

EDI WARANDOLPH ST. CHICAGO.

World Dadio History



Dealers-here is a line of Receivers that we especially recommend. They are far above the average in workmanship and performance; and their striking modernistic designs will quickly commend themselves to your customers.

For a limited time we are giving you an extra discount of almost 20% on the ARKAY Models, just to introduce them . . . . By all means take advantage of these prices immediately. The sooner you introduce them to your customers, the greater your sales will be.

#### ARKAY CONDITIONED "RADIO

#### MODEL RKC-4 (AC-DC)

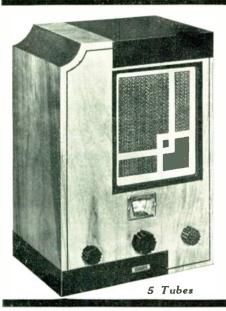
A superb 4-Tube R.F. series filament AC-DC Receiver in an unusually attractive cabinet size  $5x7x10^{1}x$  inches wide. Modernistic design, righly finished in two-tone walnut with gleaming chrome trimmings. Brings in police calls . . . Full-flux Quam Dynamic Speaker ... Ball bearing Tuning Condenser ... Polymet Filter Condenser ... Self-contained flexible Aerial which may be run under the rug for locals or out of the window for distance. Series heater line cord prevents over-boating inside cabinet. Following Tungsol Tubes heating inside cabinet. Following Tungsol Tungsol and furnished: 1-25Z5, 1-43, 1-6C6, 1-6D6,

Just the Set for those who favor the striking new modernistic designs, and a marvelous bargain. Made to sell to the Trade at \$14.63; you get an extra dis-count of about 19% at our price. 110-120 volt A.C.-

14E10977-List Price, \$22.95. YOUR PRICE

**\$1195** 





#### ARKAY MODEL RK50

- 5-Tube Superheterodyne
- Broadcasts and Police Calls
- Illuminated Vernier Dial Kilocycle Calibration
- Delayed Automatic Volume Control
- Latest Type Tubes
- Dust-proof Chassis All Parts Concealed
- Surging Volume
- Beautiful Tone
- Good Sensitivity
- · Keen Selectivity
- Beautiful Cabinet

When we say that the ARKAY Model RK 50 is the best looking, best performing, most salable 5-Tube Table forming, most salable 5-Tube Table Model Superheterodyne we have ever listed, we express but part of our enthusiasm for this remarkable little Set. At the regular bealer's price of \$21.13 it is a bargain... At our present Low Price of only \$15.95 you save another 30% which allows you just that much more profit on every sale. Its 5-Tube Superheterodyne circuit, Tone Control, Delayed Automatic Volume Control, Illuminated, vernier driven Dial graduated in kilocycles, 6½ inch licensed Dynamic cycles, 61/2 inch licensed Dynamic

Speaker and beautiful modernistic cabinet finished in maple and ebony with chrome grill and escutcheon diswith chrome grill and escutcheon distinguishes it among all other Sets of this type. Covers regular broadcast band and police calls, 550 to 1650 KC. Following latest types tubes used and supplied: 1-55, 1-57, 1-58, 1-2A5, 1-80, Overall size 6x8x12 inches high. For 110-120 volt 50/61 cycle A.C.

14E10978-Arkay Model RK50 5-Tube A.C. Complete with tubes.

YOUR SPECIAL

#### **ARKAY MODEL RK60**

- Superheterodyne Circuit Automatic Volume Con-
- Illuminated Vernier Dial Kilocycle Calibration Licensed Dynamic

- Speaker Latest Type Bakelite Moulded Sockets

The Arkay Model RK 60 is somewhat larger than the RK 50 and provides the better tone quality and improvement in overall performance which is to be expected from its larger Speaker, increased paffle area additional tube and baffle area, additional tube, and slightly greater cost. It employs a six-tube Superheterodyne circuit of the most advanced design and an 8 inch Utah Dynamic Speaker. Four tuned 175 K.C. IF stages and three-gang Tuning Condenser provide adequate selectivity for any locality. An extra heavy Power locality. An extra heavy Power Transformer and over size Con-densers insure years of trouble-free service. Push-pull 45s are free service. Push-pull 45s are used in the output stage to provide a richness of tone that is equalled in none except the finest

- Dust-proof and Safety Chassis
- Equipped with Latest Tubes
- Beautiful, hand-rubbed
- finished Cabinet
  Covers Broadcast Band
  and Police Calls
- Chrome Trimmings

console type Receivers. The illuminated Dial is vernier driven and is graduated in kilocycles. Tone Control and delayed Automatic Volume Control are incorporated. Housed in a beautiful modernistic, Housed in a beautiful modernistic, two-tone walnut finished cabinet with chrome ring in grill, chrome escutcheon and chrome trimmed knobs. Size 11½x8%x15 inches high. Tubes used and supplied: 1-57, 1-58, 1-55, 2-45s, and 1-80, (Tungsol). Covers regular broadgest hand and police galls 556 cast band and police calls, 550 to 1650 K.C. For 119-120 volt 50/60 1650 K.C. For 110-120 volt 50/60 cycle K.C. 14Ef 0979—Arkay Model RK60 6-Tulie A.C. Complete with tubes. List Price, \$39.50.

YOUR SPECIAL PRICE .....



Six Tubes!

#### **NEW REDUCED TUBE PRICES!**

The following revised List and Net Prices for Arcturus, Philco, Gold Seal, and Raytheon Tubes are now in effect, superceeding all Tube Prices shown on pages 5 to 11 of the 1935 RADOLEK PROFIT GUIDE. RCA-Cunningham tubes are also available at these List Prices, subject to the discount specified in your consignment contract.

#### Deduct an Additional 10 per cent for Lots of 25 assorted Arcturus Tubes

ARCTI	URUS	PHII	LCO	TUBE	NEW	GOLD	SEAL	RAYT	HEON	ARCT	URUS	PHH	LCO	TUBE	NEW	GOLD	SEAL	RAYT	HEON
Stock Number	Your	Stock Number	Your	TYPE NUMBER	LIST PRICE	Stock Number	Your Price	Stock Number	Your Price	Stock Number	Yeur Price	Stock Number	Your Price	TYPE NUMBER	PRICE	Stock Number	Your Price	Stock Number	Your Price
3E700 3E701	\$8.32	3E626 3E627 3E628 3E629 3E629 3E593	\$0.32 .79 .85 .53 .58	00A 01A 1A0 1Cd 1V	\$2.00 .60 1.50 1.60 1.00	3E520 3E521 3E523 3E524 3E522	\$0.96 .27 .68 .77 .48	3E781 3E782 3E765 3E783	\$1.06 .32 .79	3E741 3E742 3E743 3E744 3E745	\$0.40 .58 .58 .85	3E677 3E678 3E679 3E680 3E681	\$0.40 .58 .58 .85	56 57 58 59 71 A	\$0.75 1.10 1.10 1.60	3E571 3E572 3E573 3E574 3E575	\$0.36 .52 .52 .76	3E819 3E820 3E821 3E822 3E823	\$0.40 .58 .58 .85
3E702 3E703 3E704 3E705 3E707	.93 .58 .58 .69	3E630 3E631 3E632 3E633 3E634	.93 .58 .58 .69	2 2A3 2A5 2A6 2A7 2B7	1.75 1.10 1.10 1.30 1.50 2.50	3E525 3E526 3E527 3E528 3E530 3E529	.84 .52 .52 .62 .72 1.13	3E766 3E767 3E768 3E769 3E770	.93 .58 .58 .69	3E746 3E747 3E748 3E749 3E750	.63 .63 .69	3E682 3E683 3E684 3E685 3E686	.37 .58 .48 .63 .63 .69	75 76 77 78 79	1.10 .90 1.20 1.20 1.30	3E576 3E577 3E577 3E578 3E579 3E580	.33 .52 .43 .57 .57 .62	3E824 3E825 3E826 3E827 3E828 3E829	.37 .58 .48 .63 .63
3E706 3E708	.63	3E594 3E595 3E596 3E635 3E636 3E637	.93 .85 .85 .63 .74	2B6 3 4 5 5 5Z3 6A4/LA 6C6	1.75 1.60 1.60 1.20 1.40 1.10	3E531 3E532 3E532 3E535	.57 .67 .52	3E771 3E772 3E775	.63 .74 .58	3E751 3E752 3E753 3E754 3E755 3E755	1.32 .48 .58 .69 .58	3E688 3E689 3E690 3E691 3E692	1,32 .48 .58 .69 .58	80 81 82 83 84 85	2.50 .90 1.10 1.30 1.10	3E581 3E583 3E584 3E585 3E586	1.19 .43 .52 .62 .52	3E825 3E830 3E831 3E832 3E833 E834	.37 1.32 .48 .58 .69 .58
3E711 3E712 3E709 3E710 3E713 3E714	.58 .69 .74 .85	3E638 3E639 3E640 3E641 3E642	.58 .69 .74 .85	6D6 6A7 6B7 6F7	1.10 1.30 1.40 1.60 2.50	3E536 3E533 3E534 3E537 3E538	.52 .62 .67 .77	3E776 3E773 3E774 3E777 3E784	.58 .69 .74 .85 1.32 1.59	3E757 3E758 3E759	.53 .95 1.08	3E694 3E695 3E699	.63 .66 .53 3.57	V99 X99 866 AF AG	1.25 1.00 6.75 1.80 2.05	3E588 3E589	.57 .60 .48	3E836 3E837	.63 .66 .53
3E715 3E716	.48	3E643 3E644 3E645 3E597	.48 1.11 .58 1.19	WX12 12 12A 12A5 12Z3 14	3.00 3.00 3.00 .90 2.10 1.10 2.25	3E539 3E540 3E541	.43	3E785 3E786 3E787 3E778 3E779	1.59 1.59 .48 1.11 .58	3E760	1.45			GA BA BH BR 874 876 886	2.75 7.50 4.65 2.75 4.90 6.70 6.75			3E838 3E839 3E840	3.97 2.46 1.45
		3E646		15	2.85							MA	JESTI	Types s	Indicates	Spray Sh	ield		
		3E625 3E647 3E648 3E649 3E650	1.51 .79 1.45 .63 .79	17 18 19 20 22	1.50 2.75 1.20 1.50 1.50	3E542 3E543 3E544	.57 .71 .71	3E788 3E789 3E790	.63 .79 .79			3E598 3E599 3E600 3E601 3E602	\$1.22 1.11 1.40 .98 1.22	2A78 2B78 2S/4S 2Z2/G84 6A7S	\$2.30 2.10 2.65 1.85 2.30	3E510 3E511	\$1.03	3E851 3E852	\$1.22
3E719 3E720 3E721 3E722 3E723 3E724	.58 .85 .34 .37 .42	3E651 3E652 3E653 3E654 3E655 3E656	.58 .85 .34 .37 .42	24 A 2525 26 27 30 31	1.10 1.60 .65 .70 .80	3E545 3E546 3E547 3E548 3E549 3E550	.51 .77 .29 .32 .38	3E791 3E780 3E792 3E793 3E794 3E795	.58 .85 .34 .37 .42			3E603 3E604 3E605 3E606 3E607	1.11 1.07 .93 .93 1.00	6B78 6C7 6D7 6E7 6F78	2.10 1.90 1.75 1.75 1.90	3E512 3E513 3E514 3E515	.94 .79 .79 .85	3E853 3E855 3E856 3E857 3E854	1.11 1.00 .93 .93 1.00
3E725 3E726 3E727 3E728 3E728 3E729	.74 .74 .79 .58 .45	3E657 3E658 3E659 3E660 3E661 3E662	.74 .74 .79 .58 .58	32 33 34 35,°51 36 37	1.40 1.40 1.50 1.10 1.10	3E551 3E552 3E553 3E554 3E555 3E556	.67 .67 .71 .52 .52	3E796 3E797 3E798 3E799 3E800 3E801	.74 .74 .79 .58 .58	3E717	.79	3E608 3E609 3E610 3E611 3E612 3E613	1.00 .79 .69 1.96 .42 .74	6 Y 5 6Z5/12Z5 248 25/258 278 358/518	1.90 1.50 1.30 3.70 .80 1.40	3E500 3E501 3E502	.59 .36 .63	3E858 3E841 3E842 3E843	1.00 .69 .42 .74
3E730 3E731 3E732 3E733 3E734	.58 .63 .58 .63	3E663 3E664 3E665 3E666 3E667	.58 .63 .58 .63	38 39/44 40 41 42 43	1.10 1.20 .80 1.10 1.20 1.25	3E557 3E558 3E559 3E560 3E561 3E562	.52 .57 .38 .52 .57	3E802 3E803 3E804 3E805 3E806 3E807	.58 .63 .42 .58 .63			3E614 3E615 3E616 3E617 3E618 3E619	.58 .58 .90 .69 .69	46A1 46B1 558 56AS 568 578	1.10 1.10 1.70 1.30 1.30 1.75	3E503 3E504 3E505	.76 .59	3E844 3E845 3E846	.90 .69
3E735 3E736 3E761	.40 .63 .69	3E669 3E670 3E671 3E672	.40 .63 .69	44 45 46 47 48	1,20 .75 1,20 1,30 3,00	3E563 3E564 3E565 3E566	.34 .57 .52	3E808 3E809 3E810 3E811 3E812	.63 .40 .63 .69			3E620 3E621 3E622 3E623 3E624	.93 .93 .93 .90	57A8 588 58A8 758 85A8 85A8	1.75 1.75 1.75 1.70 1.70	3E506 3E507 3E508 3E509	.79 .79 .79	3E847 3E848	.93
3E737 3E738	1.32 .58	3E673 3E674	.58 1.32	49 50 51	1.10 2.50 1.10	3E567 3E568	1,19	3E813 3E814 3E799 3E816	.58 1.32 .58 .85		SPARTON Types				.90				
3£739 3£740	.71	3E675 3E676	.71	52 53 55	1.60 1.35	3E569 3E570	.64 .52	3E817 3E818	.71			3E696 3E697 3E698	.87 .87 .77	182B 183 485	1.65 1.65 1.45	3E590 3E591 3E592	.74 .74 .65		

# RADOLEK REVISED TUBE PRICE LIST

## DOWN GO TUBE PRICES IP

GO SALES!

Since this catalog was published the list prices of 61 types of radio tubes were reduced. The revised prices shown on this supplement supersede prices of these 61 types.

