange.	NET.....	98c

### WOOD CABINET MODEL 8 1/2-INCH MAGNETIC

Handsome new walnut-finished wood cabinet with built-in speaker, ideal for extension use or for multiple speaker installations. The sturdy speaker is 8 1/2" in diameter, 3 3/4" deep. Has heavy pressed-steel frame, large magnet, and improved armature structure with 1000 ohms DC resistance to match most multiple speaker lines. Provides excellent frequency response. Attractive matching grille cloth. With 6 foot cord. Shpg. wt., 4 lbs.



93-705. Less Volume Control and On-Off Switch. NET.....

93-706. With Volume Control and On-Off Switch. NET.....

Speaker cabinet, 9 1/2 x 9 1/2 x 5 1/2", is also offered separately. Has grilles at both front and back. Will house 8" or 8 1/2" speaker. 2 lbs. NET.....

## KNIGHT "LIGHTWEIGHT PM" SPEAKERS

Especially suited for receivers using low-drain tubes. Ideal for replacing old magnetic speakers when used with the high-impedance transformers listed below. Provide excellent tone quality. Voice coil diameter, 1/2". Voice coil impedance, 3 1/2 ohms. Supplied less output transformer. Shipping weight, 1 lb.



Stock No.	Size	Magnet Weight	NET EACH
81-620	3 1/2"	1 1/2 oz.	\$1.05
81-621	3 1/2"	1 1/2 oz.	1.07
81-622	4"	1 1/2 oz.	1.07
81-623	4"	1 1/2 oz.	1.25
81-624	5"	1 1/2 oz.	1.13
81-625	5"	1 1/2 oz.	1.26

62-324. 10,000 ohm output transformer for single IC5G, 1G5G, 6A4, push-pull 6V6, 6F6, 30, 1H4G, 41, or 42 tubes. Wt., 1 lb. NET.....

### FIELD COIL SPEAKERS

Knight Field Coil Speakers are accepted by discriminating servicemen for use as replacements or original equipment. Built of finest components to assure crisp tonal response and dependable service. With impedance matching chart. All Knight Field Coil types are equipped with universal transformers to match single or push-pull output tubes.



5-inch: 3/4" voice coil. 3 1/2 ohms imp. at 400 cycles. 2 3/4" deep. 4 lbs.  
6-inch: 3/4" voice coil. 3 1/2 ohms imp. at 400 cycles. 2 3/4" deep. 4 1/2 lbs.  
8 1/2-inch: 1 1/4" voice coil. 3 ohms imp. at 400 cycles. 4 3/4" deep. 7 lbs.  
12-inch: 1 3/4" voice coil. 8 watts undistorted output. 6" deep. 8 lbs.

FIELD	5-INCH	6-INCH	8 1/2-INCH	12-INCH
6 Volt	81-650	81-653	81-657	
1000 Ohms	81-651	81-654	81-658	81-661
1500 Ohms				81-662
1800 Ohms*		81-655	81-659	
2500 Ohms		81-656	81-660	81-663
3000 Ohms	81-652			
NET EACH.....	\$1.65	\$2.05	\$2.85	\$4.50

\*Tapped at 300 ohms.

## KNIGHT AC-DC DYNAMICS



### 3 1/2-INCH DYNAMIC

Particularly adaptable for small AC-DC sets. Excellent frequency response. 3 1/2 watts maximum input; 4-5 ohm voice coil. Wt., 2 lbs. Less output transformer. Use 62-310 listed at right.

81-680.	450 Ohm Field.	
81-681.	2750 Ohm.	NET EACH.....



### 5-INCH DYNAMIC

A very popular replacement type 5" speaker. Will fulfill the requirements of the majority of midset sets. Shpg. wt., 3 lbs.

81-682.	450 Ohm Field.	
81-683.	2750 Ohm Field.	NET EACH.....
62-310.	Universal output transformer. Wt., 1 lb.	NET.....

## CINAUDAGRAPH SPEAKERS

### 2-INCH PERMAG

Model 2ZMP. This 2" P. M. speaker is the latest development in compact speaker design. Can be used as speaker and microphone in small inter-communication apparatus. Voice coil impedance is 3 to 4 ohms. A special voice coil to grid matching transformer is listed below. Shpg. wt., 1 lb.

81-220. Less output transformer. NET.....



### OTHER SIZES IN PM DYNAMICS

Stock No.	Model No.	Size	VC Imp.	Power Watts	Shpg. Wt.	NET EACH
81-221	3ZMP	3 1/2"	3-4	1 1/2	8 oz.	\$1.26
81-222	4ZMP	4 1/4"	3-4	2	10 oz.	1.32
81-223	5ZMP	5"	4	2 1/2	1 1/2 lbs.	1.76

### TRANSFORMERS FOR ABOVE SPEAKERS

UNIVERSAL	500 OHM LINE
62-315. For 2", 3 1/4", 4 1/4", and 5" models. 3-5 ohm VC.	62-316. For 2", 3 1/4", 4 1/4", and 5" models. 3-5 ohm VC.
Wt., 1 lb. NET EACH.....	Wt., 1 lb. NET EACH.....

## NEW CINAUDAGRAPH MAGNETIC SPEAKERS

Efficiently designed, ruggedly constructed magnetic speakers. Balanced armature unit maintains perfect alignment under all operating conditions. Have heavy frames and large magnets. Thoroughly rustproof finish. Excellent frequency response makes these speakers especially desirable for battery and AC-DC sets, extension speaker units, multiple speaker installations in school's and institutions, etc. Will match most output tubes. DC resistance, 1000 ohms.

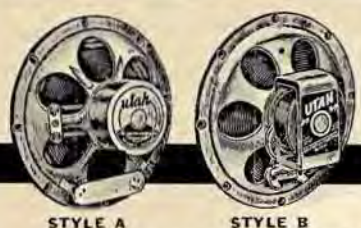


81-230.	3 1/2" Model. Wt., 1 lb.	NET.....
81-231.	5" Model. Wt., 1 lb.	NET.....
81-232.	6 1/2" Model. 1 1/2 lbs.	NET.....
81-234.	8" Model. Wt., 2 lbs.	NET.....

100 MAKE ALLIED YOUR NO SUPPLY HEADQUARTERS



# DYNAMIC JENSEN SPEAKERS



## GENUINE UTAH SPEAKERS

Years of speaker leadership are yours. Utah engineers have finest quality speakers since Radio. Skilled workmanship and attention have been successful in always out in front with the latest developments and improvements. Only the Utah speaker is carefully designed and tested in our special laboratories before assembly.

Each Utah speaker is backed by Utah's long experience and world's leading pioneer radio speaker, regardless of cost. It is backed by Utah's long experience and world's leading pioneer radio speaker.



STYLE C STYLE D

### PERMO-DYNAMIC SPEAKERS

STYLE A. The Utah Permo-Dynamic (PM) speakers listed below are especially designed for intercommunicators, portable and battery sets and PA or multiple speaker applications. Comprehensive listing allows choosing the proper speaker for any application. \*Magnet weight.

Stock No.	Model No.	Size	V.C. Imp.	Normal Watts	Shpg. Wt.	NET EACH
81-080	3P	3 1/2"	3.5	2.5	1 lb.	\$1.97
81-081	5P	5"	3.5	3	2 lbs.	2.06
81-082	6P	6"	6-8	4	2 lbs.	2.50
81-083	8P	8"	6-8	7 (5 oz.)*	3 lbs.	3.09
81-084	ESP	8"	6-8	7 (7 oz.)*	3 lbs.	3.38
81-085	10P	10"	6-8	9	5 lbs.	3.55
81-086	12P	12"	6-8	10	6 lbs.	6.03

### UNIVERSAL TRANSFORMERS FOR ABOVE

62-340. For 3 1/2" and 5" speaker. Wt. 1/2 lb. NET EACH... **76c**  
 62-341. For 6" and 8" speakers. Wt. 3/4 lb. NET EACH... **1.03**  
 62-342. For 10" and 12" speakers. Wt. 1 lb. NET EACH... **1.03**

### UTAH UNIVERSAL AUTO SPEAKERS

The speakers listed below cover all of the more important replacements used in auto radio receivers. Both PM and electro-dynamic models are included. Most electro-dynamic types do not have transformer mounting brackets, pin-jack terminals being used to conserve space.

- 81-081. 5-Inch PM Dynamic. Style A. 3.5 ohm VC. With transformer bracket, less transformer. Overall depth, 2 3/4". Out-**\$2.06** side dia., 5". Mounting hole centers, 3 3/8". 2 lbs. NET...
- 81-082. 6-Inch PM Dynamic. Style A. 6-8 ohm VC. 5 oz. ring magnet. Trans. bracket, less transformer. Depth, 2 3/4". Out-**\$2.50** side dia., 6 1/2". Mtg. centers, 4 5/8". 2 lbs. NET...
- 81-130. 6-Inch PM Dynamic. Style A. 6-8 ohm VC. 7 oz. ring magnet. Less transformer but with bracket. Depth, 2 3/4". Out-**\$2.94** side dia., 6 1/2". Mounting hole centers, 4 5/8". 2 lbs. NET...
- 81-084. 8-Inch PM Dynamic. Style A. 6-8 ohm VC. 7 oz. ring magnet. Trans. bracket, less transformer. Depth, 3 1/4". Out-**\$3.38** side dia., 8 1/2". Mtg. centers, 5 3/8". 3 lbs. NET...
- 81-102. 5-Inch Electro-Dynamic. Style B. 3 ohm VC. 6 ohm field. Transformer bracket, less transformer. 12" leads. **\$1.62** Depth, 2 1/4". Dia. 5". Mtg. hole centers, 3 3/8". 2 lbs. NET...
- 81-131. 5-Inch Electro-Dynamic. Style B. 3 ohm voice coil, 4 ohm field. Less transformer and mounting bracket. One side of field coil connected to speaker frame. Pin jack terminal. Depth, **\$1.82** 2 1/2". Outside dia., 5 7/8". Mtg. centers, 3 3/8". 2 lbs. NET...
- 81-132. 6-Inch Electro-Dynamic. Style B. 3 ohm VC. 4 ohm field. Less transformer and brkt. Field grounded to frame. Depth, 2 3/8". Dia., 6 1/2". Mtg. centers, 4 5/8". 3 lbs. NET... **\$2.50**
- 81-133. 6-Inch Electro-Dynamic. Style C. Voice coil, 3 ohms; field, 4 ohms. Square mounting. One side of field grounded to frame. Pin-jack terminal. Less transformer and bracket. Depth, 2 3/8". Out-**\$2.47** side dia., 7 1/2". Mounting centers, 4 1/8". Wt., 3 lbs. NET...
- 81-135. 7-Inch Electro-Dynamic. Style D. 3 ohm VC. 4 ohm field. Mounting holes on 7 1/2" radius. One side of field grounded to frame. No transformer or bracket. Pin-jack terminal. Depth, 3 3/8". Dia., 7". Mtg. centers, 4 1/4". 3 lbs. NET... **\$2.91**
- 81-134. 7 1/2" Electro-Dynamic. Style C. 3 ohm VC. 4 ohm field. 7 1/2" mtg. hole radius. Field grounded to frame. Less transformer and bracket. Tapped for 1/4" No. 20 mounting bolt. Depth, 3 3/8". Dia., 7 1/2". Mtg. center, 4 3/8". Wt., 3 lbs. NET... **\$3.09**
- 81-136. 7 1/2-Inch Electro-Dynamic. Style C. 3 ohm VC. 4 ohm field. One side of field grounded to frame. Less transformer and bracket. Drilled and tapped for 1/4" No. 20 mounting bolt. Depth, **\$3.09** 3 3/4". Dia., 7 1/2". Mtg. center, 5 3/8". 3 lbs. NET...

37-120. UTAH Replacement Speaker Catalog—Sent FREE.

MODEL Q FIELD-COIL SPEAKERS  
 Famous Utah "Q" line of speakers represents the highest quality in the low price field. Ideal for replacement purposes or installations. A speaker can be chosen from the listing below on the basis of the sets now in use. Universal output transformers all speakers except 4" and 5" models (\*). 4" and 5" transformers listed below. All "Q" speakers have 2 1/2 ohm VC.

Model No.	Size in Inches	Field Ohms	Shpg. Wt. Lbs.	NET EACH
81-Q330*	4	2750	2	\$1.62
81-Q345*	4	450	2	1.62
81-Q306*	5	2750	2	1.62
81-Q530*	5	2750	2	1.62
81-Q518*	5	11800	2	1.62
81-Q545*	5	450	2	1.62
81-Q610	6	1000	3	2.50
81-Q618	6	11800	3	2.50
81-Q625	6	2500	3	2.50
81-Q810	8	1000	4	3.53
81-Q818	8	11800	4	3.53
81-Q825	8	2500	4	3.53
81-Q1010	10	1000	6	4.41
81-Q1020	10	2000	6	4.41
81-Q1025	10	2500	6	4.41
81-Q1210	12	1000	7	5.14
81-Q1215	12	1500	7	5.14
81-Q1220	12	2000	7	5.14
81-Q1225	12	2500	7	5.14

\*Transformer for 4" and 5" speakers from listing below.

### OUTPUT TRANSFORMERS

Also ideal as replacements on all old speakers. Built to give clear and splendid tone. Wt., 8 oz.  
 62-320. 2000 Ohms. For 6F6, 6K6, etc. **NET EACH 53c**  
 62-321. 4000 Ohms. For 6V6, 6X4, 6X5, 6X6, etc.  
 62-322. 10,000 Ohms. For 6F6, 6K6, 41, 42, etc.  
 62-323. 25,000 Ohms. For 1A5G, 1F4, 1F5G, etc.

### JENSEN SERIES "S" DYNAMICS

Exceptionally good speakers for use as original equipment or for general replacement purposes. All speakers are completely dustproofed; supplied less transformer but with facilities permitting easy attachment. Standard RMA mounting dimensions. Weights are comparable with similar sizes above. \*With transformer. †Tapped at 300 ohms.



MODEL H55 5-INCH				MODEL H45 4-INCH			
Stock No.	Field Ohms	VC Imp.	NET EACH	Stock No.	Field Ohms	VC Imp.	NET EACH
82-153	3000	4500*	\$2.23	82-150	450	4	\$1.71
82-154	2750	4	\$1.76	82-151	1000	4	
82-155	1000	4		82-152	3000	4	
82-156	6 Volt	4					
82-157	1800†	4					
82-158	450	4					

MODEL H65 6-INCH				MODEL F8R5 8-INCH			
Stock No.	Field Ohms	VC Imp.	NET EACH	Stock No.	Field Ohms	VC Imp.	NET EACH
82-159	2750	4	\$1.91	82-163	2500	4	\$2.50
82-160	1800	4		82-164	11800	4	
82-161	1000	4		82-165	1000	4	
82-162	6 Volt	4		82-166	6 Volt	4	

- 64-816. Type ZP-1020. Output trans. Adj. pri. imp. 1 lb. ... 73c
- 64-817. Type Z-2359. 500 ohm to VC. 1 lb. ... 47c
- 64-818. Type Z-2255. 7000 ohm to VC. 1 lb. ... 47c
- 64-819. Type Z-2362. 10,000 ohm c.t. to VC. 1 lb. ... 47c

### QUAM PM AND PERMANIC SPEAKERS

#### PM JUNIOR SPEAKERS

A famous line of first quality speakers. Completely dustproofed. For use in battery, A.C.-D.C., portable sets, auto sets, or small PA systems. Voice coils, 4 ohms at 400 cycles. Less transformer.

No.	Size	Magnet	Rating	Wt.	NET
81-300	4"	2 oz.	1.5 W.	2 lbs.	\$1.21
81-301	4"	4 oz.	2.5 W.	2 lbs.	1.44
81-302	5"	4 oz.	2.5 W.	2 lbs.	1.47
81-303	6 1/2"	4 oz.	2.5 W.	3 lbs.	1.11
81-304	8"	5 oz.	3.5 W.	3 lbs.	2.06

#### PERMANIC SPEAKERS

Moving armature type speakers with genuine Alnico magnets for long life. Suitable for use in portable, battery or A.C.-D.C. sets, intercom paging or call systems, and many similar applications. Require no field current and no output transformer. Use 500-ohm models for multiple speaker systems or on long lines. High impedance models match any output tube with plate impedance of 1200 to 2500 ohms. Avg. wt., 2 lbs.



Ohms	4"	NET	5"	NET	6 1/2"	NET
12000-25000	81-310	\$1.29	81-312	\$1.32	81-314	\$1.53
500	81-311	1.29	81-313	1.32	81-315	1.53

62-330. Universal Output Trans. for speakers above. NET 68c



# REPLACEMENTS FOR SPEAKERS



## CARRON EXACT DUPLICATE QUALITY SPEAKER CONES

Duplicate replacement cones accurately designed and carefully constructed to match the originals. One piece seamless material is used; noted for enduring and pleasing quality. An accurately wound voice coil is attached to each cone. Cones are precisely formed by patented process to secure excellent tonal quality and long life. Voice coils are also exact duplicates of the originals. For improved tone quality, replace your old speaker cone.

Approximate cost for cones not listed below: 4" to 6" cones—\$0.90; 7" to 9" cones—\$1.50; 10" to 12" cones—\$1.95; cones 13" and over—not to exceed \$2.75. Send in old cone with remittance. Name, size of speaker, numbers or letters stamped on speaker and cone will help us give you faster service. If entire speaker is sent in for cone installation, add 75c to above prices for all 4" to 6" cones. Add 50c for 4" to 6" cones. This service includes at no extra charge, remagnetizing of PM's, if needed. Average shpg. wt. of cones, 2 1/2 lbs.

## P.M. AND DYNAMIC SPEAKER REPAIR AND CLEANING SERVICE



Repair your old speaker and bring back its original performance. Our speaker engineers will replace entire cone with a new one-piece genuine CARRON seamless cone, eliminate dust particles and other causes of hazy reception, align voice coil so it rides smoothly without rubbing and put speaker in A-1 working condition for small charges—outlined at left.

Stock No.	Set or Speaker No.
<b>4" SPEAKER CONES</b>	
82-500.	Zenith 49AG385, 49AG403.
82-501.	Zenith 49AG324.
<b>ANY 4" CONE, NET.....</b>	

**59c**

Stock No.	Set or Speaker No.
<b>5" SPEAKER CONES</b>	
82-510.	Airline 62-274, -350, -351, -352.
82-511.	Airline 62-518.
82-512.	Airline 62-236, 62-263.
82-513.	Arvin 467, 518.
82-510.	Belmont 425, Pt. # 114-108.
82-514.	Belmont 580, Jensen F5R.
82-512.	Belmont 666, 690.
82-515.	Chevrolet 985426 (Magnavox ID-1400).
82-516.	Chev. 985426 (Utah).
82-512.	Chevrolet 985200.
82-517.	Chevrolet 985425.
82-518.	Chevrolet 985253.
82-519.	Chevrolet 985583 (41045).
82-520.	Chevrolet 985538 (43449).
82-510.	Crosley 648, 718C.
82-511.	Crosley A157, 517, 547, 5517.
82-521.	Crosley A366, 515 (Magnavox).
82-522.	Crosley 516.
82-523.	Crosley 515, 5515 (Utah).
82-511.	Delco R663.
82-521.	Delco 640, 631A, 4099 (Magnavox ID-1400).
82-512.	Delco 640, 631A (Operadio).
82-514.	Emerson 30, 33, 250, 321, 350LW.
82-521.	Emerson 107, 111.
82-513.	Kadette 21, 22, 23, 86.
82-510.	Zenith 49-242, 49-237, 49-238.
82-514.	Zenith 49-415.
82-524.	Zenith 49B5298, 49B5303.
<b>ANY 5" CONE, NET.....</b>	

**73c**

Stock No.	Set or Speaker No.
<b>6" SPEAKER CONES</b>	
82-535.	Airline 62-173, -5, -6, -7, 193, -6, -8, 229, 316.
82-535.	Arvin 20, 25, 29, 15.
82-535.	Belmont 667, 740, Pl. 114-62.
82-536.	Belmont 777, Jensen F6R.
82-537.	Bosch 503 series.
82-538.	Cadillac C-8-56-52-53.
82-535.	Chevrolet 985252, Operadio.
82-536.	Jensen F6R.
82-539.	Jensen PM6C, G6R.
82-540.	Majestic G24, 116, Ford Auto.
82-536.	Motorola 75.
82-541.	Motorola 25F & 28D.
82-542.	Motorola 944, 28-0-3P.
82-535.	Sentinel 52A, 72A, 600, Operadio.
82-536.	Spartan 537, 547, 518, 548, 558, 568, 577, 578.
82-543.	Stewart Warner R123, R116, R118, R220, R223, R224, 1231 to 1239.
82-535.	Wells-Gardner 71, 6D, Operadio.
82-537.	Westinghouse WR209, WR211.
82-535.	Zenith 49-81.
82-536.	Zenith 49-143, 49-153.
<b>ANY 6" CONE, NET.....</b>	

**88c**

Stock No.	Set or Speaker No.
<b>7" SPEAKER CONES</b>	
82-550.	Motorola 400 Spkr. No. 50B18005.
82-551.	Zenith 49AB341.
<b>ANY 7" CONE, NET.....</b>	

**\$1.03**

Stock No.	Set or Speaker No.
<b>8" SPEAKER CONES</b>	
82-560.	Airline 62-175, 62-176, 62-190.
82-561.	Chevrolet 985283.
82-562.	Chevrolet 985536.
82-563.	Crosley M45, Model 262, 40S, 42S, 30S, 31S, 34S, 34S.
82-564.	General Electric A52, A55, A64, A65, A70, A83.
82-565.	Jensen PM8D, E8R.
82-565.	Motorola 65, 8-50, 70.
82-566.	Motorola 500, 29B, 253, -59, -61, -64.
<b>(Cont'd. next column)</b>	

Stock No.	Set or Speaker No.
<b>8" SPEAKER CONES</b>	
82-567.	Stewart Warner 102A, 104A, R110.
82-560.	Zenith 49-116.
82-568.	Zenith 49-117.
<b>ANY 8" CONE, NET.....</b>	

**\$1.18**

Stock No.	Set or Speaker No.
<b>9" SPEAKER CONES</b>	
82-580.	Majestic G1, 71, 72.
82-581.	Majestic G2, 91, 92.
<b>ANY 9" CONE, NET.....</b>	

**\$1.32**

Stock No.	Set or Speaker No.
<b>10" SPEAKER CONES</b>	
82-590.	AK15142 Mod. 55, Speaker F4.
82-591.	AK14374 Model 55, Speaker F2.
82-592.	Majestic G3, 90, 91, 93, 101-3.
82-593.	Majestic G6-G7, 51, 52 \$
<b>ANY 10" CONE, NET.....</b>	

**\$1.47**

Stock No.	Set or Speaker No.
<b>12" SPEAKER CONES</b>	
82-600.	G.E. E11, E26, E61, E68, E81, E86, E105, E115.
82-601.	Granov Spkr. 12A1, 12A2, 12A6, 12C4, 1, 901-2, 1101, 1291, 1541.
82-602.	Jensen D7, D8.
82-603.	Jensen PM12C.
82-604.	Jensen PM12GS.
82-605.	Majestic G13B, G13C, 315, 353.
82-606.	Oxford 12AMP, 12MS1, 12MS2.
82-607.	Rola G12.
82-608.	Utah No. 1220, CU29.
<b>ANY 12" CONE, NET.....</b>	

**\$1.70**

## FOR PHILCO SETS

Stock No.	Set Model or Speaker No.	Dia.	NET
82-620	Philco TH-4	4	\$0.53
82-621	Philco TP4-12-25	4	.53
82-622	Philco AR 1	4	.53
82-630	Philco 39-6, 39-7	4	.59
82-631	Philco C32, FT9, Ford	5 1/8	.59
82-632	Philco Pt. No. 02861, Mod. 5, 48, 50, 80, 81	5 1/4	.59
82-633	Philco Pt. No. 45-1344, 38-12 (121)	5 1/8	.59
82-635	Philco Mod. C1608	6	.59
82-640	Philco 1708-F1740	7	.65
82-641	Philco AR 4	7	.65
82-642	Philco Pt. No. 36-3159, Mod. 6, 7, 8, 9, 10, 12, 14, 15, 19, 43, 47, 71, 80, 91	7 3/4	.59
82-643	Philco Pt. No. 36-3157, Mod. 34B, 38B, 60B, 66B, 84B, 260B, 267B, 625B	7 1/2	.59
82-645	Philco 90, 40, 20, 21, 70, 470, 490, 650	8 1/2	.73
82-647	Philco 87, 65, 95, 76, 96, 77, 45, 111, 90, 112	10 1/2	.82

## FOR RCA SETS

Stock No.	Set Model or Speaker No.	Dia.	NET
82-650	RCA 9TX3, R24	4	.59
82-651	RCA Pl. No. 9023, Mod. M34, M105	5	.59
82-652	RCA Pl. No. 8987, Mod. R28, R29, RE40, RE40P, 100-1, 110-11, 114-15, M116, 300, 301	5	.59
82-653	RCA Pt. No. 9428, Mod. R37, R38, R38P, 112, 121, 122, 124, 126B, 241B, 310, 320, ACR136, M123, Mod. 107, 118	6 1/2	.59
82-654	RCA-Victor R32, RE45, series	9	1.03

## CENTERING SHIMS



Flexible celluloid spacers for centering and adjusting cone in pole slot of speaker. 4 shims each of the following sizes: .005; .0075; .010; .0125. In handy leather case. Shpg. wt., 5 oz.

**43-105. NET..... 35c**

## EXACT DUPLICATE FIELD COILS



No.	Set or Spkr.	Ohms	NET
61-800	Apex 26 (1 1/4 x 2 1/4 x 1 1/2")	11,500	\$1.35
61-801	Apex 8A (1 1/2 x 2 1/4 x 1 1/2")	6,600	1.35
61-802	Philco 20	3,100	1.18
61-803	Philco 86, 87, 66, 95, 76, 96, 77	3,200	2.65
61-804	Philco 70	3,600	1.18
61-805	Victor RE32, 45, 75	2,950	2.79
61-806	Westinghouse WR309, WR207	1,900	1.32

## UNIVERSAL FIELD COILS



For AC-DC midget 5" and 6" speakers. 1" inside dia.; 2" outside dia., 1" high. Supplied with 3 gaskets for fitting any pole-piece.

61-815, 450 Ohm.	61-816, 2,000 Ohm.
61-815, 1,000 Ohm.	61-819, 2,500 Ohm.
61-817, 1,500 Ohm.	61-820, 3,000 Ohm.

List, \$1.50. **NET EACH..... 88c**

## FOR "TINY" SPEAKERS

Universal Field Coils for those "tiny" 7/8" dynamics. 3/4" inside dia.; 1 1/4" outside dia., 7/8" high. With gaskets and washers, fit any pole piece. Shpg. wt., 1 lb.

61-825, 450 Ohm.	61-828, 2,000 Ohm.
61-826, 1,000 Ohm.	61-829, 2,500 Ohm.
61-827, 1,500 Ohm.	61-830, 3,000 Ohm.

List, \$1.00. **NET EACH..... 59c**

## COILS FOR GENERAL REPLACEMENT

Service any type of speaker. Coils have 2 windings which may be connected in series or parallel to obtain the resistance values shown. Sizes: Type 1—inside dia. 1 1/4", outside dia. 2 1/4", length 1 1/4"; Type 2—inside dia. 1 1/4", outside dia. 2 1/4", length 1 1/4"; Type 3—inside dia. 1 1/4", outside dia. 2 1/4", length 2 1/4"; Type 4—inside dia. 1 1/4", outside dia. 2", length 1 1/4". With instructions. Average shpg. wt., 1 1/2 lbs.

## PARALLEL RESISTANCE RANGE

Ohms	Type 1 No.	Type 2 No.	Type 3 No.	Type 4 No.
375-600	61-835	61-845	61-855	61-865
450-690	61-836	61-846	61-856	61-866
675-825	61-837	61-847	61-857	61-867
900-1100	61-838	61-848	61-858	61-868
1125-1375	61-839	61-849	61-859	61-869

## SERIES RESISTANCE RANGE

1500-1800	61-835	61-845	61-855	61-865
2250-2750	61-836	61-846	61-856	61-866
2700-3300	61-837	61-847	61-857	61-867
3600-4400	61-838	61-848	61-858	61-868
4500-5500	61-839	61-849	61-859	61-869

**ANY COIL NET EACH..... \$1.82**

## SPEAKER CONE CEMENT

Cement speaker cones, paper rings and felts to speaker frames. Dries quickly; vibration-proof. 3 oz. tube. Shipping wt., 6 oz.



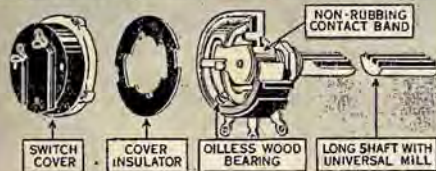
**43-101. NET..... 24c**



# CENTRALAB STANDARD RADIOHMS

CENTRAL RADIO LABORATORIES

## CENTRALAB STANDARD RADIOHM



Centralab Radiohms use the famous patented wall-type resistor which hugs inner circumference of the black molded bakelite case. This exclusive non-rubbing contact band assures quiet, smooth rotation and long life. Case size: 1 1/4" dia. and 3/4" deep. The 1/2" dia. metal shaft extends 3/4" from case. It is milled full length for push-on or set screw type knobs. All controls are carbon type. See below for explanation of taper. Wt., less switch, 5 oz.; with switch, 7 oz. **CRL type numbers given below are the new CRL numbers. You may order by these or by the old CRL numbers.**

Cat. No. Less Switch	New CRL No.	Max. Res. Ohms	Taper No.	Cat. No. With Switch	New CRL No.	Cat. No. Less Switch	New CRL No.	Max. Res. Ohms	Taper No.	Cat. No. With Switch	New CRL No.
27-200	A-100	500	1	27-230	B-100	27-150	AF-117	25000	3	27-175	BF-117
27-201	A-101	1000	1	27-231	B-101	27-151	A-118	50000	6	27-176	B-118
27-202	A-102	2000	1	27-232	B-102	27-152	A-119	50000	6	27-177	B-119
27-203	A-103	3000	1	27-233	B-103	27-153	A-120	75000	6	27-178	B-120
27-204	A-104	4000	1	27-234	B-104	27-154	AF-121	75000	4	27-179	BF-121
27-205	AF-105	5000	1	27-235	BF-105	27-155	A-122	100000	1	27-180	B-122
27-206	A-106	5000	6	27-236	BF-106	27-156	A-123	100000	6	27-181	B-123
27-207	AF-107	7500	1	27-237	BF-107	27-157	A-124	150000	6	27-182	B-124
27-208	AF-108	10000	1	27-238	BF-108	27-158	A-125	200000	1	27-183	B-125
27-209	AF-109	10000	3	27-239	BF-109	27-159	AF-126	200000	4	27-184	BF-126
27-210	AF-110	10000	4	27-240	BF-110	27-160	A-127	250000	6	27-185	B-127
27-211	AF-111	10000	4	27-241	BF-111	27-161	A-128	500000	4	27-186	B-128
27-212	AF-112	15000	3	27-242	BF-112	27-162	A-129	500000	4	27-187	B-129
27-213	AF-113	15000	4	27-243	BF-113	27-163	A-130	500000	6	27-188	B-130
27-214	AF-114	20000	3	27-244	BF-114	27-164	A-131	750000	6	27-189	B-131
27-215	AF-115	25000	1	27-245	BF-115	27-165	A-132	1 Meg.	6	27-190	B-132
27-216	AF-116	25000	4	27-246	BF-116	27-166	A-133	2 Meg.	6	27-191	B-133
						27-167	A-134	3 Meg.	6	27-192	B-134

LESS SWITCH. EACH. **59c** WITH SWITCH. EACH. **88c**

LESS SWITCH. EACH. **59c** WITH SWITCH. EACH. **88c**

### TAPPED RADIOHMS

Standard units with taps for tone compensation. Taper No. 10. See explanation below.

27-247	AT-135	250000	10	27-260	BT-135
27-248	AT-136	500000	10	27-261	BT-136
27-249	AT-137	1 Meg.	10	27-262	BT-137
27-250	AT-138	2 Meg.	10	27-263	BT-138

LESS SWITCH. NET EACH. **88c** WITH SWITCH. NET EACH. **\$1.18**

### WIRE-WOUND RADIOHMS

Similar to above in design and size, but of wire-wound construction. These units have linear taper and are supplied less switch (see right above for switches). Rated at 3 watts.

CRL Type	Res. Ohms	CRL Type	Res. Ohms	CRL Type	Res. Ohms
V100	2	V114	40	V128	750
V102	4	V116	50	VF129	1000
V104	6	V117	60	VF131	2000
V106	8	V118	75	VF133	3000
V108	10	V121	100	VF134	4000
V109	15	V123	200	VF135	5000
V110	20	V125	300	VF136	7500
V111	25	V126	400	VF137	10000
V112	30	V127	500		

27-100. Specify Type Number and Value when ordering the above controls. NET EACH. **59c**

### SPLIT KNURL MIDGET RADIOHM



For radio receivers employing brass knurled shaft used with special push-on knob. Fixed shaft, 3/4" long. For switch type, add the midget switch covers at right above. 27-143 tapped at 150 M, 27-144 at 300 M. Wt., 6 oz.

No.	Type	Ohms	Kind	EACH
27-139	NK-139	250000	Plain	<b>59c</b>
27-140	NK-140	500000	Plain	
27-141	NK-141	1 Meg.	Plain	
27-142	NK-142	2 Meg.	Phnur.	<b>88c</b>
27-143	NK-143	500000	Tapped	
27-144	NK-144	1 Meg.	Tapped	

### STANDARD SWITCH COVERS

Underwriters' Approved. Bakelite insulated switch mounted on type plate. Convert any plain Radiohm to switch type.

No.	CRL Type	Kind	NET
27-270.	K10	SPST Standard	29c
27-271.	K11	SPDT 3 Lugs	35c
27-272.	K12	DPST 4 Lugs	35c
27-273.	K16	SPDT Clockwise	35c
27-274.	K17	SPST Dummy Lug	35c
27-275.	K15	4 Point (for Batt. Sets)	35c

### TWIN VOLUME CONTROLS

Many troublesome sets with single controls may be improved with No. 74-601. The original control is in the "C" bias circuit, or with No. 74-602 for the screen grid circuit. \*Bakelite wired in like original control; section nearest shaft is shunted from ant. to gnd. Other listings have same resistance in both sections. No. 6 taper. Case, 1 1/2 x 1 1/2" deep; shaft is 3/4". Well-built controls designed to give exceptionally fine service. Wt. 10 oz.

Steck No.	CRL Type	Ohms Front	Ohms Back
27-285.*	74-601	10,000	25,000
27-286.*	74-602	10,000	50,000
27-287.	4-010-804	500,000	500,000
27-288.	4-010-805	100,000	100,000
27-289.	4-010-807	250,000	250,000

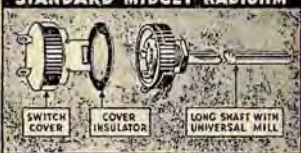
NET EACH. **\$1.47**

### EXPLANATION OF TAPERS

The taper or curve of a volume control is more important than its overall resistance. The explanation given below will help you to select the proper Centralab volume or tone control for use in any type receiver or amplifier circuit. The numbers shown correspond to the taper numbers given for the Centralab controls on this page and also on page 106. Refer to this explanation when ordering volume or tone controls, or ask us for the control you need. Always mention make, model number, and tube lineup of set or amplifier and how control is used. Standard applications of each taper are as follows: (1) Volume divider with uniform resistance change. (2) Antenna and cathode bias control of one or two tubes, no bleeder current. (3) Antenna and cathode bias control of one or two tubes, with bleeder current. (4) Audio grid, antenna, or tone control. (5) Audio grid volume control tapped for tone compensation.

Refer to Page 106 for Additional Centralab Volume Control Listings

### STANDARD MIDGET RADIOHM



Bakelite case, 1 1/4" diameter. Metal shaft is 1/2" dia. x 3/4" long. For use with push-on or set-screw type knob. Ground-lug supplied. High-quality all-purpose controls. Wt., 4 oz.

Cat. No. Less Switch	CRL Type	Max. Res. Ohms	Taper No.	Cat. No. With Switch	CRL Type
27-000	NF106	5000	1	27-025	PF106
27-001	NF107	10000	1	27-026	PF107
27-002	NF100	10000	3	27-027	PF100
27-003	NF108	10000	4	27-028	PF108
27-004	N109	10000	6	27-029	P109
27-005	NF110	15000	3	27-030	PF110
27-006	NF111	15000	4	27-031	PF111
27-007	NF112	20000	3	27-032	PF112
27-008	NF113	25000	1	27-033	PF113
27-009	NF101	25000	3	27-034	PF101
27-010	N114	50000	1	27-035	P114
27-011	N115	50000	6	27-036	P115
27-012	N116	100000	1	27-037	P116
27-013	N117	100000	6	27-038	P117
27-014	N102	250000	6	27-039	P102
27-015	N118	500000	1	27-040	P118
27-016	N119	500000	6	27-041	P119
27-017	N104	1 Meg.	6	27-042	P104

Less Switch. NET EACH. **59c** With Switch. NET EACH. **88c**

### TAPPED MIDGET RADIOHMS

Less Switch	CRL Type	Max. Res.	Tap. Res.	With Switch	CRL Type
27-050	NT119	250M	75M	27-070	PT119
27-051	NT147	250M	125M	27-071	PT147
27-052	NT148	350M	75M	27-072	PT148
27-053	NT120	500M	150M	27-073	PT120
27-054	NT149	500M	250M	27-074	PT149
27-055	NT150	1 Meg.	200M	27-075	PT150
27-056	NT121	1 Meg.	300M	27-076	PT121
27-057	NT131	2 Meg.	200M	27-077	PT131
27-058	NT152	2 Meg.	400M	27-078	PT152
27-059	NT122	2 Meg.	600M	27-079	PT122
27-060	NT153	2 Meg.	1Meg.	27-080	PT153
27-061	NT154	2 Meg.	1Meg.	27-081	PT154

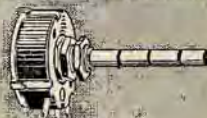
Less Switch. NET EACH. **88c** With Switch. NET EACH. **\$1.18**

### MIDGET SWITCH COVERS

Underwriters' Approved bakelite midget switch cover. \*For use with battery-radio circuits. Snap-on type for easy attachment. Wt., 3 oz.

No.	CRL Type	Kind	NET
27-090.	K155	SPST, (Standard)	29c
27-091.	K156	SPDT	35c
27-092.	K157	DPST	35c
27-093.	K169	SPST, (Dummy Lug)	35c
27-094.	K158*	Four Point	35c

### STANDARD ROUND SHAFT RADIOHM



These controls are identical with the standard Radiohms on this page but have 2 1/4" shaft. Grooved every 1/4". Easy to cut slits. See explanation of tapers at left. Less Switch. May be converted to switch type by adding any switch cover as listed in center column. 5 oz.

No.	Type	Ohms	Taper	EACH
27-300	AS-139	10000		<b>59c</b>
27-301	AS-140	25000		
27-302	AS-141	50000		
27-303	AS-142	100000		<b>88c</b>
27-304	AS-143	100000		
27-305	AS-144	250000		
27-306	AS-145	250000	6	<b>59c</b>
27-307	AS-146	500000	1	
27-308	AS-147	500000	6	
27-309	AS-148	1 Meg.	6	
27-310	AS-149	5 Meg.	6	
27-311	AS-150	10 Meg.	6	



## USE ALLIED'S VOLUME CONTROL SERVICE

The listings below, and also on the following pages, are practically all of the Centralab Special Exact Duplicate Volume Controls as shown in the latest CRL Guide, listed at right. These controls are exact duplicates electrically of the original controls. It is not necessary to make any alterations in these units. Shafts are the correct length with the proper milling, lugs are positioned like the original, etc. If your set is not listed below, send us your defective control with a 70c deposit, mentioning the name and model number of the set, and the number and type of tubes used. We will make immediate shipment from stock of the proper replacement control, COD for the balance. Average shipping weight of CRL Volume Controls is 7 oz.



## CENTRALAB VOLUME CONTROL GUIDE

Centralab Volume Controls have important features of design not available in controls of any other make. This has been accomplished through the accumulated knowledge gained by specializing exclusively in variable resistor design the early days of commercial radio. It is your guarantee that Centralab Volume Controls offer you the very finest in noise-free, long-lived operation. The latest edition of the CRL Volume Control Guide listed at left covers thousands upon thousands of sets. The proper CRL Volume Control, and other important data, is given for each model receiver. This valuable Guide is offered free with an order for Centralab Volume Controls. Ask for a copy with your next order.

37-070. CRL Volume Control Guide. Sent—FREE.

Manufacturer & Model	No.	NET	Manufacturer & Model	No.	NET	Manufacturer & Model	No.	NET
<b>All-American Mohawk</b>			<b>General Electric (Cont'd.)</b>			<b>Majestic (Cont'd.)</b>		
B80.....	27-525	\$1.47	M50, M51, M51A, M52			90, 90B, 91, 92, 100, 100B,		
D.....	27-526	1.76	M55, M56, C60, M62,			101, 102, 105, 150 (Equal-		
1931DC.....	27-527	1.47	M65S.....	27-663	\$1.18	izer).....	27-763	\$0.88
<b>Arvin (Noblitt Sparks)</b>			G53, G56, G64, G65, G75.....	27-664	1.18	100, 101 (Comb.).....	27-764	1.47
7, 17, 27, 37.....	27-500	1.18	K60, K60P, K63, M63, K65,			100B, 102, 103.....	27-765	1.47
7A, 9A, 18, 19, 20A, 28, 29,			K65P, C67, K78, K79.....	27-665	.88	120, 121.....	27-766	1.47
32, 33, 39, 42, 44C.....	27-501	.88	N60.....	27-666	1.18	120, 123.....	27-767	1.47
15, 16, 25, 35, 45.....	27-502	1.18	E61, E62, E66, E71, E72,			118 Ford Car Radio.....	27-774	.88
			E76, E81, E86, E91, E95,			130, 130A, 131, 132.....	27-769	.88
			E101, E105, E106.....	27-667	1.18	140.....	27-636	1.47
<b>Atwater Kent</b>			G61, G66, G68-9, G78, G86,			155, 160 (Phono).....	27-770	.88
37, 38, 40, 41, 42, 43, 44, 45,	27-510	.88	M61, M66, M67, M69, M81,			180, 181 (Comb.).....	27-771	1.47
46, 47, 52, 53, 56, 57.....			M85, M86, M89.....	27-669	.88	200, 201, 203, 204.....	27-772	.88
55, 55C, 55F, 55FC, 60, 60C	27-511	1.76	K62, KZ62, L80, K82, J85,			210, 211, 214, 215.....	27-551	1.47
(Late).....			N32, I2835.....	27-670	.88	220, 221, 223.....	27-774	.88
55, 55C, 55F, 55FC, 60, 60C	27-512	1.76	F63, F65, F66, FE67-8, F70,			230A, 233 (Comb.).....	27-775	1.47
(Early).....			F74, F75, F77, F80, F81,			290, 291, 293, 294, 310A,		
60, 60C (3rd Type); 70D, 70I,			F85, F86, J87, F88.....	27-671	.88	310B, 311, 314, 315 (Tone)	27-776	1.18
74D, 74L, 76D, 76L, 76P,			A64, K64, K64D, M65, A66,			340, 344, 360, 363, 390, 393,	27-777	.88
87D (F Chassis).....	27-513	1.76	K66, K66M, A67, M68,			370, 371, 373.....	27-778	1.18
70, 72 (Q Chassis).....	27-514	1.47	A79, A75, K80, K80X,			380, 381 Treasure Chest.....	27-779	1.18
72.....	27-515	1.47	K85, K88, K88X.....	27-672	.88	400, 411, 411A, 413, 413A,	27-780	1.18
80, 80F, 83, 83F, 90, 90F.....	27-516	1.18	A82, A86, A87, A88.....	27-673	1.47	440.....	27-782	1.18
			A83, A85, E115.....	27-674	.88	460.....	27-783	.88
			G85, G99.....	27-675	.88	490, 491, 493.....	27-784	.88
			G95.....	27-676	.88	500, 998.....	27-785	1.18
			F96, G97, F107, F109, F135,	27-677	.88	800.....	27-786	.88
			G105, K105, G106 (Plain),	27-678	.88			
			K105, K106, K106P, K107,			<b>Montgomery Ward (Air-</b>		
			K126, M128, M128R,			<b>line)</b>		
			M129 (with switch).....	27-679	1.18	62-23, 5 Tube, 123.....	27-800	1.47
			M106, M107.....	27-680	.88	67A, 62-103, 62-105.....	27-801	.88
			FE112, FE116.....	27-681	.88	AB10.....	27-802	1.47
			I125.....	27-682	1.47	62-77, 62-120, 62-122, 62-126,		
			I125A.....	27-683	1.47	62-128, 62-149, 62-155,		
			M125.....	27-684	.88	62-160, 62-162, 77.....	27-803	.88
			E126, E129.....	27-685	.88	62-103, 62-105.....	27-804	1.18
			E155.....	27-686	1.18	62-118.....	27-805	1.18
				27-687	1.18	62-166, 62-202.....	27-806	1.18
						62-169, 62-171.....	27-533	.88
						62-178, 62-181, 62-189.....		
						62-211.....	27-808	1.18
						62-179, 62-192, 62-194, 62-195,		
						62-206, 62-216, 62-218.....	27-809	1.76
						62-185, 62-186, 62-187.....		
						62-190, 62-196.....	27-810	1.76
						62-197, 197.....	27-811	1.76
						62-226, 62-228, 62-259.....		
						62-261, 62-308, 62-311.....	27-812	1.18
						62-313, 62-314, 62-320.....		
						62-408, 62-411, 62-418.....	27-813	1.18
						62-261, 62-311, 62-313.....	27-814	1.18
						62-314, 62-411 (Tone).....	27-815	1.18
						62-451.....	27-816	1.18
						62-901, A&B; 62-902, 62-905	27-817	.88
						93WG562.....	27-818	1.47
						101, 811X, 1111, 1111X.....	27-819	.88
						2955, 2957.....		
						Monarch.....		
						<b>Motorola (Galvin)</b>		
						50, 100, 110.....	27-840	1.18
						57, 62.....	27-841	1.18
						60, 70, 75, 79, 80, Twin 6,		
						Golden Voice (1936).....	27-842	1.18
						<b>Philco</b>		
						C, D, H, HHD, NDD, PHD,		
						10, 800 (Code 122); MT3,		
						RT3, AC266, ST3, T3, 802,	27-850	1.18
						C, CDS, D, E, MED, NCD,		
						NDD; SCD (Code 122);	27-851	1.18
						SDD, 10, 4, C206.....		
						C1423, F1440, F1440X.....		
						F1442, F1442X, FT9,		
						G1418, G1436, L1420,		
						L1424-5, L1427, L1429,		
						L1460, LT14X3, N1418,		
						N1433H, N1434H, N1514,		
						NT15, NT12N, P1417,		
						P1517, R1415, RT14N,		
						S1416, S1431, S1437,		
						S1516, ST12, ST15, T9,		
						T12, T15, W1419, 811PA,		
						811PB, 811PV, 816, 817,		
						821B, 821EV, 826, 827,		
						827K, 828, 828K.....	27-852	.88
						CI450, CI452, CI540, CT10,		
						CT11, HT11, MT14X4,		
						PI422H, PI430, PI432,	27-853	.88
						PT14, T10, T11.....		



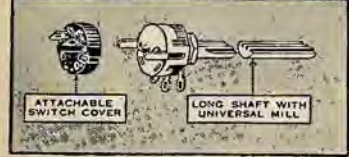
Manufacturer & Model	No.	NET	Manufacturer & Model	No.	NET	Manufacturer & Model	No.	NET
<b>Philco (Cont'd.)</b>			<b>Philco (Cont'd.)</b>			<b>Temple</b>		
C1550, Chrysler	27-854	\$0.88	926, 927, 928K, 936, 937, 938K	27-930	\$1.18	5-55, 8-61, 8-81, 8-91	28-130	\$1.47
C1608	27-855	1.18				<b>Thordarson</b>		
CGD, CGDU, G, HGD	27-856	1.18				Tone Control (4-010-000)	28-140	1.47
CGD, CGDU (Code 122); CT2, CTS, FN, FT6; G, HT2, HGD (Code 122); N, P, PT5, T2, T5, T6	27-857	1.18	<b>RCA-Victor</b>			<b>Transformer Corp.</b>		
CRD, DP, DPV, H, RHD, HRD, J, NJD, NQD; P, O, R, SJD, SQD, T1, 700, 800, AC236	27-858	1.18	AVR-1, 9 Tube AV, 121-2, 127, 140, 141, 141E, 220-1-2, 240, 320-1, 327, 340, 340E	27-672	.88	40, 100, G120, 300, 340	28-135	1.18
F1540 Ford Auto	27-859	1.18	SM	27-672	.88	<b>United Motors (Delco)</b>	28-136	.88
F1640	27-860	1.18	5T-1, 5T-4, 5T-5, 5T-6, 5T-7, 5T-8, C-6-2, C-6-8, 6K, 6T, 6T-2, 6T-5, 6K-2, 6K-3, 6K-10, 6K-12, T-6-1, T-6-7, T-6-8, 7K, 7T, 7U, 7X, 7K-1, 7T-1, 7U-2, C7-6, C8-7, T7-5, 8K, 8T, 8U, 8T-2, 8T-11, 8K-11, 8U-2, C8-15, C8-19, C8-20, T8-14, T8-16, T8-18, C9-4, D9-19, T9-10, 111-K	28-000	.88	980534, 980535 (Buick)	28-150	1.18
F1642, 19 (Code 128)	27-861	.88	T5-2, M107, 117, 118, 119, 125, 211, 214, 225	27-663	1.18	983569 (Pontiac); 985254 (Chevrolet) above Serial Number B16301	28-151	.88
F1646	27-862	.88	H6 Hudson Auto	28-002	1.18	985424	28-152	1.76
F1647	27-863	.88	H6 Hudson Auto	28-002	1.18	985426	28-153	1.76
F1630	27-864	.88	H6 Hudson Auto	28-002	1.18			
F1636	27-865	.88	H6 Hudson Auto	28-002	1.18	<b>Wells-Gardner</b>		
F1626	27-866	1.18	H6 Hudson Auto	28-002	1.18	9-in-Line (Early), 1929, A2, 2C, 2CM, OD, ODM Series, 2DL Series (Volume)	28-170	.88
S1526	27-867	.88	H6 Hudson Auto	28-002	1.18	2DL, OEL Series (Tone)	27-814	1.76
14 (Early), 15 (Late), 18 (Code 124), 91 (Late), 503	27-868	.88	H6 Hudson Auto	28-002	1.18	T4	27-812	1.18
14 (Late); 17, 18 (Code 121); 49, 118, 507	27-869	.88	H6 Hudson Auto	28-002	1.18	5G, 35G510, 35G560 Series, D709 (1935); S709	27-813	.88
15 (Early), 32	27-870	.88	H6 Hudson Auto	28-002	1.18	6F, R-F Series	27-808	1.18
16 (Code 125-6-7); 17 (Code 125); 116B, 116X, 900, 501, 650, 655, 660, 665, 16, 97, 98, 144, 506	27-871	1.18	H6 Hudson Auto	28-002	1.18	6FA 5E Series	27-811	1.76
19 (Late); 89 (Code 123)	27-872	.88	H6 Hudson Auto	28-002	1.18	6K Series	27-803	.88
20, 20A, 21, 41DC, 42DC, 70, 70A, 77, 77A, 90 (Code 125-9), 220, 370, 470	27-873	1.18	H6 Hudson Auto	28-002	1.18	6N Series; 6R, 6S	28-179	1.18
22L, 47DC, 71	27-874	1.18	H6 Hudson Auto	28-002	1.18	6U Auto Set	27-805	1.18
23X, 91 (Early)	27-875	1.18	H6 Hudson Auto	28-002	1.18	6Q Series	28-182	1.18
25, 43	27-876	1.47	H6 Hudson Auto	28-002	1.18	7G, 7GM, 7K, 37G508-566, 07A, 17A, WG24 (Tone)	27-810	1.76
30, 96, 111, 111A, 112, 112A, 211, 212, 296	27-877	.88	H6 Hudson Auto	28-002	1.18	A12, A14, A20, A22, A24, 17B Series	27-801	.88
34	27-878	.88	H6 Hudson Auto	28-002	1.18	WG24 Series, 291, CG, C, 9-in-Line (Late)	28-185	.88
35, 36 (Battery)	27-879	1.18	H6 Hudson Auto	28-002	1.18	60, 63-70, 360, 80-8 Tube, 022, 122	27-804	1.18
37 (Battery)	27-880	1.18	H6 Hudson Auto	28-002	1.18		27-802	1.47
37-9, 37-10, 37-11, 37-116, 37-610, 37-611, 37-620, 37-623, 37-624, 37-630, 37-640, 37-641, 37-643, 37-650, 37-655, 37-660, 37-665, 37-670, 37-675, 37-2620, 37-2650, 37-2670, 38-116, 38-620, 38-623, 38-624, 38-2630, 38-2650, 38-2670	27-881	.88	H6 Hudson Auto	28-002	1.18	<b>Zenith</b>	27-819	.88
37-34, 37-38, 37-60, 37-61, 37-89, 37-690, 38-60, 38-89, 37-84, 84, 84B, 267E	27-882	1.18	H6 Hudson Auto	28-002	1.18	<b>Numbers Below Are Chassis Numbers</b>	27-818	1.47
37-116 (Expander)	27-883	1.47	H6 Hudson Auto	28-002	1.18	5A02, 5A06T, 5A06BT, 6A06T, 6A05, 6A20, 8A04, 6A11AT, 6A11BT, 6A18T, 6A25, 7A01, 7A02, 7A04, 7A10T, 8A05AT, 8A05BT, 8A01, 8A03, 8A02, 10A1, 10A2, 10A3 below Serial No. 384250	28-200	.88
37-600, 600	27-884	1.47	H6 Hudson Auto	28-002	1.18	12A1, 12A2, 12A3, 12A4, 1001, 1002, 1201, 1005, 1103, 1202, 1202A, 1601CP, 5903, 1202, 1601CP, 5903 (Tone), 1206, 1502, 1503, 1207, 1501, 2057, 2044, 2053 (Noise Suppressor Control), 5419, 5510, 5536, 5538, 5539, 5601M Ford Car, 5616, 5617, 5626, 5619, 5621, 5629, 5630, 5631, 5630, 5631, 5706 (Tone), 5623AT, 5720AT, 5720BT, 5721T, 2809T, 5632, 5637, 5803, 5646, 5657, 5659-601-2, 5672P, 5675, 5679, 5715, 5700, 5714, 5807, 5721, 5725, 5804AT, 5902, 5903A, 5904, 5907	28-201	1.18
38, 38A, 81, 81A	27-885	.88	H6 Hudson Auto	28-002	1.18	1005, 1103, 1202, 1202A, 1601CP, 5903, 1206, 1502, 1503, 1207, 1501, 2057, 2044, 2053 (Noise Suppressor Control), 5419, 5510, 5536, 5538, 5539, 5601M Ford Car, 5616, 5617, 5626, 5619, 5621, 5629, 5630, 5631, 5630, 5631, 5706 (Tone), 5623AT, 5720AT, 5720BT, 5721T, 2809T, 5632, 5637, 5803, 5646, 5657, 5659-601-2, 5672P, 5675, 5679, 5715, 5700, 5714, 5807, 5721, 5725, 5804AT, 5902, 5903A, 5904, 5907	28-202	1.18
38-1, 2, 3-4, 5, 38-7, 38-8, 38-9, 38-23, 39-30, 39-35, 39-80, 40-150, 40-155, 40-180, 40-185, 40-190	27-886	.88	H6 Hudson Auto	28-002	1.18	1005, 1103, 1202, 1202A, 1601CP, 5903, 1206, 1502, 1503, 1207, 1501, 2057, 2044, 2053 (Noise Suppressor Control), 5419, 5510, 5536, 5538, 5539, 5601M Ford Car, 5616, 5617, 5626, 5619, 5621, 5629, 5630, 5631, 5630, 5631, 5706 (Tone), 5623AT, 5720AT, 5720BT, 5721T, 2809T, 5632, 5637, 5803, 5646, 5657, 5659-601-2, 5672P, 5675, 5679, 5715, 5700, 5714, 5807, 5721, 5725, 5804AT, 5902, 5903A, 5904, 5907	28-203	1.76
38-690 (Volume)	27-887	1.18	H6 Hudson Auto	28-002	1.18	1005, 1103, 1202, 1202A, 1601CP, 5903, 1206, 1502, 1503, 1207, 1501, 2057, 2044, 2053 (Noise Suppressor Control), 5419, 5510, 5536, 5538, 5539, 5601M Ford Car, 5616, 5617, 5626, 5619, 5621, 5629, 5630, 5631, 5630, 5631, 5706 (Tone), 5623AT, 5720AT, 5720BT, 5721T, 2809T, 5632, 5637, 5803, 5646, 5657, 5659-601-2, 5672P, 5675, 5679, 5715, 5700, 5714, 5807, 5721, 5725, 5804AT, 5902, 5903A, 5904, 5907	28-204	1.18
38-690 (Tone)	27-888	1.18	H6 Hudson Auto	28-002	1.18	1005, 1103, 1202, 1202A, 1601CP, 5903, 1206, 1502, 1503, 1207, 1501, 2057, 2044, 2053 (Noise Suppressor Control), 5419, 5510, 5536, 5538, 5539, 5601M Ford Car, 5616, 5617, 5626, 5619, 5621, 5629, 5630, 5631, 5630, 5631, 5706 (Tone), 5623AT, 5720AT, 5720BT, 5721T, 2809T, 5632, 5637, 5803, 5646, 5657, 5659-601-2, 5672P, 5675, 5679, 5715, 5700, 5714, 5807, 5721, 5725, 5804AT, 5902, 5903A, 5904, 5907	28-205	1.18
39-1, 7, 39-18, 39-19	27-889	1.18	H6 Hudson Auto	28-002	1.18	1005, 1103, 1202, 1202A, 1601CP, 5903, 1206, 1502, 1503, 1207, 1501, 2057, 2044, 2053 (Noise Suppressor Control), 5419, 5510, 5536, 5538, 5539, 5601M Ford Car, 5616, 5617, 5626, 5619, 5621, 5629, 5630, 5631, 5630, 5631, 5706 (Tone), 5623AT, 5720AT, 5720BT, 5721T, 2809T, 5632, 5637, 5803, 5646, 5657, 5659-601-2, 5672P, 5675, 5679, 5715, 5700, 5714, 5807, 5721, 5725, 5804AT, 5902, 5903A, 5904, 5907	28-206	1.18
39-25	27-890	1.18	H6 Hudson Auto	28-002	1.18	1005, 1103, 1202, 1202A, 1601CP, 5903, 1206, 1502, 1503, 1207, 1501, 2057, 2044, 2053 (Noise Suppressor Control), 5419, 5510, 5536, 5538, 5539, 5601M Ford Car, 5616, 5617, 5626, 5619, 5621, 5629, 5630, 5631, 5630, 5631, 5706 (Tone), 5623AT, 5720AT, 5720BT, 5721T, 2809T, 5632, 5637, 5803, 5646, 5657, 5659-601-2, 5672P, 5675, 5679, 5715, 5700, 5714, 5807, 5721, 5725, 5804AT, 5902, 5903A, 5904, 5907	28-207	.88
39-36, 39-40, 39-45, 40-195, 40-200, 108 (Volume)	27-891	.88	H6 Hudson Auto	28-002	1.18	1005, 1103, 1202, 1202A, 1601CP, 5903, 1206, 1502, 1503, 1207, 1501, 2057, 2044, 2053 (Noise Suppressor Control), 5419, 5510, 5536, 5538, 5539, 5601M Ford Car, 5616, 5617, 5626, 5619, 5621, 5629, 5630, 5631, 5630, 5631, 5706 (Tone), 5623AT, 5720AT, 5720BT, 5721T, 2809T, 5632, 5637, 5803, 5646, 5657, 5659-601-2, 5672P, 5675, 5679, 5715, 5700, 5714, 5807, 5721, 5725, 5804AT, 5902, 5903A, 5904, 5907	28-208	1.18
39-36, 39-40, 39-45, 39-55, 39-116, 40-195, 40-200, 108 (Tone)	27-892	.88	H6 Hudson Auto	28-002	1.18	1005, 1103, 1202, 1202A, 1601CP, 5903, 1206, 1502, 1503, 1207, 1501, 2057, 2044, 2053 (Noise Suppressor Control), 5419, 5510, 5536, 5538, 5539, 5601M Ford Car, 5616, 5617, 5626, 5619, 5621, 5629, 5630, 5631, 5630, 5631, 5706 (Tone), 5623AT, 5720AT, 5720BT, 5721T, 2809T, 5632, 5637, 5803, 5646, 5657, 5659-601-2, 5672P, 5675, 5679, 5715, 5700, 5714, 5807, 5721, 5725, 5804AT, 5902, 5903A, 5904, 5907	28-209	1.18
39-55, 39-116, 40-195, 40-200, 108 (Volume)	27-893	.88	H6 Hudson Auto	28-002	1.18	1005, 1103, 1202, 1202A, 1601CP, 5903, 1206, 1502, 1503, 1207, 1501, 2057, 2044, 2053 (Noise Suppressor Control), 5419, 5510, 5536, 5538, 5539, 5601M Ford Car, 5616, 5617, 5626, 5619, 5621, 5629, 5630, 5631, 5630, 5631, 5706 (Tone), 5623AT, 5720AT, 5720BT, 5721T, 2809T, 5632, 5637, 5803, 5646, 5657, 5659-601-2, 5672P, 5675, 5679, 5715, 5700, 5714, 5807, 5721, 5725, 5804AT, 5902, 5903A, 5904, 5907	28-210	1.18
44, 50A	27-894	1.18	H6 Hudson Auto	28-002	1.18	1005, 1103, 1202, 1202A, 1601CP, 5903, 1206, 1502, 1503, 1207, 1501, 2057, 2044, 2053 (Noise Suppressor Control), 5419, 5510, 5536, 5538, 5539, 5601M Ford Car, 5616, 5617, 5626, 5619, 5621, 5629, 5630, 5631, 5630, 5631, 5706 (Tone), 5623AT, 5720AT, 5720BT, 5721T, 2809T, 5632, 5637, 5803, 5646, 5657, 5659-601-2, 5672P, 5675, 5679, 5715, 5700, 5714, 5807, 5721, 5725, 5804AT, 5902, 5903A, 5904, 5907	28-211	.88
46DC	27-895	1.47	H6 Hudson Auto	28-002	1.18	1005, 1103, 1202, 1202A, 1601CP, 5903, 1206, 1502, 1503, 1207, 1501, 2057, 2044, 2053 (Noise Suppressor Control), 5419, 5510, 5536, 5538, 5539, 5601M Ford Car, 5616, 5617, 5626, 5619, 5621, 5629, 5630, 5631, 5630, 5631, 5706 (Tone), 5623AT, 5720AT, 5720BT, 5721T, 2809T, 5632, 5637, 5803, 5646, 5657, 5659-601-2, 5672P, 5675, 5679, 5715, 5700, 5714, 5807, 5721, 5725, 5804AT, 5902, 5903A, 5904, 5907	28-212	1.18
48DC, 51, 51A, 52, 551, 50, 50A	27-896	1.18	H6 Hudson Auto	28-002	1.18	1005, 1103, 1202, 1202A, 1601CP, 5903, 1206, 1502, 1503, 1207, 1501, 2057, 2044, 2053 (Noise Suppressor Control), 5419, 5510, 5536, 5538, 5539, 5601M Ford Car, 5616, 5617, 5626, 5619, 5621, 5629, 5630, 5631, 5630, 5631, 5706 (Tone), 5623AT, 5720AT, 5720BT, 5721T, 2809T, 5632, 5637, 5803, 5646, 5657, 5659-601-2, 5672P, 5675, 5679, 5715, 5700, 5714, 5807, 5721, 5725, 5804AT, 5902, 5903A, 5904, 5907	28-213	1.18
53	27-897	1.18	H6 Hudson Auto	28-002	1.18	1005, 1103, 1202, 1202A, 1601CP, 5903, 1206, 1502, 1503, 1207, 1501, 2057, 2044, 2053 (Noise Suppressor Control), 5419, 5510, 5536, 5538, 5539, 5601M Ford Car, 5616, 5617, 5626, 5619, 5621, 5629, 5630, 5631, 5630, 5631, 5706 (Tone), 5623AT, 5720AT, 5720BT, 5721T, 2809T, 5632, 5637, 5803, 5646, 5657, 5659-601-2, 5672P, 5675, 5679, 5715, 5700, 5714, 5807, 5721, 5725, 5804AT, 5902, 5903A, 5904, 5907	28-214	1.18
54	27-898	1.18	H6 Hudson Auto	28-002	1.18	1005, 1103, 1202, 1202A, 1601CP, 5903, 1206, 1502, 1503, 1207, 1501, 2057, 2044, 2053 (Noise Suppressor Control), 5419, 5510, 5536, 5538, 5539, 5601M Ford Car, 5616, 5617, 5626, 5619, 5621, 5629, 5630, 5631, 5630, 5631, 5706 (Tone), 5623AT, 5720AT, 5720BT, 5721T, 2809T, 5632, 5637, 5803, 5646, 5657, 5659-601-2, 5672P, 5675, 5679, 5715, 5700, 5714, 5807, 5721, 5725, 5804AT, 5902, 5903A, 5904, 5907	28-215	1.18
57, 58, 59	27-899	.88	H6 Hudson Auto	28-002	1.18	1005, 1103, 1202, 1202A, 1601CP, 5903, 1206, 1502, 1503, 1207, 1501, 2057, 2044, 2053 (Noise Suppressor Control), 5419, 5510, 5536, 5538, 5539, 5601M Ford Car, 5616, 5617, 5626, 5619, 5621, 5629, 5630, 5631, 5630, 5631, 5706 (Tone), 5623AT, 5720AT, 5720BT, 5721T, 2809T, 5632, 5637, 5803, 5646, 5657, 5659-601-2, 5672P, 5675, 5679, 5715, 5700, 5714, 5807, 5721, 5725, 5804AT, 5902, 5903A, 5904, 5907		



# MALLORY VOLUME CONTROLS MALLORY

PR. MALLORY & CO. Inc.

## STANDARD ELF RADIOHM



### CENTRALAB SPECIAL UNITS

Compact. Ideal for portables and auto sets. Size,  $5/16$ " dia.,  $2 3/8$ " deep, less switch. 4 oz.

#### SPECIFY TYPES AND VALUES DESIRED

Type	Ohms	Type	Ohms	Stock No.
LF-100*	10M	L-105	500M	27-325
LF-101†	25M	L-106	1 Meg.	EACH
L-102	50M	L-107	2 Megs.	59c
L-103	100M	L-108	3 Megs.	
L-104	250M			

#### "ELF" RADIOHMS WITH TAP

CR L Type	Maximum Resistance	Tap Resistance	Stock No.
LT-350	250M	75M	27-340
LT-351	500M	150M	EACH
LT-352	1 Meg.	200M	88c
LT-353	1 Meg.	300M	
LT-354	2 Megs.	200M	
LT-355	2 Megs.	400M	
LT-356	2 Megs.	600M	

27-351. SPST Switch. NET... 29c  
27-350. SPST Switch with dummy lug. 35c

\*Taper 4. †Taper 3. All others taper 6. See page 103 for explanation of tapers.

## UNIVERSAL AUTO CONTROLS



All units have taper No. 10 and tone compensation tap. All "NA" units have slip clutches. DPST switch on type "PA." Type "NA" not made for switch.  $1/4 \times 3/8$ " slotted-shaft, easily cut. With guide-funnel. Dia.,  $1 1/8$ ". 8 oz.

Ohms	Type	"NA" Type, NoSw	"PA" Type With Sw.
250000	123	27-355	27-370
500000	105	27-356	27-371
1 Meg.	124	27-357	27-372
2 Meg.	125	27-358	27-373

## EXTENSION SHAFTS

For use with Centralab Controls or where longer shaft is needed. Shafts are 4" long. Easily cut to any length. For  $1/4$ " shafts. 6 oz.

Stock No.	Type	Size	EACH
27-385	K-181	$4 \times 1/4 \times 1/2$ " flat	18c
27-386	K-182	$4 \times 1/4 \times 3/4$ " flat	
27-387	K-183	$4 \times 3/8 \times 1/4$ " flat	

## POWER RHEOSTATS

Very rugged; ideal for many commercial uses such as motor speed control, charging rate regulator, etc. All  $2"$  in dia. Shaft  $1/2$ " long.  $1 1/4$ " dia. With pointer knob. Shpg. wt., 1 lb.

### 25 WATT UNITS

No.	Type	Ohms	No.	Type	Ohms
27400	48-002	2	27407	48-150	150
27401	48-006	6	27408	48-250	250
27402	48-010	10	27409	48-400	400
27403	48-015	15	27410	48-500	500
27404	48-026	25	27411	48-810	1000
27405	48-050	50	27412	48-815	1500
27406	48-100	100	27413	48-850	5000

NET EACH... \$1.18

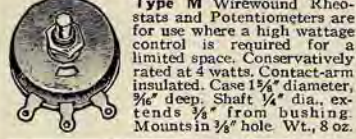
### 50 WATT      75 WATT

27430	48-025	25	27455	47-277	50
27431	48-060	60	27456	47-278	150
27432	48-151	150	27457	47-279	300
27433	48-301	500	27458	47-280	500
27434	48-311	1000	27459	47-281	1000

NET EACH... \$1.47      \$1.76

## MALLORY VOLUME CONTROLS

### TYPE M POTENTIOMETERS



Type M Wirewound Rheostats and Potentiometers are for use where a high wattage control is required for a limited space. Conservatively rated at 4 watts. Contact-arm insulated. Case  $1 1/4$ " diameter,  $3/8$ " deep. Shaft  $1/4$ " dia., extends  $3/4$ " from bushing. Mounts in  $3/8$ " hole. Wt., 8 oz.

Ohms	Type	Stock No.	EACH
15	M15P	29-400	
20	M20P	29-401	
25	M25P	29-402	
30	M30P	29-403	
40	M40P	29-404	
50	M50P	29-405	
60	M60P	29-406	
75	M75P	29-407	59c
100	M100P	29-408	
200	M200P	29-409	
400	M400P	29-410	
500	M500P	29-411	
600	M600P	29-412	
1M	M1MP	29-413	
2M	M2MP	29-414	73c
3M	M3MP	29-415	
4M	M4MP	29-416	
5M	M5MP	29-417	
10M	M10MP	29-418	
15M	M15MP	29-419	88c
20M	M20MP	29-420	
25M	M25MP	29-421	
50M	M50MP	29-422	\$1.18
70M	M70MP	29-423	

### TYPE M RHEOSTATS

Ohms	Type	Amps.	Ohms	Type	Amps.
1/2	M05R	2.80	20	M20R	.45
1	M1R	2.00	25	M25R	.40
2	M2R	1.4	30	M30R	.37
3	M3R	1.15	40	M40R	.32
4	M4R	1.00	50	M50R	.28
6	M6R	.82	60	M60R	.26
10	M10R	.63	75	M75R	.23
15	M15R	.52	100	M100R	.20

29-450. Specify values when ordering. Shpg wt., each, 6 oz. EACH 44c

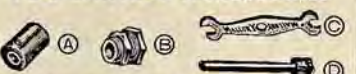
## TYPE E POTENTIOMETERS

### RATED 9 WATTS



Heavy-duty, wire-wound potentiometers. Conservatively rated at 9 watts. Recommended for experimental work and test equipment. Can be mounted on panels up to  $1/4$ " thick.  $3/4$ " shaft-tends  $3/8$ " from bushing. Overall diameter is  $2 1/2$ ". Mounts in  $3/4$ " hole. Contact-arm grounded. Wt., 10 oz.

### VOL. CONTROL ACCESSORIES



29-670. Fig. A. Type EC256. Insulated Shaft Coupler. One end for  $1/4$ " shaft; other for slotted auto cables. NET... 15c

29-671. Fig. A. Type EC257. As above but with square slot (Motorola type). NET... 15c

29-660. Fig. B. Type UB241. Universal Bushing and Nut. Accommodates  $1/4$ " shaft. Permits mounting control back of panel. NET... 5c

29-665. Fig. C. Type 178. Volume Control Wrench. Easy to handle. Prevents marring panels. NET... 12c

29-655. Fig. D. Type RS242. Universal Extension Shaft. 4" long.  $1/4$ " dia.,  $1/2$ " flat. One end fits  $1/4$ " shaft. NET... 18c

## TYPE UM UNIVERSAL MIDGETS



New midget controls, size  $1 1/8$ " dia.,  $1/2$ " W., with Plug-In Shafts below, offer a great advance in volume control servicing. See page 107 for attachable line switches. Consult the Mallory Encyclopedia Wt., 6 oz.

NOTE: We can supply controls and shafts for most sets. Send name, model and tube lineup of receiver, with deposit for each unit ordered.

Ohms	Type	Taper	Ohms	Type	Taper
5M	UM114	4-A	100M	UM143*	1
10M	UM118	1	150M	UM144	1
10M	UM119	2	250M	UM147	4
10M	UM120	4	250M	UM149	1
15M	UM121	1	250M	UM150*	1
15M	UM122	2	350M	UM151	1
20M	UM124	1	500M	UM154	4
25M	UM128	2	500M	UM156	1
25M	UM129	4	500M	UM157*	1
50M	UM133	1	750M	UM158	1
50M	UM134	2	1 Meg.	UM160	1
50M	UM135	4	1 Meg.	UM161	1
75M	UM137	1	1 Meg.	UM162*	1
100M	UM138	2	2 Meg.	UM163	1
100M	UM140	1	3 Meg.	UM165	1
100M	UM141	2	100M	UM180*	Spec.
100M	UM142	4	2 Meg.	UM181*	Spec.

\*Clutch type controls—no provision for attachable switch. †Right-hand switch action.

29-500. Less shaft. Specify values and type numbers when ordering. See page 107 for midget switch. NET... 59c

## TYPE TM TAPPED MIDGETS

Similar to UM type above but have tone control tap. Be sure to specify SS type Plug-In Shaft when ordering. Shpg. wt., 6 oz.

Ohms	Type	Tap.	Ohms	Type	Tap.
250M	TM220	50M	1 Meg.	TM240	200M
250M	TM221	110M	1 Meg.	TM241	200M
250M	TM222*	110M	1 Meg.	TM242	450M
350M	TM223*	70M	1 Meg.	TM243	450M
500M	TM224*	100M	1 1/2 Meg.	TM244	450M
500M	TM225	70M	2 Meg.	TM245	50M
500M	TM226	15M	2 Meg.	TM246	15M
500M	TM227	100M	2 Meg.	TM247	60M
500M	TM228	5M	2 Meg.	TM248	250M
500M	TM230	150M	2 Meg.	TM249	600M
500M	TM231	225M	2 Meg.	TM250	125M
500M	TM232*	225M	2 Meg.	TM251	900M
500M	TM233	60M	2 Meg.	TM252	900M
1 Meg.	TM234	65M	2 Meg.	TM244	400M
1 Meg.	TM236	125M	3 Meg.	TM257	900M
1 Meg.	TM238	300M	2 Meg.	TM259	900M
1 Meg.	TM239*	300M			

\*Clutch type. No provision for switch.

29-550. Less shaft. Specify values and type numbers when ordering. See page 107 for midget switch. NET... 73c

## TYPE SS PLUG-IN SHAFTS

For use with UM and TM controls. Knurled, split and special shafts for home or auto radios.  $3/8$ " to  $9/16$ " long. Specify type number.

Type	Type	Type	Type	Type
SS1	SS 5	SS12	SS21	SS25
SS2	SS 6	SS13	SS22	SS26
SS4	SS10	SS18	SS24	SS27

29-600. Specify Type. EACH... 15c

SS3 | SS11 | SS14 | SS15 | SS21

29-625. Specify Type. EACH... 21c

SS17 | SS19 | SS20

29-640. Specify Type. EACH... 29c

## STANDARD DUAL CONTROLS

\*Wire-wound, others are carbon units. See page 107 for standard attachable snap-on switches. Dia.  $1 1/8$ ". Wt., 1 lb. \$1.47

29-590. Specify Type. EACH

Mfr's Type	Ohms Front	Ohms Rear	USE
*CE	2M	5M	Ant. Shunt & Bias
*GE	10M	5M	Ant. Bias or Screen
*GM	10M	10M	Ant. Bias or Screen
*GM	10M	10M	Audio in P. P.
LL	100M	250M	Audio Tone or Screen
MM	250M	250M	Audio in P. P.
MN	250M	500M	Audio and Tone
NN	500M	500M	Audio in P. P.



# MALLORY Famous VOLUME CONTROLS

## UNIVERSAL VOLUME CONTROLS



Listings on these pages constitute practically all of the Mallory Volume Controls. With a comparatively small stock, you can now meet the requirements of 90% of all repair jobs. Universal controls, supplied with knob adapter, washer, and nuts. With detachable end cover plates and 3" shaft which can easily be cut to required size. All controls are listed LESS SWITCHES. Shpg. wt. without switch, 5 oz. **NOTE: All units shipped less switch unless one is ordered.** See the listing of standard attachable switch prices below.

### STANDARD UNIVERSAL CONTROLS

No.	Ohms	Type	Taper	No.	Ohms	Type	Taper
29-000	2	IQ	IV	29-035	15000	*H12	I
29-001	6	I R	IV	29-036	15000	*H7	II
29-002	10	IS	IV	29-037	15000	*H7	VII
29-003	20	I U	IV	29-038	20000	*A20MP	IV
29-004	30	I U	IV	29-039	20000	*Y	IV
29-005	60	I V	IV	29-040	25000	Y2SMP	IV
29-006	100	I W	IV	29-041	25000	*J	IV
29-007	200	I X	IV	29-042	50000	Y50MP	IV
29-008	400	IA400P	IV	29-043	50000	K12	II
29-009	500	IA	I	29-044	50000	*K	IV
29-010	550	IA550P	IV	29-045	75000	Z12	I
29-011	1000	IA1000P	IV	29-046	75000	*Z	II
29-012	1000	I B	I	29-047	100000	Y100MP	IV
29-013	1000	UC500	II	29-048	100000	L	II
29-014	2000	A2MP	IV	29-049	100000	*UC510	II
29-015	2000	C12	I	29-050	150000	UC502	I
29-016	2000	I C	II	29-051	200000	Y200MP	IV
29-017	3000	IA3MP	IV	29-052	250000	Y250MP	IV
29-018	3000	D12	I	29-053	250000	O	IV
29-019	3000	I D	II	29-054	250000	*UC511	II
29-020	3000	ID7	VII	29-055	250000	*UC509	I
29-021	5000	IA5MP	IV	29-056	500000	Y500MP	IV
29-022	5000	Y5MP	IV	29-057	500000	N	I
29-023	5000	*E12	I	29-058	500000	*UC512	I
29-024	5000	I E	II	29-059	500000	UC513	II
29-025	5000	I E7	VII	29-060	750000	UC503	I
29-026	7500	*F12	I	29-061	1 Meg.	Y1000MP	IV
29-027	7500	I O	I	29-062	1 Meg.	O	I
29-028	7500	I F7	VII	29-063	1 Meg.	*UC514	I
29-029	10000	IA10MP	IV	29-064	2 Meg.	P	I
29-030	10000	Y10MP	IV	29-065	3 Meg.	UC504	I
29-031	10000	*G12	I	29-066	4 Meg.	UC505	I
29-032	10000	I G	II	29-067	5 Meg.	UC506	I
29-033	10000	UCS01	II	29-068	5 Meg.	UC507	II
29-034	10000	IC7	VII	29-069	9 Meg.	UC508	I

I Slotted Shaft for auto sets.  
 † Wire Wound, Adjustable Bias.  
 All others carbon.  
 \* Have external bias resistors.

### STANDARD ATTACHABLE SWITCHES

Volume controls listed on this page do not have switches. Select switch to fit control requirements from listing below. Shpg. wt., 2 oz.

29-100. Type 6-9. Standard SPST. Special thin design. List, 50c. NET... 29c	29-102. Type 8. SPDT. List, 60c. NET... 35c
29-101. Type 7. OPST. Similar to type 6-9. List, 60c. NET... 35c	29-103. Type 13. Shorting. (3PST) List, 60c. NET... 35c
	29-104. Type 14. Shorting. (4PST) List, 60c. NET... 35c

### EXPLANATION OF MALLORY TAPERS:

- TAPER I:** A modified log, left-hand taper in the carbon unit; semi-log in W.W. unit. For audio or ant. snout circuits.
- TAPER II:** A right-hand log taper in the carbon unit; semi-log in the W.W. unit. For series circuits, such as cathode voltage controls.
- TAPER IV:** Linear taper. Used where the voltage changes proportionately to the degree of rotation.
- TAPER IV A:** Modification of regular linear taper IV above.
- TAPER VII:** A left hand taper found only in wire-wound controls. Useful in combined antenna and bias control circuits.

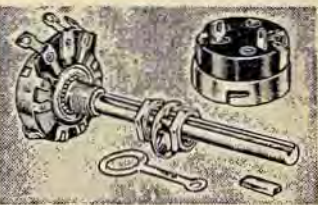
### UNIVERSAL "TRP" TAPPED CONTROLS

Stock No.	Mfr's. Type	Res. Ohms	Tapped at Ohms	Stock No.	Mfr's. Type	Res. Ohms	Tapped at Ohms
29-120	TRP601	40M	8M	29-132	TRP614	350M	70M
29-121	TRP602	60M	4M	29-133	TRP615	3 Meg.	900M
29-122	TRP603	250M	110M	29-134	TRP616	500M	60M
29-123	TRP604	350M	20M	29-135	TRP617	60M	12M
29-124	TRP605	350M	70M	29-136	TRP618	2 Meg.	25M
29-125	TRP606	500M	100M	29-137	TRP619	500M	100-200M
29-126	TRP607	500M	225M	29-138	TRP620	2 Meg.	900M
29-127	TRP608	1 Meg.	200M	29-139	*TRP621	2 1/2 Meg.	250-500M
29-128	TRP609	1 Meg.	500M	29-140	TRP622	44M	7-14M
29-129	TRP610	1 Meg.	30M	29-141	TRP623	250M	50M
29-130	TRP612	2 Meg.	15M	29-142	TRP624	2 1/2 Meg.	250-500M
29-131	TRP613	2 Meg.	400M				

\*No provision for switch; if switch is desired use TRP 624.  
 †Has slotted shaft for auto sets.  
 ‡Special taper for fader service. Others are taper I.  
**NET EACH** (less switches. Average shpg. wt., 5 oz.)... **88c**

## NEW MIDGET TYPE CONTROLS

A new series of midget replacement volume controls for use where special shafts and couplings are unnecessary. Efficiently built, compact and rugged. Snap-on type switches, listed below, easily attached 1/4" deep, 1 1/2" dia.; 3" shaft. Wt., 5 oz.



29-154. Specify Type Number and Value When Ordering. **NET EACH... 59c**

Ohms	Type	Taper	Ohms	Type	Taper	Ohms	Type	Taper
5000	MR14	IV-A	50000	MR34	II	250000	MR45	II
10000	MR18	I	50000	MR35	IV	500000	MR48	I
10000	MR19	II	75000	MR36	I	500000	*MK401	I
10000	MR20	IV	75000	MR37	II	500000	MR50	IV
15000	MR21	I	100000	MR39	I	750000	MR51	I
15000	MR22	II	100000	MR40	II	1 Meg.	MR53	I
20000	MR24	I	100000	MR41	IV	1 Meg.	*MK402	I
25000	MR28	II	150000	MR42	I	2 Meg.	MR55	I
25000	MR29	IV	250000	MR44	I	2 Meg.	*MK403	I
50000	MR33	I	250000	*MK400	I	3 Meg.	MR57	I

\*Have 3" universal knurled shaft for push-on type knobs.

### MIDGET SWITCHES FOR "MR" & "MK" CONTROLS

29-200. Type M26. Single Pole Single Throw. NET... 29c	29-201. Type M27. Double Pole Single Throw. NET... 35c
29-202. Type M28. Single Pole Double Throw. NET... 35c	

### SPECIAL SINGLE "SRP" CONTROLS

These controls have special mechanical or electrical features for receiver requirements which cannot be met with universal type controls. Consult your Mallory Encyclopedia for correct selection. Wt., 5 oz.

Mfr's. Type	Resis. Ohms	Mfr's. Type	Resis. Ohms	Mfr's. Type	Resis. Ohms
SRP133	2M	SRP245	32M	SRP274	10M
SRP134	4500	SRP251	250M	SRP275	500M
SRP138	450	SRP252	500M	SRP276	3M
SRP139	550	SRP253	400	SRP277	2M
SRP141	1200	SRP254	3500	SRP282	350M
SRP142	2900	SRP255	15M	SRP284	100M
SRP144	2M	SRP256	10M	SRP285	500M
SRP145	2M	SRP257	3M	SRP286	250M
SRP152	60	SRP258	15M	SRP287	5M
SRP153	13M	SRP260	1M	SRP288	100M
SRP154	50M	SRP261	100M	SRP289	50M
SRP160	3200	SRP262	1500	SRP290	1 Meg.
SRP170	75M	SRP263	32M	SRP291	750M
SRP179	125M	SRP264	650	SRP900	20M
SRP185	1500	SRP266	600	SRP901	10M
SRP188	32M	SRP269	10M	SRP960	800
SRP213	250M	SRP271	150	SRP961	10M
SRP216	500M	SRP272	300	SRP962	250M
SRP223	1M				

29-215. Specify Type Number and Value When Ordering. **NET EACH... 88c**  
 Less switch. Use standard switches at left.

29-300. SRP239, 450 Ohms. Vol. Strip } EACH... 29c	29-301. SRP241, 6000 Ohms. Vol. Strip } EACH... 29c
29-302. SRP273, 500,000 Control with Switch.	29-303. SRP280, 500,000 Control with Switch. EACH \$1.18

### SPECIAL DUAL "DRP" CONTROLS

Consult your Mallory Encyclopedia for the dual control you require and then order from this listing. Average shpg. wt., 8 oz.

Resistance			Resistance			Resistance		
Type	Front	Rear	Type	Front	Rear	Type	Front	Rear
DRP114	250	5M	DRP241	5M	150M	DRP306	See below	
DRP115	3800	3800	DRP242	10M	500M	DRP309	12M	65M
DRP116	25700	10000	DRP243	3M	750M	DRP310	25M	25M
DRP117	500	2500	DRP244	25M	6M	DRP311	150M	250M
DRP118	3M	10M	DRP245	1M	3 Meg.	DRP312	75M	500M
DRP122	645	10M	DRP246	32M	50M	DRP313	1M	500M
DRP169	7500	10M	DRP250	50M	1M	DRP314	500M	2500
DRP221	10M	100M	DRP301	5M	2500	DRP316	2 Meg.	2500
DRP222	75M	32M	DRP302	100M	250M	DRP317	500M	1M
DRP232	3 Meg.	3 Meg.	DRP303	2500	100M	DRP318	250M	3 Meg.
DRP239	25M	25M	DRP304	1 Meg.	3 Meg.			
DRP240	250M	10M	DRP305	25M	25M			

DRP311 is tapped at 160M ohms.  
 29-315. Specify Type and Value. Less switch. Use standard switches at left. **NET... \$1.47**

29-375. DRP306. Front 5M, Rear 10M; with switch. **\$1.76**

### Mallory Radio Service

#### Encyclopedia—4th Edition

Your replacement part worries are over when you use the Mallory Encyclopedia. Over 400 pages of receiver listings, covering thousands of models. Gives tube complements and service notes, also volume control, vibrator and condenser requirements. Includes all original factory part numbers and all Rider manual references. Wt., 2 lbs.  
**37-500. NET... 95c**





# IRC VOLUME CONTROLS

## IRC ACCESSORIES

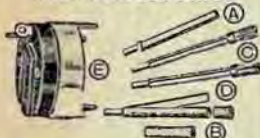


Fig. E. Standard attachable SPST and DPST switches for use with IRC Volume Controls, type "CS," "D" and "W." Av. wt., 1 oz.

No.	Type	For	EACH
30-000	SPST	"CS"	29c
30-002	SPST	"D"	
30-004	SPST	"W"	
30-001	DPST	"CS"	35c
30-003	DPST	"D"	
30-005	DPST	"W"	

## SPECIAL SHAFTS FOR TYPE D CONTROLS

30-015. Fig. B. For Auto Radios. 3 3/8" long. NET. . . . . 21c

Types below for push-on knobs. 30-016. Fig. C. Split knurled end. Length attached is 4".

30-017. Fig. D. Plain slotted end. Length attached is 4". NET EACH. . . . . 15c

## TYPE CS AND TYPE D VOLUME CONTROLS



**Type CS:** dia. 1 1/4"; case length less switch, 3 1/2"; with switch, 27/32"; 3" milled shaft. Easily cut to size.  
**Type O Midgets:** dia. is 1 9/64"; case depth less switch, 1 9/16"; with switch, 25/32"; includes Type A shaft (at left), 3 15/32" installed. Uses: A—Potentiometer, uniform change; C—Audio grid or ant. shunt; D—Grid bias and ant.; F—



Ant. and low current bias; H—Audio tapped for bass compensation. Switches and special shafts listed at left. Wt.: CS, 8 oz.; D, 6 oz.

TYPE CS STANDARD				TYPE D MIDGETS			
Stock No.	Type	Use	Ohms	Stock No.	Type	Use	Ohms
30-070	11-103	A	500	30-125	D11-103		
30-071	11-108	A	1000	30-126	D11-108		
30-072	11-110	A	2000	30-127	D11-110		
30-073	11-112	A	3000	30-128	D11-112		
30-074	11-113	A	4000	30-129	D11-113		
30-075	11-114	A	5000	30-130	D11-114		
30-076	13-114	C	5000	30-131	D13-114		
30-077	11-115	A	7500	30-132	D11-115		
30-078	11-116	A	10000*	30-133	D11-116†		
30-079	13-116	C	10000	30-134	D13-116		
30-080	11-117	D	10000*	30-135	D14-116†		
30-081	16-116	F	10000*	30-136	D16-116		
30-082	14-118	D	15000*	30-137	D14-118		
30-083	16-118	T	15000*	30-138	D16-118		
30-084	16-119	F	20000*	30-139	D16-119†		
30-085	11-120	A	25000	30-140	D11-120		
30-086	14-120	D	25000*	30-141	D14-120		
30-087	16-120	F	25000	30-142	D16-120		
30-088	11-123	A	50000	30-143	D11-123†		
30-089	13-123	A	50000	30-144	D13-123†		
30-090	13-125	D	50000	30-145	D14-123		
30-091	14-125	D	75000	30-146	D13-125		
30-092	14-125	C	75000*	30-147	D14-125		
30-093	13-128	A	100000	30-148	D11-128†		
30-094	14-129	A	100000	30-149	D13-128†		
30-095	14-129	D	200000*	30-150	D11-129		
30-096	13-130	A	250000	30-151	D14-129		
30-097	14-130	D	250000*	30-152	D11-130		
30-098	13-132	D	250000*	30-153	D13-130†		
30-099	11-133	C	350000	30-154	D14-130		
30-100	13-133	A	500000	30-155	D13-132		
30-101	14-133	C	500000	30-156	D11-133†		
30-102	13-137	D	500000	30-157	D13-133†		
30-103	13-139	C	1 Meg.	30-158	D14-133		
30-104	13-140	C	1 Meg.	30-159	D11-137		
30-105	11-141	C	2 Meg.	30-160	D13-137†		
30-106	11-142	C	3 Meg.	30-161	D13-139†		
30-107	11-143	A	5 Meg.	30-162	D11-141		
		A	7 Meg.	30-163	D11-142		
		A	10 Meg.	30-164	D11-143		

\* Includes 300 ohm 1/2 watt resistor. † Used in 30-295 above right.

## TAPPED CONTROLS

Stock No.	Type	Use	Ohms	Stock No.	Type	Use	Ohms
30-180	13-130X	A	250000	30-200	D13-130X†		
30-181	18-130X	H	250000	30-201	D18-130X†		
30-182	13-133X	H	350000	30-202	D13-133X†		
30-183	13-133X	Sp.	500000	30-203	D13-133X†		
30-184	13-137X	Sp.	1 Meg.	30-204	D13-137X†		
30-185	VC-539X	Sp.	1 Meg.†	30-205	DVC-539X†		
		Sp.	1 Meg.	30-206	D18-137X		
		Sp.	1 Meg.	30-210	D19-137X		
30-186	13-139X	H	2 Meg.	30-211	D13-139†		
		Sp.	2 Meg.	30-208	D18-139X		

† Special control for use as fader. † Used in 30-295 above right.

## TYPE D UNIVERSAL CONTROL CABINET



This sturdy all-metal IRC Volume Control Cabinet is included Free with a special assortment of the popular sizes of Type D Universal Controls. The cabinet, attractively finished in silver, blue and yellow, measures 14 1/2" x 7 3/4" x 4 1/2". Accommodates 20 controls and has 3 handy drawers for switches, special shafts, and other small parts. Assortment includes stock of 18 Type D Controls (sizes indicated by dagger "†" in stock list at left) plus 1—DC-13 133X control for auto sets, 5—SPST and 1—DPST switches, and 5 of the special shafts listed at left. This stock enables you to service up to 75% of all control replacements. You pay only for controls and accessories — cabinet is Free! Wt. 7 lbs. NET. . . . . \$14.67

## IRC ALL-METAL POWER RHEOSTATS

Unique construction provides a wide operating temperature range almost in half dissipation heat more rapidly. Ratings based on temperature rise with maximum load distributed over entire element. Flat clockspring gives positive contact between rotor arm and center terminal. With arrow pointer knob. 25 W. unit 1 1/2" dia., 3/8" behind panel. 50 W. unit 2 1/4" dia., 1 1/2" behind panel. 1 lb.



25 WATT		
Stock No.	Ohms	EACH
30-250	6	
30-251	10	
30-252	25	
30-253	50	
30-254	75	
30-255	100	\$2.35
30-256	250	
30-257	350	
30-258	500	
30-259	750	
30-260	1500	\$2.65
30-261	2500	
30-262	5000	\$2.79
50 WATT		
Stock No.	Ohms	EACH
30-275	6	
30-276	16	
30-277	50	
30-278	125	\$2.65
30-279	225	
30-280	300	
30-281	500	
30-282	1000	\$2.79
30-283	2500	
30-284	5000	
30-285	10000	\$2.94

IRC GUIDE Gives manufacturers' parts numbers, Rider's Manual, Schematic Reference, shaft requirements, etc. Handy size 8 1/2" x 11 1/2", 136 pages. FREE with purchase of IRC controls, or sold separately. Wt. 1 lb. 37-122. NET. . . . . 10c

## TYPE W WIRE-WOUND CONTROLS

Wire-wound controls with positive contact between terminal and rotor arm. Resistance value does not change on overload. Precision built with tight uniform windings to insure utmost accuracy. Has linear (or "A") taper. Rated at full 2 watts. Case: 1 1/4" dia. x 3/8" deep. 3" flatted shaft. Special switches listed above. Wt., 8 oz.

Type	Ohms	Type	Ohms
W6	6	W200	200
W8	8	W300	300
W10	10	W400	400
W15	15	W500	500
W20	20	W750	750
W25	25	W1000	1000
W30	30	W2000	2000
W40	40	W3000	3000
W50	50	W4000	4000
W60	60	W5000	5000
W75	75	W7500	7500
W100	100	W10000	10000

30-025. Specify Type and Value. Less switch. NET EACH. . . . . 59c

## KNIGHT UNIVERSAL MIDGET CONTROLS

### STANDARD CARBON TYPE



For mounting, 1/4" standard shaft, 2" long. Easily cut to any size desired. Code letter indicates taper: A—Linear taper. B—Antenna & C bias. T—Tone control or audio shunt. Switch type has SPST standard switch. Shpg. weight, less switch, 4 oz.; with switch, 6 oz.

Knight universal midget volume controls are suitable for any general replacement purpose. Unusually low priced. Buy them in quantities for all replacement needs. Knight universal midgets are precision-built, using extra-durable composition elements, with multi-wiping contacts. Have accurate tapers. These controls measure only 1 1/4" diameter, 3/8" deep, less switch. Have nut for mounting, 1/4" standard shaft, 2" long. Easily cut to any size desired. Code letter indicates taper: A—Linear taper. B—Antenna & C bias. T—Tone control or audio shunt. Switch type has SPST standard switch. Shpg. weight, less switch, 4 oz.; with switch, 6 oz.

### WIRE-WOUND

Only 1 1/4" dia. and 3/8" deep. Open construction provides max. heat radiation. Dissipates 3 wts. Single-hole mtg. Shaft, 1/4" dia., 1 1/4". With nut. Wt., 4 oz.



LESS SWITCH			WITH SWITCH		
No.	Ohms	EACH	No.	Ohms	EACH
30-400	1000	29c	30-425	1000	44c
30-401	5000		30-426	5000	
30-402	10000		30-427	10000	
30-403	15000		30-428	15000	
30-404	20000	30-429	20000	Lots of 5, 26c Each	
30-405	25000	30-430	25000		
30-406	50000	30-431	50000		
30-407	100000	30-432	100000		
30-408	250000	30-433	250000	Lots of 5, 40c Each	
30-409	500000	30-434	500000		
30-410	1 Meg.	30-435	1 Meg.		

RHEOSTATS			
No.	Ohms	No.	Ohms
30-450	1/2	30-457	20
30-451	1	30-458	25
30-452	2	30-459	30
30-453	3	30-460	40
30-454	6	30-461	50
30-455	10	30-462	75
30-456	15		

POTENTIOMETERS			
No.	Ohms	No.	Ohms
30-475	6	30-480	400
30-476	10	30-481	500
30-477	15	30-482	1000
30-478	20	30-483	1500
30-479	200		

Rheostats or Potentiometer. NET EACH. . . . . 26c



# KNIGHT

# Carbon Resistors

## HANDY KNIGHT INSULATED CARBON RESISTOR KITS



**24 Popular Values With Handy Carton**  
Highest quality Knight Insulated Carbon Resistors supplied with handy case and mounting strips. 24 commonly used values. Keep a kit on your workbench and another in your tool bag—you'll have the resistor you need when you want it. RMA color-coded. With free Color-Code Guide. Increase your efficiency and profits by having available a substantial stock of these quality resistors.

**CONTAIN THE FOLLOWING VALUES:**

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
200	1000	6000	20000	50000	250000
400	2000	10000	25000	60000	500000
500	3000	12500	30000	75000	1 Meg.
750	4000	15000	40000	100000	2 Meg.

### 1 WATT KIT

Consists of one each of the above Knight Insulated Resistors in 1 watt size. Wt., 1 1/2 lbs. 2-700. **NET \$1.25**

### 1/2 WATT KIT

Consists of one each of the above Knight Insulated Resistors in 1/2 watt size. Wt., 1 lb. 2-701. **NET \$0.99**

### 1/4 WATT KIT

Handy assortment consisting of one each of the above Knight Insulated Carbon Resistors in 1/4 watt size. Wt., 3/4 lb. 2-702. **NET \$0.81**



## 12 POPULAR VALUES WITH HANDY HOLDER

An asset in shop or on service calls. Each kit is an assortment of the 12 most popular values of Knight quality insulated carbon resistors. RMA color-coded. To be mounted on sturdy strip supplied. RMA Color-Code chart with each kit. A valuable and handy group of kits. Keep them on hand for all repairs.

### STANDARD VALUES

Ohms	Ohms	Ohms	Ohms	Ohms
200	3000	20000	50000	75000
400	4000	25000	100000	100000
500	6000	30000	250000	250000
750	10000	40000	500000	500000
1000	12500	50000	1 Meg.	1 Meg.
2000	15000	60000	2 Meg.	2 Meg.

### 1 WATT KITS

2-720. Consists of one each of the above from 200 to 15,000 ohms. Wt., 10 oz.

2-721. Consists of one each of the above from 20,000 ohms to 2 meg. Wt., 10 oz. **NET \$0.60**

### 1/2 WATT KITS

2-725. Consists of one each of the above from 200 to 15,000 ohms. Wt., 8 oz.

2-726. Consists of one each of the above from 20,000 ohms to 2 meg. Wt., 8 oz. **NET \$0.48**



## RMA COLOR-CODE GUIDE

A handy vest pocket resistor guide for every serviceman, builder, experimenter, etc. Formed from light-weight, attractive plastic material. Has three rotary discs. Quickly indicates value of any resistor color-coded according to RMA standards, either old style with center dot, or new style with colored bands. The guide is marked for "Body," "End," and "Dot" colors. For resistors marked with bands, read from left disc to right in the same sequence that resistor is coded. Shpg. wt., 2 oz. 2-770. **NET \$0.10**

FREE with order for 24 resistors

## HIGH ASSURANCE

- Average Accuracy
- Always Operates
- Complete Moisture-Proof
- Solidly Built
- 1000 Volt Axial Leads
- Maintains Insulation
- Non-Inductive

The finest you can buy units with R.F. or A.C. frequency Test Knight 1. are of solid construction with moisture; ductive, g. Resistor is close to 5% shorting. Knight in

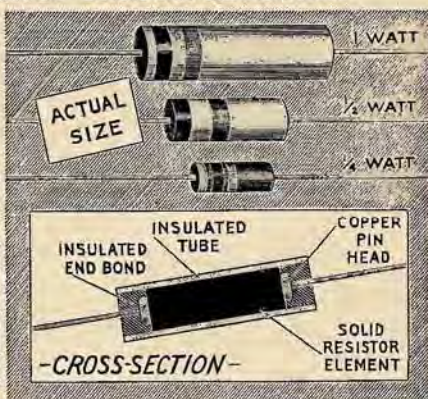
Solid carbon tube. Breaks volts. The body capacity. K

## HIGH INSULATED CARBON RESISTORS

### QUALITY ACCURACY

- Accuracy Close to 5%
- Operation
- Moisture-Proof
- Axial Leads
- All Insulation
- Permanent Value
- No Capacity

Insulated carbon resistors are the best that can be made and are guaranteed unconditionally for 2 years. We will gladly replace any Knight resistor that does not give two full years of service when operated at correct wattage ratings. Wt. 3 oz.



## Certified Resistors with the 2-Year Guarantee

Electrically and mechanically, Knight resistors are the best that can be made and are guaranteed unconditionally for 2 years. We will gladly replace any Knight resistor that does not give two full years of service when operated at correct wattage ratings. Wt. 3 oz.

### STANDARD STOCK RANGES—SPECIFY VALUES DESIRED

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
50	1750	6000	15000	50000	200000	900000	5 meg.
75	2000	7000	17500	60000	250000	1 meg.	6 meg.
100	2500	7500	20000	70000	300000	1.5 meg.	7 meg.
150	3000	8000	25000	75000	400000	2 meg.	8 meg.
200	3500	9000	30000	100000	500000	2.5 meg.	9 meg.
250	4000	10000	35000	125000	600000	3 meg.	10 meg.
300	5000	12500	40000	150000	750000	4 meg.	

1-800. 1/2 WATT. Size: 3/8" x 1/2". NET EACH... 5c

1-820. 1/2 WATT. Size: 3/8" x 3/8". NET EACH... 5c

1-840. 1 WATT. Size: 1" x 3/8". NET EACH... 6c

1-860. 3 WATT. Size: 2" x 1 1/2". NET EACH... 10c

10 for... 2c

10 for... 40c

10 for... 50c

10 for... 80c

100 for... 18c

100 for... \$3.60

100 for... \$4.50

25 for... \$1.80

Abundance of Quantity Prices Apply for Assortment of Any Values

## THIS CABINET IS YOURS FREE—WHEN YOU BUY A HANDY ASSORTMENT OF 1-WATT CARBON RESISTORS

An assortment of Knight 1-watt insulated carbon resistors in values most widely used for service and experimental work—plus a handy all-steel utility cabinet, as illustrated. Top drawer has no partitions, bottom drawer has 12. Partitions can be removed. Convenient for resistors, condensers, bolts, nuts, washers, etc. Attractively finished in moss-green hard-baked enamel. 11 1/2" long, 9 1/2" wide, 5" high. 2-740. Assortment of 100 Knight 1-watt insulated carbon resistors, color-code guide, and all-steel cabinet. Wt., 9 lbs. **\$4.50**



**CABINET ONLY. FREE with order for \$5.00 worth of resistors, assorted values. Wt., 6 lbs. 86-000. IF PURCHASED ALONE, NET \$1.09**

## WIRE-WOUND RESISTORS



Wire-wound on a bakelite strip with solder lugs at each end. Resistance wire is space-wound; cannot short between turns. Pressed on solder lugs. Power rating is 1/2 watt. Use two in series for center tapping. Use between cathode of rectifier tube and B+ to prevent condenser failure in AC-DC sets. Weight, 3 oz.

Ohms	Ohms	Ohms	Ohms	Ohms
1	6*	20*	50†	500
2	8	25	100*	600
3	10*	30	200*	700
4	15*	40*	400*	1000

1-900. Specify Values Desired. 10 FOR 63c. EACH. **7c**

## CENTER-TAPPED RESISTORS

Ideal for filament or hum balancing circuits. Wire-wound on flexible fiber strips. Supplied in values marked (\*) above. Wt., 3 oz. 1-920. Specify Values Desired. 10 FOR 71c. EACH. **8c**

## EAGLE PLUNGER LEAK



Adjustable grid-leak. Covers entire usable range up to 50 megohms. Standard mounting. Fine-pitch screw-threaded plunger permits easy, accurate adjustment. Wt., 3 oz. 2-630. **YOUR PRICE... 25c**

## MUTER CANDOHM RESISTORS



Candohm resistors can be quickly and inexpensively repaired by connecting a suitable Zipohm resistor across any open section (see page 110)—or we can supply an exact duplicate of any original Candohm resistor you wish to replace. Give all numbers on original part, and make, model and tube line-up of receiver. Please send \$1.00 deposit with your order; shipment will be made C.O.D. with your balance due. Minimum charge for exact duplicate Candohms is \$1.00.



# Finest Quality RESISTORS

## KNIGHT ADJUSTABLE WIRE-WOUND RESISTORS



A high-grade line of husky resistors that will take plenty of punishment. Wound on ceramic tubes; made to rigid specifications. Complete with slider lug and mounting brackets. Stock and use Knight resistors — the finest wire-wound resistors you can buy. Av. wt., 6 oz.

### STANDARD STOCK RANGES

Ohms	Ohms	Ohms	Ohms	Ohms
1	50	600*	4000	20000
2*	75	750	5000	25000
3	100	1000	7500	30000
5	150	1250	8500*	40000
7.5*	200	2000	8500*	50000
10	250	2000	9000*	60000
15†	300†	2500	10000	80000
20*	400*	3000	12000	100000
25	500	3500†	15000	

### 10 WATT RESISTORS

1-500. Available in all values shown from 1 to 10,000 ohms. Specify values when ordering. Size, 1 1/4 x 3/8".

NET EACH.....35c

### 25 WATT RESISTORS

1-520. Available from 1 to 5,000 ohms, except those marked \*. Specify values when ordering. Size, 2 x 3/4".

NET EACH.....48c

1-520. Available from 7,500 to 15,000 ohms, except those marked †. Specify values when ordering. Size, 2 x 3/4".

NET EACH.....52c

1-520. 20,000 and 25,000 ohms. EA.....61c

### 50 WATT RESISTORS

1-540. Available from 5 to 5,000 ohms, except those marked \*. Specify values when ordering. Size, 4 x 1/4".

NET EACH.....76c

1-540. 7,500 to 25,000. EACH.....83c

1-540. 30,000 to 30,000 ohms. EACH 95c

1-540. 60,000 to 100,000 ohms. EA. \$1.12

2-620. Extra Lug for 10 watt units.

2-621. Extra Lug for 25 and 50 watt units.

NET EACH.....5c

NOTE: For 100 and 200 watt adjustable wire-wound resistors see listing on pages 111, 150.

## CENTRALLAB RESISTORS



### CERAMIC TYPE UNITS

Patented, ceramic-coated, carbon resistors, with molded bakelite insulated caps, assuring dependable, long-life operation. Resistance core is completely covered with shock-proof ceramic material, providing great strength and maximum protection against heat and humidity. Leads are metal spray bonded to the resistance material at extreme ends only, for uniform distribution of resistance and load. The result is a resistor of low noise level and constant value, over a wide frequency and voltage range. Completely insulated; will fit into limited space without danger of shorting to chassis or parts. RMA color-coded. Tolerance ±10%. Wt., 3 oz.

### STOCK RANGES—SPECIFY VALUES

Ohms	Ohms	Ohms	Ohms	Ohms
100	1200	10000	60000	1 meg.
200	1500	12000	75000	1.5 "
300	2000	15000	100000	2 "
350	2500	17000	125000	3 "
400	3000	20000	150000	4 "
500	4000	25000	200000	5 "
600	5000	30000	250000	6 "
750	6000	40000	300000	7 "
800	7500	45000	400000	8 "
900	8000	50000	500000	9 "
1000	9000	55000	750000	10 "

1-600. 1/2 Watt Type 710. NET EACH.....10c

1-620. 1 Watt Type 714. NET EACH.....12c

## KNIGHT WIRE-WOUND POWER RESISTORS



Finest power resistors, wire-wound on a ceramic core. For radio, electrical and industrial applications. Coated with a heavy protective cement. All units are clearly marked. Hollow cores provide maximum heat dissipation. 1 3/8" tinned leads. Shpg. wt., 4 oz.

### SPECIFY VALUES DESIRED

Ohm	Ohm	Ohm	Ohm	Ohm	Ohm
1	25	250	1500	7500	40000
2*	50	400	2000	10000	50000
5	75	500	2500	15000	60000†
10	100	750	3000	20000	70000†
15*	150	1000	4000	25000	80000†
20*	200	1250	5000	30000	100000†

### 10 WATT SIZE, 1 3/4 x 5/16"

1-560. In all values except those marked †. Specify values when ordering.

5 FOR 76c. EACH.....17c

### 20 WATT SIZE, 2 x 1/2"

Available in all values except those marked \*. Specify values desired when ordering.

1-580. Values 5 to 50,000 ohms. Specify values desired when ordering.

5 FOR \$1.44. EACH.....32c

1-580. Values 60,000 to 100,000 ohms. Specify values desired.

5 FOR \$1.66. EACH.....37c

## SPRAGUE KOOLOHM RESISTORS



Wire-Wound. Turns are fully insulated. Cannot short between turns and cause noise or lowered resistance. Red dot at end changes to brown when resistor is overloaded. Changes back to red when load is corrected. Can be mounted against chassis without shorting. Cert. Accuracy, ±5%. Av. wt., 3 oz.

### RANGES AVAILABLE

Ohms	Ohms	Ohms	Ohms	Ohms
5	100	800	4000	15000
10	150	900	5000	17500
15	200	1000	6000	20000
20	250	1250	7500	25000
25	300	1500	8000	30000
30	400	1750	9000	40000
40	500	2000	10000	50000
50	600	2500	12500	60000
75	700	3000	14000	70000

### SPECIFY VALUES DESIRED

Stock No.	Ohms	EACH
1-640	10 to 5000	18c
1-640	6000 to 10000	21c
1-640	12500 to 15000	24c
1-640	20000	26c
1-640	25000	29c
1-640	30000	35c
1-640	40000	44c

### TYPE 10K—10 WATT—1 3/4 x 3/8"

Ohms	EACH
1-660	5 to 15000
1-660	17500 to 20000
1-660	25000
1-660	30000
1-660	40000
1-660	50000
1-660	60000
1-660	70000

### NON-INDUCTIVE FIXED TYPE 10-NI RESISTORS—10 WATT. 1 3/4 x 3/8"

Wire-wound resistors of zero inductance, unsurpassed for television plate-load circuits, etc. 2 mmf. distributed capacity to 50 MC.

1-680. 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 250, 400, 500, 750, 1000 ohms.

EACH.....29c

1-680. 1250, 1500, 2000 ohms. EACH 32c

1-680. 2500, 3000, 3500, 4000 ohms. EACH.....35c

1-680. 5000 ohms. EACH.....41c

1-680. 7500 ohms. EACH.....44c

1-680. 10000 ohms. EACH.....59c

Specify value and stock no. when ordering

## OHMITE "BROWN DEVIL" WIRE-WOUND RESISTORS



Famous "Brown Devil" resistors for all radio and industrial requirements. Accurately rated. Wound on porcelain core. Heavy Vitreous enamel covering protects winding, quickly dissipates heat, affords protection against moisture. 1 1/2 x 3/8". Tinned leads. Wt., 3 oz.

### STOCK RANGES—SPECIFY VALUES

Ohms	Ohms	Ohms	Ohms	Ohms
1*	125*	1000	6000	25000
2*	150	1100*	7000	30000
3*	200	1200	7500	35000
4*	225*	1250	8000	40000
5	250	1500	8500*	45000
7.5*	300	1750	10000	50000
10	350	1850†	11000*	55000†
12*	400	2000	12000*	60000†
15*	450*	2250	12500	65000†
20*	500	2400†	13500*	70000†
25	600*	2500	14300*	75000†
30*	650†	2750†	15000	80000†
35*	700	3000	16000*	85000†
40*	750	3500	17500*	90000†
50	800	4000	18000*	95000†
75	850†	4500	20000	100000†
100	900*	5000	22500*	

### 10 WATT RESISTORS

Available in all values from 1 to 50,000 ohms except those marked †.

1-700. Values 1 to 10,000 ohms. Specify values desired.

NET EACH.....26c

1-700. Values 15,000 to 50,000 ohms. Specify values desired.

NET EACH.....29c

### 20 WATT RESISTORS

Available in all values listed above, except those marked \*. Av. shpg. wt., 5 oz.

1-720. Values, 5 to 15,000 ohms. Size, 2 x 1/2". Specify values desired.

NET EACH.....41c

1-720. Values, 20,000 to 50,000 ohms. Size, 2 x 3/4". Specify values desired.

NET EACH.....50c

1-720. Values, 55,000 to 100,000 ohms. Size, 2 x 3/4". Specify values desired.

NET EACH.....65c

## OHM'S LAW CALCULATOR

This new calculator answers any Ohm's Law problem with one slide setting. Finds volts, amps, and watts. Resistance range from 0 to 10 megohms. Multiplies, divides—solves squares and square roots. 5 oz.

2-780. NET.....10c

## MUTER 5 WATT WIRE-WOUND "ZIPOHMS"



Flat, wire-wound resistors to replace overloaded carbon units. Impregnated with high-temperature cement. Noiseless, thoroughly insulated, and accurate within 5%.

### SPECIFY VALUES DESIRED

Ohms	Ohms	Ohms	Ohms	Ohms
100	600	1500	4500	12500
125	700	1750	5000	15000
150	750	2000	6000	16000
200	800	2250	7000	17500
250	900	2500	7500	18000
300	1000	3000	8000	20000
350	1100	3500	9000	22500
400	1200	4000	10000	25000
500	1250			

1-740. 5 WATT. Size 1 1/2 x 1/2", except units rated 12,500 to 25,000 ohms which are 2 x 1/2". With 1 1/2" tinned leads.

NET EACH.....15c



# IRC RESISTORS

## IRC "WW4" WIRE-WOUND PRECISION RESISTORS



Ideal for use as meter multipliers and shunts. Accuracy within 1%. Values to 500,000 ohms have lug terminals; size: 1"x3/4" dia. Others have knurled nuts; size: 2 3/4" x 3/4" dia. Available in odd sizes on special order at cost of net higher value. Wt., 3 oz.

No.	Ohms	NET	No.	Ohms	NET
2-500	1		2-521	4000	50.79
2-501	10		2-522	50000	.79
2-502	25		2-523	60000	.94
2-503	50	50c	2-524	75000	.94
2-504	100		2-525	100000	1.09
2-505	200		2-526	125000	1.23
2-506	250		2-527	150000	1.38
2-507	500		2-528	175000	1.38
2-508	1000		2-529	200000	1.38
2-509	1500		2-530	225000	1.53
2-510	2000	53c	2-531	250000	1.53
2-511	2500		2-532	300000	1.68
2-512	4000		2-533	400000	1.76
2-513	5000		2-534	500000	2.00
2-514	7500	59c	2-535	600000	2.50
2-515	10000		2-536	750000	2.65
2-516	12500		2-537	1 Meg.	3.09
2-517	15000	65c	2-538	1.5 Meg.	4.41
2-518	20000		2-539	2 Meg.	5.88
2-519	25000	79c	2-540	2.5 Meg.	7.35
2-520	30000				

## ALL-METAL RESIST-O-CABINET



GET IT FREE With Purchase of Assortments Below

Sturdily-built, all-steel cabinet. Silver and blue finish. 4 large drawers with separate compartments for small parts. Size: 11x5 1/2 x 5 1/2".

### RESISTOR ASSORTMENT No. 1

Contains: BT-1/2, 1/2 Watt, 1 each; 1000, 5000, 10000, 25000, and 50000 ohms, 1.25, and 5 meg.; BT-1, 1 Watt, 1 each; 40000, and 75000 ohms, 15 and 2 meg.; 2 each; 1000, 1500, 2000, 2500, 5000, 15000, and 25000 ohms, 1.0 and 2.0 meg.; 3 each; 10000 and 50000 ohms, 1.25, and 5 meg.; AB-10 Watt, 1 each; 1000, 1500, 2500, and 5000 ohms; 2 each; 10000, 15000, and 25000 ohms. ABA 10 Watt adjustable, 1 each; 1000, 2500, 5000, and 10000 ohms. Wt., 7 lbs.

2-750. Complete with above cabinet. NET \$9.68

### RESISTOR ASSORTMENT No. 2

Contains 100 Type BT-1/2, and BW-1/2 Watt units for 1/4, 1/2 or 1/2 watt replacements in meter sets, or for meter work, etc. Units range from 50 ohms to 2.0 meg. Wt., 7 lbs.

2-751. Complete with above cabinet. NET \$9.80

### RESISTOR ASSORTMENT No. 3

Contains 83 Type BT-1 and BW-1, 1 Watt Metallized Resistors in a balanced assortment from 50 ohms to 2.0 meg. Wt., 7 lbs.

2-752. Complete with above cabinet. NET \$9.76

## SLIDERS FOR ADJUSTABLE IRC RESISTORS.



The new "X" sliders have a silver contact button attached to a steel spring. Eliminates damage and makes positive contact.

### NEW "X" TYPE

2-603. For HAA-HOA resistors. NET \$1.5c

2-604. For DHA type resistors. EA 12c

2-605. For EPA type resistors. EA 12c

### STANDARD TYPE

2-600. For ABA type resistors. EACH

2-601. For DHA type resistors. EACH

2-602. For EPA type resistors. 6c

2-606. For HAA-HOA resistors. NET... 9c

## IRC ALL-PURPOSE INSULATED RESISTORS

### "BT" METALLIZED AND "BW" WIRE-WOUND TYPES

Highest quality resistors. Use the wire-wound type "BW" with meters, air cell batteries, cathode bias etc. Connect two resistors in series for center tap. Use metallized type "BT" for all general purposes. Quiet operation permits use in high-gain type amplifiers, etc. Both types are fully insulated and sealed against moisture by a heavy molded phenolic jacket. Hollow core dissipates heat through the wire leads. Accuracy ± 10%. Shpg. wt., 3 oz.



Illustrations show Actual Size.

### STANDARD STOCK RANGES—SPECIFY VALUES DESIRED

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
0.5	30	400	2250	9000	30000	150000	2 meg.	
	40	450	2500	10000	35000	200000	3 meg.	
	50	500	3000	11000	40000	250000	4 meg.	
	75	600	3500	12000	50000	300000	5 meg.	
	100	750	4000	12500	60000	400000	6 meg.	
	150	800	5000	15000	65000	500000	7 meg.	
	200	1000	6000	17500	70000	600000	10 meg.	
	250	1250	7000	20000	75000	750000	20 meg.	
	300	1500	7500	22500	100000	1 meg.	.....	
	350	2000	8000	25000	125000	1.5 meg.	.....	

**TYPE BT-1/2 — 1/2 ATT**  
1-000. Available in all ranges from 250 ohms to 20 megohms. (Below 250 ohms use BW-1/2 units below.) 3/4" long. 3/8" dia. Specify values when ordering. List, Each, 17c. NET EACH..... 10c

**TYPE BT-1 — 1 WATT**  
1-020. Available in all ranges from 350 ohms to 20 megohms. (Below 350 ohms use BW-1 units below.) Size, 1 1/4" x 3/4". Specify values when ordering. List, Each, 20c. NET EACH..... 12c

**TYPE BT-2 — 2 WATT**  
1-040. Available in all ranges from 500 ohms to 20 megohms. (Below 500 ohms use BW-2 resistors listed below.) Size, 1 3/4" x 3/4". Specify values when ordering. List, Each, 30c. NET EACH..... 18c

**TYPE BW-1/2 — 1/2 WATT**  
1-060. Available in all ranges from 0.5 to 750 ohms, in standard stock ranges shown above. Size, 3/4" x 3/4". List, 17c. NET EACH..... 10c

**TYPE BW-1 — 1 WATT**  
1-080. Available in all ranges from 1 to 4000 ohms, in standard stock ranges shown above. Size, 1 1/4" x 3/4". List, 20c. NET EACH..... 12c

**TYPE BW-2 — 2 WATT**  
1-100. Available in all ranges from 1 to 7500 ohms, in standard stock ranges shown above. Size, 1 3/4" x 3/4". List, 30c. NET EACH..... 18c

## IRC WIRE-WOUND RESISTORS



FIXED

High-grade resistors with wire evenly spaced on non-hygroscopic core. Have durable cement coating. All units have heavy terminal lugs except "AB" and "DG" which have strong wire leads. Mounting brackets are supplied with all units of 25 watts and up. Adjustable types are supplied with one slider. Accurate within 5%. Av. wt., 5 oz.



ADJUSTABLE

### SPECIFY VALUES DESIRED

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
1	10	75	300	750	1500*	3500	7000	15000*	40000*
2	15	100*	350	800	2000*	4500	7500*	20000*	50000*
3	20	150	400	1000*	2250	4500	10000*	25000*	60000*
5	25	200	500*	1250	2500*	5000*	12000	30000*	75000*
7.5	50	250*	600	1450	3000*	6000	12500	35000	100000*

### FIXED RESISTORS

**TYPE AB 10 WATT—SPECIFY VALUES**

1 1/4" x 3/4". Available in all sizes shown above except 60,000, 75,000 and 100,000 ohms. 5 watt rating above 25,000 ohms.

1-120. 1 to 10,000 ohms. EACH 26c

1-120. 10,000 to 50,000 ohms. EA... 29c

**TYPE DG 20 WATT—SPECIFY VALUES**

2" x 3/4". Available in all sizes shown above except 2, 3, 7.5, 15, 20, 600 and 1450 ohms, 10 watt rating above 50,000 ohms.

1-140. 1 to 15,000 ohms. EACH... 41c

1-140. 20,000 to 50,000 ohms. EACH 50c

1-140. 60,000 to 100,000 ohms. EA... 65c

**TYPE EP 50 WATT—SPECIFY VALUES**

4 1/4" x 3/4". In sizes indicated by \*.

1-160. 100 to 5,000 ohms. EACH... 71c

1-160. 7,500 to 25,000 ohms. EACH 82c

1-160. 30,000 to 100,000 ohms. EA... 94c

**TYPE HA 100 WATT—SPECIFY VALUES**

6 1/4" x 1 1/4". In sizes indicated by \*. Ideal for use as power supply bleeders, and dividers, in amplifiers, transmitters, etc.

1-300. 100 to 5,000 ohms. EACH... 97c

1-300. 7,500 to 25,000 ohms. EA... \$1.15

1-300. 30,000 to 50,000 ohms. EA... 1.29

1-300. 60,000 to 75,000 ohms. EA... 1.47

1-300. 100,000 ohms. EACH... 1.62

**TYPE HO 200 WATT—SPECIFY VALUES**

10 1/4" x 1 1/4". In sizes indicated by \*. Ideal for heavy duty radio and industrial uses.

1-320. 100 to 10,000 ohms. EACH \$1.62

1-320. 15,000 to 100,000 ohms. EA. 1.94

### ADJUSTABLE RESISTORS

**TYPE ABA 10 WATT—SPECIFY VALUES**

1 1/4" x 3/4". In all sizes up to and including 10,000 ohms. With one slider.

1-200. EACH..... 44c

**TYPE DHA 25 WATT—SPECIFY VALUES**

2 1/4" x 3/4". In sizes indicated by \* up to and including 25,000 ohms. With 1 "X" slider.

1-220. 100 to 5,000 ohms. EACH... 56c

1-220. 7,500 to 15,000 ohms. EACH. 65c

1-220. 20,000 to 25,000 ohms. EACH. 71c

**TYPE EPA 50 WATT—SPECIFY VALUES**

4 1/4" x 3/4". Available in sizes indicated by \*. With one type "X" slider.

1-240. 100 to 5,000 ohms. EACH... 88c

1-240. 7,500 to 25,000 ohms. EACH. 97c

1-240. 30,000 to 50,000 ohms. EA... \$1.12

1-240. 60,000 to 100,000 ohms. EA. 1.29

**TYPE HAA 100 WATT—SPECIFY VALUES**

6 1/4" x 1 1/4". In sizes indicated by \* except 250 ohms. With one "X" slider.

1-260. 100 to 5,000 ohms. EA... \$1.29

1-260. 7,500 to 25,000 ohms. EA... 1.47

1-260. 30,000 to 50,000 ohms. EA... 1.62

1-260. 60,000 to 100,000 ohms. EA. 1.76

**TYPE HOA 200 WATT—SPECIFY VALUES**

10 1/4" x 1 1/4". In sizes indicated by \*, except 250 ohms. With 1 type "X" slider. An excellent resistor for general shop and industrial use and for amplifier and transmitter circuits.

1-340. 100 to 10,000 ohms. EACH \$1.94

1-340. 15,000 to 100,000 ohms. EA. 2.26



# KNIGHT ELECTROLYTIC CONDENSERS

THE FINEST ELECTROLYTICS YOU CAN BUY! GUARANTEED FOR 1 YEAR!

## QUALITY MATERIALS—EXPERT CONSTRUCTION

Quality materials and expert construction have gained for Knight Condensers a national reputation for outstanding efficiency, long life and trouble-free service. Thousands of Servicemen, Amateurs, Radio Builders, and Experimenters everywhere use Knight Condensers exclusively because they have found these units to be absolutely the equivalent of the finest standard makes and yet priced much lower under the famous Knight trade name. They feature sturdy cardboard containers, wax-impregnated inner leads, pure wax-filled carton; etched foil to increase capacity; superior grade cellulose separator; and securely fastened leads. You can depend on Knight brand condensers.

## UNCONDITIONALLY GUARANTEED FOR 1 YEAR

Electrically and mechanically, Knight Condensers are the best that can be made and are guaranteed unconditionally for a year. All units are guaranteed to operate without interruption. We will gladly replace any Knight Condenser that does not give one full year of satisfactory performance when operated at correct rated voltage. Simply return the condenser if it does not live up to this guarantee, and we will promptly send you a new one without charge. The Knight name is your assurance of best guaranteed performance at lowest money-saving prices. Use Knight Condensers and prove conclusively that they are the finest of all condensers available on the market today.

### METAL CAN TYPE DRY ELECTROLYTICS



Popular, low-priced dry electrolytic condensers mounted in metal insulated containers. Have standard stud and nut mounting and insulated lead. Mounting hole—rest. 3/8". Upright mounting with clamp. Shpg. wt., 6 oz.

Stock No.	Mfd.	Size	NET
10-100	*4	4 1/2 x 1 1/2"	38c
10-101	*8	4 1/2 x 1 1/2"	42c
10-102	*12	4 1/2 x 1 1/2"	63c
10-103	*16	4 1/2 x 1 1/2"	70c
10-104	*8-8	4 1/2 x 1 1/2"	64c
10-105	*8-8-8	4 1/2 x 1 1/2"	99c
10-110	8	2 1/2 x 1"	42c
10-111	16	3 x 1"	70c

### WET ELECTROLYTICS



For heavy-duty filter work. Self-heating properties and ability to withstand voltage overloads make these units reliable. For inverted mounting only. Cans are negative. Require 3/8" mounting hole. All units have screw base and are supplied with paint for mounting. Use these quality condensers for all types of filter work. They are carefully rated for efficient service over a long period of hard use. Shpg. wt., 6 oz.

Stock No.	Mfd.	Peak V.	Size	NET
10-120	8	600	1 1/2 x 4 1/2"	\$ .79
10-121	16	600	1 1/2 x 4 1/2"	1.05
10-130	4	500	1 1/2 x 4 1/2"	.43
10-131	8	500	1 1/2 x 4 1/2"	.49
10-132	10	500	1 1/2 x 4 1/2"	.55
10-133	12	500	1 1/2 x 4 1/2"	.59
10-134	16	500	1 1/2 x 4 1/2"	.69
10-135	18	500	1 1/2 x 4 1/2"	.77
10-136	25	500	1 1/2 x 4 1/2"	.89
10-137	30	500	1 1/2 x 4 1/2"	.89
10-138	40	500	1 1/2 x 4 1/2"	.99

### "600" DRY ELECTROLYTICS



Developed especially for use in PA amplifiers and for other high-voltage applications. Unexcelled for those exacting service jobs where you simply can't afford to have a condenser failure. They feature extremely low power factor and leakage. Wax-wetted heavy surge-voltage overloads. Easy to mount. Shpg. wt., 6 oz.

600 Volt Peak—475 V. DC. Wkg.

Stock No.	Mfd.	Size	NET
10-150	4	4 1/2 x 1 1/2 x 7/8"	49c
10-151	8	4 1/2 x 1 1/2 x 1 1/8"	59c
10-152	8-8	4 1/2 x 1 1/2 x 1 1/8"	94c

### UNCASED PAPER SECTIONS

Compact paper-cased, wax-dipped. Sealed with high melting point wax. For filter block repairing 6' leads. Can be used to replace defective sections of multiple units. Wt., 5 oz.

Mfd.	200 VOLTS		400 VOLTS	
	No.	Net	No.	Net
.5	10-150	18c	10-165	20c
2.0	10-161	24c	10-166	30c
1.0	10-162	38c	10-167	54c
.25	10-170	20c	10-175	30c
	10-171	26c	10-176	45c
1.0	10-172	36c	10-177	65c



### "TINY-KNIGHT" MIDGET DRY ELECTROLYTICS

Newly developed dry electrolytics designed to fit the smallest spaces. Full capacity provided by special etched foil. Built for low leakage and to withstand high surges. Can be used to replace much larger dry electrolytics. Hermetically sealed in container with cardboard sleeve. With bare wire leads. Polarity, voltage, and capacity marked. Thoroughly dependable. The ideal electrolytic for general purpose use. Shpg. wt., 4 oz.

Stock No.	Mfd.	Wkg. V.	Size	NET
10-200	4	450	1 7/8 x 1 1/4"	24c
10-201	8	450	1 7/8 x 1 1/4"	25c
10-202	12	450	1 7/8 x 1 1/4"	33c
10-203	16	450	2 1/8 x 1 1/4"	39c
10-204	20	450	2 1/8 x 1 1/4"	44c
10-210	4	350	1 7/8 x 3/4"	21c
10-211	8	350	1 7/8 x 3/4"	24c
10-212	12	350	1 7/8 x 3/4"	30c
10-220	4	250	1 7/8 x 3/4"	20c
10-221	8	250	1 7/8 x 3/4"	22c
10-222	12	250	1 7/8 x 3/4"	29c
10-223	16	250	1 7/8 x 3/4"	33c
10-224	20	250	2 1/8 x 3/4"	36c
10-225	40	250	2 1/8 x 3/4"	41c
10-230	4	150	1 7/8 x 1/2"	18c
10-231	8	150	1 7/8 x 1/2"	20c
10-232	12	150	1 7/8 x 1/2"	21c
10-233	16	150	1 7/8 x 1/2"	24c
10-234	20	150	1 7/8 x 1/2"	26c
10-235	30	150	1 7/8 x 1/2"	29c
10-236	40	150	1 7/8 x 1/2"	29c
10-240	5	50	1 7/8 x 1/2"	20c
10-241	10	50	1 7/8 x 1/2"	22c
10-242	25	50	1 7/8 x 1/2"	24c
10-243	50	50	1 7/8 x 1/2"	30c
10-250	10	25	1 7/8 x 1/2"	18c
10-251	25	25	1 7/8 x 1/2"	22c

### DUAL CARDBOARD TUBULARS

Stock No.	Mfd.	Wkg. V.	Size	NET
10-260	8-8	450	2 1/2 x 1"	44c
10-261	8-16	450	2 1/2 x 1"	59c
10-265	8-16	250	2 1/2 x 1"	45c
10-266	16-16	250	2 1/2 x 1"	54c
10-270	10	200	2 1/2 x 1 1/4"	41c
10-271	12	200	2 1/2 x 1 1/4"	45c
10-272	16-16	200	2 1/2 x 1 1/4"	45c
10-275	20-20	150	2 1/2 x 1 1/4"	45c
10-280	10-10	50	2 1/2 x 1 1/4"	36c



### UNIVERSAL REPLACEMENT DRY ELECTROLYTICS

Excellent for general replacement use. Average sizes: Figure A—1 1/2 x 3/4"; Figure B—1 1/2 x 3/4"; Figure C—7/8 x 2 1/4". 1 1/2 x 2 1/4". Wt., 4 oz.

Stock No.	Mfd.	Wkg. V.	Fig.	NET
10-285	8-8	450	A	54c
10-286	8-8	450	B	66c
10-287	8-16	450	A	66c
10-288	8-16	450	B	66c
10-289	16-16	450	A	79c
10-290	16-16*	450	B	79c
10-300	8-8	200	B	44c
10-301	8-16	200	B	52c
10-302	12-16	200	A	64c
10-303	16-16	200	B	58c
10-304	20-20	200	C	48c
10-310	20-20	150	C	42c
10-315	8-16	200	B	68c
	10-10	25		
10-316	10-10	25	A	68c
	10-10	25		
10-317	12-16	200	A	72c
	10-10	35		

### CARDBOARD BOX STANDARD DRY ELECTROLYTICS

These Knight single and multiple section electrolytic condensers are adaptable to practically any filter and by-pass application. Flanges may be removed without injury to condenser. The 6' color-coded insulated leads allow the greatest flexibility in mounting. Conservatively rated at 525 DC surge volts; 450 DC working volts. Multiple units have separate sections. Voltage ratings and capacity values are clearly indicated. Wt., 6 oz.



### 525 VOLTS SURGE—450 VOLTS WKG. SINGLE SECTION

Stock No.	Mfd.	Size, Inches	NET
10-330	2	4 1/2 x 1 1/2 x 5/8"	26c
10-331	4	4 1/2 x 1 1/2 x 5/8"	34c
10-332	8	4 1/2 x 1 1/2 x 7/8"	38c
10-333	10	4 1/2 x 1 1/2 x 1 1/8"	52c
10-334	16	4 1/2 x 1 1/2 x 1 1/8"	65c

### MULTIPLE SECTION

Stock No.	Mfd.	Size, Inches	NET
10-340	4-4	4 1/2 x 1 1/2 x 1 1/4"	54c
10-341	4-8	4 1/2 x 1 1/2 x 1 1/4"	61c
10-342	8-8	4 1/2 x 1 1/2 x 1 1/4"	60c
10-343	8-8-8	4 1/2 x 2 1/2 x 1 1/4"	99c

### BANTAM SIZE DRY ELECTROLYTICS

The latest perfected development in small electrolytics. Same as standard condensers above except that the foil has been treated to increase surface area, consequently increasing capacity and decreasing overall size. Six inch leads. With tabs for easy mounting in any position. Shpg. wt., 5 oz.



### 525 VOLTS SURGE—450 VOLTS WKG.

Stock No.	Mfd.	Size, Inches	NET
10-350	2	2 1/2 x 3/4 x 1/2"	29c
10-351	4	2 1/2 x 1 x 1/2"	34c
10-352	6	2 1/2 x 1 1/2 x 1/2"	40c
10-353	8	2 1/2 x 1 1/2 x 1/2"	38c
10-360	4-4	2 1/2 x 1 1/2 x 1"	54c
10-361	8-8	2 1/2 x 1 1/2 x 1 1/2"	60c



### CARDBOARD TUBULAR DRY ELECTROLYTICS

Cardboard encased electrolytics with 2" bare wire leads. Completely wax-filled. Sizes vary from 2 to 3" long; 3/4 to 1" diameter. Dependable units for all filter, and bypass applications in set building and replacement. Capacities and voltage ratings are clearly indicated on each unit. Shpg. wt., 4 oz.

Stock No.	Mfd.	DC Wkg. V.	Surge V.	NET
10-365	1	450	525	22c
10-366	2	450	525	26c
10-367	8	450	525	38c
10-370	8	200	250	32c
10-373	16	150	200	38c
10-377	5	50	75	20c
10-378	10	50	75	26c
10-382	5	25	40	20c
10-383	10	25	40	20c
10-384	25	25	40	26c
10-385	5-5	25	40	30c
10-386	10-10	25	40	28c

Deduct 10% on Orders for 10 or More Knight Cardboard Tubular Electrolytics.



# KNIGHT BY-PASS AND REPLACEMENT CONDENSERS



## KNIGHT MOLDED BAKELITE MICA CONDENSERS

Compact and genuine bakelite-molded moisture-proof capacitors that will give long trouble-free service. Selected foil-mica stacks are especially treated to insure high Q, low-power factor, and long-life service. Tolerances are rigidly held within 10%. Figtail wire leads are 1 1/2" long. Thoroughly factory tested at voltages: 1000 Volts DC to .002 mfd., 750 Volts DC above .002 mfd. Size: 3/4" square. Wt., 2 oz. Deduct 10% on orders for 10 or more of these units. Buy in quantities and save.

No.	Mfd.	EACH	No.	Mfd.	EACH
10-400	.000025	8c	10-412	.0007	8c
10-401	.00004	6c	10-413	.0008	
10-402	.00005		10-414	.0009	
10-403	.0001		10-415	.001	10c
10-404	.0001	10-416	.0015		
10-405	.00015	12c	10-417	.002	
10-406	.0002		10-418	.0025	
10-407	.00025	16c	10-419	.003	
10-408	.0003		10-420	.004	18c
10-409	.0004	20c	10-421	.005	
10-410	.0005		10-422	.006	24c
10-411	.0006	10-423	.01	33c	

## HANDY KITS OF PERM-A-SEAL PAPER CONDENSERS

Handy Kits save you time and money. Keep them on hand for fast service. Each kit contains 12 of the most popular condensers described at right. Include capacities most often requiring replacement. Condensers mount on sturdy strip supplied. Convenient for portable kit or shop use. Wt., 2 lbs.

10-540. Consists of 1 each:

Mfd.	Volts	Mfd.	Volts
.001	400	.004	600
.003	400	.005	600
.005	400	.01	600
.006	400	.03	600
.001	600	.05	600
.002	600	.1	600

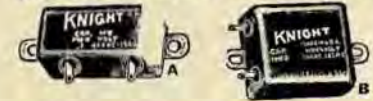
YOUR PRICE..... **75c**

10-541. Consists of 1 each:

Mfd.	Volts	Mfd.	Volts
.1	200	.05	400
.25	200	.06	400
.5	200	.1	400
1.0	200	.25	400
.01	400	.5	400
.03	400	1.0	400

YOUR PRICE..... **\$1.19**

## KNIGHT BATHTUB CONDENSERS



Non-inductive, moisture-proof bathtub condensers with metal shell. Designed for long life. Will last for years if operated within rated voltage. Type A: 1 1/2" x 1 3/4". Type B: Single. 1 1/2" x 2 1/4". Deduct 10% on orders for 10 or more. Shipping weight, 6 oz.

### BY-PASS (TYPE A)

Stock No.	Mfd.	Volts	EACH
10-500	.1	200	18c
10-501	.25	200	21c
10-502	.5	200	29c
10-503	.5	300	32c
10-504	.5	300	32c
10-505	.5	300	32c
10-506	.5	300	32c
10-510	.05	400	20c
10-511	.1	400	21c
10-512	.25	400	27c
10-513	1-1	400	29c

### SINGLE SECTION (TYPE B)

Stock No.	Mfd.	Volts	EACH
10-520	1.0	200	54c
10-521	2.0	200	54c
10-525	1.0	400	45c
10-526	.25	400	27c
10-527	.5	400	30c

## KNIGHT PERM-A-SEAL PAPER CONDENSERS

Knight Perm-a-Seal tubulars are specially treated to give efficient, long lived service. Unexcelled for building or repairing. Non-inductive windings; ideal for RF use. Entire unit is sealed in a wax mold. Prevents breakdowns due to moisture absorption. Tinned leads 2 1/2" long. Average shpg. wt., 3 oz.

### FULLY GUARANTEED FOR ONE YEAR

Phenomenal life of these condensers permits this unconditional guarantee. We will replace any Knight condenser that does not give a full year of good service when operated at the correct voltage. Simply return the condenser if it proves unsatisfactory, and a new one will be sent without charge.

### Deduct 10% on Orders for 10 or More Units.

#### 400 VOLTS DC

Stock No.	Mfd.	Size	EACH	
10-450	.001	3/2 x 1 1/2"	6c	
10-451	.002	3/2 x 1 1/2"		
10-452	.003	3/2 x 1 1/2"		
10-453	.004	3/2 x 1 1/2"		
10-454	.005	3/2 x 1 1/2"		
10-455	.006	3/2 x 1 1/2"		
10-456	.01	3/2 x 1 1/2"		
10-457	.02	3/2 x 1 1/2"		
10-458	.03	3/2 x 1 1/2"		
10-459	.04	3/2 x 1 1/2"		
10-460	.05	3/2 x 1 1/2"		
10-461	.06	3/2 x 1 1/2"		
10-462	.1	3/2 x 1 1/2"		8c
10-463	.25	3/2 x 2 1/2"		10c
10-464	.5	3/2 x 2 1/2"		14c
10-465	1.0	1 x 2 1/2"	20c	

#### 200 VOLTS DC

Stock No.	Mfd.	Size	EACH
10-430	.1	1/2 x 1 1/2"	8c
10-431	.2	1/2 x 2 1/2"	
10-432	.25	3/2 x 2 1/2"	
10-433	.5	3/2 x 2 1/2"	
10-434	1.0	1 x 2 1/2"	20c



### Deduct 10% on Orders for 10 or More Units.

#### 600 VOLTS DC

Stock No.	Mfd.	Size	EACH	
10-480	.001	3/2 x 1 1/2"	6c	
10-481	.002	3/2 x 1 1/2"		
10-482	.003	3/2 x 1 1/2"		
10-483	.004	3/2 x 1 1/2"		
10-484	.005	3/2 x 1 1/2"		
10-485	.006	3/2 x 1 1/2"		
10-486	.01	3/2 x 1 1/2"		
10-487	.02	3/2 x 1 1/2"		
10-488	.03	1 1/2 x 1 1/2"		8c
10-489	.04	1 1/2 x 1 1/2"		
10-490	.05	1 1/2 x 1 1/2"		
10-491	.06	1 1/2 x 1 1/2"		
10-492	.1	1 1/2 x 2"	10c	
10-493	.25	3/2 x 2 1/2"	14c	
10-494	.5	1 x 2 1/2"	20c	

#### DUAL UNITS

Stock No.	Mfd.	Volts	EACH
10-440	.1-1	200	14c
10-441	.25-.25	200	20c
10-444	.1-1	400	14c
10-447	.1-1	600	24c

## SPECIAL APPLICATION CONDENSERS

### AEROVOX PRONG-BASE MIDGET ELECTROLYTICS



Compact, economical units for universal replacements. Can-prongs slip into bakelite mounting washer (for insulating from chassis), or into metal mounting washer (for grounding to chassis). Terminal lugs extend through hole in mounting washer. Each unit hermetically sealed. Common negative. Shpg. wt., 8 oz.

Stock No.	Mfd.	Wkg. V.	NET
13-500	10	450	\$0.44
13-501	20	450	.65
13-502	40*	450	.94
13-503	80†	400	1.44
13-510	30	150	.41
13-515	10-10	450	.71
13-516	20-20*	450	.97
13-520	10-10	250	.62
13-521	20-20	250	.65
13-525	20-20	150	.59
13-526	30-30	150	.65
13-527	15-15x20	250x25	.65
13-530	30-20x20	150x25	.68
13-531	10-10-10	450	.91
13-532	10-10x20	450x25	.96
13-538	Metal-Mounting Washer... 3c		
13-539	Bakelite-Mounting Washer... 3c		

\*In 1"x3" can. †In 1 1/2"x2". Others are 1"x2".

### SPRAGUE SILVER MICAS

Minimum Q of 1500. Highly stable; not affected by heat. 700 w/kg. V. Shpg. wt., 2 oz.



No.	Mfd.	EACH	No.	Mfd.	EACH
15-400	.00005	21c	15-410	.0005	21c
15-401	.00001		15-411	.0006	24c
15-402	.00015		15-412	.0007	
15-403	.00002		15-413	.0008	29c
15-404	.00025		15-414	.0009	
15-405	.00005		15-415	.001	35c
15-406	.0001		15-416	.002	41c
15-407	.0002		15-417	.003	53c
15-408	.0003		15-418	.004	71c
15-409	.0004		15-419	.005	76c

### SPRAGUE HIGH-VOLTAGE TUBULAR CONDENSERS

Working voltage, 1600 Volts DC. Oil-impregnated, wax-filled. Especially designed for all high-voltage applications as in amplifiers, transmitters, etc., for maximum dependability. Excellent for use as vibrator buffer-condensers in auto radio sets. Hermetically sealed and moisture-proof. Wt., 4oz.



No.	Mfd.	NET	No.	Mfd.	NET	
15-430	.0005	21c	15-437	.007	24c	
15-431	.001		15-438	.008		
15-432	.002		15-439	.01		
15-433	.003		15-440	.02		
15-434	.004		15-441	.03		
15-435	.005		15-442	.04		24c
15-436	.006		15-443	.05		26c

### SPRAGUE PAPER REPLACEMENTS FOR ELECTROLYTICS



Designed for replacing defective electrolytics of the values specified below. Feature low leakage and power factor. No polarity to observe. Ideal for high voltage use. Wt., 6 oz.

No.	Mfd.	Wkg. V.	Size—Inches	NET
15-450	4	600	4 3/8 x 1 3/8"	\$0.79
15-451	8	600	4 3/8 x 1 3/8"	1.02
15-452	4-4	600	4 3/8 x 1 3/8"	1.32
15-453	8-8	600	4 3/8 x 1 1/2"	1.65

### TYPE RP—CARDBOARD

No.	Mfd.	Wkg. V.	Size—Inches	NET
15-460	8	600	4 1/2 x 1 3/8 x 1 3/8"	\$0.94
15-461	8-8	600	4 3/8 x 1 3/8 x 1 3/8"	1.56

### MAJESTIC CONDENSER BLOCKS

Exact duplicate of original Majestic blocks in physical dimensions and characteristics. Built for long service. Shipping weight, 5 lbs.

Stock No.	Power Pack	NET
10-550	70, 7P6, 7BP6	\$2.35
10-551	90, 9P6, 9BP6 (with res.)	2.55
10-552	90 (.5)	4.25
10-553	180, 8P6	4.25

We can supply other condenser blocks. Order with deposit giving set make, model number, tube lineup, and factory part number.



**450 VOLT ELECTROLYTICS**



**TYPE LD**  
Exceptionally high quality dry electrolytic condensers. Moisture-proof. Wkg. V. 450; peak V., 525. Shpg. wt., 6 oz.

Stock No.	Mfd.	Size—Inches	NET
15-000	4	4 1/2 x 1 1/2 x 3/4	\$0.44
15-001	8	4 1/2 x 1 1/2 x 1	.56
15-002	8	2 1/2 x 1 1/2 x 3/4	.56
15-003	12	4 1/2 x 1 1/2 x 1 1/2	.76
15-004	16	4 1/2 x 1 1/2 x 1 1/2	.88
15-005	4-4	4 1/2 x 1 1/2 x 1	.71
15-006	8-8	4 1/2 x 1 1/2 x 1 1/2	.88
15-007	8-8	(4 Leads)	.88
15-008	8-8-8	(6 Leads)	1.29

**"LS" METAL-CAN TYPE**



May be mounted in any position. Working voltage, 450; maximum surge voltage, 525. Dependable replacements for obsolete can-type capacitors. Excellent for all filter uses. Extremely low power-factor assures minimum leakage. Can negative. Lug terminals for anode connections, except 15-024 has separate positive and negative leads for each section. Supplied with mounting hardware and insulating washers. Shipping weight, 6 oz.

Stock No.	Mfd.	Size—Inches	NET
15-020	8	1 1/2 x 4 1/2	\$0.62
15-021	12	1 1/2 x 4 1/2	.82
15-022	16	1 1/2 x 4 1/2	.91
15-023	8-8	1 1/2 x 4 1/2	.84
15-024	8-8	(4 Leads)	.94



**TUBULAR BY-PASS UNITS**

Compact tubular condensers. Non-inductively wound. Oil-impregnated. Type TC test voltage, 1200; AA test voltage, 800. Shpg. wt., 3 oz.

AA—400 VOLT			TC—600 VOLT		
No.	EACH	Mfd.	No.	EACH	Mfd.
15-050		.0001	15-100		.0001
15-051		.00025	15-101		.00025
15-052		.0004	15-102		.0004
15-053		.0005	15-103		.0005
15-054		.001	15-104		.001
15-055		.002	15-105		.002
15-056		.003	15-106		.003
15-057	9c	.004	15-107	9c	.004
15-058		.005	15-108		.005
15-059		.006	15-109		.006
15-060		.01	15-110		.01
15-061		.02	15-111		.02
15-062		.03	15-112	12c	.03
15-063		.04	15-113	12c	.04
15-064		.05	15-114	12c	.05
15-065	12c	.06	15-115	15c	.06
15-066	12c	.08	15-116	15c	.08
15-067	15c	.1	15-117	15c	.1
15-068	21c	.5	15-118	29c	.5
15-069	29c	1.0	15-119	47c	1.0

**HANDY TC 600 VOLT KITS**

Variety of 600 V. tubulars. In handy carton. Stock No. Description NET

15-085, 5-5 mfd. 600 volt units... \$1.25  
 15-086, 6-25 mfd. 600 volt units... .98  
 15-087, 8-1 mfd. 600 volt units... .98  
 15-088, 15-.05 mfd. 600 volt units... 1.50  
 15-089, 15-.01 mfd. 600 volt units... 1.10  
 15-090, 15-.02 mfd. 600 volt units... 1.10

15-091. Here is real buying economy. A popular, assorted 600 V. Sprague Kit of 33 TC tubular condensers. Consists of: 2—.001, 3—.002, 3—.005, 5—.01, 5—.02, 4—.05, 8—.1, 2—.25, 1—.5 mfd. Shpg. wt., 3 lbs. \$3.50 NET.



**COMPACT FIXED MICA CONDENSERS**

Low power-factor. Sizes: 1FM, 1/4" x 3/4"; 2FM, 3/8" x 1 1/8". Wt., 2 oz.

1FM—600 VOLT WKG. UNITS			2FM—300 VOLT WKG. UNITS		
Stock No.	Mfd.	NET	No.	Mfd.	NET
15-130	.00005	9c	15-138	.001	15c
15-131	.0001	9c	15-139	.0015	13c
15-132	.00015	12c	15-140	.002	21c
15-133	.0002	12c	15-141	.003	24c
15-134	.00025	12c	15-142	.004	26c
15-135	.00035	12c	15-143	.005	32c
15-136	.0005	12c	15-144	.006	35c
15-137	.0007	12c			
15-150	.00004	9c	15-150	.00004	9c
15-151	.00005	9c	15-151	.00005	9c
15-152	.000075	9c	15-152	.000075	9c
15-153	.0001	9c	15-153	.0001	9c
15-154	.00015	12c	15-154	.00015	12c
15-155	.0002	12c	15-155	.0002	12c
15-156	.00025	12c	15-156	.00025	12c
15-157	.00035	12c	15-157	.00035	12c



**MIDGET DRY ELECTROLYTICS**

Guaranteed "mite-size" dry electrolytics. Perfect for replacements. Sized to fit smallest spaces. In sealed metal tubes. Wt., 4 oz.

Stock No.	Mfd.	Wkg. V.	Size	NET
15-170	4	450	1 1/2 x 1 1/2	32c
15-171	8	450	1 1/2 x 1 1/2	35c
15-172	12	450	1 1/2 x 1 1/2	44c
15-173	16	450	1 1/2 x 1 1/2	53c
15-174	20	450	1 1/2 x 1 1/2	59c
15-180	4	350	3/4 x 1 1/2	29c
15-181	8	350	3/4 x 1 1/2	32c
15-182	12	350	3/4 x 1 1/2	41c
15-185	4	250	3/4 x 1 1/2	26c
15-186	8	250	3/4 x 1 1/2	29c
15-187	12	250	3/4 x 1 1/2	38c
15-188	16	250	3/4 x 1 1/2	44c
15-189	20	250	3/4 x 1 1/2	47c
15-190	40	250	3/4 x 1 1/2	56c
15-192	4	150	1 1/2 x 1 1/2	24c
15-193	8	150	1 1/2 x 1 1/2	26c
15-194	12	150	1 1/2 x 1 1/2	29c
15-195	16	150	1 1/2 x 1 1/2	32c
15-196	20	150	1 1/2 x 1 1/2	35c
15-197	30	150	1 1/2 x 1 1/2	38c
15-198	40	150	1 1/2 x 1 1/2	38c
15-200	5	50	3/4 x 1 1/2	24c
15-201	10	50	3/4 x 1 1/2	26c
15-202	25	50	3/4 x 1 1/2	32c
15-203	50	50	3/4 x 1 1/2	41c
15-205	10	25	3/4 x 1 1/2	24c
15-206	25	25	3/4 x 1 1/2	29c

**DUAL CARDBOARD TUBULARS**

15-220	8-8	450	1 1/2 x 3/4	62c
15-221	*8-8	450	1 1/2 x 3/4	79c
15-222	8-16	450	1 1/2 x 3/4	79c
15-230	8-16	250	3/4 x 2 1/2	62c
15-231	*8-16	250	1 1/2 x 2 1/2	82c
15-232	*16-16	250	1 1/2 x 2 1/2	97c
15-233	16-16	200	1 1/2 x 2 1/2	79c
15-240	8-16	250	1 1/2 x 2 1/2	56c
15-241	12-12	200	1 1/2 x 2 1/2	56c
15-242	16-16	200	1 1/2 x 2 1/2	62c
15-245	8-8	150	1 1/2 x 2 1/2	47c
15-246	12-12	150	1 1/2 x 2 1/2	56c
15-247	20-20	150	1 1/2 x 2 1/2	62c
15-248	*20-20	150	1 1/2 x 2 1/2	79c
15-249	*40-20	150	1 1/2 x 2 1/2	82c
15-255	10-10	50	3/4 x 2 1/2	47c

\*Separate positive and negative leads.

**HANDY ATOM KITS**

Save time and money. A few handy Sprague Atom kits will cover most replacements.

15-260. Special Atom Kit. Six popular 8 mfd., 450 volt Sprague Atoms packed in a handy carton. Shpg. wt., 12 oz. NET. \$1.98

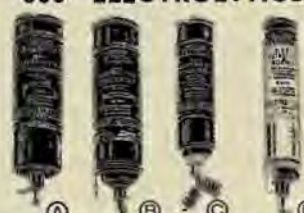
15-261. Kit of 12 Sprague Atoms. Consists of: 6—8 mfd., 1—4 mfd., (450 V.), 1—4 mfd., 2—8 mfd. (150 V.), 2—10 mfd. (25 V.). Wt., 1 lb. NET. \$3.15

**UNIVERSAL "LM" ATOMS**

Mount conveniently in any position. Rugged lugs may be soldered to chassis-top, anchored with screws, or extended through chassis-holes and bent. Has separate positive and negative leads. All units are moisture-proofed. Wt., 6 oz.

Stock No.	Mfd.	Wkg. V.	Size	NET
15-270	8	450	3/4 x 2 1/2	\$0.35
15-271	16	450	3/4 x 2 1/2	.53
15-272	8-8	450	1 1/2 x 3 1/2	.59
15-273	8-16	450	1 1/2 x 3 1/2	.97
15-274	16-16	450	1 1/2 x 3 1/2	1.18
15-280	8-8	250	3/4 x 2 1/2	.65
15-281	16-16	250	1 1/2 x 3 1/2	.97
15-285	20-16, 25-25, 250, 25	150	1 1/2 x 3 1/2	1.21
15-286	40-20, 25-25	150	1 1/2 x 3 1/2	1.38
15-290	20-10	150	1 1/2 x 2 1/2	.79
15-291	20-20	150	1 1/2 x 2 1/2	.79

**"600" ELECTROLYTICS**



Reliable metal-can filter condensers for exacting PA, power amplifier, and set replacements. 600 V. Peak; 475 Wkg. V. High rating provides extra safety. Heat and moisture resistant. With hardware. Extremely low power-factor. Wt., 8oz.

**CLAMP TYPE AC—FIG. A**

Supplied with universal-mounting bracket.

Stock No.	Mfd.	Size	NET
15-300	8	1 1/2 x 4 1/2	\$0.88
15-301	12	1 1/2 x 4 1/2	1.21
15-302	16	1 1/2 x 4 1/2	1.35
15-303	8-8	(2 Leads)	1.41
15-304	8-8-8	3 x 4 1/2	2.35

**MOUNTING NUT TYPE SC—FIG. B**

Universal-mounting. Can may be insulated from chassis. With clamps for upright mtg.

Stock No.	Mfd.	Size	NET
15-320	4	1 x 3 1/2	\$0.73
15-321	8	1 1/2 x 4 1/2	.88
15-322	10	1 1/2 x 4 1/2	1.02
15-323	12	1 1/2 x 4 1/2	1.21
15-324	16	1 1/2 x 4 1/2	1.35
15-325	8-8	1 1/2 x 4 1/2	1.41
15-326	8-8-8	(4 Leads)	1.41

**800 VOLT ELECTROLYTICS**

Can inverted; screw mounting. 600 Volts Working; for heavy-duty applications.

**INVERTED TYPE AP—FIG. C**

15-330	4	1 1/2 x 4 1/2	\$1.09
15-331	8	1 1/2 x 4 1/2	1.53

**WET ELECTROLYTICS**

Heavy-duty, durable units. Built to withstand high peak voltages. Leak-proof. Wt., 8 oz.

**TYPE WC—FIG. D—500 V. PEAK**

Stock No.	Mfd.	Size	NET
15-350	4	1 x 3 1/2	\$0.47
15-351	8	1 x 3 1/2	.56
15-352	8	1 1/2 x 3 1/2	.56
15-353	10	1 1/2 x 3 1/2	.62
15-354	12	1 1/2 x 3 1/2	.68
15-355	16	1 1/2 x 3 1/2	.79
15-356	18	1 1/2 x 3 1/2	.85
15-357	25	1 1/2 x 3 1/2	.97
15-358	30	1 1/2 x 3 1/2	1.00

**WC REGULATING TYPE—300 V. PEAK**

15-365	18	1 1/2 x 3 1/2	\$0.68
15-366	40	1 1/2 x 3 1/2	.79

**TYPE WC—600 VOLT PEAK**

15-370	8	1 1/2 x 4 1/2	\$0.88
15-371	16	1 1/2 x 4 1/2	1.18



**600 V. CARDBOARD CASED**

600 V. Peak, 475 V. Wkg. Dry units. Long pushback leads and mtg. flanges. Wt., 8 oz.

**TYPE DC—STANDARD UNITS**

Stock No.	Mfd.	Size in Inches	NET
15-375	2	2 1/2 x 7/8 x 7/8	\$0.56
15-376	4	4 1/2 x 1 1/2 x 1/2	.68
15-377	8	4 1/2 x 1 1/2 x 1/2	.79
15-378	8	2 1/2 x 1 1/2 x 1/2	.79
15-381	4-4	4 1/2 x 1 1/2 x 1/2	1.06
15-382	4-8	4 1/2 x 1 1/2 x 1/2	1.18
15-383	8-8	4 1/2 x 1 1/2 x 1/2	1.29
15-384	8-8	(4 Leads)	1.29

**TYPE RC—1000 V. PEAK**

Especially designed for public address units, transmitters, and all applications using high voltages. Safe, high capacities obtained by connecting in series. 800 Working Volts. Low power-factor provides minimum leakage. Wt., 8 oz.

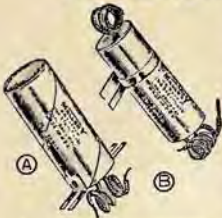
Stock No.	Mfd.	Size in Inches	NET
15-390	2	1 1/2 x 1 1/2 x 4 1/2	\$1.09
15-391	4	1 1/2 x 1 1/2 x 4 1/2	1.18
15-392	8	1 1/2 x 1 1/2 x 4 1/2	1.62



# MALLORY CONDENSERS

P. R. MALLORY & CO. INC.

## CARDBOARD TUBULAR DRY ELECTROLYTICS



Small size single and multiple units for use where space is limited. Ideal for compact table-model and portable sets. Come with 6" flexible leads. Note: Capacities of same voltage are separated by a hyphen; comma used to indicate change in voltage. Shpg. wt., 6 oz.

### ST—SINGLE UNITS FIG. A

No.	Mfd.	Wkg.	V.	Type	Size	NET
17-000	8	450	595		7/8"x2 1/4"	\$0.35
17-001	12	450	596		1 x 2 1/4"	.44
17-002	16	450	597		1 1/4"x2 1/4"	.53

### 2N—DUAL COMMON-NEGATIVE

No.	Mfd.	Wkg.	V.	Type	Size	NET
17-008	8-8	450	518*		1 x 3 1/2"	\$0.62
17-009	8-8	250	516*		1 x 2 1/2"	.50
17-010	40-20	150	514*		1 1/2"x2 1/4"	.68
17-011	8-8	150	502*		3/4"x2 1/4"	.47
17-012	16-8	150	504*		1 1/4"x2 1/4"	.50
17-013	16-16	150	506*		2 1/4"x2 1/4"	.56
17-014	20-10	150	507*		2 1/2"x2 1/4"	.56
17-015	20-20	150	509*		3 1/4"x2 1/4"	.56
17-016	10-10	50	1131		3/8"x1 1/4"	.47
17-017	10-10	25	1111		3/8"x1 1/4"	.41

\*Figure A †Figure B.  
†Type TN cardboard tubular with self-supporting bare-wire leads. Not illustrated.

### 2P—DUAL COMMON-POSITIVE FIG. B

No.	Mfd.	Wkg.	V.	Type	Size	NET
17-022	16-8	150	544		1 1/4"x2 1/4"	\$0.65
17-023	16-16	150	546		1 x 2 1/2"	.73
17-024	20-20	150	549		1 1/4"x2 1/4"	.79

### 2S—DUAL SEPARATE-SECTION FIG. A

No.	Mfd.	Wkg.	V.	Type	Size	NET
17-027	8-8	450	567		1 1/4"x3"	\$0.79
17-028	8-16	450	563		1 1/2"x3 1/4"	.97

### 3S—TRIPLE SEPARATE-SECTION FIG. A

No.	Mfd.	Wkg.	V.	Type	Size	NET
17-031	8-8, 20	450, 25	579		1 1/4"x3 1/4"	\$0.97
17-032	8-8-8, 20	450, 584			1 1/4"x3 1/4"	1.09

### "OT" OIL IMPREGNATED UNITS



For vibrator buffers and other high voltage uses. Hermetically sealed containers, externally insulated. Removable mounting strap. Shpg. wt., 4 oz.

### 1600 VOLTS DC WORKING

Stock No.	Mfd.	Type	Size	NET
17-035	.002	370	1 1/4"x3/8"	26c
17-036	.003	377	1 1/4"x3/8"	26c
17-037	.005	371	1 1/4"x3/8"	26c
17-038	.008	372	1 1/4"x3/8"	29c
17-039	.01	373	1 1/4"x3/8"	32c
17-040	.0125	374	1 1/4"x3/8"	35c
17-041	.015	375	1 1/4"x3/8"	35c
17-042	.02	376	1 1/4"x3/8"	35c

### 2000 VOLTS DC WORKING

No.	Mfd.	Wkg.	V.	Type	Fig.	NET
17-043	.005	459	1131		C	38c
17-044	.0075	460	1131		B	41c
17-045	.01	461	1131		A	44c

### HEAVY-DUTY CAPACITORS



Provide extra safety for heavy-duty filter applications. Housed in metal containers, Fig. A and B; type 690 and 692 are cardboard with mtg. flanges, Fig. C. Shpg. wt., 6 oz.

No.	Mfd.	Wkg.	V.	Type	Fig.	NET
17-055	4	600	690		C	\$1.03
17-056	4	600	691		B	1.09
17-057	8	600	692		C	1.44
17-058	8	600	693		B	1.53
17-059	8	450	684		A	.82
17-060	8	450	685		B	.82
17-061	8-8	450	686		B	.97



### "BB" TUBULAR ELECTROLYTICS

Single condensers, excellent for general purpose use and for replacing individual sections of multiple units. Sealed, insulated metal tubes. Bare wire leads. Average shipping weight, 4 oz.

No.	Mfd.	Wkg.	V.	Type	Size	NET
17-065	4	450	60		1 7/8"x1 1/2"	\$0.32
17-066	8	450	61		1 7/8"x1 1/2"	.35
17-067	10	450	62		1 7/8"x1 1/2"	.41
17-068	12	450	63		1 7/8"x1 1/2"	.44
17-069	16	450	64		1 7/8"x1 1/2"	.53
17-070	4	350	40		1 1/2"x1 1/2"	.29
17-071	8	350	41		1 1/2"x1 1/2"	.32
17-072	12	350	42		1 1/2"x1 1/2"	.41
17-073	16	350	44		1 1/2"x1 1/2"	.47
17-074	8	250	31		1 1/4"x1 1/2"	.29
17-075	12	250	33		1 1/4"x1 1/2"	.38
17-076	16	250	34		1 1/4"x1 1/2"	.44
17-077	4	150	20		1 1/4"x1 1/2"	.24
17-078	8	150	21		1 1/4"x1 1/2"	.26
17-079	12	150	22		1 1/4"x1 1/2"	.29
17-080	16	150	24		1 1/4"x1 1/2"	.32
17-081	20	150	25		1 1/4"x1 1/2"	.35
17-082	30	150	26		1 1/4"x1 1/2"	.38
17-083	40	150	27		1 1/4"x1 1/2"	.41
17-084	5	50	11		1 1/4"x1 1/2"	.24
17-085	10	50	13		1 1/4"x1 1/2"	.26
17-086	25	50	14		1 1/4"x1 1/2"	.32
17-087	50	50	19		1 1/4"x1 1/2"	.41
17-088	10	25	12		1 1/4"x1 1/2"	.29
17-089	25	25	15		1 1/4"x1 1/2"	.29
17-090	50	25	17		1 1/4"x1 1/2"	.35



### "TP" PAPER TUBULARS

Compact size paper tubular condensers, hermetically sealed for long life. Color code shows voltage rating at a glance. Shpg. wt., 4 oz.

### 600 VOLT DC TYPES

No.	Mfd.	NET	No.	Mfd.	NET
17-100	0001	12c	17-114	.025	12c
17-101	00025	12c	17-115	.03	12c
17-102	0005	12c	17-116	.04	12c
17-103	.007	12c	17-117	.05	12c
17-104	.008	15c	17-118	.06	15c
17-105	.001	15c	17-119	.075	15c
17-106	.002	15c	17-120	1	15c
17-107	.003	15c	17-121	.15	21c
17-108	.004	21c	17-122	.2	21c
17-109	.005	21c	17-123	.25	21c
17-110	.006	26c	17-124	.3	26c
17-111	.01	29c	17-125	.4	29c
17-112	.015	29c	17-126	.5	29c
17-113	.02	47c	17-127	1.0	47c

### 400 VOLT DC TYPES

No.	Mfd.	NET	No.	Mfd.	NET
17-140	.01	15c	17-149	.25	15c
17-141	.015	18c	17-150	.3	18c
17-142	.02	21c	17-151	.4	21c
17-143	.03	21c	17-152	.5	21c
17-144	.04	21c	17-153	1.0	21c
17-145	.05	21c	17-154	01-.01	21c
17-146	.06	24c	17-155	05-.05	24c
17-147	.1	26c	17-156	1-.1	26c
17-148	.2	15c			

### 200 VOLT DC TYPES

No.	Mfd.	NET	No.	Mfd.	NET
17-165	.05	9c	17-168	.5	21c
17-166	.1	12c	17-169	1.0	29c
17-167	.25	15c	17-170	25-.25	29c

### "WE" WET ELECTROLYTICS

Low power factor, leak-proof, metal-housed, self-sealing units for heavy-duty and general purpose use. 1" to 1 1/2" cans (subject to change). Single-hole mount. 8 oz.



Stock No.	Mfd.	Peak V.	Type	NET
17-180	8	600	860	\$0.88
17-181	16	600	1660	1.18
17-182	4	500	450	.47
17-183	8	500	850	.56
17-184	8	500	851	.56
17-185	12	500	1250	.68
17-186	16	500	1650	.79
17-187	20	500	2050	.88
17-188	30	500	3050	1.00
17-189	40	500	4050	1.12
17-190	24	250	2425	.68

## MALLORY RADIO SERVICE ENCYCLOPEDIA



### NEW FOURTH EDITION

Latest, revised edition of radio's most complete service manual. Essential service data with all references to and including Rider's Vol. 12. Information on vibrators, 1F peaks, volume controls, tube complements, transformer and filter circuits. Includes valuable service notes that will save you time on your repair work. Original parts numbers for all products. Conveniently arranged for instant reference. Over 400 pages. Wt., 2 lbs. **37-500. NET. 95c.**

### CARDBOARD CARTON TYPE

Small and compact replacement condensers. Internal metal seal prevents damage from excess heat or humidity. With mounting flanges, 8" color-coded leads. Shpg. wt., 6 oz.



### CS—SINGLE SECTION

No.	Mfd.	Type	Size	NET
17-200	2	130	1/2 x 1/2 x 2 1/2"	\$0.38
17-201	4	131	3/8 x 1/2 x 2 1/2"	.44
17-202	8	133	3/8 x 1/2 x 2 1/2"	.56
17-203	16	136	1 x 1 1/2 x 2 1/2"	.85

### CM—SEPARATE SECTIONS

No.	Mfd.	Type	Size	NET
17-210	4-4	170	3/2 x 1/4 x 2 1/2"	\$0.71
17-211	8-8	172	1 1/2 x 1/2 x 2 1/2"	.88
17-212	8-8-8	175	1 1/2 x 1 1/4 x 3"	1.29

### 300 V. Peak. 250 V. DC Working

No.	Mfd.	Type	Size	NET
17-213	16-16	164	1 1/2 x 1 x 2 1/2"	\$1.06

### METAL CAN DRY UNITS

Sealed against moisture. With 8" leads, nut, and washer. Avge. shpg. wt., 8 oz.



### RS—SINGLE-SECTION

No.	Mfd.	Wkg.	V.	Type	Size	NET
17-220	8	450	213		2 3/4"x1"	\$0.62
17-221	12	450	215		2 1/2"x1"	.82
17-222	16	450	216		3 1/2"x1"	.91
17-223	50	300	208		3 1/2"x1 1/2"	1.62
17-224	8	250	203		2 1/4"x1"	.56
17-225	12	250	205		2 1/4"x1"	.65
17-226	30	250	207		3 1/2"x1"	.88
17-227	50	250	200		2 1/4"x1"	.62

### RM—SEPARATE-SECTION

No.</
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# MALLORY CONDENSERS AEROVOX

## MALLORY UNIVERSAL REPLACEMENT CONDENSERS TYPES UR AND SR



**ALLIED** carries the complete Mallory replacement line. All units are moisture-proof and rated conservatively. Low power factor and high leakage resistance. Capacities of same voltage are separated by a hyphen; comma used to indicate change in voltage. Types 180-194 below are UR series; others are SR. Refer to the 1941 M-V Encyclopedia for full data (see page 115). We can supply units not listed below. Order by M-Y part number. Shpg. wt. 8 oz.

\*in cardboard tubes. †in cans. All others in cardboard carton.

No.	Type	Mfd.	Wkg. V.	NET	No.	Type	Mfd.	Wkg. V.	NET
17-270	180	8, 8	250, 300	50.76	17-308	619	5-5	35	50.44
17-271	181†	3-2-1-1	450	1.23	17-309	620	30-10	150	.91
17-272	182	5-25-10	150	.94	17-310	621*	8-16, 5-5	200, 50	1.26
17-273	183	4-4-4	150	.79	17-311	622	8-8, 12	350, 25	1.03
17-274	188*	8-8-8, 5-5	200, 25	1.47	17-312	623*	16-2, 2, 2, 5	450, 25	1.53
17-275	189	8-8-8, 5-5	200, 25	1.47	17-313	624	4-4, 10, 4	300, 150, 25	1.21
17-276	190	8-8-8-8	250	1.53	17-314	625	8-8, 5-5	450, 30	1.29
17-277	191	8-8-8-8	250	1.73	17-315	626	8, 4, 4, 12	450, 300, 150, 25	1.21
17-278	192	20-20	150	.97	17-316	627	4, 4	450, 150	.62
17-279	193	5-8-16	150	1.06	17-317	628†	8-8, 10	300, 25	1.09
17-280	194*	16-12	200	.91	17-318	629	6, 4, 10	350, 300, 25	.97
17-290	601	8-12	300	.91	17-319	630	16-8, 10	150, 25	1.03
17-291	602†	6-4, 6	300, 25	1.00	17-320	631	4-12-16	150	1.09
17-292	603*	8, 30	300, 30	.79	17-321	632*	6-4, 16	350, 25	.94
17-293	604	3-5, 6	300, 12	.88	17-322	633	6-6	250	.68
17-294	605†	8-8	350	.91	17-323	634†	8	400	1.03
17-295	606	6-6	350	.79	17-324	635†	12	150	.56
17-296	607	6-4, 6	300, 12	.91	17-325	636†	12-4	150	.65
17-297	608*	65	300	.65	17-326	637*	8-8, 20	350, 25	1.09
17-298	609†	8-8, 25	400, 25	1.23	17-327	638†	8-8	450	.94
17-299	610	8-8, 25	400, 25	1.12	17-328	639†	8-8	450	.94
17-300	611	8-8, 25	350, 300, 25	1.09	17-329	640	16-8, 10-10	450, 25	1.71
17-301	612†	8-8, 16-16	350, 100	1.71	17-330	641*	12-8, 8, 10	450, 350, 25	1.50
17-302	613	16-30-16	200	1.62	17-331	642†	8-8	450	.74
17-303	614	8, 8-8, 12-12	450, 250, 25	1.71	17-332	643†	10	450	.93
17-304	615†	8-8, 8	450, 350	1.32	17-333	644†	12	450	.82
17-305	616†	8-8, 8	450, 350	1.32	17-334	645†	8-8	450	.94
17-306	617†	16-16, 10	150, 25	1.15	17-335	646*	1000	3	1.03
17-307	618	5-20-10, 5	150, 25	1.32	17-336	647*	70	50 AC	.88

## AEROVOX ELECTROLYTICS CARDBOARD TUBULAR TYPE PR



Single and dual-section units completely sealed in sturdy cardboard tubes. For point-to-point wiring jobs where unit is supported by own connections. Ideal for by-pass and filter use. Dual-section units have three leads; single-section units have two leads. Bare wire leads are 2 1/2 inches long. Polarity-indicating markings on tubular cardboard case. Wt., 4 ozs.

No.	Mfd.	Wkg. V.	Size*	NET
13-000	2	450	3/4x2 1/4	38c
13-001	4	450	3/4x2 1/4	44c
13-002	8	450	3/4x2 1/4	56c
13-005	4	200	3/4x2 1/4	38c
13-006	8	200	3/4x2 1/4	47c
13-007	10	200	3/4x2 1/4	53c
13-010	5	100	3/4x2 1/4	32c
13-011	10	100	3/4x2 1/4	41c
13-012	20	100	3/4x2 1/4	53c
13-013	25	100	3/4x2 1/4	56c
13-017	5	50	3/4x2 1/4	29c
13-018	10	50	3/4x2 1/4	38c
13-019	20	50	3/4x2 1/4	44c
13-020	25	50	3/4x2 1/4	47c
13-021	50	50	3/4x2 1/4	71c
13-022	5-5	50	3/4x2 1/4	44c
13-025	5	25	3/4x2 1/4	29c
13-026	10	25	3/4x2 1/4	29c
13-027	20	25	3/4x2 1/4	35c
13-028	25	25	3/4x2 1/4	38c
13-029	50	25	3/4x2 1/4	56c
13-030	5-5	25	3/4x2 1/4	44c
13-031	10-10	25	3/4x2 1/4	44c

## MALLORY STANDARD "FP" CAPACITORS



Values listed will replace approximately 1000 combinations. Capacities and voltages higher than specified are often desirable and can be used. Sections of equal voltage can be connected in parallel. Section not required may be left unused. **Note:** Capacities at same voltage are separated by a hyphen; comma indicates change in voltage. With bakelite mounting washers. 8 oz.

### FPS—SINGLE UNITS

Stock No.	Type	Mfd.	Wkg. V.	Size	NET
17-360	142	10	450	2x3/4	44c
17-364	143	15	450	1x2	59c
17-361	144	20	450	2x1	65c
17-362	146	40	450	3x1	94c
17-365	120	20	250	2x3/4	41c
17-363	113	30	150	2x3/4	41c
17-366	105	100	25	2x1	62c

### FPD—DUAL UNITS

17-375	231	10-10	450 <th>2x1</th> <th>71c</th>	2x1	71c
17-376	234	20-20	450	3x1	97c
17-377	217	20-20	250	2x1	65c
17-378	208	20-20	150	2x1	59c
17-379	211	30-30	150	3x1	76c
17-380	214	50-50	150	3x1	76c
17-381	202	40-40	25	2x1	59c

### FPT—TRIPLE UNITS

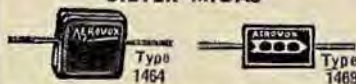
17-390	339	20-20, 20	450, 25 <th>3x1</th> <th>\$1.03</th>	3x1	\$1.03
17-385	332	10-10, 10	450, 25	2x1	.76
17-386	328	15-10, 10	350, 25	2x1	.68
17-391	389	10-10, 10	450	3x1	.91
17-393	390	15-15, 10	450	3x1	1.03
17-392	363	40-20, 20	250	2x1 1/4	.94
17-387	306	40-20, 20	150, 25	2x1	.71
17-389	354	20-20, 20	150	2x1	.71
17-388	351	20-20, 20	25	2x1	.53

### MOUNTING WASHERS—CLIPS

Type	1" No.	3/4" No.	EA.
Bakelite Washers...	17-400	17-403	3c
Metal Washers...	17-401	17-404	3c
Mtg. Clips...	17-402	17-405	6c

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## AEROVOX MICA AND PAPER CONDENSERS SILVER MICAS



For use where highly stable capacities are required under all operating conditions. Low temperature coefficient—only plus .0022 per degree F. Exceptionally high "Q." Practically no capacity drift with time. Sealed in red molded bakelite and externally wax-impregnated for protection against damage and atmospheric changes. Tolerance, ±5%. Wt., 2 oz.

### TYPE 1464—1000 V. DC TEST

Size: 2 1/2" square. With tinned wire leads.

No.	Mfd.	NET	No.	Mfd.	NET
13-130	.00075	59c	13-134	.0025	\$1.18
13-131	.001	73c	13-135	.003*	1.32
13-132	.0015	88c	13-136	.004*	1.38
13-133	.002	88c	13-137	.005*	1.47

\*These capacities, 600 Volt DC test.

### TYPE 1469—1000 V. DC TEST

Size: 29/64x45/64". With tinned wire leads.

13-150	.000005	29c	13-158	.00015	29c
13-151	.00001	29c	13-159	.0002	29c
13-152	.000025	29c	13-160	.00025	29c
13-153	.00004	24c	13-161	.0003	44c
13-154	.00005	24c	13-162	.00035	44c
13-155	.00007	24c	13-163	.0004	44c
13-156	.000075	24c	13-164	.0005	44c
13-157	.0001	24c			

## UNCASED PAPER UNITS FOR FILTER-BLOCK REPAIR WORK



Non-inductively wound, high-grade, uncase sections, neatly shaped and wrapped in black varnish-paper. Ends are pitch-sealed. Each unit moisture-proof impregnated in high melting-point wax. 8" push-back covered wire leads. Excellent for replacing defective sections in condenser blocks. Shpg. wt., 8 oz.

### 400 VOLTS

13-170.	1.0 Mfd.	2x1 1/2x1 1/2"	44c
13-171.	2.0 Mfd.	3x1 1/2x1 1/2"	68c

### 600 VOLTS

13-172.	1.0 Mfd.	3x1 1/2x1 1/2"	53c
13-173.	2.0 Mfd.	3x1 1/2x1 1/2"	79c

## TYPES 1460, 1467, AND 1468

Low-cost, midjet size condensers, providing a wide choice of designs, sizes, mountings, and terminals for every application. Each unit is built of carefully selected mica and foil. Molded bakelite casing is impervious to moisture, heat and ordinary mechanical damage. Capacity values precisely maintained through many years of service. Ideal for both audio and high-frequency by-pass circuits. Rigidly tested at 1000 volts. Sizes: 1467, 2 3/8" square; 1468, 2 3/8" x 4 1/2"; 1460, 1 3/4" x 3 1/4". Shpg. wt., 2 oz.



Cap. Mfd.	Type 1467	Type 1468	Type 1460	NET EA.
.00004	13-050	13-070	13-085	
.00005	13-051	13-071	13-086	
.000075	13-052	13-072	13-087	
.0001	13-053	13-073	13-088	9c
.00015	13-054	13-074	13-089	
.0002	13-055	13-075	13-090	
.00025	13-056	13-076	13-091	
.00035	13-057	13-077	13-092	12c
.0005	13-058	13-078	13-093	
.001	13-059		13-094	15c
.0015	13-060		13-095	15c
.002	13-061		13-096	18c
.0025	13-062		13-097	21c
.003			13-098	24c

## TYPE 1450 CONDENSERS

Accurate mica-tin-foil condensers in molded bakelite cases. Handy soldering lugs. 600 volts DC working voltage. Tested at 1000 volts. Size: 1 1/4" x 1 1/4". Wt., 2 oz.



Stock No.	Mfd.	NET	No.	Mfd.	NET
13-110	.0001	13-113	.00025	13-114	21c
13-111	.00015	13-114	.0004		
13-112	.0002	13-115	.0005		
13-116	.001	24c	13-120	.005	32c
13-117	.002	26c	13-121	.006	38c
13-118	.003	32c	13-122	.01	47c
13-119	.004	32c	13-123	.02	71c



## DRY ELECTROLYTICS METAL-CAN TYPE



### TYPE GL WIRE LEAD CONDENSERS

Expressly constructed of finest quality materials for heavy-duty service. Excellent for any type of filter circuit. These rugged metal-can condensers are engineered to give reliable performance. Short neck fits limited space of auto radios, etc. Inverted nut-mounting type, flexible 8° color-coded leads. Multiple sections have separate negative leads. Wt., 8 oz.

### GL-600—SINGLE SECTION 800 V. DC Peak—600 V. DC Working

Stock No.	Mfd.	Size	NET
13-180	4	1 1/2 x 4 1/4"	\$1.09
13-181	8	1 1/2 x 4 1/2"	1.53

### GL-450—SINGLE SECTION 525 V. DC Peak—450 V. DC Working

Stock No.	Mfd.	Size	NET
13-185	4	1 1/2 x 4"	50c
13-186	12	1 1/2 x 4"	62c
13-187	12	1 1/2 x 4"	82c
13-188	16	1 1/2 x 4"	91c

### 2GL450—DOUBLE SECTION

Stock No.	Mfd.	Size	NET
13-195	4-4	1 1/2 x 4"	\$0.76
13-196	4-8	1 1/2 x 4"	.85
13-197	8-8	1 1/2 x 4"	.94
13-198	8-16	1 1/2 x 4"	1.18

### 3GL450—TRIPLE SECTION

Stock No.	Mfd.	Size	NET
13-200	4-4-4	1 1/2 x 3"	\$1.12
13-201	8-8-8	1 1/2 x 1 1/2"	1.41



### TYPE E UNIVERSAL MOUNTING

Large metal-can dry electrolytics. Supplied with universal mounting ring for upright or inverted mounting. Multiple section units have individual sections with common negative grounded to can. 10 oz.

### 525 V. DC Peak—450 V. DC Working

Stock No.	Mfd.	Size	NET
13-240	8	1 1/2 x 3 1/4"	\$0.62
13-241	5-15	2 1/2 x 4 1/2"	1.35
13-242	8-8	2 1/2 x 4 1/2"	1.06
13-243	8-16	2 1/2 x 4 1/2"	1.38
13-244	8-8-8	3 x 4 1/2"	1.59
13-245	9-9-18	3 x 4 1/2"	2.20

## WET ELECTROLYTICS

### "PG" INVERTED TYPE



Wet electrolytic condensers of finest quality. Ideal for heavy-duty work and wherever dry units give trouble. Especially popular in circuits subject to excessive peak voltages. Exclusive Aerovox vent permits instant escape of any gas pressure, yet effectively double-seals metal container against leakage of liquid electrolyte. Have self-healing feature for longer life. Inverted mounting. 8 oz.

### PG500—500 VOLTS SURGE

Stock No.	Mfd.	Size	NET
13-210	4	1 1/2 x 3 1/2"	\$0.47
13-211	8	1 1/2 x 3 1/2"	.50
13-212	6	1 1/2 x 3 1/2"	.56
13-213	10	1 1/2 x 3 1/2"	.62
13-214	12	1 1/2 x 3 1/2"	.68
13-215	16	1 1/2 x 4"	.79
13-216	18	1 1/2 x 4"	.88
13-217	20	1 1/2 x 4 1/2"	.97
13-218	25	1 1/2 x 4 1/2"	1.00
13-219	30	1 1/2 x 4 1/2"	1.03
13-220	35	1 1/2 x 4 1/2"	1.03
13-221	40	1 1/2 x 4 1/2"	1.12

### PG600—600 VOLTS SURGE

Stock No.	Mfd.	Size	NET
13-230	4	1 1/2 x 3 3/4"	\$0.79
13-231	8	1 1/2 x 4 1/2"	.88
13-232	16	1 1/2 x 4 1/2"	1.18

### TYPE PGM WET ELECTROLYTICS

Compact, rugged units. Similar to Type PG above, but designed for small space. Self-healing. Adequate venting. Shpg. wt., 8 oz.

### PGM—500 VOLTS SURGE

Stock No.	Mfd.	Size	NET
13-235	8	1 x 3 1/2"	56c
13-236	12	1 x 4 1/2"	68c
13-237	16	1 x 4 1/2"	79c

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## TUBULAR PAPER CONDENSERS WAX SEALED—NON-INDUCTIVE

Sturdy and low-cost conservatively rated cartridge condensers non-inductively wound and sealed in wax-impregnated paper tubes. Ideal for by-pass and all coupling applications where high quality is desired. Ends filled with hard sealing wax afford positive protection against moisture, insures better contact between foil and leads while providing longer life. Has extremely low power-factor and high leakage-resistance. Provided with 2 1/2-inch tinned wire leads riveted to tabs. Tabs are securely fastened to foil. Capacities to meet every need. Stock up at these low prices. Shpg. weight, 3 oz.

400 Volt			600 Volt		
No.	Cap. Mfd.	NET	No.	Cap. Mfd.	NET
13-250	.001	EACH	13-281	.001	EACH
13-251	.002		13-282	.002	
13-252	.003		13-283	.003	
13-253	.004		13-284	.004	
13-254	.005	9c	13-285	.005	9c
13-255	.006		13-286	.006	
13-256	.01		13-287	.01	
13-257	.015		13-288	.015	
13-258	.02		13-289	.02	
13-259	.03		13-290	.03	12c
13-260	.04		13-291	.04	12c
13-261	.05		13-292	.05	12c
13-262	.1	12c	13-293	.1	15c
13-263	.12	12c	13-294	.12	21c
13-264	.15	15c	13-295	.15	21c
13-265	.25	25c	13-296	.25	29c
13-266	.5	50c	13-297	.5	47c
13-267	1.0	29c			

200 Volt			1000 Volt		
No.	Cap. Mfd.	NET	No.	Cap. Mfd.	NET
13-310	.001	EACH	13-330	.001	EACH
13-311	.002		13-331	.002	
13-312	.003		13-332	.003	12c
13-313	.005		13-333	.005	
13-314	.006	9c	13-334	.006	
13-315	.01		13-335	.01	18c
13-316	.02		13-336	.02	18c
13-317	.05		13-337	.05	21c
13-318	.1	12c	13-338	.1	29c
13-319	.25	25c			
13-320	.5	29c			

## OIL-IMPREGNATED OIL-FILLED TUBULARS

2000 Volts DC working. Designed for vibrator uses, coupling condensers for transmitters, or high voltage amplifiers and test equipment. Hermetically sealed against all moisture in leak-proof, insulated metal cans. Short-proof. With mounting strap. Shpg. wt., 4 oz.



Stock No.	Mfd.	Size	NET
13-350	.0075	1 1/2 x 2 1/2"	44c
13-351	.01	1 1/2 x 2 1/2"	47c
13-352	.015	1 1/2 x 2 1/2"	47c
13-353	.02	1 1/2 x 2 1/2"	50c
13-354	.03	1 1/2 x 2 1/2"	50c
13-355	.04	1 1/2 x 2 1/2"	56c
13-356	.05	1 1/2 x 2 1/2"	56c

## CARDBOARD CASED DRY ELECTROLYTICS

Space-saver midjet units. Heavy cardboard containers; thoroughly impregnated and sealed. Adjustable mounting brackets and flexible leads. Each section of multiple units has separate color-coded leads. Unit may be mounted in any position or stacked, by overlapping metal flanges. Wt. 6 oz.

### TYPE PBS-450 525 V. Peak, 450 V. DC Wkg.

Stock No.	Mfd.	Size	NET
13-370	2	1/2 x 3/4 x 2 1/2"	\$0.38
13-371	4	3/4 x 1 x 2 1/2"	.44
13-372	8	1 x 1 1/2 x 2 1/2"	.56
13-373	12	1 1/2 x 1 1/2 x 2 1/2"	.76
13-374	16	1 1/2 x 1 1/2 x 2 1/2"	.85
13-375	4-4	1 1/4 x 1 1/2 x 2 1/2"	.71
13-376	8-8	1 1/2 x 1 1/2 x 2 1/2"	.83
13-377	8-16	1 1/2 x 1 1/2 x 2 1/2"	1.12
13-378	8-8-8	1 1/2 x 1 1/2 x 2 1/2"	1.29

## PRS "DANDEES" MINIATURE DRY ELECTROLYTICS



Space-saving and low-priced hermetically-sealed tubular midjets. Excellent for crowded spaces in midjets, AC-DC sets, auto radios, etc. Insulated with special varnished paper jacket. Both ends of jacket spun over can-rim to eliminate shorts. Properly vented for release of gas pressure. Each unit is aged and thoroughly tested. With polarity-indicating red band on end, and 3/4" wire leads. Dual units have riveted center-mounting strap. 4 oz.

Stock No.	Mfd.	Wkg. V.	Size	NET
13-385	4	450	1 1/2 x 1 1/2"	32c
13-386	8	450	1 1/2 x 1 1/2"	35c
13-387	12	450	1 1/2 x 1 1/2"	44c
13-388	16	450	1 1/2 x 2 1/2"	53c
13-389	20	450	1 1/2 x 2 1/2"	59c
13-390	8-8	450	1 x 2 1/2"	62c
13-391	*8-8	450	1 x 2 1/2"	79c
13-392	8-16	450	1 x 2 1/2"	76c
13-393	*8-16	450	1 x 3"	1.12
13-400	4	350	3/4 x 2 1/2"	29c
13-401	8	350	3/4 x 1 1/2"	32c
13-402	12	350	3/4 x 2 1/2"	41c
13-403	16	350	3/4 x 2 1/2"	47c
13-404	24	350	3/4 x 2 1/2"	53c
13-410	4	250	3/4 x 1 1/2"	26c
13-411	8	250	3/4 x 1 1/2"	29c
13-412	12	250	3/4 x 1 1/2"	38c
13-413	16	250	3/4 x 2 1/2"	44c
13-420	8-8	200	3/4 x 2 1/2"	56c
13-421	8-16	200	3/4 x 2 1/2"	61c
13-422	16-16	200	3/4 x 2 1/2"	68c
13-423	*16-16	250	1 x 2 1/2"	.97c
13-430	4	150	3/4 x 1 1/2"	24c
13-431	8	150	3/4 x 1 1/2"	26c
13-432	12	150	3/4 x 1 1/2"	29c
13-433	16	150	3/4 x 1 1/2"	32c
13-434	24	150	3/4 x 2 1/2"	35c
13-435	30	150	3/4 x 2 1/2"	38c
13-436	40	150	3/4 x 2 1/2"	41c
13-437	8-8	150	3/4 x 2 1/2"	47c
13-438	8-16	150	3/4 x 2 1/2"	50c
13-439	20-20	150	3/4 x 2 1/2"	62c
13-440	*20-20	150	1 x 2 1/2"	79c
13-450	10	50	3/4 x 1 1/2"	26c
13-451	25	50	3/4 x 1 1/2"	32c
13-452	50	50	3/4 x 1 1/2"	47c
13-453	100	50	3/4 x 2 1/2"	59c
13-454	10-10	50	3/4 x 2 1/2"	47c
13-460	10	25	3/4 x 1 1/2"	24c
13-461	25	25	3/4 x 1 1/2"	26c
13-462	50	25	3/4 x 1 1/2"	29c
13-463	100	25	3/4 x 1 1/2"	32c
13-464	10-10	25	3/4 x 2 1/2"	41c

\*Have 4 leads. 2 for each section—less mounting strap. Other duals have common negative.

## AEROVOX PAPER REPLACEMENTS FOR ELECTROLYTICS

For replacing standard electrolytics in filter circuits. Also used wherever excessive surges or peaks are present. Will give longer service than electrolytics. 800 volt surge peak—600 volt DC working. No polarity to observe. Both types equipped with 8° leads. Capacities are equivalents. 6 oz.

### PWC 600—Metal Can—Fig. B

Stock No.	Mfd.	Size Inches	NET
13-470	4	1 1/2 x 4 1/2"	\$0.79
13-471	8	1 1/2 x 4 1/2"	1.03
13-472	8-8	1 1/2 x 4 1/2"	1.65

### PWP 600—Cardboard Cased—Fig. A

Stock No.	Mfd.	Size	NET
13-475	4	4 1/2 x 1 1/2 x 1 1/2"	71c
13-476	8	4 1/2 x 1 1/2 x 1 1/2"	94c

## AEROVOX CARDBOARD DRY ELECTROLYTICS

Universal electrolytics for all general replacement purposes. Separate wire leads for each section. \*In rectangular cartons with mounting tabs; all others in cardboard tubes with spade lugs. Conservatively rated. Keep them on hand for AC-DC sets. Shpg. wt., 6 oz.

No.	Mfd.	Wkg. V.	Size	Net
13-485	8-8	450	1 1/2 x 3 1/4"	5.79
13-486	8-16	450	1 1/2 x 4 1/4"	.97
13-487	12-6	200	1 1/2 x 2 1/4"	.91
13-488	16-8x10-10	200x25	1 1/2 x 3 1/4"	1.21
13-489	16-12x10-10	200x25	1 1/2 x 4 1/4"	1.26
13-491	*16-16x8x5-5	150-25	1 1/2 x 1 1/4 x 3"	1.44





# CORNELL-DUBILIER CONDENSERS



## TYPE BR "BLUE BEAVER" TUBULAR DRY ELECTROLYTICS

Ideal where space is limited. Patented process gives higher voltage breakdown. In cardboard-covered container. 3' leads. Shpg. wt., 4 oz.

Stock No.	Mfd.	Wkg. V.	Size	NET
14-000	8	500	7/8x1 1/8"	\$0.50
14-001	16	500	1x2 1/2"	.76
14-010	4	450	3/4x1 1/8"	.32
14-011	8	450	3/4x2"	.35
14-012	10	450	7/8x1 1/8"	.41
14-013	12	450	7/8x2"	.44
14-014	16	450	7/8x2 1/2"	.53
14-015	20	450	1x2 1/2"	.59
14-020	4	350	3/4x1 1/8"	.29
14-021	8	350	3/4x1 1/2"	.32
14-022	12	350	3/4x2"	.41
14-023	16	350	3/4x2"	.47
14-030	4	250	3/4x1 1/8"	.26
14-031	8	250	3/4x1 1/2"	.29
14-032	12	250	3/4x2"	.38
14-033	16	250	3/4x1 1/2"	.44
14-034	20	250	3/4x1 1/2"	.47
14-035	40	250	7/8x2 1/2"	.56
14-040	4	150	3/4x1 1/8"	.24
14-041	8	150	3/4x1 1/2"	.26
14-042	12	150	3/4x2"	.33
14-043	16	150	3/4x1 1/2"	.39
14-044	20	150	3/4x1 1/2"	.35
14-045	30	150	3/4x2"	.38
14-046	40	150	3/4x2"	.41
14-050	5	50	3/8x1 1/8"	.24
14-051	10	50	3/8x1 1/2"	.26
14-052	20	50	3/8x1 1/2"	.29
14-053	25	50	3/8x1 1/2"	.32
14-054	50	50	3/8x1 1/2"	.41
14-060	10	25	3/8x1 1/8"	.24
14-061	20	25	3/8x1 1/2"	.26
14-062	25	25	3/8x1 1/2"	.29
14-063	50	25	3/8x1 1/2"	.35

## BRL DUAL TYPE BEAVERS

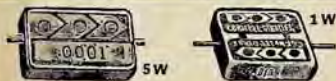
Dual common negative units. Have 8' insulated wire leads. With mounting strap. 5 oz.

Stock No.	Mfd.	Wkg. V.	Size	NET
14-070	8-8	450	1 x 2 3/4"	\$0.62
14-071	8-16	450	1 1/2 x 3 1/4"	.79
14-075	8-16	250	1 1/2 x 2 1/2"	.62
14-076	16-16	250	1 1/2 x 2 1/2"	.73
14-079	8-8	150	3/4 x 2 1/2"	.47
14-081	16-16	150	3/4 x 2 1/2"	.56
14-082	20-10	150	3/4 x 2 1/2"	.56
14-083	20-20	150	3/4 x 2 1/2"	.62
14-084	40-20	150	1 1/2 x 2 1/2"	.68
14-090	5-5	50	3/8 x 1 1/4"	.44
14-091	10-10	50	3/8 x 1 1/2"	.47
14-095	5-5	25	3/8 x 1 1/4"	.45
14-096	10-10	25	3/8 x 1 1/2"	.41

## C-D CAPACITOR MANUAL

256-page book, new 1941 edition, listing replacement condensers for almost every radio. Ask for it with your next order for Cornell-Dubilier condensers.

37-013. C-D Manual—sent FREE



## MOLDED MICA CONDENSERS

Build of highest quality components and carefully tested. Have India ruby mica dielectric, special wax-treated stack, brown bakelite case, and positive terminal connections. Tested at 1000 V. DC (on units up to .003 mfd.; 600 V. test on higher capacities). Shpg. wt., 2 oz.

### Type 5W—1/16"x3/16"x1/16"

No.	Mfd.	EACH	No.	Mfd.	EACH
14-100	.000025	\$0.12	14-105	.00015	\$0.09
14-101	.00003	.12	14-106	.0002	.09
14-102	.00004	.09	14-107	.00025	.12
14-103	.00005	.09	14-108	.0004	.12
14-104	.0001	.09	14-109	.0005	.12

### Type 1W—3/4"x3/4"x1/4"

No.	Mfd.	EACH	No.	Mfd.	EACH
14-120	.0008	\$0.12	14-126	.004	\$0.26
14-121	.001	.15	14-127	.005	.29
14-122	.0015	.15	14-128	.006	.35
14-123	.002	.18	14-129	.008	.38
14-124	.0025	.21	14-130	.01	.44
14-125	.003	.24			



## ROUND METAL CAN TYPE DRY ELECTROLYTICS

### TYPE EB—FIG. A

525 V. DC Peak—450 V. DC Working  
High grade inverted type dry electrolytic condensers. Internal sections are completely insulated from metal container. Single mounting type with insulated wire leads. Exceptional stability, minimum leakage. Av. shpg. wt., 8 oz.

Stock No.	Mfd.	Size	NET
14-140	8	1 1/2 x 3 1/2"	\$0.62
14-141	12	1 1/2 x 4 1/2"	.82
14-142	16	1 1/2 x 4 1/2"	.91
14-143	8-8	1 1/2 x 4 1/2"	.94

### TYPE KR "COMPACT"—FIG. B

Compact etched-foil dry electrolytic condensers, easily installed on the smallest chassis. Multiple units have separate leads. Wt., 4 oz.  
450 Volts DC Working

Stock No.	Mfd.	Size	NET
14-150	8	1 x 2 1/2"	\$0.62
14-151	12	1 x 2 1/2"	.82
14-152	16	1 x 3 1/2"	.91
14-153	8-8	1 x 3 1/2"	.94
14-154	8-16	1 1/2 x 4 1/2"	1.12
14-155	8-8-8	1 1/2 x 4 1/2"	1.35

### 600 Volts DC Working

Stock No.	Mfd.	Size	NET
14-160	4	1 3/4 x 3 1/2"	\$1.09
14-161	8	1 3/4 x 4 1/2"	1.53
14-162	16	1 3/4 x 4 1/2"	2.06

### TYPE EA—FIG. C

Single and multiple section electrolytics in metal containers. Mount in any position by means of clamping rings supplied. Can is common negative. 450 Volts DC Wkg. Dtg., 8 oz.

Stock No.	Mfd.	Size	NET
14-170	8	1 1/2 x 4 1/2"	\$0.62
14-171	5-15	2 1/2 x 4 1/2"	1.35
14-172	8-8	2 1/2 x 4 1/2"	1.06
14-173	8-16	2 1/2 x 4 1/2"	1.38
14-174	8-8-8	3 x 4 1/2"	1.59
14-175	9-9-18	3 x 4 1/2"	2.20
14-176	9-9-18-18	3 1/2 x 4 1/2"	3.09

## WET ELECTROLYTICS

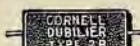
### TYPE EY—FIG. D. 450 V. DC WKG.

Ideal for all heavy-duty work where dry units give trouble. Low power factor. Self-heating. Stud and nut mounting. Av. shpg. wt., 8 oz.

Stock No.	Mfd.	Size	NET
14-185	4	1 1/2 x 4 1/2"	\$0.47
14-186	6	1 1/2 x 4 1/2"	.56
14-187	8	1 1/2 x 4 1/2"	.56
14-188	10	1 1/2 x 4 1/2"	.62
14-189	12	1 1/2 x 4 1/2"	.68
14-190	16	1 1/2 x 4 1/2"	.79
14-191	18	1 1/2 x 4 1/2"	.88
14-192	20	1 1/2 x 4 1/2"	.88
14-193	25	1 1/2 x 4 1/2"	.97
14-194	30	1 1/2 x 4 1/2"	1.00
14-195	40	1 1/2 x 4 1/2"	1.12

### 600 V. DC PEAK—500 V. DC WKG.

Stock No.	Mfd.	Size	NET
14-200	8	1 3/4 x 4 1/2"	\$0.88
14-201	10	1 3/4 x 4 1/2"	.94
14-202	16	1 3/4 x 4 1/2"	1.18



## "SILVER MIKE" CONDENSERS

TYPE 2R. Molded silver-plate mica condensers for use wherever high stability is required. 1000 Volts DC test. Size: 1 1/2 x 3/4 x 1/4". Wt., 2 oz.

No.	Mfd.	EACH	No.	Mfd.	EACH
14-350	.00005	\$0.24	14-357	.0004	\$0.44
14-351	.00007	.24	14-358	.0005	.44
14-352	.0001	.24	14-359	.0007	.59
14-353	.00015	.29	14-360	.0008	.59
14-354	.0002	.29	14-361	.0009	.65
14-355	.00025	.29	14-362	.001	.73
14-356	.0003	.44			



## DT "DWARF" TUBULAR PAPER CONDENSERS

These units are exceptionally reliable, non-inductive, small, all-purpose condensers. They are wax-impregnated and triple-sealed against moisture. High melting-point wax ends add strength and give extra protection to these condensers. Low power factor and high DC resistance make "Dwarf" Tubulars ideal for all RF, IF, and audio by-pass requirements. Conservative DC rating and triple-testing assure thoroughly dependable service. With 2 1/2" tinned leads. Shpg. wt., 3 oz.

### 400 VOLTS DC WORKING

No.	Mfd.	NET	No.	Mfd.	NET
14-230	.01		14-237	.06	\$0.12
14-231	.015		14-238	.1	.12
14-232	.02		14-239	.2	.15
14-233	.025		14-240	.25	.15
14-234	.03		14-241	.5	.21
14-235	.04		14-242	1.0	.29
14-236	.05				

### 600 VOLTS DC WORKING

No.	Mfd.	NET	No.	Mfd.	NET
14-250	.0001		14-262	.025	\$0.12
14-251	.00025		14-263	.03	.12
14-252	.0005		14-264	.04	.12
14-253	.001		14-265	.05	.12
14-254	.002		14-266	.06	.15
14-255	.003		14-267	.1	.15
14-256	.004		14-268	.2	.21
14-257	.005		14-269	.25	.21
14-258	.006		14-270	.3	.26
14-259	.01		14-271	.5	.26
14-260	.015		14-272	.1-1	.38
14-261	.02				

## "DT" VIBRATOR CONDENSERS

2000 V. DC PEAK—1600 V. WKG.

Oil-impregnated and processed paper tubular condensers especially suited for use in vibrator units. Withstand high peaks. Shpg. wt., 4 oz.

No.	Mfd.	EACH	No.	Mfd.	EACH
14-300	.0005		14-309	.007	\$0.21
14-301	.0008		14-310	.0075	.21
14-302	.001		14-311	.008	.21
14-303	.002		14-312	.01	.21
14-304	.0025		14-313	.02	.21
14-305	.003		14-314	.03	.21
14-306	.004		14-315	.04	.21
14-307	.005		14-316	.05	.26
14-308	.006		14-317	.1	.35

## TYPE EH CARDBOARD DRY ELECTROLYTICS

Large electrolytics, expressly designed for heavy-duty operation in filter circuits of console radios, Public Address, Amateur transmitters and Industrial applications where larger size units may be used. Rectangular cardboard container has mounting flanges. Have low-power factor and high-leakage resistance. Metal eyelet tabs. With 6' color-coded leads. Each unit is clearly stamped with polarity, capacity, and rating. Highly dependable. Shipping weight, 6 oz.

### 525 V. DC PEAK—450 V. DC WKG.

Stock No.	Mfd.	Size	NET
14-330	4	4 1/2 x 1 1/2 x 3/4"	\$0.44
14-331	8	4 1/2 x 1 1/2 x 3/4"	.56
14-332	8-8	4 1/2 x 1 1/2 x 1 1/2"	.88
14-333	8-8	(4 leads)	.88

### TYPE JR

Etched foil moisture-proof "handy-mike" capacitors in silvered cardboard boxes. Compact universal replacements for all radio sets. Design permits stacking units. Multiple units have separate color-coded wire leads. 6 oz.

### 525 DC PEAK—450 V. DC WKG.

Stock No.	Mfd.	Size	NET
14-210	8	2 1/2 x 1 1/2 x 1 1/8"	\$0.56
14-211	12	2 1/2 x 1 1/2 x 1 1/8"	.76
14-212	16	2 1/2 x 1 1/2 x 1 1/8"	.88
14-213	8-8	2 1/2 x 1 1/2 x 1 1/8"	.88
14-214	8-8-8	2 1/2 x 1 1/2 x 1 1/8"	1.29



# Highest Quality

# KNIGHT TRANSFORMERS

## KNIGHT FILTER CHOKES



Open type construction with leads. For use in any type of receiver. Excellent for radio servicing, building, and experimental use. Cadmium-plated frame. Average shpg. wt., 3 lbs.

Stock No.	Henries	Ma.	Ohms	NET
62-000	25	25	850	68c
62-001	25	60	200	65c
62-002	20	80	250	71c
62-003	15	100	160	89c
62-004	7.2	120	290	65c
62-005	750	5	*3500	89c
62-006	300	5	*6470	85c

\*Plate coupling choke for detector tube. High impedance at audio frequency.

112"x2 1/2"x1 1/2". Mounting centers, 2 7/8".  
 12"x2 1/2"x1 1/2". Mounting centers, 2 1/4".  
 12 1/2"x2 1/2"x1 1/2". Mounting centers, 3 3/8".  
 11 1/2"x2"x1 1/2". Mounting centers, 2 3/8".

## KNIGHT MIDGET CHOKES

Ideal chokes for any 4 or 5 tube midget radio. Semi-shielded. Rated 15 Henries at 40 ma. Horizontal mounting. 6" leads. Suitable for AC-DC. Size: 1 1/2" high, 2" long, 1 3/8" deep. Mtg. centers, 2 3/8". Shpg. wt., 12 oz.

Stock No.	Ohms	Stock No.	Ohms
62-010	200	62-014	400
62-011	250	62-015	450
62-012	300	62-016	500
62-013	350	62-017	550

NET EACH..... **35c**

## MIDGET UNIVERSAL OUTPUT TRANSFORMER



Compact output transformer for matching impedance of any tube, single or P.P. Tapped secondary matches output impedances from 1 to 54.5 ohms. Ideal for midgets, portables, and compact apparatus. Only 1 3/4" x 2" x 1 1/2". Mounts on chassis or speaker frame. Wt., 1 lb.

62-020. NET..... **49c**

## KNIGHT MIKE TRANSFORMERS OPEN TYPE



For single or double-button microphone. Tapped primary. Open frame. 1 3/8" x 1 1/2" x 2". Mtg. ctrs., 2 7/8". 1 lb.

62-025. NET..... **52c**

## SHIELDED TYPES



62-026. Single-button coupling transformer. Turns ratio, 1 to 64. Impedance ratio, 1 to 4000. For single button carbon mike to tube input. Shpg. wt., 2 lbs.

62-027. Two-button type. To couple any double-button carbon microphone to single grid. Turns ratio, 1 to 45; impedance ratio, 1 to 2000. Shpg. wt., 2 lbs.

NET EACH..... **89c**

## FILAMENT TRANSFORMERS



62-030. 6.3 V., 1.5 amp. type. Pri., 110 V., 60 cycles. For low-power transmitters and receivers. Has 6" color-coded leads. Cadmium-plated frame. Size, 2 x 2 1/2 x 1 1/4". Mtg. ctrs., 2 1/2". Shpg. wt., 2 lbs.

NET..... **65c**

62-031. Same as described above, except delivers 6.3 V. at 3 amps. For use with all 6.3 V. tubes and 7 V. loctal with 6.3 V. nominal rating. Size, 2 x 2 3/8 x 1 3/4". Mtg. ctrs., 2 1/2". Shpg. wt., 2 lbs.

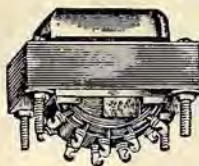
NET..... **85c**

62-032. Same as 62-030 described above, except delivers 2.5 V. at 3 amps. For use with bells, relays, etc., requiring 2.5 V., 60 cycles for their operation. Pri., 115 V., 60 cycles. Size, 1 1/2" W., 2 3/8" H. Mtg. ctrs., 2 7/8". Shpg. wt., 2 lbs. NET..... **65c**

## ANY TRANSFORMER REBUILT LIKE NEW

Mail old transformer prepaid with \$2.00 deposit. Include data such as model or set, make, and tube lineup. We will return C.O.D. for any balance.

## POPULAR KNIGHT POWER TRANSFORMERS



AS LOW AS .... **75c**

Knight, the Champion of low-cost transformers for replacements and for building radio sets, amplifiers, etc. Expertly engineered, built of quality materials for peak efficiency, low operating temperature and long life. Fully guaranteed to conform to all RMA standards.



### HALF-SHELL TYPE

Preferred style for building new apparatus. Mounts in rectangular shape hole. Unshielded portion extends below chassis, eliminating danger of shorts and shocks at terminals. Shielding above chassis protected by black enamel finish. Four corner-bolts fasten transformer firmly to chassis. Soldering terminals tinned for ease in soldering leads. With diagram of terminals to simplify installation. A favorite with builders and experimenters.

All Knight power transformers have 115 Volt 50-60 cycle primaries with center-tapped plate and filament windings. \*These filaments are not center-tapped.

### UNIVERSAL TYPE

Ideal type for radio servicing. Fully shielded. Four mounting-brackets permit mounting the transformer in any position—upright, flush, or on one side, as needed. Fits almost every radio chassis, making it unnecessary to drill new holes. Permits rapid replacement. Husky, well-built units. Black enamel finish protects shells. Heavy-duty five-inch flexible coded leads provide for simple installation. With chart showing terminal connections.

### HALF SHELL TYPES FOR 6.3 VOLT TUBES

Stock No.	No. of Tubes	NET EACH	Plate		Fil. 1		Fil. 2		Fil. 3		Mtg. Centers	Shpg. Wt.
			V.	A.	V.	A.	V.	A.				
62-035	4	\$0.79	650	40	5	2	6.3	1.6	.....	.....	2 x 2 1/2"	2 lbs.
62-036	5	.98	650	45	5	2	6.3	1.8	.....	.....	2 x 2 1/2"	2 lbs.
62-037	6	1.13	675	50	5	2	6.3	2.0	.....	.....	2 x 2 1/2"	4 lbs.
62-038	7	1.55	700	70	5	3	6.3	2.5	.....	.....	2 1/2 x 3 1/2"	7 lbs.
62-039	8 to 11	2.15	700	100	5	3	6.3	4.0	2.5	4.0	2 1/2 x 3 3/8"	6 lbs.

### UNIVERSAL TYPES FOR 6.3 VOLT TUBES

Stock No.	No. of Tubes	NET EACH	Plate		Fil. 1		Fil. 2		Fil. 3		Mtg. Centers	Shpg. Wt.
			V.	A.	V.	A.	V.	A.				
62-040	4	\$0.95	650	40	5	2	6.3	1.6	.....	.....	2 x 2 1/2"	2 lbs.
62-041	5	1.04	650	40	5	2	6.3	2.0	.....	.....	2 x 2 1/2"	2 lbs.
62-042	6 to 7	1.45	700	70	5	3	6.3	2.5	.....	.....	2 1/2 x 2 7/8"	4 lbs.
62-043	8 to 10	1.82	700	90	5	3	6.3	3.5	.....	.....	2 1/2 x 2 7/8"	6 lbs.
62-044	10 to 13	2.15	700	120	5	3	6.3	4.7	.....	.....	2 1/2 x 3 1/2"	7 lbs.
62-045	12 to 15	2.15	700	150	5	3	6.3	4.7	.....	.....	2 1/2 x 3 3/8"	8 lbs.

### HALF SHELL TYPES FOR 2.5 VOLT TUBES

Stock No.	No. of Tubes	NET EACH	Plate		Fil. 1		Fil. 2		Fil. 3		Mtg. Centers	Shpg. Wt.
			V.	A.	V.	A.	V.	A.				
62-046	4	\$0.79	650	40	5	2	2.5	*3.75	.....	.....	2 x 2 1/2"	2 lbs.
62-047	5	.98	650	45	5	2	2.5	5.0	.....	.....	2 x 2 1/2"	2 lbs.
62-048	6	1.10	675	50	5	2	2.5	7.5	.....	.....	2 x 2 1/2"	3 lbs.
62-049	7	1.55	700	70	5	3	2.5	3.5	2.5	*7.5	2 1/2 x 2 1/2"	4 lbs.
62-050	8 to 10	1.85	700	90	5	3	2.5	3.5	2.5	10.5	2 1/2 x 3 1/2"	4 lbs.

### UNIVERSAL TYPES FOR 2.5 VOLT TUBES

Stock No.	No. of Tubes	NET EACH	Plate		Fil. 1		Fil. 2		Fil. 3		Mtg. Centers	Shpg. Wt.
			V.	A.	V.	A.	V.	A.				
62-051	4	\$0.95	650	45	5	2	2.5	*3.75	.....	.....	2 x 2 1/2"	2 lbs.
62-052	5 to 6	1.19	650	50	5	2	2.5	7.0	.....	.....	2 x 2 1/2"	3 lbs.
62-053	8 to 10	1.39	700	90	5	3	2.5	12.5	.....	.....	2 1/2 x 3 1/2"	4 lbs.

## KNIGHT AUDIO AND OUTPUT TRANSFORMERS

### STANDARD AUDIOS



Ideal for replacement purposes. Open type construction. Size: 2x2 1/2 x 1 1/2". Mtg. centers: 2 1/2". Shpg. wt., 2 lbs. each.

62-055. Ratio 3 1/2-1. Straight audio. Couples 1 plate to 1 grid.

62-056. 3-1. P.P. Input. 1 plate to 2 grids.

62-057. Push-pull interstage transformer. Couples 2 plates to 2 grids. NET EACH..... **71c**

### SPECIAL AUDIOS



62-060. 3 to 1 ratio. 1 1/2 x 2 1/2". Straight audio. 1 plate to 1 grid. Mtg. ctrs.: 2 3/8". Shpg. wt., 1 1/2 lbs.

62-061. Push-pull input. Open frame type. 3 to 1 ratio. 1 1/2 x 2 1/2". Mtg. ctrs.: 2 3/8". 1 1/2 lbs. NET EACH..... **51c**

62-062. New "Tiny" 3:1 Audio. 1 1/2" H., 1 1/2" W. Mtg. ctrs., 2". 1 lb. NET..... **49c**

### OUTPUT TRANSFORMERS

For 8 to 15 ohm VC. 2" Mtg. centers. Open frame type construction like units above.

62-065. Single 43, 45, 2A3, 6A5, 25A6, 25A7G. 1 1/2 x 1 1/2 x 1 1/4". Shpg. wt., 1 lb.

62-066. Single 31, 42, 2A5, 6F6, 6N6, 6A4, 6A6. 1 1/2 x 1 1/2 x 1 1/4". Wt., 1 lb.

62-067. Push-pull 43, 45, 2A3, 6A5, 25A6, 25A7G. 1 1/2 x 1 1/2 x 1 1/4". Shpg. wt., 1 lb.

62-068. Push-pull 31, 42, 2A5, 6F6, 6N6, 6A4. 1 1/2 x 1 1/2 x 1 1/4". Shpg. wt., 1 lb. NET. ACH..... **43c**

### UNIVERSAL OUTPUTS

Primary: 2000, 4000, 7000, 8000, 10000, 14000, 18000 ohms CT. Secondary: 1:1 to 54.5 ohms.

62-070. 10 Watt. For coupling any tube, single or push-pull, to any magnetic or dynamic speaker. Universal mtg. bracket 2" high, 2 1/2" wide, 1 1/2" deep. Wt., 2 lbs.

NET..... **75c**



### STRAP MOUNTING TYPES

Primary and secondary ratings same as 62-070 above.

62-071. 5 Watt. Quality transformers with a convenient mounting strap. Have two screw holes on 2 3/8" centers. With universal primary and secondary. Overall size: 2" W., 1 3/8" H., 1 3/4" D. Wt., 1 lb. NET..... **59c**

62-072. 10 Watt. Universal primary and secondary. 2" H., 2 3/8" W., 2" D., 2 1/2" mtg. centers. Shipping weight, 2 lbs. NET..... **75c**



62-073. 12 Watt. Universal primary and secondary. 2 3/8" H., 2" W., 1 3/4" D., 2 3/8" mounting centers. With leads instead of lug terminals. Shpg. wt., 2 1/2 lbs. NET..... **89c**

### UNIVERSAL P.P. INPUTS

To couple any single plate to single or push-pull output tubes. Universal mounting bracket as used on 62-070 is incorporated. Size: 2" x 2 1/2" x 1 1/2". Shpg. wt., 2 lbs. NET..... **75c**



# THORDARSON High Quality TRANSFORMERS



FIG. 2-F



FIG. 2-E



FIG. 3-B



FIG. 2-B



FIG. 3-E



FIG. 3-Y



FIG. 2-D

## COUPLING TRANSFORMERS

Finest quality Thordarson transformers for almost every input, mixer, or line-coupling circuit. Complete information is given in the tabulation below. Consult any tube chart for the impedances of the tube or tubes to be used, then select the proper matching transformer. We can supply all Thordarson transformers. Discount from list, 40/2%, Av. wt., 2 lbs.

### TUBE TO LINE OR MIXER (LOW LEVEL)

Stock No.	Type	NET	Fig.	Primary	Secondary
63-000	T14A90	\$1.47	2-F	20,000 CT	500 or 125
63-001	T14A91	1.47	2-F	20,000 CT	200 or 50

### MIKE, MIXER OR LINE TO GRID

63-010	T58A37	\$1.32	2-F	200 or 50	100,000
63-011	T58A16	1.62	2-F	200 or 50	100,000 CT
63-012	T61A34	1.91	2-F	500 or 125	100,000 CT
63-013	T83A78	1.32	2-F	100	400,000 CT
63-014	T14A94	1.47	2-B	4 or 8	100,000

## OUTPUT COUPLING TRANSFORMERS

Quality output transformers which meet every radio requirement. First four types have tapped primaries to match any single or PP tubes. Others have fixed primaries. Consult any tube chart which lists the output impedance of the tube to be used, then select the proper transformer.

63-025	T61S25	\$1.91	2-E	Univ. Single	500
63-026	T61S26	2.06	2-E	Univ. PP	500
63-027	T57S01	1.18	2-E	Univ.-Sing.-PP	Adj. 1 to 29
63-028	T57S02	1.18	2-B	Univ.-Sing.-PP	Adj. 1 to 29
63-029	T67S54	2.35	2-F	5,000	4-8-15-500
63-030	T67S48	2.06	2-F	8,000	4-8-15-500
63-031	T67S52	2.35	2-F	5,800	4-8-15-500
63-032	T67S52	2.06	2-F	1,500	4-8-15-500
63-033	T67S51	2.06	2-F	14,000	4-8-15-500
63-034	T65S94	2.35	2-F	8,000	4-8-15-500
63-035	T75S75	2.35	2-F	10,000	4-8-15-500
63-036	T81S01	2.88	2-B	10,000 CT	2-4-8
63-037	T84S58	2.53	2-G	3,800	4-8-15-500
63-038	T89S75	2.35	2-F	6,600	4-8-15-500
63-039	T89S74	2.06	2-F	4,000	4-8-15-500
63-040	T89S68	2.06	2-G	3,300	50 to 500
63-041	T17S10	1.76	2-F	2,500	2-4-8-500
63-042	T17S11	2.65	2-F	4,000*	4-8-15-250-500
63-043	T17S12	2.65	2-F	8,300*	4-8-15-250-500
63-044	T17S13	2.53	2-G	6,600*	4-8-15-250-500
63-045	T17S14	2.53	2-G	5,500*	4-8-15-250-500
63-046	T17S15	2.06	2-G	3,300*	4-8-15-250-500
63-047	T14S83	2.35	3-B	25,000 CT	3 to 6
63-048	T14S84	2.73	3-B	8,000	3 to 6
63-049	T14S82	2.73	3-B	1,500	3 to 6
63-050	T14S81	2.73	3-B	7,000 CT	3 to 6

\*Has third winding for obtaining 10% inverse feedback.

## LINE TO SPEAKER VOICE COIL

Correctly matches line to speaker voice coil. Shpg. wt. 4 1/2 lbs.

63-060	T60S48	\$1.76	2-E	500 to 3000	Univ. V. C.
63-061	T60S49	1.18	2-E	500	2-4-6-8
63-062	T76S74	2.73	3-E	500	84 to 250
63-063	T53S81	2.79	2-D	500 or 250	4-8 or 15
63-064	T17S17	3.82	3-C	500	4-8-16-25-50
63-065	T17S18	2.20	2-D	500 to 3000	.06 to 8 or 12 to 16

## CLASS "B" and "AB" DRIVERS

Quality driver transformers. Have correct primary-to-secondary ratio, providing good regulation and minimum driver distortion. For use with tubes listed below or tubes having similar input and output impedances. Consult tube manual for plate impedances. Av. wt., 2 1/2 lbs.

63-075	T67D50	\$1.62	2-F	1-89 Triode	1-79 Class "B"
63-076	T67D47	1.47	2-F	1-6N7, 6A6, 53	1-6N7 or 53 "B"
63-077	T67D78	1.76	2-F	1-46, 59, 6F6	2-46, 59 or 6L6
63-078	T81D42	1.91	2-F	1-6P6, 42, 2A5	2-6P6, Triode, 2-42 or 2-2A5 Pentode
63-079	T84D59	1.91	2-F	2-6C5, 6N7	2-6L6 or 6V6 2-6A6, 53* 6N7, 6A6 or 53
63-080	T17D03	2.65	2-F	1-6F6 Triode*	2-6L6 "AB2"
63-081	T17D04	2.65	2-F	2-6F6*	4-6L6 "AB2"
63-082	T14D52	1.18	2-E	1-6C5, 76, 56	2-6P6, 42 or 2A5
63-083	T14D93	1.03	3-B	1-76 Triode	1-6A6, 6N7 "B"
63-084	T78D46	.88	2-B	1-30	1-1J6G, 1-19, 2-30 "B"
63-085	T74D32	1.91	2-F	2-6C5, 76, 56	2-6P6, 42, 2A5 4-6B4G, 2A3

\*Has split secondary for inverse feedback.

## TRANSCEIVER AUDIOS

Stock No.	Type	NET	Fig.	Primary	Secondary
63-100	T54D63	\$1.32	2-F	20,000	1-19 or 2-49 "B"
63-036	T81S01	1.83	2-F	10,000 CT	2-4-8
63-102	T68S06	1.47	2-F	7,000	10 or 2,000
63-103	T72S58	.97	2-B	10,000	2,000-50
63-104	T72A59	.97	2-B	5,000-200	100,000

## FILTER CHOKES

Inductances are given as ratings under actual working conditions.

Stock No.	Type	NET	Fig.	Hys.	Ma.	Ohms	Size Inches	Lbs.
63-115	T18C92	\$0.88	3-B	22	35	405	3 1/2 x 2 1/2 x 2 1/2	2
63-116	T17C07	.97	3-B	12	75	410	3 3/4 x 2 x 2 1/4	2
63-117	T8C07	1.18	2-B	15	85	375	3 3/4 x 2 1/2 x 3	2
63-118	T57C53	1.18	2-B	10	110	200	3 3/4 x 2 1/2 x 3	3
63-119	T57C54	1.32	2-F	10	110	200	3 3/4 x 2 1/2 x 3	3
63-120	T17C00	1.62	2-F	12	150	231	3 1/2 x 3 x 3 1/2	4
63-121	T13C26	.53	3-B	8	40	530	2 1/2 x 1 1/2 x 1 1/2	1
63-122	T13C27	.65	3-B	10	40	475	2 1/2 x 1 1/2 x 1 1/2	1
63-123	T13C28	.71	3-B	10	65	460	3 x 1 1/2 x 2	1
63-124	T13C29	.94	3-B	9	85	250	3 3/4 x 2 x 2	2
63-125	T75C49	.88	3-B	8	120	290	3 3/4 x 2 x 2	2
63-126	T13C30	1.18	2-B	8	150	200	3 3/4 x 2 1/2 x 3	3
63-127	T67C49	1.62	2-F	5	200	80	3 1/2 x 3 x 3 1/2	4
63-128	T16C07	1.32	2-F	15	85	375	3 3/4 x 2 1/2 x 2 1/2	3
63-129	T44C02	.88	3-B	12	80	405	3 3/4 x 2 x 2	2
63-130	T53C19	.88	2-B	8	120	290	2 1/2 x 2 x 2 1/2	2
63-131	T57C51	.88	2-B	6	80	138	2 1/2 x 2 x 2 1/2	2
63-132	T75C51	2.94	2-G	13	250	121	3 1/2 x 3 1/2 x 4 1/2	8

## PLATE COUPLING CHOKES

Stock No.	Type	NET	Fig.	Ma.	Hys.	Size Inches	Lbs.
63-146	T52C98	\$1.18	2-F	.5*	700	2 1/2 x 1 1/2 x 2 1/2	2
63-145	T29C27	1.03	2-B	.5*	500	2 1/2 x 1 1/2 x 2 1/2	2
63-147	T37C36	1.18	2-F	.5	300	2 1/2 x 1 1/2 x 2 1/2	2
63-148	T67C48	1.03	2-B	.5	300	2 1/2 x 1 1/2 x 2 1/2	2
63-149	T68C08	1.03	2-F	.5	22	2 1/2 x 1 1/2 x 2 1/2	2
63-150	T14C70	1.47	3-Y	0.1	42	1 5/8 x 1 1/2 x 1 1/2	1/2
63-151	T74C30	.88	3-B	15	42	3 1/2 x 2 1/2 x 2 1/2	2
63-152	T93C20	1.62	2-B	.5*	250	2 1/2 x 1 1/2 x 2 1/2	2

\*For use as plate inductance with S. G. tubes. Max. Cap. 8 ma.   
 †Used in Thordarson tone control circuit with Thordarson R1068 dual tone control 63-165. NET. \$1.47

## UNIVERSAL OUTPUT TRANSFORMERS

PRIMARY: SINGLE OR PP; SECONDARY: 1 TO 29 OHMS

Stock No.	Type	NET	Fig.	Primary	Size Inches	Lbs.
63-027	T57S01	\$1.18	2-E	8 Watts	2 1/2 x 2 1/2 x 2 1/2	2
63-171	T13S38	.88	3-E	8 Watts	2 1/2 x 2 x 1 1/2	1
63-172	T14S85	.88	3-B	8 Watts	2 1/2 x 1 1/2 x 1 1/2	1
63-173	T13S42	.88	3-B	10 Watts	2 1/2 x 2 x 1 1/2	1
63-174	T13S41	1.62	2-E	20 Watts	3 3/4 x 2 1/2 x 3	3

PRIMARY: CENTER-TAPPED. SEC.: 6 TO 12 OHMS

63-175	T33S99	\$0.88	2-B	8,000 ohms C.T.	2 1/2 x 2 1/2 x 2 1/2	2
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PRIMARY: SINGLE TUBE. SEC.: 1, 2, AND 4 OHMS

63-176	T13S37	\$0.73	3-E	7,000 ohms	2 1/2 x 2 x 1 1/2	1
63-177	T13S39	.73	3-E	4,000 ohms	2 1/2 x 2 x 1 1/2	1
63-178	T13S43	.79	3-E	16,000 ohms	2 1/2 x 1 1/2 x 1 1/2	1

## C.H.T. TRANSFORMERS

Ideal for use in receivers, transmitters, etc., or wherever quality of components is an important factor. Designed for varying climatic conditions. Listing below is representative. We can supply all C.H.T. type transformers and amplifier chokes from stock. For style of case refer to figure 3K on page 121; has four-hole mounting.

No.	Type	NET	No.	Type	NET	No.	Type	NET
63-200	T15A66	\$4.70	63-209	T15A75	\$4.26	63-220	T15R07	\$7.79
63-201	T15A67	4.70	63-211	T15C52	3.23	63-221	T15R08	9.41
63-202	T15A68	4.70	63-212	T15C53	3.38	63-222	T15S90	5.88
63-203	T15A69	4.70	63-213	T15C54	3.67	63-223	T15S91	7.35
63-204	T15A70	4.70	63-215	T15D84	4.70	63-224	T15S92	8.82
63-205	T15A71	4.70	63-216	T15D86	5.25	63-225	T15S93	10.29
63-206	T15A72	4.70	63-217	T15R08	4.41	63-226	T15S94	11.76
63-207	T15A73	4.41	63-218	T15R05	7.79	63-227	T15S96	7.35
63-208	T15A74	4.12	63-219	T15R06	7.20			

## UNIVERSAL 6 VOLT VIBRATOR TRANSFORMERS

Ideal for replacing defective vibrator transformers in auto radios.

Stock No.	Type	NET	Fig.	DC Volts	Ma.	Lbs.
63-250	T14R33	\$1.76	3-C	225	40	2
63-251	T14R34	2.06	3-C	250	50	3
63-252	T14R35	2.20	3-C	260	50	3
63-253	T14R36	2.79	3-C	285	75	3
63-254	T14R37	2.94	3-C	350	75	4
63-255	T14R38	3.38	2-C	320	100	5
63-256	T14R39	1.62	2-B	150	40	2

## 115 VOLT 50-60 CYCLE OR 6 VOLT DC MODEL

Universal 115 V. AC or 6 V. DC Vibrator Power Transformer.

63-270	T14R40
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# THORDARSON High Quality POWER TRANSFORMERS



Universal Power



FIG. 2-G



FIG. 2-H



FIG. 3-C



FIG. 2-C



FIG. 3-K

## UNIVERSAL DUPLICATE POWER TRANSFORMERS

A complete line of power transformers designed to meet the requirements of every Serviceman and Set-Builer. See illustration above, left. Typical Thordarson quality, built into each unit, insures dependable service and long life. A variety of mountings are used, to meet every service requirement. Mounting-brackets are adjustable to permit flush, vertical, or horizontal mounting. All power transformers listed below are for 110 volt 50-60 cycle operation. All plate-windings are center-tapped. Add 100% for 25 cycles; 60% for 230 volts. If the transformer you need is not listed, send in your order, with deposit, and we will supply correct unit promptly. Net price is 40-2% from Thordarson list price. All types available for prompt shipment. Av. wt., 6 lbs.

Stock No.	Mfr.'s Type	NET	Plate		Fil. 1		Fil. 2		Fil. 3		Size Inches		
			Volts	Mils.	V	A	V	A	V	A	W	D	H
63-300	T13R01	\$2.06	650	40	2.5	4	.....	.....	.....	.....	3	3	2 1/2 x 2 1/2 x 3
63-301	T13R02	2.20	700	50	2.5	7.25	.....	.....	.....	.....	3	3	2 1/2 x 2 1/2 x 3
63-302	T13R03	2.50	700	70	2.5	9	.....	.....	.....	.....	3	3	2 1/2 x 2 1/2 x 3 1/2
63-303	T13R04	2.94	700	100	2.5	12.5	.....	.....	.....	.....	3	3	3 1/8 x 3 1/8 x 3 1/2
63-304	T13R05	2.84	700	70	2.5	9	.....	.....	.....	.....	3	3	3 1/8 x 3 1/8 x 3 1/2
63-305	T13R06	3.38	700	120	2.5	12.5	.....	.....	.....	.....	3	3	3 1/8 x 3 1/8 x 4 1/2
63-306	T13R07	3.53	800	110	2.5	15	.....	.....	.....	.....	3	3	3 1/8 x 3 1/8 x 4 1/2
63-307	T13R08	2.94	700	90	6.3	3.3	.....	.....	.....	.....	3	3	3 1/8 x 3 1/8 x 3 1/2
63-308	T13R09	3.67	750	180	6.3	3.3	.....	.....	.....	.....	3	3	3 1/8 x 3 1/8 x 4 1/2
63-309	T13R10	2.50	600	60	6.3	2.5	.....	.....	.....	.....	3	3	2 1/2 x 2 1/2 x 3 1/2
63-310	T13R11	1.91	580	50	6.3	2	.....	.....	.....	.....	3	3	2 1/2 x 2 1/2 x 3
63-311	T13R12	2.20	700	70	6.3	2.5	.....	.....	.....	.....	3	3	2 1/2 x 2 1/2 x 3
63-312	T13R13	2.65	700	90	6.3	3.5	.....	.....	.....	.....	3	3	3 1/8 x 3 1/8 x 3 1/2
63-313	T13R14	2.94	700	120	6.3	4.7	.....	.....	.....	.....	4	4	3 1/8 x 3 1/8 x 3 1/2
63-314	T13R15	3.38	750	150	6.3	5	.....	.....	.....	.....	4	4	3 1/8 x 3 1/8 x 4 1/2
63-315	T13R16	3.82	800	200	6.3	5.14	.....	.....	.....	.....	4	4	3 1/8 x 3 1/8 x 4 1/2
63-316	T13R17	2.50	600	70	6.3	2.5	.....	.....	.....	.....	3	3	2 1/2 x 2 1/2 x 3 1/2
63-317	T13R18	2.94	700	90	6.3-2.5	2.5	.....	.....	.....	.....	3	3	2 1/2 x 2 1/2 x 3 1/2
63-318	T13R19	1.76	480	40	6.3	2	.....	.....	.....	.....	2	2	2 1/2 x 2 1/2 x 3
63-275	T13R20	2.20	610	70	6.3	3.5	.....	.....	.....	.....	2	2	2 1/2 x 2 1/2 x 3

## GENERAL-PURPOSE POWER TRANSFORMERS

A carefully selected listing. Two types to choose from. Average shipping weight, 8 pounds.

Stock No.	Mfr.'s Type	NET	Plate		Fil. 1		Fil. 2		Fil. 3		Size Inches			
			Volts	Mils.	V	A	V	A	V	A	W	D	H	
63-335	T60R49	\$1.76	2H	560	30	2.5	3.5	.....	.....	.....	.....	.....	.....	2 1/2 x 2 1/2 x 2
63-336	T70R20	1.91	2H	600	50	6.3	2	.....	.....	.....	.....	.....	.....	2 1/2 x 3 1/2 x 1 1/2
63-337	T75R47	2.79	2H	680	125	6.3	2	.....	.....	.....	.....	.....	.....	3 1/2 x 3 1/2 x 2 1/2
63-338	T70R78	2.50	2G	680	55	6.3	1.5	.....	.....	.....	.....	.....	.....	3 1/2 x 2 1/2 x 3 1/2
63-339	T70R80	2.79	2G	770	70	6.3	3.5	.....	.....	.....	.....	.....	.....	3 1/2 x 3 1/2 x 3 1/2
63-340	T56R01	3.38	2G	650	70	2.5	3	.....	.....	.....	.....	.....	.....	3 1/2 x 3 1/2 x 4 1/2
63-341	T56R03	3.97	2G	700	105	2.5	3	.....	.....	.....	.....	.....	.....	3 1/2 x 3 1/2 x 4 1/2
63-342	T70R62	3.67	2G	700	145	6.3	4.5	.....	.....	.....	.....	.....	.....	3 1/2 x 3 1/2 x 4 1/2
63-343	T56R05	3.97	2G	700	110	2.5	9	.....	.....	.....	.....	.....	.....	3 1/2 x 3 1/2 x 4 1/2
63-344	T92R16	4.41	2G	700	200	6.3	3	.....	.....	.....	.....	.....	.....	3 1/2 x 3 1/2 x 4 1/2
63-345	T75R28*	3.97	2G	880	125	6.3	3.3	.....	.....	.....	.....	.....	.....	3 1/2 x 3 1/2 x 4 1/2
63-346	T17R30	5.00	2G	740	280	6.3	7	.....	.....	.....	.....	.....	.....	3 1/2 x 4 1/2 x 4 1/2
63-347	T17R31	7.35	2G	860	325	6.3	8	.....	.....	.....	.....	.....	.....	3 1/2 x 4 1/2 x 4 1/2
63-348	T70R21	2.65	2H	700	70	2.5	4	.....	.....	.....	.....	.....	.....	4 x 3 1/2 x 2 1/2
63-349	T75R50†	4.56	2G	870	250	6.3	1.5	.....	.....	.....	.....	.....	.....	3 1/2 x 4 1/2 x 4 1/2
63-285	T17R34	3.09	2G	600	125	6.3	4	.....	.....	.....	.....	.....	.....	3 1/2 x 3 1/2 x 4 1/2
63-286	T17R35	2.06	2G	580	50	6.3	2.5	.....	.....	.....	.....	.....	.....	2 1/2 x 3 x 3
63-287	T17R36	2.35	2G	700	70	6.3	2.5	.....	.....	.....	.....	.....	.....	2 1/2 x 3 x 3 1/2
63-288	T17R37	2.79	2G	700	90	6.3	3.5	.....	.....	.....	.....	.....	.....	3 1/2 x 3 1/2 x 4 1/2
63-289	T17R38	3.09	2G	700	120	6.3	4.7	.....	.....	.....	.....	.....	.....	3 1/2 x 3 1/2 x 4 1/2

\*Has 38 volt bias tap. †Has 80 volt bias tap.

## STRAIGHT AUDIO TRANSFORMERS

Supplied in a variety of sizes and mountings, as illustrated above, and on page 120.

Stock No.	Mfr.'s Type	NET	Fig.	Ratio	Size Inches			Mts.	Shpg. Wt.
					W	D	H		
63-365	T47A25	\$1.32	2-C	3:1	2 1/2	1 1/2	2 1/2	1 1/2	1
63-366	T29A91	1.18	2-B	3:1	2 1/2	1 1/2	2 1/2	1 1/2	1
63-367	T37A36	1.18	2-F	3:1	2 1/2	1 1/2	2 1/2	1 1/2	1
63-368	T57A38	1.76	2-F	3:1	3 1/2	2 1/2	3 1/2	2 1/2	2
63-369	T75A74*	1.62	2-F	2:1	2 1/2	1 1/2	2 1/2	1 1/2	3
63-370	T17A02†	1.47	2-F	3:1	2 1/2	1 1/2	2 1/2	1 1/2	2
63-371	T13A34	.79	3-B	3:1	2 1/2	1 1/2	2 1/2	1 1/2	2

\*Has static shield between primary and secondary. †For either straight or push-pull use.

## PUSH-PULL INPUT AND INTERSTAGE TRANSFORMERS

Frequency response flat within 1 1/2 db. from 60 to 8000 CPS. Packed with proper hook-up.

Stock No.	Mfr.'s Type	NET	Figs.	Ratio	Size Inches			Mts.	Shpg. Wt.
					W	D	H		
63-385	T14A29	\$1.47	2-B	3:1	2	1 1/2	2 1/2	1 1/2	2
63-386	T33A91	1.18	2-B	3:1	2 1/2	1 1/2	2 1/2	1 1/2	2
63-387	T14A30	1.47	2-F	3:1	2 1/2	1 1/2	2 1/2	1 1/2	2
63-388	T57A40	1.91	2-F	3:1	3 1/2	2 1/2	3 1/2	2 1/2	2
63-389	T57A41	2.06	2-F	3:1	3 1/2	2 1/2	3 1/2	2 1/2	2
63-390	T57A42	2.06	2-B	3:1	3 1/2	2 1/2	3 1/2	2 1/2	2
63-391	T58A70*†	2.20	2-F	1.5:1	3 1/2	2 1/2	3 1/2	2 1/2	3
63-392	T13A36†	1.18	3-B	1:1	3	1 1/2	2 1/2	1 1/2	1
63-393	T14A92	.79	3-B	3:1	2 1/2	1 1/2	2 1/2	1 1/2	1 1/2
63-394	T13A35†	.88	3-B	3:1	2 1/2	1 1/2	2 1/2	1 1/2	1 1/2
63-395	T74A31	2.06	2-F	1:1	3 1/2	2 1/2	3 1/2	2 1/2	2 1/2

\*Primary rated at 10 ma. Others have 8 ma. primary ratings. †P.P. Interstage.

## THORDARSON PUBLICATIONS

**37-015. Transformer Catalog 400F.** Lists audio, driver, filament, modulation, plate, power and output transformers; chokes, reactors and voltage changers. Has complete index. 28 pages. .... **FREE**

**37-016. Replacement Transformer Encyclopedia 352F.** Contains important replacement service data. 31 pages. .... **FREE**

**37-017. Tru-Fidelity Broadcast Station Transformer Catalog 500F.** .... **FREE**

**37-701. Sound Amplifier Guide 346D.** Contains information on inverse feedback, meters, tone controls, and diagrams on amplifiers up to 120 watts. 32 pages. NET... **9C**

**37-702. Transmitter Guide 344E.** Contains diagrams, modulation tables, coil data, power supply circuits, etc. An indispensable aid for all Amateurs. 44 pages. .... **9C**

## ACME TRANSFORMERS

### STEP-DOWN TYPE

Will reduce line voltage of 200-240 volts, 50-60 cycles, to 100-120 volts for operating radios, amplifiers, appliances, etc. Will safely handle any device consuming up to 200 watts. With 8 foot cord, plug, and output receptacle. Shpg. wt., 8 lbs. **\$3.95**



### VARIABLE VOLTAGE ADJUSTER

Maintains proper operating voltage under varying line conditions. Allows step-up or step-down action. Primary tapped 85-100-115-130-145 volts; sec. 115 volts. With voltmeter. For 50-60 cycle, A.C. **62-501. Capacity 150 Watts. Shpg. wt., 7 lbs. NET... 6.75**

**62-502. Capacity 350 Watts. Shpg. wt., 11 lbs. NET... 11.76**

**62-503. Capacity 500 Watts. Shpg. wt., 14 lbs. NET... 12.94**



## KNIGHT STEP-DOWN TRANSFORMER

An entirely new step-down transformer with 150 watt capacity. Equipped with new Amphenol tap-switch for switching to prevailing input-voltage. Has six primary taps: 90, 100, 120, 200, 230 & 250 volts. Secondary; 115 V., at 1.3 amperes, 50/60 cycles. Handy female receptacle is mounted on side. Supplied with a rubber cord, terminating in a standard power plug. Especially designed for operating 110 volt radio receivers, amplifiers, and small electrical appliances from higher voltages. Shpg. wt., 9 lbs. **62-080. NET... 3.85**



## SET-TESTING AUTOFORMER

Just what every Serviceman needs to test potential failure in sets. Tap switch allows servicemen to overload set being tested at the shop, thus discovering defective parts which were about ready to pop. Provided with 7-tap switch to supply 90, 100, 110, 120, 130, 140 and 150 volts at 150 watts. About 90% of those pesky "intermittents" can be spotted immediately. Primary is designed for 115 volts 50-60 cycle A.C. operation. Female plug provided in transformer shell for A.C. plug of receiver. Shpg. wt., 6 1/2 lbs. **62-085. NET... 3.45**





# STANCOR TRANSFORMERS

## QUALITY CHOKES, OUTPUT, AND AUDIO TRANSFORMERS



A complete listing of popular Stancor transformers and chokes for builders, experimenters, servicemen, and for many industrial applications. High-quality material, skilled workmanship, and special impregnation assure long life and greater margin of safety. Will meet all

regular needs for constructional, experimental or replacement purposes, in radio receivers, amplifiers, PA systems, recorders, intercommunication systems, hearing aids, etc. Av. shpg. wt., 1 lb. For information covering all Stancor products, send for catalogs listed below.



### OUTPUT TRANSFORMERS

Stock No.	Type	NET	Fig.	Primary	Sec.	Size Inches
64-001	A3876	\$0.56	A	Scl. 2000	4	1 1/2 x 2 1/4 x 1 1/2
64-002	A3877	1.00	A	Scl. 2500	1, 2, 4	1 1/2 x 3 1/4 x 1 1/2
64-003	A2203	.76	A	Scl. 4000	8	1 1/2 x 2 1/4 x 1 1/2
64-004	A3877	.56	A	Scl. 5000	4	1 1/2 x 2 1/4 x 1 1/2
64-005	A3822	.71	A	Scl. 7M-10M	7-4	1 1/2 x 2 1/4 x 1 1/2
64-006	A3878	.56	A	Scl. 7000	4	1 1/2 x 2 1/4 x 1 1/2
64-007	A2313	.85	A	Scl. 7000	8	1 1/2 x 3 1/4 x 1 1/2
64-008	A2201	1.09	A	P. P. 8000	1, 2, 4	1 1/2 x 3 1/4 x 1 1/2
64-009	A3824	1.18	A	P. P. 8000	1, 2, 4	1 1/2 x 3 1/4 x 1 1/2
64-010	A3885	3.23	D	P. P. 9000	1-500	3 1/2 x 4 1/2 x 2 1/2
64-010	A3879	.59	A	Scl. 10000	4	1 1/2 x 2 1/4 x 1 1/2
64-011	A3831	.85	A	P. P. 10000	2, 4, 8	1 1/2 x 2 1/4 x 1 1/2
64-012	A3839	1.94	D	P. P. 10000	2-2M	2 1/2 x 3 1/4 x 1 1/2
64-013	A2312	.91	A	P. P. 14000	4	1 1/2 x 3 1/4 x 1 1/2
64-014	A3881	.59	A	Scl. 15000	4	1 1/2 x 2 1/4 x 1 1/2
64-015	A3857	.79	A	P. P. 25000	4	1 1/2 x 2 1/4 x 1 1/2

### FILTER CHOKES

Stock No.	Type	NET	Fig.	Hys.	Ma.	Ohms	Size
64-050	C-1706	\$0.56	A	5	50	300	1 1/2 x 2 1/4 x 1 1/2
64-051	C-1707	.56	A	7	50	500	1 1/2 x 2 1/4 x 1 1/2
64-052	C-1708	.73	A	10	65	460	1 1/2 x 3 1/4 x 2 1/4
64-053	C-1709	1.00	A	9	85	250	1 1/2 x 3 1/4 x 2 1/4
64-054	C-1710	1.23	A	8	150	200	2 1/2 x 4 x 2 1/2
64-055	C-1003	.76	A	30	50	550	1 1/2 x 3 1/4 x 1 1/2
64-056	C-1002	1.03	A	30	75	400	2 1/2 x 3 1/4 x 1 1/2
64-057	C-1001	1.29	A	30	110	200	2 1/2 x 4 x 2 1/2
64-058	C-1515	.59	A	50	15	900	1 1/2 x 2 1/4 x 1 1/2
64-059	C-2303	.91	A	10	130	100	2 x 3 1/4 x 1 1/2
64-060	C-2304	.91	A	8	150	65	2 x 3 1/4 x 1 1/2
64-061	C-2305	1.23	D	20	100	275	2 1/2 x 2 1/4 x 2 1/2

### PLATE TO GRID AUDIO INTERSTAGE

Stock No.	Type	NET	Fig.	Ratio	Size
64-070	A53	\$0.76	A	3:1	1 1/2 x 2 1/4 x 1 1/2
64-071	A63	.88	A	3:1	1 1/2 x 2 1/4 x 1 1/2

### UNIVERSAL OUTPUT TRANSFORMERS

Stock No.	Type	NET	Fig.	Watts	Sec.	Size
64-025	A3856	\$0.91	A	4	1 to 30	1 1/2 x 2 1/4 x 1 1/2
64-026	A3823	.91	A	8	1 to 30	1 1/2 x 2 1/4 x 1 1/2
64-027	A3852	1.18	B	18	1 to 30	2 1/2 x 3 1/4 x 2 1/2
64-028	A3830	1.71	A	20	1 to 30	2 1/2 x 4 1/2 x 2 1/2

### PUSH-PULL AUDIO INPUT

Stock No.	Type	NET	Fig.	Ratio	Size
64-080	A4741	\$0.91	C	2:1	2 x 1 1/2 x 1 1/2
64-081	A53C	.76	A	3:1	1 1/2 x 2 1/4 x 1 1/2
64-082	A63C	.88	A	3:1	1 1/2 x 2 1/4 x 1 1/2
64-083	A73C	1.2	A	3:1	2 x 3 1/4 x 1 1/2
64-084	A4711 Interstage	1.12	A	1:1	1 1/2 x 2 1/4 x 1 1/2

## TYPE "M" UNIVERSAL POWER TRANSFORMERS



For replacement in 80% of radio sets, 4 mounting brackets give a choice of five mounting positions. Have electro-static shielding and 8' leads. Cores of laminated silicon steel. Coils heavily insulated. Secondaries are center-tapped. Plate voltages are measured across total winding. 110-120 V., 50-60 cycles. (For 110-120 V., 25 cycles, add 100%. For 220-230 V., 50-60 cycles, add 35%. For 220-230 V., 25 cycles, add 100%.)

### UNIVERSAL REPLACEMENTS FOR 2.5 VOLT TUBES

Stock No.	Mfr's. Type	NET	Plate			Fil. 1			Fil. 2			Fil. 3			Mtg. Centers	Shpg. Wt.
			Volts	Mils.	W.	V.	A.	V.	A.	V.	A.	V.	A.			
64-100	P6001	\$1.82	650	40	5	2.0	2.5	4.0	2	2 1/2	4	4	4	4 lbs.		
64-101	P6002	2.32	700	50	5	2.0	2.5	7.25	2	2 1/2	4	4	4 lbs.			
64-102	P6003	2.44	700	70	5	3.0	2.5	9.0	2 1/2	2 3/4	4 1/2	4 1/2	4 1/2 lbs.			
64-103	P6004	2.85	700	90	5	3.0	2.5	12.5	2 1/2	2 3/4	6	6	6 lbs.			
64-104	P6005	2.68	700	70	5	3.0	2.5	9.0	2.5	3.5	6	6	6 lbs.			
64-105	P6006	3.50	700	120	5	3.0	2.5	12.5	2.5	3.5	6 1/2	6 1/2	6 1/2 lbs.			
64-106	P6007	3.65	800	110	5	3.0	2.5	15.0	2.5	3.5	7	7	7 lbs.			

### UNIVERSAL REPLACEMENTS FOR 6.3 VOLT TUBES

Stock No.	Mfr's. Type	NET	Plate			Fil. 1			Fil. 2			Fil. 3			Mtg. Centers	Shpg. Wt.
			Volts	Mils.	W.	V.	A.	V.	A.	V.	A.	V.	A.			
64-107	P6289	\$1.82	420	40	5	2.0	6.3	2.0	2	2 1/2	4	4	4	4 lbs.		
64-108	P6297	1.82	480	40	5	2.0	6.3	2.0	2	2 1/2	4	4	4 lbs.			
64-117	P6312	2.79	580	90	5	3.0	6.3	2.8	2 1/2	2 3/4	6	6	6 lbs.			
64-118	P6313	3.09	580	125	5	3.0	6.3	4.5	2 1/2	2 3/4	7	7	7 lbs.			
64-109	P6119	1.85	600	55	5	2.0	6.3	2.7	2	2 1/2	4	4	4 lbs.			
64-110	P6120	2.47	630	70	5	3.0	6.3	3.5	2 1/2	2 3/4	6	6	6 lbs.			
64-111	P6010	1.82	650	40	5	3.0	6.3	2.0	2	2 1/2	4	4	4 lbs.			
64-112	P6011	2.32	700	70	5	3.0	6.3	2.5	2 1/2	2 3/4	4	4	4 lbs.			
64-113	P6012	2.62	700	90	5	3.0	6.3	3.5	2 1/2	2 3/4	6	6	6 lbs.			
64-114	P6013	2.88	700	120	5	3.0	6.3	4.7	2 1/2	2 3/4	6	6	6 lbs.			
64-119	P6314	4.32	700	200	5	3.0	6.3	5.5	3 1/2	3 3/4	8 1/2	8 1/2	8 1/2 lbs.			
64-120	P6315	5.88	740	275	5	3.0	6.3	7.0	3 1/2	3 3/4	9	9	9 lbs.			
64-115	P6014	3.79	750	150	5	3.0	6.3	5.0	2 1/2	2 3/4	6	6	6 lbs.			
64-116	P6165	4.38	800	200	5	4.0	6.3	5.5	3	3 3/4	7	7	7 lbs.			

## STEP-UP AND STEP-DOWN TRANSFORMER

Provides 115 V., 60 cycles at 150 watts from 90, 100, 120, 220, 230, 240, and 250 V., 60 cycle lines. Primary tap switch used to step-up 110 V., 60 cycle lines to higher voltages for locating "intermittents." Ideal for service bench, laboratory and industrial use. Size, 4 1/2 x 3 1/2 x 8". Wt., 10 lbs.



64-250. Type P6300. NET. \$6.64

## STEP-DOWN TRANSFORMER

Reduces 220-250 V., 50-60 cycle lines to 110-125 V. for radios, amplifiers, electric phonographs, recorders, appliances, etc., up to 40 watts. 4 1/2 x 3 x 3". 3 lbs.

64-260. Type P6287. NET. \$2.32

## SINGLE BUTTON MIKE TRANSFORMER

Matches single-button carbon microphone to single or push-pull grids. Primary, 100 ohms. Secondary, 400,000 ohms CT. Overall ratio, 1 to 64. Open-frame mounting, 6' flexible leads. Size, 2 1/2 x 2 1/2 x 2 1/2". 1 1/2 lbs.



64-270. Type A4742. NET. \$1.23

64-271. Type A4743. As above, but has shield-cover over entire coil. 2 1/2 x 2 1/2 x 2 1/2". Shpg. wt., 1 1/2 lbs. NET. \$1.38

## EXACT DUPLICATE TRANSFORMERS FOR EASY REPLACEMENTS

The popular Exact Duplicate Power Transformers listed below are a partial selection of those available. For units not listed, give name, model, number, and tube lineup of set, or select from Stancor Guide. We ship from local stocks. Discount, 40-2% from Stancor list price.