#### Our Policy

It is our policy to give our customers the benefit of all price reductions at the time they are announced by the manufacturer. All orders for tubes shipped by us since tube prices were reduced have been shipped at the new low net prices specified on this schedule. Our policy of giving you the benefit of any price reductions applies to all the merchandise listed in this catalog. Regardless of the price you specified on your order, if any reductions have occurred on any items you ordered, Radolek will give you the advantage of the lowest prices in effect at the time your order is received.

#### Reduced Prices, But No Reduction in Your Profit Margin

At the list prices now in effect you can sell complete sets of tubes at a figure equal to what only two or three tubes cost a few years ago. There are dozens of receivers in your own locality that are not in operation or perform poorly because of defective and worn out tubes. The new list prices will lower the sales resistance you may have previously encountered. Increase your tube profits by pushing sales. These low prices will bring you business that you could not get before. Your margin of profit on all brands of tubes we list remains the same.

#### Make RADOLEK Your Tube Headquarters

We carry complete stocks of all Nationally Advertised brands of Radio Receiving Tubes and offer you complete co-operation on any lines of Tubes you may select from our listings. All of the manufacturers whom we represent have free advertising material available to the Trade and we are always glad to supply our Dealers with this material. Make RADOLEK your headquarters for everything you need in Radio Merchandise. Our Service, Prices, Quality, and Co-operation will save you money!

#### The Radolek Co.

601 W. Randolph St.
CHICAGO

#### RADOLEK'S **Determined Policy Is** *WHOLESALE ONLY*

ganized to handle your orders speedand yet with intelligent personal ntion. Our facilities include the ntion. Our facilities include the st modern equipment. Our person-is trained to the business and has een understanding of your need for trate and prompt shipment of your

rgest Complete Stock

most comprehensive stock of Radio most comprehensive stock of Radio in the country has again been slifted to include practically every eivable item that you will require. 8000 separate items consisting Repair Parts and Material, Test ipment and Instruments, National ands of Radio Tubes, Public Adess Amplifiers and Systems, and amplete selection of Radio Receivers, wer before have such extensive listings of Replacement Transformers, ondensers, Resistors and Volume attrols been assembled under one ntrols been assembled under one over and stocked complete by one organization dedicated to your service.

Lowest Net Prices In the very face of rising costs, Radolek's prices are consistently lower. Our buyers have been far-sighted—we have made large purchases and heavy commitments for merchandise and materials. In keeping with the intent of the National Recovery Act we shall protect you against increased prices for as long as is reasonably possible. We must reserve the right to change prices. must reserve the right to change prices without notice. We pledge ourselves not to profiteer—we will not raise not to profiteer—we will not raise prices unnecessarily. But where prices are advanced and as our stocks become exhausted we will be obliged to make adjustments. We hope no increase in prices quoted in this book will be necessary but there may inevitably be some adjustments.

Service Facilities Radolek is Restricted Catalog We exercise pains-taking vigilance to restrict the mailing of our catalog exclusively to those who are legitimately entitled to receive wholesale prices. We don't want your customers to have access to your net prices and we urge your co-operation that we may confine our customer list exclusively to the Trade. By these means and a constant check-up on the activity of our accounts we are able to eliminate from our mail-

are able to eliminate from our mailings the names of those who are not properly emittled to wholesale prices.

We advertise only in Trade publications and accept applications for our catalog only after careful examination or investigation. It has been our experience that we are compelled to reject over 50% of such applications as they do not qualify under our rules.

**Quality Merchandise** Fresh, Clean Stocks. We steadfastly avoid offering our customers "job-lot" or questionable merchandise regardless of how attractive the price may seem. Our great buying power and excellent factory connections enable us to offer current production material of highest standard and unquestionable quality at prices which in many cases are as low as you might pay for "shoddy" goods from unreliable sources. goods

"Your Prices" quoted through this catalog is the net wholesale price with all Trade and Cash Discounts deduct-ed. You will find no ambiguous "quantity Prices" featured in large ed. You will find no ambiguous "quantity Prices" featured in large type to mislead you. All large display prices represent your net single or unit cost. Wherever we are able to offer an additional savings on quantity purchases the Lot Price is plainly hown.

"List Prices" given are either Manufacturer's List Prices or are intended by us as a suggested Retail Price.

It is our affirmed purpose to solicit orders only from those commercially and actively engaged in the radio industry, and from a few other trade units which are recognized as entitled to receive wholesale prices. Radolek is primarily a Service Supply House catering to the Radio Merchant, Service Technician, Design and Research Engineer, Industrial and Institutional Laboratories, Public Utilities, Schools, Colleges, and those recognized as engaged in developing the Art of Radio. We also solicit and accept orders from the United States Government, Federal Institutions, State, County, Municipal and other governmental bodies and institutions.

#### How "Laboratory Control" at Radolek Protects You

Many reputable organizations in the Radio Indus-Many reputation organizations in the Radio Indus-try maintain a laboratory for the purpose of testing the merits of new apparatus. This is a most com-mendable procedure—and we have practiced it con-sistantly at Radolek.

But we have quietly introduced a new plan about which we now feel free to tell you.

A new test procedure has been adopted, which pro-A new test procedure has been adopted, which provides for testing incoming merchandise and materials before it is placed in stock. Our experience has shown us that even the most careful manufacturers sometimes make mistakes. Our "Laboratory Control" on all new merchandise provides a definite check upon possible mis-marked merchandise, improper valuations of contracted materials. nes or over-rated materials.

#### The Radolek Exchange Policy

We are most liberal in our Policy of rectifying We are most liberal in our Policy of rectifying any possible errors on your orders or in replacing defective merchandise. We observe a most fair and square unequivocal attitude on these points. You may depend on it, we will take care of any proper adjustments promptly and in a manner that will please you. However with the exception of errors on order filling, defective items or items sent in for repair we must insist that before returning any other goods to us that you first obtain our permission to do so. Simply write us, stating what you want to do so. Simply write us, stating what you want to return, the reason for the return, the date of purchase, condition of goods etc. We will answer you promptly giving you any necessary instructions.

#### Visit Our New Display Room

Our Display Room has been remodeled to serve

Our Display Room has been remodeled to serve you more efficiently. A new sound insulated demonstration room for Public Address Amplifiers and Equipment will aid you to compare and choose the most appropriate system for your installations. An enlarged Radio Set section will help you to make a selection of the models most suitable for your trade. Our City trade and our visiting Out-of-Town Customers will appreciate the prompt and courteous service that we are organized to extend in the City Sales Division.

We are located just 5 minutes from the center of the downtown "Loop" business district on the corner of Randolph and Jefferson Streets—no parking restrictions.

restrictions.

#### **NEW ITEMS** Up-To-The-Minute Merchandise

You can rely upon Radolek to have all of the new important items—even those which are amounced after our catalog goes to press. New items which are introduced after this book is published will be stocked or we will make every effort to obtain them

stocked or we will make every effort to obtain them for you on your order.

Radolek pioneers many new items of practical application in the service field. Dozens of items listed exclusively in this catalog are developed and manufactured by us to serve a definite need not adequately covered by other products.

#### THE RADOLEK GUARANTEE

We guarantee every piece of radio apparatus we supply to operate in the manner and for the purpose for which it was designed and intended. We guarantee all merchandise sold by us against We guarantee an merchanaise sola by us against defects in material and workmenship. Examine the goods we ship you. Any article which does not meet this guarantee, if returned at once, will be repaired or replaced. We are able to make this guarantee only because we handle the best grade of carefully tested merchandise.

RADOLEK IS DOING ITS PART

Member NRA

Operating Under the Radio Wholesalers Code







#### Special Copyright Notice

The text, illustrations and format of this catalog are prepared at great expense and have all been fully covered by copyright. All rights reserved and will be vigorously protected.

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Fastest Delivery

We are constantly striving to "cut-time" and to set new sined records on our excellent Shipping Schedule. Last year nearly 98% of all orders were shipped the same day they were re-ceived. You cannot afford unreasonable delay. Radolek service means delivery right to your door of the exact merchandise you want quickly and exactly as ordered.

**Equipped For Service** The most modern stock and shipping equipment—a hustling organization and an experienced and capable management—all combine to give your orders the individual attention that

Speed is Just one part of Radolek Service. Our merchandise department is constantly scouring the market to bring you better quality goods at lower

prices. We maintain a modern fully equipped Laboratory for the examina-tion and analysis of new equipment and

tion and analysis of new equipment and to maintain a high standard of qual-ity on all merchandise that we stock. For your information and assistance in the selection of special apparatus we place at your disposal the free advice of skilled Technical Experts.

are constantly striving to "cut-

#### orders.

them rapidly.

SEND NO MONEY

We Will Ship C.O.D.

You need not send a remittance with your order unless you wish to 40 so. We will ship C.O.D. any merchandise shown in our catalog, but we request that new customers on their first orders, or orders for heavy merchandise to be shipped to distant points be accompanied by a 25% deposit if so be shipped C.O.D. Most of our customers prefer to send cash with order, thereby eliminating delay and unnecessary expense of C.O.D. collection. You may remit by post office or express money-order, bank draft or personal check, as you prefer. If you send currency be sure to register the letter for we cannot be responsible for each lost in the mails. cash lost in the mails.

#### Prices Quoted are TAX PAID

Prices Quoted are TAX PAID

All quotations in this book include Federal Excise Tax in accordance with Act of June, 1932 and based upon Treasury Department, interpretations as of our press date. We reserve the right to add any taxes arising from new acts (Pederal or State) or changed interpretations. On sales in the State of Illinois we reserve the right to increase aur prices, to the extent of any increase in cost of doing business, that may be occasioned by the Illinois State Occupation (Salest Tax Act.

Our quoted prices are subject to change without notice. We have large stocks on hand of practically every 'ten quoted and have made contracts in such a manner the we expect to be able to supply an items available from ramufacturers at the prices shown for the life of this catalog. In event of market changes it will be our object to meet or better all competitive prices.

better all competitive prices.

We will ship any merchandise ordered, subject to your inspection if shipment is to go forward by express. In this manner, you may see the merchandise at the express office before you accept shipment, if you so prefer. If you desire inspection privileges, be sure to so state plainly on your wrder.

We Ship Subject to Inspection

#### We Will Ship C.O.D. On Orders of \$25.00 or Over

Within a radius of 500 miles of Chicago Radolek is consistantly rendering overnight service-but wherever you are

located we are equipped to deliver your order with the fast-

est possible speed for our stocks are very complete and we

aim to maintain our Same Day Shipping Schedule on all

FREIGHT ALLOWANCE

On Orders of \$25.00 or Over
We will allow freight charges up to a maximum of \$2.00 per hundred pounds on orders amounting to \$25.00 or more. This offer applies to all merchandise listed in our catalog with the exception of "A" and "B" Batteries. Wire and Aerial Insulators. This money-saving affer will usually cover freight charges to all states excent the few distant ones: Utah. New Merico, Colorado, Wyoming, Montana. Arizona, Idaho, Oregon, California, Texas. Washington and the New England states. Even in these states our freight allowance pays a substantial part of the transportation cost. Orders that fall within this Special Offer will be shipped charges collect—we will refund the freight charges up to the maximum allowance upon receipt of your paid freight bill. If you prefer your order hipped by Express or Parcel Post, we will allow the equivelant of what the freight charges would be.

orders to want.

#### **PHILCO** Balanced TIIDEC



Nationally Advertised By Philco for Replacement in All Radio Sets

Your Discount 40-10% Less 2% for Cash

Extensive advertising has made PHILCO a popular name in Radio. People know that PHILCO stands for quality and BALANCED TONE in Tubes as well as Sets and Parts. Capitalize on this by having PHILCO TUBES in stock ready for those who prefer them.

#### **MAJESTIC Types**

S Indicates Spray Shield

Stock	Type	List	Your
Number	Number	Price	Price
3E598	2A78	2.30	1.22
3E599	2B78	2.10	1.11
3E600	28/48	2.65	1.40
3E601	2Z2 G84	1.85	.98
3 E 602	6A7S	2.30	1.22
3 E 6 0 3	6878	2.10	1.11
3E604	6C7	1.90	1.00
3E605	6D7	1.75	.93
3E606	6E7	1.75	.93
3E607	6F78	1.90	1.00
3 E 6 0 8	6 Y 5	1.90	1.00
	6Z4 (Sa	me as Pl	hilco 84)
3 E 6 0 9	6Z5/12Z5	1.90	1.00
3E610	248	1.30	.69
3E611	25/258	3.70	1.96
3E612	278	.80	.42
3 E 6 1 3	358/518	1.40	.74
3E614	46 A 1	1.10	.58
3E615	46B1	1.10	.58
3E 616	558	1.70	.90
3 E 617	56AS	1.30	.69
3E618	568	1.30	.69
3 E 6 1 9	578	1.75	.93
3E620	57AS	1.75	.93
3 E 621	588	1.75 1.75	.93
3E622	58 A S	1.75	.93
3E623	758	1.70	.90
3E624	85AS	1.70	.90

#### **SPARTON Types**

3E696	182B	1.65	
3E697	183	1.65	
3E698	485	1.45	

one	IU	BE:	<b>5</b>
Stock Number	Type Number	List Price	Your
3E626 3E627	01A 1A6	\$0.60 1.75	\$0.32
3E628	1C6	2.20	1.16
3E629	1C6 1V	1.25	.66
3E593	2 2A3	1.10	.58
3E630		2.25	1.19
3E631	2A5	1.60	.85
3E632 3E633	2A6	1.60	.85
3E634	2A7 2B7	2.20 2.00	1.16 1.06
3E 594	3	1.75	.93
3E 595	3	1.60	.85
3E596	5	1.60	.85
3E635	5 <b>Z</b> 3	1.50	.79
3E636	6A4/LA	1.60	.85
3 E 6 3 7 3 E 6 3 8	6C6	1.25	.66
3E638	6D6 6A7	1.25	.66
3E640	6B7	2.20 2.00	1.16 1.06
3E641	6F7	1.80	.95
3E642	10	5.00	2.65
3E643	12A	1.30	.69
3E644	12A5	2.10	1.11
3E645	12Z3	1.20	.63
3E 597	14	2.25	1.19
3E646 3E625	15	2.85	1.51
3E 625 3E 647	17 18	1.50 2.75	.79 1.45
3E648	18	1.50	1.45
3E649	20	3.00	1.59
3E650	22	2.00	1.06
PECE4	044	1.00	

3E649	20	3.00	1.5
3E650 3E651 3E652 3E653 3E654 3E655	22 24 A 25 Z 5 26 27 30	2.00 1.20 2.00 .65 .70 1.30	1.00 .6: 1.00 .3: .3:
3E656 3E657 3E658 3E659 3E660	31 32 33 34 35/51	1 30 1 90 2.10 2.15 1.30	1.0 1.1 1.1
3 E 6 6 1 3 E 6 6 2 3 E 6 6 3 3 E 6 6 4 3 E 6 6 5	36 37 38 39/44 41	1.50 1.20 1.45 1.50 1.60	.7 .6 .7 .7
3E666 3E667 3E669 3E670 3E671	42 43 45 46 47	1.60 2.50 .75 1.55 1.30	.8 1.3 .4 .8
3E672 3E673 3E674 3E675 3E676	48 49 50 53 55	3.00 1.70 4.00 1.80 1.60	1.5 .9 2.1
3E677 3E678 3E679 3E680 3E681	56 57 58 59 71 A	1.20 1.65 1.65 2.00 .75	.6 .8 .8 1.0
3E682 3E683 3E684 3E685 3E686	75 76 77 78 79	1.60 1.20 1.80 1.80 2.60	.8 .6 .9
3 F 6 8 7	90	70	

#### ARCTURUS



#### Improved Performance

The exclusive Arcturus Unitary Structure is a decided advance and is a real improvement in tube manufacture, assuring uniform characteristics. This sturdy construction insures precise spacing and grips every element firmly in position making all elements inter-dependent. This entire assembly, exceptionally rigid, is safe against distortion of elements and minimizes microphonium. Rated as the most rugged tube construction on the market, this is another reason why Arcturus Tubes insure efficient and dependable performance and improved reception.