Model	No.	Lbs.	NET	Model	No.	Lbs.	NET	Model	No.	Lbs.	NET			
CROSLY 505, 515, 516, 525, 5515, 5516, 6516, 517, 537, 547, 526, 616, 5526, 555, 5555	64-150	2	\$2.23	PHILCO, Cont'd. 19 (121-120), 44 (121-122), 60, 66, 89, 264, 265, 45 (121-122), 245, 38-12 (121-123), 35-15, 38-17 (121-124), 37-9, 37-10 (121- 125), 37-650, 37- 665, 37-650, 38-3 (121-38-665, 38- 2650 (321- 14 late, 18 (121-2- 3-4), 118.	4 1/2	\$2.35	RCA-VICTOR T-4-8A, T-4-9A, 4T 64, 67 R78, RA8A, 8A 100 (100), 101, 301, T-4-5, 9K2, 9T, 9U, 9U2, 10K, 10T, C6-11, C6-12, 6K, 6T, 7K, 7T, 8K, 8K1, 8T.	64-229	2 1/2	\$ 2.23	U.S. RAD. & TEL. 26	64-235	4 1/2	2.62
64-151	2	2.59	64-203	4 1/2	\$2.35	64-204	4	2.88	64-225	6	2.62			
64-152	2	2.62	64-205	4	2.00	64-226	8 1/2	5.41	64-227	8	4.23			
64-153	4 1/4	3.47	64-206	7	4.32	64-228	9 1/2	4.79						
GENERAL ELEC E61, E62, E65, E91, E95, E101, E105, E106, K43, M42, M49, J125	64-165	5	2.62	64-207	7 1/2	4.00								
64-166	6 1/2	3.85												
64-232	3	2.00												
64-231	12 1/4	4.79												
64-180	6	3.09												
64-181	12	4.32												
64-182	10 1/4	4.62												
64-201	6 1/2	4.17												
64-202	4 1/2	2.23												

### STANCOR PUBLICATIONS

37-035. Transformer Guide. Over 4300 receivers, charts, circuits, etc. FREE  
37-036. Transformer Catalog. Illustrates and describes entire Stancor line. Includes Amateur units. FREE  
37-770. Ham manual. Popular transformer circuits, charts, power supplies, etc. FREE with Stancor order, or NET. 15c



# BURGESS RADIO BATTERIES KNIGHT



## BURGESS STANDARD DRY BATTERIES

Suitable for all radio and laboratory requirements. Absolutely moisture and climate-proof. Incorporate the highest degree of purity in materials. Quality maintained by laboratory control and test. **ALLIED's** stock of Burgess Batteries is always fresh, assuring you of full-rated efficient service. Explanation of terminals: P.I.—plug-in (plugs listed at right below); S.C.—spring clips; S.T.—screw terminals. A type for every purpose.

Stock No.	Burgess No.	Terminals	Volts	Shpg. Wt.	Size	NET EACH
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### SUPER "B" BATTERIES

80-500	21308	P.I.	45	15	7 3/4 x 8 1/2 x 4 1/2"	\$2.23
80-501	21308SC	S.C.	45	15	7 3/4 x 8 1/2 x 4 1/2"	2.23
80-502	22308	P.I.	45	10 1/2	7 3/4 x 8 1/2 x 3 1/2"	1.61
80-503	22308SC	S.C.	45	10 1/2	7 3/4 x 8 1/2 x 3 1/2"	1.61

### STANDARD "B" BATTERIES

80-504	10308	P.I.	45	13	7 1/4 x 8 x 4"	\$1.85
80-505	10308SC	S.C.	45	13	7 1/4 x 8 x 4"	1.85
80-506	2308	P.I.	45	9 1/4	7 1/4 x 8 x 2 1/4"	1.33
80-507	2308SC	S.C.	45	9 1/4	7 1/4 x 8 x 2 1/4"	1.33
80-508	5308	S.T.	45	4	5 1/2 x 4 1/2 x 2 3/4"	1.16

### STANDARD "C" BATTERIES

80-509	2156	S.C.	22 1/2	5 1/2	3 1/2 x 6 3/4 x 1 1/2"	\$1.12
80-510	4156	S.T.	22 1/2	1 1/2	3 x 3 3/4 x 2 1/2"	.64
80-511	5156	P.I.	22 1/2	2	3 3/4 x 4 1/2 x 2 1/2"	.72
80-512	5156SC	S.C.	22 1/2	2	3 3/4 x 4 1/2 x 2 1/2"	.72
80-513	2370	P.I.	4 1/2	1 1/2	3 3/4 x 1 1/2"	.30
80-514	5540	S.T.	7 1/2	1	1 3/4 x 4 x 3/4"	.48
80-515	5360	S.T.	4 1/2	1 1/2	3 x 2 3/4 x 1 3/4"	.31
80-516	B5P	P.I.	7 1/2	1	4 x 3 1/2 x 1 3/4"	.48

### SPECIAL-PURPOSE BATTERIES

80-517	Z30N	S.T.	45	1 3/4	1 1/4 x 1 1/4 x 3 3/4"	\$1.15
80-518	N30FL	Wire leads	45	1	2 3/8 x 1 1/4 x 4 1/2"	1.75
80-519	W30BPX	S.T.	45	1	3 x 1 1/4 x 3 3/4"	1.70
80-520	A30BP	S.T.	45	2 1/2	4 1/2 x 2 3/4 x 3 3/4"	1.27
80-521	W5BP	S.T.	7 1/2	1	2 1/2 x 3 1/2 x 1 1/2"	.64
80-522	W30BP	S.T.	45	1	3 x 1 1/4 x 3 3/4"	1.66
80-523	W30FL	Wire leads	45	1	3 x 1 1/4 x 3 3/4"	2.00
80-524	Z30NX	S.T.	45	1 1/2	3 x 1 1/4 x 4 3/4"	1.50
80-525	Z30BP	S.T.	45	1 1/2	3 3/4 x 2 3/4 x 3 3/4"	1.23
53-015	Z30-X	S.T.	45	1 1/2	3 3/4 x 2 3/4 x 3 3/4"	1.50
53-016	F4BP	S.T.	6	1 1/2	2 1/2 x 2 1/2 x 3 1/2"	.35
53-017	2F2H	S.T.	3	1 1/2	2 3/4 x 2 3/4 x 3 3/4"	.40
53-018	F2BP	S.T.	3	1	2 3/4 x 1 3/4 x 4 1/4"	.34
53-019	A15ST	S.C.	22 1/2	2	2 3/4 x 3 3/4 x 2 1/2"	.60

### 110 VOLT ELECTRIC SHAVER BATTERIES

53-020	Z90PI	Socket	135	4 1/2	3 3/4 x 5 3/4 x 5 3/4"	\$3.32
53-021	W90PI	Socket	135	3	3 3/4 x 2 1/2 x 6 1/2"	3.75

### PACKS FOR PHILCO 33, 38, 3BA, 623 AND 643

80-526	F90-D6	Socket	135	39 1/2	13 3/4 x 8 1/2 x 7 1/4"	\$5.15
80-527	G90-D6	Socket	135	44 1/2	13 3/4 x 9 1/4 x 7 1/4"	5.44

### FOR PHILCO 34, 34A, 39, 39A

80-528	G90-D8	.....	135	45	13 3/4 x 9 1/4 x 7 1/4"	\$5.44
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### FOR PHILCO 39-70-75-80-85

80-529	16G	Socket	1 1/2	7	7 3/4 x 5 3/4 x 4 1/2"	\$1.38
80-530	19G	Socket	1 1/2	8	7 3/4 x 5 3/4 x 4 1/2"	1.38
80-531	D60	Socket	90	16	8 1/2 x 1 1/2 x 3"	2.38

### DRY CELL "A" BATTERIES AND PACKS

Stock No.	Burgess No.	Volts	Shpg. Wt.	Size	NET EACH
53-022	4FA	1 1/2	1 1/2 lbs.	2 3/4 x 2 3/4 x 4 1/2"	\$0.33
53-023	4A	1 1/2	1 1/2 oz.	2 3/4 x 2 3/4 x 4 1/2"	.45
53-024	4FH	1 1/2	1 1/2 lbs.	2 3/4 x 2 3/4 x 4 1/2"	.45
53-025	4F2H	3	3 lbs.	2 3/4 x 3 1/2 x 5 3/4"	.56
53-025	4FAH	6	7 lbs.	2 3/4 x 8 1/2 x 6 1/2"	1.41
53-026	20F	1 1/2	8 lbs.	7 1/4 x 7 1/4 x 2 1/2"	1.42
80-532	20F2	3 1/2	15 lbs.	11 1/2 x 6 3/4 x 6 3/4"	2.35
80-533	40F2	3 1/2	30 lbs.	8 1/2 x 1 1/2 x 6 3/4"	4.76
53-028	F4H	6	2 lbs.	2 3/4 x 2 3/4 x 3 1/2"	.35

54-020. Reducing resistor. For batteries marked (†) to drop voltage to 2 volts. NET.....25c

### TUBULAR FLASHLIGHT UNI-CELLS

53-029, No. 1, 1 1/2 volts, Size: 1 1/2 x 1 in. Baby type, 2 oz.	53-009, No. 2, 1 1/2 volts, Size: 2 3/4 x 1 3/4. Standard type, 4 oz.	No. 1, No. 2 Cell. EACH.....	62c
53-030, 22, 2-Cell Penlight Battery, 3 3/4 x 3/4", Wt., 3 oz.....			6 1/2c
53-031, Z, 1-Cell Penlight Battery, 1 1/4 x 3/8", Wt., 2 oz.....			4c

## KNIGHT PLUG-IN DRY BATTERIES

Only the highest quality materials are used in the making of Knight batteries. Each Knight battery is scientifically protected against internal shorts by a unique sealing method. These batteries are designed for a long and full life. For maximum battery value—buy Knight. Our quick turnover assures you of constantly fresh stocks of all Knight battery types. Our low prices assure you of bigger savings and bigger profits. \*Plug-in batteries do not include plugs. See plugs listed below.



Stock No.	Type	Volts	Size	Shpg. Wt.	NET EACH
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80-800	*Standard	45	7 3/4 x 6 x 3"	10 lbs.	\$0.99
80-801	*Heavy-Duty	45	6 3/4 x 7 1/4 x 4"	12 lbs.	1.32
80-802	"B" or "C"	22 1/2	4 x 2 1/2 x 2 3/4"	2 lbs.	.61
80-803	"C"	4 1/2	4 x 3 x 1 1/4"	1 lb.	.24

### DRY CELL, FLASHLIGHT CELLS, AND 6 VOLT PACK

80-804	No. 6 Dry cell	1 1/2	6 x 2 1/2"	2 lbs.	\$0.23
80-805	No. 1 Midjet	1 1/2	1 x 1 1/2"	2 oz.	.04
80-806	No. 2 Std. cell	1 1/2	1 1/2 x 2 3/4"	4 oz.	.04
80-807	"Hot Shot"	6	10 1/2 x 2 1/2 x 6"	7 lbs.	1.39

### POPULAR RAY-O-VAC PLUG-IN BATTERIES

Famous quality batteries built to most rigid specifications and incorporating special Ray-O-Vac features for extra pep and stamina. Furnish an efficient, dependable source of power for portable and other battery-operated radio sets. Constructed of highest-grade materials for long-life, full-rated service. Used as original equipment in many sets, and also ideal as replacements. Equipped with plug-in type sockets. **ALLIED's** fast-moving stock of Ray-O-Vac batteries assures you of fresh batteries in every type. Supplied less plugs. Use same plugs as those listed for Burgess on page 124.

Stock No.	Type	Replaces Burgess	General	Volts	Size	Sh. Wt.	NET
80-850	P94A	4F	4F1	1 1/2	2 3/4 x 2 3/4 x 4"	1	\$0.42
80-851	P5303	B30	V30B	1 1/2	4 1/2 x 2 3/4 x 5 1/2"	3	1.12
80-852	A882	17GD60	60DL1L1	1 1/2	1 1/2 x 4 x 4 1/2"	23	3.67
80-853	P694A	F4P1	4F4	4	2 3/4 x 2 3/4 x 4 1/2"	2	1.45
80-854	P430	A30	V30A	45	3 1/2 x 2 3/4 x 4 1/2"	2	1.12
80-855	P4367	XX45	.....	6 1/2	1 1/2 x 2 1/2 x 3 1/2"	1	1.60
80-856	P7830	M30	.....	45	3 3/4 x 1 1/2 x 5 1/2"	2	1.12

### GENERAL PORTABLE AND LABORATORY-TYPE BATTERIES

Exact duplicates of batteries widely used in portable receivers. Patented construction permits use of highly active materials to give long hours of service. Excellent quality makes them ideal for laboratory work. Select by type number. See pages 124-125 for sizes and set listings. We can supply additional General batteries. Write for prices. Less plugs. See Burgess plugs listed on page 124.

### PORTABLE PLUG-IN BATTERIES (Fig. A)

No.	Type	Lbs.	NET	No.	Type	Lbs.	NET
53-200	2F1	1	\$0.21	80-701	V30A	2	\$0.94
53-201	8F4	3	.67	80-702	V30AB	3	1.05
53-202	4F1	1 1/2	.38	80-703	V30AA	1 1/2	1.06
53-203	4F2	2 1/2	.52	80-704	F30A	2	.94
53-204	3F1	2 1/2	.52	80-705	V30AAA	1	1.05
53-205	8F1	3	.67	80-706	34AAA	1	1.22
53-206	4F4	2	.38	80-713	39AAA1L	2	1.35
53-209	3H3	1 1/2	.35	80-707	41A4FL	5	1.75
53-210	5H5	2	.46	80-708	60A2L	3 1/2	2.36
53-211	20AAA	1/2	.77	80-709	60A4L	6 1/2	2.45

### LABORATORY CLIP TYPE BATTERIES (Fig. B.)

Stock No.	Mfrs. Type	Volts	Lgth.	Width	Ht.	Shpg. Wt.	NET EACH
80-714	V30AAA	45	2 1/2"	1 1/4"	4 1/2"	11 oz.	\$2.20
80-715	P2KX	3	3 1/2"	1 3/4"	4 3/4"	20 oz.	.44
80-716	PXZ	3	2 1/2"	1 3/4"	4 1/2"	16 oz.	.44

### PLUG-IN CONNECTORS

All plug-in batteries shipped less plugs. Plugs listed below fit Burgess, General, Knight and Ray-O-Vac standard batteries. See page 124 for complete listing of portable battery plugs. Shpg. wt., 3 oz.

54-050. Connector for all 45 volt batteries.  
 54-051. Connector for 22 1/2 volt batteries.  
 54-052. Connector for 7 1/2 volt batteries.  
 54-053. Connector for 4 1/2 volt batteries.  
 54-054. Connector for 3 volt "A" batteries. NET EACH.....3 1/2c



# BURGESS

## MOST POPULAR BATTERY TYPES



**M30**  
45V. "B" battery for Majestic 1BR50B, 1BR50BP; Air King 4016; Admiral 78-XF6, 77-P6, 77-P5; Delco R-1405-06-07; Crosley 27BD, 27BE; Emerson EA-338, 339, 357; Detrola 339, 3401; RCA BP55, 85; Westinghouse WR676, 679; Travler B81; Motorola 65BP3, 41H; Sentinel 192XL; etc. Size, 1 7/8" x 3 3/8" x 5 3/4". Wt., 2 lbs.  
**80-546. NET..... \$1.05**



**XX45**  
67.5 V. "B" battery. Replaces Eveready type 467. Used in camera and miniature personal portables, such as Admiral 27G4, 28G5; General Elec. models JB410, LB412, LB502, LB603; RCA BP-10; Emerson DU-379, 380, 41; Crosley 45BV; Motorola A1, 3AS; Sentinel 227P, 247P; Sonora L.P161-2-3; etc. Features new snap-on connections. Size, 2 1/8" x 1 1/2" x 1 1/2". Wt., 3/4 lb.  
**80-544. NET..... \$1.60**



**B30**  
45 V. universal type, long-life "B" battery for Zenith 4 K400D; RCA 80, 81, 94 B P 1, 96GA, 61, 62, 64, 66; Philco 39, 71-72, 504; Gen. Electric C2A28, C2A28  
80-557 2F4B60  
80-558 F4A41  
80-559 F4B60  
80-560 G4B50  
80-561 G4A60  
80-562 2GA60  
80-563 DA460  
80-564 3FA60  
80-565 4GA41  
80-566 DSA60  
80-567 FSA60  
80-568 2FA60  
80-569 GSA42  
80-570 G6B60  
80-571 FA50



**4F**  
1 1/2-volt 40 watt hour "A" battery for portable receivers. For Admiral 3314-F; Detrola Pee Wee No. 282, 295; Emerson CE-259; Fada P-49, PD-49, P-58; Farnsworth AT-30; Garod BP5, 5A, -4; General Electric HB402, -3; RCA 94BP1, -4, -64, -66, -80, -81, T4, etc. Size, 2 3/8" x 2 3/8" x 4 1/2". Wt., 1 1/2 lbs.  
**80-503. NET..... \$3.50**



**5DA60**  
Combination 1 1/2-volt "A" and 90-volt "B" battery pack for Aecolian BP6, BP943; Air King 3905 3012; De Wald 4 S C B F; Galton BF; BP3; Knight A10826, E1705, E17016; Sky Chief 225, 227, 209; Sonora PL29, PL37; Troy BP140; Remler 93 94, 95; etc. Size, 2 1/8" x 6 7/8". Wt., 5 lbs.  
**80-553. NET..... \$2.36**

## ALLIED OFFERS THE COMPLETE REPLACEMENT LINE

Here, on two easy-to-read pages, *ALLIED* lists quality batteries and standard battery plugs that may be needed to meet the specifications of every conceivable battery-portable radio, or commercial demand. Used by leading Laboratories, Government Departments and Industrial Organizations, *Burgess* and *General* batteries are constructed to most exacting standards of dependable and economical service. They are manufactured from finest materials obtainable, each embodying special features of construction designed to provide rugged durability and lasting freshness. Graded paraffin coatings moisture-proof the cells for longer life. *ALLIED'S* tremendous volume of sales assures you of factory-fresh batteries always, to fulfill all of your battery requirements dependably.

BURGESS						GENERAL				Replaces Eveready No.
Stock No.	Type	NET	Volts	Takes Plug No. †	Size In Inches	Wt. Lbs.	Stock No.	Type	NET	
<b>PORTABLE "A" BATTERIES</b>										
53-000	2F	\$0.28	1 1/2	274	1 1/2 x 2 3/8 x 4 1/2	1	53-200	2F1	\$0.21	718
53-001	2F4	.70	6	2793	2 1/8 x 3 1/2 x 5 1/2	3	53-201	8F4	.67	747
53-002	2F4L	.70	6	2793	1 7/8 x 2 3/8 x 4 1/2	1 1/4	53-202	8CF4	.56	742
53-003	4F	.25	1 1/2	274	1 3/8 x 2 3/8 x 1 1/2	1 1/2	53-203	4F1	.35	747
53-004	4FL	.42	1 1/2	274	1 3/8 x 3 1/8 x 1 1/2	1 1/2	53-204	3L1	.52	743
53-005	6F	.52	1 1/2	274	2 3/8 x 3 1/8 x 1 1/2	2 1/4	53-205	6F1	.52	743
53-006	8F	.67	1 1/2	274	2 5/8 x 3 1/8 x 1 1/2	2 1/4	53-206	8F1	.67	741
53-007	8FL	.67	1 1/2	274	1 7/8 x 3 1/8 x 1 1/2	3	53-207	8CF1	.56	745
53-008	F4L	.47	6	2793	3 1/8 x 1 1/2 x 5 3/8	1 1/2				950
53-009	2 Uni-cel	.06 1/2	1 1/2		2 3/8 x 1 1/2	1 1/2				
53-010	F	.10	4 1/2	2793	3 1/8 dia. x 4 1/4	1 1/2	53-208	4F4	.38	
53-011	F4P1	.38	6	273	2 3/8 x 2 3/8	1 1/4	53-209	3H3	.32	746
53-012	F4PLX	.38	6	273	2 3/8 x 2 3/8	1 1/4	53-210	5H5	.46	687
53-013	G3	.32	4 1/2	2792	4 1/8 x 1 x 1 3/8	1 1/4				
53-014	G5	.52	7 1/2	M77	3 5/8 x 2 1/2 x 4 3/8	2				

<b>PORTABLE "B" BATTERIES</b>										
80-534	W20P1	\$0.88	30	273	1 1/8 x 1 1/2 x 4 1/4	1/2	53-211	20AAG	\$0.77	
80-535	A30	1.05	45	273*	2 1/4 x 3 1/2 x 4 1/2	2	80-701	V30A	.94	
80-536	B30	1.05	45	273*	2 1/8 x 4 1/8 x 5 1/8	2 1/4	80-702	V30B	1.05	762
80-537	Z30	1.12	45	273*	2 1/4 x 3 1/2 x 4	1 1/2	80-703	V30AA	1.05	738
80-538	A30M	1.05	45	273*	1 1/2 x 1 1/2 x 3 1/2	1 1/2	80-704	F30A	.94	727
80-539	W30P1	1.45	45	273*	1 3/8 x 2 1/8 x 3 1/2	2 3/8	80-705	V30AAA	1.05	733
80-540	W34	1.37	51	273	1 1/2 x 3 x 4 1/4	1	80-706	34AAA	1.22	
80-541	W40	1.55	60	2767	1 1/2 x 3 x 5 1/2	1				
80-542	Z59	2.40	88 1/2	273	3 1/2 x 2 1/4 x 5 1/2	2 1/4				
80-543	A60	2.10	90	273	4 1/2 x 3 1/2 x 4 3/8	3 3/4				
80-544	XX45	1.60	67 1/2	Snap-on	2 1/8 x 1 1/2 x 3 1/8	3/4				467
80-545	XX30	1.23	45	Snap-on	1 1/8 x 1 1/2 x 3 1/8	3/4				467
80-546	M30	1.05	45	273*	1 1/8 x 3 1/8 x 5 1/8	2				482

### "A" AND "B" COMBINATION PACKS

80-550	4FA60	\$2.27	1.5/90	5705	3 1/2 x 7 x 4 3/8	5 1/2	80-707	41A4FL	\$1.75	
80-551	4GA42	1.82	1.5/63	2745	2 x 9 x 4 3/8	4 1/2	80-708	60A2L	2.36	
80-552	4TA60	2.45	1.5/90	120	8 1/2 x 2 3/8 x 4 1/2	4 3/4	80-709	60A4L	2.44	
80-553	5DA60	3.36	1.5/90	120	2 1/8 x 5 1/8 x 6 7/8	5 1/2	For Philco Mystery control			
80-554	6FA60	2.22	1.5/90	2745	1 1/8 x 6 1/2 x 4 1/2	5 1/2	80-710	Z50B4-H4	2.50	
80-555	6TA60	2.22	1.5/90	120	6 1/2 x 4 1/8 x 4 1/2	5 1/4				
80-556	C2A28	1.47	3/45	2745	6 1/2 x 4 1/8 x 4 1/2	2				
80-557	2F4B60	2.77	6/90	M64	4 1/2 x 10 1/2 x 1 1/2	8 3/4				
80-558	F4A41	1.65	6/61.5	M64	9 5/8 x 4 7/8 x 2 1/2	4				
80-559	F4B60	2.48	6/90	2776	10 5/8 x 2 1/2 x 5	6 1/2				
80-560	G4B50	3.14	6/75	M64	4 1/2 x 12 3/8 x 2 1/2	6 1/4				
80-561	G4A60	2.14	6/90	M64	10 1/2 x 2 1/2 x 5 1/2	7				
80-562	2GA60	1.03	1.5/90	120	4 7/8 x 1 1/2 x 1 1/2	4 3/4				
80-563	DA460	3.32	6/90	M64	6 5/8 x 3 1/2 x 2 1/2	5				
80-564	3FA60	3.24	1.5/90	120	10 1/2 x 4 1/2 x 2 1/2	4 3/4				
80-565	4GA41	1.80	1.5/61.5	2745	9 3/8 x 3 3/8 x 2 1/2	4 1/4				
80-566	DSA60	3.36	7.5/90	2900	9 3/8 x 4 3/8 x 2 1/2	4 3/4				
80-567	FSA60	4.40	7.5/90	2900	11 3/8 x 4 1/2 x 2 1/2	5 1/2				
80-568	2FA60	1.40	6/90	2791	11 3/8 x 4 1/2 x 2 1/2	4 3/4	80-711	60A-4FL4	2.45	
80-569	GSA42	1.78	7.5/63	2900	9 1/2 x 3 1/2 x 4 1/2	4 1/2	80-712	Z60B-6H6	2.45	
80-570	G6B60	2.60	9/90		13 1/2 x 4 1/2 x 2 3/8	8 1/4				
80-571	FA50	2.25	1.5/75		7 x 3 1/2 x 4 1/2	4 1/2				

\*Or adapter plug No. 54-050 (See page 123). †Select plug from listing below.

### BURGESS PACKS FOR FARM SETS

Types below cover high-efficiency replacements for practically every type of battery-powered farm radio.

No.	Type	NET	Volts	Size	Lbs.
80-572	17GD60	\$3.67	1.5/90	7 1/8 x 1 1/2 x 4 3/8	23
80-573	18GD60	3.67	1.5/90	6 1/8 x 1 1/2 x 4 3/8	23
80-574	3GD60	3.95	9/90	13 1/8 x 8 1/2 x 4 1/4	23
80-575	398	4.14	6/90	8 3/4 x 4 1/8 x 1 5/16	27
80-576	739	4.43	7.5/90	8 3/4 x 4 1/8 x 1 5/16	27

### BURGESS PACKAGE BATTERY KITS FOR PORTABLES

No.	Type	NET	Description	Lbs.
80-577	230 kit	\$2.80	1-2F4L & 2-M30's	7
80-578	330 kit	2.74	2-G3's & 2-M30's	6
80-579	430 kit	2.45	1-4F & 2-B30's	8
80-580	830 kit	2.77	1-8F & 2-B30's	9

### F4B60

Combination 6-volt "A" and 90-volt "B" battery pack. For Zenith 5G401, 403, 405, etc. Size, 10 7/8" x 2 3/4" x 5" A famous combination replacement pack noted for long life. Wt., 6 1/2 lbs.  
**80-559. NET..... \$2.48**



### STANDARD BATTERY PLUGS



Bakelite battery plugs. Fit standard plug-in type dry batteries. Convenient connectors for Laboratory and Industrial work, and for replacement purposes.

No.	Fig.	Type	Description
54-000	A	2793	2-prong 6V. "A."
54-001	B	273	3-prong portable "B."
54-002	C	120	4-prong 1 1/2/90 "A/B."
54-003	D	274	2-prong 1 1/2V. "A."
54-004	E	M64	4-prong 6/90 "A/B."
54-005	F	200	2-prong 3V. "A."
54-006	G	2767	3-prong 60V. "B."
54-007		2792	2-prong 4 1/2V. "A."
54-008		1777	3-prong 7 1/2V. "A."
54-009		5705	4-prong Zenith "A&B."
54-010		2745	4-prong Philco "A&B."
54-011		2900	4-prong 7 1/2V. "A/B."
54-012		2776	5-prong 6/90 "A/B."
54-013		2791	4-prong 6/90 "A/B."

NET EACH..... **3/2c**







# CONVERTERS · BATTERIES · CHARGERS

## POPULAR ATR RADIO INVERTERS—DC TO AC



Delivers 110 volt 60 cycle AC electric power from 6 or 12 volt batteries, 32 volt, 110 volt, or 220 volt DC systems. These inverters are designed especially for interference-free operation of AC all-wave radios, PA systems, radio-phonograph combinations, test equipment, and similar units from DC voltages in cars, boats, trains, farms and in DC districts. Plug-in vibrator has ten 1/2" diameter contacts which assure long life and reliable service. Features include: 4-point voltage regulator, fuse protection, on-off switch, metal case, etc. Supplied complete with filter which eliminates "ripple" and "hash," thus assuring quiet performance. Sizes: RSA 7 7/8"x9 3/4"x4 1/4"; RHA 7 7/8"x9 3/4"x6 1/4".

### RADIO TYPE WITH FILTER

Stock No.	Mfrs. Type	Input DC Volts	60 Cycle AC	Watts		Wt. Lbs.	List	NET EACH
				Cont.	Inter.			
80-000	6-RSA	6	110V.	75	85	16	\$25.95	\$15.26
80-001	12-RSA	12	110V.	100	125	16	25.95	15.26
80-002	32-RSA	32	110V.	100	150	16	26.95	15.85
80-003	32B-RHA	32	110V.	180	200	25	37.50	22.05
80-004	110-RSA	110	110V.	150	250	16	26.95	15.85
80-005	110A-RSA	110	110V.	225	325	25	35.00	20.58
80-006	110B-RHA	110	110V.	350	500	25	45.00	26.46
80-007	110C-RSA	110	110/220V.	150	250	16	32.50	19.11
80-008	110D-RSA	110/220	110/220V.	150	250	16	38.50	22.64
80-009	220-RSA	220	110V.	150	250	16	26.95	15.85

## ATR MIDGET PHONOGRAPH INVERTERS



**Model PCP.** For operation of 110-volt AC 60-cycle phono motors, AC razors, and similar AC devices from 110 volts DC. Rating, 15 watts. Easily installed anywhere. Midget size, 2 3/8" x 2 3/8" x 3 3/8". With cord set and outlet receptacle. Shpg. wt., 2 lbs.

80-010. NET..... \$4.67

80-011. Model PCP-F. As above with RF noise suppressor. For AC record player motors. NET..... \$5.00

80-012. Model PCP-R. Like Model PCP-F but with leads. For phono-players with AC motors. NET..... \$4.67

## ATR INVERTER FOR PORTABLE RECEIVERS



The ATR Portable Receiver Inverter is especially designed to operate directly from a six-volt automobile storage battery. Output of unit is 110 volts, 60 cycles AC, at 35 watts. This is ideal for the operation of three-volt portable receivers as it eliminates using the self-contained "A" and "B" batteries and thus reduces operating costs to a minimum. Unit may also be used to operate small AC-DC sets from an automobile storage battery. A built-in filter eliminates noise. Housed in a black wrinkle-finished metal case, 5 7/8"x4 3/8"x5 5/8". Shpg. wt., 6 lbs.

80-013. NET..... \$8.88

## JANETTE DC TO AC ROTARY CONVERTERS



### WITH BUILT-IN RADIO FILTERS

Converts DC to AC. Permits the operation of AC radio sets, sound systems or recording equipment, and other devices and appliances from 32 volt light plants or 115 volt DC lines. Compact, dynamically balanced, ruggedly designed, and built for long life. Efficient filter assures quiet radio reception.

### 115 VOLT DC TO 110 V. 60 CYCLE AC

Stock No.	Output Watts	In-put Amps.	Shpg. Wt.	YOUR PRICE
80-050	110	1.9	38 lbs.	\$29.69
80-051	150	2.4	38 lbs.	32.63
80-052	225	3.0	40 lbs.	38.07
80-053	300	4.0	61 lbs.	46.01
80-054	500	6.1	72 lbs.	60.56
80-055	750	8.5	95 lbs.	90.11
80-056	1000	11.0	130 lbs.	111.72

### 32 VOLT DC TO 110 V. 60 CYCLE AC

Stock No.	Output Watts	In-put Amps.	Shpg. Wt.	YOUR PRICE
80-060	110	6.5	38 lbs.	\$29.69
80-061	150	8.5	38 lbs.	32.63
80-062	225	11.5	40 lbs.	38.07
80-063	300	15.0	61 lbs.	46.01
80-064	500	18.0	72 lbs.	60.56

We can supply converters with 6 volt DC in-put and with various output wattage ratings. Send us your order specifying requirements.

## RADIART PAK FOR ELECTRIC SHAVERS



Double the utility of your Electric Shaver! Shaver-Pak operates your 110 Volt Shaver from any 6 V. DC or 32 V. DC source. For use in cars, trailers, boats, trains, or rural areas. Shpg. wt., 8 lbs.

80-035. Type S-6a. Portable. For 5 volts. With 2 1/2 ft. cord and plug.

80-036. Type S-6b. For 6 volts. With permanent mounting bracket and 2 1/2 ft. cord.

80-037. Type S-32a. Portable. For 32 volts. With 6 ft. cord and plug.

NET EACH..... \$4.55

## KNIGHT STORAGE BATTERIES



Highest quality storage batteries for radio equipment, low-voltage lighting systems, etc. Only finest materials are used. Wing-nut clamps on terminal posts.

98-010 and 98-011 are ideal for farm lighting plants. Shipped by freight or express.

### 2 VOLT BATTERIES

Stock No.	Plates	A. H.	Wt.	NET
98-000	13	115	16	\$2.95
98-001	21	150	23	3.95

### 6 VOLT BATTERIES

Stock No.	Plates	A. H.	Wt.	NET
98-005	13	95	40	\$5.50
98-006	15	121	42	8.25
98-007	19	155	53	8.85

### 6 VOLT HEAVY-DUTY

Stock No.	Plates	A. H.	Wt.	NET
98-010	21	150	58	\$ 9.90
98-011	25	180	70	13.35

### EVEREADY AIR-CELL

98-020. Model A2600. Designed for 2-volt battery radios. Life, 1000 hours. For sets with maximum current drain of 660 ma. 24 lbs. Shipped express or freight only.

NET..... \$4.51

## QUALITY BATTERY CHARGERS AND BOOSTERS

### HOMCHARGERS



### 5-3 AMP. BOOSTER

Will keep radio and auto batteries fully charged. May be used in the home, garage, or mounted under hood of cars, directly on the steering post with mounting bracket supplied. For operation on 115 V., 50-60 cycle AC current. No radio interference. Operating cost is extremely low. Size: 11"x7"x4 1/4". Shpg. wt., 8 lbs.

80-024. NET..... \$4.85

### 6 AMP. CHARGER

Will recharge a dead battery in from 12 to 16 hours. Will pay for itself many times each year. For 115 volt, 50-60 cycle AC. Size: 11"x7"x4 1/4". Shpg. wt., 11 lbs.

80-025. NET..... \$8.08

### HEAVY-DUTY 10 AMP. CHARGER

10 amp. model designed for garage or service station use. Will quickly recharge any battery in perfect safety due to the automatic tapering feature. Has meter to indicate charging rate. Deluxe dash receptacle. For 115 volts, 50-60 cycle AC. Size: 12 1/4"x9"x8 1/4". Shpg. wt., 15 lbs.

80-026. NET..... \$12.61

### GENUINE G. E. TUNGAR CHARGER



High-grade 5 amp. unit for low cost charging of any type 6-volt storage battery directly from the supply line. Famous General Electric quality construction. Delivers full 5-ampere rate to keep battery fully charged; automatic tapering feature prevents overcharging. Supplied with steering post attachment, AC cord, charger cord, tungar bulb, and full instructions. For 115 Volts, 60 cycle AC. Shpg. weight, 13 lbs.

80-027. NET..... \$12.25

### MALLORY CHARGERS

### 6 AMP. NO. 5535B

Black wrinkle-finished case. Copper-sulphide dry disc type rectifier. Meter on the front panel indicates when battery is being charged. Output, 6 to 4 amps. Special over-size transformer provides trouble-free taper charging. Operates automatically on any battery. Equipped with new thermal bimetallic circuit breaker—no fuses are used; protects charger from improper battery connections. 7 7/8"x4 1/2"x4 3/4". For operation from 115 volts, 50-60 cycles. Shpg. wt., 8 lbs.

80-030. NET..... \$7.52

### No. 3C BATTERY BOOSTER

Designed to meet the need of present day car batteries. Added equipment on your car tends to drag down your battery. Plus this Booster into your car for a few nights a week, and do away with starting difficulties. Output, 4 to 2 amps, 6"x3 3/4"x3 3/4". Shpg. wt., 5 lbs. For 110-115 volt, 50-60 cycles.


80-031. NET..... \$5.19



### KING COLE CHARGING RESISTOR

Resistance unit for charging any 6 volt radio or auto storage battery from 32 volt lighting systems. Maintains uniform charging rate and does not injure batteries. Wt., 1 lb.

78-000. List, \$2.50. NET..... \$1.47

**LEADER HYDROMETER**  Accurate, well-made hydrometer for testing storage batteries. Has beaded float. Bulb is of live, resilient rubber. Shpg. wt., 1 lb.

78-005. NET..... \$2.50



# PORTA-POWER UNITS - OVER PACKS

## MALLORY VIBRAPACKS



Inexpensive, dependable source of power for portable radio receivers and transmitters, P.A., etc. Vibrator type units. Operate from 6-volt storage battery. Will supply up to 100 ma. Models 551, 552, G556, are self-rectifying; tube rectifiers are supplied with all other models. Less Filter. \*Special dual packs for high output. VP-555 supplies 200 ma. VP-557 supplies 150 ma. VP-G556 operates on 12.6 V., supplies 100 ma. VP-F558 operates on 32 V., supplies 100 ma. Avg. shpg. wt., 10 lbs.

No.	Type	Output Voltage	EACH
80-100	VP-551*	125-150-175-200	\$ 8.82
80-101	VP-552*	225-250-275-300	10.88
80-102	VP-553*	125-150-175-200	9.70
80-103	VP-554*	225-250-275-300	11.76
80-104*	VP-555*	300	22.05
80-106*	VP-557*	400	22.05
80-105	VP-G556	225-250-275-300	11.76
80-107	VP-F558	225-250-275-300	11.76
80-108	VP-223	Single Unit Filter	4.41

## NEW MALLORY FILTERED VIBRAPACK



Complete "B" power unit for any electronic device operating 250 V. DC with 60 ma. drain, powered from 6 V. storage battery. For auto, marine and airplane broadcast or short-wave receivers.

Ideal for mobile police receivers. Self-rectifying vibrapack is fully filtered.  $7\frac{1}{2} \times 3\frac{1}{2} \times 5\frac{1}{2}$  Shpg. wt., 9 lbs. **80-109. Type VP540. NET. \$11.76**

Send for Mallory Vibrapack Bulletin. 37-025. Mallory E555C Bulletin. FREE

## MALLORY REPLACEMENT RECTIFIERS



For battery chargers and boosters of Mallory and other makes. Also ideal power source for battery radio demonstration, coin machines, relays, etc. Univ. mtg. Wt., 3 lbs.

### MOST POPULAR TYPES

- 56-170. Type IB12C1M. Replaces 12C1, F12C1, 1F12C1B, 12C1F, F12C1K, IB12CX1, X12, X12, U12, 3C Booster. **NET \$2.87**
- 56-171. Type F16C3M. Replaces 16C3, F16C3B, 16C3D, X116, X16, M16. **NET \$3.33**
- 56-172. Type F16C3MB. Replaces 16C3B, XB16, M16. **NET \$4.28**
- 56-173. Type F24H1P. Replaces P24G1, W24A1. **NET \$2.78**

37-024. Mallory Technical Bulletin containing rectifier data and circuits, sent FREE

## ELECTRONIC CONVERTERS



Permits DC operation of AC appliances, radio sets, amplifiers, test equipment, fans, etc. Ruggedly constructed. Dependable and long lived. Size  $8\frac{1}{2} \times 6\frac{1}{2} \times 4\frac{1}{2}$ , except 110 V. type which is  $10\frac{1}{2} \times 8\frac{1}{2} \times 6$ . Average shpg. wt., 15 lbs.

Stock No.	DC Volts	Input Amps.	AC Output Volts	Output Watts	NET
80-120	6	14.7	110	75	\$21.56
80-121	12	10	110	100	21.56
80-122	32	3.7	110	100	17.64
80-123	110	1.6	110	150	25.16

### TYPE 490 VIBRATOR

56-185. For replacement purposes in Knight Mobile 6V.-110V. 30 Watt Universal Sound Systems. **NET \$7.84**

## GTC PORTA-POWER BATTERY ELIMINATORS



Model "U"

### PLAY BATTERY SETS FROM AC POWER LINES

Enjoy the economy and convenience of an electric set. No batteries to replace. No weak or noisy reception because batteries are becoming low. Porta-Power units operate at peak efficiency always. Save their cost in a very short time.



Model "L"

### STANDARD MODEL U FOR 1.4 VOLT SETS

Operates 1.4 or 1.5 V. midjet or portable sets from 105-125 volt, 50-60 cycle current. Eliminates batteries. Use with sets having up to five tubes. Fits into battery compartment of most sets. Overall size,  $2\frac{1}{2} \times 3\frac{1}{2} \times 6$ . Simple to connect. Has sockets for every type battery plug. Insert battery plugs into Porta-Power and radio is ready for operation. Has copper sulfide rectifier for "A" current; 6P5GT tube for "B" current. Provides 1.5 V. "A" at 200 ma.; 90 V. "B" at 13 ma. With 6' rubber cord, plug, and "on-off" power switch. Shpg. wt., 4 lbs. **80-170. NET. \$4.41**

### HEAVY-DUTY MODEL G

More rugged unit than model U described above. For 4, 5 and 6 tube home and portable receivers. Recommended for service shop, and demonstration work. Overall size:  $3\frac{3}{8} \times 6\frac{1}{2} \times 4\frac{1}{8}$ . "A" voltage is supplied by copper sulfide rectifier; "B" voltage supplied by 6P5GT tube. Shpg. wt., 5 lbs. **80-171. NET. \$5.58**

### FARM-TYPE MODEL L FOR 2 TO 3 VOLT SETS

For 2, 2.5, or 3-volt radios, having from 4 to 8 tubes. Eliminates all "A", "B", and "C" batteries. Operates from 105-125 V., 50-60 cycle AC. Delivers: 67.5, 90, 112.5, and 135 V. of "B", and from 1.5 to 22.5 adjustable "C." Split "C" obtained from external resistors. The "B" section can be adapted to supply 45 volts also. Size,  $6\frac{1}{2} \times 4 \times 5\frac{1}{2}$ . With instructions, 6 ft. cord, plug, and "on-off" switch. All voltages are available through screw type terminals. 6 lbs. **80-172. NET. \$5.85**

### HEAVY-DUTY MODEL P FOR 6 VOLT SETS

Permits operation of 6-volt 4 to 10 tube sets from 105-125 volts, 50-60 cycles AC. Delivers two 6 V. outputs, at 1.5 amps. each. May be connected in series for 12 V., or in parallel for 3 amps. Exceptionally quiet, hum-free operation. Size:  $3\frac{3}{8} \times 5\frac{1}{2} \times 6\frac{1}{2}$ . Shpg. wt., 8 lbs. **80-173. NET. \$8.20**

### NEW MODEL C FOR USE WITH 6 VOLT BATTERY

Replaces "A" and "B" batteries in 1.4 volt portable or farm radios, having from 4 to 6 tubes. Operates from 6 volt storage battery. Supplies 1.4 V. "A" at 300 ma. 90 V. "B" at 10 ma. Hum-free operation. Has 6 battery type sockets. Size,  $3\frac{3}{4} \times 6\frac{1}{4} \times 6$ . Shpg. wt., 6 lbs. **80-174. NET. \$7.35**

## STERLING BATTERY TESTERS



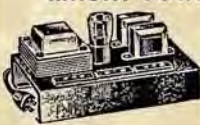
Watch-case type testers for "B" Batteries, Dry Cells, Storage Batteries, etc. Portable testers have dual coil construction providing loads necessary for testing special portable A and B batteries. Indispensable for portable sets. Shpg. wt., 1 lb.

- 78-020. Storage Battery Tester... **73c**  
 78-021. 0-35 Amps. For Dry Cells... **59c**  
 78-022. 0-50 Volts. "B" Tester... **59c**  
 78-023. Combination 0-35 Amp. and 0-50 Volts. **NET... 88c**

### PORTABLE-RADIO BATTERY TESTERS

- 78-024. 0-50 Volts, 0-2 Volts... **\$1.47**  
 78-025. 0-100 Volts, 0-2 Volts... **1.62**  
 78-026. 0-150 Volts, 0-2 Volts... **1.62**  
 78-027. 0-150 Volts, 0-10 Volts... **1.76**

## KNIGHT POWER PACKS



80-150. For operating receivers, experimental work and eliminating "B" batteries. Delivers full 300 V. filtered DC at 65 ma. Has intermediate taps. Also supplies 6.3 V. AC intermediate taps. For 115 V., 60 cycle AC. Wt., 8 lbs. **\$5.98**

C.T. at 1.5 amp. Less 80 rectifier tube. **NET. \$5.98**

80-151. Same as above except has filament winding at 3 amps. for 2.5 volt tubes. Less 80 tube. Shpg. wt., 8 lbs. **NET. \$5.85**

80-152. For Short Wave Receivers. Hum-free. Substantially built. Delivers 250 V. DC at 40 ma. Has intermediate voltage-taps. 2V. 2V. 4V. C.T. at 5 amps. Size,  $7\frac{1}{2} \times 4\frac{1}{2} \times 1\frac{1}{2}$ . Less 80 tube. Shpg. wt., 9 lbs. **\$5.98**

80-153. As above but for 6.3 volt tubes at 2 amps. Less 80 tube. Wt., 9 lbs. **NET. \$5.85**

## STANCOR POWER PACKS ECONOMY MODEL



Excellent for auto-radio sales, demonstration, and service test work. May also be used as a battery eliminator. Delivers 1.5 amp. of 6.3 volts DC at 6.5 amps. on continuous duty or 4.5 volts at 12 amps. intermittently. With 6 ft. cord and plug, line switch, heavy duty output terminals, fuse, and pilot light. Size:  $8 \times 6\frac{1}{4} \times 7\frac{1}{4}$ . For 115 V., 50-60 cycles. Shpg. wt., 17 lbs. **\$16.61**

80-135. NET.

### MASTER PACK



A compact power unit for heavy-duty work. Delivers 3 to 6 volts at 12.5 amperes continuously or 2 to 5 volts at 16 amperes for intermittent periods. The filter circuit reduces ripple to 6 percent. Ideal for demonstrating auto sets, farm sets, and portable radios. An excellent source of power for service, school laboratory work, and industrial applications. Controls and terminals conveniently mounted on sloping front panel. Output voltage variable in approximately  $\frac{1}{2}$  volt steps. Overload relay adjusted to 20 amps. Meter on front panel indicates output voltage. Size,  $13\frac{1}{2} \times 8\frac{3}{4} \times 6$ . Shpg. wt., 26 lbs. **\$25.43**

80-136. NET.

### MASTER DELUXE PACK

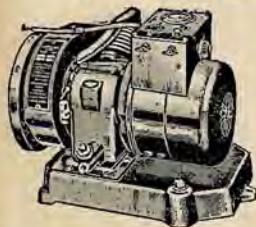
An all-purpose heavy-duty pack. Delivers 3-6 V. at 16 amps. continuous duty, or 2.7 to 6.4 V. at 22 amp. intermittently. Will power auto radio display and operate largest push-button units. Provides 8 V. at 9 amps. for testing vibrators. Ripple less than 5%. Fuse and overload-relay protect pack and equipment being operated. All controls on sloping panel. Voltmeter indicates output voltage which is variable in approximately  $\frac{1}{2}$  V. steps. Size,  $7 \times 13\frac{1}{2} \times 11$ . Shpg. wt., 50 lbs. **\$57.33**

80-137. NET.



# GAS ENGINE ELECTRIC PLANTS

## PIONEER "BLUE DIAMOND" 110 VOLT AC GAS-ELECTRIC PLANTS



### 300 WATT AC—200 WATT DC

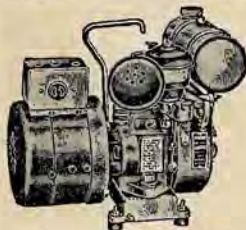
**98-500.** Model BD6. Supplies 300 watts at 110 V., 60 cycle AC, and 200 watts DC for charging 6-volt wet-cell batteries. Less filter and 6 volt starting battery. Gallon of fuel runs plant for 12 to 16 hrs. Size: 18" x 14 1/4" x 14 1/2". Wt., 125 lbs. **\$65.96**

**98-501.** Model BDR6. As BD6 above but with remote control push-button starting and stopping and with ammeter and voltmeter in control box. Shpg. wt., 127 lbs. Less starting battery. **\$86.59**

### RADIO FILTERS

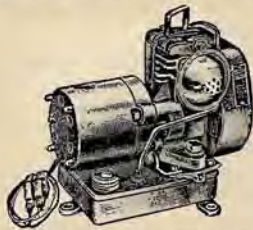
**70-000.** For 300 watt plant. Prevents power line noises. Wt., 3 lbs. **NET...\$4.95**

**70-001.** For 600 and 1000 watt plants listed at right. Wt., 3 lbs. **NET...\$12.38**



### PIONEER 400 WATT AC—100 WATT DC PORTABLE PLANTS

A full-sized gas-engine generator that weighs only 77 pounds. Supplies 110 V., 60 cycle AC at 400 watts continuously (450 watts intermittently) or 100 watts DC for charging 6-volt batteries. Single cylinder, air-cooled, 3/4 h.p. engine with rope-pull starting. Fuel consumption is 13 gallons per hour at rated load. Size: 18 1/2" long, 10 1/2" wide, 14 3/4" high. Has rubber mounting feet. Wt., 102 lbs. **98-504.** Model BLA-6. **NET...\$77.55**



### PIONEER GAS-ENGINE BATTERY CHARGER

A compact, 6-volt battery charger for use on farms, camps, boats, trailers, etc. Delivers 175 watts. Engine is 1/2 h.p. single cylinder, air-cooled type, with magneto ignition. Has automatic cut-out relay and ammeter. Starts by push-button from 6 V. battery (not included) or by rope pull. Built-in 2-quart gas tank in base. Size: 15 1/2" long, 13 3/4" high, 11 1/2" wide. Shpg. wt., 70 lbs. **98-505.** Model S-6. **NET...\$41.20**

## KATOLIGHT ECONOMICAL AC POWER PLANTS



### 350 WATT AC—110 V. 60 CYCLES

**98-520.** Model 19A. Designed for lighting homes, trailers, boats, sound trucks, farms, etc. Furnishes 110 V., 60 cycle AC at 350 watts or 22 Amps. DC for 6 V. battery charging. Has Johnson 3/4 h.p. single cylinder, air-cooled engine, shielded for radio operation. Operates 12 hours on a gallon of gasoline. May be started by crank or by 6 V. battery (not supplied). Has DC ammeter. Size: 20" long, 14" wide, 13 1/2" high. **\$74.97**

**98-521.** 500 WATT AC. Model 23A. Delivers 110 V., 60 cycle AC at 500 watts or 22 amps. DC for 6 V. battery charging. Has a Johnson 1 h.p. engine. Runs 9 hours on 1 gallon of gasoline. Size: 21" x 16 1/2" x 18". Wt., 170 lbs. **NET...\$116.13**



### 600 WATT AC—110 V. 60 CYCLE

**98-522.** Model 14A. Delivers 110 V., 60 cycle AC at 600 watts or 22 amps. at 12 volts for charging storage-batteries. 1.4 h.p. 1-cylinder, air-cooled engine runs 6 hours on 1 gallon of gasoline. Filtered and shielded for radio operation. Has gasoline filter, oil-bath air-cleaner. With ammeter, cutout, battery cables, charge control resistor, etc. For 12 V. battery or manual starting. Size: 17 1/2" x 22 1/2" x 19 1/2". Wt., 220 lbs. **\$154.35**

**98-523.** 1000 WATT AC. Model 26A. Similar in specifications to Model 14A above, but output is 110 V., 60 cycle AC at 1000 watts, or 12 V. DC at 22 amps. Uses a 2.4 h.p. engine. Size: 31" long, 20" high, 18" wide. Shpg. wt., 295 lbs. **NET \$219.03**

## TINY-TIM GAS ENGINE BATTERY CHARGERS



### 6 VOLT—240 WATT MODEL

**Model 62.** A new battery charger by Continental Motors with many exclusive features. Output is 6 V. DC at 240 watts. Unit shuts off automatically when battery is fully charged. Charging rate is variable. Push-button starting from 6 V. battery (not supplied). Rope-starter pulley provided for manual starting. Operating cost is only 1c per hour. Lubrication is automatic. With carrying handle, ammeter, cutout, etc. 15 1/2" long, 11 3/4" wide, 14 3/4" high. Shpg. wt., 90 lbs. **98-530.** **NET...\$43.72**

### 6 VOLT—150 WATT MODEL

**Tiny Tim Jr.** Similar to Model 62 described above, but output is 6 V. DC at 150 watts. The heavy-duty generator is coupled directly to the single cylinder air-cooled engine. Has push-button starter for 6 V. battery (not supplied). Gasoline tank has a capacity of 2 quarts. Unit is mounted on a sturdy wood base. With carrying handle. Size: 15 1/2" long, 11 3/4" wide, 13 3/4" high. Shpg. wt., 55 lbs. **98-531.** **NET...\$33.32**

## EICOR GAS ENGINE UTILITE POWER PLANTS



### 300 WATT AC—200 WATT DC

**Model 3AP6.** A compact, expertly-designed power plant with ignition shielding and radio filter. Output is 110 V., 60 cycle AC at 300 watts, or 6 V. DC at 200 watts. Quick-starting, single-cylinder, air-cooled engine rated at 3/4 h.p. at 1800 r.p.m. Flickerless light is assured by the fly-ball type governor. Tank holds 1 gallon of gasoline for 12 to 14 hours operation. Has shielded high-tension magneto ignition. Starting is either by rope pull or by battery (not supplied). Generator armature is connected directly to engine crankshaft. Brushes are easily accessible. Size: 12" high, 16" wide, 17" long. Shpg. wt., 115 lbs. **98-540.** **NET...\$67.13**

**98-541.** Model 3AR6. As above but for remote control use. Has DC ammeter. Requires 6 V. battery, Wt., 117 lbs. **NET...\$83.81**

## KNIGHT WINDCHARGER

### WITH 10-FOOT TOWER

Get FREE POWER from the wind with this deluxe Hy-Tower Charger. Costs nothing to operate; delivers up to 16-20 amperes at 6 volts, direct current. Charges 6 volt storage batteries to supply current for radios, lighting service, etc. Features: weather-proof, balanced-propeller; automatic tilt-back regulator; heavy-duty generator which cuts in at 370 RPM, and automatic turntable brake. With 10-foot all-steel tower and accessories. Wt., 75 lbs. **98-550.** **NET...\$21.75**



We can supply gas engine-generators and power plants for 6, 12, 32 and 110 volts, and up to 10,000 watts. Write us, describing your requirements, and we shall quote promptly.



# The Finest Hallicrafters 2 Great SUPER-SKYRIDERS FOR 1942!

## MODEL SX-28

- New 15 Tube Circuit
- Two Tuned RF Stages
- 550 KC to 42 MC
- 441, Noise Limiter
- Six Step Selectivity
- High-Fidelity Audio
- Inertia Coupling
- Full Bandspread

The Super Skyrider Model SX-28 receiver was designed as the result of exhaustive analysis of more than 600 reports and recommendations including the specification of a new, more efficient, wrinkle-chassis of 14-gauge steel with flanged edges and flame-welded corners. Brushed cadmium plating protects the chassis and metal components, with special box-crier type shields covering the gang condenser and coil assemblies. Panel is 1/2-inch steel with micro-co finish and etched control markings and will fit standard SKYRIDER RF chassis. The new SX-28 receiver is a 15-tube, 1500 ohm, 100% crystal set with 100% bandspread. Features include: AVC, 6SK7 2nd IF, 6B8 2nd detector, 6B8 AVC, amplifier, 1853 noise limiter, 6SK7 2nd IF, 6B8 2nd detector, 6B8 6SK7 audio driver, 2-6V6GT push-pull audio amplifier, and 52A rectifier. Audio output impedance is 5000 ohms to match the Hallicrafters R-12 or PM-23 speakers, and 500 ohms for long lines.

### HERE'S PROOF THE SX-28 IS TOPS!

**Frequency Range:** Tuning from 550 KC to 42 MC in six bands; No. 1—\$50 to 1020 KC, No. 2—1.5 to 3.1 MC, No. 3—2.9 to 5.9 MC, No. 4—5.75 to 11.5 MC, No. 5—10.4 to 21.5 MC, No. 6—20.4 to 42 MC. **Controls:** Micrometer scale main tuning and calibrated bandspread for 80/40/20/10 meter Amateur bands, both inertia controlled through pre-loaded ball-bearing mechanism. AVC gain, 50 dB. Inertia switch. Crystal oscillator. Six-position selectivity. Adjustable Noise Limiter. BFO pitch, and Standby switch. **Dials:** Indirectly illuminated. Direct-reading vernier type main dial with dial lock. **Wide-angle 15° S-meter:** Calibrated in "S" units and dB above "S9". **Audio:** High-fidelity push-pull audio stage with bass boost and bandpass filter. Input for 400 ohm impedance. **Audio output:** 5000 ohm, 5000 ohm, 5000 ohm, 5000 ohm, 5000 ohm. **Other Features:** Extremely high stable selectivity at all frequencies, bands 1 to 5, 2 MV. or less; band 6, 4 MV. Improved signal to image and noise ratio; temperature compensation, semi-floating condenser gang. **Speakers:** Separate Hallicrafters-Jensen high fidelity type. **Bass-Reflex speaker:** cabinet with 12" PM speaker, 5000 ohm impedance, 72 lbs. net; ship. wt. 87 lbs. **Weight:** 27 lbs. net; ship. wt. 37 lbs.

97-520, SUPER SKYRIDER MODEL SX-28.

**\$179.50**

With 2200 and crystal. Loss speaker.

### HALLICRAFTERS BASS-REFLEX SPEAKER

Attractive, bass-reflex cabinet designed to match the Hallicrafters SX-28 and SX-32 receivers. Complete with 12" PM speaker, and 5000 ohm matching transformer. Cabinet finished in smooth machine gray to match finish of both Super Skyriders models, SX-28 and SX-32. Size, 9 7/8" high, 16" deep, 21 1/2" wide. Vol. 72 lbs. **\$34.50**

## MODEL SX-32

- 13 Tube Superhet
- 500 KC to 40 MC
- 441, Noise Limiter
- 3-Step Crystal Filter
- Push-Pull 6V6GT Audio
- Two Tuned RF Stages
- Inertia Coupling
- Amplified AVC
- Inertia Tuning Dial

Taking its place in a long line of "winners," the Super Skyrider SX-32 brings to you all the features of the SX-28, the SX-32 with its effortless ease of operation will delight the most critical Amateur or SWL. The attractive, inoreco-finished 1/2" thick steel panel fits standard relay rack if desired; machine tool gray wrinkle-finished cabinet and cadmium plated steel chassis are flame-welded or heavy gauge steel, for maximum strength. **AVC:** 6SK7 2nd IF, 6B8 2nd detector, 6B8 AVC, amplifier, 1853 noise limiter, 6SK7 2nd IF, 6B8 2nd detector, 6B8 6SK7 audio driver, 2-6V6GT push-pull audio amplifier, and 52A rectifier. Audio output impedance is 5000 ohms to match the Hallicrafters R-12 or PM-23 speakers, and 500 ohms for long lines.

### HAS SIX-STEP VARIABLE SELECTIVITY

Controls are: RF and AF gain, ANL, BFO pitch, Bandwidth, Tone control, Antenna trimmer, Crystal phasing, AVC on-off and BFO switch. Selectivity control, wide-angle "S" meter calibrated in "S" units and dB, direct-reading vernier-type main tuning, calibrated bandspread tuning, and headphone jack. Six-step selectivity ranging from Broad to Sharp. Inertia and extremely high stable selectivity permits maximum performance under widely varying conditions. Additional features are: Amplified AVC action, semi-floating gang condenser, rugged cabinet especially designed to provide adequate ventilation, special box-crier type shields over condenser gang and coil assemblies, and 5000 ohm and 5000 ohm output sizes of 20V<sup>2</sup> long 10" high, 1 1/2" deep. Operates from 110 volts, 60 cycles AC. Ship. wt. 87 lbs.

97-521, SUPER SKYRIDER MODEL SX-32.

With tubes and crystal. Loss speaker.

**\$149.50**

Terms: \$17.28 down, \$14.86 monthly for 8 months.

### SX-28 WITH R-12 SPEAKER

The Model SX-28 receiver with R-12 Hallicrafters Bass-Reflex speaker is available at any price! For the Amateur or SWL who wants the "tops" in Communication or Short-wave reception, or as a precision set for use in the home, we recommend the SX-28 with R-12 combination. Vol. **\$214.00** **CASH PRICE**..... **\$184.00** \$51.50 down, \$21.27 monthly for 8 months.

### SX-32 WITH R-12 SPEAKER

For the discriminating Amateur or SWL, we offer this "matched" combination of the SX-32 receiver complete with the R-12 12" PM speaker in Bass-Reflex cabinet. Here's an attractive, smooth performing combination. Buy it now! Limited economical time Payment Plan, Vol. **\$184.00** \$46.00 down, \$18.29 monthly for 8 months.





# World-Famous Hallicrafters



## THE "SUPER DEFIANT" SX-25

It's a "world-beater" for value! Designed and built with typical Hallicrafters precision, the SX-25 uses 12 tubes, including rectifier, and tunes from 540 KC to 42MC, with Frequency-Meter tuning. Among its many desirable features are: Illuminated "S" meter, calibrated in "S" units and db.; Six-step selectivity with crystal filter; Automatic Noise Limiter; Drift-compensated oscillator; Standby switch with break-in relay terminals; Variable pitch BFO; Antenna input for Marconi or doublet; Speaker terminals for either 5000 ohms or 500 ohms; and Bass-treble tone control. Panel controls are: Main tuning, Bandspread tuning, Crystal phasing, Standby switch, and BFO control. Two TRF stages provide ample selectivity and sensitivity. The SX-25 is supplied with tubes and crystal. Separate 10" PM speaker in metal cabinet matches the receiver. Finished in attractive gray wrinkle. 19 1/2" long, 9 1/2" high, 11 1/4" deep. Has provisions for operation from emergency battery bank or from electronic-converter. For operation on 110 volts, 50-60 cycles AC. Shpg. wt., 45 lbs.

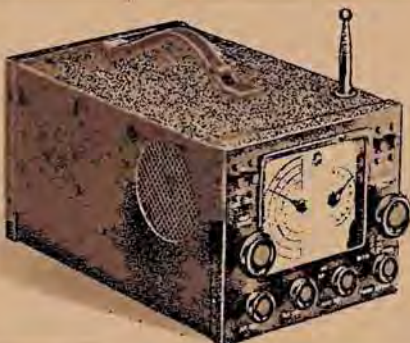
**97-513. MODEL SX-25, less speaker. NET CASH PRICE \$9450**

Terms: \$23.62 down, \$9.39 monthly for 8 months.

**97-516. MODEL SX-25, with speaker. Shpg. wt., 60 lbs.**

**NET CASH PRICE \$109.50**

Terms: \$27.38 down, \$10.88 monthly for 8 months.



## THE NEW S-29 "SKY TRAVELER"

The Model S-29 "Sky Traveler" provides true communication performance in a unit so compact, so easily carried with you, that you'll want to make it your constant companion wherever you go. It operates on 110 volts, either AC or DC; and in addition it operates from self-contained batteries! Tuning range is from 542 KC to 30.5 MC in four bands, with full electrical bandspread available at any desired portion of the tuning range. The S-29 uses new 1.4 volt tubes as follows: 1T4 RF stage, 1R5 mixer, 2-1P5GT IF's, 1H5GT Detector-AVC-Audio, 3Q5GT Audio Amplifier, 1G4GT Beat Oscillator, 1G4GT Noise Limiter, and 50Y6GT Rectifier. Controls are: Main tuning, Bandspread, RF gain, AF gain, Bandswitch, Power switch, AVC, BFO, Noise Limiter, and Standby switch. Has built-in speaker with jack for headphone use. Antenna input for doublet or single wire antenna, but also has a self-contained collapsible antenna for portable use, that extends nearly 3 feet in height. Ingenious self-contained charging circuit prolongs life of batteries for economical portable use. Improved Noise Limiter circuit and permeability-tuned RF and IF circuits contribute to exceptionally fine performance. Extremely rugged construction. Metal cabinet is finished in black crackle; size, 7"x8 1/2"x13 1/4". Weight, including batteries, only 18 lbs. Shpg. wt., 23 lbs.

**97-514. MODEL S-29. With tubes and batteries. \$6950**

**NET CASH PRICE**

Time Payments: \$17.38 down, \$9.21 monthly for 6 months.



## THE "SKY CHAMPION" S-20R

Meet the Sky Champion!—a real winner for quality performance—a blue-ribbon champion in its price class. It's "got what it takes" to make it a favorite with the Short-Wave DX fan and Amateur operator. Among its many features are: Separate Bandspread Dial, RF and AF Gain Controls, Individual Coils for each band, Inertia Tuning Mechanism, Beat Frequency Oscillator, AVC Switch, Tone Control, Beat Oscillator Switch, Send-Receive Switch, Pitch Control, Band Switch, Phone Jack, and others. Here, too, is continuous tuning in four overlapping bands from 540 KC to 44,000 KC for dependable reception of Broadcast, Amateur, and Short-Wave bands. Nine tubes including rectifier: 3-6SK7, 6K8, 6SQ7, 6F6G, 6J5GT, 6H6, and 80—in a circuit which provides maximum gain, selectivity, and sensitivity. Speaker is built-in—there's nothing else to buy. Signal-to-noise ratio is surprisingly high. In fact, in every way, the Sky Champion is a super-efficient low-priced receiver that will put a real thrill into SW DX-ing or Amateur operation. Has provisions for operating from batteries or from vibrator type power pack and 6 V. battery, for emergency service at locations far removed from the 110 volt AC supply lines. For 110 V. 50-60 cycles AC. Size: 18 1/2" long, 8 1/2" high, 9 3/4" deep. Shpg. wt., 34 lbs.

**97-510. S-20R. With Tubes. NET CASH PRICE \$5450**

Time Payments: \$13.63 down, \$7.22 monthly for 6 months.

**97-509. Universal Model S-20R. With all the S-20R features, but operates from 110-250 volts, 25-60 cycles AC. Otherwise identically the same as S-20R receiver described above. NET CASH PRICE \$59.50**

Time Payments: \$14.88 down, \$7.89 monthly for 6 months.



## THE "DEFIANT" MODEL SX-24

The SX-24 is not just an economically priced receiver, but is truly outstanding in its brilliant performance. Frequency Meter Tuning is provided by means of two translucent illuminated tuning dials, one for main tuning control and one for the electrical bandspread system; both are directly calibrated. Main dial is calibrated in MC, bandspread dial accurately calibrated for the Amateur 80, 40, 20 and 10 meter bands. Built-in Noise Limiter, Variable Selectivity in six positions from Sharp Crystal to Broad dynamic speaker is supplied in gray wrinkle metal cabinet with chrome trim to match receiver. Supplied complete with 3-6SK7, 1-6K8, 1-6SQ7, 1-6F6G, 1-6H6, 1-76 and 1-80 tubes. For 110 volts, 50-60 cycles AC; with provisions for operation from battery bank or electronic converter for emergency use. Size, 19 1/2" x 9 1/2" x 10 1/4". Wt., 40 lbs.

**97-511. MODEL SX-24, less speaker. NET CASH PRICE \$7450**

Time Payments: \$18.63 down, \$9.87 monthly for 6 months.

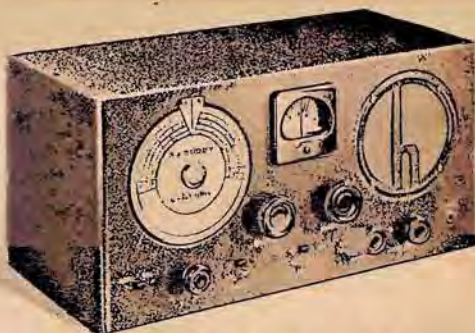
**97-512. MODEL SX-24, with speaker. Shpg. wt., 35 lbs. NET CASH PRICE \$89.50**

Time Payments: \$22.38 down, \$8.90 monthly for 8 months.

**97-572. PM-23 10" PM Speaker in matching metal cabinet. Complete with built-in coupling transformer to match 5000 ohm output of Hallicrafters receivers using external speaker. NET \$15.00**



# Receivers..



## The "SKY BUDDY"

For the beginning Amateur, the Short-Wave Listener, or the boy in quest of new thrills by way of Short-Wave Radio, the Sky Buddy has always been the outstanding low-cost choice. This latest improved model offers even greater value than ever before. Tunes with full electrical band-spread from 545 KC to 44,000 KC in four bands and covers Standard Broadcast and Short-Wave Broadcast bands as well as the Amateur 160, 80, 40, 20, and 10 meter bands. Features are comparable to those usually found only in higher-priced receivers: separate band-spread dial, Beat Frequency Oscillator, send-recv switch, AVC switch, Pitch control, AF gain control, phone jack, etc.

### OPERATES FROM 110 VOLTS AC OR BATTERIES

The Sky Buddy has built-in speaker offering excellent tone quality. Uses only six tubes including rectifier: 1-6K8, 1-6SK7, 1-6SQ7, 1-76, 1-41, and 1-80—but its performance is like most 8 tube sets. Antenna input for doublet or Marconi type systems. Headphone jack cuts out speaker when phones are plugged in. Although supplied for AC operation, the Sky Buddy is also equipped with a plug and socket arrangement at the rear which permits use of a 6 volt storage battery and "B" batteries or vibrator power pack for portable use or where AC lines are not available. With set of matched tubes and complete instruction manual. The Sky Buddy is a true communication-type receiver at a very moderate price. For 110 V. 50-60 cycles AC current. Shpg. wt., 20 lbs.

**97-500. MODEL S-19R "SKY BUDDY." \$325.00**  
NET CASH PRICE.....

Terms: \$8.13 down, \$6.46 monthly for 4 months.

## THE SKYRIDER "MARINE"

Designed for specialized communication requirements. For consistently dependable reception in the Marine and Aircraft service, for Jewelers who look for reliable time-signal reception, Press and Relay services, Broadcast and Coastal standby service, the S kyrider Marine is unexcelled. Total tuning range is 110 KC to 18.5 MC (2150 meters to 16.2 meters) available in four over-lapping frequency bands. Powerful improved 8-tube circuit uses 3-6SK7, 1-6J5, 1-6K8, 1-6SQ7, 1-25L6, and 1-25Z5 rectifier tubes. Sensitivity and selectivity are excellent. IF selectivity is only 18 KC wide at 10 times down. Greatly improved image rejection at the higher frequencies is achieved through the use of a 16000 KC IF amplifier system. Main tuning dial is directly calibrated over 338 degrees; coupled through slow ratio mechanism to the separate mechanical-bandspread dial to provide easy and simplified tuning. Sturdy metal cabinet finished in black wrinkle. All metal parts are covered with special plating or finish process for protection against weather or varied climatic conditions. Controls are: Tuning, AVC, BFO, RF and AF gain, Tone, Bandswitch, and Standby switch. Built-in speaker is automatically muted when headphones are plugged into phone jack. 18 1/2" long, 9 1/4" deep, 8 1/2" high. For 110 volts, AC-DC operation. For 6V. DC, use electronic converter. (See page 126). With tubes. Shpg. wt., 31 lbs.

**97-501. SKYRIDER MARINE MODEL S-22R. \$745.00**  
NET CASH PRICE.....

Time Payments: \$18.63 down, \$9.87 monthly for 6 months.



## MODEL S-27 FM-AM RECEIVER

A 15-tube Ultra-High-Frequency receiver designed for reception of either Amplitude-Modulated or Frequency-Modulated signals. Ideally suited to the specialized requirements of Municipal departments, Amateurs, Broadcast-Relay systems, Airline and Government services, etc. Range: 27 MC to 145 MC, continuous coverage in 3 bands. Tubes: 950 RF Amplifier, 954 1st Detector, 955 Oscillator, 1852 1st IF, 1853 2nd IF, 6SK7 3rd IF, 1852 Limiter, 6H6 Frequency-modulated detector, 6H6 Amplitude-modulation detector and ANL, 6CB6 Audio amplifier and Phase inverter, 2-6V6 Push-pull Audio amplifier, 6J5 Beat Oscillator, VR-150 Voltage Regulator, and 5Z3 Rectifier. Controls: Tuning, RF gain, AF gain, Antenna trimmer, IF Selectivity, BFO, BFO pitch, AVC, Noise Limiter, Tone, FM-AM, Standby switch. Features: Silver-plated condenser gang contacts; Flywheel gear-driven tuning mechanism with separate bandspread scale having 2400 divisions for full rotation; Shock-mounted RF assembly; Plate-tuned oscillator; Air-tuned iron-core IF's, and Zero-center "S" meter for accurate and easy tuning of FM signals. Speaker output, 5,000 ohms. For 110 volt, 60 cycles AC. 19" long, 9" high, 14" deep. Shpg. wt., 75 lbs.

**97-502. MODEL S-27, with tubes, less speaker. \$195.00**  
NET CASH PRICE.....

Time Payments: \$48.75 down, \$19.38 monthly for 8 months.

**Model S-27B.** Ultra-High-Frequency FM-AM receiver with tuning range of 36 MC to 160 MC in 3 bands. Band #1, 36-60 MC; Band #2, 56-94 MC; Band #3, 92-160 MC. In all other respects exactly the same as Model S-27 above. For 110 volts, 60 cycles AC. Wt., 75 lbs.  
**97-503. MODEL S-27B, with tubes, less speaker. \$195.00**  
NET CASH PRICE.....

Time Payments: \$48.75 down, \$19.38 monthly for 8 months.

## NEW HALLICRAFTERS MODEL S-33 AMATEUR SKY TRAINER

- 2 1/2-Meter Transceiver
- For Voice or ICW
- Tunes 112-118 MC
- Built-in Mike
- Push-to-Talk Switch
- Built-in Speaker
- New 3 Tube Circuit
- Matched Antenna
- Battery Powered
- Complete, No Extras
- With Tubes, Batteries
- Weighs only 16 lbs.



Designed by the famous Hallcrafters Laboratories, the Sky Trainer is the Amateur version of the Ultra-compact-UHF 2-way radio set. An ideal unit for the advanced Amateur or beginner, providing as it does a complete 2 1/2-meter station in one easily carried unit. Encased in a sturdy steel cabinet with carrying handle, the S-33 is complete and entirely self-contained—there are no additional accessories to carry or to lose. Uses 1-3Q5 tube as RF oscillator in transmit position and as self-quenching detector in the receive position. 1-1H5 tube serves as microphone amplifier for transmitting and as 1st audio stage when receiving. 1-3Q5 tube serves as power output stage for receiving and as modulator stage for transmitting. Talk-Listen switch on front panel; to transmit, just press lever down and talk—to listen again just release lever. Can be used for transmission of ICW code signals by inserting key into jack provided for it.

### SINGLE CONTROL TUNING—PHONE OR CW

Only one tuning control covers range of 112-118 MC; functions as frequency setting control for either receiver or transmit positions. Built-in PM speaker in front panel serves as mike for transmission of voice. No additional mike or headphones is required. Matched antenna mounts on low-loss terminals on side of cabinet. Uses 2 Eveready #482 and 2 Eveready #746 batteries. Panel controls consist of Tuning control, Volume, Talk-Listen switch, Key Jack. Size: 10" high, 6 1/2" wide, 4 1/2" deep. Total weight with all batteries is only 16 lbs. Complete with tubes, batteries and antenna. Shpg. wt., 18 lbs.

**97-504. MODEL S-33 SKY TRAINER. \$295.00**  
NET CASH PRICE.....

Terms: \$7.38 down, \$5.86 monthly for 4 months.



# HOWARD AMATEUR RECEIVERS



## HOWARD "PROGRESSIVE SERIES" RECEIVERS

The Howard "Progressive Series" Plan protects your investment in your receiver, ends trade-in loss and obsolescence! Your Model 435-A receiver can be converted at a later date to a Model 436-A at the factory for only \$12.00, or to a Model 437-A for only \$27.55! The Model 436-A

receiver can likewise be converted to a Model 437-A for only \$21.00 (\$28.50 with crystal). We Can Supply all Howard Communication receivers and accessories. For complete data on all Howard receivers ask for 37-125 Howard Catalog. SENT FREE ON REQUEST.

### MODEL 435-A

The Model 435-A is a 7-tube receiver (including rectifier), with a TRF stage on all bands! Tunes from 540 KC to 43,000 KC in four frequency range bands; controlled by a selector switch on front panel. Range indicating pointer at side of multi-scale full-vision dial tells you at all times exactly which frequency range is in use. Full-vision dial is of the slide-rule type with travelling vertical marker for main tuning; separate bandspread indicator dial at side. Bandspread dial can be used to spread out any desired portion of the total tuning range, permitting better reception of stations in closely crowded bands. Features include: Iron-core IF's, Beat Oscillator with adjustable pitch control, Electrical bandspread, AVC, Send-Receive standby switch, Audio gain control, built-in 6 1/2" dynamic speaker and power supply, provision for external speaker, and socket for 610 pack for 6 V. DC operation. Compact table cabinet; gray wrinkle finish. For 115 volts, 50-60 cycles AC. Complete with tubes. Shpg. wt., 25 lbs.

**\$34.95**

97-600. CASH PRICE.....  
\$8.74 down, \$6.95 monthly for 4 months.

### MODEL 436-A

Here is a truly fine little communication receiver that incorporates all of the features of the basic Model 435-A, yet has additional refinements to make it literally a "stand out" in the medium price class. Uses eight tubes including rectifier. Has TRF stage on all bands! Continuous coverage from 540 KC to 43,000 KC in four ranges. Full-vision slide-rule dial has band-in-use indicator at one end with bandspread scale at other end. Both main tuning and bandspread tuning controls use new Howard Inertia Knobs to provide effortless fly-wheel tuning. Electrical bandspread can be obtained at any desired point in the total tuning range. Built-in 6 1/2" inch dynamic speaker, with provision for external speaker. Has external socket for addition of the No. 610 power pack. Efficient automatic noise limiter circuit increases signal-to-noise ratio. Entirely self-contained in a small and compact table model cabinet, gray wrinkle-finished. For 115 volts, 50-60 cycles. Supplied complete with tubes. Shpg. wt., 25 lbs.

**\$39.95**

97-601. CASH PRICE.....  
\$9.99 down, \$7.94 monthly for 4 months.

### MODEL 437-A

The Model 437-A is "tops" in the Howard Progressive receiver series. Uses 9 tubes including rectifier. Has TRF stage on all bands! Tunes from 540 KC to 43,000 KC in 4 bands, covers all important short wave and experimental frequencies. Selection of desired band is by means of panel band-change switch. The Model 437-A, like the 435-A and 436-A, is housed in an attractively styled, sturdy metal cabinet. Built-in 6 1/2" dynamic speaker; muting-type headphone jack is provided to shut off speaker automatically when phones are used. Exceptionally high selectivity is assured by the two iron-core IF amplifier stages; further selectivity for both phone and CW is provided by the crystal filter. The 437-A has all controls used in the 435-A plus crystal in-out switch and phasing control. Gray wrinkle finish cabinet. For 115 volts 60 cycles. Supplied complete with tubes. Shpg. wt., 27 lbs.

**\$59.50**

97-602. MODEL 437-A, less crystal. CASH PRICE.....  
\$14.88 down, \$7.89 monthly for 6 months.  
97-603. MODEL 437-A, with crystal. CASH PRICE.....  
\$16.75 down, \$8.88 monthly for 6 months.



## NEW! HOWARD AC-DC MODEL 445

The Howard Model 445 receiver gives you full 9 tube performance with only 6 tubes, and operates from 105-117, 120-150, and 210-240 volts either AC or DC! Identical in appearance to the Model 435-A, the 445 covers a continuous tuning range of 540 KC to 43 MC. Range indicator shows which of the four frequency bands is in use. Full vision multi-scale slide-rule type dial; separate 180 degree scale for bandspread. Features include: 3-gang condenser, TRF stage on all bands, adjustable pitch BFO, Iron core IF's, built-in speaker, provisions for external speaker, calibrated main dial, electrical bandspread, headphone jack, and universal AC-DC operation. Tubes used are: 12SG7 RF, 12SA7 Converter, 12SF7 IF-Diode, 12SC7 AF-BFO, 35L6 Beam Power output, and 35Z5 Rectifier. Compact gray wrinkle finished cabinet. With tubes. Wt., 25 lbs.

**\$34.95**

97-605. CASH PRICE.....  
Terms: \$8.74 down, \$6.95 monthly for 4 months.

## HOWARD MODEL 490

Professional type 14 tube communication receiver designed to Government specifications. 5 band tuning range from 540 KC to 43.5 MC; laboratory type drum dials for main tuning and bandspread; nine position selectivity; signal level meter; crystal filter; many other features. See Howard catalog 37-125 (Free on request) for full details. Wt., 57 lbs.

97-604. CASH PRICE.....  
Terms: \$42.38 down, \$16.85 monthly for 8 months.

**\$169.50**



## "650" PRESELECTOR

Consists of two tuned RF stages, having an extremely high order of usable gain, with exceptional sensitivity to weak signals. Designed so that it may be used with any receiver. Will pep up reception and make many signals that were unreadable on the receiver alone audible at good signal strength. Has provision for use of either single wire or doublet antenna or for the built-in loop with three-position antenna switch. Full tuning coverage from 540 to 43,000 KC. Loop antenna can be rotated through 360 degrees to get most effective directional characteristics to eliminate QRM or unwanted signals. For operation on 115 volts, 50-60 cycles AC. Shpg. wt., 20 lbs. Supplied less loop.

88-300. CASH PRICE.....  
\$29.95  
\$7.49 down, \$5.95 monthly for 6 months.

88-301. Set of four Loop Antennas. Cover complete tuning bands of 540KC to 34 MC. NET.....  
\$7.50

## "610" POWER PACK

A compact, vibrator-type power supply for use with the Howard Models 435-A, 436-A, and 437-A receivers when operated at points not supplied with 115 volts 60 cycles AC. Can also be used with other small receivers or for emergency transmitters of low power. Connecting cable has polarized plug to fit socket provided on Howard receivers. Static shield in cable prevents RF pickup and radiation of vibrator noise. RF chokes in plate voltage lead insure quiet operation of receiver at high frequencies. Operates from a single 6-volt storage battery. Supplies 6 volts DC for filaments and 300 volts at 60 ma. When used with Howard 435-A receiver, total drain on supply battery is only 6 1/4 amperes; total drain with Model 437-A is 7.6 amperes; total drain at full load of 60 ma. is 7 1/4 amperes. Has on-off switch on front. Overall case size, 6" high, 5 1/2" deep, 3" wide. Shpg. wt., 8 lbs.

88-302. NET.....  
\$12.50



# NATIONAL

## COMMUNICATION RECEIVERS

### NC-200 FEATURES

- Tunes 490 KC to 30 MC
- Ten Frequency Ranges
- Full Calibrated Tuning
- Six-Step Selectivity
- Uniform Bandspread
- 30-1 Tuning Ratio



## THE NC-200 IS NATIONAL'S FINEST!

The National NC-200 receiver with its many newly developed features represents one of the most outstanding developments of the famous National engineering staff. Twelve tubes are used: 6SK7 Tuned RF stage, 6K8 First Detector, 6J5 HF Oscillator, 6K7 1st IF, 6SK7 2nd IF, 6C8G Second Detector-Limiter, 6SJ7 AVC, 6SJ7 BFO, 6F8G Phase Inverter, 2-6V6 Push-pull Audio, and 5Y3G as rectifier. A full-vision dial operated through a 30-1 gear drive is accurately calibrated on ten frequency ranges. Six of these ranges are for general coverage over the total tuning range from 490 to 30,000 KC; four additional ranges provide calibrated bandspread of the Amateur 80/40/20/10 meter bands. Automatic range-in-use indicator is built in the dial. Bandspread on Amateur bands is extremely generous, covering most of the 180° dial scale; no resetting is necessary to return to any pre-logged station or frequency. Uniform bandspread is provided through a unique tapped coil arrangement similar to that used in the famous HRO receiver, and the same knob used for tuning is used to shift bands through a clever mechanical device developed especially for the NHU and NC-200 receivers. The sensitivity of the NC-200 is particularly high, with an input signal of only 1 microvolt providing 1 watt of audio output. Newly developed RF coupling circuits provide full sensitivity up to the extreme high end of the tuning range at 30 MC. All RF and IF coils are wound on molded polystyrene coil forms, assuring freedom from circuit losses caused by humidity. All critical components, such as tuning and trimming condensers, are insulated with isolantite, to insure high stability at all frequencies. Temperature compensation in the high frequency oscillator, RF stage, and first detector circuits reduces frequency drift to a negligible value. Six step selectivity provided by a new type crystal filter will meet with instant approval from the most critical amateur or commercial operator. Other important features are: Wide range adjustable series-valve-noise

limiter, calibrated signal level meter, provision for battery operation in emergencies, standby switch, separate 10" PM speaker in matching metal cabinet, attractive modern cabinet finished in two-tone gray and chrome, self-balancing phase inverter circuit, 8 watts undistorted audio output, image ratio of better than 30 db. at 10 meters, separate high frequency oscillator and first detector tubes, absolute minimum of inherent circuit noise, and an attenuator type tone control. All controls are conveniently grouped for maximum simplicity in operation. Controls include: Combination tuning and band-change knob, RF and AF gain controls, BFO on-off and variable pitch, 3 position fl.-plate-standby switch, Crystal selectivity, Crystal phasing. The high selectivity and sensitivity of the NC-200 provide a new standard of overall performance. The NC-200 will satisfy even the most critical operator. Supplied complete with tubes, crystal, speaker and instructions. For 115 volts, 50-60 cycles. Shpg. wt., 95 lbs.

**97-650. NATIONAL NC-200TG. COMMUNICATION RECEIVER.**

**CASH PRICE \$174.50**

Time Payments: \$43.63 down, \$17.34 monthly for 8 months.

**97-651. NATIONAL NC-200RG. Same as above but for Relay Rack mounting. With rack-panel mounted speaker.**

**CASH PRICE \$188.00**

Time Payments: \$47.00 down, \$18.69 monthly for 8 months.

We can also supply all other National Communication Receivers, as well as National Transmitters. Write for literature. 37-002. National Catalog—Sent FREE on Request.



### NEW! NATIONAL MODEL NC-45

An improved model of the famous NC-44, the NC-45 is an 8-tube receiver covering the entire range from 540 KC to 30 MC in four bands. Operating from either AC or DC, the NC-45 fulfills the need for a universal type communications receiver, capable of high performance at moderate cost. Tubes used are: 6K8 1st Det.-H.F. Osc. 2-6L7 perambulator-tuned IF's, 6SQ7 combined 2nd Det.-AVC-1st AF, 6H6 self-adjusting series-valve noise limiter, 6J5 BFO, 25L6G Beam power audio output, and 25Z5 rectifier. One of its finest features is the ease of accurate tuning made possible by a straight-line-frequency condenser in conjunction with a separate bandspread condenser. Slide-rule type dial has calibrated main tuning and separate scale for electrical bandspread with vernier tuning. Housed in gray wrinkle finished cabinet with speaker in matching cabinet. Supplied with tubes and speaker. Operates from 105-130 volts AC or DC. Shpg. wt., 45 lbs.

**97-652. CASH PRICE \$575.00**

Terms: \$14.38 down, \$7.62 monthly for 6 months.

**NC-45A.** For operation from straight 110 volt, 50-60 cycle AC only. Otherwise identical to the NC-45 above. This straight AC model is recommended for use where 50-60 cycle current is available. Wt., 45 lbs.

**97-653. CASH PRICE \$575.00**

Terms: \$14.38 down, \$7.62 monthly for 6 months.

**NC-45B.** A battery model of the NC-45. Operates from 6 V. storage battery and 135-volt "B" batteries. Less batteries. **97-654. CASH PRICE \$575.00**

Terms: \$14.38 down, \$7.62 monthly for 6 months.



### HAMMARLUND MODEL HQ-120X

The Hammarlund HQ-120X receiver was designed to meet the most critical demands of both the Amateur and the professional operator. This ultra-modern 12 tube including rectifier receiver covers a continuous range from 540 KC to 31 MC in 6 bands. Special tuning condenser construction permits 310 degrees of bandspread for each Amateur band; direct calibration of tuning dial permits accurate logging. A new type of crystal filter giving six positions of selectivity for "Phone or CW" makes operation a pleasure even under unusually crowded conditions of reception on Amateur bands. Built-in noise limiter circuit overcomes objectionable noise disturbances; operates with or without AVC on and is controlled by panel on-off control. "S" meter indicates in "S" units and is calibrated S1 to S9 and up to 40 DB above "S9." Tuned preslector stage with three high-gain IF stages produces highest possible signal-to-noise ratio with maximum attenuation of image frequencies. Panel control of antenna compensator permits adjustment for peak performance on each band. Send-Receive switch with external break-in relay terminals. Automatic voltage regulator compensates for line variations. Gray Crackle finished cabinet and etched panel. Supplied with 10" speaker. For 110 volts, 50-60 cycles AC. Shpg. wt., 47 lbs.

**97-680. HQ-120X, with tubes and speaker. \$138.00**

**CASH PRICE**

Terms: \$34.50 down, \$13.72 monthly for 8 months.

**97-681. SC-10 Gray cabinet for HQ-120X speaker. \$3.90**

We can also supply the Hammarlund Super-Pro Professional Communication receivers. Descriptive bulletin with prices on request. 37-022. "Super-Pro" Booklet—Sent FREE on Request.



# STANCOR TRANSMITTER KITS



## 10-P TRANSMITTER KIT

An easy-to-assemble little phone-CW rig that packs a real wallop on any band from 160 to 20 meters. Completely self-contained. Uses 1-6J5 as a Pierce crystal oscillator, 1-6L6 as RF amplifier, and 1-6V6 as combined speech-amplifier-modulator with input for single-button type carbon mike. Only one inexpensive Bud Midget coil required for each band (see coil listing on page 149). Plate in put up to 12 watts for phone, 20 watts for CW. Low impedance output for connecting to link line or direct to 72 ohm antenna feed line. Kit contains all parts necessary, including cabinet. Accessories (not supplied) are: 1-6J5, 2-6L6, and 1-80 rectifier, 1 Triplet 2" square 0-100 ma. meter, crystal, carbon microphone and plug-in coils. Model 10-P is ideal as an auxiliary rig or for portable use away from home location. Can be assembled and wired in a minimum of time. Operates from 115 volts, 60 cycles. Shpg. wt., 17 lbs.

BB-400. Less accessories. NET PRICE..... **\$22.50**

BB-430. Accessory Kit. Consists of 1 Knight 6J5, 2 Knight 6L6 tubes, and 1 Knight 80 tube, 1 Bud plug-in coil (specify band-coil desired), 1 Triplet 0-100 ma. meter, and 1 Knight 160 or 80 meter crystal with Biley CM2 holder. (Specify which crystal and approximate frequency on order.) NET PRICE..... **\$9.05**



## 112-T TRANSCEIVER KIT

An extremely compact high-powered transceiver for the Amateur 2 1/2 meter band of 112-116 MC. Uses a Hytron HY-75 tube serving as RF oscillator for transmitting and as an ultra-audion self-quenching detector for receiving; 1-6J5 and 1-6V6 tubes serve as speech-amplifier-modulator for transmitting and as audio stages in the "receive" position. Has built-in 3 1/2" PM speaker. Transmitting power input is 10 to 15 watts. Speech input is for a single button carbon mike; variable antenna coupling permits maximum performance with most conventional types of 2 1/2 meter antennas for both receiving and transmitting. Power requirements: 300 volts DC at 100 ma. 6.3 V. at 3.35 A. from separate AC-operated power pack or batteries (power supply not included). Kit includes all parts and handsome gray finish metal cabinet, 10 1/2" long, 6 1/2" deep and 6 1/2" high, with attractive metal front panel. Accessories required: 1-HY75, 1-6J5, and 1-6V6 tubes, 1-1.5 volt bias battery, mike, antenna, and suitable power supply. The 112-T is ideal for either fixed station or mobile use. Shpg. wt., 12 lbs.

BB-401. Less all accessories. NET PRICE..... **\$22.40**

BB-431. Accessory Kit. Contains 1 Hytron HY-75, 1 Knight 6J5 and 1 Knight 6V6 tubes, and 1 Burgess 4FA 1.5 volt battery. NET PRICE..... **\$5.51**



## 20-N TRANSMITTER KIT

A complete 'phone-CW transmitter to operate on all Amateur bands from 20 to 160 meters. Carefully designed to provide the maximum in performance and efficiency, the 20-N is rated at 20 watts input, 100% modulated for 'phone, or 30 watts input for CW. The RF section uses a 6V6 regenerative crystal oscillator driving a 6V6 operated as a neutralized triode RF amplifier. Audio section has 1-6SJ7 input, 1-6CS amplifier stage, 1-6N7 Class A driver, and 1-6N7 Class B modulator. Power supply uses a 5Z3 with additional filtering for the speech amplifier tubes to insure hum-free modulation. One meter with selector switch monitors all essential circuits; all circuits arranged for full break-in operation for CW. Uses inexpensive Bud plug-in coils; will operate on two bands from most crystals. Accessories needed: 1-6V6, 1-6V6G, 1-6SJ7, 1-6CS, 2-6N7 and 1-5Z3 tubes, 1-Triplet 0-200 ma. 3" square meter, Bud midget plug-in coils, crystals, and crystal mike. For 115 volts, 60 cycles. Shpg. wt., 40 lbs.

BB-402. 20-N Kit. NET PRICE..... **\$43.50**

Less accessories and cabinet. NET PRICE..... **\$10.68**

BB-432. Accessory Kit. Contains all tubes, Triplet meter, and coils for one Amateur band (specify band on order). NET PRICE..... **\$10.68**

98-850. Gray table cabinet. NET. \$7.95



## MODEL 69-60 WATTS 'PHONE-CW

Rated at 60 watts input, this crystal-controlled transmitter works either 'phone or CW on any band from 160 to 10 meters. Uses 1-6V6 crystal oscillator, 1-HY69 RF amplifier, 1-6AC7 mike input, 2-6L6 modulators, 1-83 and 1-80 rectifiers. All controls on front; door with interlock switch permits coil and crystal changing from front. Has 3" dual scale meter with switch. Cabled wiring harness makes the final hookup fast and simple. Completely self-contained from dual power supply to antenna tuning system in gray cabinet; size: 16" x 9 1/2" x 11". Includes all parts, cabinet and special meter. Less tubes, coils, crystal and crystal mike. For 110 volts, 60 cycles. Wt., 45 lbs.

BB-404. Less accessories. NET PRICE..... **\$62.50**

BB-436. Accessory Kit. Contains all tubes, and coils for one Amateur band (specify band). NET PRICE..... **\$11.30**

## MODEL 60-N 60 WATTS 'PHONE-CW

The 60-N combines the ability to "go places" with moderate cost. Operates on all Amateur bands, 20 to 160 meters, with up to 60 watts input for either phone or CW. Inexpensive plug-in type Johnson 100 watt coils are used for both oscillator and amplifier stages. Oscillator is 6L6, with HK24 amplifier; output for 72 ohm antenna line. High-gain audio section with crystal mike input uses 1-6SJ7, 1-6N7, and push-pull 6L6's as modulators. Dual rectifier type power supply uses 1-5Z3 and 1-RK60. Kit includes all necessary parts except accessories consisting of tubes, crystal, Triplet 3" square 0-200 ma. meter, plug-in coils, and cabinet. Easy to assemble and wire. For 115 volts, 60 cycles. Shpg. wt., 50 lbs.

BB-403. Less accessories. NET PRICE..... **\$58.85**

BB-433. Accessory Kit. Contains all tubes, meter, and coils for one amateur band (specify band). NET PRICE..... **\$17.93**

98-850. Gray table cabinet. NET PRICE..... **\$7.95**

LATEST EDITION  
**STANCOR HAMANUAL**  
Every Amateur or Amateur-to-be needs a copy of this latest Stancor transmitter manual. Has 48 pages containing a detailed description of all Stancor transmitter kits. Also has detailed circuit diagrams and parts lists of all kits plus data on speech equipment and power supplies. Before you buy any transmitter kit, get your copy of the Hamannual!  
**37-770. HAMANUAL. 15c**  
NET.....



## MODEL 125-CW 125 WATTS CW ONLY

The 125-CW was designed for the requirements of the "straight CW" Amateur. Combining simplicity of operation with maximum performance, this three-stage rig will handle inputs up to 125 watts on the 80, 40, and 20 meter bands. Uses a 6J5G crystal oscillator, 6L6G buffer, and T2-40 RF stage; power supply uses 1-5Z3 and 1-RK60 tubes. Accessories required: Tubes, plug-in coils, crystal, Triplet 3" 0-200 ma. meter. For complete data refer to the Stancor Hamannual, 37-770, described above. For 115 volt, 60 cycles. Shpg. wt., 41 lbs.

BB-405. Less all accessories. NET PRICE..... **\$55.00**

BB-434. Accessory Kit. Contains all tubes, Triplet meter, coils for one band (specify band). NET PRICE..... **\$15.25**

98-850. Gray table cabinet. NET PRICE..... **\$7.95**

## MODEL 110-C 100 WATTS 'PHONE-CW

The 110-C is a 100 watt four-band phone-CW transmitter featuring cathode modulation. Because of the saving in audio power requirements for cathode modulation, greater RF carrier power is possible from the same equipment than would be possible with other types of modulation. The 110-C uses a 6L6G crystal oscillator and an 812 amplifier, with up to 100 watts input for phone, or 110 watts for CW. The audio system uses 1-6SJ7, 1-6CS, and 2-6V6 push-pull modulators, with sufficient gain to use a crystal microphone. Dual rectifier type power supply uses 1-5Z3 and 1-RK60. Coils for both the oscillator and amplifier are Johnson 100 watt plug-in type. All parts supplied except tubes, coils, 1-Triplet 0-200 ma 3" square meter, crystal, and cabinet. For 115 volts, 60 cycles. Wt., 50 lbs.

BB-406. STANCOR 110-C KIT. NET PRICE..... **\$59.00**

BB-435. Accessory Kit. Contains all tubes, meter, and coils for one amateur band (specify band). NET PRICE..... **\$16.47**

98-850. Gray table cabinet. NET PRICE..... **\$7.95**





## 6 TUBE MODEL EC-1

Good news for the beginning Amateur or SWL! A 6-tube Communication receiver covering the entire tuning range from 345 KC to 30.5 MC (550 to 9.85 meters) in three bands. Main dial calibrated in MC with separate logging scale for use with electrical bandspread control. Sturdy gray wrinkle finished metal cabinet with built-in PM speaker under top panel. Controls are: Main tuning, Bandspread tuning, Volume, Standby switch, Speaker-phones switch, BFO-AVC-On-Off switch. Doublet antenna terminals; tip-jacks for phones. Uses 1-12K8, 1-12SK7, 1-12SQ7, 1-12J5, 1-35L6GT tubes, and 1-25Z5 rectifier. Size: 7 1/2" high, 10 7/8" wide, 7 1/4" deep. With tubes. For 115-125 volts AC or DC. Shpg. wt., 15 lbs.

**\$245**

97-550. Model EC-1. NET.....  
8 TUBE MODEL EC-2

Real communication receiver performance at low cost! 8 tubes, including rectifier and ballast; three bands covering 345 KC to 30.5 MC. Many features including 1 Tuned RF stage on all hands, BFO, Noise Limiter, Calibrated Electrical Bandspread, external speaker in matching cabinet. Electrical bandspread available at all frequencies in overall range. With tubes. For 115-125 volts AC or DC. Shpg. wt., 20 lbs.

97-551. CASH PRICE.....**\$42.50**

\$10.63 down, \$8.45 monthly for 4 months.



## 9 TUBE MODEL EC-3

Only 9 tubes—but the EC-3 brings you more real value per dollar than ever before in a moderate-priced Communication receiver! Tunes from 345 KC to 30.5 MC in three bands; 2-stage 455 KC IF amplifier; Crystal filter; 4-position selectivity from Broad IF to Sharp Crystal; Automatic Noise Limiter; Electrical Bandspread with fly-wheel tuning; Calibrated bandspread on Amateur 80, 40, 20 and 10 meter bands; Beat Oscillator for CW reception with variable pitch control; Speaker-Headphone switch; Tuned RF stage on all hands; Built-in Monitor circuit enabling operator to listen to his own CW transmissions; Sturdy metal cabinet finished in gray wrinkle finish; Separate external 6" PM speaker in attractive matched cabinet with connecting cord and plug; Combination main tuning and calibrated bandspread dial indirectly illuminated. All important Short-Wave Broadcast, Amateur, Police, and Aviation Bands are clearly indicated on main tuning scales. The EC-3 uses 9 tubes: 6SD7GT, 6K8, 2-6SK7, 6H6, 6SC7, 25L6GT, 25Z6GT Rectifier, and K2P10 Ballast. Has headphone tip-jacks and terminals for doublet antenna. Operates from any 115-125 volt AC or DC supply line. Wt., 25 lbs.

97-552. Model EC-3, with tubes, crystal and speaker.....**\$595**

CASH PRICE.....  
\$14.88 down, \$7.89 monthly for 6 months.



## THE PORTABLE EC-4

Here's the Communication receiver that Amateurs and SWL's alike have been waiting for! It's the compact, lightweight EC-4 Portable that operates on 115-125 volts AC or DC or from self-contained batteries! Features: Tuning range, 345 KC to 30.5 MC in four bands; Two 455 KC IF's; Two-gang condenser is used with electrical bandspread; Automatic Noise Limiter; Two built-in loop antennas, hinged to the cabinet to turn independently of each other; Terminals for external antenna; Built-in 3 1/2" PM speaker with speaker-muting type headphone jack; Substantial wrinkle-finished steel cabinet, 9 1/2" high, 6 1/4" wide, and 5" deep; all panel controls protected by front hinged door; tubes and batteries accessible by opening rear cover; total weight with batteries only 9 1/2 lbs. Panel Controls: Main tuning control with dial calibrated in MC; Electrical Bandspread tuning control with separate logging scales; Volume; Power switch; BFO on-off; ANL on-off; Standby switch. Tubes: 1K5 oscillator, 1R5 converter, 2-1T4 1F's, 1S5 2nd det-AVC, 1S5 BFO and Noise Limiter, 2-3Q4 power output tubes, and 50Y6 rectifier. Power: Self-contained batteries (1—Eveready #482, 2—Burgess #2F) or 115-125 volts AC or DC. Complete with tubes and batteries. Shpg. wt., 12 lbs.

97-560. CASH PRICE.....**\$495**

\$12.38 down, \$9.84 monthly for 4 months.

## MODERN AIDS FOR CODE INSTRUCTION

### CODE COURSE RECORDS

Fig. A. Now everyone, young or old, can learn the radio code quickly and easily with this amazing new code teaching system. The Linguaphone course consists of five double-faced 10" phonograph records, together with a complete instruction book and album. You can sit at home beside your record player and follow the code as it sounds when "keyed" by expert instructors. You'll soon be able to "copy" code signals up to 10 words per minute with ease. Code records can be used with any electrical or mechanical phonograph. Shpg. wt., 6 lbs.

89-950. NET.....**\$8.33**

### G-L MODEL "S" SENDER

Fig. B. A compact automatic code practice instrument. Electric motor provides variable speed from 4 to 60 words per minute. Easy to operate, only three controls, motor on-off switch, contact switch, and speed control. Terminals for connecting to oscillator or buzzer. Supplied with ten rolls of double perforated tape comprising twenty practice lessons. Size, 5 1/2" x 4 1/2" x 6". For 115 volts, 50-60 cycles. Postpaid in U.S.A.

76-100. Model "S." NET.....**\$17.50**

### G-L MODEL "J" SENDER

Fig. C. Model "J" is a simple, easy to use device for code practice or instruction work. Can be used with any practice oscillator. Driven at speeds from 10 to 60 words per minute by quiet, induction-type motor. Supplied with five rolls of prepared practice tape and five rolls of blank tape. Student can prepare tape by means of punching keys to cover desired material. For 115 volts, 50-60 cycles. Postpaid in U.S.A.

76-101. Model "J." NET.....**\$12.50**

76-102. 1000 ft. extra blank tape. NET.....**\$1.00**

Literature on G-L Models "J" and "S." Sent FREE. Request 37-095.

For Radio Defense Training classes in CCC, NYA centers, Schools or Universities.



## T. R. MCELROY MODEL G-813 AUTOMATIC CODE INSTRUCTOR

Designed and produced by T. R. McElroy, World's Champion Telegrapher, for radio operator training schools of the United States Army, and now available for civilian use. Recommended for Schools, Universities, CCC or NYA Vocational or Defense Training Classes. The G-813 consists of two units securely mounted on a heavy wooden base, with removable wooden top cover. Unit No. 1 is the automatic photo-electric cell keying device. Inked tape is drawn from reel through an "electric eye" gate, actuating a relay which keys two circuits. One circuit consists of a built-in tone oscillator with variable pitch from 600 to 1000 CPS, with sufficient volume to handle 20 to 30 sets of student headphones. The other circuit can be used for keying an external oscillator, blinker, etc. Unit No. 2 is a constant speed, motor-driven tape puller with speed control permitting code practice speeds from 4 to 60 words per minute. Complete with tubes, less practice tapes. For 110 volts 60 cycles. Wt., 40 lbs.

76-010. NET.....**\$75.00**

### SET OF 15 TAPES

Complete set of 15 practice tapes for G-813 unit, prepared from Master tapes furnished by U. S. Signal Corps School. With slotted wood carrying case. Wt., 20 lbs.

76-011. NET.....**\$22.50**

37-067. McElroy Catalog, sent FREE on request.



# THE WORLD'S FINEST RADIO-TELEGRAPH APPARATUS

Selected to FILL the Requirements of Amateurs, Commercial Operators, Code Practice Classes, Government Sponsoring NYA-Army-Navy Code Training Programs, Schools, Clubs, etc.

FROM THE LABORATORY OF T. R. McELROY, WORLD'S CHAMPION TELEGRAPHER



## McELROY 5-600-PC SPEEDKEY

One of the finest semi-automatic keys made. It's a Super-Deluxe "bug" that will add WPM to your fist, whether you are a "Ham" or a Commercial operator! It's a masterpiece of mechanical craftsmanship and precision workmanship by the World's Champion Telegrapher. Massive streamlined base, all top parts finished in highly polished chrome.  $\frac{3}{8}$ " platinum alloy contacts; beryllium copper main spring and U spring. Coil springs, bearings and pins of finest stainless steel for lifetime service. Here's a "bug" so finely balanced that a feather touch makes rhythmic dots and dashes. Shpg. wt., 6 lbs.

76-000. NET.....\$11.85

76-001. Model 5-600-SC. Same as above but with finest silver contacts instead of platinum alloy.  
NET.....\$9.50



## PROFESSIONAL SPEEDKEY P500

Designed to conform with United States Navy specifications. Heavy Parkerized base casting, finished in fine black wrinkle enamel. Carefully designed super-structure finished to match base. All other metal parts finished in chrome. Molded plastic knob and finger paddles. Circuit closing switch.  $\frac{3}{8}$ " contact points are silver; beryllium copper main-spring and U spring. Right and left arm tension springs, contact spacing, and vibrating arm all fully adjustable. Size,  $3\frac{3}{4}$ " x  $6\frac{1}{2}$ " x  $3\frac{3}{4}$ ". Moderately priced through volume production, the P500 is sure to please even the most critical operator. Shpg. wt., 6 lbs.

76-002. NET.....\$7.50



## MAC HANDKEY MODEL S-100

The latest addition to the famous McElroy line of handkeys. Modern streamlined base of metallized plastic. Model S-100 is an exceptionally fine key suitable for Amateur use, for code practice and code training classes, etc. Accurately designed and built for smooth, effortless keying. Perfectly balanced main lever with bronze bearing screws;  $\frac{3}{8}$ " silver contacts. Equipped with circuit closing switch. All metal parts finished in cadmium plate. Fully adjustable. Molded plastic knobs. Ideal for training class use. A great value. Shpg. wt., 1 lb.

76-003. NET.....\$1.65



## MAC HANDKEY MODEL 300

Professional type, streamlined handkey with perfectly balanced main lever with bronze bearings. Finished overall in blue-tinted chrome plate.  $\frac{3}{8}$ " silver contacts. Has circuit closing switch. A beautiful and superbly balanced key that will make a hit with any operator. Wt.,  $1\frac{1}{2}$  lbs.

76-020. NET.....\$3.45

## MODEL BB-300

Same as Model 300 above, but main lever mounted between ball-bearings. Pigtail connection for positive keying; current does not pass through ball-bearings. Wt.,  $1\frac{1}{2}$  lbs.

76-006. NET.....\$3.45



## TRAINING SCHOOL SPECIAL McELROY "100" HANDKEY

A genuine McElroy handkey at an unbelievably low price! Ideal for code training and instruction groups, Students, Amateurs, etc. Streamlined molded plastic base;  $\frac{3}{8}$ " silver contacts; finely balanced and adjustable arm; cadmium plated metal parts. SHPG. wt., 12 oz.

76-004. NET EACH.....\$115

Descriptive literature on Mac "Auto" units for code training, 37-067, sent Free on request.



## MODEL 200 HANDKEY

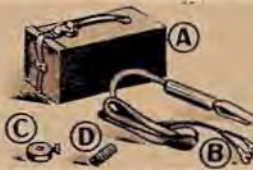
A professional type streamlined handkey having a perfectly balanced main lever with bronze bearings. Metal base finished in black wrinkle.  $\frac{3}{8}$ " silver contacts; circuit closing switch; adjustable. Wt.,  $1\frac{1}{2}$  lbs.

76-005. NET.....\$2.25

## MODEL BB-200

Streamlined professional key. Black wrinkle base.  $\frac{3}{8}$ " contacts. Ball bearings mounted on contacts; pigtail connection. Otherwise like "200." Wt.,  $1\frac{1}{2}$  lbs.

76-012. NET.....\$2.25



## McELROY ACCESSORIES

76-013. Fig. A. Speedkey Case. Leatherette covered.  $3\frac{1}{2}$ " L.  $\frac{1}{4}$ " W.  $3\frac{1}{4}$ " H. Wt., 2 lbs. NET.....\$6.95

76-014. Fig. B. Speedkey Cord. NET.....\$1.00

76-016. Fig. C. Speedkey weight. NET.....\$30c

76-015. Fig. D. Coil spring. NET.....\$15c

99-020. Coin Silver Contacts.  $\frac{3}{8}$ " head.  $\frac{1}{4}$ " adjustment.  $\frac{1}{2}$ " long. EACH.....\$10c

99-021. Platinum Contacts. .015" face.  $\frac{3}{8}$ " diam.  $\frac{1}{2}$ " shank. 4x40 thread. EACH.....\$1.50



## MAC OSCILLATONE

For code-instruction or practice, or as a keying monitor with a transmitter. Housed in plastic cabinet with built-in reproducer. Operates from 110 volts AC or DC. Provides 600 or 1000-cycle signal with tone and volume adjustment. Built-in key-click eliminator and terminals for transmitter relay. Uses 1-117N7GT tube. Less tube. Shpg. wt., 7 lbs.

76-008. NET.....\$5.95

9-357. 117N7GT tube.....99c

76-009. "Oscillofone" Speaker for use with code oscillators. Wt., 3 lbs. NET.....\$2.85

## POPULAR SPEEDKEY TRANSMITTING KEYS

### HI-SPEED MODEL 500

Fig. A. Heavy, black wrinkle finished steel base. Perfectly aligned free-acting bearings.  $\frac{1}{2}$ " silver contacts. Adjustable double finger-paddles. With cord and shorting switch. Wt.,  $4\frac{1}{2}$  lbs.

76-052. NET.....\$7.94

76-050. Model 501. Chrome plated.  $\frac{1}{2}$ " contacts. Wt., 6 lbs. NET.....\$10.29

### AMATEUR MODEL 515

Fig. B. A durable, heavy-duty Speed Key. Base and casting finished in black wrinkle enamel; all other parts chrome plated. Other features same as No. 500 Hi-Speed key above. Has  $\frac{1}{2}$ " silver contacts. Less cord and plug; does not have shorting switch. An excellent speed key for Professional or Amateur use. Wt., 5 lbs.

76-051. NET.....\$5.44

### MODEL 300—FIG. C.

Beginner's key. Walnut-bakelite base. Metal parts nickel-plated;  $\frac{1}{4}$ " silver contacts. Tension and space adjustments. Well-made. Wt., 1 lb.

76-053. NET.....88c

76-054. As above—but with cast metal base. NET.....88c

### CODE PRACTICE SET

Fig. D. An inexpensive set with practice key and adjustable buzzer; molded walnut plastic base. Produces high-pitched code signals. Excellent for class or individual code instruction. Shpg. wt., 2 lbs.

76-059. NET.....\$1.62

### MODEL 310—FIG. A.

Skeleton frame type; black wrinkle finish base; other parts nickel-plated;  $\frac{1}{2}$ " silver contacts. Dual adjustment for tension and lever action. Shipping weight, 2 lbs.

76-055. NET.....\$1.47

76-056. 310 with circuit closer. NET.....\$1.76

### MODEL 301—FIG. B.

Sturdy standard key with molded bakelite base. Metal parts nickel-plated; pigtail connection to arm;  $\frac{1}{4}$ " silver contacts. Wt., 1 lb.

76-057. NET.....\$1.26

### MODEL 320—FIG. D.

Professional type key.  $\frac{1}{4}$ -inch coin silver contacts. Black base. All other parts attractively chrome plated. Shpg. wt., 2 lbs.

76-058. NET.....\$1.91

BUZZER, Fig. C. Constant frequency. Operates on 3 volts DC. Bakelite shell. Wt., 8 oz.

76-060. NET.....73c





FOR  
AMATEUR RADIO

SPECIALIZED  
RADIO EQUIPMENT

FOR  
INDUSTRY



EVERYTHING FOR THE AMATEUR

SPECIAL SERVICE FOR INDUSTRY

Here is Amateur Radio's **complete** 1942 Buying Guide—a vast selection of the newest and best in receiving, transmitting, and experimental equipment together with all that's finest in standard parts and accessories. It's the wise Amateur who makes **ALLIED** his Radio Buying Headquarters, for he—like more than twenty thousand other Amateurs—knows that **ALLIED** is the single, dependable source for everything he needs—that our big, complete stocks, prompt, efficient service, and money-saving low prices make his radio buying easier, faster and more economical in the long run. Amateurs everywhere have come to know and depend on our alert, expert staff of licensed Amateurs, wide-awake Engineering Division, and efficient organization geared to give them what they want **when** they want it. Amateurs also like our convenient, economical Time Payment Plan. On every count it's **ALLIED** for **everything** in Amateur Radio!

For Industry, for Government Agencies, for Institutions the country over, **ALLIED** offers a specialized service in supplying all types of Radio and Electronic equipment. This catalog presents an unusually comprehensive listing of equipment used on the production line, in the control laboratory, in the research division. Besides such standard equipment—regularly carried in stock, ready for prompt shipment—we maintain an expert Special Order Division to serve you quickly with equipment for special requirements. Our central location and huge stocks, our ready access to sources of supply, our fast and dependable service save you time and money when it really counts! Hundreds of famous American business firms, Government Agencies, Universities, and Laboratories endorse our special service. Whatever you need in Radio or Electronics, **ALLIED** has it or can get it for you—**quickly, dependably, economically!**

POWER TUBES FOR COMMERCIAL AND INDUSTRIAL APPLICATION

**ALLIED** is RCA power tube headquarters. Large stocks permit prompt shipment. All new RCA power tubes available from **ALLIED** immediately on release by RCA. For RCA receiving tubes see pages 34-35.

POWER TUBES

RCA Type	Stock No.	Tube Type	Plate Diss.	NET
203A	6-832	Triode	100 W.	\$10.00
211	6-833	Triode	100 W.	10.00
800	6-834	Triode	35 W.	10.00
801A	6-835	Triode	20 W.	3.45
802	6-836	Pentode	13 W.	3.50
803	6-837	Pentode	125 W.	28.50
804	6-838	Pentode	50 W.	15.00
805	6-839	Triode	125 W.	13.50
806	6-840	Triode	225 W.	22.00
807	6-841	Beam	30 W.	3.50
808	6-842	Triode	50 W.	7.75
809	6-843	Triode	30 W.	2.50
810	6-844	Triode	150 W.	13.50
811	6-845	Triode	55 W.	3.50
812	6-846	Triode	55 W.	3.50
813	6-847	Beam	100 W.	22.00
814	6-848	Beam	65 W.	17.50
815	6-849	PP Beam	25 W.	4.50
826	6-850	Triode	60 W.	19.00
827R	6-851	Beam	800 W.	135.00
828	6-852	Beam	80 W.	17.50
829	6-853	PP Beam	40 W.	19.50
830B	6-854	Triode	60 W.	10.00
832	6-855	PP Beam	15 W.	17.00
833A	6-856	Triode	450 W.	85.00
834	6-857	Triode	50 W.	12.50
837	6-858	Pentode	12 W.	7.50
838	6-859	Triode	100 W.	11.00
842	6-860	Triode	12 W.	3.25
843	6-861	Triode	15 W.	12.50
845	6-863	Triode	100 W.	10.00
849	6-864	Triode	400 W.	120.00
850	6-865	Tetrode	100 W.	37.50
860	6-866	Tetrode	100 W.	32.50
864	6-867	Preamp.		1.00
1608	6-868	Triode	6 W.	2.00
1610	6-869	Pentode	6 W.	2.00
1613	6-870	Pentode	10 W.	2.75
1614	6-871	Beam	21 W.	3.50
1619	6-872	Beam	15 W.	4.75
1623	6-873	Triode	30 W.	2.50
1624	6-874	Beam	25 W.	3.50
1626	6-875	Beam	30 W.	3.50
1627	6-876	Triode	150 W.	13.50
1628	6-877	Triode	40 W.	32.00
8000	6-878	Beam	75 W.	13.50
8001	6-879	Beam	75 W.	22.00
8003	6-880	Triode	100 W.	12.00
8006	6-881	Triode	85 W.	7.00

For technical data on Amateur tubes see RCA Ham Guide below. For additional RCA transmitting and power-type tubes as well as information on all types ask for Power Tube Bulletin. 37-054. FREE on request.

PHOTOTUBES

Type	Stock No.	Kind	Use	NET
868	6-882	Gas	Sound	\$3.70
917	6-883	Vacuum	Relay	4.75
918	6-884	Gas	Sound	4.50
919	6-885	Vacuum	Relay	4.75
920	6-886	Gas	Sound	5.25
921	6-887	Gas	Sound	2.00
922	6-888	Vacuum	Relay	2.00
923	6-889	Gas	Sound	2.60
924	6-890	Gas	Relay	2.00
925	6-891	Vacuum	Relay	2.00
926	6-892	Vacuum	Color	3.00
927	6-893	Gas	Sound	3.70
928	6-894	Gas	Relay	2.00
929	6-895	Vacuum	Relay	3.00
930	6-896	Gas	Sound	2.00
931	6-897	Gas	Relay	12.00

TELEVISION TUBES

Type	Stock No.	Kind	Size	NET
3AP4/906P4	6-898	Kine.	3"	\$18.25
5AP4/1805P4	6-899	Kine.	5"	27.50
5BP4/1802P4	6-900	Kine.	5"	27.50
7AP4	6-901	Kine.	7"	36.00
9AP4/1804P4	6-902	Kine.	9"	62.50
12AP4/1803P4	6-903	Kine.	12"	75.00
1847	6-904	Icon.	3"	24.50
1898	6-905	Mono.	3"	24.00
1899	6-906	Mono.	5"	95.00

RCA GUIDE

A valuable new book for Hams. Contains numerous practical circuits with illustrations, explanations, and complete parts lists. Detailed data on tuning, neutralizing, etc. Complete technical data on RCA transmitter tubes. 25¢



37-061. TUBE SOCKET BULLETIN. Lists RCA sockets for RCA Power Tubes with special base or mounting. FREE on request.

RECTIFIERS

Type	Stock No.	Kind	Pk. V.	NET
816	6-800	Mercury	5000	\$ 1.00
866/866A	6-801	Mercury	10000	1.50
217A	6-802	Vacuum	7500	20.00
217C	6-803	Vacuum	7500	20.00
836	6-804	Vacuum	5000	11.50
869A	6-805	Mercury	20000	125.00
872	6-807	Mercury	7500	9.00
872A	6-808	Mercury	10000	11.00
878	6-809	Vacuum	20000	11.00
2X2/879	6-810	Vacuum	12500	1.24
2V3C	6-811	Vacuum	16500	1.51
1616	6-812	Vacuum	5500	5.75

GAS TRIODES-TETRODES

Type	Stock No.	Kind	Use	NET
884	6-813	Triode	Relay/Sweep	\$2.00
885	6-814	Triode	Relay/Sweep	2.00
2060	6-815	Tetrode	Relay	3.00
2051	6-816	Tetrode	Relay	2.50
874	6-817	Voltage Regulator		1.50
991	6-818	Voltage Regulator		.90

UHF AND ACORN TUBES

Type	Stock No.	Kind	Fil. V.	NET
954	6-819	Pentode	6.3	\$5.00
955	6-820	Triode	6.3	3.00
956	6-821	Pentode	6.3	5.00
957	6-822	Triode	1.25	3.00
958	6-823	Triode	1.25	3.00
959	6-824	Pentode	1.25	5.00
9001	6-825	Pentode	6.3	2.50
9002	6-826	Triode	6.3	2.00
9003	6-827	Pentode	6.3	2.50

CATHODE RAY TUBES

Type	Stock No.	Screen	NET
913	6-828	1-Inch	\$4.00
902	6-829	2-Inch	7.50
3AP1/906P1	6-830	3-Inch	13.50
6BP1/1802P1	6-831	5-Inch	24.75

Notice: Transmitting tubes require careful handling, and must be shipped by Express. Tubes cannot be sent by Parcel-Post.



# RAYTHEON

## TRANSMITTING TUBES

### TYPE RK60

A full-wave rectifier for use in low voltage power packs. Fil., 5 V. at 3A. Plate voltage, 750 V. RMS per plate. Maximum output current, 250 ma. High vacuum type, 4 prong base. Replaces 83, 83V and 5Z3 rectifiers. Shpg. wt., 1 1/2 lbs. **\$2.75**



Mfr's Type	Stock No.	Tube Type	Plate Diss.	NET
RK-12	5-600	Triode	25 W.	\$2.50
RK-20A	5-601	Pentode	40 W.	15.00
RK-23	5-602	Pentode	10 W.	4.50
RK-25	5-603	Pentode	10 W.	3.95
RK-28A	5-604	Pentode	125 W.	28.50
RK-34	5-605	Twin-Triode	10 W.	3.50
RK-38	5-606	Triode	100 W.	13.50
RK-39	5-607	Beam	25 W.	3.50
RK-43	5-608	Twin-Triode	10 W.	1.50
RK-47	5-609	Beam	50 W.	17.50
RK-48A	5-610	Tetrode	100 W.	27.50
RK-49	5-611	Beam	21 W.	1.25
RK-56	5-612	Tetrode	8 W.	3.00
RK-59	5-613	Twin-Triode	15 W.	4.50
RK-60	5-614	F.W. Rectifier	.....	2.75
RK-62	5-615	G.T. Triode	.....	3.50
RK-63	5-616	Triode	200 W.	22.00
RK-66	5-617	Beam	30 W.	3.50
RK-807	5-618	Beam	25 W.	3.50
866	866A	Half-wave Rectifier	.....	1.50

## HEAT RADIATING CONNECTORS



Quality heat radiating connectors designed to dissipate heat generated at the grid and plate terminals of transmitting tubes. Prevents damage to glass seal of tubes. Size indicated is maximum diameter of leads or caps these connectors fit. \*Accommodate wire leads. †Fit cap-type leads, Wt., 2 oz.

Stock No.	For Tubes	Size	NET
73-000*	HK-24	.049"	21c
73-001*	35T, HK-54, etc.	.069"	21c
73-002†	100T, 807, etc.	.360"	41c
73-003†	866, T125, etc.	.560"	41c

## AMPHENOL 912-A AND 912-B

Made of Polystyrene, the greatest advance in high frequency insulating material of recent years. Water clear transparency. Unexcelled for all high-frequency, RF or high voltage applications and has electrical characteristics equal to fused quartz. Loss factor (A) only .0005 at 1 MC and .001 at 10 MC. Zero moisture absorption, for use in any climate. Amphphenol 912-A is pure polystyrene, molded to shape; 912-B is made of acrylic type plastic; easy to drill and cut with ordinary tools.

## "912A" PLUG-IN COIL FORMS

For maximum coil efficiency in all high freq. apparatus. Bases fit standard tube sockets. Overall length of polystyrene body is 2 1/4"; dia., 1 1/4". Has finger grip for easy extraction. Easy to drill. Shpg. wt., 6 oz.

71-700.	4-prong.	NET.....	29c
71-701.	5-prong.	NET.....	32c
71-702.	6-prong.	NET.....	35c

## UHF MINIATURE SOCKETS

For use with Miniature Coil Forms below. Sockets also accommodate Bantam Jr. tubes. Mount in 3/8" hole. Held in place by steel retainer ring which is supplied. Wt., 4 oz.

71-706.	5-contact....	NET EACH	21c
71-707.	6-contact....	NET EACH	21c

## MINIATURE PLUG-IN FORMS

Especially designed for ultra-high-frequency apparatus. Polystyrene body is 1 3/8" in height, 3/4" in dia. Fits sockets above. Shpg. wt., 4 oz.

71-710.	5-prong.	NET.....	24c
71-711.	6-prong.	NET.....	24c



# HYTRON

## POWER TUBES

TYPE HY-30Z. Zero-bias triode with low-loss lava insulation. Graphite anode. For RF Power Amplifier or Frequency Multiplier stages, or Class B Modulator. Plate, 350V., Fil., 6.3V. at 2.25A. Plate diss. 30W. **7-600. NET..... \$2.75**

Mfr's Type	Stock No.	Plate Diss.	NET
HY-40	7-602	40 W.	\$3.75
HY-40Z	7-603	40 W.	3.75
HY-60	7-605	15 W.	2.75
HY-65	7-613	15 W.	3.00
HY-67	7-614	65 W.	7.50
HY-69	7-607	40 W.	3.95
HY-75	7-608	15 W.	3.95
HY-61/807	7-606	25 W.	3.50
HY-31Z	7-601	30 W.	3.50
HY-81A	7-604	65 W.	4.75
HY-815	7-603	35 W.	2.25
6L6GX	7-610	21 W.	1.25
866 Jr.	7-611	Rectifier	1.05
866A/866	7-612	Rectifier	1.50

37-003. Hytron Catalog—Sent FREE

## EIMAC TUBES

Designed for heavy-duty service. Cannot go "soft" from overloads. Envelopes are of Nonex glass.



TYPE 35T. A general-purpose triode of small size and tremendous power. Fil., 5V. at 4A. Plate, 500 to 2000V. Max. plate dissipation, 70W. Max. Class C power output, 225 W. per tube. **7-700. NET..... \$6.00**

TYPE 35TG. For UHF. **7-701. NET..... \$6.75**

Mfr's Type	Stock No.	Plate Diss.	NET
75T	7-702	75 W.	\$ 9.00
100T	7-703	100 W.	13.50
100TH	7-704	100 W.	13.50
250TL	7-705	250 W.	24.50
250TH	7-706	250 W.	24.50
KY21	7-707	Keying Rectifier	10.00

37-004. Eimac Catalog—Sent FREE

# FAMOUS AMPHENOL POLYSTYRENE PRODUCTS

## "912-B" STRIPS

Can be used for coil supports, condenser insulating bars, open-wire feed line spreaders, RF or high voltage terminal blocks, etc. All strips are 12" long; easy to cut. Avg. wt., 6 oz.

Stock No.	Size	NET
71-715	1/8" x 1/4"	\$0.16
71-716	1/8" x 3/8"	.21
71-717	1/8" x 1/2"	.30
71-718	1/8" x 5/8"	.36
71-719	1/8" x 3/4"	.42
71-720	1/8" x 7/8"	.64
71-721	1/8" x 1"	.80
71-722	1/8" x 1 1/8"	1.03

## "912-B" RODS

12" lengths of solid rod. Can be cut into short lengths for making small stand-offs, HF bushings, RF choke cores, spreaders, etc. Easily cut with hacksaw. Avg. wt., 6 oz.

71-723.	3/8" diam.	NET.....	26c
71-729.	1/2" diam.	NET.....	47c

## "912-B" TUBING

For high-Q coils. Easily drilled. 1/8" thick wall.

Stock No.	NET	Tube Dia.	Stock No.	NET
71-765	36c	1 1/2"	71-770	71c
71-766	42c	1 3/4"	71-771	84c
71-767	47c	2"	71-772	94c

## "912-B" RIBBON

A strong insulating ribbon, .001" thick and 3/4" wide. Ideal for wrapping cable joints, splices, and covering exposed voltage points in all types of equipment for maximum safety. Welds together with cement listed below. Ribbon wt., 4 oz.; cement 10 oz.