#### Precision In Manufacture Guarded by 137 Tests and Checks

The average diameter of the filament used in Arcturus Tubes is .006 inches. Yet the precise construction of the elements in Arcturus Tubes is held less than one-tenth of this dimension. This precision in manufacture plus the rugged construction of Arcturus Tubes at so insures uniformity of characteristies and performance in even the most critical circuits. Guarding Arcturus quality are 137 tests and checks which each tube receives before it is shipped. Such fine workmanship and care have gained for Arcturus Tubes a world-wide acceptance for Quality.

ra 10% Discount in Lots of 25 Assorted

Ex	ctra 10%	o Disc	ount i
Stock Number	Type Number	List Price	Your Price
3E700 3E701 3E702 3E703 3E704	01 A 1 A 6 2 A 3 2 A 5 2 A 6	\$0.60 1.75 2.25 1.60 1.60	\$0.32 .93 1.19 .85
3E705 3E706 3E707 3E708 3E709	2A7 2B6 2B7 5Z3 6A7	2.20 2.50 2.00 1.50 2.20	1.16 1.32 1.06 .79 1.16
2 3E762 9 3E710 9 3E711 9 3E712 0 3E713 2 3E714	6B6 6B7 6C6 6D6 6F7	2.50 2.00 1.25 1.25 1.80 5.00	1.32 1.06 .66 .66 .95 2.65
3 E715 3 E716 3 E717 7 3 E719	12A 12Z3 12Z5 24	1.30 1.20 1.50 1.20	.69 .63 .79 .63
3E720 3E721 3E722 3E722 3E723 3E724 3E725	25 <b>Z</b> 5 26 27 30 31	2.00 .65 .70 1.30 1.30	1.06 .34 .37 .69
3E726	32 33 34	1.90 2.10 2.15	1.00 1.11 1.14
3 E 728 3 E 728 3 E 729 3 E 730 3 E 731 3 E 732 3 E 733 3 E 733 3 E 733 3 E 733 3 E 733 3 E 733	36A 37A 38A 39-44 41 42 43 45	1.50 1.20 1.45 1.50 1.60 1.60 2.50 .75	.79 .63 .77 .79 .85 .85

Stock Number	Type Number	List Price	Your Price
3E736 3E737 3E738 3E739	46 50 51 53	1.55 4.00 1.30 1.80	.82 2.12 .69 .95
3E740 3E741 3E742 3E743 3E744	55 56 57 58 59	1.60 1.20 1.65 1.65 2.00	.85 .63 .87 .87
3E745 3E746 3E747 3E748 3E749	71 A 75 77 78 79	.75 1.60 1.80 1.80 2.60	.40 .85 .95 .95
3E750 3E751 3E752 3E753 3E754 3E755	80 81 82 83 84 85	.70 3.50 1.20 1.55 1.75 1.60	.37 1.85 .63 .82 .93
3E756 3E757 3E758 3E759 3E760 3E761	89 99UX AF AG GA PZ (47)	1.80 1.50 1.80 2.05 2.75 1.30	.95 .79 .95 1.08 1.45

#### ARCTURUS 2B6 Tube **Power Amplifier**

A super triode tube with higher power output, greater sensitivity, and lower power consumption. Six watts power may be obtained from a single tube or sixteen from a pair in push-pull. 3E706—List, \$2.50. YOUR PRICE .....

#### A. C.—D. C. SHORT WAVE SCOUT

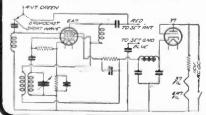
1.60 1.80 2.25 1.50 6.75

3E689 3E690 3E691

3E692

#### Latest Style Circuit

USES THE NEW 6A7 ELECTRON COUPLED detector-modulator tube in a new highly efficient frequency converter superheterodyne circuit. Two coils are supplied to cover the important short wave transmission bands. This converter is designed to operate satisfactorily with any type of broadcast receiver and when so used employs the essential principles of the superheterodyne system to secure amazing distance and power—limited only by atmospheric conditions, the amplification of the receiver used and the skill of the operator. Close observation of the circuit shown below will explain the electrical action of this instrument. A 37 tube with grid and plate tied together supplies rectified direct plate current for the 6A7, thus placing no added strain on your receiver supply. A series filament supply eliminates the need of a power transformer.



#### Tunes 20-200 Meters on Any Broadcast Receiver

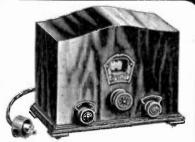
The Short Wave Scout will modernize your present radio. Easy to install—only three simple connections and plug-in cord to 110 volt A.C. or D.C. supply line, Fascinating to operate, A quick selling item for servicemen and radio dealers. Tuning range covers American Police calls, I'lane and Amateur waves between 60 and 200 meters; with the substitution of an extra coil provided with the receiver, the Short Wave Scout receives signals from 20 to 60 meters. This includes the transmission channels of most European, South American, and American Relay station.

#### You Can Step-Up Your Sales with This New Short Wave Adapter

This New Short Wave Adapter

Do your customers know how simple it is to adapt their broadcast radios for short wave reception—and how moderate the cost?

You can turn over a substantial profit each month on Short Wave Scout sales. You have the inside track—you have the confidence of your trade—they look to you for technical endorsement of any device of this nature. You can make money this business and there's a lot of it. The seld has been pioneered for you. National advertising has planted the seed of desire for short wave reception in the minds of every radio owner and most people get a big kick out of it. Cash in on this business—it can bring you a mighty good profit.



Attractive Small Cabinet
Genuine Walnut Veneer Cabinet, 8½"x6½"x
4½". Tuning dial, power switch, and change
over switch for choice of broadcast or short
wave reception. Highest quality workmanship and
parts used throughout. This attractive little converter will make any good power broadcast receiver into a world-wide multi-wave radio equal
to some of the highest priced "All-Wave" radios
on the market.

Short Wave Scout 20-200 meters when used
with any broadcast receiver. Self Powered.

with any broadcast receiver. Self Powered. Operates from 110 volts A.C. or D.C. on any aerial suitable for short wave reception.

4D10945—Complete with RCA-Cunningham Tubes. List Price \$17.50.

YOUR PRICE .....



ONE HUNDRED MILLION Radio Tubes will be replaced this year. Your share of this business will probably account for 50% of your sales. The question of wholesale Tube prices is, therefore, a very important one to YOU. ANY difference in your cost of each Tube will make a BIG difference in your

Many brands of Tubes are now available on consignment only—a system of distribution which, because it is expensive to maintion which, because it is expensive that tain, compels the manufacturer to charge you more for his Tubes than you

you more for his rubes than you would pay were you to buy Tubes of equal quality for CASH.

Raytheon tubes are the best on the market. Each one is fully guaranteed for six months, subject to the usual exceptions of burnouts and breakage.

Raytheon 4-pillar Tubes ARE sold for cash As a Raytheon Dealer you get FULL pro-fit You actually make from 10 to 15 pernt 1 ou actually make from 10 to 15 percent more on every Tube you sell because nothing is added to your cost by the manufacturer to offset his bad-account losses, elaborate check-up expense, etc., that are unavoidable wherever Tubes are consigned.

Perhaps you, like thousands of other pru

Perhaps you, like thousands of other prudent Radiomen, prefer to buy your tubes outright and pocket this extra 10 to 15 percent profit. . . . Do you?

Then Raytheon 4-pillar Tubes are the answer. They have every feature that a fast-selling, profit-producing Tube must have, including: Quality, Selection, Distinction, National Advertising and BIG TRADE DISCOUNT.

COUNT.

Build confidence in your firm by selling these outstanding high quality tubes.

The High Quality Line with

	-
1A6 Pentagrid Converter 3E765— List, \$1.75. YOUR PRICE 93¢	10 31
2A3 Triode Power Amplifier 3E766 \$1.19	WD11
2A5 Pentode Power Amplifier 3E767— 85¢	WX12 List. \$3.00.
2A6 Diode Det. Triode Amp. 3E768— List. \$1.60. YOUR PRICE 84¢	12A List, \$1.30.
2A7 Detector-Oscillator 3E769— \$1.16	19 Twin 3E7 List, \$1.50.
2B7 Diode Det. Pentode Amp. List, \$2.00. YOUR PRICE \$1.06	20 List, \$3.00.
5Z3 Full Wave Rectifier 3E771— List. \$1.50. YOUR PRICE 79¢	22 List, \$2.00.
6A4 Pentode Power Amplifier 3E772— 85¢	24A List, \$1.20.
6A7 Detector and Oscillator 3E773— \$1.16 List, \$2.20. YOUR PRICE \$1.16	26 Trio
6B7 Dlode Det., Pentode Amp. 3E774— \$1.06 List, \$2.00. YOUR PRICE \$1.06	List, 70c. Y
6C6 Pentoda Det. or Amp. 3E775— List, \$1.25. YOUR PRICE 66¢	30 Trio List, \$1.30.
STATE OF The Post of Amp.  Service of Am	31 3E7 List, \$1.30.
12A5 S2-10. YOUR PRICE \$1.11	List, \$1.90.
List, \$2.10. YOUR PRICE \$1.11  1273 Half Wave Rectifier 3E779— List, \$1.20. YOUR PRICE. 63¢	34 Vari
25Z5 Voltage Doubling Reet. 3E780—\$1.06	35 Vari
Dist, #2.00. 1008 1810E 1	List, \$1.30.

Triode Power Amp. or Osc.	and Pertable Mu Pentode Amp
10 3E784— \$2.65 List, \$5.00. YOUR PRICE	39 3E803 List \$1.50. YOUR PRICE 79¢
WD11 Triode Detector 3E785—\$1.59	40 Triode Det. or Amplifier 3E804— \$1.06
WX12 Triode Detector List, \$3.00. YOUR PRICE \$1.59	Pentode Power Amplifier 3E805— List \$1.60. YOUR PRICE 84¢
12A Triode Det. or Amp. 3E787— YOUR PRICE 69¢	Pentode Power Amplifier 3E806— List \$1.60. YOUR PRICE 84¢
Twin Class B Triode Amp. 3E788— List, \$1.50. YOUR PRICE 79\$	43 Pentode Power Amplifier 3E807— \$1.32
20 Triode Power Amplifier 3E789— \$1.59	44 3E808— TIST \$1.50. YOUR PRICE 79¢
22 Screen Grid Det. or Amp. 3E790—\$1.06	Triode Power Amplifier 3E809— List, 75c. YOUR PRICE 40¢
24A Screen Grid Det. or Amp. 3E791— List, \$1.20. YOUR PRICE 63¢	46 Dual Purpose Power Amp. 3E810— 82¢
26 Triode Amplifier 3E792— List. 65c. YOUR PRICE 34¢	47 Pentode Power Amplifier 3E811— List \$1.30. YOUR PRICE 69¢
27 Triode Det. or Amplifier 3E793— List. 70c. YOUR PRICE 37¢	48 Power Amplifier 3E812— List \$3.00. YOUR PRICE \$1.59
30 Triode Det. or Amplifier 3E794— List, \$1.30. YOUR PRICE 69¢	49 Dual Purpose Power Amp. 3E813— List \$1.70. YOUR PRICE 90¢
31 Triode Power Amplifier 3E795— List, \$1.30. YOUR PRICE 69¢	Triode Power Amplifier 3E814— List \$4.00. YOUR PRICE \$2.12
32 Screen Grid Det. or Amp. 3E796— \$1.00	Variable Mu Amplifier 3E799— List \$1.30. YOUR PRICE 69¢
Pentode Power Amplifier 3E797— \$1.11	52 Dual Purpose Power Amp. 3E816— List \$1.60. YOUR PRICE 84¢
34 Variable Mu Pentode Amp. 3E798— \$1.14	Twin Class B Triode Amp. 3E817— List \$1.80. YOUR PRICE 95¢
35 Variable Mu Amplifier 3E799— List, \$1.30. YOUR PRICE 69¢	55 Diode Det. & Triode Amp. 3E818— List \$1.60. YOUR PRICE 84¢
36 Sereen Grid Det. or Amp. 3E800— 79¢	Triode Det. or Amplifier 3E819— List \$1.20. YOUR PRICE 63¢
Triode Det. or Amplifier. 3E801— List \$1.20. YOUR PRICE 63¢	57 Pentode Det. or Amplifier 3E820— List \$1.65. YOUR PRICE 87¢
Pontada Pawar Amalifica	Variable Mu Pentode Amn