71-733.	PER 100 FT. ROLL.....	29c
71-735.	Cement, 2 oz. bottle.....	29c

# Taylor

## TRANSMITTING TUBES

### TYPE 866A/866

The world's most famous 866 half-wave mercury vapor rectifier, now in greatly improved form. Features a new heavy-duty, fully shielded filament and ceramic protection for top plate lead. Fil., 2.5 V. at 5 A. Peak inverse voltage, 10,000 volts. For use in any power supply circuit designed for heavy duty service. **7-914. NET..... \$1.50**



Mfr's Type	Stock No.	Plate Diss.	Class Service	NET
T-20	7-900	20 W.	B-C	\$ 2.25
TZ-20	7-901	20 W.	B-C	2.25
T-21	7-902	21 W.	B-C	1.95
T-40	7-903	40 W.	B-C	3.50
TZ-40	7-904	40 W.	B-C	3.50
T-55	7-919	55 W.	B-C	6.00
TW-75	7-905	75 W.	C	8.00
TW-150	7-906	150 W.	C	15.00
203A	7-907	150 W.	C	15.00
203A	7-908	100 W.	B-C	10.00
203Z	7-909	65 W.	B-C	8.00
805	7-910	125 W.	B-C	13.50
814	7-911	200 W.	B-C	18.50
822	7-912	200 W.	B-C	18.50
8415W	7-913	50 W.	C	8.00
866 Jr.	7-915	Rectifier	.....	1.00
T-125	7-916	125 W.	C	13.50
T-200	7-917	200 W.	C	21.50
HD-203A	7-918	150 W.	B-C	14.50

WE CAN SUPPLY ALL TAYLOR TUBES 37-005. Taylor Catalog—Sent FREE

## GAMMATRON HK-24

An unusually popular general purpose low power triode. Plate dissipation, 25 W. Power output, 90 W. max. Plate, 1500 V. max. at 75 ma. Thoriated fil., 6.3 V. at 3 A. 4-prong ceramic base. Has cylindrical tantalum plate and vertical-bar tantalum grid. Shpg. wt., 1 1/4 lbs. **7-750. NET..... \$4.75**



## LIQUID CEMENT

"912" is a pure polystyrene coil dope for any type of coil winding. "912-B" is a cement which actually welds "912-B" Strips, Rod and Tubing. Shpg. wt. 10 oz.

71-736. "912" Liquid cement. 2 oz. bottle. NET 29c

71-737. "912-B" cement. 2 oz. bottle. 29c

71-740. Thinner for "912". 2 oz. .... 15c

71-741. Thinner for "912-B". 2 oz. .... 15c

## STAND-OFF INSULATORS

Leakage losses between metal base and top cap negligible. Body of transparent Amphphenol. Withstands temperatures of 200° F. Will not break when dropped. 1/2" dia. sizes have solder lug; 3/4" dia. sizes have large hex. binding screw so that wires can be anchored securely. Shipping weight, 6 oz.

Stock No.	Height	Dia.	NET
71-750	1 1/2"	1/2"	29c
71-751	2 1/2"	1/2"	35c
71-752	2 1/2"	3/4"	65c
71-753	4 1/2"	3/4"	79c
71-754	6"	3/4"	88c

## AMPHENOL CRYSTAL SOCKET

For crystal holders with 3/4" pin spacing. Polystyrene body with silver-plated phosphor bronze contacts reduces leakage and resistance losses. Contacts fit all standard crystal holders. Wt., 2 oz.

71-760. NET..... 18c

WE CAN SUPPLY ALL AMPHENOL PRODUCTS Send for Complete Amphphenol literature. 37-006 Amphphenol Catalog—Sent FREE



# BLILEY QUARTZ CRYSTALS



## TYPE LD2

For 80 and 160 meter bands. Frequency drift is less than 4 cycles (±) per MC per degree C. Will operate within .03% of specified frequency at calibration temperature. Specify frequency when ordering. Plugs into 5-prong tube socket. Av. shpg. wt. 12 oz.

### FREQUENCY WITHIN 5 KC.

Stock No.	Band MC	NET EACH
99-100	3.5-4.0	\$4.80
99-101	1.75-2.05	

### EXACT FREQUENCY

Stock No.	Band MC	NET EACH
99-105	3.5-4.0	\$5.90
99-106	1.75-2.05	

## TYPE BC3

Accurately calibrated; molded bakelite holder with heat dissipating stainless steel cover plate; 3/4" pin spacing. Only 23 cycle drift per MC per degree C. Specify frequency desired in band when ordering. Average shpg. wt. 12 oz.

Stock No.	Frequency Within	Band MC	NET EACH
99-120	± 5 KC	7.0-7.3	\$3.35
99-121	± 5 KC	3.5-4.0	
99-125	± 10 KC	1.75-2.05	
99-126	± 25 KC	7.3-7.5	
99-127	EXACT	7.0-7.3	\$4.95
99-128	EXACT	3.5-4.0	
99-129	± 5 KC	7.3-7.5	

## CRYSTAL HOLDERS

Molded bakelite adjustable pressure-type holders for 1" square crystals. 3/4" pin spacing. Mount in any position. A safe, convenient holder for unmounted transmitter crystals. 8 oz.

99-225. For 20-40 meters. 99-226. For 80-160 meters. EACH. 95¢

## BLILEY CRYSTAL HANDBOOK

A complete handbook on frequency control with quartz crystals, which every Amateur, engineer, and experimenter should have. Thirty-five pages explaining theory, use, application, and care of quartz crystals. Shpg. wt. 8 oz. 37-885. NET..... 10¢

## GORDON QSL CARD ALBUM

Enables you to keep a well-ordered file of all QSL cards received. Contains 50 looseleaf pages for holding 200 cards. Will accommodate 50 more pages. Sheets compression-held with adjustable posts. Handily bound in durable red grained morocco composition leather with gold colored embossing. Page size, 9 1/2" x 13 1/2". Shpg. wt., 5 lbs. 37-890. NET..... \$2.47

37-891. 50 sheet refill for above. With stub sheets and longer posts. NET..... 83¢



## OHMITE R.F. PLATE CHOKES

74-310. TYPE Z1. 5 meter choke. 5.5 microhenries, 85 ohms DC res., 1000 ma. 1 1/4" long. Pigtail leads. NET..... 15¢

74-311. TYPE Z2. 10-20 meter. Illustrated. With brackets. 30 microhenries. 2 ohms, 1000 ma. NET..... 44¢

## OHMITE PARASITIC SUPPRESSOR

TYPE P-300. A cure for parasitic oscillation in RF stages of transmitters. Increases efficiency and reduces tube failure. (One required for tubes in parallel; two for push pull.) Has a 50 ohm vitreous resistor and 0.3 mh. choke. 1 1/4" x 3/4". 4 oz. 74-315. NET..... 88¢



## TYPE MO-2 POLICE FREQUENCY CRYSTALS



2050-3000 KC for fundamental use; 7500-11,000 KC for tripling or quadrupling. Bakelite holder with stainless steel electrodes. \*Specify frequency and include oscillator circuit sketch with order. 12 oz.

Stock No.	Frequency	EACH	5 LOTS, EACH
99-135	2050-3000 KC	\$14.00	\$23.65
99-137	2050-3000 KC*	24.50	18.65
99-136	7500-11000 KC	19.50	18.65

\*Police interzone, .01%. Oven mounted.

## TYPE MC-5 FOR MARINE AND AIRCRAFT USE



Tolerance and temp. coefficient comply with Marine and Aircraft requirements. Moisture and dust sealed. Bakelite holder with matched stainless-steel electrodes. Pin spacing 3/4". Holder size, 1 1/2" x 1 1/2" x 1/2". 1 lb. Specify exact frequency desired and include oscillator circuit diagram with order.

### FOR MARINE USE

Frequency	Stock No.	EACH	
2110 KC	2158 KC	2206 KC	99-150 \$10.00
2118 KC	2166 KC	2638 KC	
2126 KC	2174 KC	2670 KC	
2134 KC	2182 KC	2738 KC	
2142 KC	2198 KC		

### RANDOM FREQUENCIES

Marine units for any specified frequency not listed above, but between 2000 and 4000 KC.

99-151. 2-4 MC. .04%. NET... \$12.00

99-152. 2-4 MC. .02%. NET..... 14.00

### FOR AIRCRAFT USE

Tolerance complies with aircraft requirements. Send oscillator circuit diagram with order.

99-170. 3105 KC. \$14.00

99-171. 6210 KC. EACH... \$14.00

WE CAN SUPPLY ALL BLILEY CRYSTALS for Broadcast, Police, Marine or Mobile frequencies between 20 kilocycles and 30 megacycles. Send for complete Bliley literature. 37-030. Bliley Catalog—Sent FREE

## TYPE B5

Accurately engineered precision crystal for amateur 40 meter bands. Drift is less than 4 cycles per MC per degree C. Extremely active and ideal for harmonic operation. 40 meter crystals are high output type. Low-loss holder; 3/4" pin spacing. Specify frequency when ordering. Shpg. wt., 12 oz.



Stock No.	Frequencies	Within	EACH
99-180	7.0 to 7.3 MC	5 KC	\$4.80
99-181	7.0 to 7.3 MC	Exact	5.90

## TYPE HF2

Fully dependable, active, precision ground, 20 meter amateur band crystals. Applicable to conventional 14 MC oscillator circuits other than the Pierce type. Drift is only 20 cycles per megacycle, per degree centigrade. Details in bulletin 37-885—sent free. Wt., 12 oz.

Stock No.	Frequencies	Within	EACH
99-190	14.0 to 14.4 MC	15 KC	\$5.75
99-191	14.4 to 15.0 MC	30 KC	
99-192	14.0 to 14.4 MC	5 KC	
99-193	14.4 to 15.0 MC	5 KC	

## VF-1 VARIABLE FREQUENCY UNITS

Easily adjusted. Fundamental frequency variation up to 6 KC on 3.5 MC units; up to 12 KC on 7 MC units. Drift less than 4C/MC/°C. 3/4" pin spacing. Average shpg. weight, 12 oz.



Stock No.	Frequencies	Within	EACH
99-200	3500-4000 KC	± 5 KC	\$6.60
99-201	7000-7300 KC	± 15 KC	8.60
99-202	7000-7300 KC	± 5 KC	8.50
99-203	3500-4000 KC	EXACT	8.50

## BLILEY 100-1000 KC UNIT

A special dual frequency crystal sealed in special holder. For use in frequency standards or calibration oscillators; will provide 100 and 1000 KC signal when adjusted to zero beat with Standard Frequency transmissions. The 1000 KC frequency is correct within .05%. Frequency drift is minus 10 and minus 23 cycles/MC/°C, for the 100 and 1000 KC frequencies respectively. Size, 1 1/2" x 1 1/2" x 3/4". Bulletin 37-031 sent free on request. 8 oz. 99-175. Type SMC-100. \$7.75



## MEISSNER "UNI-SIGNAL" SELECTOR



The most amazing contribution to the CW field in years! An output selector to connect between the receiver and speaker that removes 90% of the tube hiss and background noise. Peaks all CW signals at 1000 cycles; unbelievable selectivity afforded by entrance path only 25 to 40 cycles wide. Will isolate any signal otherwise unreadable because of weakness or QRM. Connects to any receiver. Size, 10" x 5" x 6". Shpg. wt., 5 lbs. \$14.82

73-530. Stethoscopic Headphones. Especially designed for use with Uni-Signal Selector above. Super-sensitive. Plugs into coupling jack. Shpg. wt., 2 lbs. \$5.23

## MEISSNER SIGNAL SPLICER



Boost signal strength tremendously, decrease stray noise pickup, and improve image rejection with the new Signal Splicer. Provides accurate impedance match between receiver and antenna. Enables you to copy weak signals from ordinary AM or FM signals. Signal Splicer assures maximum sensitivity and reception on all amateur bands. Can be used as pi-section antenna coupler for transmitters up to 75 watts input. Works equally well on either AM or FM signals. Wt., 5 lbs. \$4.25

## KNIGHT UNMOUNTED TRANSMITTER CRYSTALS

High quality, inexpensive, unmounted X-cut crystals. Accurately ground from the finest quality quartz. Calibration within 1% of operating frequency under normal conditions, dependent on type of mounting used. Drift in actual operation negligible. Specify frequency, and closest stock unit will be shipped. Fit Bliley holder listed at left above. Not available for frequencies outside amateur bands. Shpg. wt., 8 oz.

Stock No.	Frequency Band	NET
99-250	7000-7300 KC	\$1.95
99-251	3500-4000 KC	1.50
99-252	1750-2050 KC	1.50

## OHMITE D-100 DUMMY ANTENNA



Designed to take the guesswork out of transmitter tuning. Special 100 watt resistor maintains constant resistance and impedance at high Radio Frequencies; glass-enclosed and plugs into standard 4 prong socket. Used with RF ammeter, it permits accurate checking of output and efficiency of transmitter or of individual stages. Write for bulletin 37-032. Wt., 1 lb.

74-300. D-100. 73 ohm. \$3.23

74-301. D-100. 600 ohm. NET EACH.....

74-302. D-250. 73 ohm. 250 Watt Dummy Antenna. Wt., 2 lbs. NET..... \$6.47

74-303. D-250-600. 600 ohm. 250 Watt Dummy Antenna. NET..... \$6.47



# STANCOR TRANSFORMERS



Amateur and industrial transformers and chokes. Only most used types are shown. Many other types available. Outline your requirements and enclose deposit with your order. Special quotations gladly supplied. All primaries, unless otherwise indicated, are for 115V. 50-60 cycles. For 220-230 V. Pri.—not listed on this page, increase price 55%, and for 25 cycle primaries, 100%.



37-036. Complete Stancor Transformer Catalog, sent FREE

## FILAMENT TRANSFORMERS

Stock No.	Type	NET	Volts	Amps.	Insul.	Fig.	Lbs.
64-300	P-6140	\$1.23	2.5	5.25	2,500	N	2
64-301	P-3060	2.00	2.5	10.0	10,000	B	3
64-302	P-5000	2.15	5.0	6.0	2,500	C	4
64-303	P-3062	1.71	5.0	6.0	2,500	B	3
64-304	P-6135	2.15	5.0	10.0	2,500	N	4
64-305	P-6136	1.38	5.25	4.0	2,500	N	3
64-306	P-6137	2.76	5.25	13.0	2,500	N	5
64-307	P-5011	3.23	5.25	13.0	2,500	A	6
64-308	P-6134	6.3	1.2	2,500	A	6	
64-309	P-5014	1.42	6.3	6.0	2,500	B	2
64-310	P-6164	1.38	6.3, 5.25	2.5	2,500	B	2
64-311	P-4089	2.32	6.3	6.0	2,500	C	4
64-312	P-3064	1.71	6.3	6.0	2,500	B	3
64-313	P-6308	2.26	6.3	10.0	2,500	N	4
64-314	P-5015	1.53	7.5	4.0	2,500	B	3
64-315	P-6138	2.32	7.5	8.0	2,500	N	4
64-316	P-4092	2.94	7.5	8.0	2,500	C	5
64-317	P-5016	1.85	10.0	4.0	2,500	N	3
64-318	P-6139	2.47	10.0	8.0	2,500	N	5
64-319	P-4097	3.09	10.0	8.0	2,500	C	6

\*Secondary is not center-tapped, all others are center-tapped.

## STANCOR PROFESSIONALS

Highest quality transformers built especially for continuous-duty laboratory and industrial use. Also highly popular with radio amateurs for transmitter construction. Vacuum impregnated and pot-sealed for complete moisture protection. Low resistance solder-lug terminals. Can be top, bottom, or side mounted.



## PLATE TRANSFORMERS

Stock No.	Type	NET	DC Volts†	DC Ma.	Wt. Lbs.
64-335	P-8500	\$ 6.17	400	250	12
64-336*	P-8501	7.85	400-500	250	13
64-337	P-8502	8.23	600-750	250	18
64-338	P-8503	7.94	400-1000	150-150	17
64-339	P-8504	15.14	1000-1250	300	30
64-340	P-8505	20.29	1000-1250	500	41
64-341†	P-8506	17.20	1250-1500	300	34
64-342	P-8507	22.46	1250-1500	500	49
64-343	P-8508	21.31	1500-1750	300	36
64-344	P-8510	22.00	1750-2000	300	39
64-345	P-8511	28.90	2000-2500	300	30
64-346	P-8512	32.34	1500-1750	500	60
64-347†	P-8513	39.69	1750-2000	500	68
64-348	P-8514	42.04	2000-2500	500	70
64-349†	P-8515	44.39	3000	375	65

\*Also has 40 volt bias tap. †Has 115-230 volt primary. ‡After filter.

## SWINGING CHOKES

Stock No.	Type	NET	Henries	Ma.	Ohms	Insul.	Lbs.
64-360	C-2700	\$2.73	8-30	200	80	3000	5
64-361	C-2701	5.38	8-25	300	80	5000	10
64-362	C-2702	7.35	5-25	400	60	5000	15
64-363	C-2703	11.76	5-20	500	65	5000	19

## SMOOTHING CHOKES

Stock No.	Type	NET	Volts	Amps.	Insul.	Lbs.	
64-364	C-2710	\$2.73	15	200	80	3000	5
64-365	C-2711	5.38	12	300	80	5000	10
64-366	C-2712	7.35	10	400	60	5000	15
64-367	C-2713	11.76	8	500	65	5000	19

## FILAMENT TRANSFORMERS

Stock No.	Type	NET	Volts	Amps.	Insul.	Lbs.
64-380	P-8536	\$2.26	2.5	5	2000	3
64-381	P-8537	2.62	2.5	10	2000	4
64-382	P-8538	4.80	5.0	15	2000	5
64-383	P-8539	4.00	5.0	6	2000	4
64-384	P-8540	4.03	5.0*	8	2000	5
64-385	P-8541	4.38	5.0*	13	2000	5
64-386	P-8542	8.67	5.0*	20	10000	10
64-387	P-8543	5.44	5.0*	21	2000	11
64-388	P-8544	2.35	6.3	3	2000	3
64-389	P-8545	3.79	7.5*	4	2000	4
64-390	P-8546	3.79	7.5*	8	2000	6
64-391	P-8547	3.44	10.0*	4	5000	5
64-392	P-8548	4.32	10.0*	8	5000	6

\*Has 115 V. primary tapped at 105 V. Filament voltage 10% higher than shown, can be obtained by connecting 105 V. primary to 115 V. line.

## OUTPUT TRANSFORMERS

Stock No.	Type	NET	Primary	Secondary	Audio	Wt.
64-400A-9040	\$5.14	1500, 2500 CT	4, 8, 15, 250, 500	30 W.	5	
64-401A-9041	9.41	1900, 6400 CT	4, 8, 15, 250, 500	100 W.	15	
64-402A-9042	2.79	2000 CT	4, 8, 15, 250, 500	5 W.	3	
64-403A-9043	4.23	3000, 5000 CT	4, 8, 15, 250, 500	20 W.	4	
64-404A-9044	5.59	3000, 5000 CT	4, 8, 15, 250, 500	40 W.	6	
64-405A-9045	5.90	3800, 6000 CT	4, 8, 15, 250, 500	60 W.	7	
64-406A-9046	5.90	3800, 6000 CT	4, 8, 15, 250, 500	30 W.	5	
64-407A-9047	4.03	6000, 10000 CT	4, 8, 15, 250, 500	30 W.	5	
64-408A-9048	3.23	7000	4, 8, 15, 250, 500	5 W.	3	
64-409A-9049	3.03	10,000 CT	4, 8, 15, 250, 500	5 W.	3	
64-410A-9050	4.00	10,000 CT	4, 8, 15, 250, 500	10 W.	3	
64-411A-9051	4.00	10,000 CT	4, 8, 15, 250, 500	20 W.	4	
64-412A-9052	3.65	14,000 CT	4, 8, 15, 250, 500	10 W.	4	

## PLATE TRANSFORMERS

Stock No.	Type	NET	DC Volts‡	DC Ma.	Fig.	Lbs.
64-425	P-5060	\$ 4.32	400	250	H	10
64-426	P-6321	4.62	500-600-30	250	C	8
64-427	P-3535	6.79	750-600-400	300	H	16
64-428*	P-6322	6.47	1000-400	130-150	C	14
64-429	P-4030	7.70	1000-750	250	D	18
64-430	P-6152	12.02	1250-1000	300	F	30
64-431†	P-5083	13.26	1500-1250	300	F	30
64-432	P-6156	14.49	1750-1500	300	F	31
64-433	P-6154	15.14	2000-1750	300	F	32
64-436	P-6155	20.05	2500-2000	300	F	43
64-434	P-6153	15.71	1250-1000	500	F	36
64-435	P-6157	20.05	1500-1250	500	F	43
64-437	P-6159	25.61	1750-1500	500	F	52
64-438†	P-6162	29.28	2000-1750	500	F	57
64-439†	P-6163	35.49	2500-2000	500	F	60

\*Tapped for dual rectifier. †Has 115-230 V. Primary. ‡After filter.

## SWINGING CHOKES

Stock No.	Type	NET	Hys	Ma.	Ohms	Insul.	Fig.	Lbs.
64-450	C-1400	\$1.85	8-40	175	100	3000	C	3
64-451	C-1401	2.29	8-30	200	80	3000	C	4
64-452	C-1403	4.26	8-25	300	80	5000	D	9
64-453	C-1404	5.56	5-20	400	60	5000	G	6
64-454	C-1405	9.26	5-20	500	65	5000	F	17

## SMOOTHING CHOKES

Stock No.	Type	NET	Hys	Ma.	Ohms	Insul.	Fig.	Lbs.
64-465	C-1421	\$1.85	25	140	160	3000	C	3
64-466	C-1411	2.29	15	200	80	3000	C	4
64-467	C-1413	4.23	12	300	80	5000	D	9
64-468	C-1414	5.56	10	400	60	5000	D	14
64-469	C-1415	9.26	8	500	65	5000	D	17

## STANDARD MODULATION TRANSFORMERS

Stock No.	Type	NET	Primary	Secondary	Audio	Lbs.
64-480	A-3812	\$0.82	10,000	4,000	5 W.	1
64-481	A-3845	2.00	10,000	3,000-8,000	25 W.	4
64-482	A-2906	4.00	6,000	3,300-6,250	40 W.	7
64-484	A-3808	4.50	3,800	4,000-10,000	60 W.	8
64-483	A-2907	5.85	8,000	3,300-12,500	90 W.	11
64-485	A-3829	6.67	6,900-9,000	3,300-6,250	175 W.	12
64-486	A-3816	34.65	8,000-10,000	4,000-9,000	1500 W.	68

## OHMITE VITREOUS ENAMELED RHEOSTATS

Underwriters' Approved heavy-duty wire-wound type for radio and power control circuits. Metal contact shoe. Conservatively rated. Air-cooled. Insulated shaft for 1/8" hole. 3 terminals. With knob. Shipping wt., 1 lb.



25 Watt—Type H		50 Watt—Type J	
No. Ohms	EACH	No. Ohms	EACH
74-320	1	74-350	5
74-321	2	74-352	2
74-322	6	74-353	3
74-323	10	74-354	4
74-324	15	74-354	8
74-325	25	74-355	12
74-326	50	74-356	22
74-327	100	74-357	50
74-328	175	74-358	80
74-329	250	74-359	150
74-330	500	74-360	225
74-331	750	74-361	300
74-332	1000	74-362	500
74-333	1500	74-363	1000
74-334	2500	74-364	2500
74-335	3500	74-365	5000
74-336	5000	74-366	10000

100 Watt—Type K	
No. Ohms	EACH
74-380	0.5
74-381	2
74-382	3
74-383	10
74-384	25
74-385	50
74-386	100
74-387	500
74-388	1000

## AEROVOX MICA CONDENSERS

Made of highest quality ruby-mica and non-magnetic foil, in molded bakelite case. Metal eyelet terminals tapped for 6-32 machine screws. Moisture proofed; protected against shorts. Can be stack-mounted. For all by-pass uses. Size, 1 1/2" x 1 1/4". With mtg. screws, Wt., 1 oz.



## TYPE 1650—1000 VOLTS

Stock No.	Cap.	NET	Stock No.	Cap.	NET	Stock No.	Cap.	NET
73-960	.00005	35c	73-964	.0001	35c	73-968	.02	\$1.09
73-961	.0001		73-965	.001	35c	73-969	.05	2.26
73-962	.00015		73-966	.006	59c			
73-963	.00025		73-967	.01	82c			

## TYPE 1651—2500 VOLTS

Stock No.	Cap.	NET	Stock No.	Cap.	NET	Stock No.	Cap.	NET
73-975	.00005	41c	73-978	.001	\$0.53	73-981	.01	\$1.65
73-976	.00025		73-979	.002	.79	73-982	.02	2.32
73-977	.0005		73-980	.006	1.03			

## TYPE 1652—5000 VOLTS

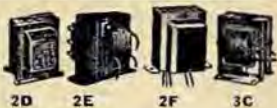
Stock No.	Cap.	NET	Stock No.	Cap.	NET	Stock No.	Cap.	NET
73-985	.00005	53c	73-988	.0005				



# THORDARSON High Quality TRANSFORMERS



An extremely popular line offering all necessary transformer units for dependable service in any type of Commercial or Amateur equipment. Each unit with mounting template. All primaries are for 115 volt 50-60 cycle. Other voltages on special order. Describe your requirements, and send deposit with order or write for quotations. Improved voltage regulation and minimum heat rise have been given prime consideration in the design of all Thordarson plate and filament type transformers.



## FILAMENT TRANSFORMERS

Stock No.	Type	NET	Volts	Amps.	Insul.	Fig.	Lbs.
63-400	T50F61	\$1.03	2.5 CT	3.5	1600	2B	1
63-401	T19F88	1.18	2.5 CT	5.25	1600	2B	1 1/4
63-402	T19F89	1.32	2.5 CT	10	1600	2B	2
63-403	T19F90	1.76	2.5 CT	10	7500	3C	2 1/4
63-404	T19F82	2.94	2.5 CT	15	10000	3C	4
63-405	T64F33*	3.53	2.5 CT	10	7500	2D	4 1/2
63-406	T19F98	1.91	5 CT	4	1600	2D	2 1/4
63-407	T19F83	1.32	5 CT	5	1600	2B	2
63-408	T19F84	1.62	5 CT	8	1600	3C	2 1/4
63-409	T19F85	2.35	5 CT	13	1600	3C	4
63-410	T19F86	3.23	5 CT	21	1600	3C	4 1/2
63-411	T19F91	1.47	5.25 CT	4	1600	3C	2 1/4
63-412	T19F92	2.06	5.25 CT	13	1600	3C	4
63-413	T74F23*	2.94	5 CT	13	1600	2D	4 1/4
63-414	T74F24*	5.00	5 CT	21	1600	2D	5 1/4
63-415	T19F80	1.79	6.3 CT	1	1600	2B	1
63-416	T19F81	1.88	6.3 CT	2	1600	2B	1
63-417	T19F97	1.03	6.3 CT	3	1600	2B	1 1/2
63-418	T61F85	1.32	6.3, 5, 2.5	2.5	1600	2E	1 1/4
63-419	T73F60*	2.35	6.3 CT	5	1600	2D	3 1/4
63-420	T19F98	1.62	6.3 CT	6	1600	3C	2 1/4
63-421	T19F99	2.06	6.3 CT	10	1600	3C	4
63-422	T19F93	1.47	7.5 CT	4	1600	3C	2 1/4
63-423	T19F94	1.76	7.5 CT	8	1600	3C	4
63-424	T19F95	2.06	10 CT	4	1600	3C	2 1/4
63-425	T19F96	1.62	10 CT	8	1600	3C	2 1/4
63-426	T64F14*	2.94	10 CT	8	1600	2D	5
63-427	T19F87	3.67	10 CT	12	1600	3C	6 1/4

\*Primaries tapped at 105, 110 and 115 volts.

## STANDARD MODULATION TRANSFORMERS

Stock No.	Type	NET	Primary	Secondary	Audio	Lbs.
63-450	T67M69	\$1.62	10000	2700	10 W.	2
63-451	T17M59	1.62	10000	3000, 3750, 4500	10 W.	2
63-452	T64M26	3.53	5800	5000, 10000	40 W.	5
63-453	T19M21	4.12	10000	3750, 6600	75 W.	7
63-454	T19M22	5.88	8400	5000, 7850	100 W.	13
63-455	T84M70	5.88	3800	2500, 5000, 7500	75 W.	10
63-456	T14M49	10.55	6900	2850, 4500, 6500	175 W.	20
63-457	T82M25	24.99	9000	4000, 6000, 8000	650 W.	47

## BUD "JUNIOR" TRANSMITTING CONDENSERS



For low and medium power applications. Uses only 3" x 2 1/4" panel space. Rounded plates. Alumatic 196 insulated. Avg. shpg. wt., 3 lbs.



### SINGLE SECTIONS

Stock No.	Type	Jm. Cap.	Per Sec.	Airgap	NET
72-900	JC1525	50 Max.	4 Min.	.051*	\$1.79
72-901	JC1526	100 Max.	6 Min.	.051*	1.94
72-902	JC1527	145 Max.	7 Min.	.051*	2.29
72-903	JC1528	250 Max.	11 Min.	.051*	2.85
72-904	JC1529	340 Max.	15 Min.	.051*	3.56
72-905	JC1530	25 Max.	4 Min.	.078*	1.76
72-906	JC1531	35 Max.	4 Min.	.078*	1.85
72-907	JC1532	55 Max.	6 Min.	.078*	2.06
72-908	JC1533	80 Max.	7 Min.	.078*	2.15
72-909	JC1534	110 Max.	9 Min.	.078*	2.50
72-910	JC1535	150 Max.	12 Min.	.078*	3.00
72-911	JC1536	190 Max.	15 Min.	.078*	3.73
72-912	JC1537	245 Max.	17 Min.	.078*	4.44
72-913	JC1538	20 Max.	5 Min.	.144*	1.94
72-914	JC1539	40 Max.	7 Min.	.144*	2.15
72-915	JC1540	55 Max.	9 Min.	.144*	2.50
72-916	JC1541	80 Max.	12 Min.	.144*	2.85
72-917	JC1542	105 Max.	15 Min.	.144*	3.29
72-918	JC1543	18 Max.	5 Min.	.175*	1.15
72-919	JC1544	40 Max.	7 Min.	.175*	1.50
72-920	JC1545	55 Max.	10 Min.	.175*	2.20
72-921	JC1546	85 Max.	16 Min.	.175*	3.56
72-922	JC1547	100 Max.	17 Min.	.175*	4.26

### DUAL SECTIONS

Stock No.	Type	Jm. Cap.	Per Sec.	Airgap	NET
72-950	JC1550	20 Max.	3 Min.	.051*	\$2.50
72-951	JC1551	50 Max.	5 Min.	.051*	3.00
72-952	JC1552	70 Max.	5 Min.	.051*	3.56
72-953	JC1553	100 Max.	6 Min.	.051*	3.88
72-954	JC1554	145 Max.	7 Min.	.051*	4.65
72-955	JC1555	200 Max.	9 Min.	.051*	5.17
72-956	JC1556	250 Max.	11 Min.	.051*	6.08
72-957	JC1557	25 Max.	4 Min.	.078*	3.00
72-958	JC1558	35 Max.	4 Min.	.078*	2.20
72-959	JC1559	55 Max.	6 Min.	.078*	3.56
72-960	JC1560	80 Max.	7 Min.	.078*	4.12
72-961	JC1561	110 Max.	9 Min.	.078*	4.44
72-962	JC1562	150 Max.	11 Min.	.078*	5.35
72-963	JC1563	20 Max.	5 Min.	.144*	3.56
72-964	JC1564	40 Max.	7 Min.	.144*	3.88
72-965	JC1565	55 Max.	9 Min.	.144*	4.17
72-966	JC1566	18 Max.	5 Min.	.175*	3.88
72-967	JC1567	40 Max.	9 Min.	.175*	4.44

## PLATE TRANSFORMERS

Stock No.	Type	NET	DC Volts	DC Ma.	Fig.	Lbs.
63-500	T19P54	\$3.53	400	150	2G	7
63-501	T19P55*	3.82	500-400	250	2G	8
63-502	T19P56	4.12	750-600	225	2G	10
63-503	T19P57†	5.00	1000-400	125-150	2G	11
63-504	T19P58†	8.82	1000-750	200-150	2G	19
63-505	T19P59	10.29	1000-1250	300	2K	27
63-506	T19P60	12.46	1250-1300	300	2K	29
63-507	T19P61	14.3	1500-1750	300	2K	31
63-508	T19P62	15.73	1750-2000	300	2K	35
63-509	T19P63	15.13	1000-1250	500	2K	38
63-510	T19P64	17.49	1250-1500	500	2K	44
63-511	T19P65	18.23	2000-2500	300	2K	44
63-512	T19P66	24.40	1500-1750	500	2K	60
63-513	T19P67	34.40	1750-2000	500	2K	51
63-514	T19P68	34.40	2000-2500	500	2K	61

\*Bias tap at 30 volts. †Designed for double rectifiers; supply both secondary voltages simultaneously.

## SMOOTHING CHOKES

Stock No.	Type	NET	Hys.	Ma.	Res.	Insul.	Fig.	Lbs.
63-530	T19C39	\$1.91	5-20	150	215	3000	2F	4
63-531	T19C35	2.35	5-20	200	130	3000	2D	6
63-532	T19C36	4.12	5-20	300	105	5000	2D	11
63-533	T19C37	7.35	5-20	400	90	5000	2K	20
63-534	T19C38	8.82	5-20	500	75	5000	2K	26

## SMOOTHING CHOKES

Stock No.	Type	NET	Hys.	Ma.	Res.	Insul.	Fig.	Lbs.
63-550	T19C46	\$1.91	12	150	215	3000	2F	4
63-551	T19C42	2.35	12	200	130	3000	2D	6
63-552	T19C43	4.12	12	300	105	5000	2D	11
63-553	T19C44	7.35	12	400	90	5000	2K	20
63-554	T19C45	8.82	12	500	75	5000	2K	26

## THORDARSON CHT SERIES

Engineered and constructed for maximum efficiency under continuous load. Completely moisture-proofed and fully shielded. Each with individual mounting template. All plate and filament transformer primaries are tapped for operation from 115/230 volt, 50-60 cycle AC.



## MULTI-VOLT PLATE TRANSFORMERS

Stock No.	Type	NET	DC Volts	Ma.	Lbs.
63-570	T15P15	\$20.58	1000-1250	300	52
63-571	T15P16	20.57	1000-1250	500	81
63-572	T15P17	22.05	1250-1500	300	55
63-573	T15P18	41.16	1500-1750	500	96
63-574	T15P19	39.69	2000-2500	300	85
63-575	T15P20	58.80	2000-2500	650	140

## C. H. T. INPUT CHOKES

Stock No.	Type	NET	Hys.	Ma.	Insul.	Ohms.	Lbs.
63-600	T15C36	\$ 5.29	5-25	200-20	4000	105	11
63-601	T15C37	7.35	5-25	300-30	4000	78	23
63-602	T15C38	8.82	5-25	400-30	4000	95	25
63-603	T15C39	13.23	5-25	500-30	10000	86	39

## C. H. T. SMOOTHING CHOKES

Stock No.	Type	NET	Hys.	Ma.	Insul.	Ohms.	Lbs.
63-620	T15C45	\$ 5.29	12	200	4000	105	10
63-621	T15C46	7.35	12	300	4000	78	22
63-622	T15C47	8.82	12	400	4000	95	24
63-623	T15C48	13.23	12	500	10000	86	39

## MULTI-MATCH MODULATION TRANSFORMERS

Plug-in terminal board for matching any driver-mod. tube combination.

Stock No.	Type	NET	Cap. Watta	Pri. Ma. Per Side	Sec. Ma.	Lbs.	
63-630	T11M74	\$ 6.47	40	100	80	160	8
63-631	T11M75	7.50	75	145	145	290	9
63-632	T11M76	13.23	125	210	160	320	18
63-633	T11M77	17.64	300	250	250	500	30
63-634	T11M78	35.28	500	320	320	640	54

## MULTI-MATCH DRIVER TRANSFORMERS

Have plug-in terminal boards for matching various driver tube combinations. Recessed sub-base lugs permit single hole wiring.

Stock No.	Type	NET	Cap. Watta	Pri. Ma. Per Side	Ratio	Lbs.
63-640	T15D79*	\$5.29	15	60	4:1, 4.5:1, 5:1, 5.5:1, 6:1	6
63-641	T15D82†	5.29	15		1:1.4, 1:1.25, 1:1.2, 1:1.175, 1:1.14, 1:1.25, 1:1.85, 1:1.75	5 1/2

\*P. P. 45 or 2 A 3's, 6B4G, etc. †500 ohm primary.

## THORDARSON TRANSMITTER MANUAL

37-702. Completely revised. Contains transmitter schematic diagrams, modulation tables, coil data, power supply circuits, etc. An indispensable aid to everyone interested in Amateur radio. NET. . . . 9c

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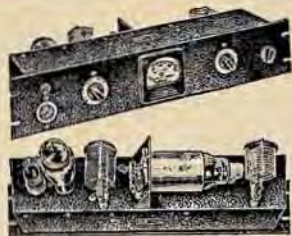
# MILLEN PRODUCTS



## "VARIARM" ECO UNIT

Here is instant fingertip control of transmitter frequency in an ECO. Uses a 6K7 electron-coupled-oscillator coupled to a 25L6GT operated either as a straight through amplifier or frequency doubler; transformerless power supply uses a 25Z5GT rectifier in a full-wave voltage-doubler circuit. Load-compensated keying circuit maintains constant output voltage from power supply. RF output of the amplifier is 2 watts over a frequency range of 75 KC plus or minus from the resonant frequency, plus or minus 150 KC when operated as a frequency doubler. Power output is ample to drive any of the commonly used tubes in the first or oscillator stage of existing transmitters. Tunes over the range from 3500 to 3650 KC at all times, and from 7000 to 7300 KC by frequency doubling. Supplied complete with parallel-resonant-tuned coupler to plug into normal crystal socket, coils, set of G.E. tubes and calibration chart. For 115 volts, 60 cycle operation. Shpg. wt., 12 lbs.

**72-000. CASH PRICE... \$3250**  
\$8.13 down, \$6.46 monthly for 4 months.



## 50 WATT TRANSMITTER

An Amateur band transmitter or exciter in a compact relay-rack type mounting. Uses a 6L6 Tri-tet oscillator and an 807 amplifier. Sufficient oscillator output at the fourth harmonic of the crystal frequency is obtainable to drive the 807 as a straight amplifier or doubler. It is possible to secure an output of 25 to 50 watts or more in four bands from a single crystal of the proper frequency. Unit is designed to operate from a 750 volt 250 ma. supply. It requires a fixed bias of 45 volts. Total filament drain is 1.8 amps at 6.3 volts. A single 200 ma. meter may be used to read plate current of either stage. Because it is possible to double or quadruple frequency in the plate circuit of the oscillator and to double in the plate circuit of the 807, there are several possible combinations of coils and crystals which will produce the same output frequency. Less tubes but with one set of 3 coils. State band in which crystal operates and band in which output is desired. Shpg. wt., 20 lbs.

**72-005. NET... \$3750**  
\$9.38 down, \$7.46 monthly for 4 months.



## FREQUENCY STANDARD

The Millen Frequency Standard has been especially designed for use wherever a high degree of calibration accuracy is required. Unit is easily adjusted to zero-beat with WWV or any other primary standard. It puts out uniformly accurate calibrating signals at 10, 100, and 1000 KC intervals. Uses the newly developed General Electric 1000 KC crystal which has a frequency temperature coefficient of less than one cycle/MC/C°. The crystal is sealed in a standard metal tube envelope filled with helium. Its frequency may be varied plus 75 cycles and minus 100 cycles from 1000 KC. The self-contained power supply uses a VR150-30 to maintain constant voltage regulation. In addition to the oscillator, multi-vibrators, and amplifier, a built-in detector with phone jack and gain control is incorporated. Uses 1-6K8, 2-6SC7, 1-6L7, 1-6V6, 1-5W4 and 1-VR150-30. Supplied complete with tubes and crystal. Size 9"x9 1/2"x10 1/2". For 110 volt 60 cycle operation. Shpg. wt., 20 lbs.

**72-010. CASH PRICE... \$11000**  
\$27.50 down, \$10.93 monthly for 8 months.

## NEUTRALIZING CONDENSERS



Fig. "A," for medium and low power has ultra-low-loss Quartz Q insulation. Fig. "B," heavy-duty telescoping cylinder type, has air dielectric, mounted on Isolantite standoff. Both types have metal mounting bases for vertical mounting. Compact but efficient units. Shpg. wt., 8 oz.

Stock No.	Type	Mmf.	Fig.	NET
72-015	15001	7-4.3	A	\$ .90
72-016	15002	5-13.5	A	1.05
72-017	15003	1-2.5	A	.50
72-018	15005	3.4-14.6	B	2.00
72-019	15006	2.8-9.1	B	3.00

\*Peak Voltage:—6000 V.; †—4000 V.

## TRANSMITTER DIAL

Heavy-gauge nickel silver dial, 0 to 100 counter-clockwise. Large black bakelite hub insulates metal scale from shaft. Overall dia., 3 1/2". Finger-grip type knob. Wt., 1 lb. **72-046. NET... \$1.00**



## TUNING KNOBS

Similar to above but 1 1/2" dia. Etched numerals are 0 to 10 clockwise. Black bakelite hub insulates nickel-silver scale from shaft. Shpg. wt., 8 oz. **72-049. NET... 50c**



## DISC DIAL

For condensers with shafts at right angles to front panel. Has 10 to 1 vernier ratio. Dial readings 0-100. Dial disc is 3/4" in dia. With meter type escutcheon. Front plate is black molded bakelite. Shpg. wt., 1 lb. **72-052. NET... \$2.25**



## GEAR DRIVE UNIT

Right angle worm-gear drive, 16 to 1 vernier tuning ratio. 1/2" shaft. No backlash. Wt., 1 lb. **72-055. NET... \$3.75**



## STEATITE TUBE SOCKETS

Higher steatite body provides maximum insulation between contacts and chassis. Low-loss type. Shpg. wt., 4 oz. **NET EACH... 24c**



## ISOLANTITE PLATE CAP

Provides protection against high voltage. Fits 866, 2032, etc. Genuine Isolantite. Wt., 3 oz. **72-068. Large. For 866, etc. NET 21c**  
**72-069. Small. For 807, etc. EA.**



## "DESIGNED FOR APPLICATION"

Fig. A. Socket shield for single-ended tubes in high-gain amplifiers. Effective electro-static shield. Shpg. wt., 5 oz. **72-074. NET... 18c**

Fig. B. Dial lock to maintain condenser setting in fixed position. Shpg. wt., 4 oz. **72-080. NET... 45c**

Fig. C. "Snap action" easy-acting base clamp for 807 and similar tubes. Prevents tubes from "working" out of sockets. Wt., 6 oz. **72-077. NET... 30c**

Fig. D. Molded bakelite terminal block with 4 terminals. Nut and bolt type connectors with raised bakelite separators between each terminal. Easy-to-get-at solder jags extend from base of block. Convenient 2-hole mounting. Ideal for all power supplies. Wt., 4 oz. **72-083. NET... 60c**

Fig. E. Bakelite safety terminal for high voltage. All metal parts enclosed in bakelite case. Insulated bushing extends through chassis. Tapered contact. Shpg. wt., 3 oz. **72-086. NET... 40c**

Fig. F. Mica-bakelite safety terminal. Same as bakelite type but with higher safety factor. Wt., 3 oz. **72-089. NET... 50c**

## SHAFT COUPLINGS

Fig. A. Flexible coupling. No back lash. Drives at angles to 45°. Isolantite insulated. For 1/4" shafts. Wt., 3 oz. **72-092. NET... 36c**

Fig. B. Standard flexible type. For 1/4" shafts. Isolantite insulation. Wt., 3 oz. **72-093. NET... 36c**

Fig. C. Insulated flexible type. Hubs slide back and forth, twist, etc., without backlash. For 1/4" shafts. Wt., 3 oz. **72-094. NET... 36c**

## DUAL MIDGETS

Compact midgets for receivers or low power transmitters. Double spaced, ultra-high frequency type. Insulation is ultra-low-loss. Quartz Q dielectric. Metal mounting feet. Shpg. wt., 8 oz. **72-025. Dual 35 Mmf. NET EACH... \$2.75**  
**72-026. Dual 100 Mmf.**

## ULTRA-MIDGETS

Extremely compact midget condensers for receivers, oscillators, etc. Isolantite end plate mounts directly on panel. Kotor may be insulated from panel. Wt., 8 oz. **72-030. 15 Mmf. NET... 75c**  
**72-031. 35 Mmf. NET... \$1.00**  
**72-032. 50 Mmf. NET... 1.50**  
**72-033. 100 Mmf. NET... 1.20**

## MIDGET R.F. CHOKES

Universal 2.5 mh. choke. Consists of four pie coils on a steatite core. Supported by its own leads or mounted with steatite insulator supplied. Wt., 2 oz. **72-040. NET... 36c**

## IRON-CORE R.F. CHOKES

500 mh. transmitting type chokes. Ideal for high power at 14 MC. Consists of five pie coils on steatite with iron core. Has spun-glass insulated wire. With metal mounting base and soldering lugs. Shpg. wt., 5 oz. **72-043. NET... \$1.75**



# Transmitting CAPACITORS

## CORNELL-DUBILIER

### "TJU" FILTER CONDENSERS



Highest quality condensers. Hermetically sealed in steel containers. Selected dielectric impregnated and filled with Dykanol. Conservative voltage ratings. Universal bracket for upright or inverted mounting. Average wt., 2 lbs.

Stock No.	Mfd.	Wkg. V.	NET
73-600	1	600	\$2.06
73-601	2	600	2.50
73-602	4	600	3.33
73-605	1	1000	2.20
73-606	2	1000	2.94
73-607	4	1000	3.67
73-610	1	1500	2.65
73-611	2	1500	3.67
73-612	4	1500	5.00
73-615	1	2000	3.23
73-616	2	2000	3.82
73-617	4	2000	5.29
73-620	1	2500	4.70
73-621	2	2500	7.64
73-625	1	3000	2.65
73-626	2	3000	8.82

### "TLA" SERIES



Especially designed for heavy-duty requirements in transmitter or high-fidelity audio amplifier power supplies. Hermetically sealed in inverted type round aluminum containers; ideal for use where space is limited. Diameter of can is only 1 1/2". Dielectric is selected paper, impregnated and filled with Dykanol. Single hole mount with stud and lock nut. Center lead insulated terminal type; metal can is negative connection. Will withstand transient voltages and high-peak voltage surges. Insulating washers are supplied. Av. shpg. wt., 2 lbs.

Stock No.	Mfd.	Wkg. V.	NET
73-630	2	600	\$1.62
73-631	3	600	1.91
73-632	4	600	2.20
73-635	1	1000	1.47
73-636	2	1000	1.91
73-640	0.5	1500	1.76
73-641	1	1500	1.91

WE CAN SUPPLY ALL C-D PRODUCTS  
Send for Complete C-D literature  
37-014. C-D Catalog—Sent FREE.

## FAMOUS GENERAL ELECTRIC PYRANOL-FILLED CAPACITORS



Efficient durable transmitting condensers of the best quality. These condensers will give exceptional service and long life. Filled and treated with Pyranol, a non-inflammable, non-explosive substance of unusual dielectric qualities. Hermetically sealed. With porcelain terminal bushings. Equipped with mounting flanges for easy upright mounting and high voltage stand-off insulators.

Stock No.	Type	Mfd.	Wkg. V.	NET
73-700	23F1	1	600	\$2.06
73-701	23F2	2	600	2.50
73-702	23F4	4	600	3.23
73-705	23F10	1	1000	2.20
73-706	23F11	2	1000	2.94
73-707	23F13	4	1000	3.67
73-710	23F20	1	1500	2.65
73-711	23F21	2	1500	3.67
73-712	23F23	4	1500	5.00
73-715	23F30	1	2000	3.23
73-716	23F31	2	2000	3.82
73-717	23F33	4	2000	5.29
73-720	23F39	1	2500	4.70
73-721	23F40	2	2500	7.64
73-722	23F41	4	2500	10.58

G. E. Pyranol Transmitting Capacitors are available in ratings up to 5000 V. DC.  
37-026. Complete Listing—Sent FREE

## MALLORY CAPACITORS



### TZ, TR AND TX SERIES

These heavy-duty Mallory capacitors are especially suited for industrial, commercial, and transmitting applications. They feature the exclusively developed synthesized plastic dielectric "X-64" which contributes so much to their amazing performance records. "X-64" is a non-oxidizing, non-polar resin of exceptional stability. May be operated up to 200° F. Power factor decreases with increasing temperature. Will withstand higher instantaneous peak voltage than usual oil or wax impregnated. Other features are: extremely high insulation resistance, long life, low leakage, high dielectric constant, and small size. With clamps. Avge. shpg. wt., 2 lbs.

Stock No.	Type	Mfd.	Wkg. V.	NET
73-800	TZ382	2	600	\$1.62
73-801	TZ383	4	600	2.20
73-805	TZ384	1	1000	1.47
73-806	TZ385	2	1000	1.91
73-810	TZ386	0.5	1500	1.76
73-811	TZ387	1	1500	1.91
73-815	TR760	1	1000	1.62
73-816	TR761	2	1000	2.20
73-817	TR762	4	1000	2.94
73-822	TR766	2	1500	0.66
73-821	TR767	2	1500	2.79
73-825	TR770	1	2000	2.65
73-826	TR771	2	2000	2.94
73-830	TR775	1	2500	3.53
73-835	TX801	1	600	2.06
73-836	TX802	2	600	2.50
73-837	TX803	4	600	3.23
73-840	TX804	1	1000	2.20
73-841	TX805	2	1000	2.94
73-842	TX806	4	1000	3.67
73-845	TX807	1	1500	2.65
73-846	TX808	2	1500	3.67
73-847	TX809	4	1500	5.00
73-850	TX810	1	2000	3.23
73-851	TX811	2	2000	3.82
73-852	TX823	4	2000	5.29
73-855	TX812	1	2500	4.70
73-856	TX813	2	2500	7.64
73-860	TX814	2	3000	7.64
73-861	TX815	2	3000	8.82

### SPRAGUE LIFEGUARDS

Live-rubber, high-voltage insulators as used on high-voltage terminals. Easily slip over binding posts of condensers, standoffs, connectors, etc. Shpg. wt., 2 oz.  
74-200. PER PAIR... 15c



## SANGAMO MICA CAPACITORS

High-quality, molded bakelite mica type capacitors. Ideal for use in all industrial, Commercial or Amateur applications. Used extensively in transmitters, laboratories, etc.

Threaded holes for 6-32 screws permit stacking. Bakelite case; ruby-mica dielectric. Accurate within 10%. Fig. A. Average shpg. wt., 2 oz.

600 V. DC WKG.			1200 V. DC WKG.		
No.	Mfd.	NET	No.	Mfd.	NET
74-000	.00005	\$0.35	74-030	.00005	\$0.41
74-001	.0001	.35	74-031	.0001	.41
74-002	.00015	.35	74-032	.0002	.41
74-003	.0002	.35	74-033	.00025	.41
74-004	.00025	.35	74-034	.0005	.41
74-005	.0005	.35	74-035	.001	.53
74-006	.001	.35	74-036	.002	.79
74-007	.0015	.38	74-037	.004	.91
74-008	.002	.38	74-038	.005	1.03
74-015	.0025	.44	74-039	.006	1.03
74-009	.003	.50	74-040	.008	1.32
74-010	.004	.50	74-041	.01	1.65
74-011	.005	.50	2500 V. DC WKG.		
74-012	.006	.59	74-050	.00005	\$0.53
74-013	.008	.71	74-051	.0001	.53
74-014	.01	.82	74-052	.00015	.59
74-016	.02	1.09	74-053	.00025	.62
74-017	.025	1.35	74-054	.0005	.73
74-018	.03	1.47	74-055	.001	.88
74-019	.05	2.26	74-056	.002	1.32
74-017	.05	2.26	74-057	.003	1.62
74-058	.001	.53	74-058	.005	1.94
74-059	.01	2.41	74-059	.01	2.41

74-170. Sangamo resistor clips. Net, per pair, ... 6c

## AEROVOX CONDENSERS

### HYVOL "05" SERIES

Increasingly popular for all transmitter requirements. These units have pure linen-paper dielectric, impregnated and filled with "Hyvol" oil. All voltage ratings are conservative for continuous operation. Hermetically sealed in round metal containers. Lead terminals equipped with lock nut and solder lugs are adequately insulated by means of high-tension pillars. Mounts upright or inverted. An exceptionally high-grade transmitting condenser. With ring mount.



Stock No.	Type	Mfd.	Wkg. V.	NET
73-900	605	1	600	\$1.47
73-901	605	2	600	1.91
73-902	605	4	600	2.65
73-905	1005	1	1000	1.62
73-906	1005	2	1000	2.20
73-907	1005	4	1000	2.79
73-910	1505	1	1500	2.06
73-911	1505	2	1500	2.79
73-912	1505	4	1500	3.53
73-915	2005	1	2000	2.65
73-916	2005	2	2000	2.94
73-920	2505	1	2500	3.53
73-921	2505	2	2500	3.82
73-925	3005	1	3000	3.53
73-926	3005	2	3000	6.47

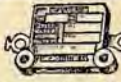
### HYVOL "09" SERIES

Hermetically sealed in welded steel can; universal bracket for upright or inverted mounting. Dielectric is selected paper, impregnated and filled with "Hyvol," the new superdielectric oil. For all heavy-duty requirements. Conservatively rated and dependable. High tension terminals with heavy-duty solder lugs.



Stock No.	Type	Mfd.	Wkg. V.	NET
73-930	609	1	600	\$0.66
73-931	609	2	600	0.91
73-932	609	4	600	1.20
73-935	1009	1	1000	0.94
73-936	1009	2	1000	1.20
73-937	1009	4	1000	1.67
73-940	1509	1	1500	0.65
73-941	1509	2	1500	0.67
73-942	1509	4	1500	0.90
73-945	2009	1	2000	0.94
73-946	2009	2	2000	1.20
73-950	2509	1	2500	0.94
73-951	2509	2	2500	1.20
73-955	3009	1	3000	0.66
73-956	3009	2	3000	0.82

WE CAN SUPPLY ALL AEROVOX PRODUCTS  
Send for Complete AeroVox literature  
37-001. AeroVox Catalog—Sent FREE



Fully insulated to permit mounting directly on chassis or panel by means of the 2 ear-type holes. 2 solder lugs. Fig. H. Wt., 2 oz.

600 V. DC WKG.			1200 V. DC WKG.		
No.	Mfd.	NET	No.	Mfd.	NET
74-100	.00005	\$0.29	74-130	.00005	\$0.41
74-101	.0001	.29	74-131	.0001	.41
74-102	.0002	.29	74-132	.0002	.41
74-103	.00025	.29	74-133	.00025	.41
74-104	.0003	.29	74-134	.0005	.41
74-105	.0004	.29	74-135	.001	.53
74-106	.0005	.29	74-136	.002	.79
74-107	.001	.29	74-137	.003	.91
74-108	.0015	.29	74-138	.004	.91
74-109	.002	.32	74-139	.005	1.03
74-110	.0025	.38	74-140	.006	1.03
74-111	.003	.41	74-141	.008	1.32
74-112	.004	.41	74-142	.01	1.65
74-113	.005	.41	2500 V. DC WKG.		
74-114	.006	.50	74-150	.00005	\$0.53
74-115	.008	.59	74-151	.0001	.53
74-116	.01	.68	74-152	.0002	.62
74-117	.015	.79	74-153	.00025	.62
74-118	.02	.91	74-154	.0005	.73
74-119	.025	1.12	74-155	.001	.88
74-120	.03	1.23	74-156	.002	1.32
74-121	.04	1.32	74-157	.003	1.62
74-122	.05	1.47	74-158	.004	1.85
74-123	.06	1.65	74-159	.005	1.94

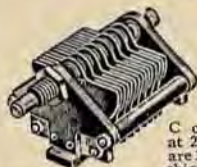
Send for complete Sangamo Catalog. 37-027. Sent FREE.



# NATIONAL Short

## TRANSMITTING CONDENSERS

### TYPE TMS



Precision type condensers for low-power stages of transmitters. Air-gaps: .026" for TMS types, .065" for TMSA. \*Low C. condensers are rated at 2000 V. Peak; others are 1000 V. Peak. Average shipping weight, 2 lbs.

Stock No.	Mfr's Type	Max. Mmf.	Min. Mmf.	NET
71-000	TMS-100	100	9.5	\$1.65
71-001	TMS-150	150	11	1.83
71-002	TMS-250	250	13.5	1.98
71-003	TMS-300	300	15	2.37
71-004	TMS-50D	50-50	6-6	2.49
71-005	TMS-100D	100-100	7-7	2.97
71-006	TMSA-35	*35	8	1.98
71-007	TMSA-50	*50	11	2.16
71-008	TMSA-50D	*50-50	10 1/2-10 1/2	2.64

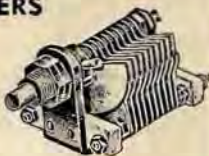
### TYPE TMC MODERATE POWER



For use in power stages of transmitters where peak voltage does not exceed 3000 V. Extremely rigid frame. Full Isolantite insulation. Plates have buffed edges, air-gap is .075". \*Dual action. Av. wt., 4 lbs.

Stock No.	Mfr's Type	Max. Mmf.	Min. Mmf.	NET
71-015	TMC-50	50	10	\$2.64
71-016	TMC-100	100	13	2.97
71-017	TMC-150	150	17	3.48
71-018	TMC-250	250	23	3.96
71-019	TMC-300	300	25	4.29
71-020	TMC-50D	*50-50	9-9	4.29
71-021	TMC-100D	*100-100	11-11	4.95
71-022	TMC-200D	*200-200	18 1/2-18 1/2	6.60

### TYPE ST

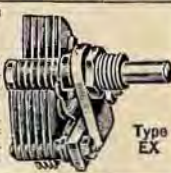


Straight-line wave-length, 180". Isolantite insulated. Airgaps: STHs, STH, and STHD—.018"; STD and ST—.026". Wt., 1 lb.

Stock No.	Mfr's Type	Max. Mmf.	Min. Mmf.	NET
71-030	STHS-15	15	3	\$0.93
71-031	STHS-25	25	3.25	.99
71-032	STHS-50	50	3.5	1.05
71-033	ST-35	35	6	.99
71-034	ST-50	50	7	1.20
71-035	ST-75	75	8	1.32
71-036	ST-100	100	9	1.50
71-037	ST-140	140	10	1.65
71-038	ST-50	150	10.5	1.65
71-039	STH-200	200	12	1.83
71-040	STH-250	250	13.5	1.98
71-041	STH-300	300	15	2.16
71-042	STH-335	335	17	2.31
71-043	STD-50	50-50	5-5	2.31
71-044	STHD-100	100-100	5 1/2-5 1/2	2.97

### EXPERIMENTERS' CONDENSERS

A superior low-priced mica condenser for SWET builders. Sturdy, all-brass construction with bakelite insulation. Rotor and stator plates easily removed. Shpg. weight, 1 lb. \*Double spaced; others single.



Stock No.	Mfr's Type	Max. Mmf.	Min. Mmf.	NET
71-050*	EX-15	15	3.5	57c
71-051	EX-25	25	3.75	57c
71-052*	EX-35	35	3.75	66c
71-053*	EX-50	50	4	60c
71-054	EX-100	100	4.75	66c
71-055	EX-140	140	5.5	84c

## NEUTRALIZING CONDENSERS

### TYPE NC-600

A small-sized neutralizing condenser suitable for use with 6L6's and similar beam power tubes. Has adjustment range from .5 mmfd. to 4 mmfd. Isolantite insulated. Shpg. wt., 6 oz.  
71-092. NET..... 30c  
71-093. NC-600U. As above but on small stand-off insulator. NET..... 36c

### DISC TYPE

High voltage neutralizing condensers for high power tubes. Micrometer adjustment with lock nut. Low-loss Steatite insulation. Three hole mounting bracket. NC-800 is for RCA-800, 35T, HK54, and similar tubes; NC-150 for HK34, RK-36, 100TH, 852, etc. NC500 for WE-251, 250TH, 450TH, etc.

Stock No.	Type	Max. Cap.	NET
71-095	NC-800	10	\$1.98
71-096	NC-150	14	4.29
71-097	NC-500	14	8.25

## UNIVERSAL MOUNTING TYPE CIR ISOLANTITE SOCKETS

Unusually adaptable universal low-loss Isolantite socket. May be mounted in several ways by means of two metal standoffs and six-position metal flange which is supplied. Flange removable for mounting on chassis. Full pin-wiping terminals provided which do not extend above top of socket and cannot cause shorts. Ideal for low-loss receiver and transmitter circuits. Shpg. wt., 4 oz.

Stock No.	Prongs	Stock No.	Prongs
71-100	4	71-103	7L
71-101	5	71-104	7S
71-102	6	71-105	8 Octal

NET EACH..... 27c

### TYPE XC SOCKETS

Isolantite sockets for use in H.F. receivers and in low power stages of transmitters. Five prong socket for National Coils is square; others are as illustrated. Shpg. wt., 4 oz.

Stock No.	Prongs	Stock No.	Prongs
71-110	4	71-113	7L
71-111	5	71-114	7S
71-112	6	71-115	8 Octal

NET EACH..... 39c

71-118. 6 prong (For Coils)..... 51c

### ACORN TUBE SOCKETS

Type XCA. For use with Triodes. Five contact clips on round Isolantite base. Wt., 3 oz. 99c  
71-120. NET.....  
Type XMA. For Pentodes. Has square copper base; all contacts by-passed. \$1.32  
71-121. NET.....

### STAND-OFF INSULATORS

Molded steatite insulators. Glazed to prevent moisture absorption. Fig. "A" is Stand-off Insulator, complete with mounting base and top cap—1/2" dia. size have solder lug and screw; 1/4" dia. have heavy binding screw. Fig. "B" Cone Insulator, for mounting parts on metal chassis; threaded 8-32 at both ends. Fig. "C" Feed-Through Insulator, have flange type steatite base, 1/4" mounting centers. Shpg. wt., 8 oz.

Stock No.	Type	Fig.	Hgt.	Dia.	NET
71-125	GS-1	A	1 1/2"	1/2"	\$0.24
71-126	GS-2	A	2"	3/4"	.30
71-127	GS-3	A	2 1/2"	7/8"	.60
71-128	GS-4	A	4"	1"	.72
71-129	GS-4A	A	6"	1 1/2"	1.05
71-130	GS-5	B	1 1/4"	1/2"	.24
71-131	GS-6	B	3"	3/4"	.42
71-132	GS-7	B	3"	3/4"	.75
71-133	GS-8	C	1 1/2"	1/2"	.54
71-134	GS-9	C	1 1/2"	1/2"	.75

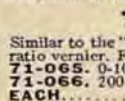
\*Has jack for standard banana plug.

## NATIONAL QUALITY DIALS

### TYPE B 4"



A compact dial with a smooth variable ratio drive. Dial scale is read through a window. Bakelite case. For 1/2" shaft.  
71-060. 0-100-0, 180°, Rotates in either direction. \$1.83  
71-061. 200-0, 360°, clockwise. Wt., 1 lb. \$1.83  
71-062. Illuminator for dial, with bracket. Wt., 1/2 lb. NET..... 33c



Similar to the "B" dial, but smaller. Has fixed ratio vernier. For 3/4" shaft. Wt., 1 lb.  
71-065. 0-100-0, 180°, universal. \$1.65  
71-066. 200-0, 360°, clockwise. \$1.65  
EACH.....



71-070. Neat etched silver dial as used on the HRO receivers. Marked 0-10 over 180° clockwise, 1 1/2" diam.; for 1/4" shaft. Shpg. wt., 8 oz. \$1.  
NET.....  
71-071. HRP-P. Bar knob as used on "HRO" dial. 1 1/4" x 1/4". With pointer. \$2.4c  
NET.....



Smooth "Velvet Vernier" dial, free from backlash. Self-contained mechanism. Ratio 5:1. For 1/4" shaft. Wt., 8 oz.  
71-074. 0-100-0, 180° Counter Clockwise. \$1.98  
71-075. 150-0, 270° Clockwise. \$1.98  
EACH.....



**AUDIO COUPLER**  
For coupling output of screen grid detector to grid of audio tube. Consists of 700 henry plate coupling choke, 0.1 coupling condenser, and 25 megohm resistor in case. Wt., 2 lbs.  
71-080. \$101. \$3.96  
NET.....

### TYPE O 3 1/2" DIAL



71-082. Attractive circular-grained Nickel Silver dial. 3 1/2" diam. Reads 0-100 over 180° C.C. Large fluted finger-grip knob for easy tuning. Fits 1/2" shafts. Wt., 10 oz. \$99c  
NET.....  
71-085. ODD. Vernier drive knob for type "O" dial drive. NET..... 39c

### HRK KNOB



Large, full-grip tuning knob for use with receivers, transmitters, etc. 2 1/4" in diameter with fluted edge. Easy to turn, non-tiring. Fits 1/2" shafts. Wt., 4 oz. \$57c  
71-086. NET.....

### ACN DIAL



For amateurs and experimenters who "build their own" and desire direct calibration. Ideal for frequency monitors, ECO's, etc. Uses Velvet Vernier drive unit. With 3 blank removable scales. Holes in pointer for making calibration points. Size: 5 x 7 1/4". Shpg. wt., 1 lb. \$2.97  
71-090. NET.....

## CATHODE-RAY OSCILLOSCOPE

### TYPE CRM



Complete oscilloscope for use with "913" cathode ray tube. Brilliance and Sweep Amplitude controls on front panel. Built-in power supply. Has 60 cycle sweep circuit. Measures phase angle and phase distortion; checks for percent modulation, etc. Requires: 1-913 tube with 1" screen; 1-6x5 rectifier; 4 1/2 x 6 1/2 x 8". For 110 V., 50-60 cycle. Shpg. wt., 9 lbs.  
88-010. Less tubes. NET..... \$12.21  
88-011. RCA Tube Kit. NET..... \$4.84



# Wave EQUIPMENT



## NATIONAL R-100 RF CHOKE

Ideal for high frequency circuits. Extensively used in receivers and low-power stages of transmitters. Has continuous 4 section universal winding on Isolantite form. Distributed capacity is only 1 mmf. 2 1/2 mh., 125 ma., 50 ohm DC resistance. Shpg. wt., 2 oz. ea.

- 71-150. YOUR PRICE.....33c**  
**71-151. R100U.** As above but on small standoff insulator for vertical mounting; has pig-tail terminals. **NET.....39c**  
**71-152. R300.** Similar to R-100. 1 mh., 300 ma., 10 ohm DC resistance. **NET.....33c**  
**71-153. R300U.** Same as R300 with standoff for vertical mounting. **NET.....39c**

## TRANSMITTER CHOKES



Universal chokes with honeycomb-type windings. Rated at 600 ma., continuously. Inductance, 4 mh., 10 ohms DC resistance. R152 for 30 and 160 meters. R154 for 20, 40, and 80 meters; 1 mh., 6 ohms.  
**71-154. R152. NET EACH.....\$1.50**  
**71-155. R154. NET EACH.....\$1.50**

**71-156. Type R154U.** For 20, 40 and 80 meter bands. Five section honeycomb coil on Isolantite core, with solder lugs. Rated at 600 ma. continuously, 1 mh. inductance, 6 ohms. Less insulating pillar and third mounting foot. **1 lb. NET.....\$1.17**

**71-160. Type R-175.** For parallel or series feed circuits up to 3,000 volts modulated plate supply. High inductive reactance 1.7 to 28 MC. Inductance, 225 uh.; distributed capacity, .6 mmf; current, 800 ma.; 6 ohms. **\$1.83**  
 12,500 V. insulation. **NET.....\$1.83**

## PLUGS AND JACKS



- 71-165. Fig. A. TPB Through Point Bushing.** Of molded polystyrene with threaded shank and .093" conductor in center. **BOX OF 12, NET.....51c**  
**71-166. Fig. B. FWC Insulators.** Molded R-39. Will mount two FWE jacks or FWA posts. Fit chassis or panel up to 1/4". **PER PAIR NET.....24c**  
**71-167. Fig. C. FWA Binding Post.** Jack top for banana plugs; hole for positive clamping of wire leads and husky screw top. **NET EACH.....18c**



- 71-168. Fig. A. FWE Jack.** Banana plug type especially suited for use with the FWC insulators listed above. Fit any panel or insulator strip up to 1/4". Shpg. wt., 1 oz. **NET.....12c**  
**71-169. Fig. B. FWF Plug.** Molded R-39 with banana plugs spaced 1/4". Takes leads through top or sides; set screws hold leads firmly. Fits FWE jacks or FWA posts. **NET.....66c**  
**71-170. Fig. C. FWD Assembly.** Consists of FWF plug, two FWE jacks, and two FWC insulator strips. When plugged together, all metal parts are insulated for safety. **\$1.05**  
**NET.....\$1.05**

## SHAFT COUPLINGS



- 71-260. TX-9.** Hubs fit 1/4" shaft. Insulation is Steatite. **NET.....72c**  
**71-261. TX-10.** Like TX-9 but has bakelite insulation. **NET.....36c**  
**71-262. TX-12.** 4 3/4" flexible shaft with 1/4" hubs. Isolantite insulated. **84c**  
**71-263. TX-11.** Like TX-12 but 4 1/4" with plain hubs not insulated. **39c**

## NATIONAL COILS AND COIL FORMS

### 50 WATT COILS TYPE AR-16



A complete series of low-loss air-spaced coils for use in exciters, buffers, and low power finals. Victroln-insulated. All sizes will tune over their respective bands, and all have separate windings for link coupling as listed. All fit XB16 socket. 71-236, listed at right below. Socket not included. Shpg. wt., 10 oz.

End Link No.	Center Link No.	Swing Link No.	Amateur Bands	Mmf. Cap.
71-180	71-190		160	65
71-181	71-191	71-200	80	60
71-182	71-192	71-201	40	55
71-183	71-193	71-202	20	40
71-184	71-194	71-203	10	25
71-185	71-195		5	20

**NET EACH.....99c**

### FIXED TUNED EXCITER TANK



Ideal for use in multi-band exciters using bandswitching. Metal case, 4 1/2 x 2 1/2 x 2" contains two 25 mmfd. 2000 Volt condensers and XR-2 coil (form 1 1/2" diam.). 71-205 fits 5-prong tube socket. 71-206 fits special 6-prong socket. 71-118, page 144. Wt., 6 oz.

- 71-205. TYPE FXTB. 5 Prong. NET EACH.....\$3.24**  
**71-206. TYPE FXTB. 6 Prong. NET EACH.....\$2.97**  
**71-207. TYPE FXT. Without plug-in base. NET.....\$2.97**

### PLUG-IN COIL BASE AND SHIELD



A plug-in coil base and shield, especially suited for mounting condensers and coils when it is desirable to have them shielded. Shield can measure: 2 x 2 1/2 x 4 1/4". 71-210 and 71-212 fit 5 prong tube socket. 71-211 and 71-213 fit special 6-prong socket 71-118, page 144. PB-10 with shield; PB-10A without shield. Wt., 8 oz.

Stock No.	Type	Prongs	NET
71-210	PB-10	5	51c
71-211	PB-10	6	51c
71-212	PB-10A	5	27c
71-213	PB-10A	6	27c

### RECEIVER COIL FORMS



Low-loss R-39 forms which are extremely popular with Amateurs and Experimenters. Easy to work. Fingergrip. 1 1/2" dia., 2 1/4" long. Wt., 4 oz.  
**71-215. 4 Prong. NET.....51c**  
**71-216. 5 Prong. NET.....51c**  
**71-217. 6 Prong. NET.....51c**



## STEEL CABINETS

Rugged steel cabinets for receivers and laboratory equipment. Panels and sub-bases undrilled. Black wrinkle finish. With sub-base and bottom cover. Average shpg. wt., 5 to 10 lbs.

Stock No.	Type	W	H	D	NET
88-000	C-SRR	7 1/2 x 7	7 1/2		\$2.31
88-001	C-PB7	11 1/2 x 8	x 12		4.62
88-002	C-PSX	6	x 9	x 12	3.96
88-003	C-SW3	9 1/2 x 7	x 9		3.63
88-004	C-110	11	x 7	x 7 1/2	2.97
88-005	C-HWR	13 1/2 x 7	x 7 1/2		3.30
88-006	C-HRO	16 1/2 x 8 1/2 x 10			5.61
88-007	C-NC100	17 1/2 x 8 1/2 x 11 1/2			5.61

WE CAN SUPPLY ALL NATIONAL PRODUCTS Send for Complete National literature 37-002, National Catalog—FREE

### PLUG-IN COIL FORM AND SOCKETS



This completely new UR-10A coil form and socket assembly consists of the XR-10A coil form for 20 and 40 meters and Isolantite Plug-in Base and Socket. Five prong base easily attached to coil form by means of two screws. Base may also be used separately for air-wound coils. Socket and five mounting jacks complete with special attachments for mounting on TMA condensers if desired. Wt., 1 1/4 lbs.  
**71-220. TYPE UR-10A. Coil Form Assembly. Complete. NET.....\$3.03**  
**71-221. TYPE PB-15. Plug-in Base Only. Wt., 1/2 lb. NET.....90c**  
**71-222. TYPE XB-15. Socket Only. Wt., 1/2 lb. NET.....\$1.17**

### TRANSMITTER FORMS

Grooved and drilled ceramic forms for winding low-loss transmitter coils. Will make your home-made coils look professional. XR10A form measures: 2 1/2" winding dia. x 5" long. XR-14A is 3" diameter. Both forms will fit the PB-15 plug and XB-15 socket above.  
**71-225. XR-10A. 20 or 40 meter bands. Shpg. wt., 1 lb. NET.....99c**  
**71-226. XR-14A. 80 meter band. Shpg. wt., 2 lbs. NET.....\$2.31**

### BUFFER COIL FORM AND SOCKET



A new Isolantite, low-loss coil form assembly, 1 1/2" dia. x 2 1/4" long. Plug with 5 prongs is easily attached to coil form by two screws. Socket is equipped with five rugged side-wiping contacts. Plug and socket are made of R39 low-loss insulation. Shpg. wt., 10 oz.

Stock No.	Type	Description	NET
71-230	UR-13	Complete Assembly	\$1.65
71-231	XR-13	Coil Form only	.72
71-232	PB-5	Coil Plug only	.51
71-233	XB-5	Coil Socket only	.51

### COIL FORMS

Un glazed Isolantite forms. 1 1/2" winding dia. x 1 1/4" long. Drilled for leads. Socket type XB-16 also fits all 4 x 16 coils. Plug socket, and coil form are available separately or as complete assembly as listed. Wt., 8 oz.

Stock No.	Type	Description	EACH
71-235	PB16	Plug.....	27c
71-236	XB16	Socket.....	33c
71-237	XR16	Coil Form.....	39c
71-238	UR16	Complete Unit.....	99c

### LOW FREQUENCY OSCILLATOR COIL

Two separate inductances, closely coupled, in shield can. Used in super-regenerative sets as interruption-frequency oscillator. Sec. Inductance, 6.25 mh. Tunes to 100 KC with .00041 mfd. condenser. Wt., 5 oz.  
**71-240. NET.....99c**

### GRID & PLATE CLIPS

Unique construction assures perfect continuous contact with grid or plate cap of tube.  
**71-243. For Standard Tubes. 1/2" dia. NET.....4c**  
**71-244. For Octal Tubes. 1/4" dia. NET.....7c**  
**71-245. For Transmitting Tubes, such as 866, T20, 809, 03Z, 812, etc. 1/2" dia. NET.....7c**

### SAFETY PLATE GRIP

SPG Safety Grip of molded R-39. For tubes with 3/8" cap, like 866, etc.  
**71-246. NET.....24c**



# Hammarlund Precision PRODUCTS

## FAMOUS "STAR" MIDGET CONDENSERS

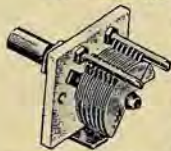


Popular low-priced midgets for set builders and experimenters. Sizes for short wave tuning, regeneration, verniers, etc. Single hole mount, 1/4" shaft. Size, 1 1/8" x 1 1/4" high, and up to 1 1/2" deep behind panel. Wt. 6 oz.

Stock No.	Mfr's. Type	Max. Mmf.	Min. Mmf.	NET
72-200	SM-15	15	3	54c
72-201	SM-25	25	3.5	54c
72-202	SM-50	50	4	60c
72-203	SM-100	100	6	72c
72-204	SM-140	140	7	84c
72-205	SM-35X	35*	6.5	72c
72-206	SM-50X	50*	7.5	84c

\*Double-spaced units with .064" airgap for low-power transmitters. Others, .032".

## "HF" MICRO CONDENSERS



A new series of ultra-high frequency variables. Very efficient in tuning or trimming critical high frequency circuits. Heavily plated plates. Isolantite insulation. Equipped with special wide front bearing. \*Dual-spaced units. Shpg. wt. 4 oz.

Stock No.	Mfr's. Type	Max. Mmf.	Min. Mmf.	NET
72-215	HF-15	17.5	2.8	\$0.84
72-216	HF-35	35	3.2	.96
72-217	HF-50	50	3.7	1.02
72-218	HF-100	100	5.3	1.26
72-219	HF-140	140	6.2	1.44
72-220	*HF-15-X	15	3.6	1.02
72-221	*HF-30-X	30	5.2	1.14

## "HFD" DUAL MICROS

No.	Type	Cap. per Sec.	NET
72-230	HFD-50	50	\$2.16
72-231	HFD-100	100	2.46
72-232	HFD-140	140	2.70
72-233	*HFD-15-X	16	2.04
72-234	*HFD-30-X	28.5	2.28

## "APC" MICRO CONDENSERS



High quality air-dielectric condensers; compact in size. Particularly adaptable to S.W. and Ultra S.W. work. Isolantite base. Air gap .015". Will fit 1/4" dia. cans. Screwdriver adjustment. Wt., 4 oz.

Stock No.	Mfr's. Type	Max. Mmf.	Min. Mmf.	NET
72-250	APC-25	25	3.0	\$0.78
72-251	APC-35	35	3.5	.90
72-252	APC-75	75	4.5	1.02
72-253	APC-100	100	5.5	1.14
72-254	APC-140	140	6.5	1.35

## "SWF" LOW-LOSS COIL FORMS



Rugged low-loss forms of XP-53. Ribbed for air-spacing, with flange grips. Have shelf inside for mounting padding condenser. 1 1/2" dia. x 2 1/2". Natural amber color. 4 oz.

72-275, 4 Prong) EACH... 30c  
72-276, 5 Prong) EACH... 36c  
72-277, 6 Prong) EACH... 36c

## "TCF" X-MITTING COIL FORMS

Of low-loss XP-53 dielectric. Ribbed for air-spacing, with flange grips. May be base-mounted on brackets supplied or plugged-in. 2 1/4" dia. x 3 3/4" long. Shpg. wt., 6 oz.

72-265, TCF-4, 4 Prong.) EACH... 48c  
72-266, TCF-5, 5 Prong.) EACH... 48c



## "CF-M" COIL FORM

Isolantite coil forms designed for maximum efficiency at ultra-high frequencies. Forms are 1 1/4" in diameter, 2" long exclusive of prongs, and have holes drilled to permit in most any type of experimental winding. Made in 5-prong type only. Ideal for UHF receiver or transmitter coils. Shpg. wt., 4 oz.

72-285, NET... 78c



## "SWK" TYPE PLUG-IN COILS

Efficient and well designed coils. Wound on low-loss XP-53 forms. High frequency coil secondaries are of heavy silver-plated wire. Others have heavy enameled copper wire. For use with 140 mmf. variable condenser. Specified in many builder's kits. Shpg. wt., 2 lbs.

4 Prong Coils: 17-270 Meters. Kit of 2 winding coils. \$2.55  
72-290, NET.....

6 Prong Coils: 17-270 Meters. Kit of 4 three-winding coils. \$3.00  
72-291, NET.....

## INDIVIDUAL "SWK" COILS

These coils feature the ultimate in efficiency due to proper co-efficient of coupling, form factor, spacing of turns, size of wire. Wt., 4 oz.

Tuning Range	4 Prong	6 Prong
10-20 Meters	72-300	72-303
17-41 Meters	72-301	72-304
33-75 Meters	72-302	72-305
NET		
EACH.....	75c	90c
66-150 Meters	72-306	72-308
135-270 Meters	72-307	72-309
NET		
EACH.....	60c	75c
250-560 Meters	72-310	72-311
NET		
EACH.....	75c	90c

## ISOLANTITE SOCKETS

Low-loss Isolantite sockets. Have long leakage paths. With positive rust-proof side-gripping contacts and mounting pillars. Glazed top and sides. Standard 1 1/2" mounting centers. 4 oz.

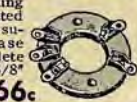


Stock No.	Description	NET
72-320	4 prong	36c
72-321	5 prong	39c
72-322	6 prong	42c
72-323	7 prong (Medium)	45c
72-324	7 prong (Small)	45c
72-325	8 prong (Octal)	48c

## NEW UHS-900 ACORN SOCKET

Locks tube in place for mounting in any position. Has silver-plated beryllium contacts; "Iso-O" super Isolantite; metal base grounding plate for complete shielding. 1-9/16" dia.; 1-3/8" mtg. centers. 4 oz.

72-335, NET... 66c



## TRIMMERS AND PADDERS

"EC" EQUALIZERS  
For balancing, neutralizing and trimming purposes. Mica dielectric; bakelite base. 1 1/4" x 1 1/2". Adjusting screw in center. Shpg. wt., 2 oz.

72-350, 3-35 Mmf. NET... 20c  
72-351, 25-80 Mmf. NET... 26c



"MEX" EQUALIZER  
Extremely small low-loss condenser. Screw adjustment. Isolantite base, with mica dielectric, and phosphor-bronze plates. 3 to 30 mmf. 3/8" x 3/4". Shpg. wt., 2 oz.

72-342, NET... 18c



Stock No.	Type	Mmf.	NET
72-360	CTS-85	25-100	30c
72-361	CTS-160	45-260	36c
72-362	CTS-230	65-350	36c
72-363	CTS-380	175-550	45c
72-364	CTS-525	230-800	48c

## HAMMARLUND CHOKES

### MIDGET CH-X CHOKE



For receivers and transmitters. Adaptable to many uses in even the smallest space. Universal-winding. Entirely impregnated. Center core is of Isolantite. May be mounted by its own leads in any position. DC resistance, 35 ohms. 2.1 mh. at 125 ma. 1 1/2" x 1/2". 4 oz.

72-375, NET... 30c

### TYPE CH-8

A low-loss type 8 mh. RF choke ideal for short-wave receivers and transmitters. Section wound on compact Isolantite spool. Moisture-proof windings are protected by lacquer and cellophane. Equipped with flexible leads and reversible end brackets for universal mounting. DC resistance, 70 ohms. Current rating 125 ma. 1 1/2" x 1/2". 4 oz.

72-376, NET... 90c



### CH-250 CHOKE

Low-loss compact RF chokes for low-power X-mitters and receivers. Four universal wound impregnated pies on 1/2" Isolantite core. 250 ma current rating; 1 mh. inductance; 10 ohms DC resistance. Only 1 1/2" in diam.; 1 1/2" long. 4 oz.

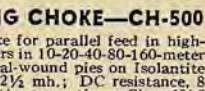
72-377, NET... 30c



### TRANSMITTING CHOKE—CH-500

A heavy-duty choke for parallel feed in high-power transmitters in 10-20-40-80-160-meter bands. Has universal-wound pies on Isolantite core. Inductance, 2 1/2 mh.; DC resistance, 8 ohms. 500 ma. continuous rating. Size: 1 1/2" diam. x 2 1/2" long. Wt., 6 oz.

72-378, NET... \$1.05



### RFC-85 CHOKE

High inductance choke for use in plate circuits of all B.C. and S.W. receivers. Specially wound and impregnated; extremely low distributed capacity for maximum efficiency. Inductance, 85 mh.; DC resistance, 215 ohms. Max. current rating, 60 ma. Bakelite case is 1 1/2" high and 1 1/2" in dia. Wt., 8 oz.

72-379, NET... \$1.80



## ISOLANTITE INSULATORS

Heavy-duty standoff insulators made of pure glazed Isolantite. Have many uses. Accurately cut threads prevent annoying thread stripping when end screws are tightened. All SOS types are 1/2" diameter; all SOL types are 3/4" diameter. Threaded top and bottom for machine screws of standard thread; less hardware. Highest quality. Av. wt., 3 oz.



Stock No.	Type	Length	NET
72-390	SOS-75	3/4"	10c
72-391	SOS-100	3/4"	13c
72-392	SOS-150	1 1/2"	17c
72-393	SOS-250	2 1/2"	20c
72-400	SOL-100	1 1/2"	20c
72-401	SOL-150	1 1/2"	26c
72-402	SOL-200	2"	33c
72-403	SOL-350	3 1/2"	46c

## INSULATOR HARDWARE

Heavy brass, cadmium-plated hardware for use with insulators listed above. SOSF and SOLP consist of screw top with solder lug, lock washer, cork washer, screws and mounting base. SOSJ and SOLJ consist of same hardware but have jack top to accommodate banana plug. Shpg. wt., 2 oz.

Stock No.	Type	NET
72-415	SOSF for SOS units.	7c
72-416	SOLP for SOL units.	10c
72-417	SOSJ for SOS units.	10c
72-418	SOLJ for SOL units.	14c

WE CAN SUPPLY ALL HAMMARLUND PRODUCTS. Send for Hammarlund literature.  
72-008. Hammarlund Catalog—Sent FREE



# Hammarlund Precision PRODUCTS

## FAMOUS HAMMARLUND CONDENSERS FOR ALL PURPOSES

### MIDGET TYPE



High quality midget condensers. Insulated with Isolantite. Cadmium-plated brass plates. .0225" thick with an .0245" air gap, are securely soldered to the 1/4" shaft. Tested at 500 V. A.C. Clockwise rotation. Shpg. wt., 1 lb.

Stock No.	Mfr's. Type	Max. Mmf.	Min. Mmf.	NET
72-425*	MC-20-S	20	5.5	\$1.32
72-426*	MC-35-S	35	6.0	1.38
72-427*	MC-60-S	50	6.5	1.44
72-428*	MC-60-M	50	6.3	1.44
72-429*	MC-75-S	80	8.0	1.56
72-430*	MC-75-M	80	7.3	1.56
72-431*	MC-100-S	100	8.3	1.68
72-432*	MC-100-M	100	7.5	1.68
72-433*	MC-140-S	140	9.0	1.80
72-434*	MC-140-M	140	10.0	1.80
72-435*	MC-200-S	200	10.3	1.98
72-436*	MC-250-M	260	12.0	2.16
72-437*	MC-325-M	320	13.5	2.40

\*Semi-circular plates. All others are Midline.

### DOUBLE-SPACED MIDGETS

Have special bearings and Isolantite insulation. Exceptionally efficient. Air-gap .0715".

Stock No.	Mfr's. Type	Max. Mmf.	Min. Mmf.	NET
72-450	MC-20-MX	20	6.5	\$1.44
72-451*	MC-20-SX	20	6.8	1.44
72-452*	MC-35-SX	32	8.5	1.56
72-453*	MC-35-MX	32	7.8	1.56
72-454*	MC-50-SX	50	11.5	1.68
72-455*	MC-50-MX	50	10.5	1.68
72-456*	MC-100-SX	100	16.5	2.10

\*Semi-circular plates. All others are Midline.

### DUAL MIDGET CONDENSERS



High quality two-gang midget condensers, designed especially to provide added efficiency at ultra-high frequencies. Plates are .0225" cadmium-plated brass; .0245" air-gap. Length behind panel, 3 3/4". Wt., 1 lb.

72-465.	MCD-50-S.	50 Mmf. per section.	Semi-circular plates. Min. cap. 5.5 mfm.	
72-466.	MCD-50-M.	50 Mmf. per section.	Midline Plates. Min. cap. 5 mfm.	<b>\$2.76</b>
72-467.	MCD-100-M.	100 Mmf. per section.	Midline Plates. Min. cap. 6.3 mfm.	
72-468.	MCD-100-S.	100 Mmf. per section.	Semi-circular plates. Min. cap. 7 mfm.	<b>\$3.00</b>
72-469.	MCD-140-M.	140 Mmf. per section.	Midline Plates. Min. cap. 7.8 mfm.	
72-470.	MCD-140-S.	140 Mmf. per section.	Semi-circular plates. Min. cap. 8.5 mfm.	<b>\$3.24</b>

### DOUBLE-SPACED DUAL MIDGETS

Similar to above, but have air-gap of .0715" between rotor and stator plates. Ideal for U.H.F.

Stock No.	Mfr's. Type	Max. Mmf.	Min. Mmf.	NET
72-475	MCD-35-MX	31	6	\$2.88
72-476*	MCD-35-SX	31	6.8	2.88

\*Semi-circular plates. Other is Midline.

### BANDSPREAD MIDGETS



For use as bandspread tuning condensers in short wave receivers and for Amateur frequency meters. "Tank" section may be locked for tuning with bandspread section. 1 lb.

Stock No.	Mfr's. Type	Tank Cap.	Tuning Cap.	NET
72-485	MC-120-B	100	20	\$1.98
72-486	MC-150-B	100	50	2.15



### CONDENSER COUPLING

Bakelized canvas insulation; brass bushings. Flexible; for ganging condensers, etc., without need of exact shaft alignment. For 1/4" shafts. 1 1/2" diameter. Shpg. wt. 3oz.

72-495. NET.....**45c**

### NEW TYPE "HFA" MIDGETS



Finest low-loss midget condensers. Require only 1 1/4" x 1 1/4" panel space. Ideal for receivers and low power transmitters. Heavy brass cadmium-plated plates. 100% soldered to eliminate high resistance contacts. Isolantite end plate permits insulating rotor from panel. Plates .020" thick. Shaft dimensions: standard 1/4" dia., 3/8" extension. 6 oz.

er to eliminate high resistance contacts. Isolantite end plate permits insulating rotor from panel. Plates .020" thick. Shaft dimensions: standard 1/4" dia., 3/8" extension. 6 oz.

Stock No.	Mfr's. Type	Mmf.	Air gap	NET
72-500	HFA-75-A	75	.020"	\$1.44
72-501	HFA-100-A	100	.020"	1.56
72-502	HFA-140-A	140	.020"	1.80
72-503	HFA-10-B	10	.030"	1.20
72-504	HFA-15-B	15	.030"	1.32
72-505	HFA-25-B	25	.030"	1.44
72-506	HFA-35-B	35	.030"	1.48
72-507	HFA-50-B	50	.030"	1.44
72-508	HFA-100-B	100	.030"	1.92
72-509	HFA-150-B	150	.030"	2.22
72-510	HFA-18-E	15	.070"	1.32
72-511	HFA-30-E	30	.070"	1.50

\*Has both front and rear Isolantite plates. †1,500 V. modulated.

### DUAL SECTION UNITS

Split stator units with opposed stators and rotors. Similar to HFA. 1 1/2" sq. Isolantite end plates on both front and rear. Wt., 8 oz.

Stock No.	Mfr's. Type	Mmf.	Air gap	NET
72-520	HFA-D-76-A	75	.020"	\$3.00
72-521	HFA-D-100-A	100	.020"	3.18
72-522	HFA-D-140-A	140	.020"	3.54
72-523	HFA-D-26-B	25	.030"	2.34
72-524	HFA-D-35-B	35	.030"	2.46
72-525	HFA-D-50-B	50	.030"	2.64
72-526	HFA-D-100-B	100	.030"	3.24
72-527	HFA-D-150-B	150	.030"	3.84
72-528	HFA-D-15-E	15	.070"	2.40
72-529	HFA-D-30-E	30	.070"	2.76

†1,500 V. modulated.

### INSULATED ROTOR TYPE "HFB"



Compact high voltage condensers for panel or chassis mounting. Rotor insulated from mounting brackets; uses 1/2" shaft.

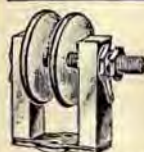
Isolantite end plates, 1 1/4" sq. Insulated rotor shaft for safety. Shaft dimension—1/4" dia., 1 1/2" extension. Average shpg. wt., 2 lbs.

Stock No.	Mfr's. Type	Mmf.	Air-gap	NET
72-535	HFB-50-C	50	.050"	\$2.76
72-536	HFB-100-C	100	.050"	3.06
72-537	HFB-150-C	150	.050"	3.36
72-538	HFB-50-E*	50	.070"	2.94
72-539	HFB-100-E*	100	.070"	3.48
72-540	HFB-50-F†	50	.100"	3.00
72-541	HFB-100-F†	100	.100"	4.14

### DUAL SECTION UNITS

Stock No.	Mfr's. Type	Mmf.	Air-gap	NET
72-550	HFB-D-35-C	35	.050"	\$4.08
72-551	HFB-D-50-C	50	.050"	4.20
72-552	HFB-D-100-C	100	.050"	4.98
72-553	HFB-D-200-C	200	.050"	6.60
72-554	HFB-D-35-E*	35	.070"	3.72
72-555	HFB-D-65-E*	65	.070"	4.26
72-556	HFB-D-100-E*	100	.070"	5.10
72-557	HFB-D-35-F†	35	.100"	3.96
72-558	HFB-D-65-F†	65	.100"	4.95
72-559	HFB-D-35-G†	35	.125"	4.35

\*Max. 100% modulated voltage. 1500 V. †2000 V., ‡2375 V. †† Have polished rounded plate edges. Others have standard plates.



### NEUTRALIZING CONDENSERS

New rounded edge, thick metal-plate type. Oversized fine thread provides micrometer tuning. Has lock nut for permanent setting. Isolantite insulation-bars will not pivot.

72-570.	Type N-10.	2.1 to 10 mmf. 1/4" to 1 1/4" air gap. Plate dia. 1 1/2" Size, 2 1/4"x1 1/2". Wt., 2 lbs.	<b>\$2.76</b>
72-571.	Type N-15.	Size, 4 1/2" by 3 1/2". Cap. is 3.2 to 14 mmf. Wt., 4 lbs.	<b>\$5.22</b>
72-572.	Type N-20.	3.8 to 14 mmf. 1/4" to 2" air gap. Plate dia. 4". Wt., 5 lbs.	<b>\$5.58</b>

### TYPE "MTC" CONDENSERS

#### SINGLES

A popular series of ruggedly built condensers for use in low or moderate power transmitters for either high or ultra-high frequency operation. Isolantite insulation. Silver-plated Beryllium rotor contact wiper; floating bearings for consistently smooth operation. Av. wt., 3 lbs.



Stock No.	Mfr's. Type	Mmf.	Air-gap	NET
72-580*	MTC-20-B	22	.070"	\$2.46
72-581*	MTC-35-B	33	.070"	2.58
72-582*	MTC-50-B	50	.070"	2.76
72-583*	MTC-100-B	100	.070"	3.18
72-584*	MTC-150-B	150	.070"	3.66
72-585*	MTC-50-C	46	.031"	2.46
72-586*	MTC-100-C	105	.031"	2.64
72-587*	MTC-150-C	150	.031"	2.82
72-588*	MTC-250-C	255	.031"	3.18
72-589*	MTC-350-C	360	.031"	3.48

†3000 V.—Polished round edge plates.

\*1000 V.—Standard type plates.

### "MTC-D" DUAL CONDENSERS

Split stator condensers with all features of MTC singles above. Connect stators in series for half the capacity at twice the breakdown voltage. Average shpg. wt., 4 lbs.

Stock No.	Mfr's. Type	Cap. Per Sec.	Air-gap	NET
72-600*	MTC-D-20-B	22	.070"	\$3.36
72-601*	MTC-D-35-B	33	.070"	3.60
72-602*	MTC-D-50-B	50	.070"	3.90
72-603*	MTC-D-100-B	100	.070"	5.25
72-604*	MTC-D-50-C	46	.031"	3.30
72-605*	MTC-D-100-C	105	.031"	3.60
72-606*	MTC-D-150-C	150	.031"	3.90
72-607*	MTC-D-250-C	255	.031"	4.50

†3000 V.—Polished round edge plates.

\*1000 V.—Standard type plates.

### "ETU" EXCITER TUNING UNITS

For use in multi-band or band-switching type exciter units. Designed for use with 6L6, RK-39, and similar type low-power beam tubes. Consist of accurately wound coil with output link winding and two variable 25 mmf. double-spaced condensers. Enclosed in shield can. 2" x 4" x 1 1/2". Wt., 1 lb.

Stock No.	Type	Band	EACH
72-620	ETU-10	10 Meters	<b>\$3.30</b>
72-621	ETU-20	20 Meters	
72-622	ETU-40	40 Meters	
72-623	ETU-80	80 Meters	

### "ETU" UNWOUND UNITS

As above but have blank coil form 2" long and 3/4" diameter, with two 25 mmf. double-spaced trimmer condensers. Units tune from top. Fully enclosed in metal shield. For custom tailored coils. Size, 2"x4"x1 1/2".

72-635. NET EACH.....**\$2.88**

### "CS-3" COIL SHIELD

Very effective as a general purpose shield. Made of durable metal and slotted to afford easy handling. Comes in 2 pieces, top and bottom. Can be used for coils and condensers, etc. Diameter is 3", height 2 3/4". Wt., 8 oz.

72-640. NET.....**33c**

### "PTS" POWER TUBE SHIELDS

Reduce feedback. PTS is for 807, RK-23 etc. 2 1/2" dia., 3" high. PTSH is for RK-20, 814, etc.; 2 1/2" dia., 2 1/4" high. Shpg. wt., 6oz.

72-650. PTS Shield. 72-651. PTH Shield. EACH.....**26c**

### "TS-50" METAL TUBE SHIELD

Complete isolation is afforded by this shield for use with high-gain RF pentodes. Drawn-in neck completes shielding between top and bottom sections. Special design affords maximum cooling. 4 1/2" high, 1 3/4" diameter. With 1 3/4" mounting centers. Wt., 8 oz.

72-660. NET.....**26c**



# LATEST AMATEUR GEAR



## ABBOTT 112 MC TRANSCEIVERS

Fig. A. MODEL DK-3

The Model DK-3 transceiver is an unusually compact unit for radio-telephone transmission and reception in the Amateur 2½ meter band of 112-116 MC. Ideal for Portable or Mobile operation or for use at the home station. Sturdy steel carrying case, size 11" x 11" x 4¼", with room for all necessary batteries. Range varies from two to thirty miles, depending upon elevation above ground. Simple to operate; panel tuning with one control which functions in both receive and transmit positions. Volume control is smooth acting and has no effect on tuning of signal. Can be used as portable or portable-mobile unit with 4 foot antenna; Ceramic antenna posts act as support for antenna in vertical position. Tubes used are 1-6J5GT and 1-6G6G. Uses four 1½-volt dry cells and three type No. M30 Burgess 45-volt batteries. Battery drain is low, assuring maximum operating life and economical performance. Requires a single-button carbon mike and headphones or combination cradle-type handset. Less tubes, batteries, headset, antenna and mike. A proven Transceiver constructed of high-quality, low-loss parts. Shpg. wt., 12 lbs.

**88-100. MODEL DK-3. NET.....\$18.82**

**88-101. Accessory Kit. Contains 1-6J5GT and 1-6G6G tube, 4 Burgess No. 4FH 1½-volt dry cells and 3 Burgess No. M30 portable 45-volt batteries, as listed above. Shpg. wt., 18 lbs. NET.....\$5.24**

Fig. B. MODEL MRT-3

A high-power 2½ meter transceiver with power input of 20 watts. Especially designed for mobile service in automobile, plane or boat installations. Covers the entire band of 112-116 MC. Working range varies from 5 to 50 miles, depending on location and type of antenna used; actual tests indicate ranges up to 85 miles or more under ideal conditions. The MRT-3 requires 300 V. DC at 100 ma. and 6.3 volts at 3.5 amps. for filaments. Can be operated from 6-volt battery using type 300-BS vibrator pack, or from 110 volts AC with MRT-P supply, both listed below. Panel controls grouped for easy operation include vernier tuning, volume control and send-receive switch. Jacks provided for single button carbon mike input as well as for measuring oscillator and modulator current. Has 2 feed-through insulators for antenna. Built-in speaker. Tubes used are: 1-HY75, 1-6CS, and 1-6V6. Size, 9" x 8" x 4". Wt., 12 lbs.

**88-102. Less tubes, power supply, and mike. NET.....\$28.81**

**88-103. Tube kit. NET.....\$ 5.27**

**88-104. 300-BS vibrator power supply. NET.....18.82**

**88-105. MRT-P 110 V. AC power supply. NET.....18.82**



## MEISSNER'S WINNING COMBINATION

Fig. A. IMPROVED DELUXE "SIGNAL SHIFTER"

New, improved model of the famous "Signal-Shifter" ECO, equipped with oscillator keying for CW "break-in" operation. It permits instant frequency change in any given band—right from the operating position—and thus affords a positive method of dodging QRM. Low-impedance link output circuit permits coupling to any stage in the transmitter; has RF power output of approx. 7½ watts on 1.7, 3.5, 7, and 14 MC bands. Three-way control switch on panel for "Standby," "Manual On," or "Automatic On"; built-in relay provides full automatic on-off control with transmitter control switch. "Manual On" position permits checking frequency at will to move to any desired spot in the band. Has selector switch for use with the "Signal-Spotter" to permit either crystal or ECO control, with coupling cable. Key-click filter provides clickless keying of oscillator stage. With 80 meter coils and tubes (1-6F6, 1-6L6, 1-5X4G, 1-VR150, 1-VR105). For 115 volts, 60 cycles, AC. Shipping weight, 35 lbs.

**88-120. Black finish. \$51.20**

**88-121. Gray finish. CASH PRICE.....\$51.20**

Terms: \$12.80 down, \$6.78 monthly for 6 months

### ADDITIONAL COILS

**73-500. 160 Meters. 73-503. 20 Meters. \$2.69**  
**73-501. 80 Meters. 73-504. 10 Meters.**  
**73-502. 40 Meters. NET, PER SET.....**

Fig. B. "SIGNAL SPOTTER"

An entirely new companion unit for use with the "Signal-Shifter." It provides a complete precision control system with instant frequency selection at your fingertips. Basically it is a crystal controlled oscillator operating from the voltage-regulated power supply of the "Signal-Shifter." Has provisions for four crystals with selector switch; ideal for use of "spot" or "band-edge" crystals; crystal-ECO switch is on Signal-Shifter. Independent, pre-tuned tank circuits; can be used with any type crystal, and any model Signal Shifter. Specify if Signal Spotter is for use with any "Signal Shifter" previous to 1941 and adapter parts and instructions will be supplied. With coils for 80 and 40 meters and tubes. Steel cabinet 5¼x9x11½". Shpg. wt., 15 lbs.

**88-130. Black finish. \$24.21**

**88-131. Gray finish. NET.....\$24.21**

### ADDITIONAL COILS

**73-510. 160 M. 73-512. 40 M. \$91.00**  
**73-511. 80 M. 73-513. 20 M. NET, EACH COIL. 91.00**  
 Write for FREE 16-page Meissner Amateur Catalog. Ask for 37-020.

## LEARN CODE EASILY WITH BUD CODE-PRACTICE AND TRAINING EQUIPMENT

### CODE-PRACTICE OSCILLATORS



#### MODEL CPO-120

Built-in dynamic speaker provides clear, strong note for classroom use. Has switch for high or low pitch signal; key jack on front. Jack at rear for remote keying and connection for external speaker. 6" high, 4¼" wide and 3¼" deep. Finished in gray crackle enamel. For 110 volts AC or DC. Complete with tube. Shpg. wt., 6 lbs.

**73-400. NET.....\$8.57**

#### CPO-124

Special classroom model to handle up to 20 sets of headphones; also has built-in magnetic speaker which is automatically muted when phones are plugged in. Has variable volume, and pitch controls so that adjustments may be made to suit individual requirements. Any number of keys may be connected in parallel for group practice. For 110 volts AC or DC. With tube. Size, 4¼" x 7¼" x 3¼". Shpg. wt., 8 lbs.

**73-402. NET.....\$8.18**



#### MODEL CPO-122

Will handle up to 20 pair of headphones or as many as five small magnetic speakers. Has variable pitch and volume controls. Ideal for code training tables with parallel keys and headphones. For 110 volts AC-DC. Overall size is 4¼" high, 3¼" wide and 3¼" deep. Complete with tube. Shipping weight, 3 lbs.

**73-401. NET.....\$7.10**



### OUTLET BOX

A convenient means for terminating key and ear phone connections in group or classroom practice. Used at each operator's position and wired to master oscillator. Includes two phone jacks. Bakelite case. 4¼" x 2¼" x 1¼". Wt., 1 lb.

**73-405. NET.....97.**



### EXTRA SPEAKERS

These magnetic and dynamic speakers have been especially designed for use with the Bud oscillators. Several speakers can be connected in parallel and used with the oscillators. They are simply plugged into the "phones" jacks on the oscillators.

Both types of speakers are housed in metal cabinets with sloping panels. Size: 4¼" high, 4" wide, and 4" deep. Shpg. wt., 2 lbs.



#### MODEL CPS-121

Contains a 2" permanent magnet type dynamic speaker. It is intended primarily for use with 73-400 Model CPO-120 code-practice oscillator at left.

**73-403. NET.....\$2.06**

#### MODEL CPS-123

Uses a 3" magnetic-type speaker. For use with either the 73-401 or the 73-402 code-practice oscillators described at left.

**73-404. NET.....\$2.40**





# Transmitting Equipment

## COTO LO-LOSS COILS



Designed for maximum efficiency in either high or low power transmitters. Equipped with plug-in base with banana plugs. "TL" and "TVL" handle up to 1 KW input; "BT" and "BTVL" coils up to 300 watts input. Average wt., 2 lbs.

### "TL" SERIES (WITH FIXED LINK)

Stock No.	Type	NET	Wire Size	No. Turns	Dia.
74-700	160TL	\$3.23	12	42	5"
74-701	80TL	2.88	10	30	4"
74-702	40TL	2.65	10	20	3"
74-703	20TL	2.29	10	10	3"
74-704	10TL	2.23	10	6	2 1/4"

### "TVL" SERIES (WITH VARIABLE LINK)

Stock No.	Type	NET	Wire Size	No. Turns	Dia.
74-710	160TVL	\$3.82	12	42	5"
74-711	80TVL	3.47	10	30	4"
74-712	40TVL	3.23	10	20	3"
74-713	20TVL	2.88	10	10	3"
74-714	10TVL	2.82	10	6	2 1/4"

### "BTL" SERIES (WITH FIXED LINK)

Stock No.	Type	NET	Wire Size	No. Turns	Dia.
74-720	160BTL	\$2.70	14	36	4"
74-721	80BTL	2.62	14	34	2 1/2"
74-722	40BTL	2.35	14	22	2 1/4"
74-723	20BTL	2.15	14	10	2 1/4"
74-724	10BTL	2.09	14	6	2 1/4"

### "BTVL" SERIES (WITH VARIABLE LINK)

Stock No.	Type	NET	Wire Size	No. Turns	Dia.
74-730	160BTVL	\$3.29	14	36	4"
74-731	80BTVL	3.20	14	34	2 1/2"
74-732	40BTVL	2.94	14	22	2 1/4"
74-733	20BTVL	2.73	14	10	2 1/4"
74-734	10BTVL	2.68	14	6	2 1/4"

## STEATITE MOUNTING BASES

Bar and insulators of Steatite with end mounting holes. Jacks fit bar and plug mountings on Coto Inductors. Nickel-plated brass hardware.

No.	Type	NET	For	Jacks
74-740	CI-8TLM	\$1.18	TL, TVL	5
74-741	CI-8BTLM	1.18	BTL, BTVL	5



## "PEE-WEE" COILS

Miniature coils, wound on Alsmag 196 forms. Have five prong bases for tube socket mountings. Handle up to 100 watts. Ideal for low or medium power stages. Cap. values are approx. Av. shpg. wt., 1 lb.

Freq. Band	Center Tap	End Link	Center Link	Cap.
160	74-750	74-760	74-770	140
80	74-751	74-761	74-771	110
40	74-752	74-762	74-772	80
20	74-753	74-763	74-773	55
10	74-754	74-764	74-774	30

NET EACH COIL..... \$1.12

## BUD MIDGET PLUG-IN COILS

Compact air-wound inductors for use in all stages with inputs of 50 watts or less. Glazed ceramic mounting base keeps coil away from chassis. For 5-prong socket. Center and adjustable link types are center tapped. End link type not tapped. Enamelled-copper windings, 1/2 lb.



Freq. Band	Center Link	End Link	Adj. Link	NET EACH
160	73-015	73-025	73-034	\$1.03
80	73-014	73-024	73-033	
40	73-013	73-023	73-032	.97
20	73-012	73-022	73-031	
10	73-011	73-021	73-030	
5	73-010	73-020		.79



## JOHNSON HI-Q PLUG-IN INDUCTORS

Mounts in 5-contact tube socket. Rated at 100 W. Ideal for oscillator, low-power amp. stages, etc. Ribbed ceramic forms. Holes for internally mounting Johnson "T" condenser. With center tap and link coupling, or with link at bottom. 6 oz.

Center Link No.	EACH	Band	End Link No.	EACH
73-300		10	73-310	
73-301		20	73-311	
73-302	97c	40	73-312	
73-303		80	73-313	91c
73-304		160	73-314	

## BARKER-WILLIAMSON PRODUCTS

### "BABY" 25-WATT AIR INDUCTORS



Midget-size plug-in coils mounted on Alsmag 196 5-prong bases. Micrometer spaced with low-loss acetate spacer strips. Only 1 1/4" length in diameter. For use where space is limited. Conservatively rated at 25 W. \*Capacity to tune to low frequency end of band. Wt., 1 lb.

Band	End Link	Center Link	*Cap. Mmf.	NET EACH
160	75-100	75-310	100	
80	75-301	75-311	48	
* 40	75-302	75-312	35	75c
20	75-303	75-313	28	
10	75-304	75-314	28	

### 75-WATT "JUNIORS"

Band	End Link	Center Link	Adj. Link	NET EACH
160	75-320	75-330	75-340	
80	75-321	75-331	75-341	
40	75-322	75-332	75-342	\$1.00
20	75-323	75-333	75-343	
10	75-324	75-334	75-344	

### "BABY" 5-BAND COIL TURRETS



Complete five-band coil and switch turret assemblies, designed for use in low power transmitter stages. Will handle up to 35 watts. Consist of five coils mounted on bandswitch and equipped with threaded shank for single-hole panel mounting.

Operate on 160, 80, 40, 20, and 10 meters. All coils tune with single section 100 mfm. condenser, or split stator condenser of 200 mfm. per section. Avge. shpg. wt., 3 lbs.

75-350. Type BTM. Untapped, without link coupling, for capacity coupled stages.

75-351. Type BTCT. These coils are center-tapped and do not have link.

75-352. Type BTEL. Untapped with end link for interstage coupling.

75-353. Type BTCL. Center-tapped with center link for balanced stages. \$8.50

### MODEL 2A BANDSWITCH



A small, compact coil and band-switch assembly for use in low power exciter stages. Operates on 160, 80, 40, 20 and 10 meters. Designed for use with 6L6, 802, 807, RK-39, T-21, and similar tubes in capacity coupled stages. Ideal for exciter units or portable rigs. Can be used in stages where input does not exceed 35 watts. Tune with 100 mfm. condenser. Shpg. wt. 2 lbs. \$3.25

### 75-360. NET. \$3.25

Send for Complete Barker-Williamson Literature. 37-062. FREE on Request.

## AIR INDUCTORS

Accurately designed and spaced. Carefully assembled to provide maximum plate efficiency. Rigidly built for maximum strength. Wound with enamel covered wire. Equipped for plug-in with banana plugs and Isolantite bottom bar. \*Capacity to resonate at low frequency end of band. Av. shpg. wt., 2 lbs.



### "BL" 100 WATT—FIXED LINK

Stock No.	Type	*Cap. Mmf.	Wire Size	Dia.	NET
75-365	160BL	110	18	2 1/2"	\$2.50
75-366	80BL	52	16	2 1/4"	2.30
75-367	40BL	43	14	2"	2.05
75-368	20BL	40	14	2"	1.80
75-369	10BL	28	12	2"	1.75

75-361. Jack Bar with jacks for "BL" series coils. NET..... 85c

### "BXL" 250 WATT—FIXED LINK

Stock No.	Type	*Cap. Mmf.	Wire Size	Dia.	NET
75-410	160BXL	100	14	4"	\$2.80
75-411	80BXL	54	14	3 1/2"	2.60
75-412	40BXL	51	14	3 1/4"	2.35
75-413	20BXL	45	14	2 1/2"	2.10
75-414	10BXL	35	12	2"	2.05

75-363. Jack Bar with jacks for "BXL" series coils. NET..... \$1.15

### "TL" 500 WATT—FIXED LINK

Stock No.	Type	*Cap. Mmf.	Wire Size	Dia.	NET
75-375	160TL	115	12	5"	\$2.85
75-376	80TL	60	12	3 1/2"	2.65
75-377	40TL	38	12	2 1/2"	2.40
75-378	20TL	30	12	2 1/2"	2.15
75-379	10TL	25	12	2"	2.10

75-362. Jack Bar with jacks for "TL" series coils. NET..... \$1.25

### "BVL" 100 WATT—SWINGING LINK

Stock No.	Type	*Cap. Mmf.	Wire Size	Dia.	NET
75-385	160BVL	150	18	2 1/2"	\$2.10
75-386	80BVL	70	16	2 1/4"	1.90
75-387	40BVL	40	14	2 1/4"	1.65
75-388	20BVL	40	14	2 1/4"	1.45
75-389	10BVL	35	8	2 1/4"	1.40
75-390	SBVL	25	8	2 1/4"	1.35

75-395. BVL Coil mounting assembly with swinging link. NET..... \$2.50

### "TVL" 250 WATT—SWINGING LINK

Stock No.	Type	*Cap. Mmf.	Wire Size	Dia.	NET
75-400	160TVL	65	18	2 1/2"	\$2.25
75-401	80TVL	55	14	2 1/4"	2.15
75-402	40TVL	34	12	2 1/4"	1.90
75-403	20TVL	25	12	2 1/4"	1.65
75-404	10TVL	22	6	2 1/4"	1.60

75-396. TVL Coil mounting assembly with swinging link. NET..... \$4.00

### "TVH" 500 WATT—SWINGING LINK

Stock No.	Type	*Cap. Mmf.	Wire Size	Dia.	NET
75-420	160TVH	90	16	2 1/2"	\$2.85
75-421	80TVH	50	14	2 1/4"	2.65
75-422	40TVH	32	12	2 1/4"	EACH
75-423	20TVH	22	12	2 1/4"	EACH
75-424	10TVH	22	6	2 1/4"	EACH

75-430. TVH Coil mounting assembly with swinging link. NET..... \$3.75

Send for Complete Barker-Williamson Literature. 37-062. FREE on Request.

## CARDWELL CONDENSERS

### TRIM-AIR MIDGETS



For all uses where high-quality midgets are required. Rigid, Isolantite-mounted assembly assures greatest stability and minimum losses. Equipped for universal mounting. For use as midget tuning condenser or low power neutralization. Easily gauged. Excellent for UHF work. Wt., 12 oz.

Stock No.	Mfrs. Type	Cap. Mmf.	Air Gap	NET
75-010	ZR-10AS	10	.030"	\$0.84
75-011	ZR-15AS	15	.030"	.84
75-012	ZR-25AS	25	.030"	.93
75-013	ZR-35AS	35	.030"	.99
75-014	ZR-50AS	50	.030"	1.05
75-015	ZU-75AS	75	.020"	1.14
75-016	ZU-100AS	100	.020"	1.23
75-017	ZU-140AS*	140	.020"	2.10
75-020	ZS-4SS	4	1.40"	1.23
75-021	ZT-15AS	15	.070"	1.02
75-022	ZV-25S†	25	.061"	.84
75-023	ZT-10AS	11	.070"	.96
75-024	ZT-30AS	35	.070"	1.23
75-025	ZS-7SS	7	1.40"	1.38

\*Double-bearing; two end plates.  
†2 segment stator for 5 meter circuits.

75-030. Mounting Bracket. NET..... 8c  
75-031. Mounting Posts, per pair. NET. 8c

### DUAL TRIM-AIRS

For use in low and medium power transmitter stages, receivers, portable equipment, etc. Small and compact, requiring minimum space for mounting. All units with insulated coupling particularly suited for use as neutralizing condensers for push-pull RF stages. Use mounting brackets, 75-030, at lower left. Wt., 1 lb.

Stock No.	Cardwell Type No.	Mmf. per Section	Air Gap	NET
75-050	EU-75AD	75	.020"	\$2.19
75-051	EU-100AD	100	.020"	2.25
75-052	EU-140AD	140	.020"	3.96
75-060	ER-10AD	10	.030"	1.71
75-061	ER-15AD	15	.030"	1.71
75-062	ER-25AD	25	.030"	1.80
75-063	ER-35AD	35	.030"	1.92
75-064	ER-50AD	50	.030"	2.04
75-070	ET-15AD	15	.070"	1.98
75-071	ET-15ADI	Insul. Coupl.	.070"	2.31
75-072	ET-30AD	30	.070"	2.37
75-073	ET-30ADI	Insul. Coupl.	.070"	2.70
75-081	ES-4SDI	Insul. Coupl.	.140"	2.27
75-082	ES-7SDI	Insul. Coupl.	.140"	2.97

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37-065. Cardwell Catalog—Sent FREE



# RELAYS VOLTAGE DIVIDERS METERS

## HIGH QUALITY RELAYS FOR EVERY PURPOSE

### POTTER & BRUMFIELD RELAYS

Ruggedly built power relays for handling any switching requirement where heavy current is present at low frequencies. Will safely break 20 amps. in non-inductive circuit. Oversize energizing coil provides powerful pull for fast, positive action. With heavy steel mounting bracket. For 110 V., 60 cy. 2 1/2 x 2 1/2 x 2". Mtg. ctrs. 1 1/2". 2 lbs.

**75-600.** Type PRA-1. SPST. \$2.25  
Normally open. NET

**75-601.** Type PRA-2. SPST. \$2.25  
Normally closed. NET

**75-602.** Type PRA-3. SPDT. \$2.50  
NET

**75-603.** Type PRA-4. DPST. \$3.20  
Normally open. NET



### POPULAR GUARDIAN RELAYS

Model B-100. Designed specifically for break-in operation of Amateur transmitters. DPDT type. Will provide rapid switching from receiving to transmitting. Heavy magnets and springs for clean-speed break. Silver contacts. Low current drain. Compact construction. For 110 volt AC. Size, 2 1/4 x 2 1/4 x 2 1/4". Shpg. wt., 1 lb.

**75-700. NET. \$5.06**

**75-701.** Model K100. SPST type. Pure silver contacts break clean. Operates from 5 to 16 V. AC or 1 1/2 to 4 V. DC source. Size, 2 1/4 x 2 1/4 x 1 1/4". Shpg. wt., 1 lb.

**75-702. NET. \$3.70**

**75-701.** Model K100. SPST type. Pure silver contacts break clean. Operates from 5 to 16 V. AC or 1 1/2 to 4 V. DC source. Size, 2 1/4 x 2 1/4 x 1 1/4". Shpg. wt., 1 lb.

**75-702. NET. \$3.70**



### MIDGET RELAYS

Efficient relays for use in small spaces. Points rated 8 A. AC and 4 A. DC. 2 1/4 x 1 1/4 x 1 1/4". Shipping wt., 1 1/2 lbs. \*Contacts normally open.



No.	Model	Type	Coil Voltage	Ea.
75-610	MRA-1	SPDT	6 V. AC 2W.	\$1.40
75-611	MRA-2	SPST*	6 V. AC 2W.	1.35
75-612	MRA-4	DPDT	6 V. AC 2W.	2.00
75-613	MRA-5	DPST*	6 V. AC 2W.	1.35
75-614	MRA-1	SPDT	110 V. AC 2W.	1.40
75-615	MRA-2	SPST*	110 V. AC 2W.	1.35
75-616	MRA-4	DPDT	110 V. AC 2W.	2.00
75-617	MRA-5	DPST*	110 V. AC 2W.	1.35
75-618	MRD-1	SPDT	6 V. DC 1.5W.	1.40
75-619	MRD-2	SPST*	6 V. DC 1.5W.	1.35

### PLATE CIRCUIT RELAYS

An excellent relay for general plate circuit uses. The 1/2" silver contacts are rated at 6 amps. Size: 2 1/4 x 1 1/4 x 1 1/4". Mounting centers, 2 1/4". Shpg. wt., 2 lbs.

**75-625.** Type MRS-291. SPDT. \$1.05  
5000 ohm coil. NET

**75-626.** Type MRS-292. SPDT. \$1.05  
5000 ohm coil. NET



### STACO ANTENNA RELAYS

RF type antenna change-over relays for use in any antenna system. Will handle 4 Amps. through silver contacts. New floating armature with ball-bearing pivots. All DPDT types, 3/4 x 3/4 x 2 1/4". ABA and ABD have high-frequency molded insulation and base; AMA and AMD have Mycalex insulation and base. Wt., 1 lb.

**75-720.** ABA. 110 V. 60 C. AC. \$2.94  
NET EACH

**75-721.** ABD. 6 V. DC. \$2.94  
NET EACH

**75-722.** AMA. 110 V. 60 C. AC. \$3.92  
NET EACH

**75-723.** AMD. 6 V. DC. \$3.92  
NET EACH



### ANTENNA RELAY

The AR-1 is designed for antenna change-over purposes. Polystyrene insulation assures low loss operation. Contacts are 1/2" silver. Coil is impregnated. For 110 V., 60 cycles. Handles 1/2 KW. 2 1/4 x 4 1/4 x 1 1/4". Wt., 2 lbs.

**75-630.** Type AR-1. DPDT. \$3.95  
NET



### KEYING RELAY

Polystyrene insulated keying or break-in relay for use in primary or secondary circuits. Double break feature assures positive full contact without chatter. Size: 2 1/4 x 2 1/4 x 2 1/4". Wt., 2 lbs.

**75-631.** Type AR-2. SPST. For 110 V. AC. \$2.95  
NET EACH

**75-632.** Type AR-2. SPST. For 6 V. AC. NET EACH. \$2.95



### NEUTRALIZING CONDENSERS

BUD FEED-THRU TYPE

For neutralizing tubes which have grid lead terminating at the base. Provides a more compact installation. Knurled nut permits locking for permanent settings. Single hole mounting. Shpg. wt., 6 oz.



Stock No.	Hole Dia.	Plate Dia.	Cap. Mmf.	NET
73-410	3/8"	1"	4	\$0.73
73-411	1/2"	1 1/2"	7.5	1.76

### BUD MIDGET TYPE

For use with beam type tubes in transmitters. Has two 1" disc plates. Ceramic stand-off insulator, crow foot base. Shpg. wt., 4 oz.

**73-412. NET. \$6.80**



### CENTRALAB SWITCHES

New transmitter switches with Isolantite insulation. Bar-knob. All have four positions, 90° apart, and adjustable stop. For any circuit up to 100 watts at potentials to 1000 V. DC. Shpg. wt., 1 lb.

Stock No.	Gangs	Poles	Positions	NET
34-000	1	1	4	\$1.00
34-001	2	2	4	1.59
34-002	3	3	4	2.29
34-003	4	4	4	2.88
34-004	5	5	4	3.59

**34-010.** Special Dial Plate. Type K-162. Marked 1 to 4. For above switches. NET. \$1.20



### ALLIED TYPE H RELAYS

A new line of relays designed to meet the rigid requirements of Industrial, Amateur, Aircraft, Mobile and Marine applications. DPDT type with fine silver contacts. Armatures are of the semi-balanced type; coils are varnish impregnated. Mounting bracket has two tapped holes. 1 1/2" apart. "Alsimag" cross bars and front plate insure low loss, non-warping insulation. 1 1/2 x 3 1/2 x 2 1/4". Wt., 1 1/2 lbs.

Stock No.	Coil Voltage	Ea.
75-635.	6 V. DC. NET	\$4.56
75-636.	6 V. AC, 60 cycles.	
75-637.	110 V. AC, 60 cycles.	\$5.44

NET EACH. \$5.44

For additional Allied relays — see page 158.



TRIPLET METERS



### THERMO-COUPLE TYPE R F AMMETERS

For RF use. Especially designed for high frequency operation and accurate to 2%. Model 341 has internal couple; Model 346 has external thermo-couple. Molded bakelite cases; flange mounting type. Model 346 case is 3 1/2 x 2 1/4". mounts in 2 1/4" hole. Model 341 is 3 1/2" in diam., mounts in 2 1/4" hole. Wt., 2 lbs.

Amps.	341	EACH	346	EACH
0-1	66-000	\$4.86	66-010	\$7.18
0-1.5	66-001		66-011	
0-2.5	66-002		66-012	
0-5	66-003		66-013	

### NEW TRIPLET MODEL 1696A MODULATION MONITOR



Helps comply with FCC regs. and indicates greatest possible efficiency. Uses a carrier level meter and a modulation meter calibrated from 40% to 120%. Has neon peak indicator. Couples inductively to the antenna circuit. For 110 V. 60 cycle. 1 1/2 x 7 1/4 x 4 1/4". Shpg. wt., 21 lbs.

**84-500.** Table Model in Metal Case. CASH. \$39.00  
Terms \$7.80 down, \$5.60 mo. for 6 mos.

### OHMITE VOLTAGE DIVIDERS

Ideal for transmitter power supplies. Have sliding contacts. 50 watt size is 4" long, 100 watt size is 6 1/2" long; 200 watt, 10 1/2" long. Hollow ceramic core prevents overheating. Supplied with one slider and mounting brackets. Av. shpg. wt., 1 lb.



Stock No.	Ohms	Ma.	NET Each
75-800	250	447	
75-801	500	316	
75-802	750	258	
75-803	1000	224	
75-804	1500	183	
75-805	2000	158	88c
75-806	2500	142	
75-807	5000	100	
75-808	10000	70	
75-809	15000	57	
75-810	20000	48	97c
75-811	25000	43	
75-812	30000	41	
75-813	40000	35	\$1.12
75-814	50000	27	
75-815	100000	12	
75-880	EXTRA SLIDER		1.29 6c

### 100 WATTS

75-830	1000	316	
75-831	5000	141	\$1.29
75-832	10000	100	
75-833	15000	81	
75-834	20000	70	\$1.47
75-835	25000	56	
75-836	30000	51	
75-837	40000	38	1.62
75-838	50000	28	
75-839	75000	16	1.76
75-840	100000	14	
75-881	EXTRA SLIDER		9c

### 200 WATTS

75-850	1000	447	
75-851	5000	200	\$1.94
75-852	10000	141	
75-853	15000	115	
75-854	20000	100	
75-855	25000	89	
75-856	30000	81	
75-857	40000	63	
75-858	50000	49	2.26
75-859	75000	30	
75-860	100000	20	
75-882	EXTRA SLIDER		9c



# Transmitting Equipment

## JOHNSON "Q" ANTENNAS



Provide a considerable increase in radiated power over conventional doublet or Zepp antennas. Accurate matching of line and antenna impedance is provided by use of quarter-wave matching section of light-weight tubing. Can be fed by open wire system up to several hundred feet. Includes hard-drawn antenna wire, center assembly, 2 pieces 1/2" tubing for "Q" bars, "Q" section spacers, and insulators.

- 88-031. 100' 10 Meter Kit. NET...\$4.62
- 88-032. 200' 20 Meter Kit. NET...7.20
- 88-033. 400' 40 Meter Kit. NET...13.29
- 88-034. 800' 80 Meter Kit. NET...24.70
- 88-030. 50' 5 Meter Kit. NET...4.12

## PREMAX ANTENNAS

Constructed of high-tensile steel tubing, antenna telescopes for accurate adjustment to transmitting frequencies. Heavily-plated to resist weathering. Hi-Q mounts without insulators to chimney or roof parapet. Others are self-supporting on special base design insulators. Easily installed.

88-040. Hi-Q Vertical Antenna for 10 Meters. Wt., 20 lbs. NET...\$11.47

88-041. Chimney Bracket for Hi-Q antenna. Wt., 14 lbs. NET...\$4.12

97-490. 318M. 10 Meter self-supporting vertical. 17 ft., 3 section, with 2P24 base-mounting insulator. Wt., 12 lbs. NET...\$7.94

97-491. 136M. 20 meter self-supporting vertical. 34 ft., 6 section, with 1P44 insulator. 29 lbs. NET...\$20.58

## AMPHENOL CO-AXIAL CABLE



Surge impedance 72 ohms, matches a half-wave antenna, 16 mmid. capacity per ft. Constructed of polystyrene beads on No. 12 solid copper wire, covered with woven copper shield. Bends on 1" radius without baring center conductor. No. 72-12 has double-cotton impregnated outer braid; No. 72-12R has .050" rubber wall over two impregnated cotton braids.

71-785. No. 72-12. Per Foot. NET...29c

71-786. No. 72-12R. Per Foot. NET...53c

## CO-AXIAL CABLE CONNECTORS

Insulation is Amphenol "912A." Outer protective shell is chrome-plated machined brass. Male and female elements are interchangeable, and are removable.

For easy wiring. Chassis type mounts in 1/8" hole, supplied with lock washer and lock nut. Fits cables to 3/8" diam. Shpg. wt., 6 oz.

71-790. Male Cable type. NET...88c

71-791. Female Cable type. NET...88c

71-792. Female Chassis type. NET...73c

## STRAIN INSULATORS

White glaze low absorption porcelain. Type 32 is for use in light guy wires or receiving antennas. Type 38 is especially designed for RF use.

Stock No. Type Fig. Lgth. EACH 10 for

73-100. 32 B 1 1/2" 5c 45c

73-101. 38 B 1 1/2" 9c 85c

## FEEDER SPREADERS

For use in all types of feeder lines, either transposed or non-transposed. Made of low absorption white glazed porcelain.

Type 31 (Fig. B) prevents twisting. For 2" line spacing. Others are 3/4"x1/2" bars.

Stock No. Type Fig. Length NET

73-110. 31 A 2" 10c

73-111. 132 A 2" 9c

73-112. 134 A 2" 12c

73-113. 136 A 6" 15c

## FAMOUS E. F. JOHNSON QUALITY PRODUCTS



## STAND-OFF INSULATORS

Made of a superior grade of low absorption high glaze porcelain. Heavy breakage-resistant bases. Nickel-plated brass hardware. Types 65, 66 and 67 have cadmium steel bases. "J" indicates jack type. \*Square base type. Wt., 1 lb.

Stock No.	Mfr's Type	Fig.	Body Hgt.	Hard-ware	NET
73-120	20	A	1 3/8"	10-32	9c
73-121	20J	B	1 3/8"	74J	11c
73-122	22	A	1"	8-32	6c
73-123	22J	B	1"	74J	8c
73-124	24	A	5/8"	6-32	5c
73-125	60	C*	4 1/2"	1/4-20	38c
73-126	62	C*	2 3/4"	1/4-20	24c
73-127	65	C	1 3/8"	10-32	15c
73-128	65J	C	1 3/8"	74J	18c
73-129	66	D	2 3/4"	1/4-20	24c
73-130	66J	D	2 3/4"	76J	32c
73-131	67	D	4 1/2"	1/4-20	35c
73-132	67J	D	4 1/2"	76J	47c



## PORCELAIN CONES

Made of high-grade, white glaze, low absorption porcelain. Finished with machine screws top and bottom, and with cushion washer. Deeply threaded. One-hole mounting. Av. wt., 1 lb.

No.	Type	Fig.	Hgt.	Thread	NET
73-140	600	A	5/8"	6-32	8c
73-141	601	A	1"	8-32	10c
73-142	601J	B	1"	74J	13c
73-143	602	A	1 1/8"	8-32	12c
73-144	602J	B	1 1/8"	74J	15c
73-145	603	A	2"	10-32	15c
73-146	603J	B	2"	74J	18c
73-147	604	A	3"	10-32	21c
73-148	604J	B	3"	76J	29c



## LEAD-IN BUSHINGS

Have many applications in transmitter and antenna installations. Type 55 is ultra-stearite, others are white glaze porcelain. Types 50, 51, 52 and 55 have nickelled brass rod and nuts.

Stock No.	Mfr's Type	Fig.	Hgt.	Dia.	Panel Hole	NET
73-160	50	D	1 1/2"	3/8"	1 1/2"	12c
73-161	51	D	1 1/2"	1 1/8"	1 1/2"	21c
73-162	52	D	1 1/2"	1 1/8"	1 1/2"	29c
73-163	53	B	1 1/2"	3/8"	1 1/2"	18c
73-164	54	A	1 1/2"	3/8"	1 1/2"	41c
73-165	55	A	1 1/2"	3/8"	1 1/2"	18c

## THREADED BRASS ROD

For use with standoff insulators, through-panel and lead-in bushings. Nickelled; thread 1/4-20. 73-175. Type 240. 8' long. NET...21c

73-176. Type 241. 10' long. NET...21c

73-177. Type 242. 15' long. NET...32c



## JOHNSON SOCKETS

73-190. UX BASE. For use with 4 prong, UX base tubes. Porcelain insulation; heavy spring contacts. Wt., 1 lb. NET...50c

73-191. 50 Watt socket. Porcelain base with heavy dual phosphor bronze contact springs. Cadmium plated. NET...73c

WE CAN SUPPLY ALL JOHNSON PRODUCTS  
Send for Complete Johnson literature.  
37-011. Johnson Catalog—Sent FREE

## JOHNSON JACKS & PLUGS



A complete line of highest quality jacks and plugs. Banana type plugs have nickel-silver springs; spring sleeve type jacks are nickelled brass with phosphor-bronze springs. 77A and 73A plugs have long screw for mounting on ceramic coil forms. Av. shpg. wt., 8 oz.

Stock No.	Type	Fits	Length	NET
73-200	74	75, 75A, 75C	3 1/2"	4c
73-201	75	74	3 1/2"	4 1/2c
73-202	75A	74	3 1/2"	4 1/2c
73-203	75C	74	1 1/2"	5c
73-204	76	77, 77A	1 1/2"	15c
73-205	77	76	1 1/2"	12c
73-206	77A	76	1 1/2"	15c
73-207	70	71	1 1/2"	21c
73-208	71	70	1 1/2"	8 1/2c
73-209	72	73, 73A	1 1/2"	15c
73-210	73	72	1 1/2"	4 1/2c
73-211	73A	72	1 1/2"	4 1/2c



## THRU-PANEL INSULATORS

Have high mechanical strength with long leakage paths. Made of white glaze porcelain. Flat mounting surface; cushion washers. Wt., 1 lb.

Stock No.	Mfr's Type	Fig.	Top Hgt.	Panel Hole	Hard-ware	NET
73-225	70	A	1 1/4"	1 1/2"	10-32	18c
73-226	40J	B	1 1/4"	1 1/2"	74J	21c
73-227	42	A	7/8"	1 1/2"	10-32	14c
73-228	42J	B	7/8"	1 1/2"	74J	17c
73-229	44	A	3/4"	1 1/2"	6-32	11c
73-230	45	C	1 1/8"	1 1/2"	10-32	24c
73-231	45J	C	1 1/8"	1 1/2"	74J	26c
73-232	4576J	C	1 1/8"	1 1/2"	76A-J	32c
73-233	46	A	2 1/4"	1 1/2"	1/4-20	38c
73-234	46J	A	2 1/4"	1 1/2"	76J	47c
73-235	47	A	4 1/2"	1 1/2"	1/4-20	62c
73-236	47J	A	4 1/2"	1 1/2"	76J	73c

## SHAFT COUPLINGS

Flexible insulated shaft couplings with phosphor-bronze springs and absolute freedom from backlash. Insulated with ultra-stearite. Maximum airgap to insure protection from flashover. Wt., 1 lb.

Stock No.	Type	Shaft	Diam.	NET
73-260	250	1/4"x1/8"	1 1/8"	47c
73-261	251A	1/4"x1/8"	2 1/8"	82c
73-262	251B	1/4"x1/8"	2 1/8"	82c
73-263	251	3/8"x1/8"	2 1/8"	82c

## PANEL BEARING & EXTENSION

For use with rigid or flexible shaft couplings. Fit panels up to 3/4" thick. \*Type 255 is panel bearing only. Of cadmium-plated brass.

Stock No.	Type	Shaft	Length	NET
73-275	255	3"	9c	
73-276	256	3"	18c	
73-277	257	6"	24c	

## FLEXIBLE SHAFTS

Non-rusting phosphor-bronze flexible shafts with 1/4" hubs. Permit control of condensers, etc., when mounted at angles up to 90 degrees. Hubs will not loosen.

73-290. Type 253. 3' length. NET...21c

73-291. Type 254. 6' length. NET...29c



# Soldering Equipment

## KNIGHT RF CHOKES



### MIDGET TYPE

Very popular with the Amateur and Experimenter. Inductance, 2½ mh.; DC resistance 16 ohms. Capacity, 150 ma. Universal winding in four sections on ceramic core. 3 oz.

60-800. 10 FOR \$1.08. EACH... 12c



### HEAVY-DUTY TYPES

60-805. 2½ Mh. at 1000 Ma. Five section universal-wound. Res. 5 ohms. With mounting brackets. \$1.08 Wt., 1 lb. NET...

60-806. 5 Mh. at 500 Ma. Five universal windings on ceramic core. Res. 12 ohms. Shipping weight, 1 lb. NET... 95c

60-807. 2.8 Mh. at 1000 Ma. Five tapered size universal-wound sections. Ceramic core. Res. 5 ohms. Shpg. wt., 1 lb. NET... \$1.21

60-808. 5.3 Mh. at 500 Ma. Same as 60-807 but resistance is 12.5 ohms. 1 lb. NET... \$1.08

## SPECIAL ALLIED VALUES IN POWER TRANSFORMERS

### 6.3 VOLT TYPE

Fully enclosed case type in upright mounting style; with flexible insulated wire leads. A unit with dozens of applications for Amateurs and Experimenters. Black lacquer finish. Ratings: Primary, 110 V., 60 cycles. Secondaries: 600-0-600 V., at 200 ma.; 6.3 V., at 4 amps.; 6.3 V., at 3 amps.; 5 V., at 3 amps. Mtg. area 3/4" x 4 1/4". Wt., 13 lbs. NET... \$3.45



### 7.5 VOLT TYPE

Same style case as above. Primary, 115 V., 50-60 cycles. Secondaries: 1200 V. CT at 200 ma.; 7.5 V. at 3 A.—CT; 5 V. at 3 A.—CT; 2.5 V. at 10 A.—CT. Mtg. ctrs., 3x3/4". Shipping weight, 13 lbs. NET... \$3.45

### EO-1 TYPE CABLE

Will handle power output up to 2000 watts, 72 ohm surge impedance. Two No. 12 solid copper conductors, cellulose and rubber-insulated, with overall weatherproofed braid.

47-500. Per foot. NET... 5c  
47-501. 100 foot roll. NET... \$3.91

## COPPERWELD SOLID ENAMELED ANTENNA WIRE

Steel core with welded copper covering. High conductivity; no corrosion. Available in continuous lengths up to 1500 feet, on order.

Gauge	100 Ft.	NET	200 Ft.	NET
14	74-601	\$0.87	74-610	\$1.57
12	74-602	1.34	74-611	2.42
10	74-603	1.94	74-612	3.50

## HARD-DRAWN SOLID ENAMELED WIRE

Gauge	100 Ft.	NET	200 Ft.	NET
14	47-011	57c	47-021	\$1.03
12	47-012	82c	47-022	1.48
10	47-013	\$1.25	47-023	2.25

## SOLID TINNED COPPER WIRE

Gauge	25 Ft.	NET	50 Ft.	NET
14	47-521	16c	47-522	29c
12	47-531	22c	47-532	41c
10	47-541	39c	47-542	75c

## FEEDER SPREADERS

White porcelain spreaders for open wire transmission lines. 3/4" wide by 1/4" thick. Use 6" spreaders with No. 12 wire for 600 ohm lines. Shpg. wt.—3", 4 oz.; 6", 6 oz.

51-220. 3" spacing. NET EACH... 5c  
51-221. 6" spacing. NET EACH... 17c

## ANTENNA INSULATORS

Made of strong white porcelain. Low capacity and long leakage path. All 1" diameter.

88-200. 7" long. Wt., 1/2 lb. EACH... 22c  
88-201. 12" long. 1 lb. EACH... 29c  
88-202. 20" long. 1 1/2 lbs. EACH... 39c

## CARDWELL COAXIAL BEADS

For constructing 1/2" copper or brass concentric line. Alkimag 196 beads—.295" diam. for No. 12 wire. Enough for 50 feet of line. Wt., 8 oz. 75-000. Package of 250. NET... \$1.50

## MALLORY PANEL BUSHING

For use with shunting, to mount condensers, etc., away from panel. Fits 1/4" shaft; panels up to 3/4" 60-350. 10 for 45c. EACH... 5c

## BUTTON-TYPE FEED-THRU BUSHING

For use wherever it is necessary to pass voltage or RF current through metal panels or chassis. Polystyrene. 3/4" diam., with 3/8" center hole for 6-32 screw. Fits 1/2" hole. 8 oz. (10). 73-425. PER BOX OF 10... 45c

## TRANSMITTING COIL FORMS

An ideal inductance form for transmitters and for numerous other uses. Bakelite body. 2 1/4" diameter, 3 1/2" long, with molded finger grip rim. Winding space, 3 1/4". Ribs extending 1/4" insure low-loss air-core winding. Grooved forms are threaded 12 turns per inch. Prong spacings fit standard sockets. Shpg. wt., 6 oz. each.



Plain Forms		Grooved Forms	
No.	Prongs NET	No.	Prongs NET
73-450	4 38c	73-455	4 54c
73-451	5 41c	73-456	5 57c
73-452	6 46c	73-457	6 59c

## KNIGHT CERAMIC COIL FORMS

Plug-in coil forms of low-loss ceramic for use in receivers or low-power stages of transmitters. Ribbed type. Side slot and holes for easy winding. 1 1/4" diameter. 1 lb.

73-460. 4 Prong. NET... 38c  
73-461. 5 Prong. NET... 41c  
73-462. 6 Prong. NET... 43c



## COIL FORMS

Low-loss coil forms of Insulac. Particularly adapted for high-frequency operation. Threaded for No. 10 wire with plenty of holes for wire and supports. 20 and 40 meter coil forms 4"x3 1/2". 80 and 160 meter coil forms 4"x3 1/2". Average shipping weight, 2 lbs.



### FOR 20 AND 40 METERS

73-470. Less supporting legs... \$0.76  
73-471. With supporting legs... 1.05

### FOR 80 AND 160 METERS

73-475. Less supporting legs... \$1.35  
73-476. With supporting legs... 1.48

## FLEXIBLE SHAFT COUPLINGS

For use with any condenser having 1/4" shaft. Flexible phosphor bronze springs. 1 1/2" diameter. Shipping weight, 3 oz.



42-010. Bakelite Type. 27c  
60-396. Ceramic Type. 33c

## PYREX INSULATORS

Strong, genuine Pyrex glass insulators for all types of antenna installations. Extremely low surface conductivity.

51-200. 3 1/4" long. Wt., 8 oz. NET... 21c  
51-201. 7 1/2" long. Wt., 1 1/2 lbs. NET... 79c



## BEE-HIVE INSULATOR

For supporting coils, condensers, high voltage leads, etc. Made of white glazed porcelain. 2" diam.; 2 1/4" high. Extra-strong; fully weather-proofed for outdoor use. Shpg. wt., 8 oz.



51-205. 10 for 99c. EACH... 11c

## KNIGHT STAND-OFF INSULATORS

High-grade glazed porcelain construction with deep corrugations. Cadmium-plated steel hardware.

51-206. 5 1/4" high, with base 2 1/2" square. Wt., 1 1/2 lbs. NET EACH... 37c  
51-207. 3 1/4" high, with base 1 1/2" square. Wt., 1/2 lb. NET EACH... 18c



## INSULATED GRID CAPS

Plated brass clip with insulated cover. 1 1/2-inch rubber-covered lead. Shpg. wt., 4 oz.



42-020. Standard size for re-cycling tubes. Black insulation. NET EACH... 8c  
42-030. Large size for transmitting tubes such as 866, etc. EACH... 16c

## TRANSMITTING CONNECTORS

For all high voltage or high RF current circuits, plug-in type transmitter coils, etc.

73-420. JACK. 1 1/4" high. Mounts with a 10-32 screw. Plated brass. With nut and 2 washers. Wt., 6 oz. NET EACH... 15c

73-421. PLUG. Fits above jack. 1/4" diameter with 10-32 nut; has hole in end. Fits 1/4" copper tubing. Wt., 6 oz. NET EACH... 8c

## HIGH VOLTAGE HOOKUP WIRE

The finest high-voltage hookup wire we can buy! Tinned stranded-conductor covered with live rubber and cotton, with an overall covering of lacquered braid. Rated at 5000 volts. Recommended for all HV uses. Wt., 6 oz.

47-701. No. 18. 25 foot coil. NET... 25c  
47-711. No. 16. 25 foot coil. NET... 29c  
47-721. No. 14. 25 foot coil. NET... 38c  
47-731. No. 12. 25 foot coil. NET... 55c

## SOLID PUSHBACK WIRE

Solid tinned-conductor with double push-back insulation; impregnated. Ideal for all transmitter wiring. Rated at 2500 volts. Wt., 8 oz.

47-751. No. 16. 25 foot coil. NET... 22c  
47-761. No. 14. 25 foot coil. NET... 29c  
47-771. No. 12. 25 foot coil. NET... 49c

## NAVY KEY KNOBS

Molded of black insuloid. For easy keying. 1 1/4" high; 1 1/4" dia. of lower skirt. 8-32 screw. Relieves finger fatigue. Shpg. wt., 4 oz. 55-000. NET... 15c



## LEAD-IN INSULATORS

For use with transmitter or receiver lead-in or feed systems. Vitrified glazed porcelain cones on threaded rod. 1 1/2 lbs.

51-215. 10" rod with cone insulators and water-tight washers. NET... 53c  
51-216. 15" rod with cone insulators and water-tight washers. NET... 59c



## LISTENING MONITOR

For checking quality of signal, phone carrier, or for frequency drift check. (Not a receiver.) Has a vernier dial and variable condenser for frequency selection. Standard jack for headphone plug. Supplied wired and complete with coils for 20, 40 and 80 meter. Amateur bands (160 and 10 meter coils not available). Less tubes and batteries. Steel case, 5" x 7" x 10". finished in black crackle enamel. Requires 1—30 tube, 1—1 1/2 V. "C" battery and 1—22 1/2 V. "B" battery. Wt. 8 lbs. 80-160. NET... \$4.85





# GREAT DEALS - SPECIALS



## PAR-METAL EQUIPMENT DELUXE STEEL CABINETS

Fabricated from  $\frac{1}{8}$ " cold-rolled steel with rounded front corners and louvre sides. Uniformly finished in ripple enamel with red-stripped chrome trim. Recessed front is drilled for all standard 19" panels with Amateur or Western Electric notching. Cabinets are 22" wide, 16 $\frac{1}{2}$ " deep. Rear door has two flush snap catches. Shipped knocked-down with hardware for easy assembly. Shpg. wts. 98-800, 100 lbs.; 98-801, 150 lbs.; 98-802, 175 lbs.

Black No.	Grey No.	Panel Space	Overall Height	NET EACH
98-800	98-805	3 $\frac{1}{2}$ "	42"	\$25.80
98-801	98-806	6 $\frac{1}{4}$ "	56 $\frac{1}{2}$ "	33.80
98-802	98-807	7 $\frac{1}{2}$ "	82 $\frac{1}{4}$ "	40.50

## DELUXE TABLE CABINETS

Of heavy steel with recessed hinged-top covers. Cabinets marked "E" have in addition a hinged door at rear. Drilled for all 19" rack panels. Completely assembled. Inside depth is 15 $\frac{1}{2}$ "; overall width, 21". Overall height 1 $\frac{1}{4}$ " more than panel space. Black or grey crackle-finish.

Black No.	Grey No.	Panel Space	Shpg. Wt.	NET EACH
98-810	98-850	8 $\frac{1}{4}$ "	24 lbs.	\$ 7.95
98-811	98-851	12 $\frac{1}{4}$ "	29 lbs.	9.60
98-812	98-852	14 $\frac{1}{2}$ "	38 lbs.	10.80
98-813*	98-853*	17 $\frac{1}{4}$ "	44 lbs.	12.75
98-814*	98-854*	20 $\frac{1}{4}$ "	69 lbs.	14.25
98-815*	98-855*	35"	73 lbs.	16.20

## RELAY-RACK PANELS

For cabinets and racks on this page, and all others having standard Amateur spacings in 1 $\frac{1}{2}$ " multiples. Uniform finish and slotting. All steel construction,  $\frac{1}{8}$ " thick, 10" wide.

Black No.	Grey No.	Size	Shpg. Wt.	NET EACH
86-100	86-130	1 $\frac{1}{2}$ "	2 lbs.	\$0.48
86-101	86-131	3 $\frac{1}{4}$ "	5 lbs.	.54
86-102	86-132	5 $\frac{1}{4}$ "	7 lbs.	.69
86-103	86-133	7"	8 lbs.	.75
86-104	86-134	8 $\frac{1}{4}$ "	9 lbs.	.90
86-105	86-135	10 $\frac{1}{4}$ "	10 lbs.	1.11
86-106	86-136	12 $\frac{1}{4}$ "	12 lbs.	1.32
86-107	86-137	14"	13 lbs.	1.50
86-108	86-138	15 $\frac{1}{2}$ "	14 lbs.	1.68
86-109	86-139	17 $\frac{1}{2}$ "	15 lbs.	1.89
86-110	86-140	19 $\frac{1}{4}$ "	16 lbs.	2.01
86-111	86-141	21"	17 lbs.	2.28

## RELAY-RACK BRACKETS

Afford easy mounting of chassis bases and sub-panels to relay-rack panels. Made of heavy sheet-steel with universal mounting holes. All brackets 7" high. Black-ripple-enamel finish. Average shipping weight per pair, 3 lbs.

86-150.	8" Base.	PER PAIR	\$0.57
86-151.	11" Base.	PER PAIR	.84
86-152.	13" Base.	PER PAIR	1.02

## RELAY-RACK METER PANELS

Heavy steel, ripple-enamelled meter panels. Slotted to fit standard relay racks, 5 $\frac{1}{4}$ " x 19". Thickness of panel  $\frac{1}{8}$ ". Shpg. wt., 4 lbs.

Black No.	Grey No.	No. of Holes	Meter Size	NET EACH
86-160	86-170	3	2"	\$1.05
86-161	86-171	5	2"	1.53
86-162	86-172	3	3"	1.05
86-163	86-173	5	3"	1.53

## ROLLER TRUCKS FOR CABINETS

For use with relay-rack or cabinet type equipment described above. Permits moving of units without dismantling. Frames of heavy steel and 3" wider for better weight distribution. Trucks have 2" swivel casters. Those marked \* are state grey-ripple finished with chrome trim; others have black-ripple enamel finish. 86-182 and 86-183 are heavy duty units ideal for heavy transmitters. † Steel wheels. ‡ Rubber wheels. Average shipping wt., 10 lbs.

Stock No.	Inside Clearance	NET
86-180	†19 $\frac{1}{2}$ " x 15"	\$4.05
86-181	†21 $\frac{1}{4}$ " x 17"	6.15
86-182*	†21 $\frac{1}{4}$ " x 15 $\frac{1}{2}$ "	5.10
86-183*	†22 $\frac{1}{4}$ " x 17 $\frac{1}{2}$ "	6.90

## STANDARD STEEL CABINETS

Attractive modern square-cornered relay-rack. Recessed front panels fit flush with edges. Constructed of  $\frac{1}{8}$ " cold-rolled steel. For all 19" panels with Amateur or W. E. notching. Full length removable hinged rear door. Cabinets are 21" wide, 16 $\frac{1}{2}$ " deep; inside depth, 15 $\frac{1}{4}$ ". Furnished knocked-down with hardware for easy assembly. Provides professional appearance for your job. Shpg. wts. 98-820, 95 lbs.; 98-821, 135 lbs.; 98-822, 165 lbs.



Black No.	Grey No.	Panel Space	Overall Height	NET EACH
98-820	98-825	3 $\frac{1}{2}$ "	42"	\$21.30
98-821	98-826	6 $\frac{1}{4}$ "	66 $\frac{1}{2}$ "	28.50
98-822	98-827	7 $\frac{1}{2}$ "	82 $\frac{1}{4}$ "	35.40

## STANDARD TABLE CABINETS

Made of  $\frac{1}{8}$ " steel. Ventilation louvres on sides and back. Drilled for standard 19" rack panels. 98-830, 98-831 with hinged doors on top; others with doors on top and rear. Take chassis up to 17 x 13". Black-ripple finish only.

Stock No.	Panel Space	Size H W D	Shpg. Wt.	NET EACH
98-830	3 $\frac{1}{2}$ " x 19"	8 $\frac{1}{4}$ " x 19" x 14 $\frac{1}{2}$ "	22 lbs.	\$5.19
98-831	12 $\frac{1}{4}$ " x 19"	12 $\frac{1}{4}$ " x 19" x 14 $\frac{1}{2}$ "	27 lbs.	6.45
98-832	17 $\frac{1}{4}$ " x 19"	17 $\frac{1}{4}$ " x 19" x 14 $\frac{1}{2}$ "	36 lbs.	9.60
98-833	26 $\frac{1}{4}$ " x 19"	26 $\frac{1}{4}$ " x 19" x 14 $\frac{1}{2}$ "	47 lbs.	10.50
98-834	35" x 19"	35" x 19" x 14 $\frac{1}{2}$ "	55 lbs.	12.30

## RELAY RACKS

Expressly designed for professional-appearing transmitter or public address system installations. Substantially built of  $\frac{1}{4}$ " pressed steel with spot-welded corners for extra heavy-duty service. Sturdy construction assures maximum rigidity and keeps all units in perfect alignment. Will accommodate all 19-inch rack panels with either W. E. or Amateur slotting. Holes are tapped for  $\frac{1}{8}$ " machine screws. 98-840 is a heavy-wrought steel base 19" deep, 20" wide. 98-841 has same type base, but 22" deep, 20" wide. Furnished in black-ripple finish. Shipped in knock-down form, complete with necessary nuts and bolts for easy assembly and an ample supply of panel mounting screws and cup washers.



Stock No.	Panel Space	Overall Height	Shpg. Wt.	NET EACH
98-840	3 $\frac{1}{2}$ "	38 $\frac{1}{4}$ "	57 lbs.	\$10.50
98-841	7 $\frac{1}{4}$ "	73 $\frac{1}{4}$ "	85 lbs.	12.90

## BUD REMOVABLE TOP CHASSIS

New type chassis base made of auto-body steel. Consists of channel-type frame with removable flat top. Permits changes in circuit and layout at minimum cost. Easy to cut holes for sockets, transformers, etc. Also allows close wiring of components under top of base without sides interfering with use of top. Black crackle finish. See replacement tops listed below.



Stock No.	Size D W H	Shpg. Wt.	NET
86-250	10"x17"x3"	5 lbs.	\$1.29
86-251	10"x17"x4"	6 lbs.	1.76
86-252	13"x17"x3"	9 lbs.	1.94
86-253	13"x17"x4"	10 lbs.	2.44

## REPLACEMENT TOP PLATES

For use with removable top chassis bases listed above; provides a new chassis at less than half the usual cost. Heavy-gauge auto body steel.

86-260	10"x17"	2 lbs.	65¢
86-261	13"x17"	4 lbs.	82¢

WE CAN SUPPLY ALL PAR-METAL OR BUD CABINETS. Send for free literature.  
37-045. Bud Catalog—Sent FREE  
37-042. Par-Metal Catalog—FREE

## RADIO STATION CALL-LETTER PLATES

Polished metal with black background. Has two threaded studs for mounting on transmitter. Removable brackets for mounting on car. Made to order. 2 $\frac{1}{4}$ " x 8 $\frac{1}{4}$ ". Wt. 1 $\frac{1}{2}$  lbs. \$1.50  
73-060. TYPE A-18. NET



TYPE A-16  
Carries three affiliation letters at each side on black background. Cast metal with raised border and letters. Has brackets and threaded studs for mounting. Made to order. 2 $\frac{1}{4}$ " x 8 $\frac{1}{4}$ ". Shpg. wt. 1 $\frac{1}{2}$  lbs.  
73-061. NET \$1.75



TYPE A-26  
Metal lapel-button call letters with highly polished and raised letters. Shpg. wt. 8 oz.  
73-062. NET .50¢



All plates made to order. Send cash with your order. Plates will be shipped to you direct from manufacturer.

## METAL NAME PLATES

W6ROD  
Oscillator

Metal nameplates with characters and borders chromium plated. Backgrounds etched dull black. Available in 125 different markings: Microphone, Phono, Input, Antenna, Key, Rectifier, etc. Standard size plate, 1 $\frac{1}{2}$ " x  $\frac{3}{4}$ ". Furnished with self-tapping screws. State markings desired when ordering.  
73-050. NET EACH 9¢

DELUXE SIZE  
Similar to above but larger; 2 $\frac{1}{2}$ " x  $\frac{1}{2}$ ". Especially designed for transmitters, etc. 125 types available. State marking desired.  
73-051. NET EACH 12¢

125 NAMEPLATE MARKINGS AVAILABLE  
73-033. Complete listing—sent FREE

## JOHNSON INDICATORS

Attractive tuning indicators which give that much desired Commercial appearance to Amateur transmitters. Handle molded of one-piece black bakelite. Scale is black and silver etched metal, with zero at left. Fit any  $\frac{1}{4}$ " shaft; Type 206 also fits  $\frac{3}{8}$ " shaft. Permits fine adjustment. Average wt. 8 oz.  
73-295. Type 204. Indicator with 4" diam. scale. NET 59¢  
73-296. Type 206. Indicator with 6" diam. scale. NET 73¢



## GORDON HAND WHEELS

A complete line of tuning control wheels which permit uniform appearance on all types of transmitting equipment. Bakelite wheel with pointer; fit all  $\frac{1}{4}$ " shafts. 1 $\frac{1}{2}$ " wheel with 270° scale for gain controls. Avg. wt., 8 oz.  
74-500. 3 $\frac{1}{4}$ " Hand Wheel and Pointer with 180° scale. NET \$1.12  
74-501. 2 $\frac{1}{4}$ " Hand Wheel and Pointer with 180° scale. NET 94¢  
74-502. 1 $\frac{1}{2}$ " Hand Wheel and Pointer with 180° scale. NET 73¢  
74-503. 1 $\frac{1}{2}$ " Hand Wheel and Pointer with 270° scale. NET 47¢  
74-510. 1 $\frac{1}{2}$ " Hand Wheel and Pointer with 270° scale. NET 53¢

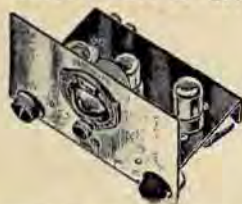


HAND WHEELS ONLY  
Same as above, with pointer, less scale.  
74-520. 3 $\frac{1}{4}$ " Hand Wheel only. NET 82¢  
74-521. 2 $\frac{1}{4}$ " Hand Wheel only. NET 71¢  
74-522. 1 $\frac{1}{2}$ " Hand Wheel only. NET 29¢  
74-523. 1 $\frac{1}{2}$ " Hand Wheel only. NET 24¢



# Build Your Own "KITS"

## Knight ALL-WAVE AC-DC "OCEAN HOPPER" KIT



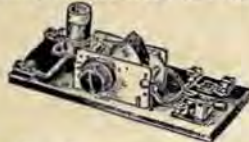
An extremely efficient, easy-to-build receiver of modern design. Appropriately named "Ocean Hopper" because its possibilities are almost unlimited for far-reaching reception. One of the most successful "Knight" kits. Equipped with modern up-to-date tubes. Uses two new single-ended beam tubes which do the work of three. 1—12SJ7GT High Gain R.F. pentode in an electron-coupled regenerative circuit and 1—70L7GT Beam Power output and diode rectifier combined. Features a vernier tuning dial; regeneration control; antenna loading dial; control. Has built-in power supply for AC or DC, 115 V. operation. Kit contains drilled metal chassis base and panel, sockets, condensers, resistors, wiring diagram, etc. Coils, tubes, speaker and headphones are extra—see below for listing. Shpg. wt. 3 lbs. NET.....**\$7.25**  
**83-310.** Kit of Parts NET.....**\$7.25**  
**83-311.** Tube Kit. NET.....**\$1.32**  
**83-312.** Coil Kit. Set of 4 coils for kit above. Tunes 16 to 195 meters.....**\$1.35**  
**83-313.** Broadcast Coil Kit. 2 coils cover range from 190 to 550 meters. NET.....**70c**  
**83-314.** 5" Speaker with transformer. NET.....**\$2.37**

## NEW Knight SUPERHET 5-TUBE AC-DC KIT



A 5-tube AC-DC superhet receiver for students and builders. Ideal as an educational project for radio instruction courses in schools, recreational centers, etc. Has large, easy-to-read, illuminated airplane dial. Tunes entire broadcast band from 550 to 1600 KC. Has self-contained, sensitive loop aerial—no outside aerial required. Efficient AVC circuit minimizes fading. Includes 5" dynamic speaker designed for excellent tone quality. Uses 1—12SA7, 1—12SK7, 1—12SQ7, 1—50L6GT and 1—35Z5GT rectifier. Assembly is simple—you need only a screwdriver, pliers and soldering iron. Complete with punched chassis, tubes, speaker, all parts and instructions. For 110V. AC or DC. Shpg. wt. 6 lbs. NET.....**\$10.75**  
**83-306.** Walnut Cabinet. Attractive wood cabinet, drilled for above. NET.....**\$3.75**

## Knight CRYSTAL SET KIT



A crystal set that anyone can build. Supplied in easy-to-assemble kit form. Will provide unusually fine reception of local broadcast stations. Kit contains baseboard, wound coil assembly, variable condenser, crystal detector, connectors, hardware, wire, easy-to-follow instructions, and diagram. Easy to build. Shpg. wt. 4 lbs. NET.....**\$1.40**  
**83-260.** NET.....**\$1.05**  
**83-110.** Headset. NET.....**\$1.05**  
**83-100.** Aerial Kit. NET.....**52c**

## ALLIED IS HEADQUARTERS FOR ALL RADIO BUILDERS

Every radio builder—newcomer, advanced experimenter, or Amateur—will find of special interest the wide selection of "Build-Your-Own" kits on these pages. Designed under supervision of L. M. Dezettel, noted kit engineer and radio magazine author, each kit has been carefully planned and laboratory tested. **ALLIED** kits are easy to assemble; chassis and panels are formed and punched; detailed instructions plus schematic and pictorial diagrams furnished are easy to follow; every necessary part, including hardware, wire, and solder, is supplied with each kit.

### PERSONAL SERVICE TO BUILDERS

For complete, authoritative advice and suggestions on your radio building problems, write to L. M. Dezettel, Chief of **ALLIED'S** Kit Division—you'll get prompt, personal service. Make **ALLIED** your kit headquarters.

## GREAT RADIO BOOK VALUES

ONLY **10c** EACH Postpaid

### RADIO BUILDER'S HANDBOOK

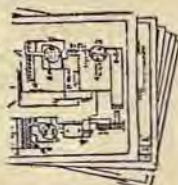
Eighth edition. Revised and enlarged. Prepared by **ALLIED'S** engineers to aid the experimenter and builder. Tells how to select suitable circuits, read diagrams, lay-out chassis bases, etc. Shows schematic and pictorial diagrams of beginner and advanced sets with parts lists and construction data. **37-750.** Postpaid in U. S. A..... **10c**

### DICTIONARY OF RADIO TERMS

For everyone interested in radio. Compiled by leading authorities. Over 800 easy-to-understand radio definitions. Includes historical data. Fully illustrated. Handy 6" x 9" size. **37-751.** Postpaid in U. S. A..... **10c**

### "BUILD-YOUR-OWN" WIRING DIAGRAMS

Clear, easy-to-read diagrams with complete matched parts lists. Enable you to build your own receivers, transmitters, amplifiers, power supplies, PE devices, etc., using the latest tubes and modern efficient circuits. Includes kits described on these pages.



- 38-000.** Crystal Set.
- 38-001.** 1 Tube Battery "DX-ER" Set.
- 38-002.** 1 Tube AC-DC SW-BC Set.
- 38-003.** 2 Tube Battery "DX-ER" Set.
- 38-004.** 2 Tube AC-DC "Ocean Hopper."
- 38-005.** 3 Tube Battery "DX-ER" Set.
- 38-006.** "Bandswitch 3" AC-DC TRF.
- 38-006.4** Metal Tube "Super-Gainer."
- 38-007.** 5 Tube AC Broadcast TRF.
- 38-028.5** Tube Broadcast AC-DC Super.
- 38-008.** "Communications 5" Ham Super.
- 38-009.** 6 Tube Broadcast Battery Super.
- 38-029.** 8 Tube Ham Super.
- 38-010.** Experimenters' Kit and 1 Tube Set.
- 38-011.** Beat Oscillator Kit.
- 38-012.** Wireless Phono Oscillator.
- 38-013.** 1 Tube Pocket Set.
- 38-014.** Junior Receiver-Transmitter.
- 38-015.** 2 1/2 Meter Transceiver.
- 38-016.** 20 Watt Transmitter.
- 38-017.** 4 Watt AC-DC Amplifier.
- 38-018.** 3 Watt Amplifier and Power Supply.
- 38-019.** Photo-Electric Cell Unit.
- 38-020.** Noise Silencer.
- 38-021.** Coil Winding Data.
- 38-022.** 3 Tube Phono Amplifier.
- 38-023.** 3 Tube Hi-Gain Phono Oscillator.
- 38-024.** Hi-Gain FM Amplifier.
- 38-025.** Fluorescent Lighting Fundamentals.
- 38-030.** Volume Expander-Compressor.
- 38-031.** AC-DC Code Practice Oscillator.
- 38-032.** 3 Tube Electronic Laboratory.

**YOUR PRICE.**  
**EACH DIAGRAM, POSTPAID..... 5c**  
**Choice of Any 6 Diagrams..... 20c**  
 Schools—Colleges—Radio Clubs. Write for our attractive quantity prices for wiring diagrams.

## NEW 1942 Knight 3-TUBE BATTERY "DX-ER" KIT

The latest addition to the Knight family of battery "DX-ER" kits. More useful, more powerful. Here is a complete kit of parts for building a 3 tube set using latest GT type battery tubes. Circuit consists of 1N5GT R.F. pre-amplifier, 1H5GT regenerative type detector, 1C5GT power amplifier. Picks up foreign DX stations with ease. Powerful enough to operate loudspeaker on local station. Has two tuned circuits for greater selectivity. Includes baseboard and drilled black-crackle panel. All parts and instructions (less tubes, batteries and coils) are supplied. Use 2—60-670 and 2—60-671 coil sets listed below. Shipping weight, 8 lbs.



**83-330.** NET.....**\$6.15**  
**83-331.** Tube and Battery Kit. Shpg. wt. 21 lbs. NET.....**\$3.92**

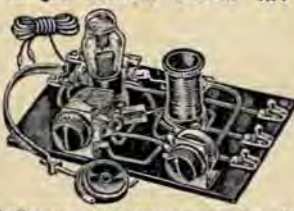
## Knight 2-TUBE "DX-ER" KIT

*Allied* presents one of the most popular low priced kits for the short-wave beginner, experimenter, and radio student. Uses two economical 1.4 volt tubes (1H5G and 1N5G) in advanced circuit employing high-gain regenerative detector and resistance-pentode audio stage. With "on-off" switch. Operates from 1—1 1/2 V. dry cell and 2—45 V. "B" batteries. Kit contains all parts, including instructions. (See 60-670 and 60-671 below for suitable coils.) Less tubes, batteries, and coils. Wt. 6 lbs. NET.....**\$3.95**



**83-336.** Tube and Battery Kit. Shipping weight, 20 lbs. NET.....**\$3.43**  
**59-110.** Headphones for above.....**\$1.05**

## Knight 1-TUBE "DX-ER" KIT



Full all-wave continuous coverage from 9.5 to 550 meters using coils listed below. Brings in Broadcast, Amateur, Police and SW DX stations. Uses 1 type 30 tube. Kit includes all parts, and instructions. Less tube, batteries, coils and headphones. Wt. 4 lbs. NET.....**\$2.50**  
**83-340.** Kit less accessories.....**\$1.60**  
**83-341.** Tube and Battery Kit. Shpg. wt. 11 lbs. NET.....**\$1.67**  
**59-112.** Headphone for above.....**71c**

### COILS FOR ALL ABOVE KITS

**60-670.** Coil Kit. Set of four coils covering 9.5 to 217 meters. Wt., 2 lbs. NET.....**98c**  
**60-671.** Coil Kit. Set of 2 coils covering 190-550 meters. Wt., 2 lbs. NET.....**75c**

### AUDIO AMPLIFIER KIT

A one-tube audio amplifier for any battery receiver. Uses 1—1Q5GT beam power tube. Will operate a small PM speaker. Requires 1—1 1/2 V. "A." 1—1 1/2 V. "C." and 2—45 V. "B." batteries. Designed for the 1 and 2-tube "DX-ER" kits above. Add 4 1/2 V. "C" to batteries used with the 2 Tube DX-ER kit. Add 4 1/2 V. "C" and one extra 45 V. "B" to the 1 Tube DX-ER kit. Less tube, speaker and batteries. Shipping weight, 4 lbs. NET.....**\$1.45**  
**83-345.** NET.....**\$1.45**  
**9-052.** Knight 1Q5GT tube.....**69c**



# LATEST Build Your Own KITS

## HI-FI 14 WATT AMPLIFIER KIT FOR PA, PHONO & FM USE



A high gain, high fidelity resistance coupled audio amplifier kit. Excellent for use with a phono player or as a PA system. 3 inputs provided; crystal microphone, a phono and a radio input. Has separate mike, phono and tone control. Circuit uses self-balanced phase inversion. Has inverse feedback for finest quality and reduction of hum. Tubes required: 1-6SJ7, 1-6CS7, 2-6V6G, 1-80 rectifier. For use with PM dynamic speaker. Kit contains all parts and instructions. Less tubes, speaker, and output transformer. For 115 V., 60 cycles. Shpg. wt., 1 lbs. **NET. \$9.45**

- 83-351. Knight tube kit for above. **\$2.33**
- 83-352. 12" PM speaker and output transformer. Wt., 8 lbs. **NET. \$5.16**

## Knight 4-WATT AMPLIFIER KIT



A high-quality AC-DC amplifier kit. Ideal for modernizing old phono equipment to achieve full realistic reproduction of all types of recordings. Tubes used: 1-6CR5, 2-25L6G, 1-25Z5 rectifier and 1 ballast. Has input connections for a high-impedance crystal pickup.

(See pages 88 and 89 for pickups.) Output is for any PM speaker and output transformer. Tone control permits accentuation of treble or bass ranges as desired. Overall size with tubes inserted is 4" x 8" x 6 1/2". For 115 V., AC or DC. Kit is complete, with instructions. Less tubes, speaker, and output transformer. Shipping weight, 8 lbs. **NET. \$4.95**

- 83-355. NET. **\$4.95**
- 93-005. Knight Tube Kit. **\$2.47**
- 83-356. 8" PM speaker and output transformer. Wt., 7 lbs. **NET. \$3.07**

## 3 TUBE DELUXE PHONOGRAPH AMPLIFIER KIT



The latest development in phono amplifier kits. The 3 tube high gain circuit is designed for either a crystal or a magnetic type pickup. The 5" PM speaker with new Alnico magnet easily handles the 2-watt output. Inverse feedback is used to reduce distortion and increase fidelity. Tubes used: 1-12J5GT, 1-50L6GT, 1-3Z5GT rectifier. (Not supplied.) Kit includes drilled chassis, built-in volume control, speaker, instructions and all necessary parts. For 115 V. AC or DC. Wt., 8 lbs. **NET. \$4.75**

- 83-360. NET. **\$4.75**
- 83-361. Tube kit for above. **NET. \$1.24**

## Knight EXPANDER-COMPRESSOR

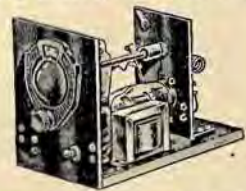


For modernizing radio sets or PA amplifiers. Adding expansion to radio or record players restores original dynamic range; adding compression, reduces blasting and acoustic feedback in amplifiers. Circuit used is based on a new principle which eliminates critical tubes and adjustments. Has "on-off" switch, pilot light and ammeter control providing smooth, continuous variation in expansion or compression. Tubes used: 1-6SK7, 1-6SJ7, 1-6H6, and 1-80 rectifier. Kit contains all parts, gray-crackle finished drilled chassis, and instructions for assembly and connection to any radio, record player or PA amplifier. Less tubes. Shpg. wt., 9 lbs. **NET. \$6.85**

- 83-365. NET. **\$6.85**
- 83-366. Tube kit for above. **NET. \$1.64**

## POPULAR KITS FOR THE RADIO AMATEUR

### Knight POPULAR LOW-PRICED 2 1/2 METER TRANSCEIVER

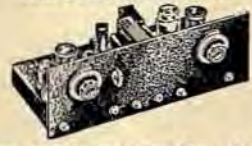


An inexpensive Transceiver Kit for the Amateur Experimenter who wants to investigate the 112-116 MC band. The circuit uses a type 76 tube acting as a super-regenerative detector for receiving and as an oscillator for transmitting. The type 41 tube alternates as an audio amplifier and as a modulator. Kit contains tubes and all necessary parts including hook-up wire and hardware. Detailed instructions for assembly are provided. May be used with the power supply listed below or any 6V. vibrator pack. Wt., 6 lbs. **NET. \$6.25**

- 83-370. NET. **\$6.25**
- 83-371. Power Supply Kit. A well-filtered unit providing "A" and "B" voltages for above. With 80 tube. For 115 **\$3.05**
- V. AC. Wt., 9 lbs. **NET.**

59-300. Universal Handset. 2000 ohm phone and single button "mike" for use with Transceivers. **NET. \$5.88**

### Knight "JUNIOR" AMATEUR STATION



Designed for the beginning Ham, this complete Amateur CW station is offered in easy-to-assemble single-unit kit form. The Knight "Junior" is complete! All on one attractive black wrinkle finish chassis and panel; a modern two metal tube Autodyne receiver, a complete power supply, and a modern crystal-controlled CW transmitter using a 6L6G tube with up to 25 watts output to the antenna!

#### GET ON THE AIR AT LOW COST!

Every necessary part is supplied: chassis and panel drilled and finished, all parts including Hammarlund and Thordarson components, hardware, 80 meter crystal and holder and all tubes! Full instructions and clear diagrams included. Coil forms and wire are supplied for the 80 meter band. Receiver is regenerative Autodyne type with 6J7 and 6C5 metal tubes. Transmitter puts out pure T9X signal. Single heavy-duty power supply with 5Z4 rectifier tube operates both receiver and transmitter. Operates from 110 volt, 50-60 cycle AC, but has provisions for battery operation. Ideal for camp and field day. Shpg. wt., 24 lbs.

- 83-375. COMPLETE KIT. Includes every necessary part, tubes, and 80 meter crystal. **NET. \$27.50**
- PRICE. **\$27.50**

### 3 TUBE HIGH-GAIN WIRELESS OSCILLATOR



A phono oscillator for playing phonograph records or using a microphone through a receiver tuning the standard Broadcast band. The high-gain circuit permits excellent results to be obtained with the mike listed below. Has separate high impedance phono and mike input jacks with individual volume controls for mixing voice and music. Complete kit consists of black crackled, formed and drilled chassis, all parts, and diagrams and instructions. Uses: 1-12SP5GT, 1-12SA7GT, 1-35Z4GT rectifier. Tubes not supplied. For 115 V. AC or DC operation. 5 lbs. **NET. \$5.85**

- 83-380. NET. **\$5.85**
- 83-381. Tube kit for above. **\$1.37**
- 59-310. Quam microphone. **2.03**

### Knight "COMMUNICATIONS 5" FOR AMATEUR OR SWL



An inexpensive, easy-to-assemble 5 tube "communications" type super-het receiver in kit form. Designed especially for the beginning Amateur or Short Wave Listener. Sensitivity equal to that of many higher priced commercial receivers. Covers a continuous tuning range from 1700 KC to 32 MC using plug-in coils. Features full bandspeed tuning, beat frequency oscillator for CW reception, standby switch, built-in 5" dynamic speaker, Iron-core IF, speaker-mounting type headphone jack. 1500 KC IF reduces images. Tubes used: 1-6K8, 1st detector and oscillator, 1-6SK7 IF stage, 1-6CR8 2nd detector and BFO, 1-6F6 audio and 1-5Z4 rectifier. Easily assembled from detailed diagram and clear instructions furnished. Kit contains all necessary parts, drilled chassis and panel, speaker, hardware and diagram. Less tubes and coils. For 115 volts, 60 cycles AC. 12 lbs. **NET. \$14.65**

- 83-385. NET. **\$14.65**
- 83-386. Tube kit for above. **NET. \$2.74**

#### SETS OF COILS FOR ABOVE

- 83-395. 2 coils for 160 meter band.
- 83-396. 2 coils for 80 meter band.
- 83-397. 2 coils for 40 meter band.
- 83-398. 2 coils for 10-20 meter band.

PER SET OF 2. **NET. \$75.**

- 83-399. Set of 2 coils. **NET. \$2.80**

### CODE PRACTICE OSCILLATOR

Efficient code practice oscillator of latest design, supplied in easy-to-assemble kit form. Has continuously variable pitch control to provide full range from high to low pitched signal to suit students' personal preference. Crisp, clear tone sounds just like CW signals on the air.



Jacks are provided for both key and headphones. Volume control allows control of signal from a low level for single headphone to high volume for use with class-room table using up to 20 sets of headphones. Built-in 5" speaker for class use is muted by insertion of headphone plug. Used with any type high impedance magnetic phones and any type key (see pages 136 and 159). Requires 1-117L7GT tube, used as combination oscillator and power supply rectifier. Kit contains all parts, crackle-finished drilled panel and chassis, two plugs for phones and key, diagram, detailed wiring instructions. Less tube. For 115 volts, AC or DC. Shpg. wt., 9 lbs. **NET. \$5.50**

- 83-390. NET. **\$5.50**
- 9-356. Knight 117L7GT tube. **NET. .99c**

### Knight WIRELESS PHONO-OSCILLATOR

This inexpensive, easy-to-build kit will permit you to play phonograph music through any radio set without direct connection to the set. Operates up to 25 feet from set. Uses type 6A8 tube as combined oscillator-modulator and 25Z5 tube as rectifier. Supplied with drilled chassis, 5 1/2" x 4" x 1 1/2", sockets, condensers, resistors, etc., and full instructions. Less tubes. For 115 V. AC or DC. 4 lbs. **NET. \$3.45**



- 83-400. NET. **\$3.45**
- 83-401. Tube Kit. **NET. \$1.01**
- 85-400. Phono Motor. **NET. \$2.44**
- 65-200. Crystal Pickup. **NET. \$2.45**



**"EASY-TO-BUILD" POPULAR MECHANICS KITS**

Here is an extensive selection of complete kits, with carefully matched parts and large blueprints in pictorial and schematic form for building the most popular circuits described in recent issues of *Popular Mechanics Magazine*. We also supply complete parts lists and parts for all *Popular Mechanics* projects as soon as published. For best results, build with *ALLIED* tested and approved kits and get the Right Parts at a Big Saving.

**MINIATURE TUBE FLASHLIGHT BATTERY KIT**



**R289.** A two unit kit, each unit using one of the low-drain, miniature type 1S4 tubes. Ideal "first set" for beginners. Receiver unit has 3-circuit tuner. No plug-in coils to bother with. Bands are quickly and easily changed by panel switch. Covers entire broadcast band from 550 to 1600 KC, as well as the 160 and 80 meter Amateur bands including many police and aircraft channels. Uses 2 flashlight cells for "A" and 4 flashlight cells for "B." For headphone operation. The amplifier unit when added permits loudspeaker operation of receiver and requires for its power 1—4½ volt "C" and 1—4½ volt "B" battery. Kits supplied less tubes and batteries. Weight: 83-600, 5 lbs.; 83-601, 1 lb.; 83-602, 5 lbs.; 83-603, 11 lbs.

**83-600.** Receiver Kit. NET... **\$3.85**  
**83-601.** Receiver tube & battery kit... **93c**  
**83-602.** Amplifier Kit. NET... **\$2.60**  
**83-603.** Amplifier tube & battery kit **2.20**

**VERSATILE 4-PURPOSE 1-TUBE AMPLIFIER**



**R292.** A 1-tube "4-in-1" high quality audio amplifier. Used to boost local station output of any good crystal set to loud-speaker volume; as a low powered PA system using single-button carbon microphone; to reproduce phonograph records on crystal pickup; as an 80 volt "B" eliminator for small battery sets. Comes complete with speaker, all parts and blueprint. Less tube. For 110 volts 60 cycles. Wt., 8 lbs. **\$7.60**

**83-610.** Parts Kit. NET... **\$7.60**  
**9-357, 117N7GT** tube for above. NET, **99c**

**PORTABLE BATTERY SET KIT**



**R279.** A self-contained portable 4 tube battery superheterodyne receiver. Ideal for trains, boats, cars, summer homes, camps, etc. Has a built-in loop antenna. Covers the standard Broadcast band. The low-drain 1.4 volt tubes (1A7G, 1N5G, 1H5G, 1T5GT), draw only 12 ma. of "B" current. A self-contained combination A and B battery operates this highly efficient receiver for over 200 hours. Has PM speaker. Kit consists of all parts, including punched chassis base less only tubes, batteries and cabinet which are listed below. With complete instructions and blueprint. Wt., 9 lbs. **\$8.85**

**83-620.** NET... **\$8.85**  
**83-621.** Tube and Battery Kit... **\$4.82**  
**83-622.** Portable Case... **2.95**

**CONSTRUCTION BLUEPRINTS**

The leading new *Popular Mechanics* sets are clearly described on 17"x22" blueprints. Include schematic and pictorial diagrams, essential construction data, and matched lists of parts. Simplify build-your-own problems by using these blueprints.



- 38-200, R245.** Two Tube Portable.
  - 38-201, R252.** One Tube DX SW Set.
  - 38-202, R259.** All-Purpose Power Supply.
  - 38-203, R272.** Portable Sound System.
  - 38-204, R274.** Zero Beat Treasure Finder.
  - 38-205, R275.** 2 Band Flashlight Set.
  - 38-206, R278.** 6 Tube, 3 Band Super.
  - 38-207, R279.** Portable Battery Set.
  - 38-208, R280.** Mighty Midget One Tube.
  - 38-209, R281.** Capacity Operated Relay.
  - 38-210, R283.** High Fidelity 5 Tube Set.
  - 38-211, R284.** Wearable Hearing Aid.
  - 38-212, R285.** Receiver-Phono Amp.
  - 38-213, R286.** Beginner's All-Wave 2 Tube A & C Set.
  - 38-214, R287.** TRF Hi-Fi Tuner.
  - 38-215, R288.** 1941 "Little Giant" Super 5.
  - 38-216, R289.** Min. Tube Flashlight Set.
  - 38-217, R290.** High Fidelity Record Player.
  - 38-218, R291.** Portable 20 Watt Amplifier.
  - 38-219, R292.** Four Purpose Adapter.
  - 38-220, R293.** Home Recorder Adapter.
  - 38-221, R294.** Little Giant "Pup" 3T TRF.
  - 38-222, R295.** 6V-110V. Portable 10W Amplifier.
- EACH, Postpaid in U. S. A. .... 25c**

**ZERO BEAT TREASURE FINDER**

**R274.** A "Chilson" type metal locating device with many outstanding features. Uses the well-known beat-frequency circuit. Has none of the disadvantages caused by extraneous capacity effects. Ideal for locating buried or hidden objects and tracing out metal pipes. It employs a single exploring coil unit connected to a metal box containing the battery-operated instrument. Uses 1—1E7G and 2—30 low-drain tubes which are operated by 1—3-volt "A" (Burgess 2F2H) and 1—45 volt "B" (Burgess Z30N) batteries. The exploring coil is complete with handle, cord and plugs. The complete kit includes pictorial and schematic blueprint, foundation kit as listed below, condensers, resistors, a metal carrying case, drilled base, hardware, etc. Less tubes, phones, batteries. Wt., 15 lbs. **\$25.50**

**83-650.** NET... **\$25.50**  
**83-651.** Foundation Kit. Consists of R.F. coupler unit, exploring coil with handle, cord and plugs, A.C. choke. Wt., 11 lbs. NET... **\$15.75**



**CRYSTAL HEARING-AID KIT**

**R284.** Popular Mechanics' most unique project. A light-weight, high-gain, wearable type amplifier, for the hard-of-hearing. Employs latest type Hytron Bantam Jr. tubes, 2—HY115, 1—HY125, in resistance coupled circuit. Complete amplifier and microphone fits in a durable case only 6½" x 1¼" x 3¼" and is worn on neck cord. When finished, will work like professional unit at ¼ cost of factory-made amplifier. 100 hours of continuous service from battery. Use with single light-weight earphone below. Complete kit with all parts including microphone, drilled and formed sturdy case and sub-chassis. (Less battery, tubes and earphone.) Shpg. wt., 3 lbs. **\$7.15**

**83-660.** NET... **\$7.15**  
**83-661.** Comb. "A" and "B" battery **\$1.98**  
**59-010.** Single Trimm beadphone... **3.67**  
**83-662.** Tube kit for above... **7.50**



**PORTABLE HOME RECORDER ADAPTER KIT**

**R293.** A home recorder and record player in a portable case, designed for use with any good radio. Makes records on acetate discs up to 10" dia. Has built-in pre-amplifier so that any crystal microphone can be used. Five-point switch permits: (1) recording "off-the-air"; (2) recording on mike; (3) use as PA system; (4) record playing; (5) straight radio operation. Has neon level indicator. Kit is complete with all parts, including quality 8-ohm magnetic cutter, crystal pickup, 78 RPM motor, and blueprint. Less tubes, case and microphone. For 110 volts, 60 cycle operation. Wt., 15 lbs. **\$19.95**

**83-630.** NET... **\$19.95**  
**83-631.** Tube Kit For Above. NET... **83c**  
**83-632.** Portable Case For Above... **\$5.50**



**IMPROVED LITTLE GIANT "PUP" AC-DC 3 TUBE TRF**

**R294.** Popular Mechanics' latest receiver in the Little Giant series. Efficient TRF circuit covers full broadcast and police band. Three of the latest GT battery-type tubes are used, giving performance equal to 4 tubes. Uses 12SK7GT RF, 12SJ7GT detector and 70L7GT combination beam power amplifier and power supply rectifier. No line cord or ballast tube used. Set will deliver full 1½ watts of input to an efficient 5" PM dynamic speaker. When used with cabinet below will make an excellent home set measuring only 7½"x6¼"x4¼" overall. Kit is supplied complete with all parts, including punched and formed chassis; speaker, all necessary hardware and large blueprint. Less only tubes and cabinet. Operates from 110 volt AC or DC line. Wt., 7 lbs. **\$6.25**

**83-640.** NET... **\$6.25**  
**83-641.** Kit of 3 tubes for above... **\$1.80**  
**83-642.** Wood cabinet to fit above... **2.25**



**ALLIED'S LATEST KIT DEVELOPMENT—THE Knight RADIO LAB KIT**



**ONLY \$675**

The most remarkable combination radio kit ever offered to radio beginners! Practical—educational—fascinating. Designed by *ALLIED's* expert engineering staff. Complete materials—down to the smallest part—with exceptionally clear instructions. Will build: a 3-tube receiver—tunes in stations within a 25-mile radius (or farther); a home "announcer"—permits you to "broadcast" through your home radio set; a code practice oscillator—to teach you wireless code; an electronic relay system—so you can construct a burglar alarm; detectophone amp., wireless phonosc., record playback amplifier, and small PA amplifier.

The best way to learn radio is by building equipment that really works. The 8-page manual contains clear schematic and pictorial diagrams for each of the projects. They are easy to follow and instructive.



**MAKE BROADCASTS**

**IDEAL FOR HOME AND SCHOOL**

The complete kit includes 3 tubes, microphone, condensers, resistors, 110V., 60 cycle transformer, solder, headphone, relay, telegraph key, mounting board, hardware, wire, and complete, easy-to-understand instructions for building each of the articles described to the left. These same parts may be used also for building many other useful items. Shipping weight, 10 lbs.

**83-270.** Complete Lab. **\$6.75**  
**Parts Kit. NET... \$6.75**



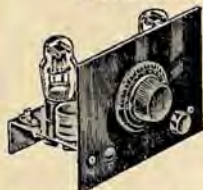
**MAKE RECEIVERS**

- Build Your Own 3-Tube Radio Receiver
- Build An Interesting Capacity Relay
- Build Your Own Code Practice Set
- Build A Wireless Phono-Oscillator
- Build A PA Amplifier or Record Player
- Build Your Own Home Broadcaster



# Philmore BUILDERS' KITS. Meissner

## PHILMORE KITS 2-TUBE AC-DC KIT



An unusually compact and easy-to-assemble 2-tube set which operates from 110 volts AC or DC. Uses 2 type 76 tubes (1—detector, 1—rectifier) in an exceptionally efficient circuit. Designed especially for use with

headphones. Has standard variable condenser for improved selectivity. Meets Underwriters' requirements. Chassis is insulated from the power line. Tunes standard Broadcast band and (with extra coils below) Short Wave bands down to 17 meters. Complete with drilled chassis base and panel, BC coil, all necessary parts, and complete instructions. Shpg. wt., 5 lbs. **83-040. Complete less tubes \$3.75** and headphones. NET.....

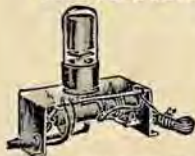
**9-340. 76 tube for above. EACH.....38c**  
**83-041. SW Coil Kit (4 coils). NET..72c**

## 1-TUBE AC-DC KIT

A 1-tube set with 2-tube performance. Similar to 83-040 above except uses only 1—70L7GT tube combining two tubes in one envelope (a high-gain beam tube used as a regenerative detector and a rectifier). The circuit employed has high sensitivity. No resistor is used in the line cord. Complete with drilled chassis base and panel, broadcast band coil, all necessary parts, and instructions. For 115 V. AC or DC. 5 lbs. **83-045. Kit of parts less tubes \$3.45** and headphones. NET.....

**9-356. Tube for above kit. NET....99c**  
**83-046. SW Coil Kit (4 coils). NET..72c**

## ECONOMY AC-DC WIRELESS PHONO-OSCILLATOR KIT



A phono-oscillator kit, designed for the home constructor. A unique type circuit permits excellent results with a minimum number of parts. Either a crystal or a high-impedance magnetic pickup may be used in conjunction with a record player and any radio receiver. Tunes from 900 to 540 KC. No connections necessary between unit and radio set. Uses a type 70L7GT dual purpose tube in a combined oscillator-rectifier circuit. Comes complete with coil, socket, chassis, and all parts. Chassis is formed and punched with oscillator coil and essential parts already mounted and wired. For 115 V. AC or DC. Less tube. Wt., 2 lbs. **\$1.95**

**83-205. Parts Kit. NET.....**  
**9-337. 70L7GT tube for above. NET..84c**

## CATHODE RAY TUNING UNIT



An inexpensive visual tuning indicator using Magic Eye tubes, 6E5 or 6E5. Easily installed in any Broadcast, All-Wave or Short Wave set with AVC no now equipped with visual tuning device. Assembly includes mounting brackets and color-coded cable. Less tube. Wt., 2 lbs. **73c**

## TOOL KIT FOR BUILDERS



Fine values in American-made tools for radio and electrical work. Contains 1 each of the 3 most frequently used tools for experimental work and are the only tools needed for building kits on these pages. Consists of: **Side-Cutting Pliers** 5" long overall; **Screw Driver** with amber handle and 1/4" blade, and **55-Watt 2-Tip Soldering Iron**, Wt., 4 lbs. **\$1.53**

## MEISSNER "BUILD-YOUR-OWN" KITS

It is easy to build your own radio receiving sets with the complete and easy to follow instructions which are included with every Meissner "Build-Your-Own" Kit. The most popular models are listed below. Write for complete Meissner Catalog 37-021, showing many other kits (both FM and AM types), wired chassis assemblies (with and without cabinets), and individual precision-built parts. We can supply all Meissner Products.

## EASY-TO-BUILD MEISSNER STUDENT "MIDGET" KITS

These outstanding new kits are ideal for the radio newcomer and experimenter. The use of 1.4 volt tubes provides high efficiency and economy of battery consumption. Each kit includes coil for the Broadcast band. Clear instructions for wiring and operating are supplied. Educational and practical.



**83-420. 1 TUBE KIT.** For headphone reception. Uses 1—1E4G tube, 1—1 1/2 V. "A", and 1—45 V. "B" battery. Less tube and batteries. Shpg. wt., 3 lbs. **\$3.23**

**83-421. 2 TUBE KIT.** Requires 1—1C5G, 1—1E4G tubes; 1—1 1/2 V. "A", 2—45 V. "B" and 1—7 1/2 V. "C" batteries. Less tubes and batteries. Shpg. wt., 3 lbs. **\$3.88**

**83-422. 3 TUBE KIT.** Requires 1—1C5G, 1—1E4G, 1—1H5G tubes; 1—1 1/2 V. "A", 2—45 V. "B", 1—7 1/2 V. "C" batteries. Less tubes and batteries. Shpg. wt., 3 lbs. **\$4.85**

## ADD-ON KITS

Permits increasing size of 1 and 2 tube kits. 3 tube kits will provide speaker reception.

**83-433. Converts 83-420 to 2 tube kit.** Less 1—C5G tube; 1—7 1/2 V. "C", and 1—45V. "B" batteries. See below. **NET 65c**

**83-434. Converts 83-421 to 3 tube kit.** Less 1—1H5G tube. See below. **\$1.21**

## ACCESSORIES FOR ABOVE

**83-425. 70-200 Meter Plug-in Coil. EACH**  
**83-426. 35-70 Meter Plug-in Coil. EACH**  
**83-427. 17-35 Meter Plug-in Coil. EACH**  
**83-428. 200-560 Meter B.C. Band Coil 97c**  
**4-024. Raytheon 1E4G tube. NET..67c**  
**4-016. Raytheon 1C5G tube. NET..84c**  
**4-037. Raytheon 1H5G tube. NET..67c**  
**80-808. 1 1/2 volt "A" battery. NET..23c**  
**80-800. 45 volt "B" battery. NET..99c**  
**80-516. 7 1/2 volt "C" battery. NET..48c**  
**59-112. Single 1,000 ohm headphone with headband. NET.....71c**

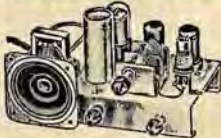
## AC-DC KITS

**83-430. 2-Tube Kit.** As 83-420 above, but uses 1—76 Det., 1—76 Rect. Less tubes. Shpg. wt., 3 lbs. **\$4.12**

**83-431. 3-Tube Kit.** Like 83-421 above, but uses 1—76 detector, 1—76 audio, and 1—76 rectifier. Less tubes. 3 lbs. **\$4.41**

**83-432. CONVERSION KIT.** Converts 83-430 to 3 tube kit. Less 1—76 tube... **29c**

## Knight "BANDSWITCH THREE" TRF KIT



Three tubes give the performance of four tubes in this modern, up-to-date AC-DC two-band kit. A TRF circuit

using the latest type low-drain tubes permits loudspeaker operation on both bands. Band one covers standard broadcast stations while band two is for the reception of Police, Amateur and Aircraft stations. Uses a 12SK7 RF amplifier, a 12SJ7 detector and a 70L7GT combined beam power amplifier and power supply rectifier. Complete kit includes punched and drilled chassis base, 6" x 4 1/2" x 1 1/2". Operates from 105-125 volts, AC or DC. Less tubes, speaker and output transformer. 6 lbs. **\$5.50**

**83-250. NET.....**  
**83-251. Speaker and output transformer. NET.....\$1.67**  
**83-252. Knight tube kit. NET..\$1.73**

## 4-TUBE AC-DC TRF KIT



An easily-built metal tube receiver with surprising sensitivity and tone quality. For broadcast reception, 530 to 1600 KC. Uses a 6K7 RF amplifier, 6J7 power detector, 25A6 pentode output, and 252B rectifier. For 110 volts AC or DC. Kit includes all necessary parts, chassis and instructions. Shpg. wt., 9 lbs.

**83-440. Complete Kit, less \$10.53** tubes, and speaker. NET.....  
**83-442. Matched kit of tubes for above. NET.....\$2.44**  
**81-610. 5" Speaker. NET.....\$1.10**

## WIRELESS PHONO-OSCILLATOR KIT



Phono oscillator designed for use with any radio in conjunction with magnetic or crystal phono pickup. Does not require connection to radio receiver. Uses 6F7 oscillator and 2525 rectifier. Supplied complete with

drilled chassis and instructions (less tubes). For 110 volts AC or DC operation. Shpg. wt., 5 lbs. Easily assembled. **\$5.50**

**83-445. NET.....**

## NEW INSTRUCTION MANUAL

"How to Build Radio Receivers," including complete step-by-step assembly and wiring instructions on 28 different projects. Also all necessary data for testing, and operating. 168 pages, fully illustrated, with up-to-date practical charts, schematic circuit diagrams, pictorial wiring diagrams, etc. 18 pages of television data. 11 pages on radio coils and circuit applications. A complete Radio-Frequency Spectrum Chart, etc. Every radio amateur, serviceman, set builder, beginner, experimenter, etc., should have a copy of this useful and educational book. **37-721. NET.....48c**

## NEW Knight FM TUNER



A complete kit of parts to build an 8 tube FM tuner that may be used in conjunction with any audio amplifier or receiver. The 8 tube FM brings you high fidelity, staticless reception. Uses:

6SK7 RF, 6SA7 converter, 6SJ7 oscillator, 2—6SK7 IF's, 6SJ7 limiter, 6H6 discriminator, 5Y3G rectifier. High frequency front end is supplied already wired and aligned. Kit is complete with all parts, including punched chassis and instructions. Less tubes and dial. For 110 volt, 60 cycles. Wt., 12 lbs. **\$21.45**

**83-325. NET.....**  
**83-326. Kit of 8 tubes.....\$3.38**  
**83-327. Deluxe dial.....\$2.91**



# PHOTO-ELECTRIC CELL EQUIPMENT

## WORNER "FOTO-ELECTRIC" PRODUCTS

We can supply Worner "FOTO-ELECTRIC" units for industrial uses such as automatic sorting, grading, or counting, for machinery protection or control; for heat, light or smoke control, etc. Send us details of your requirements for complete information and prices on equipment designed to meet your needs. Worner "FOTO-ELECTRIC" products are the finest units available. The Worner equipment on this page is also available with other voltage inputs. Write us for prices.

### BURGLAR ALARM SYSTEM



Provides long life, easy installation, reliability, and economy of operation. Indispensable in the protection of homes, offices, stores, shops, etc. Consists of 2 units: an invisible black-light source and a combination photo-electric cell, relay, and grid control rectifier. In operation, the invisible light beam is focused on the cell. Interruption of beam or of the 115 volt circuit will cause relay to trip. It is re-set by means of a tumbler-type, pick-proof lock. 2 keys supplied. Lamp life, 1500 hours. Terminal strip for closed or open circuit operation. Light unit, 4x4x6", relay unit, 6x7x4". Ranges 75 feet. For 115 V. AC. Wt. 9 lbs. **\$32.04**  
83-700, Model 301N. NET.

### BURGLAR ALARM GONG

77-000. For use with above or any burglar alarm system. 5-inch gong in weatherproof metal housing. May be used outdoors. With batteries, handy terminal strip, and 25 feet of cable. Shpg. wt., 9 lbs. **\$8.79**  
NET.

### PHOTO CELL ACCESSORIES



Fig. A. Mirror. By using mirrors, light beam can be reflected back and forth across room, and thus provide a high degree of protection. If beam is broken at any point, alarm will sound. Mirrors are scientifically ground, and adjustable for maximum concentration of the light beam. Supplied with mounting bracket. 8" x 4" x 2 1/2". Shpg. wt., 3 1/2 lbs. **\$3.38**  
77-001. NET.

77-002. 6" Focal Lens. NET. .45c

77-003. Photo Cell. Standard 4 prong radio tube base type cell. NET. . \$2.20

77-004. Infra Red Filter. NET. . 68c

77-035. Fig. B. DOOR CHIME. Dual tone. For use with PE equipment, in homes or offices. 5 V. DC, 8 V. AC. Wt., 3 lbs. \$1.25

ELECTRIC COUNTER. Counts 0 to 99999. Chrome case with mounting lugs. Wt. 2 lbs. **\$7.05**. For 110 V. AC.  
77-006. For 6 Volt DC. EACH **\$6.76**

### KNIGHT AC-DC PHOTO-CELL AND RELAY KIT

A beginners' highly practical photo-cell kit. May be used for burglar alarms, controlling lights and bells, announcing purposes and numerous other applications. An increase or decrease of light intensity controls unit. Relay is rated at 2 amps, non-inductive at 115 V. AC. Chassis shields photo-cell from unwanted light. Kit includes all parts, drilled chassis, photo-cell, SPDT relay, tube, diagram and complete instructions. Easy to assemble. Size: 5 x 4 x 2". For 115 V. AC-DC. Wt. 2 1/2 lbs. **\$5.95**  
83-710. NET.

### ECONOMY LIGHT SOURCE KIT

Throws a concentrated beam of light 50 feet. Has special 50 watt bulb. Kit includes all parts. Easy to build. In attractive metal cabinet with focused lens. Ideal where a low-cost light source is needed. Size: 4 3/4" x 4 3/4" x 2 1/2". For 115 V. AC or DC. Wt., 2 1/2 lbs. **\$2.95**  
83-715. NET.

### INDUSTRIAL EQUIPMENT

#### PHOTO CELL AND RELAY

Contains a sensitive photo cell and quick-acting SPDT relay. Highly dependable; ideal for smoke control and fire detection, counting, for controlling machinery, lights, and motors. May be used with any of the Photo Cell accessories listed in left hand column below. Size: 6x7x4". A suitable light source is listed below. For 115 V., 60 cycles. Shpg. wt., 5 1/2 lbs. **\$19.93**  
77-020. Model 201RN. NET.



#### LIGHT SOURCE

Designed for Photo Cell and Relay above, but may be used with other types of photo-electric cell relays. Uses long-life 1500-hour bulb with very low wattage consumption. Special lens permits throwing a long, concentrated beam of light. Case, 4 x 4 x 6". Accommodates 77-004 Infra Red Filter, listed under Photo Cell accessories in left hand column below (not supplied). For 115 V., 60 cycles. Supplied complete with bulb, mounting brackets, and line cord ready to operate. Shpg. wt., 4 lbs. **\$7.79**  
77-021. Model 201LN. NET.



### "ANNOUNCER" SYSTEM

Specially designed to announce the entrance of a person. Can be used across passage ways, doors, driveways, etc. Ideal for shops and stores. Range, 15 feet. Self-contained unit has photoelectric cell, light source, amplifier, and relay. Has 6V. AC output. May be mounted directly on door. Supplied with mirror and a chime. Crackle-finished green case measures 7" x 6" x 2 1/2". For 115 V., 60 cycles. Shpg. wt., 5 lbs. **\$13.20**  
77-022. Model 601N. NET.



### PHOTOELECTRIC CONTROL BOOK

An authoritative, up-to-date book on photo cells, relays and light sources. Gives valuable data on practical applications, how to make installations, and how to solve common servicing problems. Profusely illustrated. 40 pages. **\$2.95**  
37-760. NET.



### ALLIED PHOTO CELL AND INDUSTRIAL RELAYS

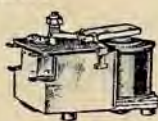
#### TYPE PC RELAYS

Especially designed for P. E. work. Silver contacts carry 5 amps. of non-reactive AC up to 115 volts. All relays are SPDT. Adjustable for pull-in and drop-out regulation, and for contact spacing. Yoke, armature and pole piece are made of Arnico electrical iron, cadmium plated. Coils layer-wound and fully impregnated. Size, 2 3/4" x 1 1/2" x 1 1/8". Wt., 1 lb.  
77-070. 2,500 ohm coil. Designed for plate circuit of a tube. **\$1.47**  
NET.  
77-071. With 6 volt A.C. coil, . . . **\$1.57**  
77-072. With 110 volt A.C. coil, . . . **1.57**  
77-073. With 6 volt D.C. coil, . . . **1.47**



#### TYPE D RELAYS

For industrial control applications, alarm and signal devices, etc. Layer-wound impregnated coils. Yoke, armature and pole piece of high-grade electrical iron and silicon steel. Contacts handle non-inductive load of 10 amps. at 125 volts AC; fully encased in porcelain housing. New type of construction eliminates carrying current through actuating springs. Have insulating metal mounting brackets. All are DPDT type. Size, 2 1/4" x 1 1/2" x 2 1/4" high, 2 1/4" wide. Shpg. wt., 1 lb.  
77-080. D1. 6V. DC. NET. . . **\$4.02**  
77-081. D3. 6V. AC. NET. . . **\$4.26**  
77-082. D4. 110 V. AC. NET. . . **4.26**



### ALLIED PHOTO RELAY BOOK

37-766. Describes clearly photoelectric phenomena, amplifiers, glow discharge tubes, light sources and their uses. Tells how to install and service equipment. 28 pages. NET. . . . 25c

## EBY P.E. EQUIPMENT

### EXPERIMENTAL PHOTO CELL KIT

Contains parts for building various Electric Eye circuits. Includes Eby photo-cell, sensitive relay, punched chassis base, adjustable voltage divider, RCA tube, sockets, resistors, condensers, etc. Also includes Eby Handbook. For 115 V., 60 cycles. Shpg. wt. 2 1/2 lbs. **\$7.94**  
83-720. NET.



### PHOTO CELL

Excellent for use in all types of photo-electric circuits. 1 1/4" diam., 3/4" high. Fits four prong socket. Shock and moisture proof. 1/2 lb. **\$2.06**  
77-030. NET.



### SENSITIVE RELAYS

Designed for direct, or for full or half-wave rectified current circuits, where operating power is small. Ideal for photo-cell equipment, vacuum tube amplifier circuits, etc. Operates on as low as 1.25 milliwatts of power. Sterling silver contacts carry 2.5 Amps. at 115 V. A.C. or 1.5 Amps. at 115 V. DC. Shpg. wt., 1lb.  
77-050. 1000 ohm coil. EACH  
77-051. 2500 ohm coil.  
77-052. 5000 ohm coil. **\$3.82**  
77-053. 10000 ohm coil.



### ELECTRIC EYE HANDBOOK

A 28 page book which contains a wealth of information. Describes in detail the underlying principles of photo-cells. Theory and practice are fully covered and illustrated. Indispensable for the student and the experimenter. **\$2.95**  
37-765. NET.



### BRADLEY LUXTRON PHOTO-ELECTRIC CELL

These Photo-Electric Cells are finding wide application in the measurement and control of light and in the automatic control of many industrial processes. They convert light energy into electrical energy without any other voltage sources. Sufficient current is developed for direct operation of instruments and sensitive relays—no amplifiers are necessary. Due to special developments, these cells have extremely low variations in electrical characteristics with changes in temperature. Plug into a standard 4 prong tube socket. Size, 2 3/8" x 2 3/8" x 3/8". Shipping weight, 8 ozs. **\$7.25**  
77-040. NET.





# ATTACHMENTS HEADPHONES Accessories

## AMERICAN BELL

### INSTITUTIONAL HEADPHONES



Especially designed for schools, prisons, hospitals and other institutions where fool-proof, light-weight headphones are essential. Also ideal for use with crystal sets, battery radios and low-cost hearing aids. Every feature required for institutional use has been incorporated.

metal cases and durable bakelite caps which are easily cleaned; inside terminal connections, to prevent shocks and tampering; 4½ braided cord. These phones have large magnets and two coils per phone, making them ultra sensitive. Shpg. wt., 1 lb.

59-100. 2000 ohms. NET..... \$1.25  
59-101. 3000 ohms. NET..... \$1.45

### SINGLE PHONES

Identical to above, but set includes only one phone. Supplied complete with headband and 4½ braided cable. Terminals are inside the durable metal case, eliminating the danger of shocks. Shpg. wt., 10 oz.

59-102. 1000 ohms. NET..... 80c  
59-103. 1500 ohms. NET..... 90c  
59-105. Replacement diaphragms for above phones. NET EACH..... 5c  
59-106. Bakelite caps. NET EACH..... 12c

**NOTE:** For special requirements we can supply phones with bakelite caps, with inside or outside terminals, with flexible steel, braided or leather headbands, and with rubber or cotton-covered cords. Please give your exact requirements for a prompt quotation.

### TRIMM QUIET RADIO ADAPTER AND HEADPHONES

Permits operating headphones from any radio or amplifier. Adapter connects to speaker coil. Permits operation of either speaker or headphones, or both at the same time. Headphones are very compact and light in weight. Ideal for hard-of-hearing.



Bakelite shell and cap. With "Dependable" headphones adapter, volume control, switch, phone plug and jack. Shpg. wt. 2½ lbs.  
59-050. Type 643. NET..... \$3.67

59-051. Type 647. As above but with Trimm "Acme" headphones. NET..... \$3.09

## TRIMM-ACME PHONES

### DELUXE TYPE



Sensitive and practical phones for every headset use. Light as a feather. Each unit weighs less than 1½ ounces, total weight is only 6 ounces. Recommended especially for Amateurs. SWL's, hard-of-hearing and multiple phone installations. Cap and shell are molded of bakelite with light-tension flexible headband. Cord is 5 ft. braided-covered. Phone terminals. Wt., 12 oz.  
59-070. 2000 ohms. NET..... \$1.27  
59-071. 4000 ohms. NET..... \$1.43

### ACME SINGLE HEADSETS

A lightweight single unit headphone, with headband as described above. 8 oz.  
59-072. 1000 ohms. NET..... 78c  
59-073. 2000 ohms. NET..... 85c

### CAPS AND DIAPHRAGMS

59-012. Replacement diaphragms for any of the above Acme phones. NET EACH, 9c  
59-075. Replacement caps. EACH... 24c

## BRANDES SUPERIOR PHONES

A high quality, ruggedly-built headset which has been a favorite for years. Outside terminal type, with metal cases and bakelite caps. Diaphragm diameter is 2¼". Has double coils, two in each receiver; adjustable flexible steel split headband; 4½ foot cotton-covered cord. Magnets of high-tensile steel, ¼" square. Resistance, 2400 ohms per pair. Wt., 1½ lbs.



59-130. NET..... \$1.87

## BRANDES "ADMIRAL" PHONES

Similar to the phones above, but with terminals inside case. Have metal cases, bakelite caps, double coils, steel magnets, etc. Sturdy and lightweight. Shpg. wt., 2 lbs.  
59-135. 2000 Ohms. NET..... \$1.97  
59-136. 3000 Ohms. NET..... \$2.14  
59-137. 5000 Ohms. NET..... 2.57

### CAPS AND DIAPHRAGMS

59-138. Caps. EACH..... 18c  
59-139. Diaphragms. EACH..... 5c

## BRUSH CRYSTAL HEADPHONES

### TYPE BJ



Finest quality, high impedance, crystal type headphones. Hermetically sealed cartridge in soft molded rubber jacket assures maximum protection against adverse climatic conditions. Has bakelite diaphragm with direct crystal drive. Yoke provides greater freedom and 5-foot all-rubber cord. Ruggedly built, yet light weight and extremely sensitive. Shpg. wt., 12 oz.

59-150. NET..... \$7.06

### SINGLE PHONE TYPE B



Ideal for hearing aids because of the extremely light weight. Excellent for multiple installations. With 5-foot cord, headband and comfort end-shell. Wt., 8 oz.

59-155. NET..... \$2.94

### SINGLE PHONE TYPE A

Like 59-151 above, right, but with single phone, cord, and headband. 8 oz.

59-156. NET..... \$2.94

### TYPE A

High sensitivity phones of new piezo-electric design. For Amateurs, Short Wave Fans, measuring work, etc. Unusually high impedance. Response is from 100 to 10,000 cycles. Cone-type diaphragm. For use in direct current circuits, a small blocking condenser is necessary. Molded plastic case shaped for maximum comfort. Low power consumption, high quality reproduction. Weight, with headband and 5 ft. cord, only six ounces. Shpg. wt., 12 oz.

59-151. NET..... \$5.29

### LORGNETTE PHONE TYPE A

Uses a single Type A phone as described above, attached to an adjustable telescoping Lorgnette-type handle. Handle may be extended from 12" to 17". Because of their light weight and the adjustable handle features, these phones are used extensively with hard-of-hearing aid systems. Units are supplied complete with Type A Crystal earphone, 5-foot cord and Lorgnette handle. Shpg. wt., 10 oz.

59-157. NET..... \$3.82

## TRIMM HEADPHONES

### FEATHERWEIGHTS



Very compact headphones, weighing only 4 oz. They have forged magnets of 36% cobalt steel bakelite shells and caps, and adjustable spring-steel headband. Diameter only 2¼". For Amateurs, Aircraft, Hard-of-hearing, etc. 24,000 ohm type for weak signals. 6 ft. moisture-proof cord. 1 lb.

59-000. 4000 ohm Standard.  
59-001. 24,000 ohm Special. \$5.88  
NET EACH.....  
59-005. Sponge rubber ear cushions for above. Shpg. wt., 1 lb. PER PAIR..... 35c

### SINGLE PHONES

Single unit phone of flat disc type similar to above. Rubber-tipped headband. Ideal for above. 6-ft. cord. 12 oz.

59-010. NET..... \$3.67

### LORGNETTE TYPE



Single unit featherweight phone with adjustable 14" telescoping metal-plastic handle. 6-ft. cord. 2000 ohms. Wt., 3 lbs.

59-011. NET..... \$3.97

### EXTRA CAPS AND DIAPHRAGMS

59-012. Extra Diaphragms for above. 9c  
59-013. Replacement Caps. EACH... 38c

## PROFESSIONALS'

A high quality standard type headphone. Used by Amateurs, SWL's, etc. Bakelite case and cap. 6-ft. cord. Terminals inside case. 1 lb.



59-020. 3000 Ohms.  
59-021. 4000 Ohms.  
NET EACH..... \$2.47

## TRIMM "DEPENDABLE" PHONES

A high-grade, low-priced headset. A good dependable phone for quantity purchasers. Will give exceptionally efficient performance in any application. Bakelite shells and caps. Chrome steel magnets. 2000 ohms resistance. 6-ft. cord. Fabric-covered headband. 1½ lbs.



59-025. NET..... \$2.00  
59-026. As above, but single phone. 1000 ohms. 1 lb. NET..... \$1.78  
59-030. Caps for 59-020/1, 59-025/6 above, and 59-050 at left. EACH..... 29c  
59-031. Diaphragms for 59-020/1, 59-025/6 above, and 59-050 at left. EACH..... 9c

## ARMY-NAVY TYPE HEADPHONES

Very sensitive. Meet both Army and Navy specifications. Impedance, 17,000 ohms. Brass shell with heavy-duty bakelite cap. 6" moisture-proof cord, phone tip terminals. Inside terminals. With leather headband. Bipolar magnets. 2 lbs.



59-040. NET EACH..... \$10.95  
59-041. Replacement Cap for above and for Western Electric headphones. EACH 53c  
59-042. Extra Diaphragms for above. 12c  
59-043. Rubber Phone Cushions for Professional, Dependable, and Army-Navy phones, above. PER PAIR..... 35c

Because of National Defense priorities, headphones on this and following two pages may be supplied with bakelite or other substitute parts. These changes will in no way impair the usefulness of the phones.



# BEGINNERS' CRystal SETS HEADPHONES ACCESSORIES

## AMERICAN BELL SILENT PHONE KIT



A complete, convenient kit that permits excellent head-phone reception on any radio. For tuning distant weak stations; for the hard-of-hearing; and for listening in on radio receiver when speaker reception would disturb others. Three position switch permits three methods of operation: speaker alone; speaker and headphones together; or headphones alone. Radionics should sell one of these attachments on every service call. Attractively priced for quick sales.

### EASY TO INSTALL

Anyone can easily and quickly install the attachment by following the simple instructions which are supplied. A soldering iron is the only tool required. Leads go to terminals of speaker's voice coil. Headphone volume is controlled by the receiver's volume control. Supplied complete with everything required. Headphones are special low-impedance type (11 ohms), assuring finest tone. Light-weight headband, 6-ft. cord, and adapter unit with switch. Shpg. wt., 5 lbs.

59-169. With Headphones. NET \$2.09  
59-170. Adapter Attachment Only. For use with any good headphones, but offers best results with low impedance (11 ohm) phones as described above. NET \$0.90

## ENCLOSED TYPE PHONE ADAPTER



Compact, enclosed adapter for switching from speaker to headphones or for simultaneous use of both when used with low impedance phones. With hook for easy mounting.

59-170 above is for permanent installation on back of set only; 59-171 may be placed near set where convenient. Wt., 1 lb. NET \$1.03

## ICA EARPHONE CUSHIONS



Finest quality soft rubber ear cushions. Scientifically molded to provide maximum comfort. Used by all leading airlines. Fit all types of phones. Wt., 1 lb.

59-122. PER PAIR \$0.50  
10 PAIRS \$4.50

## CANNONBALL MASTER HEADSETS



An improved high-resistance headset that faithfully reproduces every type of radio broadcast. Aluminum cased with bakelite caps and inside terminals to prevent shock. Has sturdy magnet of 1/2" steel in each phone. Headband is easily adjusted by means of hand spring pressure clips. These headphones, although low in price, are ideal for crystal sets, battery operated radios, and for multiple head-phone systems such as are used in hospitals, schools, prisons, sanitariums, etc. Also widely used for hard-of-hearing amplifiers. Recommended for all uses requiring a well-designed headset. Shpg. wt., 2 lbs.

59-125. 3000 ohms. NET \$1.93  
59-126. 5000 ohms. NET \$2.43  
59-127. Replacement bakelite cap for above headsets. NET 18c  
59-128. Replacement diaphragm for above headsets. NET 5c

## BRUSH "HUSHATONE"

New, efficient pillow-type speaker. May be placed under pillow on bed, couch, or chair. Enables user to enjoy radio programs in comfort without disturbing others in the room. An invaluable aid and comfort in hospitals, sanitariums, etc. Housed in sponge rubber, may be safely dipped into liquid for sterilization. Exclusive Brush principle assures excellent reproduction. Volume is regulated by volume control on radio set. The "Hushatone" will work with any receiver. Measures only 4 1/4" x 5 1/4" x 1". With 84" rubber-covered cord. 2 lbs.



59-160. NET \$4.41

## "DOOR-KNOB" TYPE EARPHONE CUSHIONS

Scientifically molded of soft, flexible rubber to slip easily over all types of phones. Especially designed for ear comfort. Shpg. wt., 1 lb.

59-122. PER PAIR \$0.23  
10 PAIRS \$2.07



## WIRELESS PHONOGRAPH OSCILLATOR



Makes it easy to operate any record player or pickup through your radio set by remote control. No connection to your radio is required. Simply connect any record player or pickup to this wireless control to reproduce records through any radio. Will play through one or a dozen sets at a time. Always stays in tune, assuring excellent tone quality from your records. Control panel has on-off switch and is adapted for terminals or tip jacks. No wiring necessary. Compact, attractive brown crackle case. Size: 7" x 4 1/2" x 3 1/4". Complete with two tubes (35Z5G and 12J7GT); 5 1/2-foot AC cord; 19-foot aerial wire for operating at distances greater than 10 feet; and simple instructions. For 110 V. AC or DC. Shpg. wt. 6 lbs. NET \$5.75

## NEW ICA PIED PIPER CRYSTAL SET



A modern type crystal radio that offers the best in crystal set reception and appearance. Finest quality components are housed in handsome black bakelite case—a real beauty! Has crystal adjustment control and tuning dial on front panel. Unusually sensitive; provides clear, full-toned reception. Ideal for hospitals, offices, etc. It's light, compact, easily portable. Measures 6 1/4" x 4 1/4" x 2 1/4". Supplied less phones and aerial. Shipping wt., 3 lbs.

83-055. NET \$2.06

## "PETER PAN" JR. CRYSTAL SET



Attractive crystal set in walnut cabinet. Brings in stations over 25 mile area with fine tone and clarity. Detector sealed at sensitive spot. Single dial control. Supplied with aerial and ground wire and single head-phone. Size: 4 1/4" x 3 1/4" x 2 1/4". Shpg. wt., 2 lbs.

83-036. Complete. NET \$1.85  
83-035. Set Only. NET \$1.18

## TRIMM HEARING-AID CONTROL



For multiple hearing-aid installations in schools, theatres, churches, etc. Also used for radio systems in hospitals, etc. Permits adjustment of volume to individual hard-of-hearing needs. Resistance, 10,000 ohms. Small and compact, only 1x2x3". (Use Knight High Gain Amplifiers for group-hearing use. See Public Address Section beginning on page 65.) Shpg. wt., 1 lb.

59-060. Brown Wrinkle Finish. NET EACH \$1.91  
59-061. Glossy Ivory Finish. NET EACH \$1.91

## PHONE AND SPEAKER CORDS

Copper tinsel inner conductor covered with closely-woven cotton braid. Tips are firmly anchored. Shipping wt., 3 oz.

### SINGLE CORDS

59-200. 4 foot cord. Tips on one end; spade-lugs on other. For speakers or single phone. NET EACH 11c  
59-201. 4 foot cord. Tips on both ends. 11c  
10 for 99c. 100 for \$9.35.

### DOUBLE CORDS

59-205. Spade-lugs on one end. Tips on other. 5 foot cord. For use with phones. NET EACH 21c  
10 for \$1.89. 100 for \$17.85.

### CANNON RUBBER CORDS

Durable rubber double head-set cord, 6 feet long. Has tips on one end; spade-lugs on other. Shpg. wt., 1 lb. NET 89c

## LOW-PRICED PHILMORE KITS AND SETS POPULAR 1 TUBE BATTERY-SET KIT

83-010. Tunes from 13 to 530 meters covering Amateur, Police, SW, Code, and Broadcast bands. Employs plug-in type coils. Excellent reception; amazing volume. For students, experimenters, and for use in camps, farms, etc. In kit form, with coil for broadcast band. Uses one type 30 tube. Less tube, batteries, and phones. Wt., 3 lbs. NET \$1.27  
83-011. As above but wired. Less tube, batteries and phones. \$1.95  
83-012. Batteries. 1—1 1/2 volt "A"; 1—45 volt "B"; 4 lbs. 1.22  
83-510. Kit of 4 coils (13 to 240 meters). Wt., 2 lbs. NET \$0.72c  
9-296. Knight Type 30 Tube. Wt., 8 oz. NET \$0.41c

### 2 TUBE BATTERY KIT

Uses 2 type 30-tubes, and plug-in Broadcast band coil. Instructions. Less tubes, batteries, and phones. Wt., 4 lbs. NET \$1.49  
83-021. As above, but Wired. \$2.25  
83-022. Batteries. 1—1 1/2 volt "A"; 2—45 volt "B". NET \$2.21  
83-510. Kit of 4 coils (13 to 240 meters). NET \$0.72c  
9-296. Knight Type 30 Tubes. (2 required). EACH \$0.41c



Compact and sturdily built 1-tube battery set. Assures undistorted and selective reception within surprisingly wide radius. Employs latest 1.4 V. tube. "On" and "Off" toggle switch gives positive contact. Housed in tiny airplane cloth-finished cabinet measuring 5 3/4" x 2 3/4" x 3 1/4" and weighs only 1 1/4 lbs. Uses 1—1E4G tube; 2—1 1/2 V. flashlight-type batteries and single earphone—all self-contained. Inexpensive to operate. Wt., 2 lbs. NET \$3.45

### 2 TUBE AC-DC KIT

This 2 tube kit operates from 110 volts, AC or DC. Uses 2 type 76 tubes (1 used as rectifier). With plug-in coil covering Broadcast band. Coil kit permits tuning Amateurs, Police calls, etc. Less tubes and phones. Easy to build. Wt., 5 lbs. NET \$2.25  
83-026. As above but Wired. \$3.10  
83-511. Kit of 4 coils (13-240 meters). NET \$0.72c  
9-340. Knight Type 76 Tube. (2 required). EACH \$0.38c

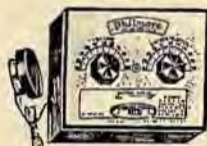




# HEADPHONES CRYSTAL SETS Accessories

## PHILMORE SETS

### "DWARF" 1 TUBE SET



One of the tiniest portable radios made. Measures  $5\frac{1}{2} \times 4\frac{1}{2} \times 3\frac{3}{4}$  and weighs only 2 lbs. Operates entirely from self-contained batteries. Covers standard broadcast band; has clear-reading

dial, tuning and volume controls, "on-off" switch. Very easy to tune. The "Dwarf" uses one low-drain type 1E4G tube and two 3 V. flashlight type batteries. Supplied complete with tube, batteries, and single earphone. Use antenna kit 83-100, listed at right below, for best results. Available only with accessories. Shpg. wt., 3 lbs. **\$4.55**  
83-000. NET.....

### "SELECTIVE" CRYSTAL SET



This well-built set is especially designed to give maximum selectivity. Built with a tapped coil matched with a .00035 mfd. variable condenser. The reception on this set is loud and clear. It is exceptionally sensitive and very easy to tune. Has double connection posts making possible the use of two pairs of

headphones at one time. With dust-proof, glass-enclosed crystal detector. In crackle finish cabinet. Wt., 3 lbs. **\$2.95**  
83-001. NET.....

### "MONARCH" CRYSTAL SET



A sensitive and attractive crystal set. Tunes stations as far as 25 miles away with good tone and volume. Has dustproof, glass-enclosed crystal and engraved aluminum dial and metal case. For

with bar-knob. Crystalline metal case. For aerial kits see right, below.  $1\frac{1}{2}$  lbs. **\$1.21**  
83-002. NET.....

### "SUPERTONE" CRYSTAL SET



Compact crystal set offers entertainment from stations within 25 mile radius with suitable aerial. Sensitive crystal enclosed in dust-proof glass casing. Mounted on bakelite base. For best results use

antenna or accessory kit at right below.  $1\frac{1}{2}$  lbs. **\$7.95**  
83-003. NET.....

### I.C.A. "Topnotch" CRYSTAL SET



Tunes in stations with amazing clarity and volume. Dust-proof, glass-enclosed crystal; engraved calibrated dial; bakelite knob. Selector coil is wound on

solenoid form for better reception. Housed in handsome black, crystalline metal case. Wt., 1 lb. **\$1.18**  
83-050. NET.....

83-051. "Topnotch" Crystal Set Kit. Complete kit for building above set. Ideal for beginners. Wt., 1 lb. NET..... **\$1.09**

### I.C.A. LOW-LOSS CRYSTAL SET



Inexpensive low-loss crystal set provides sensitive reception. Has adjustable crystal and slider tuning coil. Connect aerial and ground, attach phone, and listen in.

With crystal and cat whisker. 1 lbs. **\$7.35**  
83-052. NET.....

## AMERICAN-BELL HEADPHONES



**\$1.05**

### STANDARD DUAL HEADSETS

New inside terminals eliminate shock. Diaphragm measures  $2\frac{1}{4}$ ". Cords are mercerized cotton-covered tinsel-copper.

59-110. 2000 Ohm Headset. NET..... **\$1.05**

59-111. 3000 Ohm Headset. NET..... **\$1.33**

59-106. Quality bakelite exact-replacement caps for above headphones. NET EACH..... **12c**

59-105. Duplicate replacement diaphragms for above headphones. NET EACH..... **5c**

Sensitive headphones with new inside terminals to avoid shocks or damaging shorts. Produced by one of America's leading manufacturers. Noted for their remarkable tonal fidelity and sensitivity. Lightweight, adjustable, braided-covered headband gives utmost wearing comfort and long life. Magnets are of high permeability alloy, providing exceptional power and long life. Solenoid coils are well insulated and firmly mounted in headphone shell. Caps are molded bakelite. Supplied with  $4\frac{1}{2}$  ft. cord. Ideal for use with crystal or battery sets as well as for all general-purpose requirements. Preferred by many Amateurs for both phone and CW reception. Shpg. wt., 1 lb.



**71c**

### SINGLE HEADPHONES

Improved inside terminal type. Ideal for hearing aids and crystal or battery sets. Clock-steel headband. With cord.

59-112. 1000 Ohm Headphones. NET..... **71c**

59-113. 1500 Ohm Headphones. NET..... **84c**

## CRYSTALS & CRYSTAL DETECTORS

### OPEN DETECTOR



Universal-joint on swivel arm provides quick, accurate adjustment on any point of sensitive crystal. Comes with crystal. Wt., 3 oz. **\$2-000. EACH..... 14c**  
10 FOR..... **\$1.26**

### FIXED DETECTOR



Extremely sensitive. Selected crystals are meter-tested and permanently adjusted. Housed in compact bakelite case. Eliminates bother of continual adjustment for sensitive spot. Ready for use. 8 oz. **\$2-001. EACH..... 46c**

### METER TESTED CRYSTAL



These crystals are laboratory tested on very sensitive meters. Crystal is of genuine Galena. Fit all crystal cups. 6 oz. **\$2-006. EACH..... 12c**  
10 FOR..... **\$1.08**

### CAT WHISKERS



Set of three. Correctly designed and made of the finest quality phosphor-bronze. Correct tension for all detectors. 5 oz. **\$2-011. PER SET..... 9c**  
10 SETS FOR..... **81c**

### ENCLOSED DETECTOR



A high-grade dustproof glass enclosed detector complete with supersensitive crystal. Ideal for Crystal-Reflex circuits. Standard in 90% of the crystal sets made. Wt., 8 oz. **\$2-002. EACH..... 23c**

### FEDERAL DETECTOR



This fixed detector is designed to give more stability to crystal sets and all reflex circuits. Highly sensitive and permanently fixed. Mounted in small bakelite case with screw connectors. Each carefully tested. Wt., 3 oz. **\$2-010. EACH..... 56c**

### MOUNTED CRYSTAL



Highly sensitive galena crystal, mounted in lead. Each unit is pre-tested for sensitivity. Will fit all standard crystal cups. 6 oz. **\$2-005. EACH..... 6c**  
10 FOR..... **54c**

### 'PHONE CUSHIONS



Ideal for those who wear headphones constantly. Made of finest soft sponge rubber. Fit all headphones. Wt., 12 oz. **\$9-120. PAIR..... 28c**  
10 PAIRS, FOR..... **\$2.52**

## LOW-PRICED CARRON CRYSTAL SETS



THE "MIDGET"

BAKELITE MODEL



Midget model crystal radio set built into a sturdy solid walnut cabinet. Unusually attractive in appearance. Average reception range covers about 25 mile area. Brings in programs clearly and distinctly without distortion. Provides economical radio enjoyment. Has spring action locator and station selector knob. Complete with specially constructed earphone and roll of ground wire. Size:  $4\frac{1}{2} \times 3\frac{1}{2} \times 2\frac{1}{2}$ ". Shpg. wt., 3 lbs. **\$3-080. Complete with Accessories. NET..... \$1.65**

83-081. Radio Set Only. NET..... **97c**

Novel midget crystal radio with self-contained earphone provides low-cost radio pleasure. The latest in modern crystal set design. Very neat and compact in size. Complete set is housed in polished mahogany-color bakelite cabinet of modernistic streamlined design. Earphone fits conveniently into compartment in case. Average range is about 25 mile radius. Extremely sensitive adjustable crystal; one tuning knob controls reception. Weighs only 5 ounces; measures but  $2\frac{1}{2} \times 1\frac{1}{2}$ ". Supplied complete with earphone, aerial wire, and full instructions. Shpg. wt., 2 lbs. **\$3-082. NET..... \$1.76**

83-083. ACCESSORY KIT FOR CRYSTAL SETS. Includes headphones, aerial **\$1.65**

and ground wire, lead-in strip, lightning arrester, insulators, etc. Wt., 4 lbs. NET..... **52c**

83-100. ANTENNA KIT. Consists of 90 ft. stranded copper aerial wire; 25 ft. lead-in; window lead-in strip; insulators and ground-clamp. Shpg. wt., 3 lbs. NET.....



# NEW COILS FOR ALL PURPOSES

## MEISSNER PRECISION-BUILT COILS

### PLASTIC IF TYPE REPLACEMENT COILS



A popular line of IF type transformers priced remarkably low. Trimmer-base and coil-form are molded in one piece from plastic material absolutely unaffected by moisture. Specially-served Litz wire is used for the coils. The extremely compact size, 1 1/4" square by 2 1/2" high, makes it an ideal replacement unit for any set. Fully shielded. Transformers are double-tuned. Shpg. wt., 1 lb.

IF Freq.	Input Stock No.	Interstage Stock No.	Output Stock No.
175	60-100	60-110	60-120
262	60-101	60-111	60-121
370	60-102	60-112	60-122
456	60-103	60-113	60-123

NET EACH..... **65c**

**NEW IRON CORE PLASTIC IF'S**  
 60-130. 456 KC Input (16-6662)  
 60-131. 456 KC Output (16-6663)  
 NET EACH..... **97c**

### UNIVERSAL ADJUSTABLE FERROCART COILS



Permit exact duplication of defective RF, Ant., or Osc. coils. Inductance variable over wide range for tracking. Black crackle finish shield. Size, 1 1/2" x 1 1/2" x 2 1/2". Covers broadcast band. Shpg. wt., 12 oz.

**UNSHIELDED TYPE**

60-135. Antenna (14-1026)	EACH
60-136. RF Coil (14-1027)	} <b>82c</b>
60-137. Oscillator (14-1028)	

**SHIELDED TYPE**

60-140. Antenna (14-7413)	EACH
60-142. Oscillator (14-7560)	} <b>\$1.29</b>
60-141. RF Coil (14-7558)	

### COMPACT ANTENNA AND RF COILS



Compact high-impedance Litz-wound coils. Cover Broadcast band 545 to 1580 KC with 365 mmf. tuning condenser. Moisture-proofed coil forms, 3/4" diam., 1 1/4" long. Black crackle shields, 1 1/2" dia., 2" high. 8 oz.

**UNSHIELDED TYPE**

60-150. Ant. coil (14-1022)	} <b>29c</b>
60-151. RF coil (14-1023)	

**SHIELDED TYPE**

60-155. Ant. coil (14-1024)	} <b>38c</b>
60-156. RF coil (14-1025)	

### OSCILLATORS



Compact, oscillator coils particularly designed for use with Pentagrid tubes. Freq. coverage, 545-1580 KC. Exceptionally easy to mount. Each has bakelite base with lug terminals. Designed for use with 365 mmf. TRF variable condenser and a padder. Duo-lateral wound coils, 175 KC uses 900 mmf. padder; 456 KC uses 350 mmf. padder. Shields, 1 1/2" diam., 1 1/4" high. Wt., 1/2 lb.

**UNSHIELDED TYPE**

Stock No.	Type	Freq.	EACH
60-160	14-3732	175 KC	} <b>50c</b>
60-161	14-4034	456 KC	
60-170	14-1033*	456 KC	

\*Special oscillator coil for 6SA7.

**SHIELDED TYPE**

60-165	14-4242	175 KC	} <b>62c</b>
60-166	14-4243	456 KC	

### MEISSNER IF REPLACEMENT MANUAL



New IF Replacement Manual gives the Serviceman valuable service data never before published. Lists replacement transformers for 9,891 radios. Gives IF frequencies and special connection notes. 254 pages. Wt., 1 lb.  
 37-720. NET..... **25c**

### FERROCART IRON-CORE IF TRANSFORMERS



Incorporates a finely powdered iron-core with each particle insulated from the others, resulting in a higher "Q." Gain and selectivity are nearly twice that of air-core types. Ideal for replacements or original installations. Double-tuned from top; mica insulated. Black Crackle Shield, 1 1/4" square, 3 1/2" high. Wt. 1 lb.

IF Freq.	Input Stock No.	Interstage Stock No.	Output Stock No.
175 KC	60-180	60-185	60-189
456 KC	60-181	60-186	60-190
1500 KC	60-182*	60-182*	60-191

\*Input or interstage.  
 NET EACH..... **\$1.29**

### DUAL BAND COILS



Short-Wave and Broadcast coils for servicemen and experimenter. Shielded types have mica-dielectric trimmers mounted on shield. Use with 456-465 KC IF systems. For 365 mmf. TRF variable condensers. Wt., 1 oz.

**BROADCAST AND POLICE SHIELDED UNSHIELDED**

Stock No.	Type	Use	Type	Stock No.
60-200	14-7467	Ant.	14-7482	60-205
60-201	14-7471	RF	14-7483	60-206
60-202	14-7475	Osc.	14-7484	60-207

NET EACH... **\$1.74** | NET EACH... **\$1.21**

60-215. (22-5211) Dual Adjustable Padding Condenser. Each section 200-600 mmf. Correct padder for oscillator coils above, 1 lb. NET..... **35c**

60-216. (24-8265) 3-Gang, 2-Position Switch. For use with coils listed above. For making front-of-panel band changes. 1 lb. NET..... **97c**

### THREE BAND COILS



Similar to 2 band coils above, but have 3 band coverage. Trimmer condenser bank mounted on one side for ease of adjustment. Supplied in the most popular bands. Fully shielded for utmost stability.

### BROADCAST, POLICE & SW

For use with 450 mmf. condenser. Range: 170-555; 56-171; 162-57.7 meters. Wt., 1 lb.

60-220. Ant. (14-1012)	} <b>EACH</b>
60-221. RF. (14-1013)	

60-222. Oscillator (14-1014) } **\$2.26**  
 60-225. Padding Cond. Kit (22-5201) } **82c**  
 60-226. 3-Gang, 3-Pos. Switch. } **\$1.29**

### BEAT FREQUENCY OSCILLATORS



Especially designed units for use in incorporating beat-frequency oscillators in all-wave or short-wave receivers not already so equipped. Will provide "beat-note" tuning for locating weak signals, or for code reception. Can size, 1 1/4" square x 3/4". With pitch control knob on top. Mica-insulated trimmer. 1 lb.

60-230. 456 KC (17-6753) NETS	} <b>1.15</b>
60-231. 1500 KC (17-8175) EA.	

### REPLACEMENT PRIMARY WINDINGS



High-impedance replacement type primary windings. Permit easy, low-cost repairs. Antenna inductance, 1.7 mh., RF inductance is 3.5 mh. The dimension given below is the outside diameter of the coils with which these windings may be used. Average shpg. wt., 2 oz.

Stock No.	Inside Dia.	Type	Stock No.	Inside Dia.	Type
60-250	3/8"	Ant.	60-255	1 1/8"	Ant.
60-251	1/2"	RF	60-256	1 1/8"	RF
60-252	1/2"	Ant.	60-257	1 1/8"	RF
60-253	1/2"	RF	60-258	1 1/8"	Ant.
60-254	1/2"	Ant.	60-259	1 1/8"	Ant.

NET EACH..... **12c**

## POPULAR KNIGHT COILS

### STANDARD IF TRANSFORMERS



Standard high quality, high-gain double-tuned air-core IF transformers of superior design. Ideal for replacements and for set building. Lattice-wound primary and secondary tuned by mica-insulated compression type condensers from top of can. RMA color-coded leads. Metal cans measure 1 1/4" square and 3 1/2" high. Wt., 1 lb.

IF Freq.	Input Stock No.	Interstage Stock No.	Output Stock No.
175 KC	60-500	60-505	60-510
262 KC	60-501	60-506	60-511
456 KC	60-502	60-507	60-512

NET EACH..... **59c**

### CENTER-TAPPED OUTPUTS

60-520. 175 KC. NET  
 60-521. 456 KC. EACH..... **59c**

### KNIGHT IRON-CORE IF TRANSFORMERS

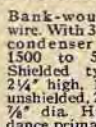


These compact units have high permeability iron-cores and low-loss windings to provide maximum sensitivity and selectivity. Double-tuned from top with mica insulated trimmers. Shield can measures 1 1/4" x 1 1/4" x 3 1/2". Mounting centers, 1 1/2". With RMA color-coded leads. Wt., 1 lb.

IF Freq.	Input Stock No.	Output No.
456 KC	60-530	60-531
1500 KC	60-535	60-536

NET EACH..... **98c**

### HIGH-IMPEDANCE LITZ COILS



Bank-wound Litz wire. With 370 mmf. condenser covers 1500 to 540 KC. Shielded type size, 2 1/4" high, 1 1/4" dia.; unshielded, 2 1/2" high, 7/8" dia. High-impedance primaries. 6 oz.

Type	Unshielded	Shielded
Ant.	60-550	60-555
RF	60-551/Ea. <b>26c</b>	60-556/Ea. <b>33c</b>

### 4-TUBE KITS

1 Ant. & 1 RF  
 60-560. Unshld.. **51c**  
 60-561. Shlded.. **65c**

### 5-TUBE KITS

1 Ant. & 2 RF  
 60-565. Unshld.. **76c**  
 60-566. Shlded.. **97c**

### HIGH-GAIN TRF COILS

Same as above, but with low-impedance primaries. High sensitivity. Shpg. wt., 6 oz.

Type	Unshielded	Shielded
Ant....	60-570	60-575
RF....	60-571/Ea. <b>28c</b>	60-576/Ea. <b>36c</b>

### COIL KITS

4-tube kit has 1 Ant. and 1 RF coil. 5-tube kit has 1 Ant. and 2 RF coils. With diagram.

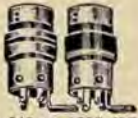
### 4-TUBE KITS

60-579. Unshielded Coil Kit. NET... **55c**  
 60-580. Shielded Coil Kit. NET... **71c**

### 5-TUBE KITS

60-583. Unshielded Coil Kit. NET... **82c**  
 60-584. Shielded Coil Kit. NET... **\$1.06**

### MIDGET SOLENOID COILS



Wound with enameled wire on special tubing 1 1/4" long and 7/8" in diameter. For replacement in midget TRF sets. Primaries are adjustable. Unshielded. Tapped coils permit amateur and police reception. For use with 370 mmf. condenser. 540 to 1750 KC. Used in modern kits. Av. wt., each coil, 8 oz.

60-590. RF Coil.	} <b>NET 15c</b>
60-591. Antenna Coil.	

60-592. Set of 2 Coils. NET..... **29c**  
 60-593. Tapped for 1500-4000 KC Band. 1 Ant. & 1 RF Coil. Shpg. wt., 1 lb. NET, per set of 2 Coils..... **44c**



# COILS · COIL FORMS · COIL KITS



## MILLER IRON CORE RF COILS

Small size RF coils, especially desirable for use in auto or other sets where a high-gain coil of small physical size is required. Shield-cans 1 1/4" dia. by 2" high. Tunes 540 to 1600 KC with 365 mmf. condenser. Wt., 8 oz.

- 60-750. Antenna Coil. } EACH 88c  
60-751. RF Coil. }  
60-760. Oscillator Coil (465 KC) NET..... 88c  
(Use 400 mmf. pad.)

## ANTENNA & RF COILS

High-gain fully shielded coils for use with screen grid tubes. High impedance primaries. RF coil has primary at 90° angle to provide uniform amplification throughout entire range. For 365 mmf. condenser. 1 1/2" dia., 3" high. Tune 540 to 1750 KC. Shpg. wt., 8 oz.



- 60-755. Antenna Coil. EACH 59c  
60-756. RF Coil. EACH 59c

## ADJUSTABLE PHONO-OSCILLATOR COIL

For use in building wireless record players. Top adjustment permits selection of clear broadcast-band frequency. Coil is impregnated and housed in metal can. 1 1/4" square x 3 1/2" high. With wiring diagram and full, easy-to-follow instructions. Shpg. wt., 12 oz.



- 60-640. NET..... 97c

## UNSHIELDED TYPE PRESELECTOR COILS

High-gain band-pass preselector coils for the broadcast band. Litz-wound. Range, 1500-540 KC. with 365 mmf. condenser and 1715-550 KC. with 410 mmf. Wt., 6 oz.



- 60-665. For 365 mmf. EACH..... 58c  
60-666. For 410 mmf. EACH..... 58c

## RADIO FREQUENCY CHOKES

### AIR CORE

Compact, silk-covered wire, RF chokes. High impedance, lattice-wound type. Thoroughly impregnated for trouble-free service. 6 oz.



Unshielded	Mhy.	Shielded	NET
60-600	2 1/2	60-620	
60-601*	2 1/2	60-621	29c
60-602	5 1/2	60-622	
60-603	8	60-623	34c
60-604	10	60-624	
60-605	16	60-625	42c
60-606	30	60-626	
60-607	60	60-627	46c
60-608	80	NET	
NET		NET	
EACH		EACH	

\*Polarized section winding construction.

## IRON CORE

New High-Q RF chokes; may be used in air-core of air-core chokes for higher efficiency. Reduce number of turns, thus lowering distributed capacity. Wt., 6 oz.



No.	Mhy.	NET	No.	Mhy.	NET
60-650	2 1/2	35c	60-654	30	48c
60-651	3 1/2	35c	60-655	60	54c
60-652	5 1/2	35c	60-656	80	61c
60-653	10	42c	60-657	125	79c

## MEISSNER COIL DOPE

High-grade RF lacquer for preserving coil efficiency. No loss in "Q" at any frequency. Quick-drying, 2 oz. can. Shpg. wt., 8 oz.



- 60-240. Tinncr. NET..... 32c  
60-241. Thinnr. NET..... 21c

For winding coils, see listing of magnet-wire and bakelite tubing on pages 169, 184, and 186.

## PLUG-IN TYPE COILS



Space-wound coils for use with 140 mmf. condensers. Forms are smooth bakelite, 1 1/4" diameter, and 2 1/4" high; have rim-top. Supplied with diagrams. Shipping wt., 2 lbs.

Bases fit standard tube sockets. Supplied with diagrams. Shipping wt., 2 lbs.

### 4 PRONGS — 2 WINDINGS

60-670. Short-Wave Coil Kit. 4 coils cover range from 9.5 to 217 meters. NET..... 98c

60-671. Broadcast Coil Kit. 2 coils cover range from 190 to 550 meters. NET..... 75c

### 6 PRONGS — 3 WINDINGS

60-675. Short-Wave Coil Kit. Primary, secondary, and tickler windings. Cover 9.5 to 200 meters. 4 coils in kit. NET..... \$1.52

60-676. Broadcast Coil Kit. 2 coils cover 190 to 550 meters. NET..... 98c

## LOW-LOSS RIBBED TYPE



1 1/4" diameter and 2 1/2" high; molded ribs for low-loss winding; rim handles. Uniform windings for use with 140 or 150 mmf. condenser. Bases fit standard 4-prong tube sockets. Discs in top indicate frequency. Wt., 2 lbs.

Discs in top indicate frequency. Wt., 2 lbs.

### 4 PRONGS — 2 WINDINGS

60-680. Short-Wave Coil Kit. Set of four coils cover 9.5 to 217 meters. Grid and plate windings. NET..... \$1.29

60-681. Broadcast Coil Kit. 2 coils for 190 to 550 meters. NET..... \$1.03

## BAKELITE COIL FORMS

### RIM TYPE



Low-loss forms with high dielectric strength. Molded rim handle for easy grip. 1 1/4" dia., 2 1/4" high. 4 oz.

Stock No.	Prongs	EACH
60-700	4	
60-701	5	11c
60-702	6	
60-703	7S	22c
60-704	8	

### SMALL RIBBED TYPE



Genuine molded bakelite; 1 1/4" diameter, 2 1/4" high. Have molded ribs for low-loss winding. Wt., 4 oz.

Stock No.	Prongs	NET EACH
60-710	4	
60-711	5	16c
60-712	6	

### LARGE RIBBED TYPE



Large ribbed coil forms of molded bakelite for winding low-loss coils. 1 1/4" diameter with 2 3/4" winding space. Molded rim at top. 4 oz.

Stock No.	Prongs	NET EACH
60-720	4	
60-721	5	21c
60-722	6	

60-723 7L. SPECIAL..... 7c

## MORRIS COIL WINDER



This Universal Coil Winding Machine will wind Honeycomb, Spiderweb, and Solenoid coils in different widths and diameters. Handles various sizes of wire to make coils that equal factory accuracy. Recorder with adjustable pointer accurately counts number of turns on coils. An ideal machine for the Experimenter. Amateur or small factory. Operates by hand power. Shpg. wt., 4 lbs. \$5.10  
83-520. NET PRICE..... \$5.10

## FREQUENCY MODULATION COILS BY CARRON DISCRIMINATORS



For Frequency Modulation reception. Operates at 4300 KC to offset images in FM band. Sizes: Standard, 1 1/4" x 1 1/4" x 2 1/4"; Deluxe, 1 7/8" x 2 1/2" x 2 1/2". Deluxe unit features air-tuned secondary, ceramic forms, DC choke for maximum stability. Shielded. 10 oz. \$1.15  
60-900. S414. Standard. NET.....  
60-901. S415. Deluxe. NET..... \$2.59

### I. F. COILS

Size, 1 1/4" x 1 1/4" x 2 1/4". Shielded. 4300 KC.  
60-905. S411. 1st IF. \$1.06  
60-906. S412. 2nd IF. EACH..  
60-907. S413. 3rd IF. EACH..



## REPLACEMENT MAJESTIC I. F. TRANSFORMER COILS

Will fit in original Majestic shield cans. Well-constructed. Moisture-proof. Less tuning condenser and can. Av. shpg. wt., 4 oz.

Stock No.	Majestic Part No.	Model	NET EACH
60-915	4428	15, 15B, 150	\$0.49
60-916*	4428	15, 15B, 150	1.94
60-917	8384	55	.44
60-918*	3908	20	1.62
60-919	6506	55	.65
60-920	6250	200	.65
60-921	6127	210	.65
60-922	7812	390, 310, 330	.56
60-923	10148	460	.44
60-924	10253	460	.65
60-925	1101	800	.56
60-925	8857	Primary coil used as RF plate coil in Models 390, 336, 331, 330, 461, 520, 85	.50

\*Complete assembly in shield can.

## REPLACEMENT COILS FOR FAIRBANKS-MORSE RADIOS

Coils supplied without shield cans or trimmers. Fit perfectly into old shields without drilling.

Stock No.	Original Part No.	Type	Used In Chassis	NET EACH
60-935	503-3	Osc.	7A, 9A	\$1.03
60-936	502-2	RF.	9A	
60-937	502-1	RF.	8A, 9A, 9A BAT	\$1.59
60-938	501-5	RF.	9A	
60-939	5978	RF.	72-73	
60-940	503-6	Osc.	12A	1.03

WE CAN SUPPLY exact duplicate or suitable replacement coils for any set. When ordering, state name, model and type of set, where coil is used, bands covered, condenser type, tubes used, etc. Cost depends on coil specifications. Send old coil for quotation or send deposit for replacement without delay.

## THREE CIRCUIT TUNER

Tuner has primary, secondary, and variable tickler windings. Designed for use with a 350 mmf. variable condenser. Bigtail connections assure positive contact at all times.



### TAPPED FOR SHORT WAVE

Both the three circuit tuner and the RF coil are tapped for short wave as well as standard broadcast reception. Shpg. wt., 1 lb. \$95c  
83-500. Tuner. NET.....  
83-501. RF coil to match Tuner. NET..... 37c



## TUBE-BASE TYPE SHORT-WAVE COILS

Kit of 4 coils covering 13 to 240 meters; wound on tube-base forms. Fit standard 4-prong tube sockets. Each coil marked with frequency. Designed for use with a 140 mmf. variable tuning condenser. Size, 1 1/4" dia., 1 1/4" H. Wt., 2 lbs. \$72c  
83-041. PER SET.....



# VARIABLE CONDENSERS TRIMMERS ACCESSORIES

## USL MIDGET CONDENSERS



Ideal for Short Wave use.  $\frac{1}{4}$ " shaft extends  $\frac{1}{4}$ " from front of condenser.  $\frac{1}{8}$ " bushing allows rigid mounting on panels up to  $\frac{1}{4}$ " thick. Single hole mount; fits  $\frac{3}{8}$ " hole. Size with plates open,  $1\frac{1}{4}$ " x  $1\frac{1}{2}$ ". Average shpg. wt., 8 oz.

Stock No.	Plates	Min. Mmf.	Max. Mmf.	NET
61-000	3	3	15	45c
61-001	5	4	30	48c
61-002	7	5	45	53c
61-003	9	6	60	57c
61-004	11	6	80	61c
61-005	14	7	100	65c
61-006	18	8	125	69c
61-007	20	8	140	71c

## DOUBLE-SPACED MIDGETS

61-015	10	6	35	71c
61-016	16	7	50	99c

## SHAFT FITTINGS

For Every Purpose



Split Bushing Coupling Extender

## COUPLINGS AND EXTENSION

Couplings are for extending shafts of volume controls, condensers, etc., or for ranging single units, even when shafts are not of same diameter. Extenders are for increasing or increasing shaft diameter and for extending shaft length.

Stock No.	Insulated	Brass	Kind	Size
60-350	60-360	Coupling	$\frac{1}{4}$ " x $\frac{1}{4}$ "	
60-351	60-361	Coupling	$\frac{1}{2}$ " x $\frac{3}{8}$ "	
60-352	60-362	Coupling	$\frac{1}{4}$ " x $\frac{1}{4}$ "	
60-355	60-365	Ext.	$\frac{1}{4}$ " to $\frac{1}{2}$ "	
60-356	60-366	Ext.	$\frac{1}{2}$ " to $\frac{3}{8}$ "	
60-357	60-367	Ext.	$\frac{1}{2}$ " to $\frac{3}{8}$ "	

10 For 100 For NET EACH 10c

## BRASS AND FIBRE SHAFTING

For shaft extensions or replacements.  $\frac{1}{4}$ " dia.  
 60-370. Brass, 6" long. EACH 10c  
 60-371. Brass, 12" long. EACH 21c  
 60-375. Fibre, 6" long. EACH 10c  
 60-376. Fibre, 12" long. EACH 21c

## SPLIT BUSHING

For increasing shaft diameter from  $\frac{1}{4}$ " to  $\frac{3}{8}$ ". Brass.  $\frac{1}{4}$ " I.D. O.D.  $\frac{1}{4}$ " long.  
 60-380. 10 For 45c. EACH 5c

## PANEL BEARING ASSEMBLY

For use with rigid or flexible couplings for mounting volume controls, etc., away from the panel. Use these panel bearings for reducing body capacity in UHF equipment. Made of brass. Take panels up to  $\frac{3}{8}$ " thick. For  $\frac{1}{4}$ " shafts. Supplied with 2 fibre insulating washers. Shpg. wt., 1lb.  
 60-385. Overall length 3". NET 19c  
 60-386. Overall length 6". NET 26c  
 60-390. Bearing only. NET 5c

## CONDENSER COUPLING

Bakelite insulated, flexible  $\frac{1}{4}$ " shaft coupling. Permits tandem operation of condensers, etc. 3 oz.  
 60-395. NET 27c  
 60-396. Ceramic Coupling. For  $\frac{1}{4}$ " shafts. NET 33c

## TRIMMER CONDENSERS

Ideal for balancing, trimming, neutralizing, antenna coupling. Has low-loss bakelite base, size  $\frac{3}{8}$ " x  $\frac{1}{2}$ " x  $\frac{1}{4}$ ". Compact full-plate type, with high-grade mica dielectric, 3-30 mmf. Mounts inside coil form, 3 oz.  
 60-330. NET EACH 7c  
 10 FOR 63c  
 60-331. Ceramic Type. Has a ceramic base instead of bakelite. Low-loss. Measures  $\frac{3}{8}$ " x  $\frac{1}{2}$ " x  $\frac{1}{4}$ ".  
 10 For 82c. NET EACH 9c

## KNIGHT COMPACT PRECISION CONDENSERS

### SINGLE TYPE

General-purpose compact single gang condensers. Low-loss bakelite insulation. Measure  $1\frac{1}{2}$ " x  $1\frac{1}{2}$ " x  $1\frac{1}{2}$ " deep.  $1\frac{1}{4}$ " x  $1\frac{1}{2}$ " shaft. Very rigid, sturdy construction throughout. Capacity increases clockwise. Supplied less trimmers. Wt., 1 lb.



61-050. 50 Mmf.	NET EACH
61-051. 100 Mmf.	
61-052. 140 Mmf.	
61-053. 240 Mmf.	\$1.08
61-054. 370 Mmf.	
61-055. 450 Mmf.	

### 370 MMF. GANG CONDENSERS

Easy-to-mount and compact condenser assemblies of superior design and construction. Trimmers mounted on both sides. Plates slotted for accurate alignment. Maximum capacity, 370 mmf. Increasing clockwise rotation.  $\frac{1}{4}$ " shaft extends  $1\frac{1}{2}$ ". End shields,  $2\frac{3}{8}$ " x  $1\frac{1}{2}$ ". Can be used as tuning condensers in set-builders kits. Wt., 2 lbs.  
 61-070. \$1.32 | 61-071. \$1.91  
 2 Gang... | 3 Gang...