Quality	
3 3E803 Test \$1.50. YOUR PRICE 796	59 Universal Power Amp. 3E822— \$1.06
10 Triode Det. or Amplifier 3E804— \$1.06	71A Triode Power Amplifier 3E823— 40¢
Pentode Power Amplifier 3E805— lst \$1.60. YOUR PRICE 84¢	75 Dlode Det. & Triode Amp. 3E824— List \$1.60. YOUR PRICE 84¢
Pentode Power Amplifier 3E806— alst \$1.60. YOUR PRICE 84¢	76 Triode Det. or Amplifier 3E825— List \$1.20. YOUR PRICE 63¢
Pentode Power Amplifier 3E807— \$1.32	77 Pentode Det. or Amp. 3E826— List \$1.80. YOUR PRICE 95¢ 78 Var. Mu Pent. Det. or Amp. 3E827— List \$1.80. YOUR PRICE 95¢
14 3E808— 79¢	78 3E827— List \$1.80. YOUR PRICE 95¢
Triode Power Amplifier 3E809— ist, 75c. YOUR PRICE 40¢	79 3E828- List \$2.60. YOUR PRICE \$1.37
Dual Purpose Power Amp. 3E810— 1st \$1.55. YOUR PRICE 82¢	80 Full Wave Rectifier 3E829— List, 70c. YOUR PRICE 37¢
Pentode Power Amplifier 3E811— 69¢	81 3E830— \$1.85
Power Amplifier 3E812— 1st \$3.00. YOUR PRICE \$1.59	82 Full Wave Mercury Rect. 3E831— List \$1.20. YOUR PRICE 63¢
19 Dual Purpose Power Amp. 3E813— ist \$1.70. YOUR PRICE 90¢	S3V Full Wave Rectifier 3E832— 82¢ List \$1.55. YOUR PRICE 82¢  84 3E833— Rectifier 3E833— 93¢
Triode Power Amplifier 3E814— \$2.12 ist \$4.00. YOUR PRICE	84 3E833— List \$1.75. YOUR PRICE 93¢
Variable Mu Amplifier 3E799— ist \$1.30. YOUR PRICE 69¢	85 Dlode Det. & Triode Amp. 3E834— List \$1.60. YOUR PRICE 84¢
Dual Purpose Power Amp. 3E816— 1st \$1.60. YOUR PRICE 84¢	89 3E835— List \$1.80. YOUR PRICE 95¢
Twin Class B Triode Amp. 3E817— ist \$1.80. YOUR PRICE 95¢	V99 3E836- \$1.19
Diode Det. & Triode Amp. 3E818— ist \$1.60. YOUR PRICE 84¢	X99 Triode Det or Amplifier 3E837— YOUR PRICE 796
Triode Det. or Amplifier 3E819— 1st \$1.20. YOUR PRICE 63¢	BA Full Wave Gaseous Rect. 3E838— List \$7.50. YOUR PRICE \$3.97
Pentode Det. or Amplifier 3E820—	BH Full Wave Gaseous Rect. 3E839— See \$4.65 YOUR PRICE \$2.46

OOA Triode Det. or Amplifier 3E781— \$2.12

O1A Triode Detector or Amplifier 3E782— 32¢

1-V Half Wave Rectifier 3E783-List. \$1.25. YOUR PRICE.. 66¢ 38 Pentode Power Amplifier.
3E802—
77¢ | 58 Variable Mu Pentode Amp.
3E821—
List \$1.45. YOUR PRICE ... 77¢ | 58 Variable Mu Pentode Amp.
3E840—
List \$1.45. YOUR PRICE ... 87¢ | 3E840—
List \$2.75. YOUR PRICE \$1.45 Variable Mu Pentode Amp. 3E821-

List \$4.65. YOUR PRICE \$2.46

**Nationally Advertised** 

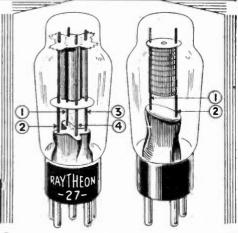
It will never be necessary for you to "sell" a customer Raytheon 4-pillar It will never be necessary for you to "sell" a customer Raytheon 4-pillar Tubes—The millions of advertising dollars that have, and are, being spent to impress the public with this exclusive patented feature, have firmly established Raytheons in the minds of Set owners as the standard of quality by which other Tubes are judged. With such tremendous nation-wide publicity and universal public acceptance behind them, Raytheon 4-pillar Tubes will sell themselves. themselves.

Complete Selection
Raytheon 4-pillar Tubes are made in all types—including spray-shield—to fit any Set. With this line you have a Tube for every customer-no lost sales,

#### Make 10% to 15% Bigger Profits

There are at least five good reasons why it will pay you to handle Raytheon Tubes exclusively. Here they are:

- You can buy them outright—and save 10% to 15% by paying cash.
- Their quality is of the bestperfect performance with long life.
- Nationally Advertisedeasiest sold because best known,
- Complete Selectiona Tube for every Set.
  - 4-pillar Construction—
    the only Tube having this patented exclusive Raytheon feature.



#### The Big Dealer Discount

#### Special Spray Shield Types for MAJESTICS

(SS Indicates Spray Shield)

24S List, \$1.3	3E841— 0. YOUR PRICE 69¢
275	Triodo Det-Amp. (SS) 3E842— 0. YOUR PRICE 42¢
0.00	Vari Mu S.G Amn (SS)

355 3E843— List, \$1.40. YOUR PRICE ..... 74¢

555 Dlode Det.-Triode Amp. (SS) List, \$1.70. YOUR PRICE ..... 90¢

565 Triode Det-Amplifier (SS) 3E845-List, \$1.30. YOUR PRICE .... 69¢ 575 Pentode Det-Amplifier (SS) 3E846-

List, \$1.75. YOUR PRICE ..... 93¢ Detector-Amplifier 57AS 3E847-

List. \$1.75. YOUR PRICE .... 93¢ 585 Vari Mu Pentode Amp. (SS) 3E848-List, \$1.75. YOUR PRICE ..... 93¢

Super Con. R.F. Amp. 3E849— 85AS List, \$1.75. YOUR PRICE .... 93¢

855 Diode Det-Triode Amp. (88) 3E850-YOUR PRICE ..... List, \$1.70.

Detector-Oscillator (SS) 2A7S List. \$2.30. YOUR PRICE . \$1.22 Detector Oscillator (SS) 6A7S

List. \$2.30. YOUR PRICE . \$1.22 Diode Det-Pentode Amp. 6**B**7**S** List. \$2.10. YOUR PRICE . \$1.11

Triode Pent. Det Osc. (SS) 3E854-List, \$1.90. YOUR PRICE .. \$1.00

6C7 Duo-Diode-Triode 3E855-List, \$1.90. YOUR PRICE .. \$1.00

6D7 R. F. Amplifter 3E856-List. \$1.75. YOUR PRICE ..... 93¢

**6E7** Super Cont. R.F. Amp. 3E857— List, \$1.75. YOUR PRICE ..... 93¢

6Y5 Full-Wave M-V Rectifier List. \$1.90. YOUR PRICE .. \$1.00

#### Raytheon Multi-Adapter

Special Offer with Order for 25 Assorted Raytheon Tubes

\$625

Brings your Tube Tester up-to-date. No individual adapters noe de d. Supplies all filament voltages not available on your old Tube Tester and allows for testing any number of new tubes that

number of new tubes that may be brought out in the future. It is no flexible that every possible connection of interelement arrangement of plate, grids, screen, cathode can be makes additional charts unnecessary. In leather case, size 7.89 kg/3/4 inches.

3E859—YOUR PRICE \$7.45 (If purchased on Tube Deal.)

#### Raytheon Tool Kit \$2.17

This is the ideal Radio Ser by

men. Made by
one of the country's leading tool makers. Consists of a Univ
Chuck Handle. 3 Screw-driver Blades. 5
Wrenches and 3-in-1 Bakelite Balancing Wrenches and 3-in-1 Bakelite Balancing
Fitted with neat leatherette roll type case. Fits
veniently Into Raytheon carrying case. 

\$2. a University s, 5 Socket ing Wrench.

3E860-YOUR PRICE \$2.55 (With an order for 10 Raytheon Tubes...\$2.17) Raytheon



Carrying Case \$1.06

A very substan-tually made, leatherette covered case measuring 19 inches long, 9 inches wide and 7½ inches Large enough to hold a full set of tubes and A very handr item for Service calls. Finish black with brass fittings. tubes and tools

SERGI—Each SI.35
(With Order for 5 Raytheon Tubes....\$1.06)

#### Raytheon Rider's Manuals

Here's your chance to get these famous service data books at big savings. See page 100 for complete description. 3E862-VOLUME | \$4.99

YOUR PRICE ..... (With order for 15 Raytheons) 3E863-VOLUME 11\$4.32

YOUR PRICE .... 94.3 (With order for 15 Raytheons) 3E864-VOLUME III \$4.99

PRICE (With order for 15 Raytheons) NOTE: You may secure all three Volumes with an order for 35 Raytheon Tubes. Volumes for \$14.30

#### Why Raytheon 4-Pillar Construction is Best

There are more than thirty elements in every Radio Tube, no matter what the make -tiny pieces of wire and delicate bits of metal. When the Tube is made, these fragile elements are properly adjusted at the plant, placed in just the right position to provide the clear, sweet-tone reception that the Radio Set was made to give. Any change in the spacing of these elements changes the characteristics of the Tube. Unless the original adjustment of these elements is maintained to the thousandths of an inch the Set cannot perform the way it should.

Jolts, jars and vibrations affect ord-inary two-support Tubes and you can never be sure that their original factory adjustment will be retained through the bumps of shipment and handling, to say nothing of vibrations while the set is being used.

Raytheon 4-pillar Tubes on the other

hand come to you exactly as they leave the laboratory. Four strong pillars keep the elements in place, maintaining the hair-line accuracy with which they were assembled. And because of their unique construction. they will stay that way throughout their long life. Heavy vibrations caused by the Dynamic Speaker, knocks and bumps incident to store-handling—the slight mishaps that impair and even ruin ordinary Tubes leave Raytheons unaffected.

#### Who Uses Raytheons

In huge planes of the great continental transport companies, alert police cars on watch throughout the country, in automobile Radios and for all other purposes where the hardest usage must be withstood with unfailing dependability, Raytheon 4pillar Tubes are extensively used. . . . It is the one Tube that defiies abuse . . the one Tube that outlasts all others.

Therefore when a Set owner comes to you for new Tubes you can recommend with confidence Raytheons, making not only a satisfied customer, but also a 10% to 15% greater profit for yourself!

#### Things to Help You Sell Raytheons

Many arresting window displays, window streamers, display stands, consumer leaflets, data charts, etc., are being issued from time to time to tie up with the Raytheon advertising campaigns being carried on in the country's leading Radio periodicals. If you can use this material please advise us when placing your order for Raytheons and we will place your name on the list to receive all advertising assistance available.

## The Standard Comparison

## Genuine-

#### Cunningham Radiotron

#### Merchandising Aids and Service Helps Successful Servicemen Advertise-

More profit, greater volume, satisfied customers. Advertising builds confidence, as well as more business. The your firm name in with Cunningham and profit by the millions of dollars Cunningham spends on national advertising. You increase your customer's confidence in you when you handle reliable well known merchandise. The advertising plees on this page have been selected because of successful results obtained on tests by leading servicemen. This is the most economical profit-producing publicity you can buy.

#### Other Advertising Material Free

To our customers who are prepared to carry a reasonable stock of Cunningham Tubes and display advertising helps, we will, upon your request, astvise E. T. Cunningham Advertising Department of your tube sales, and recommend that you should be supplied free with the material they have available for larger dealers.

#### Tube Stickers

Every time you test a tube, put on a Cunning-ham Tube Test Sticker. Sew up the renewal sale. Makes every tube a selling agent for you. The cost is negligible, the value great. Has space for date sold, date tested, satisfactory, doubtful and unsatisfactory indications. Im-printed with 3-lines (Your name, address and city). Print name plainly.



D996-Roll of 2000 Tube Stickers. \$1.00 YOUR PRICE .....

### THE RADIO OF Carrier .

#### Service Billheads

It pays to look the part of a profitable efficient, up-to-date service organization. If the Serviceman's billhead is a sloppy make-shift affair it is liable to counteract an otherwise impressive service layout. This neat form costs no more than many infector billheads. Imprinted with your name, address, city, and telephone number. telephone number.

D997.			64 00
Imprinted,	500	for	 21.00

#### **Not-At-Home Cards**

number. D998. Per 100 imprinted ...... 25¢



00A CE925—Cunningham 00A RE925—Radiotron 00A LIST PRICE	2A6 CE902—Cunningham 2A6 RE902—Radiotron 2A6 LIST PRICE
CE926—Cunningham 01A RE926—Radiotron 01A LIST PRICE	2A7 CE903—Cunningham 2A7 RE903—Radiotron 2A7 LIST PRICE
1A6 CE904—Cunningham 1A6 RE904—Radiotron 1A6 LIST PRICE	2B7 CE915—Cunningham 2B7 RE915—Radiotron 2B7 LIST PRICE \$2.00
CE927—Cunningham 1 RE927—Radiotron 1 LIST PRICE	5Z3 CE920—Cunningham 5Z3 RE920—Hadiotron 5Z3 LIST PRICE \$1.50
1-V CE931—Cunningham 1-V RE931—Radiotron 1-V LIST PRICE	6A4 CE907—Cunningham 6A4 RE907—Radiotron 6A4 LIST PRICE
2A3 CE900—Cunningham 2A3 RE900—Radiotron 2A3 LIST PRICE	6A7 CE911—Cunningham 6A7 RE911—Radiotron 6A7 LIST PRICE
2A5 CE901—Cunningham 2A5 RE901—Radiotron 2A5 LIST PRICE	6B7 CE918—Cunningham 6B7 RE918—Radiotron 6B7 LIST PRICE

RCA Cunningham Radiotron

RCA Cunningham Radiotron Tubes are now available to
servicemen and dealers on consignment only. No distributor
is permitted to sell these tubes for cash except at full list prices. You pay for the merchandise only after you sell it. Discounts range from 37-5% to 41-5%. If you are interested we will send you full details upon request. In the event the RCA Radiotron Company, Inc., approves your contract we will establish you as an RCA Cunningham Radiotron dealer and you will be able to obtain an adequate stock of these tubes from us.

#### Consignment Exceptions

Consignment Exceptions

The Radolek Company is authorized to sell for eash or on any other basis it elects to Theaters, Schools. Broadcasters, Engineering Laboratories, Research and Manufacturing companies, United States Government, State Governments, County and Municipal Governments, and all governmental and public institutions, at a 40% discount from current list prices. It must, however, be agreed to in a contract provided by us that tubes so purchased will be used only for installation or use in radio apparatus, equipment or devices either owned, controlled or used by the purchaser; or in radio apparatus, equipment or devices (except receiving apparatus) manufactured by the purchaser for resale. If you can classify under any of the exceptions write us for a contract and other details.