### 450 MMF. GANG CONDENSERS

Capacity increases clockwise. Trimmers on both sides.  $\frac{1}{4}$ " shaft mounting. End shields,  $2\frac{3}{8}$ " x  $1\frac{1}{2}$ ". Shaft,  $1\frac{1}{2}$ " x  $\frac{1}{4}$ ". Wt., 2 lbs.  
 61-075. \$1.32 | 61-076. \$1.91  
 2 Gang... | 3 Gang...

### 140 MMF. GANG CONDENSERS

Ball bearing shaft. Easily removed trimmers mounted on both sides. End measures,  $1\frac{1}{2}$ " x  $2\frac{3}{8}$ ". Shaft,  $1\frac{1}{2}$ " x  $\frac{1}{4}$ ". Shpg. wt., 2 lbs.  
 61-080. \$1.26 | 61-081. \$1.85  
 2 Gang... | 3 Gang...

## COMPACT 370 MMF. 2 GANG CONDENSER

This compact midget type two gang condenser is well designed and ruggedly constructed. End plate measures  $1\frac{1}{8}$ " x  $1\frac{1}{8}$ "; overall length,  $2\frac{3}{4}$ "; shaft,  $\frac{1}{4}$ " x  $1\frac{1}{8}$ ". Has ball-bearing shaft trimmer, and threaded mounting holes. Shpg. wt., 2 lbs.  
 61-085. NET 98c



## MEISSNER CONDENSERS

These precision-built three-gang variable condensers are rigidly constructed to give the very highest quality performance possible. Counter-clockwise rotation increases the capacity. A average shipping weight is 3 lbs.

3-GANG CONDENSERS	NET
61-030. 365 Mmf. With trimmers.	\$2.59
61-031. 365 Mmf. Less trimmers.	2.47
61-035. 410 Mmf. Less trimmers.	2.47
61-036. 450 Mmf. Less trimmers.	2.50

### 4-GANG CONDENSERS

61-040. 365 Mmf. With trimmers. Clockwise rotation increases capacity. Shpg. wt.  $4\frac{1}{4}$  lbs. NET \$3.23

## DIAL DRIVE RUBBERS

Box of 25 assorted dial-drive friction-rubbers in eight different types. Used in such sets as RCA, Atwater Kent, Stewart Warner, etc. 1lb.  
 60-400. NET 84c



## NON-SLIP DIAL COMPOUND

A special powder for aiding repair of all belt and cord driven dials. Prevents slipping. Easy to apply. This compound will save you time and money in dial repair work. Shpg. wt., 1 lb.  
 60-403. NET 18c



## LOW-LOSS CERAMIC-INSULATED MIDGET CONDENSERS

Compact and efficient. For short wave sets or transmitters. Ceramic-insulated to prevent RF losses, high voltage breakdowns, and insure moisture-proofing. Non-corrosive plates. Rotating phosphor-bronze wiper contacts. Mounts in  $\frac{3}{8}$ " hole. Size with plates open,  $1\frac{1}{4}$ " x  $1\frac{1}{2}$ ". Brass shaft,  $\frac{1}{4}$ " diameter, extends  $1\frac{1}{4}$ " from back of panel. Shpg. wt., 10 oz.



Stock No.	Max. Mmf.	Min. Mmf.	No. of Plates	NET EACH
61-100	15	3	3	53c
61-102	25	3.5	4	56c
61-103	80	6	11	68c
61-104	100	6	14	68c
61-105	140	7	19	73c

### DOUBLE SPACED UNIT

61-110	35	6.5	10	73c
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## TRIMMER AND PADDER CONDENSERS

For HF, IF, and Oscillator circuits. First quality, mica-insulated, Isolatite base. Screw-driver adjustment. May be shunted by fixed mica condensers to increase maximum capacity. Solder lug type connectors. A is single type; B is double trimmer. Shpg. wt., 3 oz.



### TYPE A

No.	Mmf.	NET	No.	Mmf.	NET
60-300	25-100	15c	60-306	325-1000	36c
60-301	75-225	18c	60-307	400-1200	33c
60-302	125-350	21c	60-308	500-1400	38c
60-303	175-500	23c	60-309	600-1600	42c
60-304	225-650	26c	60-310	700-1800	45c
60-305	275-825	31c			

### TYPE B

60-315	20-90	15c	60-319	200-600	33c
60-316	50-180	18c	60-320	300-675	38c
60-317	100-300	21c	60-321	325-850	42c
60-318	170-410	31c			

## JFD DIAL BELT KITS

Kit of 25 contains one each of the most popular numbers. Kit of 100 includes 90 different types to fit over 900 sets. Each kit supplied with free steel cabinet, belt scale and JFD book of belt and ballast replacement data for over 1100 standard radio sets. Shpg. wts.: 60-455, 3 lbs.; 60-456, 5 lbs.  
 60-455. 25 Assorted. NET \$3.67  
 60-456. 100 Assorted Belts. NET \$13.23



## EXACT DUPLICATE BELTS

60-450. For Majestic No. 1-70, 71, 72... 9c  
 60-451. For All Philco Sets... 13c

We can supply any single belt for 15c each. Order by JFD number or send in the defective belt, with price and postage, for correct duplication.

## BRAIDED SILK DIAL CORD

Durable dial-cable of pure braided silk, with water-proof finish. A real necessity for the well-stocked shop.

Stock No.	Length	NET
60-441	5 ft.	\$0.22
60-442	25 ft.	.80

## PHOSPHOR BRONZE DIAL CABLE

42 strands—6 cables each of 7 strands of phosphor bronze wire, around linen-core; or braided from 16 strands of fine bronze wire woven together. Won't slip, stretch or chafe.

42 Stranded			16 Braided		
No.	NET	Length	No.	NET	
60-421	\$0.19	5 ft.	60-431	9c	
60-422	.70	25 ft.	60-432	26c	
60-423	1.25	50 ft.	60-433	41c	
60-424	2.25	100 ft.	60-434	65c	



# TUNING DIALS • PILOT LIGHTS



## GENUINE G.E. MAZDA PILOT LIGHT BULBS

General Electric Mazda pilot light bulbs. Famous for quality. These lamps are made to operate on the voltages indicated. Excellent for all pilot lamp requirements. Will give long dependable service. Buy standard packages of 10 and save money.

Stock No.	Type	Volts	Amps	Each	10 for
52-305	40	6-8	.15	9c	\$0.54
52-306	41	2.5	.50	9c	.54
52-307	42	3.2	.35	12c	.71
52-308	43*	2.5	.50	9c	.54
52-309	44*	6-8	.25	9c	.54
52-310	45*	3.2	.35	12c	.71
52-311	46	6-8	.25	9c	.54
52-312	47*	2.0	.06	11c	.88
52-313	48	2.0	.06	15c	.88
52-314	49*	6-8	.20	10c	.59
52-315	50†	6-8	1.0	7c	.41
52-316	51†	6-8	.40	7c	.41
52-320	55†				

\*Indicates miniature bayonet base.  
†Indicates small round bulb.

511. A special 10 watt bulb designed for the RCA-VICTOR R-32. For use on 115 volts. 52-348. 10 For \$1.35. EACH..... 15c



## PILOT LIGHT SOCKETS

Miniature base pilot light sockets with lug connection mountings. Both bayonet and screw types. For all radio requirements. Wt., 4 oz.  
52-400. Type A. U-type clip-on mounting.  
52-401. Type B. Spade-bracket mounting.  
52-402. Type C. Straight-clip-on mounting.  
52-403. Type D. Bayonet Shell Type.  
52-404. Type D. With U-style clip as on A. 10 For 45c. 100 For \$4.05. NET EACH..... 5c

## PILOT LIGHT BRACKETS, JEWELS, DIAL BELTS



**1" JEWEL BRACKET**  
For transmitters, test equipment, etc. Standard bulb replaceable from front. 1 1/2" long; requires 1 inch mounting hole. Less bulb. Shpg. wt., 5 oz.

Color	Bayonet	Miniature	Candelabra*
Red	52-420	52-430	52-440
Green	52-421	52-431	52-441
Amber	52-422	52-432	52-442

\*For 115 volt service. NET EACH..... 54c

52-349. 115 V. bulb for candelabra. Ea. 15c  
1/2" TYPE—MINIATURE SCREW BRACKET  
52-450. Red. 52-452. Amber. NET EACH..... 24c  
52-451. Green. NET EACH..... 24c

## UNDERWRITERS' APPROVED TYPE



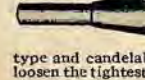
115 volt pilot light assembly. Porcelain and metal construction. 1" hole mounting. Bulb removable from front. Chrome-finished jewel holder. Without bulb. Shpg. wt., 5 oz.  
52-460. Red. 52-462. Amber. NET EACH..... 73c  
52-461. Green. NET EACH..... 73c  
52-349. 115 V. Mazda Bulb..... 15c

## 1/2" AV 19 AVIATION TYPE



Mounts in 3/4" hole in panels up to 3/4" thick. Has insulating washers. Uses any miniature tubular bayonet base lamp. Lamp replaceable from the front. Glassless jewel; chrome-finished holder. Less bulb, 2 1/4 in. long, 6 oz.  
52-465. Red. 52-467. White. NET EACH..... 84c  
52-466. Green. NET EACH..... 84c

## BULB REMOVER



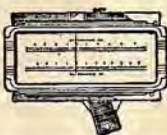
52-550. Rubber tool for removing or installing standard type and candelabra pilot lights. Will loosen the tightest bulb. Wt., 8 oz. NET 24c

## VALUES IN MODERN DIALS

### KNIGHT-CROWE SLIDE-RULE



Beautiful Cro-Art Slide-Rule Dial. Has black figures on bronze background. Scales, 550 to 1700 KC and universal 0-100. For 180° rotation. Direct drive. Has a 1/4" diameter shaft on the pulley hub. Requires 1 1/4" x 3/4" hole. With bronze escutcheon, crystal and pilot light socket. Wt., 1 lb. 55-300. NET..... \$1.08



### 6 3/4" SLIDE-RULE DIAL

Attractive new dial, 6 3/4" x 3 3/4". Universal scale calibrated 55-150, 150-55, 0-100, 100-0, on gold face. 12 to 1 ratio drive. With escutcheon and pilot light socket. Fits either 3/8" or 1/2" shafts. Requires panel opening 2 3/8" x 5 3/8". For SW or standard broadcast. Less pilot light bulb and knob. Shpg. wt., 2 lbs. 55-301. NET..... \$2.29



### MIDGET SLIDE-RULE

A beautiful and compact new slide-rule dial. Measures only 4 3/4" x 2 1/4" overall. Panel opening required, 1 1/2" x 3 1/4". Has universal scale calibrated 55-150, 150-55. Black letters on beige background. 8 to 1 drive ratio. Fits 3/8" or 1/2" tuning shaft. Escutcheon and 2 light sockets are included. Pilot light bulbs and tuning knob are not supplied. Shpg. wt., 1 lb. 55-302. NET..... \$1.88

## 5-INCH ULTRA-MODERN

### RADIO DIAL

An airplane-type dial with black figures on gold foil. Scale, 4 1/4" x 3 1/4". Calibrated 0-100; 100 to 0; 0 to 10; 10 to 0. Ideal for general experimental use. 1 to 1 in 360°. Bronze escutcheon. Positive cord drive with take-up spring. For 3/8" or 1/2" shaft. With dial light socket. Shpg. wt., 10 oz. 55-303. NET..... 95c



### 9 1/4" SLIDE-RULE DIAL

Slide-Rule dial, 9 1/4" long by 3 3/8" wide. Requires 4 1/2" x 8 1/2" opening. Universal scale calibrated 55-150, 100-0, 150-55. Has bushing to fit 3/8" or 1/2" shaft. 20 to 1 drive ratio. With escutcheon and 2 pilot light sockets. Wt., 2 lbs. 55-304. NET..... \$3.06



### 2 3/8" INCH AIRPLANE DIAL

A friction-drive dial with a tuning ratio of 4 to 1. Dual translucent dial calibrated with a universal scale, 0-100 and 100-0. With escutcheon, glass bezel, and pilot light socket. Fits 3/8" or 1/2" shafts. Shipping wt., 1 lb. 55-310. NET..... 85c



55-311. 3 3/8" AIRPLANE DIAL. A positive-action, smooth-tuning dial. Has dual translucent universal scale with glass bezel. Tuning ratio, 6 to 1. Calibrated 0-100 and 100-0. Has bushing for 3/8" or 1/2" shafts. Pilot light socket and escutcheon. Shpg. wt., 1 lb. NET..... \$1.09

55-312. 4" AIRPLANE DIAL. Similar to above but larger in size. Tuning ratio 9-1. Has two pilot light sockets. 2 lbs. NET..... \$1.29

55-313. 5 1/2" AIRPLANE DIAL. Like above. Ideal for console sets. Has 2 light sockets. Ratio, 11-1. Wt., 2 lbs. NET..... \$1.71

## KURZ-KASCH VERNIER DIALS

Always popular with builders and experimenters. Made of black bakelite. Universal scale reads 0-100-0. Smooth positive friction-drive action; no backlash. Fit 1/4" shaft. 4" dial has 13 to 1 ratio, for extra critical tuning. 3" size has 9 to 1 ratio. Shpg. wt., 1 lb. 55-320. 4" Diameter. NET..... 79c  
55-321. 3" Diameter. NET..... 75c



## MOLDED DIALS

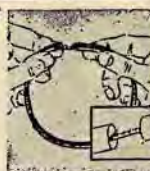
Attractive black bakelite dials with large calibrations in white. Easy-grip 2" knob on 3" dials; 2 3/8" knob on 4" dials. Calibrations carried to the outer edge of dial to permit extremely accurate settings. All types listed below fit 1/4" shafts. Shpg. wt., 8 oz.

3 INCH DIALS	4 INCH DIALS
55-330. 0-100.	55-332. 0-100.
55-331. 100-0.	55-333. 100-0.
NET EACH..... 23c	NET EACH..... 26c



## WALSCO UNIBELT

Adjustable dial belt to fit any dial. Sizes listed will cover all popular replacements. Installed quickly without taking dial apart—just cut to size and push together. Will not stretch or slip. Shpg. wt., 8 oz. 60-470. Popular Unibelt Kit. Contains 10 belts assorted, most used sizes. NET..... \$2.32



60-471. 6 3/4 to 10" size. NET EA. 24c  
60-472. 10 1/2 to 13 3/8" size. NET EA. 24c  
60-473. 14 3/8 to 17 3/8" size. NET EA. 26c  
60-474. 19 3/8 to 22 3/4" size. NET EA. 26c

## ICA MINIATURE DIALS

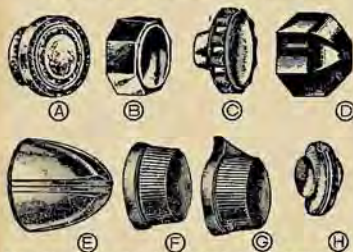
Beautiful chrome silver dials with black etched numerals. For instruments, amplifiers, receivers, etc. Equipped with finger grip black knob. Only 1 3/8" diameter. Fit 1/4" shaft. Ranges from 0-10 over 180 or 270 degrees. Shpg. wt., 3/8 lb. 55-340. 0-10 in 180°. 55-341. 0-10 in 270°. EACH..... 44c





# KNOBBS AND SWITCHES

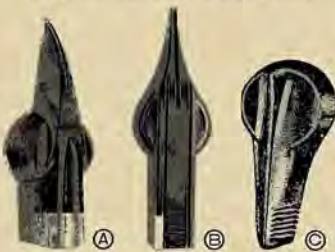
## POPULAR MOLDED KNOBS



Durable molded knobs. Fit 1/4" shafts. Equipped with set screws. Type "G" has pointer. Types B, D, F, and H are adaptable as midjet set knob replacements. \*For knurled shaft. 2 oz.

Stock No.	Fig.	Diam.	Color	NET Each	10 FOR
55-010	A	1"	Walnut		
55-011	A	1 1/4"	Walnut		
55-015	B	1"	Walnut	7c	56c
55-016	B	1 1/4"	Walnut		
55-020	D	1"	Walnut		
55-025	E	1 1/4"	Black		
55-026*	E	1 1/4"	Black	6c	48c
55-027	E	1 1/4"	Walnut		
55-028*	E	1 1/4"	Walnut		
55-029	E	1 1/4"	Ivory		
55-030*	E	1 1/4"	Ivory	7c	56c
55-035	F	1 1/4"	Black		
55-036	F	1 1/4"	Walnut	6c	48c
55-040	F	1 1/4"	Black		
55-041	G	1 1/4"	Walnut	6c	48c
55-045	H	1 1/4"	Black		
55-046	H	1 1/4"	Ivory		
55-047	H	1 1/4"	Red	9c	72c
55-050	C	1"	Black		
55-051	C	1 1/4"	Ivory		
55-052	C	1 1/4"	Red	6c	48c

## STREAMLINED BAR KNOBS



Modern black or red knobs for test instruments, amplifiers, etc. Fit 1/4" shafts. Recessed set screws. Average shipping weight, 4 oz.

Stock No.	Fig.	Size	Color	NET Each	10 FOR
55-070	A	2"	Black	7c	56c
55-071	A	2"	Red	8c	64c
55-072	A	1 1/4"	Black	6c	48c
55-073	A	1 1/4"	Red	7c	56c
55-074	B	1 1/4"	Black	5c	40c
55-075	B	2 1/4"	Black	5c	56c
55-076	C	1 1/4"	Black	7c	56c
55-077	C	1 1/4"	Red	8c	64c

## POINTER KNOB

Black 1 1/4" bakelite knob. Arrow engraved on face. Fits 1/4" shaft. For general and commercial use. Brass insert with set screw.

55-150. 10 FOR 72c. EACH..... 8c



## 2 SPEED PLANETARY DRIVE

Auxiliary speed reducer. Mounts on condenser back of panel or on dial knob shaft. Ratios 5 to 1 and 1 to 1. Fits 1/4" shaft. 1/2 lb.

55-180. NET..... \$1.32

Knobs for Above. Set of 2. Large knob fits 7/8" high-speed shaft, small knob fits 1/2" low-speed shaft. Shpg. wt., 4 oz.

55-186. Black. PER SET..... 12c

## GEAR REDUCTION UNIT

6 to 1 ratio. For condenser not equipped with reduction gear. Has anti-backlash spring. 1/4" drive shaft. Set screw holds condenser shaft firmly. For test instruments and short wave sets. 10 oz.

55-190. For 1/4" dia. shaft. } EACH 44c  
55-191. For 3/8" dia. shaft. }



## DIAL PLATES WITH KNOBS

Professional dial plates in silver-grain satin. Calibrations are in black etching on heavy metal background plates. In three sizes, with 0-100 calibrations. Bakelite fluted-finger-grip pointer knob fits 1/4" shafts. 325° plates ideal for volume controls.



Degrees	2"	3 1/4"	4"
180°	55-100	55-105	55-110
325°	55-101	55-106	55-111
NET EACH	60c	89c	\$1.03

## DIAL PLATES ONLY (LESS KNOBS)

180 DEGREES			325 DEGREES		
No.	Dia.	NET	No.	Dia.	NET
55-120	2"	32c	55-128	2"	32c
55-121	3 1/4"	54c	55-129	3 1/4"	54c
55-122	4"	62c	55-130	4"	62c

## FLUTED KNOBS

Molded of high quality black bakelite; for 1/4" shaft. Has an attractive, professional appearance. Fluted rim gives positive grip.

Fig. A. Pointer Type  
55-085. 1 1/4" NET. 7c  
55-086. 1 1/2" NET. 35c  
55-087. 2 1/4" NET. 40c

Fig. B. Flange Type  
55-090. 2 1/4" NET. 35c  
55-091. 3" NET. 40c

Fig. A. Less Pointer  
55-095. 1 1/4" NET. 22c  
55-096. 1 1/2" NET. 27c  
55-097. 2 1/4" NET. 35c



## DELUXE DIAL PLATES

Single hole mounting. Beautiful black and red color combination on light metal background makes polished markings stand out. Size: 1 1/4" x 2 1/4". Mounting hole, 3/8" dia. Wt., 2 oz.



- 55-160. Treble
- 55-161. Bass
- 55-162. Phono 1
- 55-163. Bass Treble
- 55-164. Microphone 1
- 55-165. Microphone 2
- 55-166. Microphone 3
- 55-167. Microphone 4
- 55-168. Phono 2
- 55-169. Dual-Phono
- 55-170. Master Gain
- 55-171. Microphone-Phono
- 55-172. Plain 0-10

NET EACH

12c

10 for

\$1.08

## HANDY GENERAL-PURPOSE SWITCHES

### SWITCH LOCK



Single-pole, single-throw, 90-degree turn switch lock. Key withdraws only in locked position when contact is broken. Heavily-plated, 5/8 inch body diameter, 27 thread. With two keys. For automobile radios, amplifiers, portable equipment, etc. Shpg. wt., 8 oz.

34-185. NET..... 54c

### G.E. MERCURY SWITCH



Low-cost mercury switch for laboratories, builders, experimenters, etc. Provides quick break; low resistance. Mounts horizontally; 15° movement for positive operation. 7" leads. 1 1/2 x 3/4" 4 oz.

34-196. NET..... 25c

### TEST BUZZER BUTTON



Pearl button is held in 3/4 inch hole by spring clasps. Wt., 4 oz.

55-195. 10 FOR 90c. EACH..... 10c

### BAKELITE KNIFE



For panel or base mounting. Heavily plated blades and contacts.

- 34-800. SPST 1/2" x 1 1/4" 13c
- 34-801. SPDT 1/2" x 1 1/4" 19c
- 34-802. DPST 1/2" x 1 1/4" 26c
- 34-803. DPDT 1" x 1 1/4" 29c

### PORCELAIN KNIFE



Compact midjet knife switches. Glazed porcelain base; screw terminals.

- 34-820. SPST 1" x 2 1/4" 10c
- 34-821. SPDT 1" x 2 1/4" 12c
- 34-822. DPST 1 1/2" x 1 1/4" 18c
- 34-823. DPDT 1 1/2" x 2 1/4" 21c
- 34-824. 3 PDPT 2 1/4" x 2 1/4" 54c

### H & H ROTARY SWITCH

Shallow canopy type. Plated 3/8" stem. Wire leads. Rated 6 amp. at 125 volts Wt., 6 oz.

34-147. 10 FOR \$1.62. NET EACH..... 18c



## CENTRALAB SPECIAL-PURPOSE SWITCHES

### LEVER-ACTION



Low-capacity silver-plated contact points. 1 1/4 x 1 1/2 x 1/2". \*Spring action return from either side.

Positive spring action to mid-position from one side only and spring return. Others, positive action in all positions. Use plates listed below. Shpg. wts. 4 oz.

Poles	Positions	Shorting Types	Non-Shorting
2	3	1452	1454
2	3*	1453	1455
2	3†	1466	1467
4	2	1459	1458
4	2*	1456	1457

34-020. Specify Type. EACH..... 59c

### AC SNAP SWITCHES

Lever action, use plates below.

- 34-040. SPST. 1468. NET 35c
- 34-041. DPST. 1469. NET 44c

### PLATES FOR ABOVE

- 34-050. P1755 1 Switch... 12c
- 34-051. P1756 2 Switches 18c
- 34-052. P1757 3 Switches 21c
- 34-053. P1758 4 Switches 26c
- 34-054. P1759 5 Switches 29c

### ROTARY & TONE



Small rotary switches in bakelite cases. Underwriters' approved 1449 has three positions: one for AC line switch operates off-on; second for tone control operates off-on-off; 1465 has AC snap-switch 8 oz.

Stock No.	Mfr. No.	Type	NET EA
34-070	1447	SPST	29c
34-071	1448	DPST	35c
34-072	1449	Tone Type	35c
34-073	1465	SP 4 Pos.	59c

### TONE SWITCHES

Shorting-type contacts. Rating, 1 amp. at 6 volts. Shaft, 1/4" x 2 1/4".

- 34-080. Type 1460. SPDT or SPST. 1 x 1 1/4".
- 34-081. Type 1461. SPST. 1 1/2 x 1 1/4". EACH... 29c
- 34-082. Type 1462. DPDT. 1 x 1 1/2". NET... 35c

### 1450 SWITCH

Use as SPST, SP-DT, DPST, DP-DT, 3PST, 3PDT, 4PST, 4PDT. Non-shorting type, 3/8" deep. 2 1/4" shaft. With bar knob.





# Quality Radio SWITCHES for all Purposes

## H&H TOGGLE SWITCHES



Underwriters' Approved; rated at 3 amps.—125 V., 1 amp.—250 V. Oxidized black finish. Threaded shank, 1/2" dia. With two locknuts. Wt., 6 oz.

SINGLE POLE SINGLE THROW (2 LUGS)			
No.	Shank	EACH	FOR
34-100	1/2 in.	18c	\$1.62
34-101	3/8 in.	20c	1.80
34-102	1 in.	21c	1.89

SINGLE POLE DOUBLE THROW (3 LUGS)			
34-110	3/8 in.	22c	\$1.98
34-111	1/2 in.	24c	2.16
34-112	1 in.	25c	2.25

DOUBLE POLE SINGLE THROW (4 LUGS)			
34-120	3/8 in.	35c	\$3.15
34-121	1/2 in.	37c	3.33
34-122	1 in.	38c	3.42

DOUBLE POLE DOUBLE THROW (6 LUGS)			
34-130	3/8 in.	37c	\$3.33
34-131	1/2 in.	39c	3.51
34-132	1 in.	40c	3.60

## SWITCH PLATES

**34-150.** Fig. A. An "on-off" plate for any toggle switch. Has 1/2" center hole; brown finish. **EACH..... 2c**  
**10 FOR..... 12c**

**34-151.** Fig. B. This plate is finished in etched metal with black background. Dia., 1 1/4". 1/2" center hole. **EACH..... 9c**

## H&H ROTARY SWITCHES



Positive contact rotary type power switches rated at 3 amps.—125 V., 1 amp.—250 V. Steel-cased. Shaft is 7/8" long, 1/4" diameter. 3/8" dia. threaded shank for panel nut. With locknuts. Underwriters' Approved. Wt., 6 oz.

<b>34-140.</b> SPST 1/2" shank. 10 for \$1.62. <b>EACH 18c</b>
<b>34-141.</b> SPST 3/4" shank. 10 for \$1.62. <b>EACH 18c</b>
<b>34-142.</b> SPDT 3/4" shank. 10 for \$1.98. <b>EACH 22c</b>
<b>34-143.</b> OPST 1/2" shank. 10 for \$3.15. <b>EACH 35c</b>
<b>34-144.</b> OPOT 3/4" shank. 10 for \$3.42. <b>EACH 38c</b>

## PUSH-BUTTON STYLE



SPST metal plunger type. Press plunger to close circuit; press again to open. Will handle 6 amps. at 125 V. Threaded 1/2" dia. shank 1/2" long with locknuts. Wt., 8 oz.

<b>34-160.</b> EACH..... <b>27c</b>
<b>10 FOR..... \$2.43</b>
<b>BAKELITE BUTTON TYPE</b>
As above, but with snap-on bakelite button in red or black.
<b>34-161.</b> Red. <b>EACH..... 35c</b>
<b>34-162.</b> Black. <b>EACH..... 35c</b>
<b>10 FOR..... \$3.15</b>

## ROTARY SWITCHES

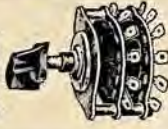


Compact switch used in test equipment, etc. Nickel-plated type with pointer knob. Mount 1/4" hole. Of fine quality. Wt., 6 oz.

No.	Points	EACH
34-170	3	<b>31c</b>
34-171	5	
34-172	7	
34-173	9	<b>45c</b>
34-174	12	

## MALLORY GANG SWITCHES

For test equipment and general radio and laboratory work. Have 1 fixed and 1 adjustable stop, laminated bakelite insulation, and phosphor-bronze springs. 2 gang switches are spaced 1/2"; 3 and 4 are spaced 1". Notched 2" shaft is easily shortened. Require 3/4" mounting hole. With bar knob, but less the dial plate. Use 1 1/4" base diameter switch plates listed below. Wt., 12 oz.



Shorting		Non-Shorting		Gangs	Poles	Positions	NET EACH
Stock No.	Type	Stock No.	Type				
34-200	1216L	34-250	1316L	1	1	1-6	\$0.59
34-201	1211L*	34-251	1311L*	1	1	1-11	.68
34-202	1215L	34-252	1315L	1	2	1-5	.73
34-203	1213L	34-253	1313L	1	3	1-2	.85
34-204	1212L	34-254	1312L	1	4	1-2	.85
34-205	1226L	34-255	1326L	2	2	1-6	\$0.94
34-206	1221L	34-256	1321L	2	2	1-11	1.03
34-207	1225L	34-257	1325L	2	4	1-5	1.18
34-208	1223L	34-258	1323L	2	6	1-3	1.33
34-209	1222L	34-259	1322L	2	8	1-2	1.32
34-210	1236L	34-260	1336L	3	3	1-6	\$1.29
34-211	1231L*	34-261	1331L*	3	3	1-11	1.38
34-212	1235L	34-262	1335L	3	6	1-5	1.47
34-213	1246L	34-263	1346L	4	4	1-6	\$1.62
34-214	1241L	34-264	1341L	4	4	1-11	1.76
34-215	1245L	34-265	1345L	4	8	1-5	2.06

\*Have no third or "off" position with all circuits open. All others have.  
**34-420.** Universal Mounting Bracket RB254 for all above. **NET 12c**

## MALLORY SINGLE GANG SWITCHES

The Mallory types 3100J and 3200J series of switches. Designed for short-wave, tone control, and tap switch requirements; non-shorting types for test equipment service. Have 2" notched shafts; silver contacts; 3/8" threaded bushing. With bar knob and mounting nut. All 1 1/4" base dia. types have adjustable stops. Wt., 8 oz.



Shorting		Non-Shorting		Poles	Positions	Base Dia.	NET EACH
Stock No.	Type	Stock No.	Type				
34-300	3115J	34-350	3215J	1	1-5	1 1/4"	44c
34-301	3112J	34-351	3212J	1	1-12	1 1/4"	
34-302	3122J	34-352	3222J	2	1-2	1 1/4"	
34-303	3123J	34-353	3223J	2	1-3	1 1/4"	53c
34-304	3126J	34-354	3226J	2	1-6	1 1/4"	
34-305	3134J	34-355	3234J	3	1-4	1 1/4"	53c
34-306	3142J	34-356	3242J	3	1-2	1 1/4"	
34-307	3143J	34-357	3243J	4	1-3	1 1/4"	53c
34-308	3117J*	34-358	3217J*	1	1-17	1 1/4"	
34-309	3129J	34-359	3229J	2	1-9	1 1/4"	79c
34-310	3136J	34-360	3236J	3	1-6	1 1/4"	
34-311	3163J	34-361	3263J	3	1-3	1 1/4"	88c

## MALLORY SWITCH PLATES FOR ABOVE

For switch, tone or volume control. Easy-to-read figures on black. 7/8" center hole. For 1 1/4" and 1 1/2" base diam. switches. Spacing between numerals: 1 1/2" = 30"; 1 1/4" = 20". Specify marking and stock No.

Marking	Marking	Marking	Marking
*0 to 100	1 to 6	1 to 12	Off-1 to 7
1 to 2	1 to 7	1 to 17	Off-1 to 8
1 to 3	1 to 8	Off-1 to 3	Off-1 to 9
1 to 4	1 to 9	Off-1 to 4	Off-1 to 10
1 to 5	1 to 10	Off-1 to 5	Volume
	1 to 11	Off-1 to 6	

**34-600.** For 1 1/4" Switch Base Diameter (except 1 to 17).  
**34-650.** For 1 1/2" Switch Base Diameter (except 1 to 2).  
 (\*Net price, 12c.) ALL OTHERS, EACH..... **9c**

## MALLORY NO. 10 MIDGET JACK SWITCH



A handy, compact single-pole, single-throw jack switch with "on-off" plate, black bakelite knob, and metal pointer. Mounts in single 7/8" hole on panels up to 1/2" thick. Wt., 6 oz.

**34-430.** NET..... **29c**

## MALLORY LONG FRAME JACKS

These jacks extend 3/4" behind panel. Provide even tension and wiping action. Have heavy contacts. Make use of bakelite separators ground to uniform thickness. 8 oz.

<b>34-440.</b> No. 1. Open Circuit. <b>NET..... 29c</b>
<b>34-441.</b> No. 2. Circuit Closing
<b>34-442.</b> No. 2A. Two Circuit. <b>NET EACH..... 35c</b>

## MALLORY JUNIOR JACK SWITCHES

Constructed of selected metals. Has uniform tension and wiping action contacts. Furnished with black knob, pointer, and hardware. "On-Off" plate with two-position switches only. Mounts in 7/8" hole on panels up to 1/2" thick. Ideal for use where depth behind panel is limited. Extends only 1 1/4" back of panel. Average shpg. wt., 10 oz.

### 2 POSITION SWITCHES

Stock No.	Type	Mfr's No.	NET
34-400	SPST	720	41c
34-401	SPDT	730	50c
34-402	DPST	740	56c
34-403	DPDT	760	73c

### 3 POSITION SWITCHES (Center Position "Off")

34-410	SPDT	732	\$0.50
34-411	DPDT	762	.71
34-412	3PDT	763	.91
34-413	4PDT	764	1.15

## CUTLER-HAMMER

### TOGGLE SWITCHES



Underwriters' Approved. 1 1/2" diameter threaded shank; bakelite base. One-hole mount; solder lugs. Heavy nickel-plated finish. Shank is 1/2" long. All rated at 125 volts. Wt., 6 oz.

<b>34-500.</b> SPST 6 A. 10 for \$1.62. <b>EACH..... 18c</b>
<b>34-501.</b> SPDT 3 A. 10 for \$1.98. <b>EACH..... 22c</b>
<b>34-502.</b> DPST 6 A. 10 for \$3.15. <b>EACH..... 35c</b>
<b>34-503.</b> DPDT 6 A. 10 for \$3.33. <b>EACH..... 37c</b>

### MIDGET TYPE

Low-cost SPST type switch. 1/2" bushing slotted to take "on-off" plate listed below. Mounts in 7/8" hole in panels up to 1/4" thick. 3 amps. 125 V. AC.



**34-510.** 10 for \$1.26. **EACH..... 14c**

### "ON-OFF" PLATES

Nickel-plated "on-off" plates for midget switches. Clearly etched.

**34-515.** 10 for 12c. **NET EACH..... 2c**

### POWER TYPE

SPST power switch. 6 c. 125 V. AC. Bakelite housing. One hole mounting. 1/2" bushing. End screw terminals. Nickel finish. 8 oz.



<b>34-520.</b> 10 Amps. 10 for \$3.42. <b>EACH..... 38c</b>
<b>34-521.</b> 15 Amps. 10 for \$5.85. <b>EACH..... 65c</b>

### 3-POSITION TYPE

SPDT switch with off position in center. Rated at 3 A., 125 V. A.C. 1 1/2" bushing. Screw terminals. One hole mounting. A fine quality switch. 6 oz.



<b>34-522.</b> 10 for \$1.89. <b>NET EACH..... 21c</b>
<b>34-523.</b> 3PDT Ctr. Off Position. 125 V. 15 A. Lug terminals. <b>NET..... 75c</b>

## FEDERAL ANTI-CAPACITY SWITCHES

Springs and contacts of silver-plated phosphor bronze. 2 1/2x5x3/4" Cam roller. Wt., 8 oz.



<b>34-481.</b> DPDT..... <b>\$1.65</b>
<b>34-482.</b> 4 PDT..... <b>1.90</b>

## PUSH-BUTTON TYPES

Have nickel-silver springs and bakelite button. 7/8" hole mounting. Locking type makes contact with knob pushed in. Non-locking type opens when released. 1/4" panel. Wt., 8 oz.



Locking Type	Type	Non-Locking	NET EA.
34-450	SPST	34-460	53c
34-451	DPST	34-461	70c
34-452	SPDT	34-462	59c
34-453	DPDT	34-463	88c

### FEED-THRU TOGGLE SWITCH

**34-550.** Underwriters' Approved. Bakelite construction. 6 amp., 125 V. 12 oz.



**10 for \$1.35. EACH..... 15c**



# METER CABINETS AND CHASSIS



## ICA HINGED COVER STEEL CABINETS

A new ultra-modern streamlined cabinet. Beautifully designed to meet the most discriminating taste in this type of equipment. The cabinet has rounded corners with specially designed ventilating louvres on sides allowing free circulation of air and dissipation of heat. The front panel is removable and fits flush with front of cabinet. The panel door provided on top of case hangs on a full-sized piano hinge. Modern grille-type ventilators are provided on the back panel which also has an opening on the

bottom to allow for leads, cable connections, etc. Bottom has four embossed feet. Cabinets are available in 4 convenient sizes. Finished in a beautiful grey ripple enamel. The deluxe cabinet is like the standard model except for bright trim. Especially designed chassis bases to fit the I C A hinged cover and sloping panel cabinets are listed at right. These chassis bases are of one piece metal construction with an attractive black ripple finish. All chassis are drilled for bottom plates.

Deluxe					Standard				
Stock No.	NET	Size H. W. D.	Panel Size	Shpg. Wt.	Stock No.	NET	Size H. W. D.	Panel Size	Shpg. Wt.
86-300	\$3.38	8x10x8"	8x8"	9 lbs.	86-310	\$2.26	8x10x8"	8x8"	10 lbs.
86-301	3.38	8x12x8"	8x10"	10 lbs.	86-311	2.44	8x12x8"	8x10"	11 lbs.
86-302	4.32	8x14x8"	8x12"	11 lbs.	86-312	3.09	8x14x8"	8x12"	11 lbs.
86-303	6.17	12x20x12"	12x18"	17 lbs.	86-313	5.59	12x20x12"	12x18"	17 lbs.

## ICA DELUXE SLOPING PANEL CABINETS

The top corners of this all-purpose cabinet are rounded and trimmed with red striped metal. Sides have "Air-Gate" type ventilators. The rear has louvred ventilators with openings at the bottom. Eye-level controls can be installed. Front panel is removable so that the chassis can be attached to it and used as one unit. Cabinets and chassis are made of heavy-gauge metal. In four sizes with chassis to fit each unit as listed below. Finished in grey ripple. Chassis is black ripple finished, folded over on bottom and drilled to take bottom plates. Cabinets are supplied less chassis bases but with bottom plates.



Stock No.	Size H. W. D.	Shpg. Wt.	NET EACH
86-320	8x8x8"	9 lbs.	\$3.09
86-321	8x10x8"	10 lbs.	3.23
86-322	8x14x8"	11 lbs.	3.53
86-323	12x18x12"	17 lbs.	5.59

## CHASSIS BASES FOR ABOVE AND AT LEFT

Stock No.	Size	For Cabinet No.	Wt.	NET
86-330	2x7x7"	86-300, 86-310, 86-320	2 lbs.	59c
86-331	2x7x9"	86-301, 86-311, 86-321	2 lbs.	66c
86-332	2x7x13"	86-302, 86-312, 86-322	3 lbs.	79c
86-333	3x10x17"	86-303, 86-313, 86-323	5 lbs.	97c

## CRYSTAL FINISH METAL CABINETS WITH HINGED TOP



Sturdy metal cabinets with piano-hinged lids. Front panel, back panel or bottom can be removed for changing wiring without disturbing the rest of the cabinet. Supplied in knock-down form for easy handling. Easily assembled. Finished in black ripple enamel.

Stock No.	Size H. W. D.	Shpg. Wt.	NET EACH
86-340	6x9x5"	6 lbs.	\$1.91
86-341	7x10x8"	7 lbs.	2.41
86-342	10x10x8"	8 lbs.	2.65
86-343	7x12x8"	9 lbs.	2.73
86-344	8x12x11"	10 1/2 lbs.	3.23
86-345	7x14x8"	11 lbs.	3.73
86-346	9x18x12"	15 lbs.	4.03

## UTILITY METAL CABINETS



Cabinets have various uses such as housing input stages, mixers, transceivers, amplifiers, monitors, etc. Front and back covers are removable and can be fastened to cabinet with self-tapping machine screws. Cabinets shipped knock-down. Easily assembled. Have black ripple enamel finish.

Stock No.	Size H. W. D.	Shpg. Wt.	NET EACH
86-350	4x4x2"	1 lb.	\$0.59
86-351	5x4x3"	2 lbs.	.65
86-352	6x6x6"	3 lbs.	.75
86-353	6x9x8"	4 lbs.	1.15
86-354	7x10x8"	5 lbs.	1.47
86-355	10x10x8"	6 lbs.	1.82
86-356	8x12x11"	8 lbs.	1.94

## CHROME HANDLES



A handy and useful addition to any cabinet, chassis, transmitter, etc. Chrome finished (with red stripes added to 5/8" size). With mtg. screws. 42-520. 4" Handle. 42-521. 5 1/2" Handle. NET EACH 29c

## WRINKLE VARNISH



An attractive, modern wrinkle finish for all metal chassis, panels, etc. Air drying; easily applied with brush or spray. In six popular colors. Weights: 1/8 pt., 10 oz., 1 pt., 1 1/2 lbs.

1/8 Pint	COLOR	1 Pint
43-000	Black	43-010
43-001	Brown	43-011
43-002	Green	43-012
43-003	Silver Grey	43-013
43-004	Red	43-014
43-005	Blue	43-015

1/8 Pint. EACH 23c Per Pint \$1.18

## AMPLIFIER FOUNDATION UNITS



Clever design and styling are incorporated in these amplifier foundation units available at amazingly low prices. Top covers have rounded corners, and fronts are embellished with polished "Air Gate" ventilators. Additional ventilation is obtained through the raised screen openings on the top as well as louvres on both sides and back. The unit is very simple to assemble. All parts are perfectly fitted. Red striped mouldings and handles give additional beauty to the appearance of the unit. In five convenient sizes. Finished in Marine grey ripple enamel.

Stock No.	Case Size H. W. D.	Chas. Ht.	Shpg. Wt.	NET EACH
86-370	9x10x 5/2"	3"	9 lbs.	\$2.91
86-371	9x12x 8"	3"	10 lbs.	3.79
86-372	9x17x 7"	3"	11 lbs.	3.79
86-373	9x14x10"	3"	11 lbs.	4.26
86-374	9x17x10"	3"	14 lbs.	4.41

## STURDY SLOPING-PANEL METAL UTILITY CABINETS



Professional type sloping-panel metal cabinets, ruggedly built, small and compact in design, and very attractive in appearance. Ideal for use as speaker cabinets, oscillator cases, receivers, amplifiers, etc. Have rounded corners. Finished in marine grey ripple enamel.

Stock No.	Overall Size	Wt.	NET
86-380	4 1/2"H, 4 1/2"W, 4 1/4"D	2 lbs.	\$0.97
86-381	4 1/2"H, 7 1/2"W, 4 1/4"D	5 lbs.	1.76

## ICA DELUXE METER CASES

Designed to harmonize with the trend of modern streamlined equipment. Finished in marine-grey ripple enamel trimmed with beautiful red striped metal band. Has neat rounded top. Available for 2" or 3" meters. Ideal midgeet speaker case for intercoms. Shipping weight, 2 lbs.



Stock No.	H. W. D.	Opening	EACH
86-390	4 1/2" x 4 3/8" x 1 1/2"	2 1/8"	\$1.03
86-391	4 1/2" x 4 3/8" x 1 1/2"	2 1/8"	

## PORTABLE STEEL CABINET

Ideal for housing oscillators, transceivers, test equipment, etc. Both front and back panels are removable and are held in place with self-tapping screws which are supplied. Entire cabinet is sturdily built of finest metal; has reinforced corners and edges. Supplied with a convenient leather carrying handle. The perfect housing for home-built portable equipment. Chassis listed below suitable for both sizes of cabinets. Finished in black ripple.



Stock No.	H. W. D.	Wt.	NET
86-395	12x7 1/4x7"	9 lbs.	\$1.85
86-396	15x7 1/4x7"	11 lbs.	2.12

86-397. Chassis for above. 7 1/2"x6 1/4"x2 1/2". Shpg. wt., 3 lbs. NET 32c

## METAL SPEAKER CABINETS

Designed to conform with streamlined appearance of all modern equipment. Metal grille firmly attached, will not rattle, and provides excellent protection for speaker cone. Has convenient metal carrying handle on top. Finished in black-ripple enamel with handle finished to match.



Stock No.	Spr. Size	H. W. D.	Shpg. Wt.	NET
86-360	6"	10x10x6"	8	\$2.44
86-361	8"	12x12x7"	9	2.94
86-362	10"	14x14x8"	15	3.88
86-363	12"	16x16x8"	20	5.17

## CHROME TRIM MOULDING

Attractive chrome and red striped trim moulding to dress up any cabinet (for receivers, speakers, transmitters, etc.). With mtg. hardware.



Stock No.	Size	Type	NET
42-500	3/8x4"	With 1 red stripe	24c
42-501	3/8x8"	With 2 red stripes	44c
42-502	3/4x12"	With 2 red stripes	50c
42-503	3/8x6"	Bullet shape. Plain	24c

## CRYSTALLINE LACQUER

Will cover any metal surface, wood or other material. Dries in 20 minutes. Easy to apply and requires no special equipment. Will give your metal products a professional look. Supplied in three colors.



Color	1/8 Pint	1/2 Pint	1 Pint
Black	43-020	43-030	43-040
Grey	43-021	43-031	43-041
Brown	43-022	43-032	43-042

1/8 Pint. Specify Color. Wt. 1/2 lb. Net 21c  
1/2 Pint. Specify Color. Wt. 1 lb. Net 61c  
1 Pint. Specify Color. Wt. 1 1/2 lbs. Net \$1.18



# RADIO-BUILDERS' SUPPLIES

## FORM-FITTING TUBE SHIELDS FOR ST12 BULBS



Formed of two half-shields with cap and base. Clamp and ground clip.  
**42-530.** For 1A6, 1C6, 1F6, 2A7, 6A7, 36, 38, 39, 75, 77, 78, 85, 89.  
**42-531.** For 1B5, 1E7G, 1H4G, 1J6G, 1-V, 6Z5, 19, 27, 30, 31, 37, 56, and similar size tubes.

## FOR S14 AND ST14 BULBS

**42-533.** For all S14 straight size tubes such as 24A, 27, 32, and similar size tubes.  
**42-534.** For ST14 dome-shaped tubes such as 01A, 2A5, 24A, 26, 32, 35-51, etc.  
**10 For 54c. NET EACH.....6c**

## GT & BATTERY TUBE SHIELDS



**42-550.** One piece less cap for all GT type tubes.  
**10 For 24c. EACH.....3c**  
**42-551.** Ground clip for use on bakelite based tubes.  
**10 For 8c. EACH.....1c**  
**42-552.** Tall shield with cap base and ground clip for 19 bulb, battery type tubes.  
**10 For 45c. EACH.....5c**

**42-553.** Shield for Loktal base tubes.....3c

## GT, LOKTAL TUBE SHIELDS

Seamless drawn-wall and vertical groove design produces efficient, positive-fitting shield. Open and closed types. Shield acts as ground. 8 oz.

**FOR LARGE GT TUBES**  
**42-570.** With open top. NET  
**42-571.** With closed top. NET  
**FOR SMALL GT/G TUBES** EACH  
**42-572.** With open top. NET  
**42-573.** With closed top. NET  
**FOR LOKTAL TUBES** 3c  
**42-573.** With closed top. NET

## COIL SHIELDS

Metal shields with detachable base.  
**42-590.** 2 1/2" x 3"  
**42-591.** 2 1/2" x 3 1/2"  
**NET EACH.....22c**  
**10 For.....\$1.98**

## BAKELITE TUBING

High-grade bakelite tubing. Wall 1/16-inch thick. Excellent for coils, etc.

Size O.D.	Per 6" Length		1 Foot Length	
	Stock No.	NET	Stock No.	NET
1"	43-501	25c	43-502	46c
1 1/2"	43-511	35c	43-512	70c
2"	43-521	39c	43-522	92c
2 1/2"	43-531	45c	43-532	85c
3"	43-541	52c	43-542	98c
3 1/2"	43-551	59c	43-552	\$1.10

## FENOLINE TUBING

Black polished finish. 1/16" wall. Easy to cut.

Stock No.	Outside Dia.	Per Ft.
43-560	1/2"	39c
43-570	3/8"	41c
43-580	1/2"	45c
43-590	3/4"	49c

## GRILL CLOTH

Black and gold interwoven.

**43-601.** 12x12". NET. 9c  
**43-602.** 12x24". NET. 17c  
**43-603.** 24x24". NET. 33c  
**43-123.** Walsco Non-Penetrating Cloth & Fabric Cement. Per Tube, NET.....25c



## BULB COLORING KIT

Kit contains one bottle each: Green, Blue, Red, Brown; with bottle of solvent. Bulbs may be colored by dipping in bottle.  
**43-110. NET.....29c**

## QUALITY METAL CHASSIS BASES

With reinforced or spot-welded corners. Folded on four sides except those marked \*. which are folded on sides only, with one open. In cooperation with the National Defense Program, use of alternative metals and finishes may be necessary. Equivalent or better values will always be supplied.



**43-620.** Volume Control Bracket for bases below. NET. 5c

Size, Inches	Terplate		Electralloy		Cadmium-Plated		Wrinkle Finish	
	No.	NET	No.	NET	No.	NET	No.	NET
4 1/4 x 8 1/2 x 1 1/2"	86-500	\$0.39	86-550	\$0.73				
86-501	.43	86-551	.75	86-601	\$0.44	86-651	\$0.44	
5x9 1/2 x 1 1/2"	86-502	.50	86-552	.87	86-602	.57	86-652	.57
5x9 1/2 x 3	86-503	.53	86-553	.99	86-603	.60	86-653	.60
5 1/2 x 10x3	86-504	.59	86-554	1.03	86-604	.73	86-654	.73
7x1x2	86-505	.48	86-555	.87	86-605	.51	86-655	.51
7x9x2	86-506	.55	86-556	.96	86-606	.59	86-656	.59
7x11x2	86-507	.57	86-557	1.05	86-607	.65	86-657	.65
7x12x3	86-508	.61	86-558	1.26	86-608	.70	86-658	.70
7x13x2	86-509	.63	86-559	1.20	86-609	.70	86-659	.70
7x17x3	86-510	.71	86-560	1.75	86-610	.86	86-660	.86
7x23x3	86-511	.75	86-561	1.85	86-611	.94	86-661	.94
8x17x2	86-512	.78	86-562	1.62	86-612	.94	86-662	.94
10x11x2 1/2	86-513	.67	86-563	1.75	86-613	.94	86-663	.94
10x12x3	86-514	.69	86-564	1.79	86-614	.94	86-664	.94
10x14x3	86-515	.71	86-565	1.89	86-615	1.01	86-665	1.01
10x17x3	86-516	.80	86-566	1.95	86-616	1.05	86-666	1.05
10x23x3	86-517	.91	86-567	2.25	86-617	1.19	86-667	1.19
12x17x3	86-518	.93	86-568	2.35	86-618	1.65	86-668	1.65
12x17x3	86-519	.93	86-568	2.35	86-618	1.65	86-668	1.65
10x17x4	86-520	.91			86-620	1.15	86-670	1.15
13x17x4	86-521	.98			86-621	1.86	86-671	1.86

## PANELS FOR ALL RADIO PURPOSES

Electralloy panels are 1/16" thick with natural finish; bakelite panels are 1/16" thick with polished finish. Wrinkle finish panels are 1/16" steel in black wrinkle enamel finish; 1/8" Masonite panels in natural black; 1/8" Masonite finish in baked black ripple. Odd size panels (except "Wrinkle Finish Type") cut to order at 1 1/2c per sq. inch. Minimum order, \$1.00 NET.



Size In.	Electralloy		Bakelite		Wrinkle Finish		1/8" Masonite		1/8" Masonite	
	No.	NET	No.	NET	No.	NET	No.	NET	No.	NET
7x10	86-700	\$0.47	86-720	\$0.95	86-740	\$0.37	86-750	\$0.26	86-770	\$0.38
7x12	86-701	.54	86-721	1.15	86-741	.43	86-751	.30	86-771	.42
7x14	86-702	.62	86-722	1.32	86-742	.50	86-752	.34	86-772	.48
7x16	86-703	.71	86-723	1.45			86-753	.38		
7x18	86-704	.77	86-724	1.70	86-744	.69	86-754	.43	86-774	.65
7x24	86-705	.90	86-725	1.95	86-745	.86	86-755	.48	86-775	.68
8x12	86-706	1.01	86-726	2.29			86-756	.47		
8x18	86-707	.90	86-727	1.98	86-747	.69	86-757	.47	86-777	.70
9x15	86-708	.83	86-728	1.87	86-748	.68	86-758	.46		

## GRID CAPS AND METAL-TUBE GRID SHIELD

A complete line of grid caps for all receiving type and amateur transmitting type tubes.



Stock No.	Type	Description	EACH
42-035	A	For all standard large cap, glass-type receiving tubes.....	1c
42-036	B	For all small cap, glass, metal, loktal, octal, "GT" & bantam tubes.....	1c
42-060	C	Universal fits all receiving tubes. Insulated. Less lead.....	8c
42-061	C	Universal fits all receiving tubes. Insulated. 15' lead.....	12c
42-019	D	For glass tubes. Red composition insulated. 12' lead.....	8c
42-020	D	For glass tubes. Black composition Ins. 12' lead.....	8c
42-029	D	Transmitting-tube size. Otherwise same as 42-019, above.....	16c
42-030	D	Transmitting-tube size. Otherwise same as 42-020, above.....	16c
42-052	D	For glass tubes. Soft-rubber insulated. 12' lead.....	7c
42-053	D	For metal tubes. Soft-rubber insulated. 12' lead.....	7c
42-051	D	Transmitting-tube size. Soft-rubber insulated. No lead.....	9c
42-050	D	Transmitting-tube size. Soft-rubber insulated. 12' lead.....	11c
42-595	E	Grid shield for metal tubes. Has slot in side for grid lead.....	7c

## FLOCKING KIT

**43-050.** Provides soft-felt brown finish for phono-turntables, etc. Consists of flock, undercoat, thinner, brush, and special sifter-top can for sifting flock over the undercoat. 1lb. \$1.18 NET.



**43-051.** As above, but consists of flock, undercoat, and special sifter-top. Less thinner and brush. Wt., 12 oz. NET.....97c

## MASONITE RACK PANELS

Non-magnetic. Easily worked with ordinary woodwork fitting tools. Black-ripple finish. 1/8" thick. Av. shpg. wt., 1 lb.



Stock No.	Size	NET EACH
86-790	7 x 19"	\$0.68
86-791	8 1/2 x 19"	.82
86-792	10 1/2 x 19"	.94
86-793	12 1/2 x 19"	1.06

## DIAL SPRINGS

Rustproof, high-grade steel wire dial-drive springs. Constructed to give exceptional service. In an assortment of 10 of five sizes for any replacement job. Essential for every service shop. Wt., 8 oz.  
**60-480. Kit of 10. NET.....24c**



## SPAGHETTI TUBING

Heavily varnished flexible tubing with 5,000 volt average dielectric strength. Accommodates wire sizes up to No. 10. Wound on handy spools in 20-foot lengths only. Shpg. wt., 1 lb.



**49-240. Black. NET.....73c**  
**49-241. Red. EACH.....73c**



# SOCKETS • PLUGS • CONNECTORS



## QUALITY SOCKETS

Used in test instruments, amplifiers and quality receivers. Molded black bakelite, with tight gripping contacts.



RS



MIP

### REPLACEMENT SOCKETS

Type RS. Molded high-dielectric bakelite. Removable adapter plate permits quick replacement of any wafer socket. Eliminates terminal-to-ground leakage. Mtg. centers 1 1/2" to 1 3/4". Wt., 4 oz.

Stock No.	Prongs	EACH
40-004	4	7c
40-005	5	
40-006	6	
40-007	7S	
40-009	7L	
40-011	7S L	9c
40-008	8 Octal	
40-010	8 Loktal	11c
40-012	9	

### "MIP" SOCKETS

Bakelite body molded on steel plate. 1 1/2" mtg. centers. 4 oz.

Stock No.	Prongs	EACH
40-024	4	6c
40-025	5	
40-026	6	
40-027	7S	
40-029	7L	7c
40-028	8 Octal	
40-030	8 Loktal (1 1/2")	10c
40-032	9	9c
40-033	11	12c
40-038	Super MIP UHF Octal Socket. NET.....	24c
40-040	Low-Loss Loktal. 18c	
40-050	UHF Loktal.....	26c

## OAK TYPE WAFER SUB-PANEL SOCKETS

High grade wafer type sub-panel tube sockets of laminated bakelite construction. Sturdy and reliable with fully insulated top. Contacts are full-floating type, self-aligning, and of one piece construction for low resistance connection; make side-wiping contact with tube prongs. Center rivet securely holds laminations together. Order a supply for general replacement or set-building. 3 oz.



TOP VIEW

BOTTOM VIEW

### STANDARD SIZE

No.	Prongs	EACH	10 FOR
40-204	4	5c	45c
40-205	5		
40-206	6		
40-209	7L		
40-207	7S		
40-208	8		

### MIDGET SIZE

No.	Prongs	EACH	10 FOR
40-224	4	5c	45c
40-225	5		
40-226	6		
40-229	7L		
40-227	7S		
40-230	Loktal		

FOR ALL OCTAL BASE TUBES

40-228. 8 hole type for glass or metal tubes, 1 1/2" mounting centers.  
40-240. "Button" Type Wafer Socket for RCA miniature 7-contact tubes; 1R5, 1S4, 1S5, 1T4. 3/8" mtg. ctrs. 10 for 45c NET EACH..... 5c

### EBY SOCKETS



One-piece black bakelite construction. Sturdy contact guides. 1 1/4" mounting centers. Molded contact designations. Genuine Eby Type 12. Shpg. wt., 6 oz. ea.

Stock No.	Prongs	EACH
40-254	4	18c
40-255	5	
40-256	6	
40-261	7L & 7S	24c
40-258	8 Octal	

### INSULEX SOCKETS



Low-loss glazed insulex. Sturdy, re-reinforced spring contacts. Centers, 1 1/2". Shpg. wt., 8 oz. ea.

No.	Prongs	NET EACH
40-274	4	25c
40-275	5	
40-276	6	28c
40-277	7S	
40-278	8 Octal.....	34c



### CHASSIS TYPE

Type S. For chassis hole mounting, with locking ring. Molded bakelite. With retainer ring. 1 1/4" dia. Shpg. wt., 3 oz.

No.	Prongs	EACH
40-054	4	6 1/2c
40-055	5	
40-056	6	
40-057	7S	
40-059	7L	
40-061	7	8c
40-058	Octal	
40-062	9	10c
40-063	For Loktal Tubes.....	

### STEATITE

Type RSS. Molded from ultra-low-loss steatite. Contacts are separated by raised barriers. Universal type mounting plate. For short wave transmitters, etc. Withstand extreme temperatures. Mtg. centers 1 1/2" to 1 3/4". 5 oz.

No.	Prongs	EACH
40-074	4	24c
40-075	5	
40-076	6	
40-077	7S	
40-079	7L	
40-078	8 Octal	29c
40-078	8 Octal	24c

### TOP CHASSIS

Type ACS. Mounted in heavy metal shell, which holds socket 1/4" above panel, and shields connections. 4 wiring knockouts. Reverses for below chassis mtg. 6 oz.

No.	Prongs	EACH
40-104	4	12 1/2c
40-105	5	
40-106	6	14c
40-107	7S	
40-109	7L	16c
40-111	7S	
40-108	8	16c
40-112	9	

### MINIATURE SOCKETS

78-7P and 54-7P fit RCA 1R5, 1S4, 1S5, 1T4. 7 prong tubes. 78-5H fits Hytron Bantam Jr. series. 78-5P fits Raytheon CK501-2-3-4 series. All mount in 3/8" hole.

Stock No.	Prongs	EACH
40-120	78-7P.....	10c
40-121	54-7P.....	21c
40-122	78-5H.....	10c
40-123	78-5P.....	10c



### AMPHENOL AC PLUGS AND RECEPTACLES

Molded bakelite. Fig. A mounts with retainer ring. Fig. B has mounting plate. \*Are polarized.

No.	Fig.	Type	NET
40-675	A	Male*	15c
40-676	A	Female	
40-677	B	Male	16 1/2c
40-681	B	Male*	
40-682	B	Female	

### FLUSH TYPE PLUG AND RECEPTACLE



Drilled to "Electrical Standard" mounting centers. \*Is polarized. Dia. 1 1/4". Mtg. centers 1 1/4".

Stock No.	Type	NET
40-685	Male	24c
40-686	Male*	
40-687	Female	

### PLUGS FOR ABOVE

Metal-encased bakelite connectors with cable clamp. For plugging into all above AC receptacles.

Stock No.	Type	NET
40-690	Standard Male.	24c
40-691	Polarized Male.	
40-692	Female.	
NET EACH.....		24c



Shielded Connectors. Metal snap-on caps. 1 1/4" x 1 1/4".

No.	Prongs	NET
40-504	4	15c
40-505	5	
40-506	6	15c
40-507	7S	
40-508	8 Octal	15c
40-509	8 Octal	
NET EACH.....		15c

40-512. 9 Prong Male..... 17c  
40-513. 11 Prong Male..... 21c

### CABLE CLAMP

Fits connectors above. For holes 1/8" to 3/8". 40-670. NET..... 6c

### BASE MOUNT SOCKETS



A molded bakelite socket for panel or baseboard mounting. Rugged contacts. 1 1/4" diameter. With knurled metal binding posts.

Stock No.	Prongs	EACH
40-304	4	21c
40-305	5	
40-306	6	
40-309	7L	
40-307	7S	
40-308	8 (Octal).	44c

### HEAVY-DUTY RUBBER-HANDLE PLUGS



Molded bakelite plugs and sockets mounted in unbreakable rubber handles. For use on speakers, power packs, or equipment using multi-conductor connecting cable. Hollow, tinned prongs for individual wires in cable. 2 1/2" handles.

No.	Prongs	NET
40-554	4	18c
40-555	5	
40-556	6	27c
40-557	7S	
NET EACH.....		18c

### 2-PIECE CONNECTORS

Connectors of two piece molded bakelite construction. Sure grip handles; sturdy contacts and pins. For speakers, microphones, etc.

No.	Prongs	NET
40-604	4	21c
40-605	5	
40-606	6	27c
40-609	7L	
40-607	7S	27c
40-608	8	
NET EACH.....		21c

### BAKELITE MALE CONNECTOR PLUG

A sturdy, neat, two-piece molded bakelite connector plug for speaker connections, etc. Top unscrews.

Stock No.	Prongs	EACH
40-654	4	19c
40-655	5	
40-656	6	25c
40-659	7L	
40-657	7S	25c
40-658	8 (Octal).....	

### HOWARD B. JONES PLUGS AND SOCKETS

Bakelite units with metal caps and cable clamps, 8 oz. 37-090. Jones Plug, Socket, and Terminal Catalog FREE.

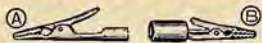
Contacts	Stock No.	NET	Stock No.	NET
2*	40-802	20c	40-852	20c
3	40-803	21c	40-853	21c
4	40-804	22c	40-854	22c
5	40-805	23c	40-855	23c
6	40-806	24c	40-856	24c
7	40-807	25c	40-857	25c
8	40-808	26c	40-858	26c
9	40-809	27c	40-859	27c
10	40-810	28c	40-860	28c
11	40-811	29c	40-861	29c
12	40-812	30c	40-862	30c

\*Plug and socket are round. All others rectangular.



# PLUGS · JACKS · POSTS · CLIPS

## ALLIGATOR CLIPS



Banana plug fits back of clip. Insulated type with red or black handle. \*Insert for phone tips.  
**41-270. FIG. A. 2" long. EACH.....4c**  
**41-271. Pkg. of 12.....43c**

**FIG. B. 2 1/4" INSULATED**  
**41-280. Red. EACH.....8c**  
**41-285. Black. EACH.....8c**  
**41-281. Red. Pkg. of 12**  
**41-286. Black. Pkg. of 12**  
**PER PKG.....86c**

**FIG. B. 2 1/4" INSULATED**  
**41-300. Red.**  
**41-305. Black. EACH. 19c**  
**41-301. Red. Pkg. of 12**  
**41-306. Black. Pkg. of 12**  
**PER PKG.....\$2.05**

## COLORED TIP JACKS

Amphenol bakelite jacks. Held in 3/8" hole by sturdy retainer ring.  
**41-320. Red.**  
**41-321. Black.**  
**41-322. Green.**  
**41-323. Blue. 4 1/2c**  
**NET EACH.....4 1/2c**  
**41-240. Solderless pin plug. 5c**

## BINDING POSTS



**FIG. A. EBY JUNIOR.** Non-removable screw-type top. 1/2" dia. Screw is 6-32 x 1/2" long. With soldering lug. Wt., 4 oz.  
**41-350. Plain. 41-354.**  
**41-351. Ant. Output.**  
**41-352. Gnd. 41-355. +**  
**41-353. Input. 41-356. +**  
**NET EACH.....11c**

**FIG. B. EBY TWIN assembly.** Standard Ant. and Gnd. posts. 2 x 1 1/4" base. 6 oz.  
**41-365. Bakelite.....29c**  
**41-366. Laminated.....24c**

**FIG. C. COMBINATION FOR BANANA OR TIP PLUG.** Top takes banana plug; shaft accommodates phone tip or wire. 4 oz.

Color	EACH	Pkg. of 12
Red	41-330	41-331
Black	41-335	41-336
NET	11c	\$1.19

## BAKELITE TWIN JACKS



Fig. A. Laminated. 2" x 1 1/4". 2 oz.  

Type	EACH	Pkg. of 12
Speaker	41-375	41-376
Phono	41-377	41-378
Plain	41-379	41-380
NET	6c	65c

## TRIPLE LAMINATED JACKS

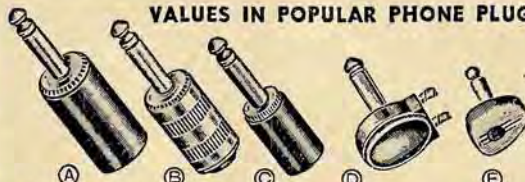
For mikes, speakers, etc.  
**41-385. Plain. EACH.....9c**

**FIG. B. MOLDED TWIN JACKS.** Have single mounting screw molded into bakelite. Size, 1 1/2" x 1 1/4". For cord tips. Wt., 2 oz.  
**41-391. Phono. 2" long. 17c**  
**41-392. Plain. EACH.....17c**

## SHORTING TYPE JACKS

Circuit closes when tips are removed. Similar to Fig. B. Single mounting stud. 2 oz.  
**41-396. NET.....17c**

## VALUES IN POPULAR PHONE PLUGS



### FIG. A. STANDARD PLUG

Take two sets of cord tips. Have molded bakelite barrel. Barrel size: 3/8" dia., 1 3/8" long. Wt., 5 oz.  
**41-600. Black. 21c**  
**41-601. Red. EACH.....21c**

### FIG. A. METAL SHELL TYPE

Bright polished metal shell for shielding purposes. Barrel size: 1 1/8" dia., 2 1/8" long. 6 oz.  
**41-605. NET.....39c**

### FIG. B. STUBBY TYPE PLUG

Shielded type plug for use in limited space. Polished metal shell. Suited for portable amplifiers. Barrel size, 1/8" dia. x 1".  
**41-610. NET.....31c**

### FIG. D. CARTER FLAT PLUG

Molded bakelite. 1 1/8" dia., 1/4" thick. Stay-cord anchor. 4 oz.  
**41-620. NET.....33c**

### FIG. C. MIDGET TYPE PLUGS

Compact, 2 3/8" overall. Bakelite barrel length 1". Dia. 3/8". 6 oz.  
**41-625. Black. 21c**  
**41-626. Red. EACH.....21c**

### FIG. C. METAL SHELL TYPE

Metal shell for shielding purposes. Barrel 1 1/4" x 3/8". Wt., 6 oz.  
**41-630. NET.....30c**

### FIG. E. TRIMM FLAT PLUG

Molded bakelite plug 3/8" thick. Polarity shown. Wt., 2 oz.  
**41-635. NET.....34c**

## EXTRA PLUG BARRELS

**41-650. Black for 41-600.....10c**  
**41-651. Red for 41-601.....10c**  
**41-652. Metal for 41-605.....24c**  
**41-653. Black for 41-625.....10c**  
**41-654. Red for 41-626.....10c**  
**41-655. Metal for 41-630.....16c**

## BANANA PLUGS AND JACKS



### STANDARD PLUGS

**FIG. A. NON-INSULATED** heavy metal plug with spring-metal prong 1 1/2" long. Used in coils and on transmitting or laboratory equipment. Thread is 6-32 x 1/2" long. Wt., 4 oz.  
**41-400. EACH.....5c**  
**41-401. Pkg. of 12.....54c**  
**100 For.....\$4.05**

### FIG. B. INSULATED TYPE

Set screw holds wire in place. Size: 1 3/8". Plastic insulation.  

Color	EACH	Pkg. of 12
Red	41-405	41-406
Black	41-410	41-411
NET	9c	97c

**100 For.....\$7.20**

### SPLIT TYPE PLUGS

**FIG. C. NON-INSULATED.** Sturdy positive spring in heavy durable metal. Size: 1 1/4". Fit standard banana type jacks.  
**41-420. EACH.....5c**  
**41-421. Pkg. of 12.....54c**  
**100 For.....\$4.05**

### FIG. D. INSULATED TYPE

Solderless type with set screw. Fits banana jack. Size, 1 1/8", 4 oz.  

Color	EACH	Pkg. of 12
Red	41-425	41-426
Black	41-430	41-431
NET	9c	97c

**100 For.....\$7.20**



## STANDARD JACKS

**FIG. F. Metal jack for banana plugs.** 3/8" long. Wt., 2 oz.  
**41-470. EACH.....5c**  
**41-471. Pkg. of 12.....54c**  
**100 For.....\$4.05**

### FIG. G. INSULATED TYPE

With insulated shoulder washers.  

Color	EACH	Pkg. of 12
Red	41-475	41-476
Black	41-480	41-481
NET	6c	65c

**100 For.....\$4.86**

## BABY JACKS

**FIG. H. For Baby Banana Plugs** listed below. 2 oz.  
**41-000. EACH.....5c**  
**41-001. Pkg. of 12.....54c**  
**100 For.....\$4.05**

### BABY INSULATED TYPE

Color EACH Pkg. of 12  
 Red 41-005 41-006  
 Black 41-010 41-011  
 NET 6c 65c  
**100 For.....\$4.86**

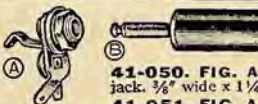
### FIG. E. BABY PLUGS

Banana type. Fit baby jacks.  
**41-440. EACH.....4c**  
**41-441. Pkg. of 12.....43c**  
**100 For.....\$3.24**

### BABY INSULATED TYPE

Color EACH Pkg. of 12  
 Red 41-450 41-451  
 Black 41-455 41-456  
 NET 6c 65c  
**100 For.....\$4.86**

## MALLORY PHONE PLUGS AND JACKS



**41-050. FIG. A. Type A-1.** Open circuit "Infant" jack. 3/8" wide x 1 1/4" long. NET.....15c  
**41-051. FIG. A. Type A-2.** Closed circuit "Infant" jack. Size as above. Bakelite insulation. NET.....21c  
**41-641. FIG. B. Type 75.** Bakelite Shell Plug. NET.....29c  
**41-640. FIG. B. Type 75N.** Metal Shell Plug. NET.....44c  
**41-052. Type 703.** Junior Jack. Mounts in 3/8" hole. Takes standard phone plug. Single circuit filament control. NET.....38c

## QUALITY TIP JACKS



**FIG. A. Metal tip jack.** 1/4" mtg. hole; takes 3/8" panel.  
**41-100. EACH.....5c**  
**41-101. Pkg. of 12.....54c**

**FIG. B. Short compact type.** Fits panels up to 1/4" thick.  
**41-105. EACH.....5c**  
**41-106. Pkg. of 12.....54c**

### FIG. C. INSULATED TYPE.

Color	EACH	Pkg. of 12
Red	41-110	41-111
Black	41-115	41-116
NET	6c	65c

**100 For.....\$4.86**

### FIG. D. BANANA OR CORD TIP JACK

Combination insulated jack for standard tip or banana type plug. 1/4" mtg. hole.  

Color	EACH	Pkg. of 12
Red	41-130	41-131
Black	41-135	41-136
NET	9c	97c

**100 For.....\$7.20**

## MALLORY COLORED TIP JACKS

Insulated. For standard cord tip. 3/8" mtg. hole. Hex. nut top. 2 oz.  
**41-150. Black. 9c**  
**41-151. Red. EACH.....9c**  
**41-155. SET OF 2.....15c**

## ROUND HEAD TIP JACK

Bakelite top and washer insulates tip jack from metal panel or chassis. Assures positive insulation. Wt., 3 oz.

Color	EACH	Pkg. of 12
Red	41-170	41-171
Black	41-175	41-176
NET	8c	86c

## HANDY CORD TIPS



**FIG. A. Standard cord tip;** fits regular tip jack.  
**41-202. 100 For.....97c**  
**41-201. 12 For.....13c**  
**FIG. A. Similar to above** but heavy duty for use on test leads, etc. Plated metal.  
**41-211. 12 For.....43c**  
**41-210. EACH.....4c**

**FIG. B. Hole in sleeve** provides means of soldering to wire insert.  
**41-222. 100 For.....\$1.21**  
**41-221. 12 For.....16c**

**FIG. C. "Imp" midget** 1 1/8" solderless screw-on connector.  
**41-231. 12 For.....43c**  
**41-230. EACH.....4c**

**FIG. D. Standard size** 1 3/8" solderless screw-on connector.  
**41-241. 12 For.....54c**  
**41-240. EACH.....5c**

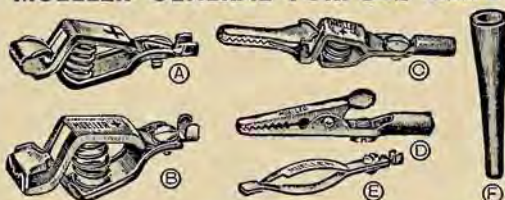
### FIG. E. INSULATED TYPE.

Color	EACH	Pkg. of 12
Red	41-250	41-251
Black	41-255	41-256
NET	8c	86c



# FUSES · CLIPS · CONNECTORS

## MUELLER GENERAL PURPOSE CLIPS



For making quick, but temporary electrical connections. Standard packages of 10 have 5 each plus and minus clips. Types marked with asterisks (\*) are solid copper.

### MESH TEETH TYPE FIG. A

Mfr's Type	Amps.	Size	Jaw Spread	Spring	EACH		Box of 10	
					No.	NET	No.	NET
45	5*	1 1/2"	3/8"	7 lb.	45-000	4c	45-001	29c
45C	10*	1 1/2"	3/8"	7 lb.	45-005	6c	45-006	54c
48B	10	1 1/2"	3/8"	10 lb.	45-014	4c	45-011	32c
27	20	2 1/2"	5/8"	12 lb.	45-015	8c	45-016	69c

### GRIP TEETH TYPE FIG. B

Mfr's Type	Amps.	Size	Jaw Spread	Spring	EACH		Box of 10	
					No.	NET	No.	NET
24A	25	2 1/4"	1"	17 lb.	45-020	8c	45-021	\$0.59
24	50*	2 1/4"	1"	17 lb.	45-025	15c	45-026	1.37
21A	50	4"	1 1/4"	33 lb.	45-030	12c	45-031	1.03
21	100*	4 1/4"	1 1/4"	33 lb.	45-035	38c	45-036	3.43
11A	100	6"	1 3/4"	38 lb.	45-040	45c	45-041	4.12
11	200*	6"	1 3/4"	38 lb.	45-046	6c	45-046	6.58
33	300*	7 3/4"	2"	52 lb.	45-050	1.35	45-051	12.25

### WEE-PEE-WEE PHOSPHOR BRONZE CLIPS FIG. E

Mfr's Type	Size	Description	EACH		Box of 10	
			No.	NET	No.	NET
88	1 1/16"	Ideal for coils.	45-055	7c	45-056	59c

### CROCODILE CLIPS FIG. C

83	2 3/8"	Fit banana plugs.	45-060	5c	45-061	39c
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### ALLIGATOR CLIPS FIG. D

60S	2"	Fit banana plugs.	45-065	5c	45-066	39c
60HS	2 1/4"	Ins'd red handle.	45-070	8c	45-071	69c
60HS	2 1/4"	Ins'd black handle.	45-075	8c	45-076	69c
60CS	2"	Solid copper.	45-080	8c	45-081	69c

### RUBBER INSULATORS FIG. F

For Mueller clips. In pairs of 1 red and 1 black. Made of Fiberglass.

For Clip	Par Pair		Per 5 Pair		For Clip	Per Pair		Per 5 Pair	
	No.	NET	No.	NET		No.	NET	No.	NET
45, 45C	45-100	16c	45-101	\$0.52	27	45-120	\$0.24	45-121	\$0.80
48B	45-105	18c	45-106	.59	11, 11A	45-125	1.04	45-126	3.53
24, 24A	45-110	36c	45-111	1.18	88	45-130	.10	45-131	.29
21, 21A	45-115	66c	45-116	2.25	89	45-135	.10	45-136	.29



### EXTRACTOR FUSE POST

41-720. Underwriters' Approved Molded bakelite. Holds type 3AG fuses. For panels up to 3/8" thick.  
41-721. For Test Instrument Littelfuses 1 1/4".  
NET EACH.....24c



### FAHNESTOCK CLIPS

Stock No.	Type	Per Doz.
41-701	Single 1"	10c
41-706	Single 3/4"	9c
41-711	Double 1 1/4"	27c
41-716	Double 1 1/2"	26c

### MIDGET SHORT JACK

Smallest made. High grade bakelite insulation. Requires 3/8" mounting hole. Widely spaced lugs. Wt., 4 oz.  
41-030. Open Circuit.....14c  
41-031. Single Closed Circuit. NET EACH.....17c



For type 3AG fuses. U-J approved. Metal shell with bakelite base. Size, 2 1/2 x 3/8". 2 1/4" mounting centers. Wt. 6 oz.  
41-725. EACH.....12c  
41-726. Per Dozen...\$1.30

### HINGED COVER TYPE

Underwriters' Appr. Single and double pole mount. Bakelite base, 2 1/4 x 1 1/4". Meets engineering requirements for coin machines, amplifiers, radio sets, etc.  
41-730. For 1 fuse.....18c  
41-731. For 2 fuses.....36c  
NET.....36c

### BUSS QUALITY FUSES

TYPE 3AG  
Tubular fuses. Compactly made. Size is 1 1/4 in. x 1/4 in. Protect radio sets, test instruments, etc. In metal box.  
41-150 1 41-155 5  
41-151 1 1/2 41-156 10  
41-152 2 41-157 15  
41-153 3 41-158 20  
41-154 4 41-159 25  
Box of 5...16c Box of 5...10c



## TERMINALS—TIES—CONNECTORS



Fig.	Description	Stock No.	Per Doz.
A	Insulated Tie Terminal; Tie Point.....	41-751	23c
B	Single hole mount. For 1/4" Dia. Fuses.....	41-756	14c
C	Terminal lugs. Make your own strips.....	41-766	38c
D	Pressure type terminal board contact.....	41-771	9c
E	Black insulated pin-plug. Fits "D".....	41-776	42c
F	Single-lug mounting strip.....	41-781	9c

41-785. Fig. G. Universal storage battery binding post. EACH..13c

### JONES "140" TERMINAL STRIPS

Barriers between terminals increase insulation, by increasing leakage path. Has many applications. Molded bakelite base 1/8" wide, 1 1/2" high. 5-40x3/16" screws. Wt., 6 oz.

No.	Descrip'n	Type	EA.
41-800	2-Terminal	2-140	11c
41-801	3-Terminal	3-140	16c
41-802	6-Terminal	6-140	27c

### MOUNTING STRIPS



Lugs	EA. No.	NET	Doz. No.	NET
2	41-850	3c	41-851	19c
3	41-855	3c	41-856	22c
4	41-860	4c	41-861	39c
5	41-865	4c	41-866	39c
6	41-870	4c	41-871	39c

### RADIO TYPE TERMINAL STRIPS



3/8" thick bakelite strips.

Term.	EA. No.	NET	Doz. No.	NET
2	41-810	6c	41-811	\$0.65
3	41-815	8c	41-816	.86
4	41-820	11c	41-821	1.19
5	41-825	13c	41-826	1.40
6	41-830	16c	41-831	1.73

### HEAVY-DUTY STRIPS



Bakelite strips with securely fastened screw terminals.

Stock No.	Term.	EACH
41-875	2	9c
41-880	3	12c
41-885	4	15c
41-890	5	19c
41-895	6	23c

### LITTELFUSES FOR TEST INSTRUMENTS

Designed especially for the protection of delicate instruments. Glass enclosed units. 1 1/4". High-speed action with short time lag. For use on AC or DC up to 250 volts. Highest quality. Laboratory tested.



Rating Amps.	Max. Load M. A.	Aver. Resis. 6 M. A. Load	Stock No.	NET EA.	Use to Protect		
					Volt-meters	Milliammeters	Thermo-Couple Types
1/200	1	500	52-200	18c	Over 1000	Galv.	0-5
1/100	10	110	52-201	12c	1000	Up to 0-1	0-10
1/32	25	20	52-202		500-1000	0-10	0-25
1/16	60	5.0	52-203		100-500	0-25	0-60
1/8	100	1.5	52-204		.....	0-75	0-150
1/8	100	3.0	52-205		20-100	0-75	0-150
1/4	200	6.2	52-206		10-20	0-150	0-200
3/8	300	3.0	52-207		5-10	0-250	0-300
1/2	400	2.5	52-208	9c	3-5	0-350	0-400
3/4	600	4.0	52-209		.....	0-500	0-600
1	1000	.24	52-210	6c	.....	0-750	0-1000
2	2000	.14	52-211		.....	0-1500	0-2000

### TYPE 3AG LITTELFUSES FOR RADIO & AMPLIFIER

For use in 105-120 volt primary line. Underwriters' Approved. 1 1/4 x 1/4".

Amps.	Volts	No.	EACH	Amps.	Volts	No.	EACH
1/2	500	52-230		2	250	52-236	
1/4	500	52-231		3	250	52-237	5c
1/2	500	52-232	9c	4	250	52-238	
3/4	500	52-233		5	250	52-239	6c
1	250	52-234	5c	6	250	52-240	
1 1/2	250	52-235		8	250	52-241	9c

### FUSE MOUNTINGS

Test instrument type with Littelfuse mounts.



52-285. Bakelite base; single hole mtg. EACH.....9c  
52-286. Pkg. of 12.....98c  
52-290. Panel type mounting. EACH.....12c  
52-295. Meter Back mtg. 1" x 1 1/4" x 3/8". EACH..12c

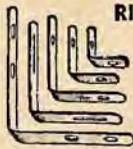
### SFE AUTO FUSES

New approved auto and radio fuses replacing older 3AG type. Order by amp. rating. Different length for each rating prevents possibility of incorrect replacement.

EACH	No.	NET	Amps.	12 For	
				No.	NET
	52-250		4	52-251	
	52-255		6	52-256	
3c	52-260		9	52-261	33c
	52-265		14	52-266	
	52-270		20	52-271	
4c	52-275		30	52-276	43c



# RADIO HARDWARE VALUES



## RIGHT ANGLE BRACKETS

Plated-metal angle brackets. Provide firm support at corners of cabinets, racks, etc.  $\frac{3}{8}$ " width.  $\frac{1}{2}$ " bracket. 12 oz.

Stock No.	Size	12 For
44-001	$\frac{1}{2} \times \frac{1}{2}$ "	9c
44-006	$\frac{3}{8} \times \frac{3}{8}$ "	14c
44-011	1 x $\frac{1}{2}$ "	19c
44-016	$1\frac{1}{2} \times \frac{1}{2}$ "	29c
44-021	$1\frac{1}{2} \times 1\frac{1}{2}$ "	39c
44-026	$\frac{1}{2} \times 1\frac{1}{2}$ "	39c

## WITH TAPPED HOLES

For chassis, cabinets, etc. One 8-32 tapped hole and one  $\frac{3}{8}$ " dia. plain hole. Plated metal. Wt. 12 oz.

Stock No.	Size	12 For
44-031	$\frac{1}{2} \times \frac{1}{2}$ "	26c
44-036	$\frac{3}{8} \times \frac{3}{8}$ "	32c
44-041	$\frac{1}{2} \times \frac{3}{4}$ "	32c
44-325	Bracket assortment.	

30 popular-sized angles and brackets. Wt., 1 lb. NET ..... 32c

## PLUG BUTTONS

Plated metal buttons for covering holes up to  $\frac{1}{8}$ " thickness in panels, chassis, racks, cabinets, etc.

Stock No.	Hole Dia.	12 For
44-051	$\frac{1}{8}$ "	21c
44-056	$\frac{1}{4}$ "	26c
44-061	$\frac{3}{8}$ "	31c
44-066	$\frac{1}{2}$ "	31c
44-071	$\frac{3}{4}$ "	52c

## SOLID TYPE RIVETS

Refer to page 175 for rivet tool.

Size Length	24 Lots		Gross Lots	
	No.	NET	No.	NET
$\frac{3}{8}$ "	44101	11c	44102	46c
$\frac{1}{2}$ "	44106	12c	44107	48c
$\frac{5}{8}$ "	44111	18c	44112	55c

## EYELET TYPE RIVETS

$\frac{1}{8}$ "	44121	11c	44122	46c
$\frac{3}{16}$ "	44126	18c	44127	55c
$\frac{1}{4}$ "	44131	20c	44132	59c

$\frac{1}{8}$ " dia.  $\frac{1}{16}$ " dia.

## ESCUTCHEON SCREWS

Metal wood screws  $\frac{1}{4}$ " long. For escutcheons, nameplates, indicators, etc. 44-141. Gross..... 29c

## RUBBER BUMPER FEET

Standard 6-32 screw. Provide steady, solid footing for table cabinets, etc. Protects surfaces. 44-151. Pkg. of 12..... 26c  
44-152. Gross..... 2.25

## INSULATED GROMMETS

Prevent wires from fraying or breaking. Knurled mounting nut.

Stock No.	Fits Inside Hole	Inside Dia.	Per Doz.
44-161	$\frac{3}{8}$ "	$\frac{1}{2}$ "	9c
44-166	$\frac{1}{2}$ "	$\frac{3}{4}$ "	77c
44-171	$\frac{3}{4}$ "	$\frac{1}{2}$ "	90c
44-176	$\frac{1}{2}$ "	$\frac{3}{8}$ "	98c

## RUBBER GROMMETS

For insulating holes in metal plates up to  $\frac{1}{8}$ " thick. Of durable live black rubber.

Stock No.	Fits Inside Hole	Inside Dia.	Per Doz.
44-181	$\frac{1}{4}$ "	$\frac{1}{2}$ "	9c
44-186	$\frac{3}{8}$ "	$\frac{1}{2}$ "	21c
44-191	$\frac{1}{2}$ "	$\frac{3}{8}$ "	22c

**Miscellaneous Hardware**  
Wing nuts and cap nuts are bright finish. For dressing up appearance of all apparatus. Lock washers are spring metal.

Size	Wing-nut	12 FOR	Cap nuts	12 FOR	Lock washers	24 FOR
6-32	44-201		44-231		44-251	
8-32	44-206		44-236		44-256	
10-32	44-211	26c			44-261	7c
$\frac{1}{4}$ -20	44-216					

## RADIO HARDWARE IN JARS



Glass jars with screw-on caps offer a neat, convenient way of storing your radio hardware. Jar comes filled with any single selection of hardware below. Buy your hardware this way and keep your workbench ship-shape. Shpg. wt., per jar 8 oz. **YOUR PRICE ANY JAR COMPLETE WITH HARDWARE..... 27c**  
44-500. Glass Jar Only..... 6c

## R.H. MACHINE SCREWS (A)

Stock No.	Quantity	Size
44-510	100	4-36x $\frac{1}{4}$ "
44-511	75	4-36x $\frac{3}{8}$ "
44-512	90	6-32x $\frac{1}{2}$ "
44-513	80	6-32x $\frac{3}{4}$ "
44-514	70	6-32x1"
44-515	50	6-32x1 $\frac{1}{2}$ "
44-516	65	8-32x $\frac{3}{4}$ "
44-517	35	10-32x1"

## NICKELED HEX NUTS (B)

Stock No.	Quantity	Size
44-530	100	4-36x $\frac{1}{4}$ "
44-531	90	6-32x $\frac{1}{4}$ "
44-532	80	6-32x $\frac{1}{2}$ "
44-533	80	8-32x $\frac{3}{4}$ "
44-534	50	10-32x $\frac{1}{2}$ "

## RADIO HARDWARE IN ENVELOPES

NOTE: Hardware above is available in small quantities in envelopes. When ordering envelopes, change prefix number from 44 to 45. Thus 44-510 would become 45-510. EACH ENVELOPE..... 6c

## RACK SCREWS-WASHERS (C)

44-545. 20 each 10-32x $\frac{3}{4}$ " oval head screws with cup washers.

## SELF-TAPPING SCREWS (D)

Stock No.	Quantity	Size
44-550	50	No. 6x $\frac{1}{4}$ "
44-551	45	No. 6x $\frac{3}{8}$ "
44-552	40	No. 7x $\frac{1}{2}$ "

## SHAKEPROOF WASHERS (E)

Stock No.	Quantity	Size
44-560	100	6-32
44-561	90	8-32
44-562	80	10-32

## Shoulder Fiber Washers (F)

Stock No.	Quantity	Size
44-580	100	$\frac{3}{8}$ - $\frac{1}{2}$ x $\frac{3}{8}$ "
44-581	90	$\frac{1}{2}$ - $\frac{3}{4}$ x $\frac{3}{8}$ "
44-582	70	$\frac{3}{4}$ -1x $\frac{3}{8}$ "
44-583	50	$\frac{1}{2}$ - $\frac{3}{4}$ x $\frac{3}{8}$ "

## HANDY HARDWARE ASSORTMENTS



### ALL-PURPOSE ASSORTMENT

An indispensable item for the serviceman, experimenter, etc. Metal case has 12 compartments containing assorted machine screws, nuts, spade bolts, self-tapping screws, rubber grommets, knob set screws, rivets and eyelets, lugs, washers, etc. 5 lbs. 44-300. NET..... \$2.03

### BELDEN SOLDER LUGS

100 most popular solder terminals for set building, servicing. Similar to lugs listed below, next column. Consists of 20—Fig. 1; 10—Fig. 2; 25—Fig. 3; 10—Fig. 4; 35—Fig. 5. 44-310. NET..... 38c

### SWITCH POINTS AND STOPS

Heavy nickel plated brass. 6-32 thread.  $\frac{1}{2}$ " long. Supplied with a  $\frac{1}{4}$ " nut. 44-331. PER DOZ..... 9c  
Switch Stops..... 9c  
44-341. PER DOZ..... 9c  
44-350. Switch handle and slider, with knob. NET 10c

### CABLE CLAMPS

The  $\frac{3}{4}$ " size fits  $\frac{1}{2}$ " cable; 1" size fits  $\frac{3}{4}$ " cables. Made of extra heavy-gauge plated metal. Have a No. 6 mounting hole. 44-361.  $\frac{1}{2}$ " long. 44-371. 1" long. Per 12 10c

### 1000 PIECE ASSORTMENT

A bargain assortment of radio hardware that will prove invaluable to any serviceman or experimenter. Contains rivets, grommets, nuts, screws, washers, brackets, soldering lugs, etc.—1,000 pieces of useful hardware for servicing, set-building, and all other needs. Wt., 4 lbs. 44-315. NET..... \$1.35

### FIBER WASHERS

A large variety of shouldered and plain fiber washers useful to every Radio Experimenter and Serviceman. Assortment of 100 washers per box. Shpg. wt., 1 lb. 44-320. PER BOX..... 32c

### INSULATING SPACERS

For raising subpanels, chassis, condensers, etc. Made of fenolite. Keep a supply on hand. 6 oz.

No.	Size	Quant.	NET
44-376	$\frac{1}{4}$ " Long	12	21c
44-381	$\frac{1}{2}$ " Long	12	24c
44-386	$\frac{3}{4}$ " Long	12	27c
44-391	1" Long	12	31c

### SOLDERING LUGS

Quality soldering lugs. All sizes and shapes. Lasting connection. 44-426 takes No. 10 screw size. 44-431 takes  $\frac{1}{4}$ " screw size. Rest take 6-32 and 8-32 screws.

No.	Fig.	No.	Fig.
44-401	1	44-421	5
44-406	2	44-426	4
44-411	3	44-431	4
44-416	4		

Per Pkg. of 100. NET..... 20c

## "PARKERIZED" STEEL MACHINE SCREWS

Standard thread. "Parkerized" rust-proof steel screws in a wide selection of sizes for every purpose.

### 6-32 ROUND HEAD

No.	Length	Gross
44-701	$\frac{1}{4}$ "	20c
44-706	$\frac{3}{8}$ "	18c
44-711	$\frac{1}{2}$ "	21c
44-716	$\frac{3}{4}$ "	25c
44-721	1"	41c
44-726	$1\frac{1}{4}$ "	34c
44-731	$1\frac{1}{2}$ "	40c
44-736	2"	57c

### 8-32 ROUND HEAD

Stock No.	Length	Gross
44-751	$\frac{1}{4}$ "	21c
44-756	$\frac{3}{8}$ "	29c
44-761	$\frac{1}{2}$ "	29c
44-766	$\frac{3}{4}$ "	56c

## METAL TAPPING SCREWS

Cut their own threads in metal as they are turned in. For all sheet metal up to No. 16 gauge.

SIZE 6		SIZE 8		
No.	Gross	Lgth.	No.	
44-801	29c	$\frac{1}{4}$ "	44-826	33c
44-806	30c	$\frac{3}{8}$ "	44-831	33c
44-811	31c	$\frac{1}{2}$ "	44-836	37c
44-816	32c	$\frac{3}{4}$ "	44-841	39c

## PHILLIPS MACHINE SCREWS

Round head; cross-slots; "Parkerized" rust-proof steel; in standard sizes.

### 6-32 ROUND HEAD

No.	Length	Gross
44-851	$\frac{1}{4}$ "	41c
44-856	$\frac{3}{8}$ "	43c
44-861	$\frac{1}{2}$ "	46c
44-866	$\frac{3}{4}$ "	50c

### 8-32 ROUND HEAD

44-871	$\frac{3}{8}$ "	43c
44-876	$\frac{1}{2}$ "	46c
44-881	$\frac{3}{4}$ "	53c

## ORNAMENTAL HEAD SCREWS

Rosette head; statuary bronze finish. Size 6-32 ( $\frac{3}{8}$ " head dia.).

No.	Length	Doz.
44-886	$\frac{3}{4}$ "	9c
44-891	1"	10c
44-896	$1\frac{1}{4}$ "	11c

## SPADE LUGS

For mounting shield cans, etc. Cadmium plated, 6-32 thread. 44-902. Per Gross, 37c  
44-901. PER 12. NET..... 6c

## HEXAGONAL NUTS

Standard  $\frac{3}{8}$ " nuts, machined steel, heavy cadmium plated. 44-912. PER GROSS..... 26c

## SHAKEPROOF HARDWARE

Sturdy lugs and washers that lock in position. Cannot come loose. Lug No. Washer  
44-921 For 6-32 Screw 44-931  
44-926 For 8-32 Screw 44-936  
PER GROSS LUGS OR WASHERS..... 29c

## JUMBO SHAKEPROOF SOLDER LUGS

Cadmium-plated soldering lugs with  $\frac{1}{4}$ " hole. Ideal for auto aerial connections, etc. 44-941. Per 12. 7c  
44-942. Per Gross, 63c



# NEUTRALIZING TOOLS • TEST LEADS

## ALIGNING AND NEUTRALIZING TOOLS



### ICA NEUTRALIZING & ALIGNING KITS DELUXE MODEL

Aligns almost all receivers. 14 parts cover multiple functions. These units telescope into each other forming 6 separate tools. In a handy leatherette case including: screwdriver with flexible shaft for hard-to-reach spots; "magic" alignment tool; alligator side wrench; 6" insulated screwdriver with metal nib; 3/4" and 1/2" nut wrench; 1/4" insulated square nut wrench; 1/4" hex metal side wrench; 2 1/2" insulated screwdriver with metal nib; 1/4" hex slotted insulated wrench screwdriver; 3/8" hex insulated nut wrench; 5" and 6" insulated screwdrivers. Supplied with leatherette case. Shpg. wt., 1 lb. 3 oz. **42-100. NET. \$3.38**

### STANDARD MODEL KIT

Similar to the "Deluxe" set above but less the flexible screwdriver and "magic" aligning tool. With handy case. 8 oz. **42-102. NET. \$2.79**

### SUPER DELUXE MODEL KIT

21 tools permit aligning and adjusting any set, regardless of age or make. Ideal for large service shops, schools, laboratories, etc. With carrying case. 3 lbs. **42-101. NET. \$9.26**

### ICA ALL-PURPOSE TEST KIT



The bandiest test kit available. Consists of a 60-inch pair of test leads, one red and one black, of kinkless live rubber-covered wire. One end has short insulated phone-tips. Other has long insulated prod handles with banana-plug tips. Includes interchangeable colored-coded, insulated units, 1 pair alligator clips, 1 pair spade plugs and 1 pair needle points. In leatherette case. Wt., 1 lb. **42-103. NET. \$1.47**



**Non-Metallic Adjustable Neutralizing Tool.** Made of tough plastic, no metal parts. Screwdriver at one end and hex socket at other. Fully shock-proof. 4 oz. **42-104. Extends 6" to 11". NET. \$36.**  
**42-105. Extends 10" to 18". NET. \$51C**



**42-170. Non-Metallic Screwdriver.** Made of 1/4" polished bakelite rod 6" long. 4 oz. **NET. \$31.**  
**42-171. Double-Edged Screwdriver.** Made of durable 1/4" bakelite with blades at both ends. 7" long. 3 oz. **NET. \$26.**



**SOLDERLESS TEST PRODS**  
Needle point test prod with insulated plastic handle threaded to take the solderless plug chuck. 5 1/2" long; 3/8" dia. Wt., 3 oz. **42-110. Red. \$18.**  
**42-111. Black. EACH. \$18.**



**SHORT TESTER**  
Uses miniature 2 1/2 volt lamp and battery for indicating open or closed circuit. May also be used with a neon lamp for any voltage or frequency, or determining AC or DC. Shock-proof. With bulb. Wt., 10 oz. **42-115. NET. \$1.03**



**TROUBLE LIGHT**  
A handy tool that saves time and trouble. Provides light where you want it. Fountain-pen size. For 110 volts AC or DC. With bulb and 5 1/2-foot cord. Wt., 1 lb. **42-120. NET. \$88.**



**5-IN-1 ALIGNMENT TOOL**  
A handy alignment tool kit that will serve innumerable uses. Consists of 1/4" and 3/8" nut wrenches, miniature blade and full-size screwdriver with pocket clips. Shpg. wt., 8 oz. **42-125. NET. \$65.**



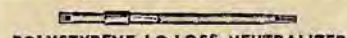
**4-IN-1 ALIGNMENT TOOL**  
Combines in one fountain pen size tool 4 Serviceman's necessities—1/4" and 3/8" nut wrenches, neutralizing screwdriver and key slot grip. Insulated handle with pocket clip. 6" long. 8 oz. **42-126. NET. \$36.**  
**42-127. Crosley attachment. 4 oz. \$12.**  
**42-128. Majestic attachment. EACH \$12.**



**42-135. Alignment Wrench.** Handy aligning tool for adjusting air trimmers and coil cores. 3/8" dia. Plastic rod, 8 1/2" long, has hexagon wrench at one end and shaped hook at other. For RCA and Philco. 5 oz. **NET. \$82.**



**42-140. Low Capacity Aligner.** Made of tough bone fibre, 1/4" dia. One end has screwdriver for adjusting trimmers and padding condensers; the other end has a recessed screwdriver for adjusting permeability tuned circuits. Ideal for aligning push-button sets. Shpg. wt., 5 oz. **NET. \$35.**



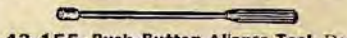
**POLYSTYRENE LO-LOSS NEUTRALIZER**  
**42-143.** An alignment tool having a minimum effect on critical circuits. For adjusting FM, television, SW, and standard receivers. Made of Amphenol "912-A." With pencil-type clip. 5 oz. **NET. \$24.**



**42-145. Alignment Tool.** Has specially designed metal clip for neutralizing air trimmer condensers on all model sets, including late Philco. Of narrow fibre rod. Dia. is 1/2". Length, 6". 3 oz. **NET. \$26.**



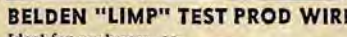
**Insulated Hex Wrench.** Hex broaching runs entire length of wrench. End may be cut off when worn. Fibre rod. Fits 1/4" nut. 3 oz. **42-150. 6 INCH. \$14.** | **42-151. 8 INCH. \$17.**



**42-155. Push-Button Aligner Tool.** Designed for all Push-Button Tuners. Plastic handle. Overall length, 6 1/4". Socket is 1/2" diameter. Recessed blade in socket fits slot in adjusting screw. 6 oz. **NET. \$35.**



**AMPHENOL CO-AXIAL CABLE TEST LEAD WIRE**  
Transmits RF and AF currents with minimum loss. Extremely flexible, bends on 1" radius. Made of 3/4" polystyrene beads strung on No. 22 stranded copper wire. Low capacity. Shielded. Lacquered cotton braid covering. Diameter is only 1/4". For signal generators, etc. **49-300. Per Foot. NET. \$29.**  
**49-301. 5 Foot Length. 6 oz. NET. \$1.32**



**BELDEN "LIMP" TEST PROD WIRE**  
Ideal for analyzers, oscillators, high voltage test apparatus and therapeutic equipment. Breakdown, 10,000 V. 2 3/4" dia. 6 oz. **NET. \$15.**  
**47-801. 5 Ft. Length. Black. NET PER LENGTH \$15.**  
**47-811. 5 Ft. Length. Red. NET PER LENGTH \$15.**

## TEST LEADS AND KITS

### HEAVY-DUTY LAB MODEL PRODS

All-purpose leads for test work. Flexible, rubber-covered kinkless wire fitted into heavy 3/8" handles, one red and one black. Handles, 5 1/2" long, have sharp point phone tips and will fit all standard jacks. Leads are 50" long. These popular high quality test prods are used by leading laboratory and service engineers who require the best test leads available. Choice of tips. Shpg. wt., 1 lb. **42-200. Phone Tips. \$49.**  
**42-201. Spade Tips. \$49.**  
**42-202. Alligator Terminals. PER PAIR. \$49.**



### NEEDLE-POINT LEADS

High-quality test leads equipped with needle points for making good contact through insulation or pitch. 4" handles, 3/8" thick. 50" kinkless wire leads. 10 oz. **42-210. Phone Tips. \$36.**  
**42-211. Spade Tips. PER PAIR. \$41.**  
**42-212. Alligator Terminals. PER PAIR. \$41.**



### ALL-PURPOSE TEST PROD KIT

For all test requirements. Made of sturdy plastic. Handles are 6" long and 3/4" diameter. Have 50" kinkless red and black wires. Prod end equipped with needle-point phone tips. Other end equipped with split banana plugs allowing for interchange of spade lugs, phone tips, or alligator clips which are supplied. A complete test lead set offered at an attractive low price. 1 lb. **42-220. NET. \$98.**  
**42-221. With Fixed-End Phone Tips. As above, but less interchangeable feature. \$49.**  
**42-222. With Fixed-End Alligator Clips. As above, but without the interchangeable feature. For Lab and test bench. NET. \$56.**



### UNBREAKABLE TEST PRODS

Prods are nickel-plated brass, covered with red and black shockproof live rubber sleeves. Supplied with 50" kinkless rubber wire. Shpg. wt., 10 oz. **42-230. With Standard Phone Tips. \$41.**  
**NET. \$45.**  
**42-231. With Insulated Phone Tips. NET. \$45.**



### ICA FUSED TEST LEAD SET

Protect your meters with fused test leads. Fuses easily inserted in prod handles. Can also be used less fuses. Supplied with interchangeable alligator clips, spade ends and insulated phone tips same as 42-220 leads above. 50" kinkless rubber-covered colored wire leads. With two fuses. Shpg. wt., 1 lb. **42-235. NET. \$1.47**



### PENCIL TYPE PRODS

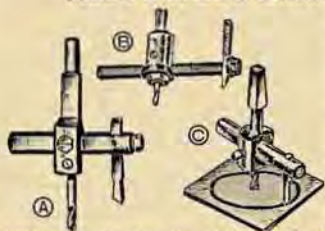
High-grade Weston type leads for all test equipment. 5" handles of insulating material, with flexible rubber wire. Sharp-pointed tip is threaded and screws into handle. Molded grips with phone tips have set screws for easy removal of wire. Length of leads and handles is 6 1/2". Properly soldered connections and good quality. 8 oz. **42-240. NET. \$79.**  
**42-241. Phone-Tip Plugs Only, as illustrated in circle above. One red, one black. Plastic insulated. With nuts and bolts. Wt., 1 oz. NET, PER PAIR. \$39.**





# Values in POPULAR TOOLS

## ALL-PURPOSE CIRCLE CUTTERS



Designed to cut large holes accurately and quickly in wood, bakelite, hard rubber, tin, sheet metal, etc. May be used in slow-speed drill press or ordinary hand-brace. Type C is designed for heavy-duty work; Type A is a standard professional cutter; Junior type is for light work on softer materials.

All cutter blades removable. Fine American-made tools.

**45-600. Type A. Professional model.** High quality sheet metal. bakelite, wood, etc. Shpg. wt., 2 lbs. NET..... **\$1.25**

**45-601. Junior.** Not illustrated (similar to Fig. A). Cuts holes  $\frac{3}{8}$ " to  $2\frac{1}{2}$ " in diameter. Suitable for light duty cutting in panels and chassis. Shpg. wt., 1 lb. NET..... **78c**

**45-602. Type C. Square Shank.** Heavy-duty cutter of hardened steel. Cuts holes  $1\frac{1}{2}$ " to  $5\frac{1}{2}$ " in diameter in bakelite or metal panels. Shpg. wt., 2 lbs. NET..... **\$1.88**

**45-603. Type C. Round Shank.** Same as Type C above, but with round shank for use in power drill chuck. Cuts holes from  $1\frac{1}{2}$ " to  $5\frac{1}{2}$ ". Shpg. wt., 2 lbs. NET..... **\$1.88**

**45-604. Type B.  $\frac{1}{4}$ " to 8" Circle Cutter.** All-purpose cutter of high-grade hardened steel. Fits brace or chuck. Cuts metal, bakelite, etc. Shpg. wt., 2 lbs. NET..... **\$2.91**

**45-610. Cutter Blades.** Extra blade for Type A and C cutters listed above. Made of finest tool steel, hardened for long wear. Shpg. wt., 4 oz. NET..... **24c**

## CHASSIS AND PANEL PUNCHING TOOLS



**45-630. Fig. A. REAMER.** Shank has T-type handle. Overall length,  $5\frac{3}{4}$ "; taper,  $3\frac{3}{4}$ ". Small end diameter,  $\frac{1}{8}$ "; large end diameter,  $\frac{1}{2}$ ". Shpg. wt., 1 lb. NET..... **69c**

**45-650. Fig. B. RIVET AND EYELET TOOL.** Universal type for radio size eyelets and rivets. 6-sided, cast-iron base and hardened-steel punch. With assortment of eyelets and rivets. 2 lbs. NET..... **\$1.49**

**45-652. RIVET AND EYELET PUNCH.** Push only as used in 45-650 above. Made of hardened steel and formed to take most sizes of eyelets and rivets used in radio receivers. .... **44c**

**45-635. Fig. C. STEEL SNIPS.** 7" dropfaced snips. Cut chassis steel, etc. Wt., 1 lb. NET..... **61c**

**Fig. D. EASY SELF-ALIGNING PUNCH.** Requires only pin punch for centering. Shpg. wt., 1 lb. Stock No. DIA. EACH

45-670	$\frac{3}{8}$ "	\$1.75
45-671	$\frac{1}{2}$ "	1.89
45-672	$\frac{5}{8}$ "	1.93
45-673	$1\frac{1}{8}$ "	1.93
45-674	$1\frac{1}{2}$ "	2.10

**45-675. For Amphenol Sockets.** Provides locking  $2\frac{25}{32}$ " key.  $1\frac{1}{8}$ " hole. NET **\$2.25**

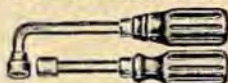
**Fig. E. CHASSIS SHEAR PUNCHES.** Cut round hole by turning cap screw. Shpg. wt., 1 lb.

45-685	$\frac{3}{8}$ "	<b>\$1.59</b>
45-686	$\frac{1}{2}$ "	
45-687	$1\frac{1}{8}$ "	

45-688	$1\frac{1}{2}$ "	<b>\$1.79</b>
45-689	$1\frac{3}{4}$ "	
45-690	$1\frac{7}{8}$ "	

45-691  $1\frac{7}{8}$ "..... **\$1.99**  
45-692. Extra  $\frac{3}{4}$ " Cap Screws. NET..... **21c**

## HIGH-GRADE SOCKET WRENCH SELECTION



### SPIN-TYPE WRENCHES

Sockets of hardened tool steel. Shanks of rust-proof steel with ribbed wooden handles. Shpg. wt. each, 8 oz. Set of six wrenches, 3 lbs.

Nut Size	6" Straight	9" Straight	7" Offset
$\frac{1}{8}$ "	45-700	45-720	45-750
$\frac{1}{4}$ "	45-701	45-721	45-751
$\frac{3}{8}$ "	45-702	45-722	45-752
$\frac{1}{2}$ "	45-703	45-723	45-753
$\frac{5}{8}$ "	45-704	45-724	45-754
1"	45-705	45-725	45-755

NET EACH..... **18c** EACH..... **21c**

45-710. Set of 6—6" wrenches..... **97c**  
45-730. Set of 6—9" wrenches..... **\$1.13**  
45-760. Set of 6 offset wrenches..... **1.13**

### SOCKET WRENCH SET AND SCREWDRIVER



A set of 8 sockets in assorted sizes to handle hex, square, and round nuts. Consists of 1— $\frac{1}{4}$ " hex socket mounted on  $3\frac{1}{4}$ " straight extension; 5 hex sockets in  $\frac{1}{4}$ ",  $\frac{3}{8}$ ",  $\frac{1}{2}$ ",  $\frac{5}{8}$ ",  $\frac{3}{4}$ " sizes, 2 square sockets in  $\frac{1}{4}$ " and  $\frac{3}{8}$ " sizes.

1 round nut socket, 1 "L" shaped extension, 4" long, and 1 screwdriver wrench handle. Patented locking device holds tools firmly in handle. Shpg. wt., 4 lbs. **45-827. NET..... 73c**



### AMBERYL HANDLE WRENCHES

Hardened tool-steel socket wrenches,  $7\frac{1}{2}$ " long. With hollow shafts and shock-proof unbreakable plastic handle. Shpg. wt., 12 oz. each.

Stock No.	Size	Stock No.	Size
45-800	$\frac{1}{8}$ "	45-804	$\frac{1}{2}$ "
45-801	$\frac{1}{4}$ "	45-805	$\frac{3}{4}$ "
45-802	$\frac{3}{8}$ "	45-806	1"
45-803	$\frac{1}{2}$ "		

NET EACH..... **40c**

45-810. Set of 7 wrenches. NET **\$2.52**

45-820. Volume Control Wrench. Similar to those above. For hexagonal nuts measuring  $\frac{3}{8}$ " across. NET..... **67c**

### SOCKET WRENCH SET



Set of 5 detachable sockets of wrought steel with wrench handle. Sizes:  $\frac{1}{4}$ ",  $\frac{3}{8}$ ",  $\frac{1}{2}$ ",  $\frac{5}{8}$ " and  $\frac{3}{4}$ " inch to cover most jobs. Wt., 1 lb. **45-825. NET..... 39c**

### HOLLOW HANDLE SET



Hollow handle holds all sockets. Sizes,  $\frac{1}{4}$ ",  $\frac{3}{8}$ ",  $\frac{1}{2}$ ",  $\frac{5}{8}$ ", and screwdriver socket,  $7\frac{1}{2}$ " long. Shpg. wt., 1 lb. **45-826. NET..... 53c**

## LITTELFUSE NEON TATTLETE

Pocket neon tester. Indicates voltages from 90 volts DC and 60 volts AC to 500 volts AC or DC. Tests for live lines, grounded lines, open circuits, shorts, polarity and whether AC or DC or RF, blown fuses, defective spark plugs. Molded tenite body, color-coded leads, handy pocket clip. Insulated test leads prevent accidental shocks. With neon lamp. Full directions. **78-055. NET..... 59c**



### LOW-VOLTAGE TATTLETE

**78-056.** As above but tests 3 to 25 volts AC or DC. Alligator clips on test leads. Less pocket clip. NET..... **\$1.03**

## VEST-POCKET SOCKET SET

Compact, complete 8-piece pocket wrench set. Consists of seven sockets:  $\frac{1}{4}$ ",  $\frac{3}{8}$ ",  $\frac{1}{2}$ ",  $\frac{5}{8}$ ",  $\frac{3}{4}$ " round knurled,  $\frac{1}{2}$ " square, and 4" L handle with two friction knobs. In enameled box. Shpg. wt., 1 lb. **45-830. NET..... 48c**



## PHILLIPS OFFSET SCREWDRIVER

Handy offset combination screwdriver for Phillips screws. One end drives Phillips No. 1 size. Other end drives Phillips No. 2 size. Of durable alloy steel,  $3\frac{1}{2}$ " long. Shpg. wt., 8 oz. **45-835. NET..... 39c**



## VALUES IN HANDY ELECTRICAL ACCESSORIES



**52-600. Fig. B. PLUG CAP.** Brown bakelite plug with finger-grip. Wires don't pull out. Parallel blade type. Wt., 4 oz. **10 FOR 45c. EACH..... 5c**

**52-601. Fig. C. CUBE TAP.** Three connections from one outlet. Sturdy construction of brown bakelite. 4 oz. NET..... **7c**

**52-602. Fig. D. RUBBER HANDLE CAP.** Unbreakable soft-rubber plug cap. Sturdy brass blades. Approved. Wt., 4 oz. **5c**

**Fig. A. FRICTION TAPE.** Black,  $\frac{3}{4}$ " wide.

**52-610. 2 Oz. Roll..... 7 1/2c**

**52-611. 4 Oz. Roll..... 13c**

**52-612. 8 Oz. Roll..... 21c**

**52-620. RADIO-WIDTH FRICTION TAPE.**  $\frac{3}{8}$ " narrow width, made especially for radio work. Eliminates waste and tearing. 65 foot roll. 1 lb. NET..... **18c**

**52-615. SCOTCH TAPE.** High insulation value.  $\frac{1}{4}$ " wide. 10 yard rolls. Wt., 1 lb. NET..... **29c**

**52-605. Fig. E. AC TRI-EXTENSION.** Bakelite 3-way extension tap. Steel-plated back. With 6 ft. rubber cord and plug cap. Underwriters' approved. Wt., 1 lb. NET..... **24c**

**47-820. Fig. F. BELOEN EXTENSION CORD.** 10-foot unbreakable, brown, all-rubber extension cord, with rubber cap and double outlet tap. Famous Belcon quality, built for long-life service. Underwriters' approved. Wt., 1 lb. NET..... **43c**

**Fig. G. EAGLE INDICATING FUSES.** Show "OK" in window when fuse is good; "OK" vanishes when fuse blows. Five of one type per box. Shpg. wt., 1 lb.

**52-170. 10 Amp. 52-173. 25 Amp. 52-171. 15 Amp. 52-174. 30 Amp. 52-172. 20 Amp. BOX OF 5..... 20c**

**87-900. Fig. H. CLAMP LAMP.** Rubber-covered clamp fastens to chassis or cabinet.  $5\frac{1}{2}$ " dia. shade. With switch, less bulb. 2 lbs. NET..... **89c**



# Values in POPULAR TOOLS

## "BANTAM" HAND GRINDER POWER-TOOL



A sturdy, dependable, motor-tool with innumerable uses. By simply inserting the proper tool, you can grind, polish, carve, or drill on the most delicate and intricate objects as well as on toughest steel and plastics. Works equally well on wood, metal, glass, stone, china, bakelite, and many other materials. Used extensively by radio servicemen, toolmakers, machinists, engineers, experimenters, dentists, professional craftsmen, etc. Powerful motor with balanced armature and standard field, drives chuck at the high speed of 20,000 RPM. Internal fan insures cool operation. Has metal case and finger-tip switch. Size, 4 1/4" x 2" dia. With 8 ft. cord, 2 wrenches, 1/4" and 3/8" collets, and 1 grinder wheel similar to Fig. C. For 110 V. AC-DC. Wt., 2 1/2 lbs.

**46-120. NET. \$8.10**

### ACCESSORIES FOR ABOVE POWER TOOL

- 46-125. Fig. A. Bristle Brush. NET 23c
- 46-124. Fig. B. 1/4" Wire Brush. NET \$1.08
- 46-121. Fig. C. Grinder Wheel. NET 45c
- 46-122. Fig. D. Grinder Wheel. NET 53c
- 46-127. Fig. E. Pointed Burr. NET... 97c
- 46-126. Fig. F. Blunt Burr. NET... 97c
- 46-123. Fig. G. Grinder Wheel. NET 53c

## AC-DC ELECTRIC SPEED DRILL

This rugged electric speed drill is light and easy to handle. Sturdy chuck-assembly holds up to 1/4" drills. Handle has thumb-controlled switch. High speed drills can be used, 1500 R.P.M. Drills 3/8" from corners. For 110 V. AC or DC. With 7 foot cord. Shpg. wt., 4 1/2 lbs.



**46-005. NET. \$7.45**

## POLISHING HEAD OUTFIT

Complete kit for home or shop. Use with 1/2 to 1/4 horsepower motor for grinding, buffing, sawing or drilling. Consists of polishing head and chuck, saw table and guide, cotton buff, wire brush, saw, emery stone, leather belt, and 9 steel drills. Head has a 2-speed pulley, chuck capacity of 3/8". Steel flanges hold stone, brushes, etc., against material being worked. Saw table clamps securely to polishing head. Red enamel finish. Shpg. wt., 8 lbs.



**46-008. Complete. NET. \$3.95**  
**46-009. Polishing head and chuck only. NET. \$1.10**

## HANDY RULES AND GAUGES

- 46-061. A. 6" Rule & Wire Gauge.** Stainless steel. Front graduated in 32nds and 64ths, also B. & S. wire gauge. Back has decimal equivalents. For Nos. 8 to 20 wire. With case. NET. **25c**
- 46-050. B. Micrometer.** Precision-built; accurate to 1/1000 of an inch. Hardened steel. Zero setting in anvil. Standard 1" size. Wt., 8 oz. NET. **\$1.05**
- 46-051. 1/2" size. NET. 53c**
- 46-060. C. Drill and Wire Gauge.** A handy, accurate gauge of polished, tempered steel. Has index on the face for machine screw taps. Sizes are in decimal equivalents and number size. NET. **95c**
- SEMI-INDUSTRIAL MICROMETER**
- 46-052. B.** Similar to 46-050 above except frame and barrel are die-cast. Anvil and spindle are hardened and ground to maintain squareness. Decimal equivalents stamped on frame. 1" size. In wooden box. **\$3.35** Wt., 10 oz. NET.

## PORTABLE CLAMP-ON VISES

- Strong sturdy vise with jaw faces carefully machined to insure firm grip. Jaws close squarely with equal pressure on both ends. Jaw width, 2". Jaws open, 5". Will clamp on benches up to 2 1/2" thick. Has handy anvil back. Steel slide bar precision fit to prevent jaws from wobbling. Fine enamel finish. Ideal for carrying in tool kit.
- 46-020. 2" Jaws. Shpg. wt., 3 1/2 lbs. \$1.10**
- NET. 55c**
- 46-021. 1 1/2" Jaws. Shpg. wt., 2 lbs. 55c**

## RADIO TAP, DRILL AND DIE SET

- A complete set for almost all threads used in radio. 3 taps with 11 drills for 4/36, 6/32, 8/32 threads. Three 1" dia. dies for cutting above threads. Die stock and adjustable tap wrench. In wood case, 1 1/2" x 3 3/4" x 1 1/4". Wt., 3 lbs.
- 46-025. NET. \$1.75**

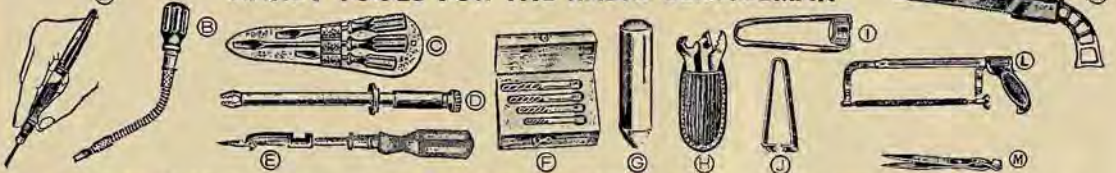
## VALUES IN QUALITY DRILLS

- 46-030. Fig. A. Sturdy hand drill with 1/4" jaws adjustable from zero to 1/4". Shpg. wt., 2 lbs. NET. 95c**
- 46-031. Fig. B. Low-priced automatic push drill.** With eight fluted-shank drill points, 1/8" to 1 1/4" diam., held in numbered racks in black bakelite handle. May be used as 1 1/2" screwdriver. 1 lb. NET. **\$1.75**

## ASSORTED DRILL SET

- American-made. Quality high-speed twist drill set, containing the popular sizes necessary for radio and other work. Set consists of 9 carbon steel drills ranging from 1/8" to 3/8" sizes in 1/4 inch size graduations. Wt., 10 oz. NET. **\$1.10**

## HANDY TOOLS FOR THE RADIO SERVICEMAN



- Fig. A. PRES-TO-OILER.** Press on plunger to release one drop of oil. Prevents over-oiling and waste. Transparent fountain-pen reservoir holds oil supply. Wt., 8 oz. **39c**
- 46-065. NET. 39c**
- Fig. B. FLEXIBLE SHAFT SCREWDRIVER.** No more fumbling for those hard-to-reach spots. Flexible shaft and movable insulated guide do the trick with little or no difficulty. 8 1/2" long overall. 1 lb. **98c**
- 46-070. NET. 98c**
- Fig. C. POPULAR SCREWDRIVER KIT.** Consists of 3 most used screwdrivers in leatherette holder for wall mounting. Blades measure 5 1/2", 3 1/2", and 2 3/8". Wt., 1 lb. **42c**
- 46-071. NET. 42c**
- Fig. D. MUELLER SNAPPER.** Combined test clip and radio tool. Spring contact jaws make test-prod contacts; start nuts and screws in out-of-the-way places. Picks up fallen units. Push-button top operates jaws. 1 lb. **38c**
- 46-100. Red. 38c**
- 46-101. Black. NET EACH. 38c**
- Fig. E. SCREW HOLDING CLIP.** For any screwdriver. Comes in three sizes. Will fit any size or type wood or machine screw. **10c**
- 46-075. PER SET OF 3. NET. 10c**

- Fig. F. SCREW EXTRACTORS.** For removing any broken screws, bolts, studs, and pipes. Simple turn brings out broken unit in one piece. Set of four extractors: 1/8", 3/16", 1/4", 5/16". Shpg. wt., 2 lbs. **98c**
- 46-076. NET PER SET. 98c**
- Fig. G. HANDY SCRATCH REMOVER.** Restores scratched and marred surface of radio set cabinets and all furniture. Stick buds scratch to original level and polishes and stains. Shpg. wt., 6 oz. **22c**
- 46-300. 5 for 99c. NET EACH. 22c**
- Fig. H. END-WRENCH SET.** A handy end-wrench set of many uses. Cadmium plated. Wrenches are 1/4"-3/8"; 3/8"-3/4" and 1/2" with alligator jaw. Wt., 1 lb. **10c**
- 46-080. Set of 3 Wrenches. NET. 10c**
- Fig. I. KNOB PULLER.** Easily and quickly removes all types push-on knobs. Saves you time and prevents marring of panel or cabinet, while removing knobs. Wt., 8 oz. **15c**
- 46-077. NET. 15c**
- Fig. J. WIRE STRIPPER.** Strips insulation from wire easily and cleanly. Does not damage wire. Has tempered steel cutting edge. Saves you time. Shpg. wt., 1/2 lb. **10c**
- 46-083. NET. 10c**

- Fig. K. KEYHOLE HACKSAW.** A handy tool for use in the home and workshop. One blade efficiently cuts all metals, woods, plaster, wall-board, conduit, metal lath, etc. Ideal for tight places. 7 1/2" interchangeable, 180-tooth blade. Shpg. wt., 1 lb. **29c**
- 46-085. Frame and Blade. NET. 29c**
- 46-086. Extra Blades. EACH. 12c**
- 46-087. Package of six blades. 65c**
- Fig. L. PISTOL-GRIP HACKSAW.** Highly polished nickel-plated steel frame, adjustable for all 8" to 12" blades. Black composition, non-slip handle, easy pistol grip type. Blade may be faced in any one of four directions; rigidly held in desired position. Supplied with 8" blade. Shpg. wt., 2 lbs. **51c**
- 46-090. NET. 51c**
- 46-091. QUALITY HACKSAW BLADES.** Finest American-made hacksaw blades. They are hard and flexible to withstand tough use. 8" long, 3/16" wide. Set contains one fine and one coarse blade. Shpg. wt., 6 oz. **10c**
- NET. Set of 2. 10c**
- Fig. M. ELECTRIC RADIO TWEezer.** Finely tempered spring tweezers. For delicate work. Holds wires, nuts, screws, etc. **25c**
- 46-095. NET EACH. 25c**



Quality

# TOOLS FOR EVERY PURPOSE

## LENK QUALITY BLOW TORCHES



**43-700. Fig. A. No. 104. Gasoline blowtorch.** Leak-proof and non-clogging; features flame-control and shut-off valve to eliminate evaporation of fuel and loss of pressure. Extremely simple to operate. Control regulates flame size. Fool-proof design and sturdy construction; has self-cleaning orifice. Produces a 2000° F. flame. Generates quickly from asbestos-lined drip-cup. Height 7 1/2"; diameter at base 3"; capacity 3/4 pint. Shpg. wt., 2 lbs. **\$1.59 NET.**

**43-701. Fig. B. Number 66 double-barrel type Blowtorch.** Leak-proof; uses ordinary alcohol to produce intense flame. No pumping or blowing necessary; easily loaded through screw-top. Cap prevents evaporation. 6 1/2" x 2 3/4" x 1 1/4". Wt. 1 lb. **\$1.10 NET.**

**43-702. Fig. B. No. 24 Blowtorch.** This efficient torch is entirely automatic in operation. Uses alcohol for fuel. Made of heavily-plated metal. Solid leak-proof case. Has copper heat conductor. Used for light work. No pumping or blowing. Size, 5 1/2" x 2" x 1 1/2". Shipping wt. 1 lb. **69c NET.**

**43-703. No. 105.** Similar to No. 104 above in construction and appearance, except uses alcohol for fuel. Develops hot blue flame free of soot and smoke. For use wherever gasoline is not readily available. Tank of heavy gauge seamless metal. Height 7 1/2"; 3" base. 2 lbs. **\$1.76 NET.**

## WALSCO STAPLE DRIVER AND ACCESSORIES



**Fig. A.** Automatically staples wires in corners, behind pipes, into moldings, etc. Works even on hard surfaces, such as plaster, mortar and soft concrete. Staple depth can be regulated to avoid damaging wire insulation. Holds 23 staples; for wire up to 1/4" in diameter. Easily loaded. Trigger-operated feeding mechanism. With box of staples. Useful for general stapling, sign-posting, refrigeration gasket work, etc. Indispensable for Radio or PA Servicemen. Wt., 2 lbs. **\$3.33.**

**43-720. Tool Finish Model. NET.**

**43-721. Deluxe Chromium-Finished Model. NET. \$4.18**

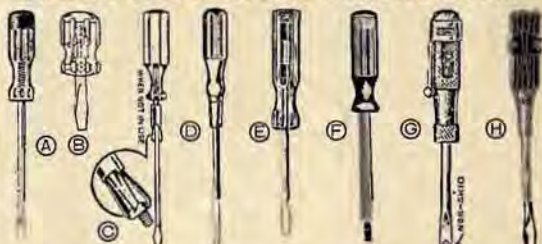
**43-722. Steel Staples for above.** Covered inside with insulating lacquer. Box contains 250 staples in 10 strips of 25 staples each. **25c**

**43-723. Box of 1000 Staples. NET. 95c**

**43-725. B. Rubber Cap.** Fits stapler head. Cushions hand. **19c**

**43-726. Fig. C. Leather Carrying Case for Stapler. \$1.25**

## HANDY ALL-PURPOSE SCREWDRIVERS



**43-800. Fig. A. Rustproof, tool steel blade, accurately ground to fit screw slot. Slip-proof, transparent amber handle and 3" blade. NET. 32c**

**43-801. 6" Blade. 43c**

**43-802. 8" Blade. 46c**

**43-805. Fig. B. LIFE-TIME "STUBBY." Tempered high carbon crucible tool steel blade, 1/4" x 1 1/4". Ambery sure-grip handle. Shock-proof; non-absorbent. NET. 33c**

**43-835. Fig. E. SUNDT NEON "FIRE DEVIL." Fine quality screwdriver. Built-in neon tube in handle glows when contact is made. 4 1/2" overall. Transparent handle, 1 1/4". Blade, 2 1/4". Insulated for 5000 volts. EACH. 24c**

**43-836. Handle, 3 3/4". Blade, 3 3/4". 15,000V. 7" overall. 59c**

**43-860. Fig. F. INSULATED BLADE TYPE.** 10,000 V. insulated screwdrivers. Red and black composition handle. 5" insulated steel blade. NET. 15c

**43-861. 6 1/2" blade. NET. 19c**

**43-850. Fig. G. Non-skid, shock-proof, with ribbed joint. Genuine Amberlite handle; with clip. 3" blade. 10 FOR \$1.53. EACH. 17c**

**43-851. 2" blade. 10 FOR \$1.44. EACH. 16c**

**43-852. 1 1/2" blade. 10 FOR \$1.35. EACH. 15c**

**43-870. Fig. H. Narrow blade screwdrivers.** For set-screw knobs and balancing trimmers. Overall length, 4 3/4". Hardened 2 1/4". Amber handle with clip. 10 for 90c. EACH. 10c

**43-871. 6 1/2", 4" blade, less clip. 10 for \$1.35. EACH. 15c**

Average shipping weight of above screwdrivers, 8 oz.