6C6 CE905—Cunningham 6C6 RE905—Radiotron 6C6 LIST PRICE	CE937—Cunningham 27 RE937—Radiotron 27 LIST PRICE
6D6 CE906—Cunningham 6D6 RE906—Radiotron 6D6 LIST PRICE	30 CE938—Cunningham 30 RE938—Radiotron 30 LIST PRICE
6F7 CE908—Cunningham 6F7 RE908—Radiotron 6F7 LIST PRICE	31 CE939—Cunningham 31 RE939—Radiotron 31 LIST PRICE
CE928—Cunningham 10 RE928—Radiotron 10 LIST PRICE	32 CE940—Cunningham 32 RE940—Radiotron 32 LIST PRICE
CE929—Cunningham 11 RE929—Radiotron 11 LIST PRICE	33 CE941—Cunningham 33 RE941—Radiotron 33 LIST PRICE
CE930—Cunningham 12 RE930—Radiotron 12 LIST PRICE	34 CE942 Cunningham 34 RE942 -Radiotron 34 LIST PRICE
12Z3 CE922—Cunningham 12Z3 RE922—Radiotron 12Z3 LIST PRICE	35 CE943—Cunningham 35 RE943—Radiotron 35 LIST PRICE
CE909—Cunningham 19 RE909—Radiotron 19 LIST PRICE	36 CE944—Cunningham 36 RE944—Radiotron 36 LIST PRICE \$1.50
20 CE933—Cunningham 20 RE933—Radiotron 20 LIST PRICE	37 CE945—Cunningham 37 RE945—Radiotron 37 LIST PPICE \$1.20
22 CE934—Cunningham 22 RE934—Radiotron 22 LIST PRICE	33 CE946—Cunningham 38 RE946—Radiotron 38 LIST PRICE
24A CE935—Cunningham 24A RE935—Radiotron 24A LIST PRICE	39-44 CE947—Cunningham 39-44 RE947—Radiotron 39-44 LIST PRICE
25Z5 CE921—Cunningham 25Z5 RE921—Radiotron 25Z5 LIST PRICE	CE948—Cunningham 40 RE948—Radiotron 40 LIST PRICE
26 CE936—Cunningham 28 RE936—Radiotron 26 LIST PRICE	CE949—Cunningham 41 RE949—Radiotron 41 LIST PRICE

## Fresh Stock and RCA Radiotrons

#### Tube Agency Consignment Plan

The Radolek Company will be glad to co-operate with all Radolek Company will be glad to co-operate with all Radio Servicemen or Radio Service Organizations so as to enable them to qualify for the RCA Tube Agency. If you have an established RCA Cunningham Radiotron clieatele we want you to write us for your contract.

Only List Prices Specified

We have specified the current list prices on RCA Cunningham and Radiotron tubes. The discount varies according to the quantity of tubes you are able to use over a period of one year.

	Schedule D	Discounts	
Qualification Basis Annual Sales in Units	Basic Rate	For Prompt Payment	Equivalent
Under 1,000	37%	5%	40.15
1,000-2,500 2,500-5,000	38%	5%	41.1
5.000-10.000	39% 40%	5% 5%	42.05
Over 10,000	41%	5%	43. 43.95

Your contract must be approved before any of these discounts are applicable. All contracts start on the 37% Basic Rate and are adjusted to high Basic Rate when sales so justify.

		1
CE951—Cunningham 42	CE966—Cunningham 58	an an
RESSI—Radiotron 42 LIST PRICE \$1.60	RE966 Radiotron 58 LIST PRICE \$1.65	0 4m
CF953—Cumpingham 42	CE967—Cunningham #0	Carantis Vicus
RE353 Rediotron 43 \$2.50	LIST PRICE \$2.00	-
CF954 Cunningham 11 20	CF972 Cupping to a	Service
RE954 Radiotron 44-39 \$1.50	RE972—Radiotion 71A LIST PRICE	This form comes pad, with two sheets for information to be
CE955 Cunningham 45	CE974 Cuputant	are turned over to the
LIST PRICE	RE974 Radiotron 75 \$1.60	
CE956—Cunningham 46 RE956—Radiotron 46	CE975—Cunningham 76 RE975—Radiotron 76	original is returned to and entering inform record.
RE956—Radiotron 46 LIST PRICE \$1.55		D993 Three pads your name and address
CE957—Cunningham 47 RE957—Radiotron 47 LIST PRICE	CE976—Cunnlagham 77 RE976—Radiotron 77 LIST PRICE	
48	78	
CE958—Cunningham 48 RE958—Radiotron 48 LIST PRICE \$3.00	CE977—Cunn ngham 78 RE977—Radiofron 78 LIST PRICE	
49	79	3 - 12
CE959—Cunningham 49 RE959—Radiotron 49 LIST PRICE	CE978—Cunringham 79 RE978—Radbotron 79 LIST PRICE \$2.60	
50	80	
CE960—Cunningham 50 RE960—Radiotror 50 LIST PRICE	CE979—Cunningham 80 RE979—Radiotron 80 LIST PRICE	PRICE REFERENCE (size 13x6 in., will be
53	81	CE984 Cunningham 85
CE962—Cunningham 53 RE962—Radiotron 53 LIST PRICE	CE980—Cunningham 81 RE980—Radiotron 81 LIST PRICE \$3.50	RE984—Radiotron 85
55 CE963—Cunningham 55	CE981—Cumpingham 86	89 CE986—Cunningham 89 RE986—Radiotron 89
RE963—Radiotron 55 LIST PRICE \$1.60	RE981 Radiotron 82 \$1.20	LIST PRICE
CE964 Cunningham 56	83	99V CE987—Cunningham 997 RE987—Radiotron 99V
RE964—Radiotron 56 \$1.20		LIST PRICE
57 CE965—Cunningham 57 RE965—Radiotron 57	CE983—Cunningham 84	99X CE988—Cunningham 993
RE965—Radiotion 57 LIST PRICE \$1.65	LIST PRICE \$1.75	RE988 Radiotron 99X LIST PRICE

## Dependable and Long Lived

#### Radio Tube Manual

The Manual contains more than 80 pages of data, including 20 pages of general cluding and is followed by a lost of installation and spication. Also contains a characteristics chart, a sowket connection chart and from one to four curves for most tube types.

106 page 10 pages of shipping expense of.....

Additional copies, Each ..... 25 c



#### Socket Layout Guide

This booklet shows the types of tubes and the number of each used in practically every standard make and model of Radio Receiver now in use. Contains data on all important Sets made since 1920. An indispensable reference book for every Radio Tube Counter.

D992—One copy FREE to Cunning-ham Tube Purchasers on pay- 10¢

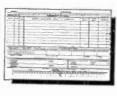
Additional copies, Each..... 50c

#### Service Order Form

This form comes in triplicate, 50 sets to a pad, with two sheets of carbon paper. Has space for information to be filled out when the call for service comes in. The original and duplicate are turned over to the Serviceman making the call. The triplicate is filed as a record. The Serviceman fills out the remainder of the form after he has finished the job, and secures the customer's signature. Second copy is given to customer and original is returned to office for making up bills and entering information on permanent service record.

D993 Three pads imprinted with \$1.25 your name and address.....





99 X Cunningham 99X

#### **Prospect Sales and Service** Record Form

Two ply cardboard cards 4x6 in., printed two sides. On the "prospect" side has space for recording much prospect and sales information pertaining to Tubes, Radio Sets and Electrical Appliances. Cards of customers who prossess radio sets are turned around in the file so that the complete record faces forward. D994-

PRICE REFERENCE CARDS showing latest list prices on all types of tubes; size 13x6 in., will be sent FREE on request to Cunningham Tube Purchasers.

85 CE984—Cunningham RE984—Radiotron 85 LIST PRICE \$1.60	112A CE932—Cunningham 112A RE932—Radiotron 112A LIST PRICE \$1.30
89 CE986—Cunningham 89 RE986—Radiotron 89 LIST PRICE \$1.80	874 RE973—Cunningham 874 RE973—Radiotron 874 LIST PRICE \$4.90
99V CE987—Cunningham 99V RE987—Radiotron 99V LIST PRICE \$2.25	876 CE989—Cunningham 876 RE989—Radiotron 876 LIST PRICE \$6.70

\$1.50

CE985 Cunningham 8 RE985 Radiotron 886

LIST PRICE ......



Your DISCOUNT Over

SIX MONTHS GUARANTEE
burnouts and breakage alone are excepted.

#### 50 and 10%

Many of the Net Prices Quoted Figure as Low as 60 and 10% Discount!

#### GOLD SEAL Majestic Type Tubes

These tubes are equipped with special shields, and assure a satisfactory replacement in all Majestic receivers using the types listed below.

Majestic receivers using the types listed	
2453E500-List, \$1.30.	59¢
	36¢
	53¢
555 3E503-Lim, \$1.70	76¢
	59¢
575 3E505-List, \$1.75.	79¢
	79¢
585 3E507—List, \$1.75.	79¢
58AS 3E508 List. \$1.75.	79¢
85AS 3E509 List, \$1.70.	76¢
2A75 3E510 List, \$2.30. \$1	.03
6A7S 3E511-List, \$2.30. \$1	.03
6B7S 3E512-List, \$2.10.	)4¢
6D7 3E513List, \$1.75.	79¢
	79¢
	85¢

ooA	3E520-		\$4.00.	\$1.14
01A	3E521- YOUR PR	List, ICE	\$0.60.	27¢
1 <b>V</b>	3E522-	List,	\$1.50.	54¢
1A6	3E523- YOUR PR		\$1.75.	68¢
106	3E524-YOUR PR		\$2.20.	89¢
2A3	3E525- YOUR PR		\$2.25.	\$1.01
2A5	3E526 YOUR PR		\$1.60.	64¢
2A6	3E527 YOUR PR		\$1.60.	69¢
2A7	3E528- YOUR PR	List.	\$2.20.	89¢
2B6	3E529 YOUR PR	List. ICE	\$2.50.	\$1.13
2B7	3E530-YOUR PR	List,	\$2.00.	79¢
<b>5Z3</b>	3E531-	List,	\$1.50.	64¢
6A4		532 UR	-List,	\$1.60. 69¢
6A7	3E533- YOUR PR	List,	\$2.20	88¢
6B7	3E534- YOUR PR	List,	\$2.00.	79¢

3E535List, \$1.25. YOUR PRICE	569
6 3E536-List, \$1.25.	569
7 3E537-List, \$1.80.	81
3E538-List, \$5.00. YOUR PRICE	\$1.79
3E539—List, \$3.00.	939
3E540-List, \$4.30. YOUR PRICE	491
Z3 3E541-List, \$1.20.	. 519
3E542-List, \$1.50. YOUR PRICE	689
3E543-List, \$3.00. YOUR PRICE	\$1.35
3E544—1.ist, \$2.00. YOUR PRICE	859
3E545-List, \$1.20.	
25 3E546-List, \$2.00.	799
3E547—List, \$0.65. YOUR PRICE	299
3E548-List, \$0.70. YOUR PRICE	329
3E549—List, \$1.30. YOUR PRICE	499
	3E536—List, \$1.25. YOUR PRICE  3E537—List, \$1.80. YOUR PRICE  3E538—List, \$5.00. YOUR PRICE  3E539—List, \$3.00. YOUR PRICE  3E540—List, \$1.30. YOUR PRICE  3E541—List, \$1.20. YOUR PRICE  3E542—List, \$1.50. YOUR PRICE  3E544—List, \$2.00. YOUR PRICE  3E545—List, \$1.20. YOUR PRICE  3E546—List, \$1.20. YOUR PRICE  3E547—List, \$0.65. YOUR PRICE  3E547—List, \$0.65. YOUR PRICE



II oSex

_							2.00.	uving								
See Explan	atory Note, I	Bottom	of Pa	je VI	ent	ent		mpe	Max.	ED DS	Grid V.	Recommended Ohms Bias Resistor	Amplification Factor	Recommended Ohms Plate Load	Power Output Milliwatts	Total Power Consumption In Watte
Bottom View of Sockets	Tube Circuit Diagram	Туре	List	Purpose	Flament Volts	Filament Amps.	Plate Voits	Plate Milliamps	Screen Volts Max.	Screen Milliamps	Neg.	Recon Ohms Resist	Ampli	Recon Ohms Load	Power	Total Consult
(D)	·	00A	\$4.00	Detector Only	5 D. C.	0.25	45	1.5			5		20			1.3
	<i>-</i>	01A	.60	General Purpose Triode	D. C.	0.25	135	3			- 9	3000 1 Watt	8			1.4
	e 📛	10	5.00	Power Amplifier Oscillator	7.5 A. C.	1.25	425	18			-39	2170 2 Watt	8	10000	1600	11
	· (5)	12A	1.30	Amplifier Detector	Ď. C.	.25	180	7.7			-13.5	760 15 Watt	8.5	10000	260	1.5
	C 3 C	14	2.25	Philes Special DetAmp.	14 D. C.	0.3	180	4	90	1.7	- 3	525 14 Watt	400			4.4
SC C	2	15	2.85	Mixer-Osc. Sub. 1A6	2 D. C.	.205	135	1.85	67.5	0.6	- 1.5	610 % Watt	530			0.6
		17	1.50	Philco Special DetAmp.	14 D. C.	0.3	135	4.5			- 9	2000 ½ Watt	9			4.7
sc Sk	g 50	18	2.75	Philos Power Pentode	14 D. C.	0.3	250	34	250	7.5	-16.5	400 4 Watt	220	9000	3000	7.2
	GI - GZ	19	1.50	Class "B" Output	D. C.	0.26	135	25			0			10000	2100	2.6
	c ( )	20	3.00	Early Batt. Triode	3.3 D. C.	0.132	135	6.5			-22.5	"C" Batt.	3.3	6500	110	.55
W.	c ( sc	22	2.00	Early Batt. Tetrode	3.3 D. C.	0.132	135	3.7	67.5	1.3	- 1.5	"C" Batt.	160			.45
SC C	0 00	24A	1.20	Screen-Grid DetAmp.	2.5 D. C.	1.75	250	4	90	1.7	- 3	525 1 Watt	630			5
	c-(2)	26	.65	R. F. er A. F. Ampliffer	1.5 A. C.	1.05	180	6.2			-14.5	2320 1 Watt				2.6
P( 3) K	2 (2)	27	.70	General Purpose Triode	2.5 A. C.	1.75	250	5.2			-21	4100 1.5 Watt	9			5.8
* (3)×	2 0	29		High Mu Detector	2.5 A. C. D. C.	1	180	4.5		,	- 3	6675 1% Watt	30			2.7
	c (5)	30	1.30	General Purpose Triode	D. C.	0.06	135	3			- 9	3000 ½ Watt	9.3			1.7
	c (5)	305		Spec. Triad S-W Tube	D. C.	0.06	135	3			- 9	3000 ½ Watt	9.3			1.7
	c ( )	31	1.30	Pwr. Amp. Triode	D. C.	0.13	135	8			-22.5	2800 or "C" Batt.	3.8	7000	185	.35
	c \$ 50	32	1.90	R. F. Amp. Tetrode	D. C.	0.06	135	1.7	67.5	0.4	- 3	1425 or ' C" Batt.	610			1.5
p ( 3) 50	c \$ 50	33	2.10	Pwr. Output Pentode	D. C.	0.26	135	14.5	135	3	-13.5	770 or "C" Batt.	70	7000	700	1.2
	c 356	34	2.15	Var. Mu. R. F. Amp.	D. C.	0.06	135	2.8	67.5	1	- 3	800 or "C" Batt.	360			.2



#### **CONFIDENCE** Tube Tester

#### Four Simple Operations-Four Straight Sockets

We guarantee that the operation of this tester is so simple, the instructions so clear that your customer can accurately test his own tubes after you guide him in testing the first tube.

Let your wife or clerk self tubes for you. With the Confidence Straight Four Tube Tester, they can serve your customers just as well on tube testing as you can. How many sales can be made while you are out on calls?—How many tube sales were lost because the tester in your be made while you are out on calls?—How many tube sales were lost because the tester in your store was too complicated for anyone besides yourself to operate? Every tube in the Radolek Tube Chart may be tested without adapters in this instrument. After adjusting the line voltage with slider 4, observe the three numbers opposite the tube type on the table in the lid of the tester. Adjust the three sliders to their correct positions and insert the tube in the socket it fits. The meter indicates GOOD or BAD. A cathode heater leakage test is made while the tube is hot. Other shorts indicate on the ruby jewel adjacent to the meter.

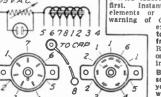
Adapters are not necessary with the Confidence Straight Four Tube Tester. Every tube employed in standard radio receivers for the past six years can be tested quickly and accurately on this modern us to date tube tester. A feature of Confidence Tube Testers incorporated in this model is the 01A tube used as a half-wave rectifier for the meter when measuring A. C. line voltage on the D. C. i mil. 3% in D'Arsonval meter. The tube is in service only when the line voltage button is pressed. Two sockets are provided for testing 2% and 6 volt pitol lights. A six volt bulb may be left in the 2% volt socket as a pilot for the tester. Provision is made under the panel for wiring for about 30 different circuits which might someday be necessary if new tubes are announced. Size of case 10"x15"x6%" with slip hinge cover.

1E2540—Confidence Straight Four Tube Tester. \$4361 YOUR

See Expla	natory Note, E	Bottom	of Pa	ge VI				1 2	범		1	anded	tion	nded	tput	ret
Bottom View of Sockets	Tube Circuit Diagram	Туре	List	Purpose	Flament	Fllament Amps.	Plate Volta	Plate Millamps	Screen Volts Max.	Screen	Neg. Grid Blas V.	Recommended Ohms Bias Resistor	Amplification Factor	Recommended Ohms Plate Load	Power Output Milliwatta	Total Power
a Com	G . SG	35	\$1.30	Var. Mu. Same as 51	2.5 A. C.	1.75	250	6.5	90	2.5	- 3	333 Min.	420			4.8
SC C	i 50	36	1.50	Gen. Pur. Tetrode Same as 64A.	6.3 A. C. D. C.	0.3	180	3.1	90	1	- 3	750 ½ Watt	525			2.9
	£	37	1.20	Triode Same as 67A	6.3 A. C. D. C.	0.3	180	4.3			-13.5	3150 1 Watt	9.2			2.8
S C C	gsc	38	1.45	Pentode Same as 68A	6.3 A. C. D. C.	0.3	180	14	180	2.4	-18	1100 2 Watt	120	11600	1000	3
SG X	gsc	39	1.50	Var-Mu Pentode Same as 44 and 65A	6.3 A. C. D. C.	0.3	250	5.8	90	1.4	- 3 Min.	417 ½ Watt	1050			2.1
	c - (1)	40	2.00	Early Hi-Mu Triode	D. C.	.25	135	0.2			- 1.5		30			1.3
	c	40 SOI	6.00	Arcturus-Dia, T. Sonora Spec.	15 A. C.	0.35	180	21			-40.5	Batt.	3	4000		6
	c sc	41	1.60	Pwr. Output Pentode	6.3 A. C. D. C.	0.4	180	18.5	180	3	-13.5	627 2 Watt	150	9000	1500	4
SC TO C	g	42	1.60	Pwr. Output Pentode	6.3 A. C. D. C.	0.7	250	34	250	6.5	-16.5	407 4 Watt	220	7000	3000	7.5
Se Com	c sc	43	2.50	AC-DC Pwr. Output Pentode	A. C. D. C.	0.3	100 135	20 34	100 135	4 7	-15 -20	625 488 3 Watt	90 80	4500 4000	900 2000	9.5
S CON	5 50	(39-44)	1.50	Vari-Mu or R. F. Det.	6.3 A. C. D. C.	0.3	90 .	5.6	90	1.6	- 3	417 ½ Watt	360			2
	<i>c</i>	45	.75	Pwr. Output Triode	2.5 A. C.	1.5	250	34			-50	1470 3 Watt	3.5	3900	1600	3.7
P (3 5)50	6 56	46	1.55	Dual Grid Class "B"	2.5 A. C.	1.75	250	22			-33		5,6	6400	1250	22
60		47	1.30	Pantada Outrus	0.5	1.75	300	- 21	050		188 "B"			5800	20000	
P( 3) SG	6-3-56	48		Pentode Output Same as PZ	2.5 A. C.	1.75	250	31	250	6	-16.5	446 4 Watt	150	7000	2700	5
5° (3)×	50	48	3.00	AC-DC Pentode Output	30 A. C. D. C.	0.4	95	47	95	9	-20	357 4 Watt	28	2000	1600	14
	<i>(</i>	RAI	4.50	Arcturus-Dia, T. Sonora Spec.	A. C.	0.35	90	4.5			- 4.5	Batt.	10.9	18000		6
P ( 3) 3G	6-(3)56	49	1.70	Dual-Grid Pwr. Output	D. C.	0.12	135	5.7			-20	3500	4.5	11000	170	3.7
- C	40	50	4.00	Extra Heavy	7.5	1.25	180	55		CI	ass "E'			12000	3500	
S6 ===6	<i>c</i> ( )	51		Powr. Output	A. C.						-70	1275 10 Watt	3.8	3670	3400	12.7
P ( 1/3 ) N	2 50	52	1.30	Var. Mu R. F. (Substitute Type 35)	2.5 A. C.	1.75	180	6.3	90	2.5	- 3	Min.	305			4.8
SG STOKE	SUP SG		1.60	Tetrode Class "B" (Substitute Type 89)	6.3 A. C. D. C.	0.3	100	42			Class	"B" enly a	s a Dou	ible Grid.		
P2 (0) (0) (0)	G1 G2	53	1.80	Twin Triode Class "B"	2.5 A. C.	2	300			Cla	nss "B"			10000	10000	15

#### A. C. Tube Short Checker Kit-"Build-it Yourself"

Neon Bulb Instantly Shows Open Filament or Inter-element Short 115 VAC



Protect your regular tube tester or analyzer from shorted tubes! Test every tube in this short checker first. Instant indication of leakage between any elements or open filament. Gives you adequate warning of defective tubes which might ruin an expensive test meter. You can't afford to smit this spiendid Short Checker from the next tube tester you build! Radolek's Essential Parts Kt includes only the items you need when "building your own tester."

Build the cemplete Short Checker as a

Build the complete Short Checker as a separate piece of test equipment for your service bench. Each numbered wire in the diagram connects te the corresponding numbers on the tube seckets. For 110-120 Volts 25-60 cycles A.C.

#### Essential Parts Kit

Parts supplied: 1-Tapped Choke, 1-Special Variable Resistor, 1-Neon Bulb, 1-4, 5, 6 Hole Tube Socket, 1-Dual 7 Hole Socket, 1-Neon Bulb Socket, and Plans for building. No Panel or Scheme (neludad) Included. 3E2520-YOUR PRICE .....

Principle of Operation
Filament or heater completes circuit
through 3 and 4 in the diagram when tube
is inserted in one of the sockets. With
115 volt A.C. 60 cycle supply,
this momentarily flashes the neon
bulb. Any trace of leakage in
the tube elements places a
"bad" across the sections of the
tapped choke changing its impedance from approximately 0.1
megohm to a negligible quantity.
Practically the full A.C. line
voltage is then applied to the
neon bulb. An open filament does
not cause the initial flash. Complete instructions included.

Principle of Operation

Complete Parts with Case

This Kit consists of Essential Parts Kit and a neatly finished walnut case, size 7"x4%"x3%" high, bakelite panel (cut to size but not drilled) hook-up wire, 40" heavy rubber covered connecting cord and plug. 3E2521-YOUR PRICE .....

Bottom	Tube	Botton	of Pa	go VI	Flament Volts	Filament Amps.	ite Ita	Plate Milliampe	Screen Volts Max.	Screen Millampe	Neg. Grid Blas V.	Recommended Ohms Blas Resistor	Amplification Factor	Recommended Ohna Plate Load	Power Output Milliwatts	Total Power Consumption
View of Sockets	Circuit Diagram	Туре	List	Purpose	IEV No	An	Plate Volts	MA	No.	Ser	ää	\$5 <b>%</b>	Far	<b>2</b> 63	N N	F8:
P CONTRACTOR		55	\$1.60	Diode Lo-Mu Triode	2.5 A. C.	1	250	8			-20	2500 ½ Watt	8.3	20000	350	2.9
r ( ) x	: 3	56	1.20	Improved Triode	2.5 A. C.	1	250	5			-13.5	2700 1 Watt	13.8			3.5
36 (34.) SUP C	SUP SG	57	1.65	HI-Mu. Det. R. F. and Osc.	2.5 A. C.	1	250	2	100	0.5	- 3	1200 1 Watt	1500			3.5
S G SUP C	SUP S G	58	1.65	VarMu R. F. Amp.	2.5 A. C.	1	250	8.2	100	2	- 3	294 ½ Watt	1280			2.75
	10	59	2.00	3 Grid Triode	2.5 A. C.	2	250	35	250	9	-18	408	100	6000	3000	
S G ( 1 3 SUP) K	SUP SG			Pentode	A. C.		250	26	As T		-28	1150	6	5000	1250	2.5
							400			lass "B				6000	20000	
	2 30	64	1.70	Nat. Un. Tetrode Substitute type 36 In Parallel	6,3 <b>A</b> . C.	0.4	135	3	67.5	3	-1.5	250 ¼ Watt	370			2.8
S C C C X	c 350	65	1.60	A. F. Amp. Substitute type 36 in Parallel	6.3 A. C. D. C.	0.4	135	3.5			- 9	2570 34 Watt	9			3
- ( ) ×	2	67	1.30	Det,-Amp. Substitute type 37 In Parallel	6.3 A. C. D. C.	0.4	135	5	67.5	3	-15	1870 3 Watt	320			2.7
S C C C C C C C C	csc	68	1.55	Output Pentode Substitute type 38 In Parallel	6.3 A. C. D. C.	0.4	135	14	135	3	-13.5	795 1 Watt	90	7500	650	3.14
	200	69		Spec. HI-Mu. Detector	6.3 A. C. D. C.	0.3	180	4.5			- 3	666 % Watt	30			2.1
	· (A)	71A	.75	PwrAmp. Triede	5 A. C. D. C.	.25	180	20			-43	2150 2 Watt	3	4800	790	2.3
P ( 123) X		75	1.60	Double Diede Hi-Mu Triede	6.3 A. C. D. C.	0.3	250	0.8			-2.	2500 ½ Watt	100		-	2.1
SG SUP G	SUP SG	77	1.80	HI-Mu R. F. Pentode	6.3 A. C. D. C.	0.3	250	2.3	100	0.6	- 3	1035 1/2 Watt	1500			2.1
SG SUP G	SUP SG	78	1.80	Var. Mu. R. F. Pentode	6.3 A. C. D. C.	0.3	250	7	100	2	- 3	334 ½ Watt	1160			2.4
P(2:13)P1	6 01	79	2.60	Class "B" Twin Triede	6.3 A. C. D. C.	0.6	180	7.5			Class '	'B''		7000	5500	9.3
POR GONE		85	1.60	AVC Diode Triode	6.3 A. C. D. C.	0.3	250	8			-20	2500 1 Watt	8.3	20000	350	2.1
SC STORE C	SUP SG	87	1.65	R. F. Pentode Same as 57A	6.3 A. C. D. C.	0.4	250	2	100	1	- 3	1000 ½ Watt	1250			2.8
SG SUP G	SUP SG	88	1.65	Var. Mu. R. F. Pentode Same as 58A	6.3 A. C. D. C.	0.4	250	8.2	100	3	- 3	270 ½ Watt	1280			3
SG SUD C	SUP SG	89	1.80	-As a Triode or Pentede	6,3 A. C. D. C.	0.4	250 250	32 32	250	5.5	-31 -25	970 666 1 Watt	4.7 125	5500 6750	350 340	3 3
SC SUP C	SUP SG	89	1.80	-As a Class "B" Amplifier	6.3 A. C. D. C.	0.4	180				0			9400	3500	6
A A	<i>c</i> ⊕	UV99	2.25 1.50	Gen. Purpose Same as 299	3.3 D. C.	0.06	90	2.5			-4.5	"C" Batt.	6.6			5.3



#### TUBE PERFORMANCE METER

Performs Six Basic Functions with One Instrument

Universal Tube Performance Meter, Signal Generator and Output Meter. Neutralizing and Balancing Unit-Comparative Set Efficiency Tester.