## G.C. CABINET REPAIR KIT



An inexpensive and practical kit for repairing dents, scratches, or nicks on wood, plastic, or bakelite cabinets, knobs, etc. Complete kit consists of: an assortment of 9 shades of shellac sticks, bottles of light and dark oil stain, metal shading lacquer, polish, Magic Scratch Remover, alcohol lamp, spatula, touch-up brushes, steel wool, sandpaper, and wiring cloth. Shpg. wt., 4 lbs. **\$1.91 NET.**



### REPAIR CEMENT

Used for repairing loose coils and speaker cones. Rapid drying. Kit consists of 2oz. can of cement, 2 oz. can of thinner, and a brush. 1 lb. **33c**

**43-116. NET.**

### BAKELITE CEMENT

For cementing bakelite to bakelite or to other materials; metal parts to metal; speaker cones; glass; loose inserts; molded tube bases, etc. Handy for radio repair and building.

**43-117. 2oz. Can. Wt., 1/2 lb. NET 24c**

**43-118. 8oz. Can. Wt., 1 lb. NET .75c**

## WALSCO RADIO NECESSITIES



Convenient kit of five Walsco chemicals packed in handy 1 1/4 oz. tubes. Contains Radio Cement, Fabric Cement, Multi-Use Cement, Walscolub B, and Motor and Gear Lubricant. Comes in sturdy box. Every serviceman, experimenter, and builder needs this kit. Wt., 2 lbs. **\$1.15 NET.**

**43-120. NET.**

**43-121. Radio Cement.** Quick-drying; water-proof. Heat-proof. 1 1/4 oz. tube. Wt. 8 oz.

**43-122. Multi-Use Cement.** Water-proof; heat-resisting. For plastics, metal, wood, glass, etc. 1 1/4 oz. tube. Wt., 8 oz.

**43-123. Fabric Cement.** For grill cloth, turntable felt. 1 1/4 oz. tube. Wt., 8 oz. **25c NET EACH.**

**43-124. Walscolub B.** Eliminates noise on contacts. 1 1/4 oz. tube. Shpg. wt., 8 oz.

**43-125. Motor and Gear Lubricant.** For phone-motors, etc., 1 1/4 oz. tube. Wt., 8 oz. **21c NET EACH.**

## KRAEUTER UTILITY HAMMER



Utility hammer and pry-bar. Useful for service shop, laboratory, or home. Drives removes staples, etc. Drop-forged alloy steel. Black finish. Polished steel claw. 9 1/2" long. Wt., 2 lbs. **65c NET.**

**43-900. NET.**

## 5-IN-1 WIRE STRIPPER



New 5-in-1 handy tool acts as stripper, scraper, cutter, wire-bender, and screwdriver. Constructed of finely tempered alloy steel. Shpg. wt., 8 oz. **15c NET.**

**43-905. NET.**

## VACO PHILLIPS-TYPE SCREWDRIVER KIT



Indispensable kit of five screwdrivers for all Phillips-type screws. Ambery shock- and break-proof handles have good insulating properties; high-carbon steel blades. P10 is 5 1/2" long; for No. 4 screws and smaller; blade, 3/8 x 3". P20 is 8 1/4" long; for No. 5 to 9 screws; blade, 1/2 x 3/4". P30 is 10" long; for No. 10 to 16 screws; blade, 5/8 x 6". P50 Stubby is 3 1/4"; for No. 5 to 9 screws; blade, 1/2 x 1 1/4". P60 Stubby is 3 1/4"; for No. 4 and smaller screws; blade, 3/8 x 1 1/4". Wt., 2 lbs. **\$2.35**

**43-880. Complete Kit. NET.**

## INDIVIDUAL SCREWDRIVERS

**43-885. No. P10. 41c** **43-882. No. P50. 47c**

**43-886. No. P20. 53c** **43-889. No. P60. 44c**

**43-887. No. P30. 68c**

## HANDY VACO 1/4" NUT-DRIVER

Break-proof, shock-proof insulating, 1/4-inch hexagon-socket nut driver. Hollow-shaft 1 1/2" deep. 3/8" x 6". 6 oz. **53c NET.**

**43-893. NET.**

## VACO CONDENSER-NUT WRENCHES

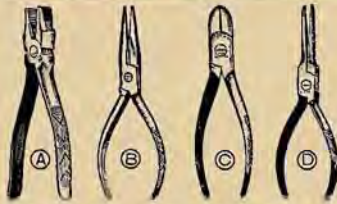
For easy removal or tightening of electrolytic condenser mounting nuts. 2" steel socket easily holds long lug or lead terminal. Has Ambery chip-proof, shock-proof handle. Size: 7", 8 oz.

**43-894. For 1 1/2" Nuts. NET**

**43-895. For 1 1/4" Nuts. EACH. 90c**



# Quality TOOLS FOR EVERY PURPOSE



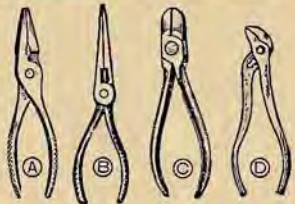
## KRAEUTER TOOLS

Kraeuter "K" brand fine-quality dependable tools are made to exacting specifications, yet are priced to save you money. Have blue-tempered finish. Made of high-quality steel with hardened, tempered jaws. Average shpg. wt., 10 to 16 oz.

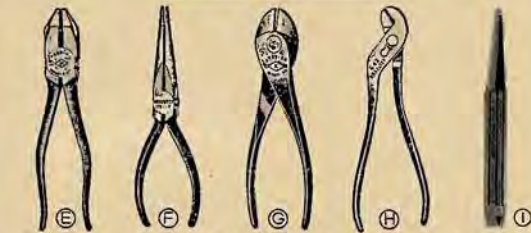
<b>TYPE A</b> 6½" Electrician's Type Pliers. 46-400. NET.....	<b>TYPE B</b> 6 Inch Needle-Nose Side Cutter. 46-401. NET.....	<b>TYPE C</b> 5 Inch Diagonal Cutting Pliers. 46-402. NET.....	<b>TYPE C</b> 6 Inch Diagonal Cutting Pliers. 46-403. NET.....	<b>TYPE D</b> 6 Inch Semi-Duckbill Type Pliers. 46-404. NET.....
<b>99c</b>	<b>\$1.08</b>	<b>99c</b>	<b>\$1.20</b>	<b>\$1.45</b>

## POPULAR-PRICED RADIO PLIERS

Fine values in American-made pliers for radio and electrical work. Carefully made of hardened steel; stoutly built to give long, reliable service. Every serviceman, experimenter, and Amateur can use these pliers to good advantage. Offered in four types for every requirement at attractive prices. Wt., 10 oz.



<b>TYPE A</b> Sturdy 6 Inch Thin Nose Type Pliers. 46-405. NET.....	<b>TYPE B</b> 5½ Inch Special Long Nose Side-Cutting Pliers. 46-406. NET.....	<b>TYPE C</b> 5½ Inch Diagonal-Cutting Type Pliers. 46-407. NET.....	<b>TYPE D</b> Midget Pliers; 4 Adjustments up to ¾-inch. 46-430. NET.....
<b>39c</b>	<b>41c</b>	<b>39c</b>	<b>29c</b>



<b>TYPE E</b> 8½" Line-man's Heavy-Duty Side-Cutting Type. 46-408. NET.....	<b>TYPE F</b> 7 Inch Extra Long-Nose Side-Cutting Pliers. 46-409. NET.....	<b>TYPE G</b> 6½" Heavy-Duty Diagonal Cutting Pliers. 46-410. NET.....	<b>TYPE H</b> 5-In. "Sure-Grip" Type Ignition Pliers. 46-411. NET.....	<b>TYPE I</b> Octagon Center Punch ¾" dia. x 4½". 46-412. NET.....
<b>\$1.52</b>	<b>\$1.55</b>	<b>\$1.25</b>	<b>91c</b>	<b>29c</b>

## SERVICEMEN'S TOOL CHESTS



### ALL-PURPOSE STANDARD

An all-purpose Utility Chest, Service Kit, or Tackle Box with double section detachable automatic-lift tray for housing tools, small parts, etc. 13½" long, 4½" deep, 6½" wide. Made of heavy gauge steel with green mar-proof enamel finish; watertight. Spill-proof lock automatically latches cover when closed. Has 12" embossed rule on front edge of cover. With key. Shpg. wt., 3 lbs. **86-001. NET..... 75c**



### HEAVY-DUTY DELUXE

A lift-out tray chest of heavy 22-gauge cold rolled steel. Built for hard usage; has double-lock seams, heavy corner reinforcements, paneled ends and cover, continuous hinge. Patented Padlock Eye welded to inside of chest, plus regular key lock, permits double locking. Hard-baked enamel finish in ripple grey; cadmium plated hardware. Size: 19" x 7" x 7". Shpg. wt., 8 lbs. **86-002. NET..... \$2.20**

## "LINEMASTER" FOOT TREADLE POWER TOOL SWITCH

A ruggedly-built 4-pole snap-action switch mounted in a sturdy, cast-iron casing. Pressure of foot on treadle switches power on and off, allowing you to keep both hands free for work. Switch is fully enclosed and hooded for protection against dirt. Useful for drill presses, punches, stampers, and all other power-operated machines or devices where hand-controlled switch is inconvenient and time-wasting. Rated at 20 amps. on 220 V., 40 amps. on 110 V. Light gray enamel finish. Size: 7" long, 4" wide, 3¼" high. Shpg. wt., 7 lbs. **46-450. Press to start, press to stop. 46-451. Hold down for closed circuit. NET EACH..... \$7.35**

## ACRO CHASSIS CRADLE

Permits locking any radio set or amplifier chassis in any position for circuit alignment, test, or replacement of parts. Prevents damage to tubes or other parts. Ideal for radio school instruction. Mechanical clamp holds chassis firmly in place. Adjustable base takes any size chassis up to 21" long. Made of cold-rolled heavy steel. Shpg. wt., 5 lbs. **86-030. NET..... \$3.50**  
**86-031. Extra set of clamps... \$2.45**

## RADIO TOOL CHEST KIT

Handy tool chest with 11 useful tools for servicemen or set builders. Consists of: 3" and 5" screwdrivers, scriber, reamer, countersink, thin long-nosed pliers, center punch, socket wrench set from ¼" to ½" for hexagon and knurled nuts, and 3 hexagon nut wrenches from ¼" to ½". Durable, dark blue and gold fiber-board cabinet, with tray. 9½" long, 5½" wide, 1½" high. Tools are those most frequently used. Shpg. wt., 2 lbs. **46-040. NET..... \$2.25**

## MASTER STEEL TAPE RULES

A steel tape rule for inside, outside, height, depth, and layout measurements. Rule has double-edge marking. ½" tape; 6 ft. long. Wt., 6oz. **46-045. NET..... \$1.29**  
**46-046. In round metal case without lock. NET..... 75c**



## JUSTRITE SOLDERING IRON AND BLOWTORCH

A sturdily built soldering iron and blowtorch combined. Ideal for use where power lines not available and where heavy-duty soldering or melting work is to be done. Works 30 min. with valve wide open on one filling of 1½ oz. of gasoline, naphtha, or benzine. Self-generating; requires no pumps or pressure systems. Easily operated regulating valve controls size of flame. Heavy brass shell withstand high pressures. Bakelite casing over shell for cool grip. With two heavy ¾" removable type tips. 12¾" long. Shipping wt., 1¼ lbs. **43-710. NET..... \$2.95**



## MAGIC STYLUS SOLDERING PENCIL

Ideal for soldering small parts in hard-to-get-at corners. Heats quickly. Insulated handle with cork finger guard. With 5 ft. cord. Underwriters' Approved. Shpg. wt., all types, 1 lb. **46-500. 110 Volt AC or DC Type. 46-501. 6 Volt DC Type. (Storage Battery.) EACH..... 78c**  
**46-502. 25 WATT. 110 V. AC-DC. Heavy-duty pencil. Has ¼" tips. Mica-insulated element. With 3 tips, 6 ft. rubber cord, and stand. NET..... 95c**  
**46-503. 40 WATT. 110 V. AC-DC. ¼" screw-tip; 6-foot cord. NET..... \$1.25**



## DRAKE NO. 3 MIDGET 40 WATT SOLDERING IRON

An unusually handy, midget-sized iron, tested and approved by Underwriters' Laboratories. Especially suitable for light radio work, for soldering in crowded quarters, or for use as a spare iron. Overall length only 10 inches; has ½" screw-on removable tip and shaped wood handle. 40 watt element. With 6-foot approved rubber cord and plug and convenient metal resting stand. Quick-heating "extra" iron complete with container for convenient storage in every Serviceman's tool kit. For 110 Volts AC or DC. Shpg. wt., 1 lb. **46-520. NET..... 75c**



# SOLDERING IRONS & ACCESSORIES

## KNIGHT SOLDERING IRONS



### UNDERWRITERS' APPROVED—WITH STAND

Here are splendid values in efficiently designed, sturdily built soldering irons at exceptionally low prices. These new Knight Soldering Irons are Underwriters' Approved with extra safety factors built in. Special features include: replaceable screw-on type, hard drawn copper tip; black rubberoid handle, shaped for easy gripping; tough, well-finished polished nickel case; 6-ft. cord with spring cord protector and unbreakable rubber plug. A convenient metal stand is included with all models. These quality irons are built to stand up under heavy use.  $\frac{1}{2}$ " copper tips. Operate from AC or DC. Shipping weight of each iron, 3 lbs.

75 WATT IRON		100 WATT IRON	
46-600. For 110-120 Volts. NET.....	\$1.39	46-602. For 110-120 Volts. NET.....	\$2.15
46-601. For 220-250 Volts. NET.....	\$1.52	46-603. For 220-250 Volts. NET.....	\$2.35

## KESTER SOLDERS

Compounded of the highest grade tin and lead. Flux filling assures perfect permanent joints free from corrosion. Aluminum solder absolutely holds aluminum. Save money—buy the handy one or five pound spools.



Quantity	ROSIN CORE		ACID CORE		ALUMINUM	
	No.	NET	No.	NET	No.	NET
Per Tin	46-900	17c	46-905	17c	46-910	17c
1 lb. spool	46-901	64c	46-906	64c	46-911	\$1.96
5 lb. spool	46-902	\$3.00	46-907	\$3.00		

## SOLDERING PASTE



A new improved soldering paste. Does a clean, non-corrosive job of soldering. Uniform quality and uniform fluxing strength; ideal for radio work.

46-915. PER TIN..... 12c  
10 FOR..... \$1.05

## TINNING BLOCK

Cleans and "tins" soldering irons or coppers very quickly. Replaces ordinary salammoniac. Won't crumble or corrode. Convenient to use.



46-920.  $\frac{1}{4}$  lb. NET..... 15c  
46-921.  $\frac{1}{2}$  lb. NET..... 30c  
46-922. 1 lb. NET..... 44c

## DRAKE SOLDERING IRONS AND ACCESSORIES



### STANDARD MODELS

Underwriters' Tested and Approved. Sturdy dependable irons for all shop or service requirements. With an "Easy-Grip," non-tiring wood handle. Heating elements are of highest-grade nichrome wire wound on genuine amber mica; reach soldering heat quickly. Equipped with spring to protect line cord. Tips nickel coated to prevent corrosion. With 6 foot approved cord fitted with soft rubber plug. Handles remain cool. For 115 V. AC or DC operation.

46-521. 60 Watt. Length 12";  $\frac{3}{8}$ " screw-on tip. Ideal for any light solder work. Wire element extends into tip for faster heating. With stand. Gun metal finish. Wt., 1 lb. NET..... 71c

46-522. 80 Watt. Length 13";  $\frac{3}{8}$ " tip, plunger type. For light radio work. With "Magic Cup" stand. Wt.,  $1\frac{1}{2}$  lbs. NET..... 2.06

46-523. 100 Watt. Length 12 $\frac{1}{2}$ ";  $\frac{3}{8}$ " tip, plunger type. For medium-heavy work. With "Magic Cup" stand. Wt., 2 lbs. NET..... 2.44

### DRAKE 7-INCH STAND WITH "MAGIC CUP"



This new idea in a soldering iron stand saves time and keeps iron in best working condition. Sturdy metal stand has "magic cup" built in at one end. Just insert tip of iron into cup, twist, and oxide is removed. Shpg. wt., 1 lb.

46-525. NET..... 31c  
46-526. As above, but less cup. NET. 18c



### DELUXE MODELS

High quality irons designed and constructed for light duty production work. Approved by Underwriters' Laboratories. Finest grade nichrome wire element wound on amber mica. Bright finish housing. Copper tips are bright dipped to resist corrosion. Aircooled baffle plates mounted at rear of element housing keep handle cool at all times. Spring guard prolongs life of heater cord. Larger surface for rapid radiation of heat provided by cooling fins. With 6 foot heater cord, soft rubber plug, and 7" soldering stand. For 110 V. AC or DC. Removable tips. Shpg. wt., 2 lbs.

46-530. 125 Watt. Length 12"; tip diameter  $\frac{3}{8}$ ". Extra hot iron for Service-**\$2.94**

46-531. 200 Watt. Length 14"; tip diameter  $\frac{3}{8}$ ". For auto radio installation work, lamp wiring, home repairs, light factory **\$4.25** work, etc. NET.....

46-535.  $\frac{3}{8}$ " Replacement Tip.  $\frac{1}{2}$  lb. .29c  
46-536.  $\frac{3}{8}$ " Replacement Tip.  $\frac{1}{2}$  lb. .47c



### DRAKE "400" MIDGET

An extra small iron. Ideal for connections close to chassis and coil shield work on midget sets, electrical meters, hearing aids, and other light jobs in home or shop. Length, 9"; weighs only 8 oz. 60 watt element with  $\frac{1}{4}$ " tip. Nichrome wire wound on amber mica. With 6 ft. cord, rubber plug, and "Magic Cup" soldering stand. For 115 V. AC-DC. Shpg. wt., 1 lb. **\$2.65**

46-538. NET.....



### ECONOMY MODELS

Excellent irons for light work and tight corners. Element wound of highest quality nichrome wire on amber mica. Comes complete with 6 ft. heater cord, rubber plug, and small stand. Gun metal finish. Shpg. wt., 1 lb.

46-540. 65 Watt. Length 12 $\frac{1}{2}$ " long. **\$1.32**  
 $\frac{1}{4}$ " tip. Shpg. wt., 1 lb. NET.....

46-541. 100 Watt. Length 13 $\frac{1}{2}$ " long. **\$1.76**  
 $\frac{3}{8}$ " tip. Shpg. wt.,  $1\frac{1}{2}$  lbs. NET.....

46-542.  $\frac{1}{4}$ " Dia. Tip for 65 watt iron.  $\frac{1}{2}$  lb. (see center col. for  $\frac{3}{8}$ " size). NET..... 24c

## DRAKE HEAT CONTROLS

Keeps iron heated to proper temperature. Reduces operating cost. Dull nickel finish. Shipping weight, 3 lbs.



46-543. Type 300H. NET..... **\$2.65**  
46-544. Type 300. Same as above but without shield. NET.... **2.35**



## AMERICAN BEAUTY IRONS

Finest quality irons for 115 volts AC or DC. Type 3158. 200 Watts. For medium-heavy factory and production work. Length, 13 $\frac{1}{2}$ "; tip dia.,  $\frac{3}{8}$ ". Baffle plate keeps handle cool. Chrome-plated metal parts. For AC or DC. With 6 ft. cord and stand, 3 lbs. **\$6.50**

46-650. NET.....  
46-651. Extra tip for above. NET. 75c

Type 3138. 100 Watt. Adapted for production work on radio, ignition, telephone, etc. 16 oz.; length, 12 $\frac{1}{2}$ "; tip dia.,  $\frac{3}{8}$ ". 6 foot cord. Highly polished, chrome-plated metal parts. Complete with stand. Wt., 2 lbs. **\$5.45**

46-655. NET.....  
46-656. Extra tip for above. NET.... 35c

Type S-76. 50 Watt. Light, compact. Heats quickly, handle stays cool. 6 oz.; length, 11 $\frac{1}{2}$ "; screw type removable tip,  $\frac{3}{8}$ ". 6 foot cord and holder. Wt., 1 lb. **\$3.25**

46-660. NET.....  
46-661. Extra tip for above. NET.... 21c

## REPLACEMENT ELEMENTS

46-665. For type 3158 Iron.  $\frac{1}{2}$  lb. **\$3.50**  
46-666. For type 3138 Iron.  $\frac{1}{2}$  lb. 2.75

## IRON CLEANER AND TINNER

Keeps your iron "Silver Bright." Cleans and tins in one operation. Saves your time. Improves workmanship. Shpg. wt., 1 lb. **25c**



## JACKSON SOLDERING IRONS

A high grade line of electric soldering irons. Elements are wound on amber mica insulation over steel core. Supplied with plunger tips. For 115 V. AC-DC. 6 foot cords.  $1\frac{1}{2}$  lbs. each.

46-620. 75 Watt. Has  $\frac{3}{8}$ " copper rod tip with set screw. Nickel-finish tube. **\$1.85** NET.....

46-621. 100 Watt. Has  $\frac{3}{8}$ " copper tip, 12 $\frac{1}{2}$ " long. Removable handle. **\$2.59** NET.....



## ICA SOLDERING IRONS

Element is of the highest quality resistance wire. Will heat in three minutes. Handle remains cool. Plunger tip is easily removed. Stand supplied. For 115 volts, AC or DC operation.

46-635. 60 Watt. A medium weight iron for most encountered types of ra- **\$2.35** dio work.  $\frac{3}{8}$ " tip. Wt., 2 lbs. NET.....

46-636. 85 Watt. A good general-purpose iron.  $\frac{3}{8}$ " tip. Shpg. wt.,  $2\frac{1}{2}$  lbs. **\$2.94** NET.....

46-637. 115 Watt. Heavy Duty type; has  $\frac{3}{8}$ " plunger type tip of adjustable length. Shpg. wt., 3 lbs. **\$3.50** NET.....

## SOLDERING IRON TIPS

High quality replacement plunger type copper tips. Fit all standard irons. Shpg. wt.,  $\frac{1}{2}$  lb. NET EA.

46-646. Size  $\frac{3}{8}$ " x  $2\frac{1}{2}$ " **28c**  
 $\frac{3}{8}$ " x  $3\frac{1}{4}$ "



## GARDINER ROSIN CORE SOLDER

A dependable, rosin-core solder developed especially for delicate electrical and radio work. 3 oz. can.

46-950. PER CAN..... **12c**  
46-951. 1 LB. SPOOL. NET..... **60c**



# INTERFERENCE ELIMINATORS

## AEROVOX FILTERS



### TYPE IN-24<sup>4</sup> ELIMINATOR

- Eliminates power line interference
- Completely factory-built
- Simple one-minute installation

Completely eliminates all power-line noises when connected between noisy motor and line. Greatly reduces man-made static from electric motors, vacuum cleaners, washers, and other interfering electrical devices. Provided with inductance as well as capacitance for thorough filtering action. Aerovox Interference Eliminators increase your radio enjoyment. No tools needed—just plug in and connect to ground. Handles 3 amps. Complete with cord and plug. Size: 4" x 2 1/4" x 3 1/4". For 110-220 volts, AC-DC. Wt., 3 lbs. **\$2.79**

70-300. List, \$4.75. NET.....



### TYPE IN-29 FILTER

Effective for reduction of interference which is variable in character but strong in intensity. Ideal for eliminating noise caused by electric razors and other vibrating devices. (Max. V., 125 AC or DC.) 1 3/8" x 3". 1 lb.

70-301. NET..... **44c**



### TYPE IN-30 FILTER

Similar to IN-29, but provided with inductance in addition to capacitance for elimination of more intense interference. May effectively be used either at source of interference or at radio set. Size: 1 3/8" x 3". Wt., 1 lb.

70-302. NET..... **73c**

70-303. TYPE IN-31. Similar to above but for elimination of more serious interference. Size, 1 3/8" x 3". NET..... **88c**

### OTHER AEROVOX FILTERS

70-304. Type IN-27. NET..... **38c**  
70-305. Type IN-28. NET..... **56c**

## TYPE ANL-37 INTERFERENCE ANALYZER



Contains the seven fundamental filter circuits, one of which will eliminate the interference being traced. Plugs into power-line ahead of radio receiver or noise-producing device. Rotary selector indicates proper filter by Aerovox type number) to be used for best results. Supplied with complete instructions. In metal case, 5 1/2" x 5 1/2" x 8". For AC or DC. Shpg. wt., 6 lbs.

70-306. NET..... **\$6.86**



## ICA ALL-WAVE FILTERVOLT HEAVY-DUTY TYPE

A new and improved noise filter, especially designed for eliminating interference in all-wave receivers. Can be installed at the radio or at the source of noise. Contains heavy-duty RF chokes and large capacitors. The "PI" filter circuit used has proved especially effective for eliminating noise caused by heating-pads, automatic-irons, toasters, vacuum cleaners, etc. Rated conservatively at 250 watts. For use on 32, 110 and 220 volt AC or DC. 5.4x4 1/4". Shpg. wt., 5 lbs.

70-370. NET..... **\$2.94**

## ICA STANDARD FILTERVOLT



An efficient filter to eliminate noise-interference from all types of electrical appliances. For installation directly ahead of radio set or at source of noise disturbance. For 110 or 220 volts, AC or DC. 4 3/8" x 3 3/4" x 1 1/4". Wt., 1 1/2 lbs.

70-371..... **\$2.06**

## END RADIO NOISE!

To find source of noise, connect aerial post of radio to chassis or ground. If noise stops, an all-wave antenna is required (see pages 182-3). If noise persists, select a line filter to be installed between noise source and power line.

## TACO H-F ALL-WAVE LINE FILTER

A composite filter containing three complete filter circuits. Covers short-wave and ultra-short-wave as well as the standard broadcast bands. RF choke filter system stops noise that would ordinarily enter the set through the power line. Most efficient when installed on the interference-causing device. Operates on either AC or DC devices drawing not more than 200 watts at 120 volts. Measures only 4" x 4" x 5". Easily installed without tools. Plug in and connect to ground. With attachment cord and unbreakable rubber plug. In brown metal case. An effective filter. Shpg. wt., 5 lbs.

70-380. Model 100. NET..... **\$4.41**

## MALLORY NOISE FILTERS

### TYPE LC-10

Inductance-capacity filter for eliminating severe interference. Install as close as possible to noise source. Has binding post on case for grounding to frame of motor or appliance. Plugs into 110-220 volt power source. Has convenient outlet on top of case to accommodate plug of motor or appliance. Unit is housed in a shell case with mounting flanges. Easily installed on a wall or directly on the appliance. Overall size: 2 1/2" x 3" x 3 1/4". For any electrical apparatus drawing up to 10 amps. Wt., 5 lbs.

70-320. NET..... **\$4.70**

### TYPE X5 FILTER

For use with vacuum cleaners, food mixers, etc. Use between the electrical appliance and the 110-220 volt power line. Has binding post for grounding to frame of appliance. Triple capacity filter. Blocks interference at source. Handles up to 5 amps. 1 3/4" x 2 1/4". 1 lb.

70-321. NET..... **73c**

TYPE Z2. A capacitor-inductance plug-in type filter for medium interference such as electric razors, small motors, etc. Most effective on ground line systems. Size, 1 3/4" x 2 1/4". Rated at 3 amps. For 110-220 V. Wt., 1 lb.

70-322. NET..... **68c**

TYPE Z4. A dual inductance-capacity plug-in filter for severe interference. For use at radio or noisy appliance. Size, 1 3/4" x 3". For 110-220 V. AC or DC at 3 amps. 1 lb.

70-323. NET..... **79c**

TYPE ZA1. Antenna substitute. A capacity and inductance combination using house wiring as an antenna. Plugs in power line socket. Size, 1 3/4" x 1 1/4". Wt., 1 lb.

70-324. NET..... **59c**

TYPE W7SP. A filter for drink mixers, drills, etc. 7/8" x 1 1/2". Wt., 1 lb.

70-325. NET..... **44c**

TYPE W9SP. Similar to W7SP but for stronger interference. Wt., 1 lb.

70-326. NET..... **59c**

TYPE W1SP. Similar to W7SP but for severe interference. Wt., 1 lb.

70-327. NET..... **73c**

37-007. Mallory Noise Elimination Circular. List all types of Mallory noise filters. Sent FREE on request.

## TOBE NOISE-ELIMINATING FILTERETTES

### MODEL 7 AC-DC POWER LINE FILTER

An easily installed Tobe capacity type line-filter which will effectively eliminate line-noises. Plugs into electric light socket or wall receptacle. Receiver plug fits into top of filter-unit. Materially reduces disturbing radio interference from power lines. For 110 volts, AC or DC. 1 3/4" x 2 1/2". Shpg. wt., 1 lb.

70-340. NET..... **59c**

### RAZOR FILTERETTE

A practical filter-unit to reduce interference from electric razors. Enjoy early morning programs, time signals, etc., without the disturbing buzz of your razor. Just plug unit in wall receptacle and plug razor at other end. In black bakelite case only 1 1/2" dia. by 2 1/4" long. Wt., 1 lb.

70-341. NET..... **59c**

### MODEL RF-2

Designed to eliminate noises coming from the power line. Effective filtering is attained through combining capacity and inductance in one carefully engineered unit. For installation between set and power line. For 110-130 volts, AC or DC. 250-watt capacity. 4.3x3.2". Shpg. wt., 2 lbs.

70-342. NET..... **\$2.79**

### OB-31 FOR OIL BURNERS

Specially designed for oil burners but also may be used on motors up to 2 1/2 amps at 110 volts AC or DC. Has dual RF chokes and correctly designed capacitors for maximum filtering efficiency. In utility type box, 4" x 2" x 2", with 1/2" knockouts for BX or conduit. Underwriters' Approved. 6 lbs.

70-343. NET..... **\$4.67**

## CONTINENTAL FILTERNOYS

Eliminate or materially reduce "man-made" static caused by vacuum cleaners, refrigerators, shavers, mixers, etc. For 110-120 Volts, AC or DC.

70-350. Type R01DH. Plug-in Receptor-type. For use between radio and power outlet. 5-amp. capacity. Fully insulated. 2 3/8" x 1 1/4". 8 oz. NET..... **59c**

70-351. Type F01DH. Plug-in Suppression type for elimination of noise at motors using less than 300 watts. Max. Volts, 120 AC or DC. Shpg. wt., 8 oz. NET..... **59c**

### TYPE G01DH

Wire-in suppression-type unit with two chokes and two condensers with grounded frame. Mounts on motors, within diathermy or dental machines, etc., drawing less than 300 watts AC or DC. Also for filtering interference caused by fluorescent lights. 2 1/4" x 1 1/4". Wt., 8 oz.

70-352. NET..... **59c**

70-353. Type L02DH. Designed especially for fluorescent lights. 5 amps. 1 1/2" x 1 1/2" x 6 1/2". Shpg. wt., 2 lbs.

NET..... **\$1.47**

### TYPE F1005DH

A heavy-duty suppression-type filter, employing two chokes and two condensers for maximum filtering efficiency. Ideal for use with oil burners, neon signs, motors, etc. Size, 4 3/8" x 3" in diameter. Rated at 10 amps, 110-220 V. AC or DC. Shpg. wt., 2 lbs.

70-354. NET..... **\$2.94**

70-355. Type F05D. Diverter type. For up to 220 volts, regardless of watts load. 4 1/2" x 2 1/2". Shpg. wt., 2 lbs. NET..... **\$1.47**



# INTERFERENCE ELIMINATORS & FILTERS

## SPRAGUE PROFESSIONAL METHOD OF NOISE ELIMINATION

Locate and eliminate noise interference by scientific analysis. Only three simple steps: (1) locate the trouble with the Interference Locator; (2) determine the remedy with the Interference Analyzer; and (3) install the correct filter from the list below. Countless radio receivers need this service. Specialize in noise elimination work in your locality. You'll find that it is easy and profitable.



### THE SPRAGUE MASTER INTERFERENCE ANALYZER

This sturdy, portable instrument determines quickly and accurately the proper type of filter needed to eliminate noise. Widely used by power companies, servicemen, etc. Easy to use. Simply connect analyzer into the circuit of any device causing radio interference. By rotating the selector switch any one of 60 different filter combinations is connected into the circuit, to determine the correct filter for installation. Interference booklet and chart supplied free. For 110-220 V. AC or DC. Wt., 8 lbs. **\$23.94**  
84-000. MODEL MA-1. NET.



### INTERFERENCE LOCATOR

This brand new, completely portable, self-contained Model IL-2 Interference Locator will take the kinks out of one of the Serviceman's toughest jobs. Enables you quickly to determine the source, extent, and remedy of all kinds of interference. Consists of a specially designed, portable battery receiver with full three-band range: 500 to 1700 KC., 1.7 to 5 MC., and 15 to 32 MC. Employs extendable pole antenna as well as demountable loop antenna in a special antenna circuit for excellent sensitivity. Sensitivity is less than 1 MV for 10% output meter scale deflection. Includes built-in loudspeaker plus headphone jacks; sensitive, easy-to-read two-range output meter; and AC-DC cord connectors for line operation when desired. Supplied complete with batteries in a rugged metal case, 15"x11"x8", with detachable cover and convenient handle; loop antenna is carried in cover recess when not used. Shpg. wt., 23 lbs. **\$79.90**  
84-001. CASH PRICE.

\$15.98 down, \$8.73 monthly for 8 months. Write for prices of coaxial cable with connectors for use of pole antenna as probe.

### SPRAGUE INTERFERENCE ELIMINATOR CONDENSERS & CHOKES



Eliminate interference at the source. All units except LF-2 for 110 or 220 volts, AC or DC.



**70-100. IF-15. Fig. B.** A triple-section filter for small motors used in mixers, fans, drills, etc. RMA recommended design. Size, 2 1/2" x 1 1/4" dia. 6' leads. Shpg. wt., 8 oz. **73c**  
NET.

**70-101. IF-25. Fig. A.** Double-section filter for medium-sized motors up to 1 H.P., and to 220V. Used on grinders, drill presses, etc. 3 1/2" x 1 3/4" dia. Wt., 8 oz. **\$1.32**  
NET.

**70-102. IF-G1. Fig. B.** Metal encased, single-section filter for use on brush connector of generators, converters, etc. Case grounded. 1 3/4" x 1 1/4" dia. Shpg. wt., 6 oz. **38c**  
NET.

**70-103. IF-G10. Fig. A.** High-capacity, single-section filter with enclosed terminals. Used with IF-11 on 3-wire distribution systems. 3 3/4" x 1 3/4". Shpg. wt., 8 oz. **\$1.18**  
NET.

**70-104. IF-11. Fig. A.** Dual high-capacity filter for heavy industrial uses. Size, 4 1/2" x 1 1/2". 6' leads. Wt., 1 lb. **\$1.68**  
NET.

**70-105. IF-21. Fig. B.** Dual, compact filter with 220 V. AC rating. Case grounds to motor frame. Size, 2 1/2" x 1" dia. Shpg. wt., 1 lb. NET. **59c**

**70-106. CH-1. Fig. C.** Metal encased choke of adequate inductance for R.F. filtering. 10 Amp. size, 3 1/2" x 1 3/4" x 1 1/2". Shpg. wt., 1 lb. NET. **79c**

**70-107. LF-2. Fig. D.** Multi-section filter for electric shavers, hair dryers, and other units up to 1/2 amps. 115 V. AC. **\$2.06**  
DC. Wt., 1 lb. NET.

### RADIO INTERFERENCE MANUAL

Compiled by Sprague engineers to help you determine the source of radio interference. All types of interference considered and the remedies suggested. Includes data on motors, neon signs, etc. Shpg. wt., 1 lb. **37-520. NET PRICE.....25c**



## CORNELL-DUBILIER "QUIETONE" FILTERS



**MODEL IF-18.** An efficient all-wave, capacitive-inductive, sectional-band type filter for use between radio receiver and power line when interference conditions are severe. Has binding post for making ground connection. In walnut bakelite case, 110 V. AC-DC at 5 amps. 5 x 3 1/2 x 2 3/4". Shpg. wt., 6 lbs. **\$2.94**  
**70-120. NET.**

**MODEL IF-4.** Ideal for use with small radio receivers, such as AC-DC midget sets, etc., where noise level is not too severe. Connects in power line between the radio receiver plug and wall receptacle. 110 V. AC-DC at 5 amps. Contained in attractive walnut finished metal shell, 2 1/2" x 1 1/2" dia. Shpg. wt., 1 lb. **70-125. NET.....44c**

### FOR USE AT APPLIANCES

**MODEL IF-19.** An efficient capacitive-inductive type filter for use where interference is severe. Has binding post for ground connection. Mounting ears permit filter to be set in any convenient position. In walnut bakelite case, 110 V. AC-DC at 5 amps. Size, 4 x 3 1/2 x 2 1/2". Shpg. wt., 4 lbs. **\$2.35**  
**70-121. NET.**

**MODEL IF-6.** For all types of some electrical appliances where interference is of moderately low intensity. Installed between appliance and power line with short return lead which reduces radiation. 110 V. AC-DC at 5 amps. Walnut finish. Size, 2 1/2" x 1 1/2" dia. Shpg. wt., 1 lb. **70-126. NET.....73c**

**MODEL IF-24.** (Not illustrated.) Industrial capacitive dual unit; filters noise caused by fluorescent lights, etc. in 110 V. AC-DC, single phase circuits. Shpg. wt., 1 lb. **70-122. NET.....44c**

**MODEL IF-20.** A plug type filter for small electrical appliances where interference is very low. 110 V. AC-DC at 5 amps. Bakelite case; walnut finish. Shpg. wt., 1 lb. **70-127. NET.....29c**

**MODEL IF-5.** For small appliances such as food mixers, hair dryers, etc., where radio interference is of low intensity. 110 V. AC-DC at 5 amps. Walnut finish. Wt., 1 lb. **70-123. NET.....44c**

**MODEL IF-22.** Special filter with 6 foot rubber line cord and plug for electric shavers. 110 V. AC-DC, Shpg. wt., 1 lb. **70-128.** For Schick, Knapp Monarch, etc. **70-129.** For Packard, Reming. **\$1.03**  
ton-Road, etc. NET EACH

### MODEL IF-7A FOR INDUSTRIAL USE

An ideal filter designed to block severe radio interference caused by motors, generators, stokers, diathermy machines, oil burners, etc., and especially suitable for factory, office, and apartment building installations. This Quietone consists of low-loss coils and highest quality capacitors that will correct noise conditions in both Broadcast and Short-Wave receivers. A heavy-duty, capacitive-inductive filter for single phase, 110-220 V. AC-DC at 5 amps. Housed in a heavy metal cut-out box, with hinged cover, finished in grey enamel. With knockout holes for BX or conduit connectors; ready for wall mounting. Size: 6 x 6 x 4". Shpg. wt., 9 lbs. **70-124. NET.....\$4.41**



## MEISSNER WAVE TRAPS

Interference created by powerful local stations, code and long wave signals can be eliminated by these units. Select a wave trap which will tune to the frequency of the interfering signal. Where frequency of interference is not known, use dual model. Installed in series with serial lead-in.



**70-150. Dual Universal Model.** Ends interference in broadcast, police and IF bands. 400-475 KC and 550-1950 KC. Wt., 2 lbs. NET. **\$1.71**

### FOR BROADCAST BAND

"A" operates on low frequency broadcast. "B" on medium frequency broadcast. "C" on high frequency broadcast. "D" eliminates IF interference caused by code, etc. Av. wt., 2 lbs.

Stock No.	Type	Freq. Covered	NET
70-151	A	400 to 700 K.C.	EACH <b>79c</b>
70-152	B	650 to 1000 K.C.	
70-153	C	950 to 1600 K.C.	
70-154	D	456 K.C. (shielded)	59c
70-155	D	456 K.C. (unshielded)	41c

**70-156. Deluxe Dual Broadcast Wave-trap.** 2-section trap for single frequency elimination. 550 to 1950 KC. NET. **\$1.71**

### FOR AMATEUR BAND

For interference caused by nearby Amateur stations. Select proper frequency-band type.

70-160	20 Meter Band	EACH <b>79c</b>
70-161	40 Meter Band	
70-162	80 Meter Band	
70-163	160 Meter Band	
70-168.	Deluxe Dual Amateur Wave-trap.	For eliminating interference simultaneously in the 40 and 80 or 80 and 160 meter Amateur bands. Covers 1.5-7.5 MC. <b>\$1.71</b>

## RCA No. 33033 WAVE TRAP

Attenuation 40 to 1 over entire broadcast band. Eliminates interference from commercial, ship, police, and amateur stations. Also tunes out interfering broadcast stations. Range, 450 to 2100 KC. No signal loss. 1 lb. **70-195. NET.....\$1.09**





# RCA-UNITRA ANTENNA SYSTEMS & ACCESSORIES



## RCA "SPIDER-WEB" ALL-WAVE ANTENNA

RCA's finest antenna. Insures greater signal pickup on every band with maximum noise rejection. Gives excellent all-wave reception over a frequency range from 140-23,000 K.C. Installation simple. Kit includes: 6 coils of 7 x 22 stranded antenna wire; 2 hangers; 1 coil of lead-in wire; receiver and antenna coupling transformers; 7 "U" clips; 2 antenna transformer connectors; complete instructions. For use with any receiver. Wt., 6 lbs. Shpg. wt., 10 lbs. **NET \$5.26**

**51-062. No. 9685. NET \$5.26**

**51-063. No. 9689. This kit when added to the Spider-Web increases range to cover from 23 to 70 MC. Shpg. wt., 2 lbs. NET \$8.8c**



## RCA "MAGIC-WAVE" ALL-WAVE ANTENNA

Factory-wired. Up to 16 radios may be operated from one installation. Kit includes Receiver and Antenna Couplers with built-in lightning arrester; 60' Antenna Wire; 45' Transmission Cable; 5 insulators; Ground Clamp. Shpg. wt., 5 lbs.

**51-060. No. 9812. NET \$3.50**

**51-065. No. 9849. Antenna Coupler only, with built-in lightning arrester. NET \$1.18**

**51-066. No. 9814. Distribution Transformer. Use one for each 4 additional sets. NET \$1.76**

**51-067. No. 9813. Set Coupler only. For each additional set on one antenna. NET \$1.47**



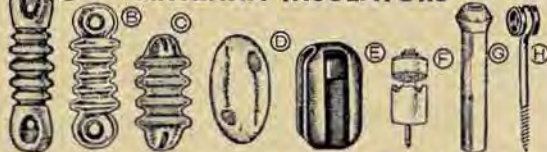
## RCA 395 ALL-WAVE ANTENNA SYSTEM

A low-priced antenna that will improve the performance of any type of set. Fully assembled and ready to install. Provides improved signal pickup and high signal-to-noise ratio. Transmission line and receiver coupler help eliminate noise. Consists of 2-20 foot coils of antenna wire, 2-strain insulators, 60 foot transmission line, 1-junction box, 1-receiver coupler, 2-coupling links, 2-nail-knobs, 1-ground clamp, and complete instructions. Requires little space; span is only 40 feet. Shpg. wt., 5 lbs. **NET \$2.32**

**51-061. NET \$2.32**

**51-064. No. 12855. Receiver Coupler Unit Only. Shpg. wt., 1 lb. NET \$4.4c**

## ANTENNA INSULATORS



A splendid selection of sturdy insulators for practically every application in antenna installation. Each type of insulator is made of the finest quality material to assure dependable service. Av. wt., 1/2 lb. ea.

Stock No.	Fig.	Size	Description	EA.	10 For	100 For
51-200	A	3 3/4"	Pyrex glass, 250W.	21c	\$1.89	.....
51-201	A	7 1/2"	Pyrex glass, 1000W	79c	7.11	.....
51-250	B	3 1/2"	Glass type.....	3c	.24	\$2.16
51-255	C	2 1/2"	Glazed porcelain.....	3 1/2c	.41	2.79
51-256	C	4"	Glazed porcelain.....	5 1/2c	.49	4.41
51-257	C	4"	Glazed porcelain.....	9c	.81	7.29
51-260	D	1 1/2" x 3/8"	Lo-loss white porc.	3c	.24	1.92
51-261	E	2 1/2" x 1 1/2" D.	Brown glazed porc.	7c	.63	5.67
51-265	F	1 3/4" x 1 1/2" D.	Porcelain nail knob	3c	.28	1.92
51-270	G	3" x 1 1/2" D.	Porcelain tube.....	2c	.18	1.62
51-271	G	6" x 1 1/2" D.	Porcelain tube.....	2 1/2c	.20	1.80
51-275	H	3"	Eye wall insulator.	3c	.24	2.16
51-276	H	7"	Eye wall insulator.	3 1/2c	.31	2.79

## ANTENNA LIGHTNING ARRESTERS



**51-280. Fig. A. Approved by Underwriters'. Porcelain construction with screw terminals. Shpg. wt., 10 oz. 10 FOR 81c. EACH... 9c**

**51-281. Fig. B. Bakelite construction. Underwriters' Approved. For single wire lead-ins. Equipped with screw terminals, 1 lb. 10 FOR 99c. EACH... 11c**

**51-282. Fig. C. Black porcelain with screw terminals. For any two-wire lead-in or transmission line. Shpg. wt., 1 lb. EACH... 17c**

**51-284. Fig. D. Combination lightning and static arrester. Incorporates choke coil and condenser acting as noise and static reducer and filter. 1 lb. EACH... 51c**

**51-240. Fig. E. Uses Neon element in place of the usual air-gap or resistance. Fully approved by the Underwriters. 1 lb. EACH... 59c**

**51-241. Fig. E. Duplex Type. As above but for Doublet antennas. Shpg. wt., 1 lb. EACH... 82c**

## ANTENNA LOOPS FOR MIDGETS & PORTABLES



Replaces antenna coil in battery and midget sets or portables. Insures good signal pickup and excellent selectivity. Eliminates the necessity for using an outdoor or indoor antenna. Inductance is higher than needed; permits removing turns for accurately matching loop to radio. Easily installed in back of set. Two sizes. Shpg. wt., 12 oz.

**51-040. 4 1/2" x 8". NET \$4.8c**

**51-041. 7 1/2" x 9 1/2". NET \$5.1c**

## INDOOR ANTENNA WIRE



Exceptionally flexible, fine stranded wire. Definitely will not knot. Excellent for AC-DC and midget radio sets or experimental use. Suitable for loop aerials. Easily hidden from view under rugs, behind woodwork, etc. Shipping wt., 1 lb.

**49-152. 100 Feet. NET \$3.9c**

**49-151. 25 Feet. 8 oz. NET PRICE... 11c**

## GROUND CLAMP



Sturdy ground clamp for radio or telephone use. Has lead-connector and clamp-screw with pointed tip and locknut. Max. bite 1 1/2".

**51-305. EACH... 3c**

**10 FOR... 27c**

**100 FOR... \$2.43**

## MUELLER CLAMP



Positive Contact Ground Clamp. Channel construction. Max. bite 1 1/4". Case hardened screw. Shpg. wt., 4 oz.

**51-310. EACH... 6c**

**Lots of 10... 48c**

**100 for... \$4.32**

## PLATED GROUND RODS

Copper-plated steel, 3/4" diam., with screw clamp for lead-in wire. Shpg. wts., 4 and 6 lbs.

**Stock No. Feet EACH 10 For**

**98-570. 4 | 28c | \$2.52**

**98-571. 6 | 42c | 3.78**

## PUSH-CLIPS

For fastening cords from radios, wall or floor lamps, to moldings or baseboard. Wt., 3 oz.

**52-020. Brown. 52-021. Ivory. Card of 8 Clips... 8c**

**10 Cards For... 72c**

## INSULATED STAPLES

Saddle-type, insulated. For radio or lamp cords. 100 to the box. Wt., 2 lbs.

**52-030. Per Box of 100... 12c**

**10 Boxes For... \$1.08**

## NAIL-IT INSULATED STAPLES

New design. Saves fingers—drives like a nail. Won't bend. Locked insulation. Copper finish.

**52-031. Per Box of 50... 7c**

**20 Boxes For... \$1.12**



## WINDOW LEAD-IN

Insulated, weather resistant.

**51-050. Fig. A. 12 inch... 4c**

**51-051. Fig. A. 16 inch... 5c**

**51-052. Fig. B. Dual window lead-in. 12 inch... 8c**

## TRANSPOSITION BLOCK

Made of glazed ceramic material. Prevents twisting of transposed lead-ins, reduces electrical loss to minimum. 2 1/2" x 1 1/4". Shpg. wt., 3 oz.

**51-222. EACH... 8c**

**10 FOR 72c**

## GUY WIRE

50-ft. coil of galvanized steel wire. Strong, tough. Shpg. wt., 1 lb.

**51-320... 17c**

## ADJUSTABLE ANCHOR

Rust-proof-steel anchor for keeping guy wires taut. 1 lb.

**51-321. NET... 11c**



# ANTENNAS AND ACCESSORIES

## TACO ALL-WAVE AERIAL



Standard-wave type kit. Gives maximum signal pickup. Frequency range, 150 KC to 25 MC. Aerial length only 60 feet. Includes dual iron-core transformers for matching to any set; 2-30-ft. coils of stranded wire; 60 foot weather-proof cable, assembled and soldered; 1 screw-eye; 2 nail knobs; 2 porcelain insulators. Instructions. Shpg. wt., 4 lbs. **\$3.97**  
51-000. NET.....



## FREQUENCY MODULATION AND STANDARD WAVE COMBINATION

A self-selecting combination antenna covering all bands including the new Frequency Modulation band. Range is 150 KC to 75 MC. Consists of antenna transformer; 2-30-ft. coils of aerial wire; 60 ft. transmission cable; 1 screw-eye; 2 nail knobs; 2 insulators; and set transformer. Latter has separate leads for AM and FM bands. Wt., 4 lbs. **\$2.94**  
51-001. NET.....

## TACO POWER ANTENNA

Picks up radio signal from power line, filters and matches it to set. May be mounted inside radio cabinet. Wt., 1 lb. **\$1.18**  
51-005. NET.....



## INDOOR ANTENNA AND DYNATROL FILTER

Combination indoor aerial and line noise filter. Plugs into light socket and makes use of service line as antenna. May be used in conjunction with regular outside antenna to give increased pickup. Serves to reduce noise and improve radio set sensitivity. Binding post connections. 1 lb. **\$1.95**  
51-020. NET.....



## INDOOR AERIAL AND ANTENNA TUNER

This new device operates as a noise reducer when used with an outside aerial. Tunes antenna circuit to desired signal providing a better signal-to-noise ratio. May also be used by itself as an indoor aerial. Dual bracket type mounting. Easily installed; works with any receiver; will improve reception. Wt., 1 lb. **\$1.68**  
51-021. NET.....

## "VERTROD" VERTICAL MAST ANTENNAS FOR FM AND AM SETS

Type 104. This antenna comes closer to complete freedom from man-made static than any so far devised. At the same time it provides maximum efficiency in the reception of signals from the Standard Broadcast and the new Frequency Modulation bands. Magnetically-core antenna and set transformers plus the special 3/4-foot transmission line assure perfect impedance match between antenna and set. The rigid, rustproof elements extend from 3 to 9 feet. Unit has patented rotary base for mounting at any angle. Frequency ranges are 40 to 60 MC and 500 to 1700 KC. Wt., 5 lbs. **\$7.06**  
97-450. NET.....

## COMMUNICATIONS ANTENNA

Similar to the model described above but peaked for reception on 10, 20, and 40 meter bands, with 600 to 10 meter overall coverage. Wt., 5 lbs. **\$7.06**  
97-481. Type 103. NET.....



## TACO FREQUENCY MODULATION-SW AND BROADCAST ANTENNA SYSTEM

New type receiving antenna. Permits maximum signal pickup from Broadcast, SW, and Frequency-Modulated stations by means of automatic, self-selecting antenna and receiver transformers. Antenna can be adjusted for vertically or horizontally polarized FM signals or rotated, after mast has been erected, for maximum signal-to-noise pickup. Consists of two 65' collector elements, one antenna, one set transformer, 60 feet of low-loss transmission cable, polarization bracket and 8-foot mast. Shpg. wt., 12 lbs. Send for free Taco literature 37-009 on this and other FM antennas. **\$8.82**  
97-465. Complete Taco Antenna System. NET.....

97-466. Same as above but less 3-foot mast. Shpg. wt., 6 lbs. NET..... **\$7.35**  
47-000. A dditional low-loss transmission cable for use with above system. Per foot 3c

## KNIGHT VERTICAL ANTENNA

The newest development in home type antennas. Recommended by leading radio set manufacturers for best and most efficient results. Mounts vertically to match newest broadcasting type antenna construction. Eliminates wind noise than old style horizontal antennas. Provides efficient reception with All-Wave, Broadcast, or SW receivers. Simple to install. No fuss and bother with masts and horizontal wires. Sturdily constructed, guaranteed rust-proof. Insulator furnished provides positive weather-proof insulation. Universal bracket allows easy fastening to gable or flat roof, or to chimney soil pipe. Complete antenna assembly includes 4 section 12 foot mast made of Admiralty brass with beautiful nickel-plated finish, universal mounting bracket, 40 feet of lead-in wire, 10 feet of ground wire, lightning arrester, insulators, etc. Wt., 4 lbs. **\$2.38**  
97-470. NET.....

## WARD UNIVERSAL ROOF & WINDOW ANTENNA

Latest type universal vertical antenna with newly developed bracket which permits mounting in almost any location desired. Can be easily attached to window sill, acid pipe, side of house, gable or flat roof, chimney, cornices, etc. Ideal for apartments, hotels, offices, etc., where roof installation of a regular horizontal-type antenna is impractical. Eliminates the weather and high cost of erecting masts, guy wires, etc. Improves reception.

## FOR ALL RADIO SETS

Will operate with any type of set: Broadcast, Short Wave, or All-Wave. Also for low-power, high-frequency 10- and 20-meter transmission. Improved signal pickup. High signal-to-noise ratio. The perfect antenna for all console sets. Guaranteed rustproof. Includes 4-section 15-foot mast, soil pipe and universal mounting, 40 feet of lead-in wire and 9 feet of ground wire, ceramic insulators, ground clamp, and lightning arrester. Shpg. wt., 6 lbs. **\$3.97**  
97-451. Model C4-120. NET.....

## ICA TENNA-SCOPE LOOP

For modernizing radio receivers which do not have a "built-in" antenna. Easily installed inside radio cabinet by following the simple instructions. Eliminates ground and antenna wires. Provides higher signal-to-noise ratio and increases selectivity. Tuning range is 175 KC to 500 KC, covering the entire broadcast band. An adjustment trimmer condenser permits adapting the loop to any receiver. Radio wires connect to Fahnestock clips. The small size of the loop permits its use with portable radios and night sets, making the radio easy to move from place to place. Size: 8" long, 6" high, 1 1/4" deep. Shpg. wt., 1 lb. **\$1.15**  
51-022. NET.....



- Replaces Antenna & Ground
- Improves Selectivity and Reduces Noise
- Easily Installed

## ICA WINDOW POLE ANTENNA

A deluxe window antenna, made of Admiralty brass with beautiful nickel-plated finish. Ideal for homes, apartments, hotels, offices and other buildings where a roof antenna is impractical. Will materially improve the reception of sets now operating from aerial eliminators or built-in aerials. Will increase selectivity and sensitivity of All-Wave, S-W and Broadcast receivers. Adjustable bracket permits the antenna to be pointed in any position.



## Adaptable for F.M. Use

The ICA Window Pole Antenna is easily adjusted for the reception of Frequency Modulated signals. An adjustable bracket at base of unit permits maximum pickup of either vertically or horizontally polarized FM signals. There are three telescoping sections which open to a maximum length of 96". Supplied with mounting flange, insulator, and insulated lead-in strip. Wt., 2 lbs. **\$2.65**  
97-460. NET.....

## INDOOR ANTENNA

Replaces outside aerial. Condenser and coil combination built in to give an effective equivalent of 75 feet of wire. Measures 5 x 2 1/2 x 1". Shpg. wt., 1 lb. **\$1.32**  
51-023. NET.....



## ALL-DIRECTIONAL AERIAL

Improves short wave and broadcast reception. Simple to install. Does away with masts, poles, etc. Requires only a small mounting space. Has 40-ft. lead-in. Only a screw driver required for installation. Complete with insulators and handy mounting bracket. Designed to produce greater volume and clearness of tone. Can be mounted in any convenient space indoors or outdoors on roof or window sill. Wt., 1 lb. **\$2.65**  
51-030. NET.....



## DUPLEX FILTERVOLT

Power line type aerial and a p.c. radio noise filter. Eliminates noise caused by electric shavers, fans, motors, etc., reaching radio through power line. Equipped with dual output, both sides are filtered for noise elimination. Wt. 10 oz. **\$1.59**  
70-372. NET.....





# Belden RAD PRODUCTS



## BELDEN MAGNET WIRE

Famous Belden quality magnet wire. Highest grade soft-drawn copper wire with uniform insulation. Will not dry out or crack. Each spool is one continuous length, uniformly drawn. Standard B & S gauge. Ideal for winding chokes, coils, etc. Supplied on convenient metal spools. The finest quality magnet wire you can buy.

### PLAIN ENAMELED 1/2 LB. SPOOLS

Stock No.	Size	Feet	EACH
47-100	14	39	
47-101	16	60	27c
47-102	18	100	
47-103	20	160	29c
47-104	22	250	30c
47-105	24	400	30c
47-106	26	635	33c
47-107	28	1010	36c
47-108	30	1610	40c

### 1/2 LB. SPOOLS

47-120	32	1275	24c
47-121	34	2030	29c
47-122	36	3220	33c
47-123	38	5120	43c
47-124	40	8140	64c



## MAGNET WIRE IN HANDY-SIZED SPOOLS

Quality magnet wire in small quantities on handy, marked spools. Double-cotton, double-silk and enamel types. Handy for the serviceman and builder. **15c**  
YOUR PRICE ANY SPOOL

PLAIN ENAMEL			DOUBLE COTTON			DOUBLE SILK		
Stock No.	Size	Feet	Stock No.	Size	Feet	Stock No.	Size	Feet
47-200	14	20	47-230	14	20	47-250	18	25
47-201	16	30	47-231	16	30	47-251	20	35
47-202	18	50	47-232	18	40	47-252	22	55
47-203	20	75	47-233	20	55	47-253	24	75
47-204	22	120	47-234	22	75	47-254	26	100
47-205	24	175	47-235	24	100	47-255	28	120
47-206	26	250	47-236	26	150	47-256	30	140
47-207	28	340	47-237	28	175	47-257	32	165
47-208	30	430	47-238	30	200	47-258	34	175
47-209	32	600	47-239	32	220	47-259	36	200
47-210	34	800	47-240	34	250			
47-211	36	900	47-241	36	275			
47-212	38	900						
47-213	40	900						

## CELLULOSE ACETATE PUSH-BACK WIRE

Finest hookup wire. Cellulose acetate push-back insulation, covered overall with lacquered, basket-weave rayon braid. Solid is No. 20 tinned copper; stranded is true concentric lay. 25 ft. spools. Shpg. wt. per spool, 6 oz.

Solid		Stranded	
No.	Color	No.	Color
47-270	Red	47-280	Red
47-271	Blue	47-281	Blue
47-272	Green	47-282	Green
47-273	Black	47-283	Black
47-274	Yellow	47-284	Yellow
NET EACH.	19c	NET EACH.	21c

**No. 14 Stranded**  
Similar to above but especially suited for heavy-duty use. No. 14 conductor is 41 strands of No. 30 copper wire, Wt., 1 lb.  
47-290, 25 foot spool, Black, NET... **32c**  
47-291, 25 foot spool, Red, NET... **32c**

## HOOK-UP WIRE ASSORTMENTS

Special assortments of 4-25 foot coils of Belden hook-up wire, No. 20 tinned copper wire; cellulose acetate push-back insulation covered with basket-weave rayon braid. Colors: black, red, yellow, green.  
47-300, Solid, NET... **64c**  
47-301, Stranded, NET... **81c**

## DOUBLE COTTON 1/2 LB. SPOOLS

Stock No.	Size	Feet	NET
47-130	18	95	\$0.33
47-131	20	235	.36
47-132	22	235	.43
47-133	24	360	.43

1/2 LB. SPOOLS			
Stock No.	Size	Feet	NET
47-140	26	280	.26
47-141	28	430	.30
47-142	30	645	.36
47-143	32	950	.42
47-144	34	1350	.48
47-145	36	1675	.72

## DOUBLE SILK 1/2 LB. SPOOLS

Stock No.	Size	Feet	NET
47-150	18	100	\$0.43
47-151	20	160	.49
47-152	22	250	.51

1/2 LB. SPOOLS			
Stock No.	Size	Feet	NET
47-160	24	195	\$0.30
47-161	26	310	.36
47-162	28	450	.40
47-163	30	765	.52
47-164	32	1190	.72
47-165	34	1785	1.05
47-166	36	2685	1.37

## COLORBUBBER HOOKUP 20 GAUGE WIRE

Used by most radio set manufacturers. Stranded tinned copper wire. Outer covering is .025" waxed rubber.

100 FOOT SPOOLS			
Stock No.	Color	Color	EACH
47-302	Red		
47-303	Green		
47-304	Blue		
47-305	Black		51c
47-306	Yellow		
47-307	Brown		

1000 FOOT SPOOLS			
Stock No.	Color	Color	EACH
47-310	Red		
47-311	Black		\$4.28
47-312	Brown		

## NO. 20 DOUBLE BRAID

Double braid, waxed push-back wire with Number 20 tinned conductor, .25 ft. spool, Wt. 6 oz.

Solid		Stranded	
Stock No.	Color	Stock No.	Color
47-320	Red	47-330	Red
47-321	Blue	47-331	Blue
47-322	Green	47-332	Green
47-323	Black	47-333	Black
47-324	Yellow	47-334	Yellow
NET EACH.	16c	NET EACH.	18c

**BAKELITE ARRESTER**  
Underwriters' approved. Positive protection. Compact. \$100.00 Belden guarantee, Wt., 8 oz.  
51-230, EACH... **15c**  
51-231, Similar to above but for doublet antenna. Brown porcelain, Wt., 8 oz.  
NET... **27c**

## SINGLE AND MULTIPLE CABLES



### GLAZED COTTON TYPE

No. 20 tinned copper wire. Paper wrap, rubber sheath (except 47-351 and 47-350 which have cotton wrap), color-coded. Abrasion-proof braid overall.

Cond.	100 FEET No.	PER FOOT NET	PER FOOT No.	NET
2	47-351	\$1.20	47-350	1 1/2c
3	47-361	1.96	47-360	2 1/2c
4	47-371	2.52	47-370	3c
5	47-381	2.91	47-380	3 1/2c

### RUBBER-COVERED TYPE

No. 18 stranded wire for speakers and power supply lines. Coded, rubber-covered, cotton wrapped. \*Has 2-#18 leads, others are #20.

Cond.	100 FEET No.	PER FOOT NET	PER FOOT No.	NET
2	47-411	\$2.66	47-410	3c
3	47-421	3.32	47-420	4c
4*	47-431	4.26	47-430	5 1/2c
5*	47-441	5.31	47-440	6 1/2c

### RUBBER SERVICE CORD

Round, flexible, weather-proof cable. No. 18 (16/30) stranded wire conductors, each rubber covered and coded; with cotton wrapping and outer live rubber sheath.

2 CONDUCTOR			
Stock No.	Per Foot	Per Foot	Per Foot
47-400	Per Foot	3c	
47-401	50 Feet	\$1.35	
47-402	100 Feet	2.60	

3 CONDUCTOR			
Stock No.	Per Foot	Per Foot	Per Foot
47-550	Per Foot	4c	
47-551	100 Feet	\$3.45	



### MATCHED IMPEDANCE TWISTED PAIR LEAD-IN

66.4 ohm twisted pair transmission line. Two No. 18 conductors covered with color-coded rubber and white weather-proof braid. Designed to match most all-wave antennas and receivers. **\$1.40**  
47-640, 75 Ft. Coil  
47-641, 500 Ft. Coil, \$9.15

WE CAN SUPPLY ALL BELDEN PRODUCTS. Send for literature 37-040. Catalog—FREE



### MICROPHONE CABLE

Shielded, rubber-sheathed mike cable; low capacity, rubber covered; special stranding gives extra flexibility and tensile strength.

### SINGLE CONDUCTOR

Size	100 FEET No.	PER FOOT NET	100 FEET No.	NET
25	47-561	\$4.77	47-560	6c
20	47-571	3.81	47-570	5c

### FOR CARBON MIKE, ETC.

Cond.	25 FEET No.	100 FEET No.	PER FOOT NET	
2	47-451	\$1.25	47-452	\$ 4.68
3	47-461	1.49	47-462	5.45
4	47-471	1.83	47-472	6.68
5	47-481	2.30	47-482	8.39
6	47-491	2.99	47-492	10.94
7	47-511	3.21	47-512	11.70

### \* SPECIAL PURPOSE CABLE

No.	Use	10 Ft.
47-601	Lapel Mike	40c
47-611	Phono-Pickup	25c

No.	Use	25 Ft.
47-602	Lapel Mike	95c
47-612	Phono-Pickup	59c

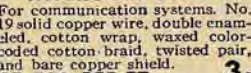
\*Shielded single conductor  
†Cotton braid overall.



### ARMORED CABLE

Weather-proof, armored speaker cable. Will stand hard usage. Consists of 2 parallel conductors No. 18 stranded wire with cotton wrap, 1/4" rubber wall, paper wrapped, tinned steel armor.

47-580	PER FOOT	3 1/2c
47-581	100 FEET	\$2.61



### INTERCOM CABLE

For communication systems. No. 19 solid copper wire, double enameled, cotton wrap, waxed color-coded cotton braid, twisted pair, and bare copper shield.

47-590	PER FOOT	3c
47-591	100 FEET	\$2.18

### LEAD-IN WIRE

Stranded conductor, covered with special rubber insulation to allow quick and easy stripping. Finest quality.

No.	Size	Length	NET
47-620	14	50 ft.	\$0.47
47-625	16	50 ft.	.33
47-626	16	100 ft.	.56
47-627	16	250 ft.	1.32
47-630	18	100 ft.	.46

## POPULAR BELDEN AERIAL WIRE

Famous Belden quality aerial wire Enameled: A high conductivity wire. Ideal for all types of Broadcast, All-Wave, and Short Wave aerials. Belden insulation protects wire from corrosion and atmospheric conditions. The best enameled aerial wire you can buy. Stranded Bare: Finest quality stranded bare copper wire. Ideal for all types of aerials. High conductivity. Very little stretch. Supplied in continuous length coils. Belden wire is famous for long endurance and high efficiency.

STRANDED ENAMELED		STRANDED BARE	
Stock No.	Price	Stock No.	Price
47-650, 75 FEET.	50c	47-680, 50 FEET.	23c
NET.		NET.	
47-651, 100 FEET.	64c	47-681, 75 FEET.	34c
NET.		NET.	
47-652, 150 FEET.	88c	47-682, 100 FEET.	45c
NET.		NET.	
47-660, 100 FT.	\$1.20	47-683, 1000 FEET.	\$4.44
NET.		NET.	
47-665, No. 10.	\$1.17	47-690, 50 FEET.	12c
100 FEET.		NET.	
47-670, No. 12.	77c	47-691, 75 FEET.	17c
100 FEET.		NET.	
47-675, No. 14.	52c	47-693, 1000 FEET.	\$2.14
100 FEET.		NET.	





# AERIAL WIRE AND EQUIPMENT

## VALUES IN AERIAL WIRE



Exceptionally high-quality hard-drawn copper wire. Has high conductivity and very little "stretch." Enameled wire will not corrode. Ideal for all types of aerials; single wire, doublet, or cage-type, for All-Wave, Short-Wave, or Broadcast sets. Servicemen; these low prices will increase your aerial wire profit. Av. shpg. wt., 2 lbs. for 100 feet.

### STRANDED ENAMELED

75 Ft. Coils				
Stock No.	Size	Per Coil	10 Coils	
49-000	7x26	\$0.29	\$2.75	
49-001	7x24	.39	3.70	
49-002	7x22	.49	4.65	

100 Ft. Coils				
Stock No.	Size	Per Coil	10 Coils	
49-010	7x26	.36	3.42	
49-011	7x24	.48	4.56	
49-012	7x22	.61	5.79	

200 Ft. Coils				
Stock No.	Size	Per Coil	10 Coils	
49-020	7x26	.71	6.74	
49-021	7x24	.89	8.45	
49-022	7x22	1.20	11.40	

### SOLID ENAMELED

Solid enameled copper wire for transmitting or receiving aerials.

No.	Gauge	Feet	NET
47-013	10	100	\$1.15
47-023	10	200	2.29
47-030	10	500	5.65
47-012	12	100	.74
47-022	12	200	1.45
47-011	14	100	.50
47-021	14	200	.99



### APPROVED LAMP CORD

Rubber-jacketed, flexible cord; each conductor is No. 18 stranded copper wire, separately insulated in tough rubber sheath that splits down center when pulled apart. Fine for lamps, radios, etc.

BROWN		BLACK	
No.	NET Ft.	No.	NET
48-761	40c	25	48-771 40c
48-762	70c	50	48-772 70c
48-763	\$1.29	100	48-773 \$1.29
48-780	Grey	Per Ft.	.2c
48-790	Ivory	100 Ft.	\$1.29
48-800	Green		

### HEADPHONE AND SPEAKER CORDS

Copper tinsel inner conductor covered with closely-woven cotton braid. Tips are firmly anchored.

SINGLE CORDS	
Stock No.	NET EACH
59-200. 4 foot cord. Tips on one end; spades on other.	
59-201. 4 foot cord. Tips on both ends.	11c
10 for 99c. 100 for \$9.35.	
DOUBLE CORDS	
Stock No.	NET EACH
59-205. Spades on one end. Tips on other. 5 foot cord.	
59-206. Tips on both ends. 5 foot cord.	21c
10 for \$1.89. 100 for \$17.85.	
59-220. 5 foot double cords. Spade lugs on phone ends; phone tips on other. For Frost phones, etc. NET	35c

### TEST-LEAD WIRE

Extra-flexible No. 20 test lead wire. Made of 41 strands of No. 36 tinned copper wire, with waxed cotton wrapping, and 3/64" wall of rubber. 10,000 volt test.

48-911. Red.	
48-901. Black.	
5 FOOT COILS, EACH	6c
IN ANY LENGTH	
48-910. Red. PER	
48-900. Black. FOOT.	1 1/2c

### STRANDED BARE

75 Ft. Coils				
Stock No.	Size	Per Coil	10 Coils	
49-060	7x26	\$0.16	\$1.52	
49-061	7x24	.23	2.19	
49-062	7x22	.33	3.14	

100 Ft. Coils				
Stock No.	Size	Per Coil	10 Coils	
49-070	7x26	.21	2.00	
49-071	7x24	.29	2.75	
49-072	7x22	.44	4.18	

200 Ft. Coils				
Stock No.	Size	Per Coil	10 Coils	
49-080	7x26	.42	3.99	
49-081	7x24	.58	5.51	
49-082	7x22	.88	8.36	

### PHOSPHOR BRONZE

Strongest aerial wire. Has high conductivity; non-stretching. Used commercially on ships.

No.	Size	Feet	NET
49-100	7x22	100	\$1.37
49-110	7x24	200	2.65
49-111	7x24	200	1.72
49-120	7x26	100	.72
49-121	7x26	200	1.38

### APPROVED CORD SET

An Underwriters' Approved cord for radios, lamps, fans, amplifiers, etc. 6 foot cord with rubber plug. An excellent value in a safe appliance cord.

49-230. NET..... 15c

### FLEXIBLE SPAGHETTI

For insulating bus bar wire, and condenser and resistor pigtail leads. Fine quality impregnated cambric tubing.

49-200. Black. Per 30' Lgth. 6c NET  
49-204. Yellow.  
49-201. Red.  
49-203. Green.  
10 LENGTHS FOR..... 54c

### GIANT SPAGHETTI

Black cambric tubing, impregnated with oil varnish. 3/4" inside diameter. 36" long.

49-210. NET..... 15c  
10 LENGTHS FOR..... \$1.35

### SPAGHETTI ASSORTMENT

A handy selection of 26 lengths of spaghetti tubing in assorted diameters for every radio requirement. Each piece is 7 1/2" long. Shpg. wt., 1 lb.

49-220. NET..... 38c

### BELL WIRE

No. 18 solid copper wire with a double cotton insulation. Paraffin-impregnated.

49-131. 1/2 Lb. Coil. 23c NET.....  
49-132. 25 Foot Coil. 8c NET.....



with 1/2" rubber insulation; glazed cotton braid overall.

## SPECIAL VALUE AERIAL KITS

### DELUXE AERIAL KIT

An exceptionally fine kit. Will improve reception of any radio set. Contains 100 feet of 7 strand copper aerial wire; 40 feet of rubber-covered lead-in wire; 25 feet of ground wire; 4—porcelain insulators; 2—screw-eye insulators; 1—lightning arrester; 1—window lead-in strip; 1—adjustable ground clamp. With instructions. Shpg. wt., 6 lbs.

83-101. NET..... 89c

### STANDARD AERIAL KIT

A real value in a complete aerial kit. Includes all materials for a "Marconi type" antenna. Consists of: 90 feet of 7x22 stranded copper aerial wire; 25 feet of rubber covered lead-in wire; window lead-in strip; two porcelain insulators; two nail knobs; and an adjustable ground clamp. Shpg. wt., 4 lbs.

83-100. YOUR NET PRICE..... 52c



## ALL-PURPOSE LEAD-IN WIRE

### TWISTED PAIR SHIELDED LEAD-IN

For all-wave and doublet aerials. No. 20 solid copper conductors; weather-proof insulation with closely woven copper shielding overall.

48-831. 50 Ft. Coils. \$1.08  
48-832. 100 Ft. Coils. 2.10  
48-833. 250 Ft. Coils. 5.15



### WEATHERPROOF TWISTED PAIR

Low impedance transmission line. Two No. 22 stranded copper conductors, rubber-covered. Paraffined braid overall.

48-841. 50 Ft. Coils. \$0.64  
48-842. 100 Ft. Coils. 1.19  
48-843. 250 Ft. Coils. 2.89



### RUBBER TWISTED PAIR LEAD-IN

For all noise-reducing doublet antenna systems. No. 18 twisted rubber-covered stranded wire. NET

48-851. 50 Feet. \$0.59  
48-852. 100 Feet. 1.12  
48-853. 250 Feet. 2.65



### LAMP CORD

Underwriters' Approved. No. 18—1/2" rubber insulation with black cotton braid overall.

48-860. Per foot..... 2c  
48-861. Per 25 Ft. 45c  
48-862. Per 50 Ft. 85c  
48-863. Per 100 Ft. \$1.59



### ANALYZER CABLE

Tinned, stranded conductors with individual rubber and color-coded braid covering.

48-873. 8 Conductor. Has 2 No. 16 and 6 No. 20 wires. 5-FOOT LENGTH..... 37c  
48-881. 9 Conductor. Has 2 No. 16 and 7 No. 20 wires. 5-FOOT LENGTH..... 39c

### TELEPHONE WIRE

For telephone or multiple speaker installation. No. 19 solid tinned copper overall.

48-821. 100 Ft. NET. \$2.35  
48-822. 500 Ft. NET. 11.16

### RUBBER COVERED LEAD-IN WIRE

#### STRANDED

Stranded No. 18 rubber-covered lead-in wire. Flexible wire; very easy to work.

Stock No.	Ft.	10 for	EACH
48-921	25	\$1.33	\$0.14
48-922	50	2.37	.25
48-923	100	4.37	.46
48-924	250	10.92	1.15
48-925	1000	.....	3.70

#### SOLID

High quality No. 16 rubber covered lead-in wire. Weatherproof.

Stock No.	Ft.	10 for	EACH
48-931	25	\$1.52	\$0.16
48-932	50	2.85	.30
48-933	100	5.51	.58
48-934	250	13.39	1.41
48-935	1000	.....	5.45

### SHIELDED LEAD-IN

For broadcast use. No. 20 stranded tinned wire; rubber-covered, tinned copper braid overall.

48-941. 50 Feet. 65c NET.....  
48-942. 100 Feet. \$1.25 NET.....  
48-943. 250 Feet. \$3.10 NET.....

NO. 16 STRANDED WIRE  
Heavy rubber insulation on stranded conductor. Braided copper shield. Weatherproof.

Stock No.	Size	Length	NET
48-951	16	50 ft.	\$0.83
48-952	16	250 ft.	3.89

### LEAD-IN AND AERIAL WIRE

10 strands of No. 30 copper wire, insulated with Gutta-percha. Easy-stripping.

Stock No.	Length	NET
48-961	25 ft.	\$0.13
48-962	50 ft.	.25
48-963	100 ft.	.49
48-964	250 ft.	1.21
48-965	1000 ft.	4.75

### LITZ WIRE

Superior quality for low-loss coil winding. 10 strands No. 38 high conductivity copper, white double-silk covered.

48-971. 100 Foot Spool. NET..... 15c  
48-972. 1000 Ft. Spool \$1.35

48-981. Size 7 x 41.  
48-991. Size 10 x 41.  
EACH 100 Feet For..... 18c



# HOOKEP & MAGNET WIRE - CABLES



## SINGLE COTTON ENAMELED MAGNET WIRE

An exceptionally high-grade magnet wire. Properly annealed for easy handling. Cotton-wrap over enamel gives adequate insulation. Each spool holds one continuous, uniformly drawn, insulated length. B. & S. gauge. For winding RF coils, chokes, motor armatures, power transformers, electro-magnets, solenoids, etc. Shpg. wts.: 1/2 lb. spool, 14 oz.; 1 lb. spool, 1 1/2 lbs.; 2 lb. spool, 2 lbs. 12 oz.; 5 lb. spool, 6 lbs. 12 oz.

1/2 LB. SPOOLS				1 LB. SPOOLS			
No.	Ft.	NET	Size	No.	Ft.	NET	Size
48-000	39	\$0.25	14	48-020	78	\$0.45	14
48-001	49	.26	15	48-021	98	.47	15
48-002	62	.27	16	48-022	124	.49	16
48-003	78	.28	17	48-023	156	.50	17
48-004	98	.29	18	48-024	198	.52	18
48-005	124	.30	19	48-025	248	.54	19
48-006	156	.31	20	48-026	312	.56	20
48-007	196	.32	21	48-027	392	.58	21
48-008	245	.33	22	48-028	490	.59	22
48-009	386	.38	24	48-029	772	.68	24
48-010	468	.42	25	48-030	936	.76	25
48-011	605	.45	26	48-031	1209	.81	26
48-012	938	.51	28	48-032	1876	.92	28
48-013	1390	.54	30	48-033	2780	.94	30

2 LB. SPOOL				5 LB. SPOOL			
No.	Ft.	NET	Size	No.	Ft.	NET	Size
48-050	62	\$0.86	10	48-070	155	\$2.04	10
48-051	98	.87	12	48-071	246	2.09	12
48-052	156	.88	14	48-072	390	2.15	14
48-053	195	.90	15	48-073	488	2.19	15
48-054	248	.92	16	48-074	620	2.24	16
48-055	312	.95	17	48-075	780	2.30	17
48-056	396	.97	18	48-076	990	2.35	18
48-057	488	1.06	19	48-077	1240	2.56	19
48-058	624	1.12	20	48-078	1560	2.72	20
48-059	784	1.19	21	48-079	1990	2.87	21

### WE CAN SUPPLY

all sizes of single cotton-covered enameled magnet wire in any length required. To determine your cost, simply multiply the price listed after the one pound spool of the size required, by the number of pounds. Send us your order with a 25% deposit; shipments made promptly from our complete stocks.



## COLOR RUBBER HOOK-UP WIRE

Stranded tinned No. 18 copper wire. Rubber insulated.

Wts.: 25', 4 oz.; 1000', 5 lbs. 10 oz.

25 FOOT COILS		NET EACH
48-200.	Black.	<b>14c</b>
48-201.	Red.	
48-202.	Blue.	
48-203.	Green.	
48-205.	White.	

1000 FOOT ROLLS		EACH
48-210.	Black.	<b>\$4.55</b>
48-211.	Red.	
48-212.	Blue.	
48-215.	White.	

No. 16 STRANDED		NET EACH
48-220.	Black.	<b>25c</b>
48-221.	Red.	
25 Foot Coils, Each.		

No. 14 STRANDED		NET EACH
48-230.	Black.	<b>41c</b>
48-231.	Red.	
25 Foot Coils, Each.		



## EXTENSION CORDS

Flexible cords with phone-tips and connector. Av. wt. 11 oz.  
 49-500.20 Ft. Cord. NET 45c  
 49-501.30 Ft. Cord. NET 63c  
 49-502.50 Ft. Cord. NET 98c  
 49-505. Extra Connector. 12c

## HIGH-GRADE MAGNET WIRE ON SPOOLS

Insulated copper wire of highest quality for all radio and electrical purposes. Wound on spools in continuous lengths. Excellent for winding armatures and field coils, receiver and transmitter coils, rewinding power transformers and chokes. For shops, schools, laboratories, radio builders, experimenters, etc. Standard B. & S. Gauge. Plain Enameled, Double Cotton, or Double Silk types. We can supply magnet wire in all sizes and types of insulation in larger quantities than listed below. Write for attractive quantity prices. Shpg. wts.: 1/2 lb. spool, 9 oz.; 1 lb. spool, 14 oz.

PLAIN ENAMELED 1/2 LB. SPOOLS				DOUBLE COTTON 1/2 LB. SPOOLS				DOUBLE SILK 1/4 LB. SPOOLS			
No.	Size	Ft.	NET	No.	Size	Ft.	NET	No.	Size	Ft.	NET
48-100	14	38	\$0.23	48-120	14	36	\$0.26	48-154	18	49	\$0.22
48-102	16	63	.24	48-122	16	61	.28	48-156	20	78	.25
48-104	18	101	.24	48-124	18	96	.26	48-158	22	126	.26
48-106	20	159	.26	48-126	20	150	.31	48-159	24	196	.27
48-108	22	253	.26	48-128	22	234	.34	48-161	26	310	.33
48-109	24	402	.27	48-129	24	362	.39	48-162	28	486	.39
48-111	26	640	.30	48-131	26	558	.48	48-163	30	775	.49
48-112	28	1013	.32	48-132	28	842	.54	48-164	32	1207	.67
48-113	30	1602	.36	48-133	30	1321	.64	48-165	34	1828	.95
48-114	32	2543	.40	48-134	32	1889	.75	48-166	36	2668	1.28
48-115	34	4042	.47	48-135	34	2746	.98	48-167	38	2875	1.59
48-116	36	6410	.59	48-136	36	3801	1.25	48-168	40	5325	2.95

## UNDERWRITERS' LISTED "HI-TEMP"

### HOOKEP WIRE

New rubber-insulated wire. Underwriters' Approved for high temperatures. Evenly-drawn pure tin-coated copper conductor. Wide range of colors. Shpg. wts.: 25', 4 oz.; 100', 1 lb.

Color	20 SOLID		20 STRANDED	
	25 Feet	100 Feet	25 Feet	100 Feet
Black	48-250	48-260	48-270	48-280
Red	48-251	48-261	48-271	48-281
Blue	48-252	48-262	48-272	48-282
Green	48-253	48-263	48-273	48-283
Yellow	48-254	48-264	48-274	48-284
NET EACH	<b>21c</b>	<b>68c</b>	<b>24c</b>	<b>79c</b>
Color	22 SOLID		22 STRANDED	
	48-290	48-300	48-310	48-320
Black	48-291	48-301	48-311	48-321
Red	48-292	48-302	48-312	48-322
Blue	48-293	48-303	48-313	48-323
Yellow	48-294	48-304	48-314	48-324
NET EACH	<b>18c</b>	<b>59c</b>	<b>21c</b>	<b>68c</b>

## CABLES FOR EVERY PURPOSE



### HIGH IMPEDANCE MICROPHONE CABLE

Shielded and rubber-jacketed low-loss cable. Conductor of fine-stranded No. 26 copper. 48-531\* is No. 20 stranded copper.

### SINGLE CONDUCTOR

Mm Ft.	25 Ft. Coils	100 Ft. Coils	No.	NET	No.	NET			
24	48-501	\$1.15	48-502	\$4.25	24	54.25			
30	48-511	1.10	48-512	4.10	30	48-521	.90	48-522	3.20
27*	48-531	1.35	48-532	4.79					

### DOUBLE CONDUCTOR

30	48-541	1.55	48-542	5.95
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### CARBON MIKE AND UTILITY CABLE

Rubber covered shielded cable.

Cond.	Per Foot		100 Feet	
	No.	NET	No.	NET
2	48-550	4 1/2c	48-551	53.95
3	48-560	5 1/2c	48-561	6.85
4	48-570	7c	48-571	6.35
5	48-580	8 1/2c	48-581	7.85
6	48-590	10 1/2c	48-591	9.75
7	48-600	11 1/2c	48-601	10.85



### MULTI-CONDUCTOR STRANDED CABLES

Color coded; covered with rubber jacket and brown cotton braid.

Cond.	10 Feet		100 Feet	
	No.	NET	No.	NET
2	48-611	18c	48-612	51.65
3	48-621	20c	48-622	2.90
4	48-631	25c	48-632	2.45
5	48-641	35c	48-642	3.25
6	48-651	50c	48-652	4.75
7	48-661	65c	48-662	5.45
8	48-671	85c	48-672	6.25
9	48-681	70c	48-682	6.75



### SHIELDING OVERALL

Shielded and tinned copper wire. Color-coded and rubber insulated.

Cond.	Per Foot		100 Feet	
	No.	NET	No.	NET
2	48-700	3c	48-701	52.75
4	48-710	4c	48-711	3.60
5	48-720	5c	48-721	4.45
6	48-730	5 1/2c	48-731	5.25
7	48-740	6 1/2c	48-741	5.95
8	48-750	7 1/2c	48-751	7.25

## PUSH-BACK HOOK-UP WIRE

This tinned push-back hook-up wire is of the highest quality. Only evenly-drawn pure copper wire is used. Available in both solid and stranded wire. The stranded wire is made up of carefully twisted individual strands of great tensile strength. Unusual flexibility. Will withstand hard use.

### FIVE DIFFERENT COLORS

This wire is double-cotton covered with paraffin-treated damp-proof braid which pushes back easily. Use a different color for each circuit for identification. Buy in quantities and save. Shpg. wts.: 25 ft., 4 oz.; 100 ft., 1 lb.; 1000 ft., 5 lbs. 10 oz.

No. 20 SOLID 25 FOOT ROLLS		PER ROLL	No. 20 STRANDED 25 FOOT ROLLS		PER ROLL
48-330.	Black.	<b>13c</b>	48-360.	Black.	<b>14c</b>
48-331.	Red.				
48-332.	Blue.				
48-333.	Green.				
48-334.	Yellow.				

100 FOOT ROLLS		PER ROLL	100 FOOT ROLLS		PER ROLL
48-340.	Black.	<b>45c</b>	48-370.	Black.	<b>49c</b>
48-341.	Red.				
48-342.	Blue.				
48-343.	Green.				
48-344.	Yellow.				

1000 FOOT SPOOLS		NET EACH	1000 FOOT ROLLS		NET EACH
48-350.	Black.	<b>\$3.95</b>	48-380.	Black.	<b>\$4.50</b>
48-351.	Red.		48-381.	Red.	
48-352.	Blue.		48-382.	Blue.	
48-353.	Green.		48-383.	Green.	
48-354.	Yellow.		48-384.	Yellow.	

No. 14 SOLID 25 FOOT ROLLS		PER ROLL	No. 18 SOLID 25 FOOT ROLLS		PER ROLL
48-410	Black	<b>\$1.15</b>	48-390	Black	<b>17c</b>
48-411	Red				
48-412	Blue				
48-413	Green				
48-414	Yellow				

No. 14 SOLID 25 FOOT ROLLS		PER ROLL	No. 18 SOLID 25 FOOT ROLLS		PER ROLL
48-410	Black	<b>\$1.15</b>	48-390	Black	<b>17c</b>
48-411	Red				
48-412	Blue				
48-413	Green				
48-414	Yellow				



# BARGAINS

**POPULAR HIGH QUALITY PARTS  
BUY NOW! QUANTITIES LIMITED!**

## BARGAIN TUBULAR PAPER CONDENSERS

As Low  
As

**3<sup>1</sup>/<sub>2</sub>  
c**  
EACH



Exceptional buys in high-quality standard-size tubular by-pass condensers. Brand-new, top-quality units in most popular values. Quantities limited. Buy now. Tinned leads. Wkg. V., 600 V. DC. Wt., 3 oz.

No.	Mfd.	EA.	No.	Mfd.	EA.
58-050	.001		58-055	.02	4c
58-051	.002		58-056	.05	4c
58-052	.005	<b>3<sup>1</sup>/<sub>2</sub> c</b>	58-057	.1	4c
58-053	.006		58-058	.25	8c
58-054	.01		58-059	.5	12c

## L49B OCTAL BASE BALLAST TUBE

**10<sup>c</sup>** EACH An extraordinary value offering of the widely used L49B octal base glass ballast tube at a special low price. For AC-DC sets using 3—6.3 volt tubes and 2—25 volt tubes with original ballast tube type L49B, 49LB, L49BG, B1, 49B, 2UR224, 1.65L B, 160LB, 692033, #5550, #5511. Identical to originals in electrical specifications and in base connections, and thus requires no rewiring. A quality-built tube. Stock up at this special price to save and profit more. Shpg. wt., 1 tube—3 oz., 10 tubes—4 lbs., 20 tubes—7 lbs.  
**58-035, NET EACH..... 10<sup>c</sup>**  
**10 FOR..... 90c**

## CLOSEOUT OF SICKLES OUTPUT IF TRANSFORMERS

**39<sup>c</sup>** EACH A topnotch quality 456 KC. Output to Diode Detector, IF transformer at a very special price. Can be used in interstage position by bringing lead through top of can; neutralizing winding can be clipped off without affecting performance of transformer. In genuine aluminum shield can. Color-coded leads. Built to exacting standards. 1 1/2" sq. x 5 1/2" long. Supply limited. Shpg. wt., 8 oz.  
**58-036, 456 KC Output Transf. NET..... 39<sup>c</sup>**

## SPECIAL BARGAIN VALUE BATTERY CLIPS

**3<sup>c</sup>** EACH As Low As  
Non-corrosive. Strong spring gives sure grip. Exceptionally low-priced. Wt., 5 oz.  
**58-065, 1 1/2" long. Jaw spread, 3/4". 10 For 27<sup>c</sup>. EACH..... 3<sup>c</sup>**  
**58-066, 2" long. Jaw spread, 1/2". 10 For 27<sup>c</sup>. EACH..... 3<sup>c</sup>**  
**58-067, 2 1/2" long. Jaw spread, 1". 10 For 45<sup>c</sup>. EACH..... 5<sup>c</sup>**  
**58-068, 3 3/8" long. Jaw spread, 1 1/4". 10 For 54<sup>c</sup>. EACH..... 6<sup>c</sup>**

## MIDGET UNIVERSAL OUTPUT TRANSF.

**49<sup>c</sup>** EACH Matches impedance of all single or push-pull output stages. Tapped secondary matches all voice coils from 2 to 30 ohms impedance. Size: 1 1/2" high, 2 1/2" long, 1 1/2" thick. With instructions. Ideal for replacement. Shpg. wt., 1 lb.  
**62-020, NET..... 49<sup>c</sup>**

## CARBON RESISTORS



**3<sup>c</sup>** EACH Brand new Standard RMA Color-Coded Carbon Resistors. Values held to close tolerance. Improved construction insures long life. 1 1/2" tinned copper leads. Permanent lead connection is provided by welding. Order a supply now. Shpg. wt., 3 oz.

### SPECIFY VALUES DESIRED

Ohms	Ohms	Ohms	Ohms
100	800	12500	150000
150	1000	15000	200000
200	1500	20000	250000
250	2000	25000	400000
300	2500	30000	500000
350	3000	40000	750000
400	4000	50000	1 Meg.
500	5000	60000	2 Meg.
600	6000	75000	3 Meg.
700	10000	100000	5 Meg.

2-000, 1/2 watt size.  
2-020, 1 watt size.  
**EITHER TYPE, NET EACH..... 3<sup>c</sup>**  
**Quantity Price—100 FOR..... \$2.40**



## RESISTOR ASSORTMENT

**100 FOR 95<sup>c</sup>** A useful assortment of economy-type carbon resistors. All are brand new and coded with standard RMA color code. Most popular resistance values in 1/4 and 1/2-watt sizes. Shpg. wt., 1 1/2 lbs.  
**58-086, 100 Resistors, NET..... 95<sup>c</sup>**  
**58-085, Assortment of 50 Resistors.** Smaller assortment of same quality resistors as those listed above. An ideal assortment for the home-builder and experimenter at a money-saving low price. Wt., 1 lb.  
**NET..... 50<sup>c</sup>**

## BARGAIN 4-PRONG EBY WAFER SOCKET



**25 FOR ONLY 49<sup>c</sup>**  
A standard-quality 4-prong socket of laminated bakelite construction at a special low price. Has full-floating, self-aligning contacts of one-piece construction. 1 1/2" mounting centers. Buy in quantities and save more. For replacement and set-building use. Shpg. wt., per 25, 1 1/2 lbs.  
**58-090, PACKAGE OF 25, NET..... 49<sup>c</sup>**  
**100 FOR..... \$1.76**

## HANDY SOCKET KIT

ONLY  
**59<sup>c</sup>**  
PER KIT



A special offer. Kit contains 20 assorted tube sockets, including 4, 5, 6, 7, and 8 prong. All have standard 1 1/2" mounting centers. Laminated bakelite; self-aligning contacts. Wt., 1 lb.  
**58-091, YOUR NET PRICE..... 59<sup>c</sup>**

## BARGAIN MIDGET DRY ELECTROLYTICS

As Low  
As

**14<sup>c</sup>**  
EACH



First quality midget dry electrolytic condensers. Hermetically sealed. Excellent for replacement purposes or as original equipment. Compactly built. Shpg. wt., 4 oz.

No.	Mfd.	Wkg. V.	Size	EACH
58-070	4	450	1 7/8" x 3/4"	14c
58-071	8	450	2 3/8" x 1 3/8"	16c
58-072	16	450	2 3/8" x 1 3/8"	29c
58-073	8	350	1 7/8" x 1 1/8"	14c
58-074	20-20	175	2 5/8" x 7/8"	22c
58-075	8	150	1 1/2" x 3/4"	14c
58-076	16	150	1 7/8" x 3/4"	19c
58-076	20	150	1 3/4" x 3/4"	21c
58-077	10	25	1 1/2" x 3/8"	14c
58-078	25	25	1 1/8" x 3/8"	16c

AS  
LOW  
AS

**16<sup>c</sup>**



## VALUES IN STANDARD DRY ELECTROLYTICS

A record value in filter condensers. In cardboard container with mounting tabs and wire leads. Quantities limited.

**58-080, Single 8 Mfd. condenser.** Card-board container. 2 1/4" x 1 1/4" x 3/4". Has flexible leads. Working voltage—450 V. DC. Shpg. wt., 8 oz.  
**10 For \$1.44. EACH..... 16<sup>c</sup>**

**58-081, Dual 8-8 Mfd. 450 working voltage.** Same construction as above. Measures 2 1/4" x 1 1/4" x 3/4". Separate sections. Shpg. wt., 10 oz.  
**10 For \$3.42. EACH..... 38<sup>c</sup>**

**58-082, AC-DC TYPE. Filter and by-pass block.** Contains 1—16 and 1—12 mfd. section at 200 volts; 2—10 mfd. sections at 35 volts; 3" x 1 1/4" x 1 1/4". Coded leads. Shpg. wt., 10 oz.  
**10 For \$3.69. EACH..... 41<sup>c</sup>**

## 30 HENRY FILTER CHOKE



**59<sup>c</sup>** EACH  
A special value in a 30 Henry, 50 ma. DC choke, ideal for use in dozens of circuits. Resistance, 550 ohms. Has layer-wound, layer-insulated coils and bright plated, fully rustproof frame. Size: 1 1/2" high, 2 3/8" long, 1 1/4" deep. Mounting hole centers, 2 1/8". With 6" insulated leads. Suitable for replacement purposes or as original equipment. A really remarkable bargain. Shpg. wt., 2 lbs.  
**58-037, NET..... 59<sup>c</sup>**

## PLUG-IN COIL KIT

KIT OF  
4  
**65<sup>c</sup>**



Quality coils for building all-wave sets with various circuits. Kit has four coils for following bands: 16 to 36, 32 to 64, 57 to 115, 107 to 217 meters. For 140 mfd. condenser. Fit 5-prong socket. Coils have two windings. A rare value. Shpg. wt., 1 lb.  
**58-092, KIT OF 4 NET..... 65<sup>c</sup>**



# BARGAINS POPULAR HIGH QUALITY PARTS BUY NOW! QUANTITIES LIMITED!

## GENUINE G.E. MOTOR NOISE FILTER



An amazing bargain in an industrial type filter. Minimizes radio noise due to motor interference. Metal case, 5/4 x 3 x 2 1/2", houses two line chokes and two condensers. Midpoint of condensers grounded. Removed from new G.E. converter units and refinished. Handles 10 amperes continuous service. Two lug-terminal leads connect to motor; third lead is grounded. Two binding posts take line connection. For 110-115 Volts, AC-DC. Shipping weight, 2 lbs.

**58-000. NET..... \$1.95**



AS LOW AS  
**5c**  
EACH

## BARGAIN SOCKETS

Quality tube sockets at low prices. 1 1/2" mtg. centers. RMA numbered pin bores. Bakelite construction. Metal plate. Shpg. wt., 4 oz.

Stock No.	Prongs	EACH	10 FOR
58-005	4	5c	45c
58-006	5	5c	45c
58-007	6	6c	54c
58-008	7	6c	54c
58-009	8 Octal	7c	63c



## MIDGET 2 1/2 MH. RF. CHOKE

Universal winding, sectioned to reduce distributed capacity. DC resistance, 60 ohms; will carry 125 ma. Ceramic core. Shpg. wt., 1 1/2 lbs.

**60-800. 10 For \$1.08, EACH 12c**

## VALUE IN HIGH-VOLTAGE POWER TRANSFORMER



**ONLY \$3.45** Plate and filament transformer. Primary, 115 V., 50-60 cycles. Secondary, 1200 V. CT at 200 ma.; 7.5 V. at 3 A-CT; 5 V. at 3 A; 2.5 V. at 10 A-CT. Mtg. ctrs., 3 x 3 1/2". Shpg. wt., 12 lbs.

**62-101..... \$3.45**

## BARGAIN IN 50 MA CHOKE



**ONLY 32c** This is an exceptional value. Replaces Philco No. 5643J filter choke. Strap mtg. with 2 1/2" crs. Inductance, 30 hys. DC resistance, 150 ohms. 50 ma. rating. Brand new units that save you money, 2 lbs.

**58-015. NET..... 32c**

## TRANSMITTING CONDENSER



**79c** A transmitting condenser bargain. Oil-impregnated, sealed metal cases. Capacity, 3 mfd. Conservatively rated at 600 V. DC. Lug-type terminals. Bottom flange, 3/4" x 1". Has mounting flanges. Size: 4 1/2" x 2" x 1 1/2". 2 lbs.

**58-016. NET..... 79c**

## HAMMERMILL RECORDING DISCS



PKG. OF 6  
**29c**

Here's an outstanding feature-special in brand-new Hammermill recording discs. These plastic 6 1/2-inch double-faced recording discs have a slightly higher surface noise than the more expensive discs, but represent a smashing bargain for low-cost home recording and test purposes. They are constructed of a durable paper-bond base, coated on both sides to mirror-smoothness with a superior-grade uniform coating. Six cream-colored flexible Hammermill recording discs are contained in a sturdy and attractively printed manila envelope which has space for tabulating six record titles. Available only in standard packages of 6. Quantity limited; take advantage of this amazingly low price. Shipping weight, 1 lb.

**58-017. Pkg. of 6. NET..... 29c**

## LOW-COST 2 MFD. 1000V. CONDENSER

A real "buy" for any Amateur. Hermetically sealed, oil-impregnated 2 mfd. 1000 volt paper condensers in metal cans. Built for dependable service and conservatively rated for long life. Terminals are on glazed porcelain stand-off insulators; with heavy mounting flanges. Can measures: 5" long x 2" deep x 3 1/2" wide. Insulators are 1 1/4" high. Shipping weight, 2 lbs.

**58-018. NET..... \$1.29**



## SPST TOGGLE SWITCH

Ideal for kits, small appliances, etc. Has key groove for on-off plate. Screw terminals. Standard 7/8" dia. Nickel-plated finish. Will take panels up to 5/8". Bakelite handle. Shpg. wt., 4 oz.

**58-020. EACH..... 8c**  
**10 FOR..... 72c**



## SPECIAL VALUE 7-STRAND RUBBER-COVERED CABLE

100 FT. COIL

ONLY  
**35c**



Here's the real bargain-highlight every serviceman and builder always looks for. Finest-quality, general purpose, No. 14-gauge 7-strand conductor. Cable consists of 3-copper and 4-steel wires for greater strength and exceptional durability. Covered with a live rubber that strips easily to save time and effort. Two cables can be twisted together for double lead-in. This same high quality wire is sold elsewhere at substantially higher prices. Now's your opportunity to "cash-in" on a lucky buy made before prices were affected by material shortages. Shipping weights: 100 feet, 3 lbs.; 250 feet, 6 lbs.

**58-031. 100 Foot Coil. NET..... 35c**  
**58-032. 250 Foot Coil. NET..... 79c**

## SPECIAL VALUE IN 55 WATT 2-TIP IRON



**ONLY 69c** This bargain is a dollar-stretcher. With wire-wound element in a ceramic tube. Two types of durable tips are supplied with iron to handle all work from fine soldering to tinning of chassis bases. Fast heat-up period. Tips are 1 1/2" long, 3/8" and 5/8" dia. With 5 foot heater cord and rubber plug. For 115 volt AC or DC. 3 lbs.

**58-021. NET..... 69c**

## 100 WATT IRON

Low-cost soldering-iron recommended for all medium-heavy radio work in shop or laboratory. Has one 7/8-inch diameter replaceable screw-on type copper tip. Fast heat-up period. With black "sure-grip" insulated handle. Has 6-foot heater cord. An exceptional value. Shpg. wt., 3 lbs.

**58-022. NET..... \$ 98c**

## MARVEL ELECTRIC IRON



**ONLY 30c**

A fine-quality 9 1/2-inch soldering iron used as an extra by servicemen, amateurs, and builders everywhere. Ideal for general radio and all light work. Quick heating period. Has Nichrome wire element mounted in twin porcelain tube. Comes equipped with 1" copper tip. 3 1/4-ft. Underwriters' Approved heater cord. For 100-115 volt AC or DC. Shipping weight, 2 lbs.

**58-025. EACH..... 30c**  
**10 FOR..... \$2.70**

## POPULAR COIL KIT

KIT OF 6

**49c**



A sensational value in popular coils. Contains six coils suitable for replacements or as originals. Antenna and TRF coils, superhet coils, oscillator coils. Etc. Most coils shielded; some round cans and some square. Manufacturers' types. Quantity limited. Shpg. wt., 3 lbs.

**58-026. Kit of 6. NET..... 49c**

## PILOT LIGHT SOCKET KITS

10 FOR

**25c**



Popular assortment of miniature base pilot light sockets for all radio needs. Have heavy-plated lugs for easy soldering. Spring contact holds lamp firmly. Wts.: 58-027, 3 oz.; 58-028, 6 oz. **58-027. 25c** | **58-028. 55c**  
Asst. of 10..... 25c | Asst. of 25..... 55c

## SERVICE TEST LEADS

ONLY

**29c**



Kinkless leads with solderless phone tips fitted into 3/4" dia. probe 3/4" long. 44" leads. With phone or spade tip. 10 oz.

**58-023. Phone Tips. PER PAIR 29c**  
**58-024. Spade Tips. PAIR 29c**



# SPECIAL FEATURE VALUES

## KNIGHT PRE-AMPLIFIER AND MICROPHONE



ONLY  
**\$8.75**

With this cleverly designed pre-amplifier and Shure crystal microphone, any radio set can be operated as a Public Address system. Pre-amplifier housed in metal case finished in brown crackle; size, 4 1/2" x 3 1/2" x 7". Microphone is high impedance crystal type with excellent frequency response, equipped with convertible stand for either hand or desk use. Pre-amplifier uses two tubes, 1-3525GT and 1-1217GT; operates from any 110 volt AC supply; couples to the radio-phonograph input. With tubes. Wt., 6 lbs. **\$8.75**  
85-501. NET.....

### PRE-AMPLIFIER ONLY

Same as above, with tubes, but less microphone. Shipping wt., 4 lbs. **\$5.75**  
85-500. NET.....

## SUPREME PUBLICATIONS



### PRACTICAL RADIO MATHEMATICS

New and invaluable book simplifies and clearly defines and inter-connects the proper use of arithmetic and elementary algebra as applied to everyday radio servicing problems. Offers training for average student or serviceman; provides a better and thorough understanding of involved radio mathematical applications. Illustrated examples explain mathematics in connection with color code, meter scales, Ohm's Law, alternating current, ohmmeter testing, wattage rating, series and parallel connections, capacity, inductance, etc. Plainly written—easy to understand. Fully illustrated. Size: 8 1/2" x 11".

37-832. NET POSTPAID..... **\$3.95**

## CYCLOPEDIA OF TELEVISION

Practical low-cost home-study course book fully defines and clarifies television terms, transmitting and receiving equipment, etc. Thoroughly explains the basic television theory. You'll need it to understand television and its latest developments. Fully illustrated. 57 pages. Size: 5 1/2" x 8 1/2".

37-833. NET POSTPAID..... **\$3.95**

## TECHNIFAX GEOPHYSICAL PROSPECTING PRINTS

50c  
EACH



With any of the geophysical methods described, instruments can be built to locate metal and ore veins, subterranean water, oil deposits, buried pipes, etc. Folder contains blue prints and data.

**38-100. Folder No. 1.** 2 tube transmitter and 3 tube receiver. Reflected wave principle.  
**38-101. Folder No. 2.** Harmonic Frequency Locator. Radiates low frequency waves.

**38-102. Folder No. 3.** Beat Note Indicator, 2 oscillators. Visual and audio signals.

**38-103. Folder No. 4.** Radio Balance Surveyor. Loop principle. Modulated transmitter.

**38-104. Folder No. 5.** Variable Inductance Monitor. Inductance and loop principle.

**38-105. Folder No. 6.** Hughes Inductance Balance Explorer. Wheatstone Bridge type.

**38-106. Folder No. 7.** Radiodyne Prospector. Balanced loop principle. **50c**

EACH, POSTPAID..... **\$3.00**  
7 FOR.....

## SPECIAL VALUE RECORDING UNIT



ONLY  
**\$13.75**

Here's our feature smash value. Designed for those who wish to assemble their own Recorder-Phonograph instruments. Excellent for school construction, C.C.C. projects, and general kit-builders. This Knight Preferred-Quality Recording Unit is ruggedly built; all adjustments have been held to a minimum to insure simple, easy operation by anyone. Heavy weighted turntable is rim-driven at 78 RPM by a powerful self-starting motor. The high-quality magnetic cutting head is adjustable for depth of cut, needle angle, and arm height; cuts 110 lines per inch from outside to inside. Has positive worm and gear drive for the cutting head. The crystal playback pickup is of the 1 1/2-oz. low-pressure type for proper fidelity. Records on any disc up to 10"; will play all phonograph records up to 12". Operates from any 6-8 ohm voice coil circuit supplying 3 watts power. Size: 13" x 12 1/4", 2 1/2" above board, 4 1/4" below. Here's a really dependable, complete recording mechanism that's easy to operate—at a new low price that's hard to beat. For 110 volts, 60 cycles AC. Shpg. wt., 19 lbs. **\$13.75**  
96-204. NET.....

## CODE PRACTICE SET



ONLY  
**\$2.32**

This is the ideal set for code practice. Permits sending and receiving between two stations. Makes it easy to learn radio signals and telegraph code and blinker or navy signalling. Comprises high frequency buzzer, blinker light, key, and telegraph sounder. Has switch on panel board for changing from one type of signal to another. Easy-to-read code instruction card is mounted on signal box. Clips are supplied to connect to another set. Double unit consists of two complete instruments and 50 feet of special wire. Two standard flashlight batteries used with each set. With instructions, less batteries. 2 1/2 lbs.  
**76-150. Double Unit. NET... \$2.32**  
**76-151. Single Unit.** Less wire and batteries. Wt. 1 1/2 lbs. EACH... **\$1.15**  
**80-806. Flashlight cell.** (2 needed.) Ea. 4c

## N. R. I. BOOKLETS



Concise, written, published by National Radio Institute, training school of thousands of successful radio men. These booklets are excellent as introductory or reference texts for various radio fundamentals. 5/8 x 8 1/2".

**38-120.** "How Sound and Television Radio Programs are sent from Studio to Your Home."

**38-122.** "F.M. Signals." Frequency Modulation and fundamentals of FM receivers.

**38-123.** "Radio Receiver Troubles." Trouble-shooting simplified.

**38-121.** "Arithmetic in Radio." Simple math to slide-rule computations. **10c**

NET EACH, POSTPAID.....

## ANTENNA LOOP VALUE

ONLY  
**\$1.10**  
EACH



Tuned loop type antenna provides higher signal-to-noise ratio and better selectivity. Eliminates need for outside aerial or ground. Has permeability tuned iron core assembly. Instructions. Size: 9 1/4" x 7 1/4" x 1 1/4". 1 1/2 lbs. **\$1.10**  
51-075. NET.....

## POWER LINE FILTER

ONLY  
**\$9c**



Minimizes radio noises caused by appliances such as electric razors, vacuum cleaners, hair driers, etc. No ground required, plugs into any standard receptacle. Has socket for receiver plug. Suitable for any line voltage. Wt., 1 lb. **70-340. 6 For \$3.36. 59c**  
EACH.....

## CLEAR-A-TONE POWER-LINE FILTER

Enjoy improved radio reception with this low-price power-line filter. Scientifically constructed filter designed to reduce radio interference which comes through power lines. Effective in filtering electrical appliance interference. Install between radio and wall plug or at cause of disturbance. Utilizes capacitive and inductive filter units for most effective results. Maximum current handling capacity, 5 amps. Size: 7 1/2" x 5" x 3 1/2". For 110 V., AC-DC. 5 lbs. **\$1.95**  
70-390. NET.....



## 3-IN-1 RADIO TUNER

ONLY  
**\$3.2c**



Improves the reception of any radio. Acts as an Antenna Tuner, a Wave Trap, or Indoor Aerial. With instructions. Shpg. wt., 8 oz. **70-395. NET... 32c**

## SCRATCH REMOVER KIT

Make scratches vanish. Run filler stick over blemish, then polish. Kit contains refinishing liquid and 6 stain filler sticks in mahogany, walnut, dark oak, golden oak, maple or amber maple. Shpg. wt., 1 1/2 lbs. **43-130. 39c**  
NET.....



## WALSCO SCRATCH REMOVER

New plastic fountain-pen shaped scratch remover instantly removes scratches on radios or furniture, etc. Just brush over lightly. Reverse end of pen contains special filler for staining. Unbreakable. Shpg. wt., 6 oz. **43-131. NET... 29c**





# SPECIAL FEATURE VALUES

## HAND MICROPHONE ONLY



An efficient, well constructed novelty microphone. Fitted with

wooden handle. Will provide hours of enjoyment. On-off switch in handle allows you to break in on regular radio programs with your own announcements. Quickly and easily connected to any radio set without rewiring. With cord and adapters. Shpg. wt., 2 lbs. **59-320. NET. 98c**

## STANDARD MODEL MIKE ONLY



An excellent compact, well-built microphone for home use. In metal case, 3 3/4" high. Will provide hours of fun and entertainment.

Complete with adapters and cord. Has push-button switch. Mounted on pedestal with felt base. Shpg. wt., 1 lb. **59-325. NET. 59c**

## DELUXE MODEL MIKE ONLY



Similar to standard model above, but larger in size. Does not interfere with radio reception. Push-button switch. Green-bronze finish. 5" high. Mounted on no-tip pedestal. With cord. Wt., 1 1/2 lbs. **59-326. NET. 99c**

## ICA MIKE BOOSTER



Permits connecting a single tube microphone to any radio. Increases sensitivity and output. Limits button current; eliminates carbon "popping." With instructions. Shpg. wt., 1 lb. **59-330. NET. 73c**

## BELL-RINGING TRANSFORMER



Jefferson transformer for operating bells, door openers, annunciators and as experimental 10V. source. Secondary has binding posts; 10V. at 5 amps. Primary has insulated leads for connecting to 110 V. 50-60 cycle current. Size: 2"x2"x2 1/2". Shpg. wt. 1 1/2 lbs. **62-120. NET. 65c**

## DIETZGEN SLIDE RULE



Famous Dietzgen Co. accurately calibrated 10-inch

rule. Mannheim type with A, B, C, CF, D, and K scales on face; and S, L, T, inch, and mm. scales and conversion tables on reverse. With 18-page instruction book and leatherette case. Made in U.S.A. Shpg. wt., 1 lb. **45-870. NET. 98c**

## DYNAMIC MICROPHONES



**QUAM MIKE, Fig. A.** A high impedance dynamic type mike. Ideal for use with wireless record players, radio sets, paging systems, Amateur phone transmitters, etc. Frequency range, 60 to 8,000 cycles; output, —50 db. With 5-foot cord and 'phone tips. 3 1/2" high. Shpg. wt., 2 1/2 lbs. **\$2.03 59-310. NET.**

**ICA MIKE, Fig. B.** A high quality microphone incorporating the new high impedance permo-magnetic type of construction. Highly sensitive. Frequency response is from 60 to 8,000 CPS; output level, —50 db. High impedance output; 5 foot cord. Shpg. wt., 3 lbs. **\$2.91 59-331. NET.**

## LITTLE WONDER CRYSTAL SET



One of the smallest crystal sets made. Employs Philmore super-sensitive crystal detector in open-type mounting to permit easy adjustment to point of highest sensitivity. Will tune local stations within 25-mile area when used with suitable antenna. Has convenient slider contact and binding posts for connection of earphones, aerial and ground. Mounted on a very attractive bakelite base. No tubes or batteries are required. A well-designed and efficient crystal set at an exceptionally low price. Shpg. wt., 1 1/2 lbs. **83-015. NET. 59c**

## PHILMORE ULTRATONE CRYSTAL SET



An unusually attractive and efficient set, offering exceptional sensitivity. Tunes stations over distances of about 25 miles with suitable aerial. Has four-way switch operated by knob on front panel, variable condenser with dial, sensitive glass-enclosed crystal detector, and insulated headphone jacks. Affords enjoyable reception, loud and clear, without distortion. Presented in attractive metal cabinet with etched metal front panel. Requires no tubes or batteries. A fine value in a quality-built crystal set. Shpg. wt., 3 lbs. **\$3.45 83-016. NET.**

See pages 161 and 185 for headphones and aerials suitable for use with above sets.

## DIESEL HANDBOOK



A complete, authoritative work by J. Rosbloom. Combines in one big volume detailed handbook and textbook material on every aspect of modern Diesel engineering: stationary, marine, locomotive, etc. Endorsed by engineering organizations and widely used in technical classes. Written in clear, easy-to-follow language. Fully illustrated. Has extensive, informative questions-and-answers section. A complete course in Diesel engineering. 720 pages, size 5 1/2" x 7". Cloth-bound. **37-910. POSTPAID IN U.S.A. 3.00**

## STUDIO TYPE MIKE

ONLY **\$147**



An extremely popular hand-type carbon microphone for use with any radio set or amplifier. Looks like a professional type. Includes on-off switch mounted on handle. With 10-foot cord and connector prong adapter. With instructions. Wt., 2 lbs. **59-321. NET. 1.47**

## POPULAR DYN-A-MIKE

ONLY **\$275**



A quality-built dynamic type microphone for home use; unidirectional; sturdy construction; high output. Combines high-sensitivity with freedom from feedback. Has built-in switch on handle, allowing you to cut in on radio programs with your own announcements. Easily connected to any radio set or amplifier. Complete with nine-foot rubberized cord with pin tips. With instructions. Wt., 3 lbs. **59-322. With 9-foot cord. NET 2.75**  
**49-500. Extra 20-foot cord and connector. Wt., 8 oz. NET. 45c**

## ICA DELUXE SIGNA-TONE WITH SPEAKER



A perfected audio oscillator with 3 output frequencies and a variable volume control. Produces audio signal similar to those of commercial CW stations. For use as (1) Code Practice Set—with facilities for keys and phones for use in multiple or classroom code instruction; (2) Keying Monitor—will follow "bug" at all speeds; (3) Modulation Signal—for adjusting the modulation level of a transmitter; (4) Signal Tracer—locates defects when fed into audio stage of amplifier. With tube and self-contained speaker. 7 1/2"x4 1/2"x4". For 110 volts AC-DC. Shpg. wt., 5 lbs. **73-430. NET. 9.55**

## ICA SIGNA-TONE FOR PHONES



Similar to deluxe model above, but designed primarily for use in classroom instruction and radio clubs. Has plug-in facility for earphones or speaker. Features include adjustable 3 tone audio output, continuously variable volume control, and extra terminals for keys and phones. Includes send-receive practice instructions for classroom use. Same high-quality construction throughout as deluxe model. Supplied complete with tube in attractive metal case, size: 4" wide, 4 1/4" high, 4" deep. For operation from 110 volts, AC or DC. Shpg. wt., 3 lbs. **73-431. NET. 7.35**  
**73-432. Station Terminal Box.** Consists of key and phone jacks mounted in compact case. Ideal for multiple station code instruction classes. Wt., 1 lb. **NET. 98c**



# SPECIAL FEATURE VALUES

## TORK TIME SWITCH CLOCKS



### URNS ELECTRICAL APPLIANCES ON AND OFF

Compact and dependable time switch clocks. May be set at any time to automatically turn off or on oil-burners, hall lights, radios, refrigerators, window lights, etc. Electrically safe units constructed of quality materials; made by world famous manufacturer.



## ELECTRIC SELF-STARTING MODELS

**MODEL 25**  
Fig. A. For radio control, defrosting refrigerators, window displays, hall lighting. Has 24-hour dial with "ON-OFF" arms, easily set in 15-minute steps, 2 hours apart or more. Dial has ratchet-type setting for accuracy. In steel case with convenient plug-in receptacle at back for any electrical appliance controlled by switch. Capacity, 6 amps. With 7-foot cord and plug. For 110 V., 60 cycles AC. Underwriters' Listed.  $4\frac{1}{2} \times 3 \times 2\frac{1}{2}$ . Shpg. wt., 5 lbs. **\$7.00**  
**78-300. NET**

**MODEL 26**  
Thrift Model Similar to Model 25 at left, but designed for permanent installation. Dustite steel case has removable backplate for mounting to ears of standard switch box. Terminal wires from the switch and clock motor extend through backplate and are easily connected by using switch box as a junction box. Held in position by top and bottom screws. Capacity, 6 amps. For 110 volts, 60 cycles AC. Underwriters' Listed.  $4\frac{1}{2} \times 3 \times 2\frac{1}{2}$ . Shpg. wt., 5 lbs. **\$7.00**  
**78-301. NET**

## MODEL 191A FOR INDUSTRIAL CONTROL

Fig. B. For heavy-duty industrial requirements. Turns electrical equipment "on" and "off" at any predetermined time in 15-minute steps; single pole switch. Low-g geared ratchet center knob adjusts to accuracy within one minute. Switch may be freely operated by hand at any time without disturbing its automatic setting. Coil, field, and rotor of motor are sealed in steel housing; parts revolving faster than 8 RPM run in oil. In pressed-steel case, size:  $8\frac{1}{2} \times 5\frac{1}{2} \times 3\frac{1}{4}$ . For 20 amps., up to 2200 watts. For 110 volts, 60 cycles AC. Underwriters' Listed. Shpg. wt., 6 lbs. **\$9.10**  
**78-302. NET**

We can supply Tork clocks for all requirements.

## "IDEAL-PHONE" TELEPHONE SYSTEMS 2-STATION PRIVATE LINE

- FOR WALL OR DESK MOUNT
- WITH PLASTIC HANDSET
- PUSHBUTTON SIGNALING

The "Ideal-Phone" 2-station system provides an economical and very efficient means of communication between any two points in homes, offices, stores, etc. Easy to install and use. Operates from two 6-volt batteries (one at each station) over any distance up to 500 feet; for greater distances simply add extra batteries. The standard size plastic-molded handset hangs from the control box which may be mounted on a wall or at the side of a desk. Has single push-button at each station, to make call, simply lift handset; and press button; signal bell rings at other station. Black japanned control box measures  $5\frac{1}{2} \times 4 \times 2$ . For complete installation, order two phone sets, two batteries, and sufficient cable necessary to cover distance.



**95-880. Type AM-34 Phone. 2 \$10.75**  
required. 4 lbs. ea. NET EACH...

**48-630. 4-conductor cable. PER FOOT.....3c**  
**80-807. 6 volt battery, 2 required. 8 lbs. ea. EACH.....\$1.39**

## 3 TO 10 STATION SIGNALING SYSTEM

A complete telephone system for larger installations than system above. Accommodates from 3 to 10 stations; ideal for use in schools, factories, larger stores, etc. Push-button is used for code signals which are sounded at all stations simultaneously. Operates from two 6-volt batteries, one used for talking, the other for ringing current supply. Handset and control box are exactly as described above; may be mounted on wall or on side of desk. Impedance coil listed below required for each complete system; connects in negative line to ground. For complete installation, order number of phone stations needed, two batteries, impedance coil, and sufficient cable to cover distance. Supplied with complete instructions for wiring. A practical, efficient telephone system at a very moderate price.

**95-881. Type AM-34 Phone. (Use any number \$10.75**  
from 3 to 10) Wt., 4 lbs. each. NET EACH.....

**60-850. Type AU-10 Impedance Coil. 1 lb. NET..... \$1.85**  
**48-630. 4-conductor cable. NET PER FOOT.....3c**  
**80-807. 6 volt battery, 2 required. 8 lbs. ea. EACH.....\$1.39**

## TRINDL EASY-TO-OPERATE ARC WELDERS



### MODEL 125 SUPER-INDUSTRIAL HEAVY-DUTY ARC WELDER

A deluxe industrial heavy-duty type Arc Welder. Welds metals up to  $\frac{1}{2}$ " thick. Will handle a  $\frac{1}{8}$ " shielded arc welding rod directly in the holder. 32 heat ranges for all welding requirements. Has an improved vernier control panel for greater selectivity. 10 to 125 ampere output. Unit measures only  $10\frac{1}{2} \times 9 \times 14$ ". Complete with five pounds of welding rod, ground cable, and shield. 2 special fuses, carbon, flux regulation welder's helmet, electrode holder, etc. No previous experience necessary. Instructions supplied are actually a course in welding. Shpg. wt., 92 lbs.

**98-050. For 110 V., 50-60 cycle AC.**  
**98-051. For 220 volt, 50-60 cycle AC.**  
EITHER **\$48.04**  
MODEL



### MODEL 75 SUPER-INDUSTRIAL LOW-COST ARC WELDER

Don't discard machinery because of broken parts. This low-cost arc welder will weld cylinder blocks, bumpers, fenders, tanks, and practically all metal farm implements. Works on iron, steel, tin, brass, etc. Does carbon arc and metallic arc welding. Holder takes  $\frac{3}{32}$ " shielded arc welding rod. Welds metals up to  $\frac{1}{4}$ " thick. Convenient terminal outlets for Low, Medium, High, and Very High heat welding. Range of four settings is 30 to 75 amperes. Light in weight—easily portable. Complete Welder includes assortment of rods, ground clamp, ground cable, spring type electrode holder, helmet, and detailed instructions which are easy to follow. Size,  $7\frac{1}{2} \times 9 \times 11\frac{1}{2}$ ". For 110 volt, 60 cycles. Shpg. wt., 35 lbs.  
**98-052. Complete with \$24.25**  
helmet. NET



### MODEL 40 LIGHT-DUTY ARC WELDER

An economy arc welder for all metal repair work; will do a professional job on aluminum, brass, copper, iron, steel, bronze and other ferrous and non-ferrous metals. In addition to work such as fender welds, auto body repairs, etc., handles heavy work such as cylinder, bumper, tank, and industrial repairs. Excellent for sheet metal shops, plumbers, etc. Quick, simple operation. No special wiring required. Complete with power unit, cord, holder, carbons, welding and brazing rods, solder, flux, goggles, 30 ampere fuse, and instructions. For 110 V., AC or DC. Wt. 8 lbs.  
**98-053. \$12.75**  
NET

## RODS FOR ALL WELDERS

Specially selected assortments of rods, specifically intended to meet all standard welding rod requirements. Include every type and size of rod needed for any of the welders above and for practically all arc-welding jobs. Buy your rods in large assortments and save more.

**78-400. 5-LB. PACKAGE** assorted mild steel welding rods, containing 253 pieces: 1 lb.  $\frac{1}{8}$ " dia. rods, 3 lbs.  $\frac{3}{32}$ " dia. rods, 1 lb.  $\frac{1}{4}$ " dia. rods. NET..... **\$1.47**

**78-401. 10-LB. PACKAGE** assorted mild steel welding rods, containing 405 pieces: 1 lb.  $\frac{1}{8}$ " dia. rods, 6 lbs.  $\frac{3}{32}$ " dia. rods, 3 lbs.  $\frac{1}{4}$ " dia. rods. NET..... **\$2.53**

**78-402. 15-LB. PACKAGE** assorted mild steel welding rods, containing 677 pieces: 2 lbs.  $\frac{1}{8}$ " dia. rods, 10 lbs.  $\frac{3}{32}$ " dia. rods, 3 lbs.  $\frac{1}{4}$ " dia. rods. NET..... **\$3.96**

**78-403. 25-LB. PACKAGE** assorted mild steel welding rods, containing 1063 pieces: 3 lbs.  $\frac{1}{8}$ " dia. rods, 15 lbs.  $\frac{3}{32}$ " dia. rods, 7 lbs.  $\frac{1}{4}$ " dia. rods. NET..... **\$6.27**

## AUDELS' WELDER'S GUIDE

Get in on the big demand for experienced welders! This book covers every welding practice. Explains methods, construction of welders, kinds of metals, etc., 400 pages; illustrated. Questions and answers section.  
**37-099. 98c**  
Postpaid





# SPECIAL FEATURE VALUES

## LUXURAY BED LAMP



AS LOW AS

**87c**

If you read in bed (and who doesn't?), here's just the bed lamp you've been looking for—and at a money-saving low price. Provides cooler, better, glareless illumination. New Plastacele diffuser assures clear, bright light without glare. Handsome molded plastic case has adjustable rubber-covered brackets that fit over headboard of bed. Uses standard 60-watt bulb. Presented in soft Ivory Plaskon or rich Walnut Bakelite to match any setting; size: 10" x 3 3/4" x 3 3/4". Complete, with 6-foot Underwriter's Listed rubber cord and plug. Less bulb. Shpg. wt., 2 lbs.