#### Easy to Use-Many Uses

Easy to Use—Many Uses
Shielded transmission cable couples
output of modulated oscillator to set
under test. Output meter connects to
power tube plate prong. No change
in connections for all following uses:
As Balancing oscillator; permits
matching of R.F., and I.F. trimmer
condensers. As Comparison Efficiency
Tester: similar sets can actually be
compared to detect difference in gain.
As Neutralizer: the well modulated
algani permits excellent neutralization.
Makes location of loose connections
easy by observing output as each
write is wiggled. Checks efficiency of
A.V.C. circuits. Also compares new
and old tubes in actual service by
difference in total gain.

#### Universal Tube Performance Meter

lias ability to test any tube em-ployed in a radio set. The Perform-ance Meter generates a modulated signal at radio-frequency, thus testing signal at radio-frequency, thus testing a receiver under actual operating conditions. By substituting one new tube at a time in the radio under test, the increased reading on the output meter is proof of the need for new tubes. No special scales—No mathematical computations—No difficulty in explaining action to your customer. No complicated tube socket adapters required. When used with a volt-ohmmeter, radio troubles can be located. The rectifier type capacity

coupled output meter with a variable shunt control may be employed separately.

SPECIFICATIONS: 100% shielded cast aluminum case finished in durable crackle-lacquer, contains batteries. tube, output meter, colis, and control potentiometers. Lithographed panel. Non-removable binding posts. Instructions for operation and location of plate prongs on all types of power tubes included. Accessories required for operation, 1 Type RCA-Cunningham 30 tube, 1 Burgess No. 5126, 22½ told to the collision of the collision o tube, output meter, coils, and control

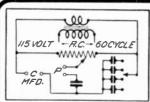


Bargain Price!

IE2545-List, less tube and bat-\$15.95 YOUR PRICE

#### Radolek TUBE CHART With Bias Resistor Data and Total Power Consumption of all standard American Made Radio Receiving Set Tubes.

					_			_	7							
See Explan  Bottom View of Sockets	Tube Circuit Diagram		of Pa		Flament Volts	Filament Amps.	Plate Volts	Plate Millamps	Screen Volts Max.	Screen Milliamps	Nec. Grid Blast V.	Recommended Ohms Bias Resistor	Amplification	Recommended Ohns Plate Load	Power Output Milliwatts	Total Power Consumption In Watta
	Diagram	181	\$1.90	Purpose  Sparton Power Tube	3	1.75	180	20	82.5	82	-32	1600	FAT 5	2000 7000	1500	285 7
				Tube Top Heater	A. C.							2 Watt		1000	1300	ļ .
of John Co	61 625	1A6	1.25	MixerOsc. Same as 15	D. C.	0.06	180	1.3	67.5 Anode 135	2.4 Grid #2 2.3	- 3	1037 1/2 Watt				1.5
	c 😂	2A3	2.25	Multi. Filament Class "A"	2.5 A. C.	2.5	250 300	60 40	Push-F With I	Pull ndeneno	-45 -62 tent Fix	750 10 Watt ed Bias. P-P	4.2 4.2 Outout	2500 5000 3000	3500 10000 15000	10
C2 (10) C3	64 62-5 61 62	106	2.20	Heptode Converter	D. C.	.13	180	2.8	67.5	0.1	- 3		Julian		13000	
SG TO C	c Sc	2A5	1.60	Pentode Output Same as 95 and PZH	2.5 A. C.	1.75	250	34	250	6.5	-16.5	407 4 Watt	220	7000	3000	5
PI PI C	P. K	2A6	1.60	Double Diode Hi-Mu Triode	2.5 A. C. D. C.	0.8	250	0.8			- 2	2500 16 Watt	50		-	4.5
635 63 61 635 63 61 635 63 61	GJ C2 5	2A7	2.20	Mixer. Osc. Converter	2.5 A. C. D. C.	0.8	250	3.5	109 Anode 200	2.2 Grid #2	- 3	300 ½ Watt			-	3
P2 (0) 70 K1062	CI TO K	286	2.50	Doube A-F Amp. Values for Output Sec.	2.5 A. C.	2.25	250	40	2007	4	-24 +2.5	8000 540 545 W.	18	5000	4000	10
56 (1) P2	S S S S S S S S S S S S S S S S S S S	287	2.00	AVC Duo-diode Pentode	2.5. A. C. D. C.	0.8	250	9	126	2.3	- 3	266 35 Watt	730			2.5
P (1,50)K	200	25	2.65	Majestic Duo-Diode	2.5 A. C.	1.75	20	11	With	Special /	Adanter	Substitute	.			4.4
P (12, 15) K	(A)	45	2.65	Majestic Duodiode	2.5 A. C.	1	20	11	Diode	Portion	of Typ	Substitute e 55.				7.7
P ( 3 ) SG	0 50	6A4	1.60	Pentode Pwr. Output Same as LA	6.3 A. C. D. C.	0.3	180	22	180	3.9	-12	463 2 Watt	100	8000	1400	3.3
C3-5 (1-5)C1 P (2-5)K P (2-5)K	Co Cos Cos	6A7	2.20	Mixer Oscillator	6.3 A. C. D. C.	0.3	250	3.5	100 Anode 200	2.2 Grid #2	- 3	525 %Watt				3
SG (3) P2 P (2:45) K G	56	6B7	2.00	Diode Pentode	6,3 A. C. D. C.	0.3	250	9	125	2.3	- 3	265 %Watt	730			2.5
S C SUP C	SUP SG	6C6	1.25	Var-Mu R. F. Pentode	6.3 A. C. D. C.	0.3	250	2.3	100	1	- 3	910 34Watt	1500			2.5
SC (3) P2 P (3) P3 P (4) P4	SG 56	6C7	1.90	AVC Diode	6.3 A. C. D. C.	0.3	250	5.5			- 9	1635 ½Watt	20			2.7
S G SUP G	SUP SC	6D6	1.25	Var. Mu R. F. Pentode	6.3 A. C. D. C.	0.3	250	7.5	100	1.75	- 3	324 ½Watt	1160			2.7
SG SUP SG SS S S S S S S S S S S S S S S S S S	SUP SG SS:	6D7	1.75	R. F. Pentode	6.3 A. C. D. C.	0.3	250	2.3	100	1	- 3	910 %Watt	1500			2.2
SG (0.33,0.55) P (0.2 50) PK	SUP SG	GE7	1.75	R. F. Pentode	6.3 A. C. D. C.	0.3	250	7.5	100	1.75	- 3	324 ½Watt	1160			2.4
SG GI PIGI PC S S X G	SG SG	6F7		Mixer, Osc. Triode Pentode	6.3 A. C. D. C.	0.3	250	6.5	100	1.5	- 3	375 %Watt	900			2.4
SG OFF ON FILCT		12A5	2.10	Double Heater Pentode	12.6 A. C. D. C.	0.3	180	40	180	9	-27	551 5 Watt		4500	2800	8.7



**Universal Condenser** Tester\_Measures All Type Condensers

Electrolytic-Paper-Mica From .0001 to 30 Mfd.

\*\*Port \*\*Means A Baldwin Phone\*\*

Only with a sensitive balanced armature Genuine Nathanie Baldwin Phone at zero hum position of the Potter Condenser Tester. Uses any frequency—Genuine Nathanie Baldwin Phone capacity network in the Potter Condenser Tester. Uses any frequency—Genuine Nathanie Baldwin Phone capacity network in the Potter Condenser Tester. Uses any frequency—Genuine Nathanie Baldwin Phone capacity network in the Potter Condenser Tester to the many of the potter Condenser Tester to the most accurate low priced capacity measuring device on the market. You will find it as useful as your ohmmeter. For capacity network in the Potter Condenser Tester uses any frequency—Genuine Nathanie Baldwin does not deterior to the market. You will find it as useful as your ohmmeter. For capacity of the point capacity tests in filter and bypass circuits. It will speed up your work, locate causes of hum and intermittant reception; you can do the potter Condenser Tester uses of hum and intermittant reception; you can do the condenser the potter condenser. The potter condenser the potter condenser the potter condenser the potter condenser that the potte



3E5298— List. \$17.00. YOUR PRICE .....

With Baldwin Phone and cord. 3E5299—List \$22.00 \$11.65

See Explan	Tube	Botton	of Pa	ge VI	nent	nent 8.	0.5	Plate Milliamps	Screen Volts Max.	Screen	Grid V.	Recommended Ohms Blas Resistor	Amplification Factor	Recommended Ohms Plate Load	Power Output Milliwatts	Total Power Consumption In Watta
View of Sockets	Circuit Diagram	Туре	List	Purpose	Filament	Filament Ampa.	Plate Voits	Plate	Scree	Scree	Neg. Blas	Recol Ohm Resis	Ampl	Recor	Power	Total Consu
	5	401 and 373	\$4.00	Kellog O'v'rhead Heater Triode	3 A. C.	1	180	6			+13.5	2250 ½ Watt	8.7	14000		4
	<i>-</i>	482B	1.65	Sparton P-P A. F. Triode	б. С.	1.25	250	18			-32.5	1805 4 Watt	5	4500	1400	9.5
	· (5)	483	1.65	Sparton P-P A. F. Triode	А. С.	1.35	250	25.3			-40.5	1580 2 Watt	3.3	3900	1600	10
بر ( الم	: (5)	485	1.45	Sparton Triode Quick Heater Replacing 484	3 A. C.	1.25	90	5			- 3	600 1 Watt	12.5			4
p ( ) x	*	486	4.10	Sparton Special Triode	D. C.	.25	90	3			- 3	1000 14 Watt	12.5			1.5
	6	586	4.00	Sparton Pwr. Output Same as 50	7.5 A. C.	1.25	450	55			-80	1450 10 Watt	3.8	4350	4600	14
	c 💮	864	2.10	For Portable Oscillator and Preamplifiers	D. C.	.25	135	3.5			- 9	2575 or "C" Batt.	8.2			.3
SG SA	- Ar	AE		Tetrode Hi-Mu Output	12.6 A. C. D. C.	0.3	100	8.5	100	1.75	-13.5	1330 1 Watt	20	13500	400	4.5
p ( 3) 56	c 55	GA	2.75	Arcturus Special Pentode	5 A. C. D. C.	.25	180	25	180	7.5	-10	307 1 Watt	60	7000	800	5.5
p (3 3) S G	csc	KR5		Kenrad Pwr. Output Pentode	6.3 A. C. D. C.	0.3	165	17	165	3.5	-11	537 2 Watt	100	8000	1200	2.4
Contraction of the contraction o	2 - 1	KR20	3.00	AVC Detector	2.5 A. C.	1	250	3.5					14	.1 Meg		3
Par C	2 0 ×	KR22	2.00	AVC Detector	6,3 A. C. D. C.	0.4	250	3.5					14	.1 Meg		3
SG SUP PC J BX	g	KR25		Pentode Output	2.5 A. C.	1.75	250	34	250	6.5	-16.5	407 4 Watt	220	9000	3000	7.8
p (3) sc	c'	LA	2.75	Pwr. Pentode Substitute 6A4	6.3 A. C. D. C.	0.3	165	17	165	3.5	-11	470 2 Watt	100	8000	1200	3
p ( ) 50	csc	PZ	1.30	Arcturus Number for Type 47	2.5 A, C.	1.5	250	32.5	250	7.2	-16.5	410 4 Watt	95	7000	3000	7
S CONTRACTOR OF THE SECOND	G SG	PZH	1.60	Arcturus Number for Type 2A5	2.5 A. C. D. C.	2	250	33.5	250	8	-16.5	400 5 Watt	100	7000	3500	8.5
	c (1)	WDII	3.00	Early Batt. Sets	1.1 D. C.	.25	135	3			- 9	"C" Batt.	6.5			.3
	c 💮	WX12	3.00	Gen. Purpose Triode Sub. 864	1.1 D. C.	.25	135	3			- 9	"C" Batt.	6.6			.3
c (3) c	6 6	WUN	3.00	Twin Grid AVC. Det.	2.5 A. C. D. C.	1	250	7			-16.5	236 ½ Watt	9.25			3
~ (7.3)×	6 A - 6	WUNA	3.00	For Auto Sets	6.3 A. C. D. C.	0.4	250	7			-16.5	236 1⁄2 Watt	9.25			2.5



#### A Genuine NEON Sign "Radio Service"

14E10734-YOUR PRICE, ONLY In Brilliant Red Neen! Words perfectly formed in glass tubing which is protected by an artistle steel case 20" wide, 8" high, and 5\%" deep. Neon transformer housed within the case. DOES NOT INTERFERE WITH RADIO RECEPTION! Operates on A.C. 110 to 120 volts, 60 cycle only. Low power factor of Neon tubing makes the cost of operation of this sign very slight. Costs no more to operate than a 60 watt bulb.

An Unprecedented Offer
Fully guaranteed for one year. This guarantee

Fully guaranteed for one year. This guarantee does not cover breakage of the tubing which can only be injured by actual physical violence. Tubing is floated on rubber and inconspicuously braced at 10 points. Shipments are made only by Express. We guarantee delivery of sign in perfect condition. ready to plug-in.

#### **Auxiliary Tube Tester**

**8898** 

99999

9**9**9888

800 6666

Used with Any Style Tube Tester 1E8075-YOUR SPECIAL PRICE

\$14.70

Contains 30 sockets, including pre-heaters for new tubes, special A. C. transformer for and 10 volts

#### 1000 Hour Guarantee **Electric Soldering Iron**



At an amazingly low processional light soldering, 105-125 volt. made. 3E4776-YOUR PRICE

Easy Starting Screw Driver



Positive Gripping Action
Will start any size screw in
the most inacessible places.
Self releasing. High grade
bakelite construction.