90-550. Ivory finish. **\$1.14**  
NET.....  
LOTS OF 6, EACH.....**\$1.05**  
90-551. Walnut finish. **94c**  
NET.....  
LOTS OF 6, EACH.....**87c**

## UTILITY ELECTRIC AUTOMATIC TOASTER

2-SLICE MODEL

ONLY

**\$8.75**



A deluxe automatic two-slice toaster at a popular price. Incorporates latest features for quicker, better, crispier toast—always uniform golden brown in color. Efficient silent-clock and thermostat control provides uniform accuracy in toast-timing. Toast automatically pops up when finished or may be kept warm until served. Handsome polished chrome body on bakelite base; size: 11 1/2" long, 6 1/4" wide, 7" high. Double silver contacts; pure mica element. Bottom plate easily removable for cleaning. Complete with cord. For 110-125 volts AC or DC. Shpg. wt., 6 lbs.

90-500. **\$8.75**  
NET.....

## MIRACLE FOOD MIXER

ONLY

**\$13.50**

COMPLETE



A marvelously efficient, time-saving kitchen servant, this deluxe Food Mixer beats, stirs, whips, and mashes all types of batters, salad dressings, eggs, cream, etc.; and extracts juice from fruit. Has every convenience for wonderful utility: 5-speed Universal motor; self-locking beaters with polished metal blades, easily removable for cleaning; revolving bowl platform. Motor tilts back to drain beaters and is easily detached for cleaning. Accessories include: 2 heat-proof white bowls, juicer attachment, beverage mixing attachment. Handsome ivory finish with easy-rip ebony black handle. Underwriters' Listed. With cord. For 110-120 V., AC or DC. Shpg. wt., 20 lbs.

90-501. **\$13.50**  
NET.....

## HANDY ELECTRIC WHIPPER

ONLY

**\$1.95**



Ideal for whipping eggs, cream, dressings, sauces, drinks, etc. The powerful, speedy motor will not interfere with

any radio. Has 1 1/2 pint heavy glass mixing bowl. With removable beater and on-off switch. Easy to use; easy to keep clean. Complete with cord and plug. For 110 volts, 60 cycles AC. Shipping weight, 4 lbs.

90-502. NET..... **\$1.95**

## SAFE-D-LITE WALL LIGHT

URNS ITSELF OFF AUTOMATICALLY

ONLY **\$1.36**



An all-purpose battery-operated wall light for use anywhere; no wiring necessary. Simple control provides timing range from seconds to minutes; light goes out automatically. May also be used for continuous light. Ideal for garages, stairs, cellar, etc. Baked enamel finish; with unbreakable lens. Size: 4 1/2" x 2 1/4" x 3 1/4". Less batteries. Shpg. wt., 5 lbs.

90-555. NET..... **\$1.36**  
80-806. No. 2 Cell (2 required). EACH 4c

## MARVEL TELEPHONE SET

ONLY

**\$3.33**



All-purpose battery phone set operates electrically for low-cost inter-communication for houses, offices, factories, farms, etc. Two dry-cell batteries at each phone carry voice and signal 750 feet; four dry-cells at each phone carry 2000 feet and over. Cradle-type phones made of durable pressed-metal; finished in telephone black. Simple to install. With 35 feet of wire. Extension wire listed below. Less dry cells. Use 80-804 dry cells on p. 123. 4 lbs.

59-311. NET..... **\$3.33**  
59-312. 100 ft. Extension Wire. NET 75c

## SAMSON-UNITED UNDERWRITERS' LISTED ELECTRICAL APPLIANCES

### AUTOMATIC WAFFLER

ONLY

**\$6.25**



Bakes a waffles as you want them—Light,

medium, or dark. Signal flashes when ready for batter and when waffle is done; automatic current shut-off. 7/8" non-stick grids. Chrome finish; walnut handles. 10" x 8 1/4" x 4 1/4". Underwriters' listed. With cord. For 110-120 V. AC. Shipping wt., 6 lbs.

90-504. NET..... **\$6.25**  
90-505. Non-Automatic Model. As above, but less automatic mechanism. NET..... **\$4.85**

### DIAL-A-HEAT IRON

ONLY

**\$4.15**



A handsome, modern Underwriters' Listed electric iron. 1000 watt heating unit housed 1/2" from ironing surface; heats faster, saves current. Weighs only 4 1/2 lbs. Fingertip control selects and maintains correct heat for every fabric—cotton, wool, silk, etc. Has air-cooled black plastic handle and tilt-to-rest stand. Chrome finished. With 7 ft. cord. For 110-120 V. AC. Shpg. wt., 6 lbs.

90-508. NET..... **\$4.15**

### COMBINATION SANDWICH TOASTER-GRILL-WAFFLER

ONLY

**\$7.65**



A marvelously convenient home appliance that can rightly be called a feature value! Here in one complete unit of striking modern design are three separate and popular household aids: a sandwich toaster, a grill, a waffle-baker. Heat indicator flashes correct grilling and baking temperature. Adjustable lid hinges permit toasting sandwiches without crushing; with the top laid back it becomes a double-surface flat grill for fast grilling or frying. Both flat grids have large drain with cup to catch grease. Converts to a waffle iron in a jiffy merely by inserting the greaseless type non-stick waffle grids included; bakes double-size waffles. Finished overall in polished chromium with genuine walnut handles. Has fast-heating element. Underwriters' Listed. For 110-120 volts AC or DC. With approved cord set. Size: 14 1/2" x 8 1/2" x 4". An efficient quality home appliance. Shpg. wt., 15 lbs.

90-510. NET..... **\$7.65**

### AUTOMATIC AUTO-FLIP TOASTER



Sets for light, medium, or crisp toast; automatic signal tells when to turn and turns over when door is lowered. With approved cord. For 110-120 volts AC.

Shpg. wt., 4 lbs.  
90-506. NET..... **\$4.15**  
90-507. Non-Automatic Model. Same as above, but less automatic mechanism. NET..... **\$3.10**

### FOLD-AWAY TRAVEL IRON AND HANDY KARRY-KIT



Smooths out travel wrinkles in a jiffy. Ideal for tourists, students, etc. Only 2 1/2 lbs. Cream enamel-finished handle folds flat for easy packing. Quick-heating element. Polished chrome. With slide-fastener Karry-Kit bag and approved cord set. For 110-120 volts, AC or DC. Shpg. wt., 3 1/2 lbs.

90-509. NET..... **\$2.75**

### SANDWICH TOASTER AND GRILL

A complete sandwich toaster and grill with the same beautiful design, finish, and construction as model above, but without the heat indicator and the waffle grids. With cord. For 110-120 volts AC or DC. Wt., 13 lbs.

90-511. **\$5.55**  
NET.....



# SPECIAL FEATURE VALUES



## "AIRMETER"

Tells at a glance the relative humidity and temperature in any room. Attractively presented in a beautiful gunmetal finished case. Light tan dial face and contrasting figures and pointers. Size: 1" x 3". Wt., 1 lb.

**60¢**  
EA. LOTS OF 6

ished case. Light tan dial face and contrasting figures and pointers. Size: 1" x 3". Wt., 1 lb. **78-200, EACH, 67¢.**  
**LOTS OF 6, EACH, 60¢.**

## "AIR PILOT" AIR CONDITION INDICATOR



**41¢**  
EA. LOTS OF 12

A well-built, accurate instrument; shows temperature and humidity on large, clearly lettered dial. Polished Ivory-finished metal case, 3" diameter. Shipping weight, 8 oz.

**78-201, EACH, 46¢.**  
**LOTS OF 12, EACH, 41¢.**

## BURGESS PENLIGHT



Handy pen-light fits either vest pocket or purse.

Bright plated barrel trimmed with maroon enamel. Thumb-switch locks on and quickly releases. Has pocket clip. Complete with G-E bulb. Less battery. Wt., 8 oz. **78-230, Penlight only, NET, 39¢.**  
**53-030, 2 cell battery, Wt., 4 oz, NET, 6½¢**

## HANDY WATCH-CHAIN LIGHT



A practical miniature flashlight only ¾" dia. x 3¼" long. Hang from watch-chain or carry in vest-pocket, purse, etc.

Streamlined metal case with bright finish. Excellent for reading theater program, finding keyhole, etc. Uses single penlight battery (not supplied). Shpg. wt., 4 oz. **78-231, NET, 21¢.**  
**53-031, Battery, Wt., 4 oz, NET, 4¢**

## NICOUO LIFETIME FLASHLIGHT



NO BATTERIES

Genuine NIKO self-generating flashlight—no batteries! Tenite case with built-in generator; just pump lever and get continuous beam of uniform light. Ideal for campers, sportsmen, tourists, Boy Scouts, etc., or for home use. Works under water also. 4¼" long, 2½" wide, 1" thick. Shpg. wt., 8 oz. **78-210, NET, \$1.62**



## NIKO BICYCLE LIGHT

A self-generating, no-battery bicycle light. Will fit any bike. Driven by wheel rim. Gives constant beam of bright light when wheel is in motion. Streamline design for minimum wind resistance. Oilless bearings. Easily installed. Shpg. wt., 1½ lbs. **78-211, EACH, \$1.92**

## RECHARGEABLE BATTERY



A miniature storage battery for flashlights—saves up to 75% on costs of flashlight cells. Use charger below to recharge battery. Provides up to 1000 hours of service. Fits all standard 2-cell flashlights; replaces two No. 2 cells. Shipping weight, 8 oz. **53-400, Battery, NET, \$1.96**  
**53-401, Charger, Operates from 110 V. AC, Wt., 3 lbs, NET, \$1.96**  
**52-328, Special low drain bulb. For use in flashlights when replacing standard cells with above wet cell, NET, 15¢**

## ATR "B" BATTERY ELIMINATOR



A convenient, economical means of dispensing with expensive "B" batteries in operation of portable sets. Uses five inexpensive No. 2 flashlight cells, three rechargeable 2-volt cells, or storage battery in car; delivers 90 W. of "B" power at 10 ma—enough for most portables. Replacement cells easily obtained; use rechargeable cells at left; flashlight cells on p. 123. Eliminator consists of vibrator-operated "B" unit and a case for cells. Occupies less space than equivalent "B's." Vibrator unit size: 3½ x 2¼ x 1¼". Cell case size: 5½ x 4½ x 1¾". Net weight (with cells) only 3½ lbs. Battery drain, 0.2 Amp. Easily installed in battery radios. Complete with dry cell case, but less cells. Shpg. wt., 4 lbs. **80-015, NET, \$6.97**

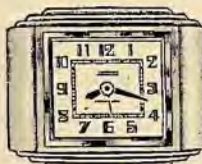
## ATR BATTERY CHARGER



Keeps auto battery fully charged without removing battery from car. Assures ample current for car radio, heater, etc. Utilizes full-wave dry-disc rectifier. Charging rate, 4 to 2 amperes. To operate, attach plug to dash receptacle and connect to 110 volt AC power line. Automatic tapering prevents overcharging. In metal case, 5½" x 3½" x 3¼". Complete with polarized dash receptacle and plug, fuse, 6-ft. DC cord and 6-ft. AC cord. Shpg. wt., 5 lbs. **80-016, NET, \$4.41**  
**80-017, Deluxe Model, 6 to 3 Amps, 9-ft. DC, 12-ft. AC, cords, With instructions, 8 lbs, NET, \$7.61**

## POPULAR-PRICED ELECTRICAL APPLIANCES

### NEW HAVEN SET-O-MATIC ELECTRIC KITCHEN CLOCK



**\$2.18**

An attractively designed kitchen clock. Sets and starts from the front in one operation; operates from 100-125 volts, 60 cycles AC. Large

black numerals on white dial, with red sweep-second hand, 180 RPM motor. Draws only 1¼ watts. 8½" wide, 6½" high, 2" deep. Shpg. wt., 3 lbs. **90-120, Refrigerator White, \$2.18**  
**90-121, Green, EACH**

### "BABY GRANDE" ELECTRIC CLOTHES WASHER



**\$10.46**

A new Underwriters' Approved Electric Clothes Washer; ideal for the home or nursery. Boils and sterilizes as it washes everything from baby's clothes to adult apparel and linen. Compact design affords big washer efficiency with small machine convenience and economy. Holds 2 full pounds of dry clothes; washes thoroughly with swirling action; gentle action prevents tangle or tearing of clothes. Has powerful air-cooled induction-type motor and a powerful 3 in. cast agitator. Heavy, triple-coated vitreous porcelain enameled steel tub attractively finished in speckled Ivory; dome is black enamel finished. Cover has convenient handles and steam escape vents. Tub diameter, 14 inches; overall size: 16 x 16 inches. For 110-120 volts, 60 cycles AC. Less wringer. Shipping weight, 18 lbs. **98-580, NET, \$10.46**

**98-030, Portable Wringer, White enamel finish. Easy to attach to tub and to remove. Soft rubber rollers. Wt., 4 lbs. NET, \$4.20**

### VACULATOR WIDE-MOUTH COFFEE BREWERS

Famous VACULATOR coffee brewer, completely re-designed, at a new low price. Made with Pyrex brand glass parts. New features include: three-inch wide mouth for easy cleaning and easy pouring; new VACULATOR filter system; ingenious 3-in-1 cover; smart decanter tea cap. Capacity, 8 cups. With two-speed heating unit ("brew"—"warm"), cord and plug. For 110 V. AC or DC. Approved by Good Housekeeping Inst. Shpg. wt., 5 lbs. **90-100, NET, \$4.86**



**90-101, Gas Model, For use on gas burner or open flame. Shpg. wt., 4 lbs. NET, \$2.76**

### "HOT DONUT" WATER HEATER

All the hot water you need in a jiffy. Just connect "Hot Donut" to 110 volt AC or DC outlet and immerse in pan of water for quick heating. Rustproof. With 6 ft. cord and plug. Wt., 2 lbs. **90-110, NET, 79¢**  
**10 FOR, \$7.11**



### "NO TOOL" HANDY PLUGS

NO WIRE STRIPPING—MERELY INSERT AND TURN CAP FOR CONTACT



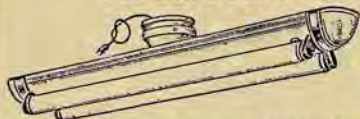
The first new electric plug! Anyone can connect it in a jiffy—without tools—without bother. Just separate wires, insert ends in holes, and screw on cap. Pressure of cap forces teeth through wire to make permanent contact. Safer and simpler to use than old style plugs. Underwriters' Listed. Shpg. wt., 3 oz. **78-225, Brown Bakelite, EACH, 8¢**  
**PACKAGE OF 25, NET, \$1.70**

**78-226, Ivory Bakelite, EACH, 10¢**  
**PACKAGE OF 25, NET, \$2.25**



# SPECIAL FEATURE VALUES

## MODERN PLUG-IN TYPE ALL-PURPOSE FLUORESCENT FIXTURE



Provide Cool, Glareless, Economical Light.  
Plugs Into Any Light Socket.

A very handsome new fluorescent lighting fixture of neat streamlined design. Exceptionally suitable for use in kitchen, bedroom, bathroom, den, laundry, garage—or wherever modern illumination is desired at very modest cost. Easily installed in any standard lighting socket with 4-inch holder; just remove old globe and bulb, screw fixture plug into socket, plug in cord, and adjust adapter ring to holder. It's simple—anyone can do it in a few minutes; no re-wiring needed. Lighting fixture comes completely equipped (less lamps), ready for installation. Body is constructed of heavy-gauge steel, finished throughout in triple-coated white enamel, with glistening chrome trim; a truly modern streamlined fixture. Equipped with replaceable starters and approved ballast. Built of Underwriters' Listed parts throughout. Gives you cool, comfortable, glareless light; uses 2-20 watt fluorescent lamps to give equivalent of 100 watts incandescent light. Normal power factor. For 110-125 volts, 60 cycles AC. Less lamps. Wt., 6 lbs.

91-200. Complete, less only 2 lamps. NET..... \$3.98  
91-503. 20-watt white fluorescent lamp (2 required), 2 lbs. ea. NET EACH ..... 76c

## AD-O-LITE COMBINATION FLUORESCENT FIXTURE AND ELECTRIC SIGN

Furnishes Illumination Plus Advertising and Sales Message.  
Complete with 92 Interchangeable Letters.



The perfect double-purpose fluorescent lighting fixture and sign for stores, restaurants, markets, offices, taverns, etc. Supplies modern fluorescent lighting and, in addition, is an advertising sign with space on both sides of fixture for your message. Furnished with 92 interchangeable letters and numerals so that message can be changed easily and quickly. Has translucent background for letters; attracts attention and always tells your customers what you have to sell. Fits your present electric fixture; just attach to holder and plug in. No rewiring, no bother; anyone can install it quickly. Uses two 20-watt fluorescent lamps which replace a 100-watt incandescent light. Handsome, practical design; has white baked enamel reflector and smart chrome trim. Size: 25" long, 8 1/2" wide, 4 1/2" deep. For operation from 110-125 volts, 60 cycles AC. Complete with letters, but less lamps (see below). Light up your shop, and get your sales message across. 2 types—for 4" or 6" ceiling holders. Shpg. wt., 12 lbs.

91-205. Fixture less lamps with 4" holder. 1 NET \$7.93  
91-206. Fixture less lamps with 6" holder. EACH \$7.93  
91-503. 20 watt white fluorescent lamp 2 lbs. EACH 76c  
43-100. Extra set of 92 letters. 2 lbs. NET 81c

## JFD FLUORESCENT-LIGHT NOISE FILTER



An Underwriters' Listed capacitive-type filter, especially designed to suppress radio interference noise caused by fluorescent lamps. Easily installed; just connect filter leads to line, and ground can to fixture. Also an efficient suppressor for other electrical interference. In metal can, size: 4 1/2" x 1 1/2" x 1 1/2". With 12" leads. For 115 V., 60 cycles AC. Shpg. wt., 12 oz.

70-400. NET..... 88c

## REHTRON "JUNIOR ENGINEER" ELECTRIC-EYE KIT



- Build Your Own Burglar Alarm
- Operate Secret Door Signal
- Make A Trick Lie Detector
- Perform Electronic Experiments

Learn all about photo-electric equipment and set up your own apparatus with this sensational new Electric Eye Kit. Not a toy—actually scientific apparatus that enables you to perform innumerable experiments. It's entirely practical and, what's more, unusually instructive. With this kit you can build your own burglar alarm, make a trick lie detector, operate a secret door signal, light an electric bulb with a match, sound a signal with a flash-light, take your own snapshot, etc. Exceptionally fascinating for young people, and for adults as well. Detailed instruction booklet explains function of each piece of equipment and gives you complete operating details; really a simplified, condensed education in Electronic fundamentals. Complete kit includes: Photo Cell, 6J5G Amplifier Tube, Electric-Eye transformer with potentiometer, demonstrator panel board, buzzer, porcelain base switches, bulb with socket, adapter plug with leads, wire, and hardware. For operation from 110 volts, 60 cycles AC. Attractively boxed; complete with manual of instructions. Shpg. wt., 9 lbs.

83-900. \$875  
SPECIAL NET PRICE.....

## RAPID ELECTROPLATERS STANDARD MODELS

A complete, handy kit for quick, convenient electroplating of reflectors, fittings, household articles, etc. Restores gleaming finish—just like new. Easy to use; complete instructions furnished. Kit includes: 1 oz. of compound, 1 oz. metal polish, anode brush, wires with clips attached, emery paper, brass strips for practice, 2 dry cell battery and battery holder. Sufficient compound is included to plate 100-150 square inches of surface. Ideal for auto mechanics, for replating reflectors, nicked fittings, etc. Don't throw away articles from which plating has worn off; replating them yourself at very small cost. Anyone can do it. Shpg. wt., 2 lbs.



83-910. For replating all silver \$1.83  
or silver-plated objects. NET.....

83-911. For replating cadmium \$1.47  
nickel, etc. NET.....

## ECONOMY MODELS

NICKEL ELECTROPLATER. Contains 1 oz. compound, 1 oz. metal polish, anode brush, wires with clips, emery paper, etc. Uses 1 No. 6 dry cell (not included). Wt., 1 1/2 lbs. 83-912. \$1.10 NET.....

CHROMIUM ELECTROPLATER. For replating all chromium-finished objects. Same as 83-912 but has 1 oz. chromium compound. Requires 1 No. 6 dry cell (not included). 1 1/2 lbs. 83-913. \$1.10 NET.....

## WILCOX-GAY SOUND EFFECTS

A complete kit that furnishes professional-type sound effects for your home recorder. Re-creates the roll of thunder, ringing of doorbell, wash of waves on the seashore, steamboat whistle, police-car siren, clatter of horses' hoofs, patter of rain, rattle of machine guns, etc. Enables you to furnish the proper kind of sound-effects setting for any skit. Supplied with clear, easy-to-follow instructions. Will add wonderful realism and greater interest to every home recording. A necessity for every owner of home recording equipment. Shpg. wt., 2 lbs.



83-920. NET..... 98c

## ACRO SNAP SWITCHES



An exceptionally well-constructed, frictionless, snap-action switch for precision control of all kinds of apparatus in industry, laboratories, etc. Extremely sensitive; operates on very low pressure. Has one-piece blade, silver contacts, roller spring. In molded bakelite case; overall size: 1 1/2" x 1 1/2" x 2 1/2". Drilled for mounting with two #32 screws. Weighs less than 1 oz. Rated 2 amps. at 600 V., 3 amps. at 450 V., 5 amps. at 250 V., 10 amps. at 115 V. Shpg. wt., 4 oz.

- FIG. A. PIN-PLUNGER TYPE  
35-000. SPST. Normally open. 98c  
35-001. SPST. Normally closed. 98c  
35-002. SPDT. Type ..... \$1.18  
FIG. B. LEAF ACTUATOR TYPE  
35-005. SPST. Normally open. \$1.08  
35-006. SPST. Normally closed. \$1.08  
35-007. SPDT. Type ..... 1.27

## A-1 METAL POLISH



An excellent all-purpose polish for metal, glass, porcelain, etc. Cleans and polishes gold, silver, chrome, copper, nickel, etc. Ideal for fluorescent fixtures. In paste form; contains no acid or grit; does not scratch.

43-150. 4 oz. Jar. NET..... 15c  
43-151. 8 oz. Jar. NET..... 25c

## EVERHOT TIMER CLOCK



Turns radio, toaster, coffee maker, lights, etc., on or off at any predetermined time from 15 min. to 10 1/2 hrs. Has 30-hour spring-wound movement. Handles up to 1650 watts. In molded plastic case of modern design. For AC operated appliances only. Shpg. wt., 3 lbs.

78-320. NET..... \$4.65



# SPECIAL FEATURE VALUES

## NEW MUSICRAFT—MASTERPIECE RECORDS



AS LOW AS **26c** The world's greatest music—recorded by noted artists and concert groups—now at Musicraft's incredibly low prices! All Musicraft Masterpiece 10" and 12" records are recorded on both sides and are freshly made from recently recorded masters. Artists, though not mentioned by name, are first-ranking musicians. Order in quantities for extra savings! (For complete listings of single records, see page 205.) Average shpg. wt., one record— $\frac{3}{4}$  lb.; six records—4 lbs.

### 10-INCH RECORDS

- |   |   |
|---|---|
| <b>8-567. L'Arlesienne Suite</b> (Bizet). Parts 1 and 2.                        | <b>8-570. Pizzicati, Sylvia Ballet</b> (Delibes). Coppelia Entr'acte, Waltz. Sym. Orch. |
| <b>8-568. L'Arlesienne Suite</b> . Parts 3 and 4. Sym. Orch.                    | <b>8-572. La Golondrina. Over the Waves.</b> Symphony Orchestra.                        |
| <b>8-569. Le Cygne</b> (Saint-Saens). Gavotte in E Major (Bach). Violin, piano. | <b>8-573. Aloha Oe. Goodbye Forever.</b> Soprano, piano. Violin and piano.              |

NET EACH..... 29c  
LOTS OF 6, EACH..... **26c**

### 12-INCH RECORDS

- |  |   |
|--|---|
| <b>12-015. Rosamunde Overture</b> (Schubert). Sym. Orch.             | <b>12-018. Oance of the Hours</b> (Ponchielli). Sym. Orch.                |
| <b>12-016. Merry Wives of Windsor Overture</b> (Nicolai). Sym. Orch. | <b>12-019. Hungarian Rhapsody, No. 2</b> (Liszt). Symphony Orchestra.     |
| <b>12-007. Euryanthe Overture</b> (Weber). Sym. Orch.                | <b>12-017. Poet and Peasant Overture</b> (Von Suppe). Symphony Orchestra. |

NET EACH..... 49c  
LOTS OF 6, EACH..... **44c**

## RCA-VICTOR SPRING-WOUND RECORD PLAYER VALUE



ONLY **\$8.95**



Enjoy recorded entertainment with any battery radio set. This new and extremely attractive RCA-Victor Spring-Wound Record Player transforms any battery-operated radio receiver with phono connection or adapter (page 56) into an efficient radio phonograph. Plays all records through radio set with all the volume and fidelity usually obtained from the radio. The mechanical, spring-wound motor does not use any current, and thus involves no additional battery drain. Amazingly low-priced, this new Record Player brings you added entertainment, added enjoyment, from the vast range of recordings now available.

### WORKS WITH ANY RADIO

It's easy to connect; just plug phonograph cable into phono jacks of radio set—no involved rewiring or bother. Features include: improved feather-touch Crystal Pickup, housed in a lightweight, plastic tone arm of modern design; volume control so that you can regulate volume to suit yourself; spring-wound motor, completely governed to maintain a constant speed, and with manual speed regulator; manual start and stop. 8-inch turntable plays all 10" and 12" 78-RPM records. Beautifully housed in compact cabinet of attractively grained heart walnut veneer. Measures: 6" high, 12 $\frac{1}{2}$ " wide, 10" deep. With 6-foot cable. For operation with any battery radio. A splendid value at this low price. Wt., 9 lbs. **\$8.95**  
**96-500. Model R103-S Record Player. NET..... \$8.95**  
**61-675. Adapter for connecting above player to any AC radio. NET..... 68c**

LEARN SPANISH EASILY AT HOME



ONLY **\$19.35**

## NEW SPANISH LANGUAGE RECORD COURSE

Learn Spanish at home under the guidance of expert instructors. This remarkable new Spanish study course will provide you with a working vocabulary of more than 2,000 words—and teach you correct pronunciation and grammatical rules through the combined use of visual and aural instruction. The lessons are electrically recorded on 5 double-faced 10" records by two Spanish-language professors. As you hear their voices from your record player, you follow the spoken word in the textbook. It's so easy to learn by the recorded-lesson method—you'll make amazing progress! The complete course consists of 5—10" double-faced records, a 192-page cloth-bound textbook, and an attractive storage and carrying case. Records can be played on any 78 RPM phonograph. Also included is a six-month free correspondence service with the famous Pan-American Language School of New York City. Shipping weight, 7 lbs.

**8-995. NET..... \$19.35**  
**8-996. Text Book as supplied with above, 192 pages, cloth bound. 2 lbs. \$3.43**  
NET.....



## MASTERPIECE CLASSICAL RECORD SETS IN ALBUMS

Famous classics by outstanding orchestras. Complete in attractive, durable albums (except 8-919, which is in envelope). All newly recorded records—not repressings or re-recordings. Remarkable values. Order several sets!

**8-916. GREAT OVERTURES:** Rosamunde, Merry Wives of Windsor, Poet and Peasant, Euryanthe, Symphony orch. 4-12" double-faced records. Album **\$2.18**  
A-16. Wt., 5 lbs. NET.....

**8-917. VIENNESE WALTZES.** Concert orch. 3-10" records (8-558, 8-559, 8-560 on page 205). Album A-17. Wt., 3 lbs. **\$1.02**  
NET.....

**8-918. BALLET MUSIC.** Symphony orch. 3-10" records (8-563, 8-562, 8-570 on page 205 and above). Album A-18. Wt., **\$1.02**  
3 lbs. NET.....

**8-919. L'ARLESIENNE SUITE** (Bizet). Symphony orchestra. 2-10" double-faced records in envelope. Set A-19. Wt., 2 $\frac{1}{2}$  lbs. Net..... **57c**

10% additional discount on above albums in Lots of 3, in any assortment.

### "IN THE BEGINNING"

#### OLD TESTAMENT BIBLE STORIES FOR CHILDREN—ON RECORDS

Six stories from the Old Testament, retold for children by Sholem Asch, author of *The Nazarene*, and narrated, with charming musical background, by David Niles. Includes: *Adam, Eve, Noah and His Ark, The Tower of Babel, Abraham, How Abraham Came to Know God.* 3-10" records, recorded on both sides, in attractive album with complete texts of stories and illustrations. Delightfully simple and richly poetic. Wt., 3 lbs. **\$2.25**  
**8-999. NET PER SET.....**

QUALITY ALBUMS ONLY **25c** EACH



A special bargain! Well-made albums for 10" records at an unbelievably low price. Flat-opening type with 12 permanent rings. Have durable composition binders, heavy kraft pockets for 9 records. Two-tone finish in assorted colors of our selection. Order quantities and save. Shpg. wt., 2 lbs. each. **96-888. NET EACH..... 25c**  
**10 FOR ONLY..... \$2.25**

### LOW-PRICED NEEDLE SHARPENER

ONLY **75c**



Resharpen cactus, thorn, fiber, and other non-metallic needles as good as new for added needle life. 7 oz. **69-950. NET..... 75c**

### ACOUSTIC PHONOGRAPH REPRODUCERS

**69-960. No. 6.** Replace the worn-out reproducer of your old phonograph and improve its tone. Fits any portable or other mechanical phonograph with standard  $\frac{1}{4}$ " end tone arm, including Victor and other makes. Made in U.S.A. 3 lbs. NET..... **79c**  
**69-961. No. 4.** As above, but lighter in weight. 2 lbs. NET..... **54c**

FOR ADDITIONAL PHONOGRAPH ACCESSORIES, records, needles, etc., see pages 84 to 90, 205 to 208.



# I WILL TRAIN YOU TO START A SPARE TIME OR FULL TIME RADIO SERVICE BUSINESS WITHOUT CAPITAL



**N.R.I. MEN  
WORK IN THESE  
BRANCHES, TOO**



(Above) Broadcasting Stations employ Radio Technicians as operators, installation and maintenance men and pay well.



(Above) Radio Jobbers and Dealers employ installation and servicemen at good pay.



(Above) Loud Speaker System is another field for Radio Technicians. (Left) Police, Aviation and Commercial Radio are newer fields for which we have required knowledge.



## These Men Have SPARE TIME BUSINESSES



"I repaired many Radio sets when I was on my tenting lesson. I really don't see how you can give so much for such a small amount of money. I made \$600 in a year and a half and I have made an average of \$10 just spare time."  
**JOHN JERRY**  
1749 Penn St.  
Denver, Colo.



"I am now making \$10 a week in spare time while still holding my regular job as a machinist. I owe my success to N.R.I."  
**W.M. F. RUPP**  
R.F.D.  
Wayne, Penna.



"I am doing spare time Radio work, and I am averaging around \$300 a year. Those extra dollars mean so much—the difference between just barely getting by and living comfortably."  
**JOHN WASHKO**  
97 New Cranberry  
Hazleton, Penna.



## These Men Have FULL TIME BUSINESSES



"For several years I have been in business for myself making around \$200 a month. Business has steadily increased. I have N.R.I. to thank for my start in this field."  
**ARLIE J. FROEHNER**  
300 W. Texas Ave.  
Goose Creek, Texas



"I went into business for myself 6 months after enrolling. In my 6 months of business I do about \$300 a month. I can't tell you how valuable your course has been to me."  
**A. J. BATES**  
Box 1168  
Gladewater, Texas



"I am making around \$50 a week after all expenses are paid, and I am getting all the Radio work I can take care of."  
**H. W. SPANGLER**  
1261 1/2 S. Gay St.  
Knoxville, Tenn.

The tremendous increase in the use of Radio in recent years has opened many opportunities for you to have a spare time or full time Radio service and sales business of your own. More than 50,000,000 home and auto sets are in use today—many millions more than there are telephones. Every year millions of these sets get out of date and are replaced. Millions more need new tubes, repairs, other forms of service. U.S. Radio owners spend \$600,000,000 a year for servicing their Receivers. I will train you at home in your spare time to be a Radio Technician—to repair, sell, install all types of Radio sets—to start your own Radio business and to build it up on money you make in your spare time while learning. I will also train you to hold a good job in many of Radio's profitable branches. And best of all, you don't need to give up your present job or go away to school and spend a lot of money to train to be a Radio Technician or Operator. I train you right at home in your spare time.

## Many Radio Technicians I Trained at Home Make \$30, \$40, \$50 a Week

Many N.R.I. trained Radio Technicians have taken advantage of opportunities to open a full time or spare time Radio business selling, servicing, installing, repairing home and auto Radio sets. Many others hold good jobs doing this kind of work for Radio manufacturers, dealers, jobbers, service organizations. Radio Operators I trained have good jobs in Broadcasting, Commercial, Aviation, Police, Ship, Radio Stations. Some make good money in Public Address work and other branches of the Radio industry.

My Course is thorough and practical. I give you basic training in Radio Theory and Engineering Practice which enables you to understand the operation and design of practically every type of Radio apparatus. You understand your work—know just what to do—instead of merely relying on your mechanical ability to fix a few common faults and make a few simple adjustments. That's why many men who have been in Radio before enrolling report that my Course helped them make more money, win success. I train you for Television, a field of future opportunity.

## Beginners Quickly Learn to Earn \$5 to \$10 a Week Extra in Spare Time

Nearly every neighborhood offers opportunities for a good part time Radio Technician to make extra money fixing Radio sets. I give you special training to show you how to start cashing in on these opportunities early. You get Radio parts and instructions for building test equipment, for conducting experiments that give you valuable practical experience. My 50-50 method of training—half with Radio parts I send you, half studying my lesson texts—makes learning Radio at home interesting, practical.

**MAIL THE COUPON**—get my FREE Lesson and 64-page Book "Rich Rewards in Radio" at once. See what Radio offers you as a skilled Radio Technician. Learn how practical my Course really is. Read letters from more than 100 men I have trained telling what they are doing and earning. Mail the Coupon NOW—in an envelope or paste it on a penny postal.

**J. E. SMITH, President, Dept. 1KZ  
National Radio Institute, Washington, D. C.**

## You Get This Professional Servicing Instrument

This instrument makes practically any test you will be called upon to make in Radio service work on both spare time and full time jobs. It can be used on the test bench, or carried along when out on calls. It measures A.C. and D.C. voltages and currents; tests resistances; has a multi-band oscillator for aligning any set, old or new. You get this instrument to keep as part of your N.R.I. Course.



## SAMPLE LESSON FREE

I want to prove our Course gives practical, money-making information, that it is easy to understand—what you need to master Radio. My sample Lesson Text, "Radio Receiver Troubles—Their Causes and Remedies," covers a long list of Radio receiver troubles in A.C., D.C., battery, universal, auto, and T.R.F., superheterodyne, all-wave and other types of sets. And a cross reference system gives you the probable cause and a quick way to locate and remedy these set troubles. A special section is devoted to receiver check-up, alignment, balancing, neutralizing, testing.

**Mail Now**

## GOOD FOR BOTH

64 PAGE BOOK  
SAMPLE LESSON



**J. E. SMITH, President, Dept. 1KZ,  
National Radio Institute, Washington, D. C.**

Without obligating me, mail your Sample Lesson and 64-page Book FREE. I am particularly interested in the branch of Radio checked below. (No salesman will call. Write plainly.)

- Radio Service Business of My Own
- Service Technician for Radio Stores and Factories
- Spare Time Radio Servicing
- Auto Radio Technician
- Aviation Radio
- Operating Broadcasting Stations
- Army, Navy Radio Jobs
- Operating Police Radio Stations
- Operating Ship and Harbor Radio

(If you have not decided which branch you prefer—mail coupon for facts to help you decide.)  
Name.....Age.....  
Address.....  
City.....State.....14 x 1



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## IT'S EASY TO ORDER

Use our convenient order blanks. Type or print your name and address and specify method of shipment. Make extensions carefully, and total your order. For prepaid parcel post orders remit enough to cover merchandise and postage. Extra order blanks and envelopes are packed with order and will also be mailed to you promptly on request.

## HOW TO SEND MONEY

It is safest to remit by postoffice or express money order, bank draft or check. Avoid sending coin or currency, but if necessary, be sure to register your letter. For rush handling, telegraph your order and money by Western Union or Postal Telegraph. Because we use postage meter machines for our mailings, please do not remit in stamps except on very small orders.

## OUR TERMS SAVE YOU MONEY

Our terms of sale are cash with order or C.O.D. (See below for easy terms on some types of merchandise.) Resulting savings in operating costs are passed on to you in our low prices. We ship C.O.D. if you wish (except special merchandise). A 20% deposit should be included with first C.O.D. orders from new customers and with C.O.D. orders for heavy items such as generators, public address systems, console radios, batteries, etc. Catalog prices are net, F.O.B. Chicago (except where noted).

## YOU GET FULL DISCOUNTS

All trade discounts and a 2% cash discount have already been deducted from every price in this book. Our NET catalog prices are the prices you pay.

## WE WILL NOT BE UNDERSOLD

Don't split your orders! We meet all competitive prices for identical standard merchandise of current make. We can secure for you any special radio equipment not shown in this catalog, at lowest prices. Order with deposit, and give full data or send sample. Always specify make, model and tube lineup of unit for which replacement is required.

## TESTERS, AMPLIFIERS, AND AMATEUR GEAR ON EASY TERMS

ALLIED offers practical time payment terms to continental United States only on Servicemen's Test Units, Sound Equipment, and Amateur Receivers. Terms are indicated under listings of the units available on time payments. Order with required down payment; give credit references, employment and income data. A contract will be mailed for your signature while credit investigation is being made.

## FAST SERVICE PERSONAL ATTENTION

Whether you shop by mail, by phone, or visit our fully air-conditioned Chicago Salesrooms—you always receive fast service, and courteous personal attention, when you shop at ALLIED RADIO.

All Local and Long Distance Phones  
**HAYmarket 6800**

## IMPORTANT—ABOUT PRICE AND SUPPLY

To protect you on both price and supply, we have made large advance purchases. Our stocks are larger and more complete than ever. You can depend on continued fast service and best values from ALLIED. Nevertheless, because abnormal demand may affect present large stocks and in view of prevailing material shortages, all merchandise is offered subject to prior sale, and all prices are subject to change without notice. Because of low prices, also, we reserve the right to add any Federal or State taxes levied after this book is printed. To protect you, we may limit the quantity on any item supplied. ALLIED will always give you the benefit of any price reductions.

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The table below helps you estimate parcel post charges. Shipping weights are indicated in all catalog listings. Save C. O. D. charges by sending enough money to cover postage and insurance. Any surplus will be promptly refunded. If remittance does not cover postage, shipment will be made C. O. D. for balance. For your protection, we insure all parcel post shipments.

### PARCEL POST INSURANCE RATES

Up to \$5.00	5c
\$5.00 to \$25.00	10c
\$25.00 to \$50.00	15c
\$50.00 to \$100.00	25c

## TRANSPORTATION ALLOWANCE

ALLIED offers a substantial saving on shipping costs by making a 2% transportation allowance on any cash or C. O. D. order for \$25.00 or more. For example, if your order is for \$100.00 you may deduct \$2.00 on the basis of this offer. This applies on shipments made anywhere in the United States on all merchandise except *Knight* radios, amplifiers, and public address systems, National Company merchandise, and items marked "Postpaid." (Shipments to U. S. Territories and Possessions or for export are excepted.) Whether your order is for cash or C. O. D., deduct this extra 2% allowance in advance.

## HOW TO ESTIMATE PARCEL POST CHARGES

Packages Under 8 Ounces, Allow 1½¢ Each 2 Ounces

WEIGHT IN POUNDS	ZONES							
	First, Up to 50 MILES	Second, 50 to 150 MILES	Third, 150 to 300 MILES	Fourth, 300 to 600 MILES	Fifth, 600 to 1000 MILES	Sixth, 1000 to 1400 MILES	Seventh, 1400 to 1800 MILES	Eighth, Over 1800 MILES
1	8c	8c	9c	10c	11c	12c	14c	15c
2	10c	10c	11c	14c	17c	19c	23c	26c
3	11c	11c	13c	17c	22c	26c	32c	37c
4	12c	12c	15c	21c	27c	33c	41c	48c
5	13c	13c	17c	24c	33c	40c	50c	59c
6	14c	14c	19c	28c	38c	47c	59c	70c
7	15c	15c	21c	31c	43c	54c	68c	81c
8	16c	16c	23c	35c	49c	61c	77c	92c
9	17c	17c	25c	38c	54c	68c	86c	\$1.03
10	18c	18c	27c	42c	59c	75c	95c	1.14
11	19c	19c	29c	45c	64c	82c	\$1.04	1.25
12	21c	21c	31c	49c	70c	89c	1.13	1.37
13	22c	22c	33c	52c	75c	96c	1.22	1.47
14	23c	23c	35c	56c	80c	\$1.03	1.31	1.58
15	24c	24c	37c	59c	86c	1.10	1.40	1.69
16	25c	25c	39c	63c	91c	1.17	1.49	1.80
17	26c	26c	41c	66c	96c	1.24	1.58	1.91
18	27c	27c	43c	70c	\$1.02	1.31	1.67	2.02
19	28c	28c	45c	73c	1.07	1.38	1.76	2.13
20	29c	29c	47c	77c	1.12	1.45	1.85	2.24
For Each Additional Pound Add	1c	1c	2c	3½c	5c	7c	9c	11c

## EXPRESS RATES

Max. Lbs. Wt.	Maximum Distance in Miles							Over 2000
	100	200	300	500	750	1000	1500	
5	\$.25	\$.25	\$.30	\$.35	\$.45	\$.50	\$.55	\$.65
10	.30	.31	.40	.50	.65	.84	1.10	1.50
15	.34	.41	.47	.61	.70	.88	1.20	1.59
20	.42	.51	.59	.78	.90	1.14	1.57	2.09
25	.50	.61	.71	.94	1.09	1.40	1.93	2.59
35	.66	.82	.96	1.28	1.49	1.91	2.67	3.58
45	.82	1.02	1.19	1.62	1.83	2.43	3.40	4.57
55	.98	1.23	1.44	1.95	2.28	2.95	4.13	5.57
75	1.30	1.63	1.92	2.62	3.07	3.98	5.59	7.55
90	1.54	1.94	2.28	3.13	3.67	4.76	6.69	9.04
Ea. 100 Lbs.	1.60	2.04	2.42	3.36	3.96	5.17	7.32	9.93

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## EXPRESS SHIPMENTS

Console Radios, Windchargers, Generators, Storage Batteries and any items in this catalog marked "not mailable" must be shipped by express or freight. To assure safe arrival we prefer to ship all radios, sound systems, transmitting tubes, test units, and other fragile merchandise by express. If there is no express agent at your location, be sure to specify your nearest express office. All express shipments are insured. See table at the left for rates, but do not include express charges with your order. Shipment will be made charges collect.

## FREIGHT SHIPMENTS

Where fast shipment is not essential and merchandise selected weighs 100 lbs. or more, you save by specifying shipment via freight. Please do not send shipping charges unless you are on a prepaid station. If your location has no freight station, specify nearest shipping point.



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KITS AND ACCESSORIES

BUILD YOUR OWN DEPENDABLE FLUORESCENT FIXTURES

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A modern fluorescent adapter-lite, available as a KNIGHT "Build-Your-Own" Kit containing all necessary parts, diagram, and complete instructions for wiring and assembly. Easy to build and easier to install. Simply remove the incandescent bulb and shade from any 4" ceiling type fitting; screw Adapter-Lite plug into the socket; adjust Adapter-Lite ring to the fitting; then tighten the fitting set screws. A truly desirable addition to any room. Produces a flood of cool, evenly distributed, glareless light. Ideal for kitchen, bathroom, bedroom, playroom, recreation room, etc. An excellent light for offices, stores, reception rooms, game rooms, barber shops and many other places of business and public use. Durably constructed and scientifically designed for long life and efficient operation. Attractively finished in gleaming white enamel, with modern die-cast ends. Will harmonize with any type of interior. All high-quality electrical parts are used throughout. Comes complete with fixture parts, adjustable adapter ring, reactor, starter, wire and attachment plug. Fully power-factor corrected. For 110-125 V. DC, or 60 cycle AC operation. 5 lbs.

**83-801. Complete Kit, Less Lamp. NET.....\$2.95**  
**91-503. T12 20-watt 24" lamp for above. NET.....76c**

## FAMOUS G.T.C. FLUORESCENT BALLASTS



Compact fluorescent lamp ballasts. Easily mounted in conventional channels and fixtures. Normal power factor types are 50-60% corrected. All high power factor types are 90-100% corrected. Scientifically designed for long life, easy starting, and efficient operation. Properly treated to minimize hum vibration. For 105-125 V. 60 cycle operation. We can also supply ballasts for 199-219 and 220-250 volt operation, 60 cycle AC. Write for prices.

**38-025. Fluorescent Lighting Fundamentals (Instructive Bulletin).....5c**  
**37-130. GTC Ballast Bulletin.....FREE**

### 2-LAMP BALLAST—HIGH POWER FACTOR—NEEDS NO COMPENSATOR

A 2-lamp ballast with sufficient current-handling capacity as to require no compensator.

Stock No.	Mfrs. Type	Lamp Watts	Size	Mtg. Ctrs.	Fig.	Shpg. Wt.	NET PRICE	
							1-9	10-up
78-800	40BL2	2-40	1 3/8 x 2 1/2 x 1 3/4"	1 1/4"	C	5	\$4.38	\$3.75

### 2-LAMP BALLASTS—HIGH POWER FACTOR—WITH COMPENSATOR

Popular "Long-Fellow" ballasts. Will fit any standard channel strip. Save time and money.

Stock No.	Mfrs. Type	Lamp Watts	Size	Mtg. Ctrs.	Fig.	Shpg. Wt.	NET PRICE
78-801	15BCL2	2-15	1 3/8 x 2 1/2 x 1 1/4"	1 3/4"	C	4	\$3.41 \$2.92
78-802	20BCL2	2-20	1 3/8 x 2 1/2 x 1 1/4"	1 3/4"	C	4	3.41 2.92
78-803	30BCL2	2-30	1 3/8 x 2 1/2 x 2 1/4"	1 9/8"	B	6	5.16 4.42
78-804	40BCL2	2-40	1 3/8 x 2 1/2 x 1 7/4"	1 6/8"	B	6	4.90 4.20
78-805	100B2*	2-100	2 3/8 x 3 1/2 x 1 9/8"	2 x 1 3/4"	B	15	10.06 8.62

\*100B2 100-watt ballast is not long-fellow type. Does not need compensator.

### T-LAMP BALLAST—HIGH POWER FACTOR

Fully 90-100% power-factor corrected. Meet power company requirements. Underwriters Approved.

Stock No.	Mfrs. Type	Lamp Watts	Size	Mtg. Ctrs.	Fig.	Shpg. Wt.	NET PRICE
78-806	15BLP	1-15	1 3/8 x 2 3/8 x 3 1/4"	8 1/4"	A	2	\$2.62 \$2.25
78-807	20BLP	1-20	1 3/8 x 2 3/8 x 3 1/4"	8 1/4"	A	2	2.62 2.25
78-808	30BLP	1-30	1 3/8 x 2 3/8 x 4 1/4"	1 3/4"	C	4	3.72 3.18
78-809	40BLP	1-40	1 3/8 x 2 3/8 x 4 1/4"	1 3/4"	C	5	3.72 3.18
78-810	100BP	1-100	1 3/8 x 3 3/8 x 1 3/4"	2-1 3/4"	C	10	7.00 6.00

### T-LAMP BALLAST—NORMAL POWER FACTOR

50-60% power-factor corrected. For use where higher corrected units are not required.

Stock No.	Mfrs. Type	Lamp Watts	Size	Mtg. Ctrs.	Fig.	Shpg. Wt.	NET PRICE
78-811	15B	1-15	1 1/4 x 1 1/4 x 3 1/4"	3 3/4 - 4 1/8"	D	1	\$0.57 \$0.48
78-812	20B	1-20	1 1/4 x 1 1/4 x 3 1/4"	3 3/4 - 4 1/8"	D	1	.57 .48
78-813	30B	1-30	1 3/8 x 2 3/8 x 3 3/4"	3 1/2"	A	3	2.10 1.80
78-814	40B	1-40	1 3/8 x 2 3/8 x 3 3/4"	3 1/2"	A	3	2.10 1.80

### MULTIPLE LAMP BALLASTS—NORMAL POWER FACTOR

Same as 1-lamp ballasts immediately above, except designed for operation in 2-lamp circuits.

Stock No.	Mfrs. Type	Lamp Watts	Size	Mtg. Ctrs.	Fig.	Shpg. Wt.	NET PRICE
78-815	215B	2-15	1 3/8 x 1 3/4 x 6 3/4"	5 1/8 - 6 1/2"	A	2	\$1.05 \$0.90
78-816	220B	2-20	1 3/8 x 1 3/4 x 6 3/4"	5 1/8 - 6 1/2"	A	2	1.05 .90

## ARROW H & H FLUORESCENT LIGHTING ACCESSORIES



High quality fluorescent starter switch and socket assemblies. Average shpg. wt., 3 oz.

### STARTERS—FIG. A

No.	Type	Watts	Each	10 For
78-850	FS2	15 or 20	28c	\$2.52
78-851	FS4	30 or 40		
78-852	FS6	100	60c	5.40

### LAMPHOLDER SOCKETS—FIG. B

No.	Watts	Color	Each	10 For
78-860	15, 20	Black	16c	\$1.44
78-861	30 or 40	White	18c	1.62
78-862	100	White	34c	3.06

### STARTER SOCKETS—FIG. C

For use with 78-860 and 78-861 holders above  
**78-853. 10 For \$1.17 NET EACH. 13c**

### COMBINATION STARTER SOCKET & LAMPHOLDER—FIG. D

No.	Watts	Color	Each	10 For
78-865	15, 20	Black	28c	\$2.52
78-866	30 or 40	White	30c	2.70
78-867	100	White	59c	5.31

## FLUORESCENT BALLAST-LAMP FOR 14 WATT LAMPS

Intermediate base GE ballast lamp for 2-14 watt fluorescent lamps. 1 lb.  
**78-870. NET EACH.....45c**  
**52-854. Cleat Socket.....15c**

## DC TO AC FLUORESCENT LINE RESISTORS

Permit operation of A.C. fluorescent fixtures from 105-125 volts DC.  
  
**FIG. A. Sprague Type PF. Resistor ballasts for operating fluorescent lamps from 110 volts DC. Fits wall outlet. Wt., 1 lb.**  
**78-875. For 15 watt T8.**  
**78-876. For 20 watt T12.**  
**NET EACH.....\$1.76**

**FIG. B. Clarestar Type FT Resistor. Plugs into outlet. 1 1/2" dia. x 3 3/8" x 1/2" lb.**  
**78-880. For 15 watt T8 or T12 lamps.**  
**78-881. For 20 watt T12 lamps.**  
**EACH.....81c**

**FIG. C. Clarestar Type GT. Fits standard fluorescent channel. 7" x 1 3/8" x 1 1/4". 1 lb.**  
**78-882. For 15 watt T8.**  
**78-883. For 15 watt T12.**  
**78-884. For 20 watt T12.**  
**EACH.....\$1.13**

See pages 194 and 201-204 for complete listings of fluorescent lamps and fixtures

FOR COMPLETE INDEX

← TURN THIS PAGE

HOW TO ORDER INFORMATION APPEARS ON PAGE 197



# POPULAR FLUORESCENT LAMP VALUES

Fluorescent lighting—the cool and brilliant modern miracle of lighting science—is available here in all needed forms. Saves you money, reduces eyestrain, increases working efficiency, reduces errors, and puts maximum sales appeal in store interiors, show windows, counter displays, etc. Increased brilliance, up to three times that of incandescent lights of equal wattage rating, means money saved on your light bill. A complete line of latest money-saving values in fluorescent equipment is listed in this catalog as follows:

Fixtures... pages 194, 201-204. Lamps... page 203. Ballasts, Starters, Sockets, etc... page 200.



## MITCHELL DAYLIGHT DESK LAMPS

The economy model is a rich-looking, graceful, fluorescent desk lamp at an amazingly low price! Sturdy and substantial in construction with miraculously high lighting performance. Parabolic reflector with chip-proof white enamel surface diffuses light evenly. Finished in durable morocco brown. Underwriters' Approved materials used throughout. 14½" high. Shade is 18" long; base, 10" long, 5¼" wide with pen-trough and on-off switch. Complete with approved cord and plug. Uses 1—T8 15-watt lamp; operates on 105-125 volts, 60 cycles. Less lamp. Shpg. wt., 12 lbs.

91-100. EACH, \$4.52.  
LOTS OF 6, EACH.....\$4.17



A deluxe desk lamp in every sense of the word! Features a scientifically designed parabolic Alzak reflector which controls brilliance for proper lighting. Your eyes deserve good light. Use one of these efficient desk lamps for better light and eliminate eyestrain. Finish is lacquered bronze with satin-gold trim. 15½" high. Base is 11" long, 6¼" wide. With push switch. Fully Underwriters' Approved with latest type starter and ballast for trouble-free service. Uses 1—T8 15-watt lamp; for 105-125 volts, 60 cycles. Produces glareless light over entire length of lamp. Less lamp. Shpg. wt., 11 lbs.

91-101. EACH, \$7.12.  
LOTS OF 6, EACH.....\$6.57



## COMPCO DELUXE DESK LAMP

Attractive deluxe desk lamp with pen and pencil set. Ideal for home or office. Modern dignified appearance blends readily with every type of surrounding. Supplies an abundance of light without glare. Finished in fine brown wrinkle. Adjustable-tilt reflector with glazed white reflecting surface for best lighting. Satin brass trim. Height, 13". Heavy base, 11x6". With switch. Uses 1—T8 15-watt lamp. For 105-125 V., 60 cycles. Less lamp, 7 lbs.

91-105. EACH, \$6.46.  
LOTS OF 3, EACH.....\$5.97  
91-106. As above, but less pen-pencil set.  
EACH, \$5.52.  
LOTS OF 3, EACH.....\$5.10



## COMPCO BED & UTILITY LAMP

The ideal light for greatest reading comfort. Scientifically designed reflector with white enameled interior, produces a flood of cool, shadowless light without glare. Can be clamped on a bed or other convenient support. Has many uses. The perfect fixture for illumination of bulletin boards, pictures, music racks, pulpits, mirrors, merchandise displays, workbenches, etc. Comes completely wired, ready for instant use. Plugs into any 105-125 volt 60 cycle socket. Attractively finished in lustrous ivory or brown wrinkle. Uses 1—T8 18" 15-watt lamp. On-off switch located in reflector. An exceptional value. Less lamp. Wt., 4 lbs.

91-110. In lustrous ivory enamel finish.  
91-111. In brown wrinkle enamel finish.  
EACH, \$3.21.  
LOTS OF 3, EACH.....\$2.97



## COMPCO SPECIAL VALUE!

Big money-saving values in fluorescent desk lamps. Highest quality. Latest design. Scientifically engineered for maximum light reflection. Attractively finished in ripple brown with white enamel reflecting surface, and polished metal fittings. Completely wired with Underwriters' Approved materials. Uses 1—T8 18" 15-watt lamp. For 105 to 125 V., 60 cycle AC operation. Less lamp. Shpg. wt., 6 lbs.

91-115. EACH, \$4.51.  
LOTS OF 3, EACH.....\$4.17  
91-116. As above but with pen and pencil set as illustrated above, right.  
EACH, \$5.52.  
LOTS OF 3, EACH.....\$5.10



## SPECIAL!

## UNIVERSAL ADAPTER

Now—the benefits of modern fluorescent lighting are available for every lighting requirement at unbelievably low cost! This amazing new fluorescent lamp fixture screws into any 105-125 volt, 60 cycle AC socket. As easy to install as a light bulb. You will want one for every light socket in your shop, garage, etc. Scientifically designed to provide a flood of evenly diffused light. Inside of reflector finished in white enamel, outside in durable metallic bronze. Patented swivel allows the fixture to be moved around for best light distribution. Ideal for service shops, work benches, homes, offices, assembly lines, etc. Uses one standard 18" 15-watt fluorescent lamp. Produces same as 45 watts ordinary light. Saves money on your electric light bill. Less lamp. Wt., 4 lbs.

91-150. EACH, \$3.21.  
LOTS OF 3, EACH.....\$2.97



## POPULAR UTILITY ADAPTERS

Screws into any light socket—as easy as inserting an ordinary lamp bulb. Patented swivel permits complete 360° rotation. No danger of breaking wires. Ideal for all types of work. Throws a flood of well diffused, evenly distributed light of high efficiency. Comes complete with built-in ballast and automatic starters of the latest type. High-quality construction. Finished in durable brown wrinkle with white enameled reflector. Has loops for chain hanging. For 105-125 V., 60 cycles. Less lamp. Shipping weight, 6 lbs.

91-151. Uses 1—T8 18" 15-watt lamp.  
EACH, \$3.22.  
IN LOTS OF 6, EACH.....\$2.97  
91-152. Uses 2 lamps as above. 8 lbs.  
EACH, \$5.17.  
IN LOTS OF 6, EACH.....\$4.77



## MITCHELL MARVELITE SHIELDED BED LAMP

A new adventure in reading comfort. Produces an abundance of cool, evenly distributed light. "Plastacel" diffusing shield hides the lamp entirely from view. Smartly styled in soft ivory or rich English bronze finish, with gold scroll ornamentation. Uses 1—T12 15" 14-watt lamp. For 105-125 volt 60 cycle AC. Clamps fit any bed. Less lamp. Shpg. wt., 4 lbs.

91-160. In soft ivory enamel finish.  
91-161. In rich English bronze finish.  
EACH, \$3.87.  
LOTS OF 3, EACH.....\$3.57



## A NEW TABLE LAMP FOR HOME AND OFFICE

The newest sensation in fluorescent lighting. Gives up to three times more light at no increase in operating cost. Produces a flood of cool, evenly distributed light of high visibility. Ideal for homes, clubs, offices, reception rooms, reading rooms, restaurants, night clubs, etc. Stands 27¼" high overall. White silk based, hand-fashioned, pleated shade is satin lined. No deterioration of shade from heat. Shade diameter, 13" at top and 16" at bottom. Has 2-way positive-starting switch. Ballast in base. "Regency" style. Silver finished base. Uses 2—T12 15" 14-watt lamps. For 105-125 V., 60 cycles. Less lamps, 11 lbs.

91-170. EACH, \$12.75.  
IN LOTS OF 3, EACH.....\$11.75



# COMMERCIAL FIXTURES FOR STORE AND OFFICE

Modern business demands modern lighting! Fluorescent lighting makes interiors attractive—helps sell merchandise and increases store traffic. Increases employee efficiency by reducing eyestrain, fatigue and discomfort. Saves money on your light bill.

# MIRACLE OF MODERN LIGHTING

Here's the new Fluorescent Lighting at its best! It's the newer, better way to high-level, glareless illumination! It's the closest to daylight yet. And it's economical! ALLIED offers you a wide variety of easy-to-install Fluorescent Units. Let ALLIED show you the way to profits in the tremendous Fluorescent Lighting market!

## WITH DUPONT PLASTACELE LIGHT-DIFFUSING SHIELDS



### COMPCO SINGLE-STEM FIXTURES

Efficient, economical light for stores, offices and display rooms. Attractively designed fluorescent fixtures with full Underwriters' Approval. Reflecting surface has exclusive Compcoc "Glazename" finish for maximum light reflection; canopy and stem finished in baked-on satin silver; sturdy one-piece ends finished in gleaming white, trimmed in chrome. New Dupont Plastacele light-diffusing shield covers lamps. High power-factor corrected fixtures insure elimination of annoying stroboscopic effect and comply with power company requirements by offering a stabilized load to the power supply line. Both normal and high power-factor-corrected types offer increased lighting at no extra cost. Each fixture is complete, with one 24" stem. For 105-125 volts, 60 cycles AC operation. Use 24" T12 20-watt fluorescent lamps. (See page 203 for listing of lamps.)

#### NORMAL POWER FACTOR

Normal power factor types. For use from 105-125 volts, 60 cycles AC. Supplied less lamps.

- 91-000. Uses two 20-watt 24" T12 lamps. Shpg. wt., 10 lbs. EACH, \$10.07.
- LOTS OF 3, EACH... \$9.30
- 91-001. Uses three 20-watt lamps. Otherwise same as 91-000. Shpg. wt., 11 lbs. EACH, \$12.31.
- LOTS OF 3, EACH... \$11.37

#### HIGH POWER FACTOR

Similar to units listed at left but high-power-factor corrected to eliminate stroboscopic effect.

- 91-003. Uses two T12 20-watt lamps. Shpg. wt., 11 lbs. EACH, \$12.31.
- LOTS OF 3, EACH... \$11.37
- 91-004. Same as 91-003 but uses three 20-watt T12 lamps. Shpg. wt., 12 lbs. EACH, \$14.91.
- LOTS OF 3, EACH... \$13.77

### COMPCO TWIN-STEM DELUXE FIXTURES

These beautiful and scientifically designed fixtures provide economical, efficient fluorescent lighting for hundreds of commercial and industrial applications. Readily installed in a minimum of time. Fixtures are finished in baked-on enamel for long life and attractive appearance. Reflector surfaces finished in exclusive Compcoc "Glazename" for maximum light reflection. Canopy, suspension stems, and backplate finished in satin-silver baked-on for high durability; sturdy one-piece ends are finished in gleaming white trimmed with chrome. Dupont Plastacele light-diffusing shield covers lamps. Each fixture is furnished with two 36" suspension pipe stems and is completely wired with Underwriters' Approved G-E control units; ready for installation. Ideal wherever high-level illumination is required. High power-factor corrected to insure elimination of annoying stroboscopic effect and to comply with power company requirements by offering a stabilized load to the supply line. Use T12 40-watt 48" fluorescent lamps and have replaceable starters. Recommended for modern-minded store owners who want to dress up their store and at the same time increase lighting without increasing cost of operation. All Deluxe Compcoc fixtures are fully Underwriters' Approved. For 105-125 volts, 60 cycles AC. Less lamps.

- 91-010. Uses two T12 40-watt 48" lamps. Shpg. wt., 31 lbs. EACH, \$21.41.
- LOTS OF 3, EACH... \$19.77
- 91-011. Uses three T12 40-watt 48" lamps. Shpg. wt., 34 lbs. EACH, \$25.02.
- LOTS OF 3, EACH... \$23.10
- 91-012. Uses four T12 40-watt 48" lamps. Shpg. wt., 48 lbs. EACH, \$30.87.
- LOTS OF 3, EACH... \$28.50

### COMPCO LOW-COST FIXTURES

Efficient fluorescent fixtures with full Underwriters' Approval. Similar to the Compcoc fixtures described above but not equipped with Plastacele diffusion shields. Reflecting surface has "Glazename" finish for maximum light reflection. Canopy and stem finished in baked-on satin silver; one piece ends finished in gleaming white with chrome trim. Single stem fixtures have 24" stem; use 20 watt lamps. Dual stem fixtures have 36" stems; use 40 watt lamps. All are for 105-125 volts 60 cycles AC. Supplied less lamps.

#### SINGLE STEM

#### TWIN STEM

#### NORMAL POWER FACTOR

Normal power factor types. Use standard T12 20-watt lamps. Supplied with 24" length pipe stem for ceiling suspension. For use from 105-125 volts, 60 cycles AC. Supplied less lamps.

- 91-020. Uses two 20-watt 24" T12 lamps. Shpg. wt., 9 lbs. EACH, \$6.82.
- LOTS OF 3, EACH... \$6.30
- 91-021. Uses three 20-watt lamps. Otherwise same as 91-020. Shpg. wt., 10 lbs. EACH, \$9.06.
- LOTS OF 3, EACH... \$8.37

#### HIGH POWER FACTOR

High-power-factor corrected to eliminate stroboscopic effect. Complies with power company requirements. Use T12 20-watt 24" lamps. 105-125 volts, 60 cycles AC. Supplied less lamps.

- 91-022. Uses two T12 20-watt lamps. Shpg. wt., 10 lbs. EACH, \$9.06.
- LOTS OF 3, EACH... \$8.37
- 91-023. Same as 91-022 but uses three 20-watt T12 lamps. Shpg. wt., 11 lbs. EACH, \$11.37.
- LOTS OF 3, EACH... \$10.50

Finished in baked-on enamel, with reflector surfaces finished in exclusive Compcoc "Glazename" for maximum light reflection. Each fixture is furnished with two 36" suspension pipe stems and is completely wired, ready for installation. Ideal wherever high-level illumination is required. High power-factor corrected to insure elimination of annoying stroboscopic effect. Use standard T12 40-watt 48" fluorescent lamps and have replaceable starters. Fully Underwriters' Approved. For 105-125 volts, 60 cycles AC. Less lamps. Will meet all power company requirements.

- 91-024. Uses two T12 40-watt 48" lamps. Shpg. wt., 29 lbs. EACH, \$14.91.
- LOTS OF 3, EACH... \$13.77
- 91-025. Uses three T12 40-watt 48" lamps. Shpg. wt., 32 lbs. EACH, \$18.81.
- LOTS OF 3, EACH... \$17.37
- 91-026. Uses four T12 40-watt 48" lamps. Shpg. wt., 45 lbs. EACH, \$24.37.
- LOTS OF 3, EACH... \$22.50

### ATTRACTIVE GLASS-COVERED WALL BRACKETS

New wall bracket type fluorescent fixtures, fully Underwriters' Approved. Mount flat against wall in either vertical or horizontal position. Easily installed anywhere. Finished overall in baked-on white enamel; can be cleaned in a jiffy without damage to finish. Use standard T8 15-watt bulb. Flat glass diffusion shield protects and conceals lamp; softens and diffuses light. Ideal for use in homes for bathroom, dinette, bedrooms, etc.; can also be used for small offices, display cases, tavern or restaurant booths, lounges, reception rooms; for hallway, staircase, or corridor lighting, and dozens of other applications. Modern and attractive in design. Blend readily with every type of surrounding. For 105-125 volts, 60 cycles AC. Less lamps.

- 91-030. Single light wall bracket. Uses T8 15-watt lamp. With glass shield. For 105-125 volts 60 cycles AC. Less lamp. Shipping weight, 7 lbs. EACH, \$6.17.
- LOTS OF 3, EACH... \$5.70

- 91-031. Wall bracket with AC outlet. Otherwise identical to 91-030 at left. Uses T8 15-watt lamp. For 105-125 volts, 60 cycles AC. Less lamp. Wt., 7 lbs. EACH, \$6.50.
- LOTS OF 3, EACH... \$6.00





# BETTER, COOLER, ECONOMICAL LIGHT

Fluorescent Lighting is better—it provides softer, more evenly diffused illumination. It's cooler—actually radiates less heat! It's economical—a 15-watt fluorescent lamp provides as much light as a 40-watt incandescent lamp. Save as much as 50% on your light bills, or get more and better light for the same current cost!



## HI-POWER TWO LAMP FIXTURE

Designed to meet the demands of industry for high levels of illumination. These units are high power-factor corrected (95-99%) using the new "Tulamp" ballast and replaceable cartridge-type starters. Extremely efficient and provide 60-70 foot candles of cool, pleasing daylight when suspended 3 feet above working surface. Rigidly constructed of heavy gauge steel with fired porcelain white enamel reflector; outside finish, blue-black baked enamel. Underwriters' Approved "Tulamp" ballast reduces stroboscopic flicker to an absolute minimum. Certified by Electrical Testing Labs. for conformance with 50 rigid electrical and mechanical requirements; all operating equipment Underwriters' Approved and meets National Electrical Code requirements. Easy to install. Supplied complete with two 8 foot hanging chains and 6 foot heavy-rubber cord with separate ground lead. Knockouts permit use of BX or conduit if required. Use two standard 40-watt T12 fluorescent lamps. Increases light at no extra cost. For 105-125 volts, 60 cycles, AC. 1.5 lamps. Wt., 38 lbs. **91-120. NET EACH, \$14.26. IN LOTS OF 3, EACH \$13.17**



## FACTORY TYPE HANGING FIXTURES

Designed especially for the industrial installation, these ruggedly built fixtures provide high-efficiency illumination at moderate cost. Reflecting surface finished in "Glazename" for maximum light reflection without absorption. Specially designed angular reflector. All fixtures equipped with knockouts at top-center and ends for conduit wiring. Also equipped with suspension loops for drop-chain installation, and 6 foot rubber covered cord and plug for connection to ceiling outlet. Completely Underwriters' Approved, and have replaceable starters. Ideal for shops, production or assembly lines, stockrooms, machine operators, etc. The last word in modern, efficient, economical light. For operation from 105-125 volts 60 cycles. Less lamps.

### NORMAL POWER FACTOR TYPE

Stock No.	Lamps Used	Shpg. Wt. Lbs.	NET EACH	LOTS OF 3, EACH
91-126	1—T12 20W	5	\$4.71	\$4.35
91-127	1—T12 40W	12	8.12	7.50
91-128	2—T12 20W	8	8.12	7.50

### HIGH POWER FACTOR TYPE

Stock No.	Lamps Used	Shpg. Wt. Lbs.	NET EACH	LOTS OF 3, EACH
91-129	1—T12 20W	6	\$ 7.11	\$ 6.57
91-130	1—T12 40W	12	10.40	9.60
91-131	2—T12 20W	8	10.36	9.57
91-132	2—T12 40W	28	14.13	13.05

## WALL BRACKETS

Attractive wall type fluorescent fixtures for homes, display rooms, etc. Mount flat on wall in either vertical or horizontal position. Use T8 15-watt lamps. Finished in baked-on white enamel; easily cleaned. Deluxe model has swivel reflector, fully adjustable from side to side. For 105-125 volts 60 cycles.

### STANDARD

**91-180.** Standard wall bracket fixture. With on-off switch. Uses 1—T8 15-watt lamp. Less lamp. Wt. 4 lbs. **EACH.....\$3.25**

**91-181.** Same as 91-180 above but has built-in AC appliance outlet. Less lamp. Wt. 4 lbs. **EACH.....\$3.57**

### DELUXE

**91-182.** Deluxe wall bracket fixture. With on-off switch. Uses 1—T8 15-watt lamp. Less lamp. Wt. 7 lbs. **EACH.....\$4.55**

**91-183.** Same as 91-182 above but has built-in AC appliance outlet. Less lamp. Wt. 7 lbs. **EACH.....\$4.87**



# INDUSTRIAL FIXTURES

## FORFACTORY AND WAREHOUSE

Efficient, modern, fluorescent lighting floods working space with daylight intensity. Increases working efficiency and production; reduces rejects; improves employee relations by reducing eyestrain and fatigue. Stops wasteful heat radiation; furnishes more and cooler light at less cost. Saves you money.



## 200 WATT FLOODLIGHT FIXTURE

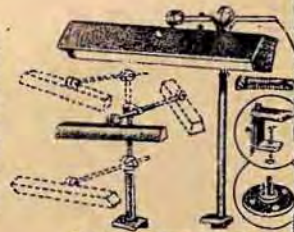
Here is the answer to industrial high-level lighting requirements. Equivalent to about 400 watts of incandescent light. Completely wired and ready to install in shops, garages, for production and assembly lines, stockrooms, factories, tailor shops, storerooms, warehouses, shipping-rooms, etc. Sturdily constructed metal housing with the exclusive "Glazename" reflector finish for maximum light reflection. Supplied with six feet of suspension chain; 4 "S" hooks; 6-foot cord and plug; installation can be made in a minimum of time. Completely Underwriters' Approved and with power-factor correction. Will provide a flood of evenly diffused, cool, glareless light of soft daylight intensity. Eliminates shadows and uneven lighting. Increases worker efficiency. Reflector is 17 1/2" wide, 67" long. Uses two T17 100-watt 60-inch lamps. Equipped with mogul 2 pin bases for T17 bulbs. For 105-125 volts, 60 cycles AC. 1.5 lamps. Shpg. wt., 53 lbs. **91-121. EACH, \$26.65. IN LOTS OF 3, EACH.....\$24.60**

## BENCH-TABLE LAMPS

A handy all-purpose fluorescent lamp that brings daylight to your work. Can be quickly installed on tables, desks, benches, walls, ceilings, etc. Shade, upright and arm fully adjustable. Economical; uses less current than incandescent lamps. Highly efficient. Shade 18" long, finished in brown enamel with white coated reflector; upright adjusts from 14" to 26"; arm extends to 16". With 9 ft. cord. Uses 1—T8 15-watt lamp. Same as 40 watts ordinary light. 105-125 volts, 60 cycles AC.

### FLUSH MOUNT TYPE

For permanent installation. Has heavy cast base gangle which can be bolted or screwed down. Supplied less T8 15-watt lamp. 8 lbs. **91-140. EACH, \$6.46. LOTS OF 6, EACH.....\$5.97**



### CLAMP MOUNT TYPE

Clamps to any table, desk, bench top. Has adjustable screw clamp opening to maximum of 2 inches. Less lamp. Wt. 8 lbs. **91-141. EACH, \$6.46. LOTS OF 6, EACH.....\$5.97**



## G-E MAZDA FLUORESCENT LAMPS

Genuine General Electric fluorescent lamps for all fluorescent fixtures. All have standard two-pin contacts except 100 watt (9) size. Furnish non-glaring light from entire surface with even diffusion and high illumination. Most efficient light known. Use white lamps to obtain soft white light; daylight lamps for obtaining a light containing a more pronounced bluish tinge. Very long life—approximately 2,000 hours. Ideal for special lighting effects. Colored lamps for display or decorative lighting also available—write for prices. Use 6 lot price for lamps when purchased with any fixture in this catalog.

Stock No.	Type	Watts	Size	Color	EACH	LOTS OF 6, EA.
91-520	T4 1/2	6	9"	Daylight	\$0.90	\$0.72
91-521	T4 1/2	6	9"	White	.90	.72
91-522	T12	14	15"	Daylight	.90	.72
91-523	T12	14	15"	White	.90	.72
91-500	T8	15	18"	Daylight	.75	.60
91-501	T8	15	18"	White	.75	.60
91-502	T12	20	24"	Daylight	.95	.76
91-503	T12	20	24"	White	.95	.76
91-504	T8	30	36"	Daylight	.95	.76
91-505	T8	30	36"	White	.95	.76
91-506	T12	40	48"	Daylight	1.35	1.08
91-507	T12	40	48"	White	1.35	1.08
91-508	*T17	100	60"	White	3.00	2.40
91-509	*T17	100	60"	Daylight	3.00	2.40

Shpg. wts.: 91-520, 91-521, 1 1/2 lbs.; 91-522, 91-523, 91-500, 91-501, 91-502, 91-503, 2 lbs.; 91-504, 91-505, 3 lbs.; 91-506 and 91-507, 4 lbs.; 91-508 and 91-509, 8 lbs. \*Mogul 2 pin base.



# GENERAL-PURPOSE FLUORESCENT FIXTURES

## ALL-PURPOSE ADAPTORLITES



### COMPCO STANDARD FIXTURES

Install in ceiling-type holders as easily as replacing an incandescent bulb and shade. Ideal for kitchen, bedroom, bathroom, den and reception hall. Also used in stores, offices, churches, libraries, game rooms, etc. Provides a wide distribution of cool brilliant light. Permits a big saving in your light bill. Wired with Underwriters' Approved components. Finished in lustrous white enamel, with chrome trim. Less lamps. For 105-125 V., 60 cycle operation. Supplied with adapter to fit 4" ceiling holder. For installation in 6" ceiling holder, ask for 91-130 adapter and add 25c to your order.

#### NORMAL POWER-FACTOR

Without power-factor correction. Come completely wired and ready to install. Highly popular. High in quality. Low in price. Use T12 20-watt 24" lamps shown on page 203.

- 91-035. Uses two 20-watt lamps. Shpg. wt., 8 lbs.  
**EACH, \$4.87.**  
**LOTS OF 3, EACH, \$4.50**
- 91-036. Uses three 20-watt lamps. Shpg. wt., 9 lbs.  
**EACH, \$7.47.**  
**LOTS OF 3, EACH, \$6.90**

#### HIGH POWER-FACTOR

Like units at left but power-factor corrected. Meet power company requirements. No stroboscopic effects. Use type T12 20-watt 24" lamps. All parts Underwriters' Approved.

- 91-037. Uses two 20-watt lamps. Shpg. wt., 9 lbs.  
**EACH, \$7.11.**  
**LOTS OF 3, EACH, \$6.57**
- 91-038. Uses three 20-watt lamps. Shpg. wt., 10 lbs.  
**EACH, \$9.42.**  
**LOTS OF 3, EACH, \$8.70**

### COMPCO "PLASTACELE" FIXTURES

Same as Standard Fixtures described at left, except lamps completely shielded from view with Du Pont white "Plastacele". Ideal for homes, churches, mortuaries, theatres, etc., where highly diffused, flood lighting is desired. Wired with Underwriters' Approved components. Finished in lustrous white enamel, with chrome trim. Less lamps. For 105-125 V., 60 cycle operation. Supplied with adapter to fit 4" ceiling holder. For installations in 6" ceiling holder, ask for 91-190 adapter and add 25c to your order.

#### NORMAL POWER-FACTOR

An inexpensive deluxe fixture, without power-factor correction. Exceptionally easy to install. Uses type T12 20-watt 24" lamps (see page 203).

- 91-047. Uses 2 T12-24" 20-watt lamps. Shpg. wt., 9 lbs.  
**EACH, \$6.46.**  
**LOTS OF 3, EACH, \$5.97**
- 91-048. Uses 3 T12-24" 20-watt lamps. Shpg. wt., 10 lbs.  
**EACH, \$9.39.**  
**LOTS OF 3, EACH, \$8.67**

#### HIGH POWER-FACTOR

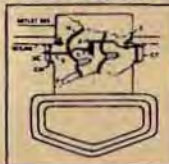
Fully power-factor corrected to meet all power company requirements. Minimizes annoying stroboscopic effects. Uses type T12 20-watt 24" lamps.

- 91-045. Uses 2 T12-24" 20-watt lamps. Shpg. wt., 10 lbs.  
**EACH, \$9.39.**  
**LOTS OF 3, EACH, \$8.67**
- 91-046. Uses 3 T12-24" 20-watt lamps. Shpg. wt., 11 lbs.  
**EACH, \$12.31.**  
**LOTS OF 3, EACH, \$11.37**

## COMPCO PERMANENT INSTALLATION FIXTURES

### STANDARD UNITS

Identical in every respect to the Compc Standard Fixtures listed above, except mount in any regulation ceiling outlet box. Canopy, stub wires, and all necessary mounting hardware are supplied. Fixtures are completely wired with Underwriters' Approved components, and ready for installation. Finished in lustrous white enamel with chrome trim. Ideal for all permanent or semi-permanent installations wherever high quality and moderate cost are of prime consideration. Save their cost in a very short time. For 105-125 volt 60 cycle AC operation. Supplied less lamps.



### "PLASTACELE" UNITS

Deluxe ceiling mount fixtures for permanent or semi-permanent installations, especially where best quality at moderate cost is desired. Easily installed. Come completely wired with Underwriters' approved components. Canopy, stub wires, and all necessary mounting hardware are supplied for mounting fixture in any standard ceiling outlet box. Exactly the same in all other respects as Compc "Plastacele" Fixtures described above. Finished in lustrous white enamel with chrome trim. For 105-125 volt 60 cycle AC operation. Supplied less lamps. The last word in modern design.

#### NORMAL POWER-FACTOR

Particularly suited for use where power-factor corrected units are not essential, and easily installed low-cost units are desired. Give maximum illumination at minimum cost. Use T12 20-watt 24" lamps.

- 91-050. Uses two 20-watt lamps. Shpg. wt., 8 lbs.  
**EACH, \$5.16.**  
**LOTS OF 3, EACH, \$4.77**
- 91-051. Uses three 20-watt lamps. Shpg. wt., 9 lbs.  
**EACH, \$7.76.**  
**LOTS OF 3, EACH, \$7.17**

#### HIGH POWER-FACTOR

Fully power-factor corrected. Meet all power company requirements. No stroboscopic effect. Otherwise the same as normal power-factor units described at left. A plus value. Uses type T12 20-watt 24" lamps.

- 91-052. Uses two 20-watt lamps. Shpg. wt., 9 lbs.  
**EACH, \$7.44.**  
**LOTS OF 3, EACH, \$6.87**
- 91-053. Uses three 20-watt lamps. Shpg. wt., 10 lbs.  
**EACH, \$10.04.**  
**LOTS OF 3, EACH, \$9.27**

#### NORMAL POWER-FACTOR

A low cost truly deluxe fixture. The last word in smart design. Has no power-factor correction. Completely wired with all accessories for easy installation. Uses T12 20-watt 24" lamps.

- 91-060. Uses two 20-watt lamps. Shpg. wt., 9 lbs.  
**EACH, \$6.46.**  
**LOTS OF 3, EACH, \$5.97**
- 91-061. Uses three 20-watt lamps. Shpg. wt., 10 lbs.  
**EACH, \$9.39.**  
**LOTS OF 3, EACH, \$8.67**

#### HIGH POWER-FACTOR

A deluxe fixture in every respect, including full power-factor correction to meet all power company requirements. Has no stroboscopic effects. Uses type T12 20-watt 24" lamps.

- 91-062. Uses two 20-watt lamps. Shpg. wt., 10 lbs.  
**EACH, \$9.39.**  
**LOTS OF 3, EACH, \$8.67**
- 91-063. Uses three 20-watt lamps. Shpg. wt., 11 lbs.  
**EACH, \$12.31.**  
**LOTS OF 3, EACH, \$11.37**



### MITCHELL ALL-PURPOSE FIXTURES

An all-purpose fixture for both household and commercial use. Furnishes an abundance of cool glareless, evenly distributed light. Brings new splendor and new eye comfort to the kitchen, bathroom, bedroom, library, playroom and den—with equally satisfactory application for hotel rooms, lobbies, hallways, shops, etc. Uses Underwriters' approved ballasts, starters and sockets. Has specially designed ceiling holder, and ceiling strap to fit standard outlet boxes. Du Pont "Plastacele" shield hides lamps completely from view, and can be tipped forward or backward for easy insertion of new lamps. Choice of two finishes: lustrous white or English bronze. For 105-125 volt 60 cycle AC operation. Furnished less lamps. Produces up to 3 times the light of incandescent fixtures of equal wattage. Blends with any type surroundings.

#### NORMAL POWER-FACTOR

Supplied completely wired and ready to hang. "Plastacele" shield is easily removable and can be washed in soap and water. Canopy has knock-out for switch or drop cord. Lustrous white enamel finish is chip-proof. Uses 2 type T12 20-watt 24" lamps listed on page 203. Quickly and easily installed, 11 lbs.

- 91-070. In lustrous white enamel.  
**EACH, \$7.12.**  
**LOTS OF 6, EACH, \$6.57**

#### HIGH POWER-FACTOR

Same as units listed at left except have high power-factor correction. Will meet all power company requirements. No stroboscopic effects. Lustrous white enamel finish is chip-proof. Uses 2 type T12 20-watt 24" lamps. Completely wired. Less lamps. All parts Underwriters' Approved. Shipping weight, 12 lbs.

- 91-072. In lustrous white enamel.  
**EACH, \$9.39.**  
**LOTS OF 6, EACH, \$8.67**

### MITCHELL KITCHEN UNITS

Enjoy the thrill of modern illumination in kitchen, bathroom, shop, etc., with this smart-looking up-to-date Mitchell fixture. Can be installed in your present fixture holder as easily as replacing an incandescent bulb and shade. Supplied with adapters to fit all standard 4" and 6" ceiling holders. Attractively finished in durable high-gloss white enamel. Underwriters' Approved ballasts and replaceable FS-2 starters. Uses two T12 24" 20-watt lamps. Light of high intensity. For 105-125 volts, 60 cycle AC. Supplied less lamps.

- 91-080. Normal power-factor unit. Complete with all necessary fittings, ready to install. Supplied less lamps. Shipping weight, 6 lbs.  
**EACH, \$5.17.**  
**LOTS OF 6, EACH, \$4.77**

- 91-081. High power-factor corrected unit. Meets all power company requirements. No stroboscopic effect. Less lamps. Shipping weight, 7 lbs.  
**EACH, \$7.44.**  
**LOTS OF 6, EACH, \$6.87**

### PERMANENT INSTALLATION UNITS

- 91-085. Same as normal power-factor unit described above, except supplied with canopy, stub-wires, and all necessary hardware for mounting in standard outlet box. Less lamps. Shpg. weight, 6 lbs.  
**EACH, \$5.17.**  
**LOTS OF 6, EACH, \$4.77**

- 91-086. Same as high power-factor corrected unit described above, except supplied with canopy, stub-wires, and hardware for mounting in standard outlet box. No stroboscopic effect. Less lamps. Shpg. wt., 7 lbs.  
**EACH, \$7.44.**  
**LOTS OF 6, EACH, \$6.87**



# FAMOUS MASTERPIECE RECORDS

A WIDE CHOICE OF MUSICAL CLASSICS  
AT AN AMAZINGLY LOW PRICE

The world's finest and best-loved music—recorded by famous artists and concert groups—at prices everyone can afford! Included in this treasure-house of famous musical selections are matched album sets and popular collections that belong in every music-lover's library!

**61 RECORDS . . . OVER 120 SELECTIONS.** Musicraft Masterpiece 10" records are recorded on both sides! All are freshly made from recently recorded masters—no repressings or re-recordings. The exceptionally low prices are possible only because of large volume and elimination of huge royalty payments. Recording artists, although not mentioned by name, are top-ranking musicians. Here is choicest music, at prices unbelievably low! Order in quantities for extra savings! Sippg. wt., each record, 3/4 lb.

AS LOW AS

**23c**

EACH,  
IN 25 LOTS

1-10, EACH . . . 29c

10-24, 25c EA.  
25 Up, 23c EA.

- | No.    | TITLE   |
|--------|---|
| 8-5D1. | Serenade (Schubert).<br>Hungarian Dance No. 5.<br>(Brahms). Violin and Piano  |
| 8-502. | Hark, Hark The Lark.<br>Ave Maria (Gounod).<br>Soprano and String Ensemble  |
| 8-503. | Di Provenca Il Mar from La<br>Traviata.<br>Oormiro Sol Nel Manto from<br>Don Carlos (Verdi).<br>Baritone and String Ensemble  |
| 8-504. | Serenade from Quartet Op. 3<br>No. 5 (Haydn).<br>Andante Cantabile from<br>Quartet Op. 11 (Tschalkow-<br>sky). String Quartet |
| 8-505. | Blue Oanube Waltz (Strauss).<br>Tales From Vienna Woods<br>(Strauss). Concert Orchestra                                       |
| 8-506. | Vesti La Giubba from Pagliacci<br>(Leoncavallo).<br>La Donna E Mobile from Rigo-<br>letto (Verdi).<br>Tenor and Orchestra     |
| 8-507. | Solvejg's Song from Peer Gynt<br>Suite (Grieg).<br>The Prophet's Lullaby (Schumann).<br>Violin and Piano                      |
| 8-5D8. | Macushila<br>L'Amour Toujours L'Amour.<br>Tenor and Orchestra   |
| 8-509. | Moonlight Sonata (Beethoven).<br>Hymn To The Sun (Rimsky-<br>Korsakov). String Ensemble                                       |
| 8-51D. | I Love You (Grieg).<br>Lullaby (Brahms).<br>Soprano and Orchestra   |
| 8-511. | Prelude in G Minor (Rach-<br>maninoff).<br>Poeme (Fiblich). Salon Orchestra   |
| 8-512. | Maiden With the Flaxen Hair.<br>Minstrels (Debussy). Piano  |
| 8-513. | Air on the G String (Bach).<br>Lied from Liszt.<br>Violin and Piano   |
| 8-514. | La Paloma.<br>Intermezzo from Cavaleria<br>Rusticana. String Ensemble   |
| 8-515. | Ay Ay Ay.<br>O Sole Mio. Tenor and Orch.  |
| 8-516. | None But the Lonely Heart<br>(Tschalkowsky).<br>Hungarian Oance No. 6<br>(Brahms). Salon Orchestra                            |
| 8-52D. | Song of a Nightingale (Rimsky-<br>Korsakov). Salon Orchestra  |
| 8-521. | Loin Du Bal (Gillet).<br>I Love Life.<br>Morning. Tenor and Piano   |
| 8-522. | Wine, Women and Song.<br>Vienna Bonbons (Strauss).<br>Concert Orchestra   |
| 8-523. | My Old Kentucky Home.<br>Jeannie With the Light Brown<br>Hair. Male Chorus  |
| 8-524. | The Lord's Prayer (Malotte).<br>The Rosary (Nevin).<br>Tenor and Organ  |
| 8-525. | The Gingerbread Boy (Child-<br>ren's Stories; Milton Cross).  |
| 8-526. | Cinderella (Children's Stories by<br>Milton Cross)  |
| 8-527. | Little Red Riding Hood (Child-<br>ren's stories; Milton Cross).   |
| 8-528. | The Sleeping Beauty (Children's<br>stories; Milton Cross).  |
| 8-529. | Emperor Waltz.<br>Sweetheart Waltz (Strauss).<br>Concert Orchestra  |
| 8-530. | Vienna Blood.<br>Artist's Life (Strauss).<br>Concert Orchestra  |
| 8-531. | Voices of Spring.<br>Southern Roses (Strauss).<br>Concert Orch.   |
| 8-532. | Heav'n Heav'n.<br>Sometimes I Feel Like a Moth-<br>erless Child.<br>Sung by Marian Anderson                                   |
| 8-535. | Boles (Ravel).<br>Symphony Orchestra  |
| 8-536. | Trees. Tenor and Organ<br>Dh Promise Me.  |
| 8-537. | God Bless America.<br>The Star Spangled Banner.<br>Baritone and Orchestra   |

- | No.    | TITLE  |
|--------|--|
| 8-538. | Barcarolle from Tales of Hoff-<br>man (Offenbach).<br>Spanish Dance (de Falla).<br>Symphony Orchestra    |
| 8-539. | Love's Old Sweet Song.<br>Annie Laurie.<br>Soprano and Piano   |
| 8-540. | Minute Waltz; Mazurka in B<br>Flat.<br>Polonaise Militaire (Chopin).<br>Piano                            |
| 8-541. | Souvenir (Drdla).<br>Spring Song (Mendelssohn).<br>Violin and Piano                                      |
| 8-542. | Marche Militaire (Schubert).<br>Scherzo (Chaminade).<br>Symphony Orchestra                               |
| 8-543. | My Heart at Thy Sweet Voice.<br>Una Voce Poco Fa. Soprano and<br>Orchestra                               |
| 8-544. | Habanera from Carmen.<br>Vedrai, Carino from Oon<br>Giovanni. Soprano and Orch.                          |
| 8-545. | Celeste Aida from Aida.<br>M'Appari from Martha.<br>Tenor and Orchestra                                  |
| 8-546. | Oil Quella Pira from Il Trova-<br>tore (Verdi).<br>Salut Oemeure from Faust.<br>Tenor and Orchestra      |
| 8-547. | Für Elise (Beethoven).<br>Fledermaus (Strauss). Piano  |
| 8-548. | Coronation March (Meyer-<br>beer).<br>March of the Smugglers from<br>Carmen. Symphony Orch.              |
| 8-549. | Traumerei (Schumann).<br>Meditation from Thais.<br>Violin and Piano                                      |
| 8-550. | Gems from The Mikado<br>(Gilbert and Sullivan).<br>Light Opera Co. & Orch.                               |
| 8-551. | Gems from Iolanthe (Gilbert<br>and Sullivan).<br>Light Opera Co. & Orch.                                 |
| 8-552. | Gems from The Pirates of<br>Penzance (Gilbert and Sul-<br>livan). Light Opera Co. Orch.                  |
| 8-553. | Gems from H.M.S. Pinafore.<br>Light Opera Co. & Orch.  |
| 8-554. | Les Filles de Cadiz.<br>Queen of the Night Aria.<br>Soprano and Orchestra                                |
| 8-555. | On Wings of Song (Mendels-<br>sohn).<br>Spanish Oance Op. 22, No. 3<br>(Sarasate). Violin and Piano      |
| 8-556. | O Paradiso from L'Africana<br>(Meyerbeer).<br>Tenor and Orchestra  |
| 8-557. | Cielo e Mar from La Gioconda<br>(Ponchielli).<br>Tenor and Orchestra                                     |
| 8-558. | Scenes of Childhood (Schu-<br>mann). Parts 1, 2, 5, 6, 12.<br>Piano                                      |
| 8-559. | Waltzes from Old Vienna.<br>Evening Star Waltz. Concert<br>Orch.   |
| 8-559. | Skates Waltz.<br>Valse d'Amour. Concert Orch.  |
| 8-560. | Les Sirenes Waltz, Part 1.<br>Les Sirenes Waltz, Part 2.<br>Concert Orchestra                            |
| 8-561. | Una Furtiva Lagrima.<br>Romance (Fearl Fishers).<br>Tenor and Orchestra                                  |
| 8-562. | Swan Lake Ballet:<br>Oance of the Swans.<br>Hungarian Oance.<br>Symphony Orchestra                       |
| 8-563. | Flight of the Bumble-bee<br>(Rimsky-Korsakov).<br>Improvisation in Major<br>(Schubert). Violin and Piano |
| 8-564. | Spring Song (Mendelssohn).<br>Minuet in G (Beethoven). Piano   |
| 8-565. | Minuet.<br>Serenade Les Millions<br>d'Arlequin. Sym. Orch.   |
| 8-566. | Melody in Rubinstein).<br>All Through the Night.<br>Soprano and Piano                                    |

Turn to Page 195 for additional listings of  
splendid values in phonograph records.



## MASTERPIECE ALBUMS

Best-loved classics complete with albums.

- |  |
|--|
| 8-9D1. UNFINISHED SYMPHONY No. 8<br>(Schubert). Symp. orch. 3-12" \$1.69<br>double-faced records. Album A-1. NET   |
| 8-902. SYMPHONY No. 40 in G-Min.<br>(Mozart). 3-12" double-faced<br>records. Album A-2. Wt., 3 1/2 lbs. NET \$1.6  |
| 8-9D3. ALBUM OF STRAUSS WALTZES<br>5-10" records. (8-529, 8-505, 8-522, 8-<br>530, 8-531, at left). Album A-3. NET \$1.59  |
| 8-904. TREASURY OF INSTRUMENTAL<br>MUSIC. 4-10" records (8-501, 8-504, 8-509,<br>8-513 at left). Album A-4. Wt., 3 lbs. NET<br>\$1.31  |
| 8-910. NUTCRACKER SUITE (Tschalkow-<br>sky). Symp. orch. 3-12" double-faced. \$1.6<br>In album A-10. Wt., 3 1/2 lbs. NET   |
| 8-912. FESTIVAL OF OPERA. 5-10" recs.<br>(8-506, 8-543, 8-544, 8-545, 8-546 at<br>left). Album A-12. Wt., 3 1/2 lbs. NET \$1.5   |
| 8-913. GEMS FROM GILBERT AND SU-<br>LIVAN. 4-10" records (8-550, 8-551, 8-<br>552, 8-553 at left). 3 lbs. NET \$1.3  |
| 8-914. MENDELSSOHN VIOLIN CO-<br>CERTO. 4-12" records. Violinist and Symphe-<br>Orchestra. With Mozart's Overture to<br>Marriage of Figaro on eighth side. Mil-<br>Album A-14. Wt., 4 lbs. NET \$2.1 |
| 8-915. NEW WORLD SYMPHONY (D-<br>rak). 5-12" records. Symphony No. 2.<br>Orchestra. Album A-15. Wt., 5 lbs. NET \$2.0  |
- 10% additional discount in Lots of 3



## MASTERPIECE COLLECTIONS

- Newly recorded 10" double-faced records in col-  
ful envelopes. Average shpg. wt., 2 lbs.
- |   |
|---|
| 8-906. CHILDREN'S STORIES No.<br>"Gingerbread Boy," "Cinderella," Mil-<br>ton Cross. 2-10". Set A-6. NET \$1.57   |
| 8-9D7. CHILDREN'S STORIES No.<br>"Little Red Riding Hood," "Sleeping Beauty"<br>Milton Cross. 2-10". Set A-7. NET \$1.57  |
| 8-908. A TREASURY OF SONG. Includes<br>Hark, Hark The Lark, Ave Maria, Vesti La Giubba,<br>La Donna E Mobile, I Love You, Lullaby (8-<br>502, 8-506, 8-510 at left). Set A-8. NET \$1.85  |
| 8-9D9. SALON MUSIC. Salon Orchestra. 3-12"<br>records. Includes: Prelude in G Minor, Poeme, No.<br>But the Lonely Heart, Hungarian Dance No. 6, Song<br>of India, Loin du Bal (8-511, 8-516, 8-520<br>at left). Set A-9. Wt., 2 lbs. NET \$1.85 |
| 8-911. WILLIAM TELL OVERTURE (Re-<br>sinj). Symphony orchestra. 2-10" records.<br>Set A-11. NET \$1.57  |
- 10% additional discount on above serial  
when ordered in Lots of 3, in any assortment





## RCA R93-F PLAYER AND RECORDS

Another special offer! The popular RCA Model R93-F Wired Record Player plus six double-faced Victor Bluebird records plus handy RCA record rack—all at a smashing low price! **Fine Wired Record Player.** Easily connected in a few minutes to any radio set equipped with a phono-graph connection. Plays all records through radio's amplifying system with the tone and volume your radio gives you regularly. Features RCA "feather-touch" Crystal pickup, constant-speed 78 RPM manually-started RCA phono motor, combination volume control and on-off switch. One of RCA-Victor's most popular record players in handsome dark brown bakelite case measuring 11" x 9" x 5". You can place it on any convenient table or on top of radio cabinet. Turns your radio into a combination radio-phonograph. **New Victor Bluebird Records.** Six popular selections. Latest 10-inch double-faced recordings by noted orchestras and artists. "The music you want... when you want it." **Record Rack.** Handy new record rack that holds 24 records. Made of rigid pressed-paperboard, finished in deep walnut color. Will keep your records safe and always accessible. Shpg. wt., 17 lbs. Record player operates from 110 volts, 60 cycles, AC.

**96-502. Special Combination Offer Complete. \$760**  
NET PRICE.

**96-501. Model R93-F Wired Record Player only. 12 records and record rack. For 110 volts, 60 cycles, AC. Shpg. wt., 12 lbs. \$625**

**1-675. Switch and cable for connecting above Record Player to any radio set. NET \$68c**

## RECORD ALBUM CABINETS

### TWO-SHELF TABLE

Here is the perfect answer to the record-storage problem—a beautifully constructed and practical two-shelf table for holding record albums. Provides a practical and attractive housing for your musical library. Top of table may be used for record player, table model radio-phonograph, lamp, pottery, etc. A fine piece of furniture of distinctive design. Sturdily built of choice woods, rubbed to a lustrous finish. Beautiful walnut finish on selected hardwood veneer top, sides and back, with solid gumwood legs. Holds 16 full-sized 12" record albums; has vertical separator partitions to hold albums rigid and prevent record warping. (Less albums.) Measures 31" high, table top is 19" wide by 15" deep. Wt., 34 lbs.

**98-950. NET PRICE \$11.25**

### ONE-SHELF TABLE

An unusually attractive single-shelf record album table at moderate cost. Gracefully designed to fit all home surroundings. With fitted corner posts and attractive open grille-type side panels. Heavy walnut veneered top surface with corner posts and shelving of walnut-finished gumwood. Holds five full-sized 12" record albums with vertical separator partitions to hold albums rigid and in place. Measures 25" in height and 14" deep by 18" across the top. Has 3/4" space between top and shelf, providing storage space for other records, albums, magazines, etc. You'll enjoy the convenience provided by having records easily accessible and can use the table for a lamp, small radio, etc. (Albums not included.) Shpg. wt., 25 lbs.

**98-951. NET \$4.25**

## GENUINE SAPPHIRE PHONO NEEDLES



**Fig. A. Walco WN50. Long-life shank type sapphire needle. Plays over 2,000 records without burrs. Eliminates sharp burrs. Needle-point reduces noise minimum. Shadowgraphed. Wt., 2 oz. \$2.00. NET 73c**

**Fig. B. Walco WN55. Straight shank type sapphire needle. Plays over 10,000 records in 1 oz. assures pickup without loss of melody. Parallel-in-cut flats minimize surface noise. 2 oz. \$2.821. NET 73c**

**Fig. C. Knight genuine sapphire needles are kind to your cherished records and priced exceptionally low. They are precision-cut to provide the lowest possible surface noise. Will play over 2,000 times without noticeable wear. Provide glorious, full-voiced tone quality. Ideal replacement for use in lightweight high-fidelity pickups. 2 oz. \$5-816. NET 59c**

## PRECIOUS METAL TIP PHONO NEEDLES



**Fig. A. Pfanzstiel. Precious Osmium metal-alloy needle point offers over 4,000 plays. Ideal for automatic coin-operated machines. Accurately shaped and polished point assures true-tone reproduction and long life. 2 oz. \$5-910. EACH, 85c. LOTS OF 10, EACH, 76c**

**Fig. B. Permo Fidelitone. Unique "floating-point" needle action. Filters record scratch; gives three to six months normal service. Produces true-tone quality. Wt., 2 oz. \$5-915. Postpaid, EACH, 50c**

**Fig. C. Eldeen Classic. A superior-quality precious-metal-tipped needle designed for multiple-play phonographs. Will provide splendid entertainment for over 2,000 plays. Minimizes record wear and noise. 2 oz. \$5-918. EACH, 35c. LOTS OF 10, EACH, 28c**

**Fig. O. Knight. Preferred-quality precious Osmium-tip metal-alloy needle at a remarkably low price. Plays over 2,000 records, or 4,000 sides. Minimizes record wear. 2 oz. \$5-920. EACH, 44c. LOTS OF 10, EACH, 39c**



## QUALITY STEEL PHONOGRAPH NEEDLES

### RCA NEEDLES

**Fig. A. Steel Needles. 5-881. Soft Tone. 5-882. Full Tone. 5-883. Loud Tone. 5-884. Full Tone. Pkg. of 100. 4 oz. NET 10c 0 Pkgs. 8 oz. NET 75c**

**Fig. B. RCA REO SEAL. Designed for playing Red and records. Pkg. of 50. 0z. 5-885. NET 20c**

**Fig. C. Actone. Shadowgraphed steel professional transcription needles. Minimize surface-noise level. Perfectly formed and highly polished points. One of the best steel needles made. 10 per pkg. 6 oz. \$5-825. Per Pkg. 38c 10 Pkgs. \$3.42**

### RECOTON

**Fig. D. Automatic. Hand-turned, properly polished steel needles. Plays 12 or 15 records with low surface noise. 8 oz. \$5-930. Pkg. of 30. \$23c 55-931. Tin of 200. \$1.22**

**Fig. F. Superior. Hand-turned scientific designed steel alloy needles. Safely play 12 to 15 records without wear. Minimize surface noise. 8 oz. \$5-932. Pkg. of 12. 10c 55-933. Tin of 200. \$1.22**

**Fig. E. Transcription. Shadowgraphed steel needles meet all professional requirements. Suppresses surface noise. Assures perfect total reproduction. 2 oz. \$5-934. Pkg. of 75. 49c**

### KNIGHT

**Fig. G. Steel. High-grade needles. Finely ground points. For commercial records. 4 oz. \$5-940. Soft. 55-941. Medium. 55-942. Loud. 55-943. Extra Loud. Pkg. of 100. NET 6c 10 Pkgs. For 54c**

**Fig. H. Oeluxe Steel. Brass-plated. Produce clear, true tone. Plays 10 records. 3 oz. \$5-944. Medium. 55-945. Loud. 55-946. Extra Loud. Pkg. of 50. NET 8c 10 Pkgs. For 72c**

**Fig. I. Chrome Plated. Shadowgraphed. Plays 25 or more records without wear. Shpg. wt., 2 oz. \$5-947. Pkg. of 6. 17c 10 Pkgs. For \$1.53**

## THORN PHONO NEEDLES

**Fig. A. Kacti. Famous Peter Grey long-playing Kacti needles. Assure glorious tone quality. Will not scratch. A favorite of music lovers. 4 oz. \$5-832. Pkg. of 12. 29c**

**Fig. B. Greythorne. Peter Grey needles. Selected thorns give perfect performance. Will not scratch. 4 oz. \$5-830. Pkg. of 15. 33c**

**Fig. C. Cactus. Specially designed needle made from selected cactus. Eliminates needle scratch and surface noise. Give fine tone. 4 oz. \$5-831. 10 pkgs. for \$2.07 Pkg. of 10 23c**

## JUKE BOX NEEDLES

**Fig. A. Permo Pt., over 2,000 plays. \$5-812. EACH, 50c. LOTS OF 5, EACH, 45c**

**Fig. B. Gerritt Miracle Point. Rouncer point, 700 plays. \$5-835. EACH, 25c. LOTS OF 10, EACH, 23c**

**Fig. C. Knight rigid shank type. 4,000 plays. 5-840. EACH, 39c**







**POPULAR LOOSE-LEAF RECORD ALBUMS**

**TWO-TONE LOOSE-LEAF ALBUM VALUE**

**ECONOMY**

Keeps your records safe and orderly. Has 12 record pockets reinforced with metal eyelets. Pockets may be removed or replaced in a jiffy. Durable fabrikoid cover finished in rich wine-color. Album is flat-opening type. Ring-binder built to stand up under constant use. Shipping wt., 3 lbs.

96-850. For 10" records. NET. **44c**  
96-851. For 12" records. NET. **54c**

**CORK-GRAINED**

A strikingly beautiful album finished in matching cork-grain material. Stiff back covered with smart brown swirl cloth. Attractive gold-stamped design on back. A looseleaf album holding 12 records in heavy kraft envelopes, reinforced with metal eyelets. Shpg. wt., 3 lbs.

96-852. For 10" records. NET. **65c**  
96-853. For 12" records. NET. **79c**

**DELUXE 2-TONE**

Rich aristocratic two-tone loose-leaf album bound in natural rawhide-grained leatherette. Contrasting brown Levant-grain ends have handsome gold-stamped design. Contains 12 heavy kraft envelopes in easy-turning three-ring binder. Shpg. wt., 3 lbs.

96-860. For 10" records. NET. **79c**  
96-861. For 12" records. NET. **95c**

**PADDED COVER**

Deluxe type. Full cloth-bound in rich brown swirl material with heavy padded covers and a metal reinforced, gold-stamped, rounded back. A deluxe album, 12 heavy envelopes with reinforced metal eyelets on smooth-acting loose-leaf three-ring binder. Wt., 4 lbs.

96-865. For 10" records. NET. **90c**  
96-866. For 12" records. NET. **\$1.10**

New 12-pocket album with easy-operating loose-leaf three-ring binder. Opens flat. Permits you to remove record envelopes at will. Has metal tear-proof protectors around pocket holes. Heavy fabrikoid binder is beautifully finished in gold-stamped dark brown back and handsome tweed-effect finish on front and back covers. Very durable.

96-867. For 10-inch Records. NET. **51c**  
96-868. For 12-inch Records. NET. **65c**



**POPULAR RECORD HOLDERS**

**ECONOMY MODEL**

An exceptionally low-priced Record Rack that accommodates fifty 10- or 12-inch records. Durably constructed, neatly finished wood base. Cotton-covered wires will not harm records. Helps you to keep your records filed in an orderly manner and protects them from injury. Has handy index numbers for arranging records systematically. At our very low price you can easily afford this indispensable record filing-aid. No record-collector should be without one. 12" x 7 1/2" x 6 1/4". Shpg. wt., 3 lbs.

96-820. NET. **79c**

**LYRIC DELUXE**

Excellent light-weight holder for filing fifty 10" or 12" records. Heavy soft red-felt coating on wires and base prevents scratching or breaking records. Smart copper-plated end pieces act as convenient handles. Records are filed in numbered pressed-steel base by handy index disc and stickers. Size: 12" L. x 7 1/2" H. x 9" W. Wt., 5 lbs.

96-825. NET. **\$2.45**

**LYRIC STANDARD**

Same as above, but with copper-finished end pieces.

96-826. NET. **\$1.65**

**MUSICRAFT BOUND ALBUMS**

**DELUXE**

Rich library binding. Solid round wood back. Bound in luxurious crushed levant with genuine buckram sides. Back die-stamped in gold. Flat opening with 12 pockets. 12 permanent rings for maximum strength. In two-tone blue or brown, 4 lbs.

For 10-inch Records. 96-875. Blue. 96-876. Brown. EACH. **85c**

For 12-inch Records. 96-877. Blue. 96-878. Brown. EACH. **99c**

**STANDARD**

Newly designed beautiful levant type binding. Back is die-stamped in gold. Flat back construction. Holds 12 records. Maximum strength has been attained through the use of 12 permanent rings. Album lies flat when open for ease in removing or inserting records. 3 lbs.

For 10-inch Records. 96-880. Blue. 96-881. Brown. EACH. **47c**

For 12-inch Records. 96-882. Blue. 96-883. Brown. EACH. **59c**

**OUR VALUE LEADER**

Handsome sturdily bound brown alligator-finished albums at an astoundingly low price. Durable construction withstands hard usage. Each album is equipped with 10 individual pockets of heavy-weight manila paper. Contains index for record title and name of artist. Shpg. wt., 2 1/2 lbs. each.

For 10-inch Records. 96-830. EACH. **34c**

In Lots of 12. EACH. **30c**

For 12-inch Records. 96-831. NET EACH. **45c**

In Lots of 12. EACH. **40c**

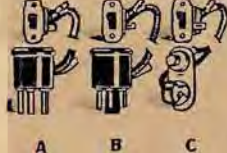
**SHARPENS KACTI NEEDLES**



**PETER GREY SHARPENER**

A genuine Peter Grey needle sharpener. For use on all non-metallic needles such as cactus, thorn, bamboo, or kacti. Sharpens thorn needles to perfectly rounded point and maintains shape. Works by hand. Saves you money because you can sharpen needles and use them over and over again. Top cover of box serves as a record brush for cleaning dust, etc., from records. 1 lb.

69-945. NET. **\$1.32**  
69-946. Replacement Garnet Discs (to above sharpener). EACH, 10c. 10 FOR. **90c**



**PHONO ADAPTERS**

Connects phono pickup to radio without wiring-change.

61-650. Fig. A. For sets using 5 prong tube (no grid cap) as det. or first audio.

61-651. Fig. B. For type 816 as second detector.

61-652. Fig. B. For types 6C5, 6J5, etc., as first audio.

61-653. Fig. C. For sets using grid-cap type tube, such as 6J5, 6K7, 6P5. NET EACH. **79c**



**RECORD PLAYER SWITCH**

Replacement for RCA switch 9824A. Provides change-over from radio to record player. Quickly and easily installed. 1 lb. 59-230. NET. **68c**



**RECORD ACCESSORIES**

Fig. A. Record Cleaning Cloth. Specially treated felt cloth removes dust, etc., from grooves of phonograph records; extends record life. 69-905. 4" x 4". NET. **12c**  
69-906. 6" x 6". NET. **18c**

Fig. B. Record Cleaner. Cleans, renews and provides plastic film to aid in reducing surface noise. 2 oz. 69-902. NET. **21c**

Fig. D. Turntable Needle Sharpener. For all non-metallic needles; provides perfect points. 8" abrasive disc and needle holder. 1 lb. 69-940. NET. **\$1.15**  
69-941. Replacement Discs for above sharpener. NET. **39c**

Fig. C. Kit of 10 Stylus Set Screws. Assorted, round-head; for popular phono pickup arms, recording heads. 3 oz. 69-935. NET. **79c**

Fig. E. Rubber Replacement Drives. For rim-drive turntables. 8 oz. 69-936. For G.I. RX-LX. 69-937. For Alliance 80. EACH. **15c**

**PORTABLE RECORD CASES**

Permits you to carry phonograph records conveniently and safely. Sturdily made; has handsome airplane luggage material covering and hinged top lid. With strong chrome clasp. Felt lined to assure extra protection. Holds 25-12" records. An attractive and handy case which will easily solve your problem of safely transporting records. Wt., 8 lbs. 96-890. NET. **\$1.29**

96-891. Same as above, but holds 25-10" records. A well-built case at a very low price. Shpg. wt., 7 lbs. NET. **\$1.15**

96-892. Same as above but holds 50-12" records. Heavily felt-lined for extra protection. Wt., 10 lbs. NET. **\$2.55**

96-893. Felt-lined case as above, but holds 50-10" records. Wt., 9 lbs. NET. **\$2.15**



**RECORD REPEATER**

Repeats 10" records automatically. Made of durable celluloid to give long service. Will not injure records or needles. For use on any phonograph. Wt. 2 lbs. 69-930. **85c**





## GREAT VALUES IN KNIGHT RECORD PLAYERS

### AUTOMATIC CHANGER PLAYERS

Convert your present radio set into a luxurious Radio-Phonograph combination instrument with this deluxe Knight Automatic Record Changer. Available as a Wireless Player (no connection to set necessary) or with conventional connection to set or amplifier.

#### WIRELESS PLAYER

Works like a miniature transmitter. Tune in on your radio receiver like any radio program. Incorporates a precision Seeburg Automatic Record Changer. Will play ten 12" or fourteen 10" records automatically at a single loading. Has heavy-duty self-starting 78 RPM motor. Single control acts as on-off switch and record reject. Last record in stack repeats. New lightweight crystal pickup is mounted on counterbalanced tangent arm. Needle pressure, only 1 oz. Beautiful table-type cabinet with highly polished finish. Cabinet measures 16 1/2" D. x 13 1/2" H. x 15 1/2" W. Has smooth-acting hinged lid which closes over all records. For operation on 110-120 volts, 60 cycles AC. Wt., 45 lbs. **96-260.**

NET ..... **\$28.50**

#### WIRED PLAYER

Has all of the features of the Wireless Player described above but does not have built-in oscillator. Requires direct connection to receiver or amplifier through phono jack or by means of phono adapter. Quickly and easily connected. Size: 16 1/2" D. x 13 1/2" H. x 15 1/2" W. For 110 volts, 60 cycles AC. Shpg. wt., 47 lbs. **96-261.**

NET ..... **\$22.75**

### PORTABLE PLAYERS

These unusually well-built Knight portable record players will bring you hours of enjoyable recorded entertainment at exceptionally low cost. Handy, compact, portable case style in either wired (direct connection) or wireless type (no connection to radio).

#### WIRELESS PLAYER

The miracle player that requires no direct connection to radio. Plays records through the amplifying system of your radio set with all the tone quality of any radio program. Operates from any distance up to 50 feet away. Sturdy, self-starting 78 RPM motor of latest design with 9" turntable. High-quality light-weight crystal pickup with arm rest. Needle pressure, only 1 oz. for longer record life. Built-in wireless two-tube oscillator. Case is 15" wide, 12" deep, 6 1/2" high. Plays all 10" and 12" records with lid closed to reduce surface noise. Case is leatherette-covered with convenient carrying handle. Has needle cup. For 110 volts, 60 cycles AC. Shpg. wt., 12 lbs. **96-265.**

NET ..... **\$13.75**

#### WIRED PLAYER

Connects directly to radio set or amplifier through phono jacks or adapter. Has all features of wireless model above, less only the oscillator. Crystal pickup has wide response. Constant speed motor runs without waver. A splendid value in a low-cost record player. For 110 volts, 60 cycles AC. Wt., 10 lbs. **96-250.**

NET ..... **\$9.95**

### DELUXE PLAYERS

Convert your radio receiver into a modern radio-phonograph combination quickly and easily with one of these Knight deluxe record players. Will provide splendid phonograph record reproduction for hours of delightful entertainment from your musical library.

#### WIRELESS PLAYER

The "magic" record player that requires no direct connection to radio set. Works like a miniature transmitter. May be placed anywhere in room or at any distance up to 50 feet away from radio. Incorporates latest deluxe features such as: offset head, lightweight crystal pickup; 78 RPM self-starting motor with 9" turntable for all 10" or 12" records; two needle cups; push-button on-off switch; locking armrest for pickup. Has built-in two-tube oscillator. Housed in beautiful roll-top walnut cabinet with lid that closes to reduce surface noise. Cabinet closed: 12 3/4" D. x 15" W. x 6 1/2" H. Brings you ideal record-playing facilities. For 110 volts, 60 cycles AC. Shpg. wt., 15 lbs. **96-270.**

NET ..... **\$15.75**

#### DELUXE WIRED PLAYER

Has all features of "wireless" type above, but without built-in oscillator. Can be used with any radio with all of the volume and tone quality of the set itself. Connects directly to any radio set through phono jack or by means of adapter. Easily connected in a jiffy. For 110 volts, 60 cycles AC. Shpg. wt., 13 lbs. **96-271.**

NET ..... **\$12.45**



## PHONOLA ACOUSTIC PORTABLE PLAYERS

### SPRING-WOUND MODEL 22A

**Economy Model.** An acoustic phonograph designed to meet the demand for a low-priced machine—but capable of fine performance. Uses no electricity or batteries; just wind and play. Completely self-contained and ready to play all 10" or 12" records. An ideal unit for tourists, for students in dormitories, for club-rooms, rumpus-rooms, picnics, and week-end trips. Equipped with an American-made spring-wound motor of governor type, reflecting tone chamber, tapered throw-back tone arm, and reproducer head of good quality. Has 9-inch velvet-covered turntable. Record holder in lid of case holds 12-10" records. Portable case is covered with waterproof brown two-tone star-grain simulated leather, with harmonizing lining. Nickel-plated hardware. Sturdy carrying handle. Case size, 13 3/4" x 11" x 5 1/2". Shpg. wt., 11 lbs. **96-350. NET ..... \$8.18**

**96-351. Electric Model 22E.** Similar to above, but has constant speed electric motor for operation from 110-120 volts, 60 cycles AC. Wt., 10 lbs. **NET ..... \$8.18**

### SPRING-WOUND MODEL 88A

**Deluxe Model.** Attractive acoustic portable phonograph incorporating special features for more efficient operation and better tone quality. Makes a handsome and practical gift. Has high-quality American-made, long-running, spring-wound motor of governor-type with lever-operated speed regulator. 9-inch plated rim, velvet-covered turntable accommodates all 10" and 12" records. Phonola deluxe reproducer of correct acoustical design has free-floating diaphragm and double-pivoted, balanced needle arm. Tone chamber is one-piece heat molded, producing a 24" tone column sealed in place; assures excellent tonal reproduction. Has flush-mounted needle cup, extra cup for used needles, and winding crank with harmonizing knob. In luxurious waterproof, simulated-leather case with Herward Tweed finish of medium tan and harmonizing stripes. Size: 16 1/2" x 7 1/2" x 13". With carrying handle and record holder. Shpg. wt., 15 lbs. **96-352. NET ..... \$12.50**

**96-353. Electric Model 88E.** Similar to above, but has self-starting synchronous electric motor for operation from 110-120 volts, 60 cycles AC. Shpg. wt., 13 lbs. **NET ..... \$12.50**

## KNIGHT ECONOMY PLAYER

Efficient, low-cost record players for use with any radio. Play all 10 and 12-inch records through the radio amplifying system. Latest desirable features include: lightweight, offset-head crystal pickup, self-starting 78 RPM motor with 9-inch turntable; two needle cups; on-off switch; pickup arm rest.

### WIRELESS MODEL

The wireless model of the Knight Economy Player requires no connection to radio set. May be used anywhere up to distance of 50 feet from radio; just plug in to electric outlet, place record on turntable, and tune radio set to player frequency. Presented in a good-looking open-face cabinet — 12 3/4" D. x 15" W. x 4 1/2" H. handsome walnut finish. For 110 volts, 60 cycles AC. Shpg. wt., 13 lbs. **96-275. NET ..... \$11.44**

### WIRED MODEL

With all features of wireless model above, but (or direct connection to radio set through phono jacks or phono adapter. Offers complete facilities for enjoyable recorded entertainment at a smashing low price. For 110 volts, 60 cycles AC. Shpg. wt., 10 lbs. **96-276. NET ..... \$8.75**



## SENSATIONAL NEW 3-WAY PORTABLES



PLAY FROM  
BATTERIES  
OR FROM AC-DC



### PERSONAL MODEL IN LEATHER

The **Knight 3-Way Personal Portable** is also available in a deluxe Custom-made case of genuine top-grain cowhide leather in a rich brown finish. Has all of the fine features of the plastic-molded model described at right. It's the last word in a quality Miniature Portable that plays from AC or DC current, or from self-contained batteries. You'll be proud to own this deluxe Personal Radio—the most distinctive model in its field this year! Complete with tubes and batteries. Shpg. wt., 6½ lbs.

D-156. Value, \$34.95.

NET PRICE EACH, \$21.75.

NET, LOTS OF 3, EACH.....

**\$20<sup>95</sup>**



### 3-WAY "TREASURE CHEST" MODEL

Distinctive! Different! Here's an exquisite presentation of the **Knight Personal Portable** in a lovely wood chest model that looks just like a jewel-box. It's perfect for use on office desk, on end-table, on book-shelf, or bed-side table, etc. Works from AC, DC or batteries—has all of the fine features described at right. Measures only 8¼"x5¼"x4". Weighs only 5 lbs. Entirely self-contained in a solid walnut case with charming marquee inlay trim; beautifully handrubbed to a rich, lustrous finish. Here's one of the most unique little radios you've ever seen—tiny in size but a real performer! Complete with tubes and batteries. Shpg. wt., 6½ lbs.

D-157. Value, \$34.95.  
NET EACH, \$21.75.

NET, LOTS OF 3, EACH.....

**\$20<sup>95</sup>**



### Knight 3-WAY PERSONAL PORTABLE GORGEOUS NEW PLASTIC MODEL

Here's the Personal Portable for all America—at home or at play—at a new low price all America can afford! What a radio this is—works not only from self-contained batteries, but from AC or DC current as well! It's no bigger than the palm of your hand, yet it's the most remarkable and versatile radio ever built! Here's why:

**Plays Anywhere!** Carry the **Knight 5 Tube** (with rectifier) 3-Way Personal Portable with you wherever you go. If there's an electric outlet handy (110 volts, 50-60 cycles AC or 110 volts DC) just plug in. If you're in the country, at camp, on the beach, or on a trip, play it from the economical self-contained batteries. Either way, you get powerful, efficient operation you'll enjoy!

**Everything Built-in!** Everything you need for operation on AC, DC or batteries is right inside that beautiful little case. No aerial, no ground, no wires to attach. The built-in loop aerial has astonishing sensitivity. Batteries are self-contained, too. And it's a simple thing to switch from batteries to electric operation; just set the control pointer at AC-DC-position, plug in the power cord—and play. You'll marvel at the versatility of the **Knight Personal Portable**.

**Strong Reception.** The **Knight 3-Way Personal Portable** tunes 535 to 1650 KC for remarkably powerful reception of all regular Broadcast programs. You'll like the easy-tuning Slide-Rule Dial, (just as in regular big radios) the handy-sized controls and the practical, visual "Off-AC-DC-Battery" indicator.

**An Engineering Miracle**—that's the only way to describe the amazing Superhet circuit of this remarkable 3-Way Personal Portable. RCA Licensed—with every latest feature. Uses the latest miniature 1.4 volt tubes (1R5, 1T4, 1S5, 3S4 and 45Z3 Rectifier). Has Automatic Volume Control to maintain uniform volume on all programs. The tone quality is pure and rich. A specially developed Dynamic Speaker handles full volume with pleasing fidelity.

**Exceptional Economy.** You'll like the practical economy of the 3-Way Personal Portable especially when you're operating from the self-contained batteries. Uses 3 ordinary flashlight cells for "A" supply—last about 20 to 25 hours—inexpensive to replace. The compact "B" battery gives about 50 hours of service.

**Blue-Ribbon Winner** for looks—that's the new **Knight 3-Way Personal** in its gem-like plastic-molded case! It's a beauty you'll be proud to be seen with. Molded in shiny black plastic in the smoothest-looking lines you've ever seen, with contrasting plastic-molded door in beautiful slate-grey. Has attractive carrying handle. You'll be proud of this set wherever you play it—whether at home or outdoors on the go. Size is only 8¼"x5¼"x4". Weighs only 5 lbs.

**A Wonderful Gift to yourself**—or to others. The **Knight 3-Way Personal Portable** is offered in molded plastic case as illustrated, complete with tubes and batteries. For 110-120 volts, 50-60 cycles AC or DC or for battery use. Shpg. wt., 6½ lbs.

D-155. Value, \$34.95.

NET PRICE EACH, \$17.85.

NET PRICE, LOTS OF 3, EACH.....

80-831. Extra Set of Batteries. NET.....

**\$17<sup>25</sup>**

**\$1.79**



OUR SUPREME PHONO-RADIO VALUE FOR '42!



NEW AUTOMATIC CHANGER



Enjoy the marvelous convenience and luxury of this new Automatic Record Changer that brings you forty minutes of uninterrupted entertainment without requiring the touch of human hands. Let this Changer work for you—swiftly, quietly, automatically. . . .



THREE BAND RADIO

You get the latest and best features for dependable three-band reception. Spread-Band tuning—with dial scale s-p-r-e-a-d out on both Short-Wave ranges. New noise-reducing RF circuit for better reception. Enjoy all the world's fascinating radio entertainment!

FEATURES:

- Powerful Superhet
- Built-in Aerial
- New RF Circuit
- Spread-Band Tuning
- With Tone Control
- Full-Acting AVC

**Knight 6 TUBE AUTOMATIC PHONO-RADIO**

This is the kind of Phonograph-Radio you've longed to own—a wonderful new instrument for Complete Home Entertainment! Here, in one of the greatest value-offerings in our history, we bring you powerful 3-Band Radio Reception and superb Automatic Record Reproduction—with a rare perfection of tone, with important new features, and with an outstanding achievement in beautiful cabinet design. . . .

**3 Band Radio Range.** The powerful Superhet circuit of the **Knight 6** (including rectifier) tunes three full bands for world-wide coverage. 5.25-10.25 and 11.5-16MC cover Foreign and domestic Short Wave programs, amateur, aviation and police signals. New S-p-r-e-a-d Band feature gives foreign bands a wider tuning range for easy, instant station logging. Tunes 540-1650 KC for powerful American and Canadian standard Broadcast reception.

**Every 1942 Radio Feature.** There's no more aerial or ground to worry about in the **Knight 6**, because it has the latest-type built-in loop aerial that permits you to plug in and play anywhere. You'll find the latest type tubes used in the new RCA and Hazeltine licensed Superhet circuit as follows. 6SK7 as RF, 6SA7 as Mod-Osc. (dual-purpose), 6SK7 as IF; 6SQ7 as Det.-1st Audio (dual-purpose); 25L6 Output; 25Z6 Rect. New noise-reducing RF circuit means better sensitivity—less background noise. Automatic Volume Control is incorporated to maintain uniform volume on every program you tune.

**Brilliant Automatic Record Changer.** Put yourself in this glorious entertainment picture: imagine forty blissful minutes of continuous listening to your favorite recorded music, without once getting up from your easy chair! This thrill can be yours with the **Knight 6** Automatic Changer that plays up to twelve 10-inch or ten 12-inch records at a single loading. It's the latest and finest gentle-action type, equipped with the new feather-weight, low-pressure Crystal pickup that comes complete with lifetime needle.

**Glorious Tonal Reproduction.** The **Knight 6** is yours to command! At the mere touch of your finger, you can have Radio or Phonograph. Whichever you choose, there is always the assurance of thrilling fidelity, with each tone faithfully mirrored in the performance of the 5/2-inch Dynamic Speaker. You'll appreciate, too, the rich effect of the Personal Tone Control that you yourself can vary to give the kind of tone emphasis you like.

**Beautiful New Cabinet.** You've never before seen such table-model cabinet beauty. Notice the rich style details of the grille treatment, the good taste with which walnut wood contrasts are achieved. The cabinet is designed to play both 10 and 12-inch records with lid closed. Size: 19 1/4" wide, 14 1/4" deep, 13 1/2" high.

**Knight 6 Phono-Radio Complete.** The **Knight 6** is offered complete as illustrated above, with 6 Tube 3 Band Radio, Automatic Record Changer and tubes. For 110-120 volts, 60 cycles AC. Shpg. wt., 40 lbs.

D-175, Value, \$74.50.  
NET PRICE EACH, \$39.95.  
NET PRICE, LOTS OF 3, EACH.....

**\$37<sup>95</sup>**



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