Number	Dia. Length	Size	Price
3E4637 3E4638 3E4639	14 "x4 14" 56 "x7 34 "x8 14"	2 to 6 6 to 12 2 to 8	9¢ 12¢ 15¢
For TOOL See Pages	S You need in 100 to 105.	Radio Serv	icing,

#### Radolek Tube Chart [Rectifier Tubes]

								-	
Bottom View of Sockets	Tube Circuit Diagram	Type	List	Purpose	Fitament Volts	Filament Amps.	A. C. Plate Volts	Mar. D-C. Output in Milliamps	Total Power Consumption In Watts
(Z) <sup>x</sup>	<u>*</u>	1	\$1.25	Half Wave M-V Rect.	6.3	0.3	350	50	1,89
(1) <sup>x</sup>	x (5)	I-V	1.50	Half Wave HI-Vac Rectifier	6.3	0.3	350	50	1 89
		83	.70	Full Wave Rectifier	5	2	350	125	11
	-	80M	1.55	Kenrad F. W. M. V. Rect. Sub. 83	5	2	425	125	10
	(1)	81	3.50	Half Wave Rectifier	7.5	1.25	700	85	10
	(2)	81 M		Kenrad M.V. Half Wave Rectifier	7.5	1.25	750	85	6.4
	p-(1)-p	82	1.20	Full-Wave M-V Rect.	2.5	3	500	125	7.5
(2)	0-10-0	83	1.55	Full-Wave M-V Rect.	5	3	500	250	15
- (T-)x		84	1.75	Full-Wave M-V Rect.	6.3	.5	225	50	3.2
	p-(1)-p	5 <b>Z</b> 3	1.50	Full-Wave Rectifier	5	3	500	250	15
(T)"	* (5)	6 <b>Z</b> 3	1.25	Full-Wave Rectifier	6.3	0.3	350	50	1.89
PL CT SE	, (E)	6 <b>Z</b> 5	1.90	Double Fil. Full-Wave Rectifier	6.3	0.8	230	60	5.04
(?),×	~ <del>(S)</del>	12Z3	1.20	Half Wave Rectifier	12.6	0.3	230	60	3.78
K	12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1225	1.90	Full-Wave Rectifier	12.6	0.3	225	60	
n, (1, 1) pz	N2 PI	25 <b>Z</b> 5	2.00	Full-Wave Rectifier	2.5	0.3	125	100	
	(2)	866	9.00	Half-Wave Rectifier	2.5	5	7500	600	12.5
P (3.5) X	***	986	1.65	Full-Wave M.V. Rectifier	5	0.5	500	200	2.5
(E.)	× 🖨	AD	1.50	Rectifier For Auto Sets	6.3	0.3	350	50	1.89
	1	AF	1.80	Spec. Arcturus Rectifier Substitute 82	2.5	3	500	125	7.5
	p-(1)-p	AG	2.05	Arcturus Type 83	2.5	3	500	250	7.5
LINE OF LINE	A - N	874	4.90	Voitage Regulator	Operating Starting Operation	yoltag Voltag	e	.90 Vol. 125 Vol. 10-50 M	ts. ts.
	7 00	ВА	7.50	Full Wave Rectifier	Has no Fil'mnt	Max. Volt Max. I Max. I	A.C. Vol s per pla D.C. Ou D.C. Ou	ts (RMS ite. tput 350 tput 300	M.A. Volts.
	7-00	вн	4.65	Full Wave Rectifier	Has no Fil'mnt	Max. Volt Max. Max.	A.C. Vol. s per pla D.C. Ou D.C. Ou	ts (RMS ate. tput 125 tput 300	8) 350 M.A. Volts.

#### Elkon 5,000 Hour "B" Rectifier



Replaces rectifier tube in "B" Eliminator. Dry, solid, rugged self healing.

Just replace the fragile 1,000 hour tube with this sturdy 5,000 hour Elkon EBH and the change is made. Not affected and the change is made. Not affected by accidental surges or overloads. No adjustments required. Shpg. wt., 1/2

3E85—For "B" Eliminators using Raytheon BH Tube.
List. \$6.00.
US SPECIAL PRICE ... 79C



#### Genuine Raytheon Rectifier Tubes

Long Life. No Filament.

Greater economy and reserve power; enough to run a 10-tube set.
Uninterrupted service. No liquids.
Utilizes both halves of the alternating current for rectification. except in BR half wave model.

Stock Num.	Type	Mils.	List	Net
3E840	BR	50	\$2.75	\$1.45
3E839	BH	125	4.65	2.46
3E838	BA	350	7.50	3.97

#### Genuine KELLOGG A. C. Tubes



The original top connection radio tube designed to operate on alternating current. Operates directly nating current. Operates directly from house lighting current with step down transformer. Quiet operastep down transformer.

tion. No hum nor microphonics.

Has excellent tone quality. Extremely rugged construction insures long life and satisfactory service.

Shpg. wt., each about I lbs.

3E875-Type 401. List, \$4.00. YOUR PRICE ..... \$2.33 3E876-Type 403.

List, \$5.00. YOUR PRICE ..... \$2.94



Same type as used in many Sparton, Kellogg and other sets. Excellent quality and a real value.

3E877-Type 401 Tubes. List Price, \$4.00. YOUR

PRICE .....



#### **BARGAIN Power Tubes**

Excellent quality guaranteed tubes. Wonderful values at our prices. You will find them very satisfactory for all work.

3E880—Type 210. 3E881—Type 250. 3E882—Type 281. \$110

PRICE. EACH

#### **EXPLANATORY NOTE**

for Radolek Tube Charts

Watt rating recommended for bias resistor values is high enough to carry the A.C. component of the plate circuit. All bias resistors should be bypassed by sufficient capacity to handle 75% of the A.C. component.

Approximate total power consumption of tubes is given to aid Servicemen in selecting the proper replacement power transformer according to the load the transformer must handle. Usually 15% extra is allowed for power consumed by voltage divider bleeder circuits. Radolek Transformers are rated in safe load capacities.

. winter rose by W C Dea

#### Universal Speaker Tester

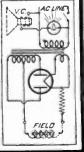


For Aligning Dynamic and Magnetic Speaker Cones

Permits exact centering of any dynamic speaker voice coil or any magnetic speaker armature, while in motion! Actuales voice coil or armature at 60 cycle pulsation which permits use of speaker armature at 60 cycle pulsation which permits use of speaker speaker speaker of cycle 105-120 voit, A. C. Supplies rectified D. C. to any dynamic speaker field coil having more than 250 ohms resistance. A ten watt pilot build in series with the A. C. line supply indicates open voice coil circuits or intermittant shorting of a voice coil. Tester is supplied in a genuine walnut portable carrying case with metal handle and clasp.

3E7975—Tester with 10 Watt Lamp Without type 80 tube.

YOUR PRICE.



#### Sub-Panel Tube Sockets



With Tube Locating Ring



Used as standard equipment by many of the largest set manufacturers. Strong, sturdy, durable laminated construction. Top entirely insulated with positive locating ring. Tubes easily and quickly inserted. New floating contacts eliminate all strain on the bakelite, preventing warping and loss of tension. Contacts self-aligning, assuring a firm positive contact on each tube prong, at all times.

Midget Size

Standard Size

With mounting holes 11/2 inch cen-rs. Overall length 178". Width Width ters.

Mark- Stock

With mounting holes 1% inch cen-ers. Overall length 2%". Width Mark- Num. P'gs ings Num. P'gs ings

ESDON SE		148 551 56.	PLACE OF	T24	1	n	. 6	******			
Num.	P'gs	egani	Num	P'gs	ings	3D6245	4	None	3 D 6 2 6 8	5	238
3 C 6210	-	NYONE	3 C 6229	5	239	3D6261	5	None	3D6269	5	239
3C6221		None	3 C6230	6	41	3D6279	6	None	3 D6270	6	41
3 C 6 2 2 1	5	None None	3 66230	0	31	306282	7	None	3D6271	6	'42
3D8100		None	3 C6231	6	42	(Large-	.850	pin	3D6272	5	'43
(Small-			3 C6232	5	43	circle)	. 000	DATE:	3D8133	5	144
eircle)	. 730	' pin	3D8112	5	44	3D8125	7	None	3 D 6254	4	245
3D8101	4	2A3	3 C6216	4	245	(Small-	.750	' pin	3 D 6273	5	'46
3D8102	6	2A5	3 C 6 2 3 3		46	circle)		P.1.	3D6274	5	247
300101	0	240	300233		30	Citato			3 D 6275	6	'48
3D8103	6	2A6	3 C 6234	5	247	3D8126	4	2A3			
3D8104	7	2A7	3 C6235		48	8 D8127	6	2A5	3D8135	5	'49
3D8105		6A4	3D8113		49	3D8128		2.46	3D8136	7	'53
3D\$106		6A7	3D8114	7	53	3D8129		2A7	3D6255		250
3D8107		287	3D6236	6	55	3D8130		2137	3D6276	5	551
3D8108	7	637	-			-	-	-	3D6277	6	'55
	-	027	3 C6237	5	56	3 D8131	4	523			
3D8109	4	Ci l	3 C 6239		57	3D8132	6	2525	3D6278	5	'56
3D8110		5 <b>Ž</b> 3	3 C6240		58	3D6246		201A	3D6280	6	'57
3D8111	6	2525	3C6242		59	3 D 6 2 4 7	4	210	3D6281	6	'58
3C6211	4	112A	3 C6217	4	171A	3D6248	4	112A	3D6283	7	'59
3C6222	5	224	-				_	-	3D6256	4	171A
3C6223		227	3D8115	6	75	3D6262		224			
	_		3D8116	6	77	3D6249		226	3D8137	6	'75
3C6212		230	3D8117		78	3D6263		227	3D8138	6	.22
3 C 6 2 1 3	4	231	3D8118		79	3D6250		230	3D8139	6	'78
3C6214		232	3 C6218	4	250	3D6251	4	231	3D8140	6	'79
3C6224		233	-	-			1-		3D6257	4	280
3C6215		234	3 C6219		82	3D6252		232			
3C6225	5	235	3 C6220		63	3D6264		233	3D6258	4	281
	-		3D8119		84	3 D 6 2 5 3		234	3D6259	4	'82
3C6226		236	3D8120		85	3D6265		235	3D6260		'83
3C6227		237	3D8121	6	89	3D6266	5	236	3D8141	5	*84
3C6228	5	238							3D8142		'85
				1		3D6267	5	237	3D8143	6	'89
	1					1	1		1	1 -	
	1	Prong	Each	- 1	Per 10	}		Prong	Each	P	er 10
						11	1-				_

#### **Analyzer Multiple Tube Sockets** With Moulded Ears

Your Price

65c

74c



78

Your Price

Excellent quality moulded sockets used in many factory built analyzers and tube checkers. Widely used to replace obsolete sockets having the same mounting dimensions, Naves space. Each socket has many different possible applications. Mounts above or below panel.

3D6730. Na-Ald 456; requires 1A" panel hole. Mounting holes 1a" centers. Receives all 4. 5 and 6 prong tubes. Filament circuits common— all other isolated—9 contracts.

7 c

8c

3D6731. Na-Ald 456E; same as above but requires 1%" panel hole. Mounting holes 1%" centers. Mounting 47 - 59

3D6732. Na-Ald 457; Receives type '47, 5 prong pentode and type '59 7 prong pentode. Cathode of '59 from screen grkl of '47. is isolated from screen grid of '47. Has eight contacts. Requires 1 %". panel hole, Mounting centers 1 %".

panel hole. Mounting centers 14%".

3D6733. Na-Ald 457E. Same as above but requires 14%" panel hole. Mounting holes 146" centers.

List Price, 50c. YOUR PRICE, EACH .....

5 -5 - 7
3D6734. Na-Ald 567A. Receives all 5, 6 and small 7 prong (.75" pin circle) tubes. Has seven contacts. Requires 14" panel hole. Mounting holes 13" centers. Seven contacts.

3D6735. Na-Ald 567EA. Same as above but requires 1%" panel hole Mounting hole 1\(\frac{1}{2}\)" centers.

7 - 7 7 - 7
3D6736. Na Aid 477. Receives 1 prong large (.85" pin circle) and 2 prong small (.75" pin circle). Requires 1 A" panel hole. Mountin holes 1 \(\frac{1}{2}\)" centers. Has seven contacts. Receives 7 Mounting tacts.

3D6737. Na-Ald 477E. above but requires 1%" paramounting holes 1%" centers Same panel hole centers.

29¢

55c

65c

6c

7c

#### Compact Sockets

Moulded black bakelite. Guiding groove for tube prongs. Tubes can be quickly insorted. Perfect contact on each prong. Center hole for screw Center hole for screw
mounting. 1 & inch diameter exactly fits inside standard tube
base. & inch high. Solder luxs project downward for wiring below base.

Stock Na-ald Number Code Prongs Each Ten 424 425 426 427 427 A \$1.40 15c

3 D67091 Medium base, .85' pin circle. Small base, .75' pin circle.

#### **Laboratory Sockets** With Plug-in Binding Post

Jacks Each terminal



each contact. new standard Molded Bakelite. ontact has numbering. Stock Code No Pronga Number 3E6745 3E6746 3E6747 484 485 486

487 487A

3E6748 3E6749

Your 29c large

#### Multiposition Bakelite Sockets

Made of molded Bakelite with tube locating groove, Mounts without screws or rivers; held to chassis with ring of spring steel. Requires less space than the tube base. Mounts in 152 hole (large size 7 prong tube base, in 1 A " + in 1&" hole). Very easy to mount. For use in material not ove &" thick.

Stock	Number	Your Price	Ten
Number	of Prongs	Each	For
3E6719 3E6720 3E6721	4 5	5c 5c 6c	45c 45c 55¢
3E6722	7 small	6¢	55é
3E6723	7 large		57¢



#### Universal Adapter Plate



Replacing Any Size Wafer Sachet Steel plate with

correct

hole for Multi-position socket. Slotted mounting hole centers from 1½" to 2". Socket can be rotated in adapter base

for wiring.
3E6725—Add Adapter plate only EACH . . . . .

TEN FOR..... 15c

#### **Tube Shield Base**



The flange on the top of the socket securely binds the shield base to the chassis without the use of any rivets or screws. Turning is prevented by a small lug projection on the shield base e which fits into a slot in the side of the socket. Made of a cadmium plated rust proof metal. Fits all standard size shields.

3E6724-Shield base only. YOUR PRICE, EACH ..... TEN FOR .... 18c

#### General Use Sockets





Screws Down Screws Up Screws Down Moulded black bakelite. Guiding groove for prongs. Long wiping contacts. Supplied with binding posts for connections. Screws can be reversed for sub-panel connections. Two mounting holes with 176" centers. Overall diameter, 148".

Stock	Na-ald	Prongs	Price	Ten
Number	Code		Each	for
3D6710 3D6711 3D6712 3D6713* 3D6714†	481 X 481 Y 486 487 487 A	4 5 6 7 7	12c	\$1.15

(\*) Medium base, .85° pin circle.
 (†) Small base, .75° pin circle.

#### Multiple Compact Sockets



Ideal where space at a premium. Can be used for below panel connecting and making adapters. Hole in center for No. 6 screw. adapters. Hole center for No. 6 scre is 1 ½" and 58" high.

5 and 6 prong 3E6738-Receives 4, 5 tubes. Na-Ald No. 456B.

5-6-7
3E6739—Receives 5, 6 and small size 7 prong tubes. Na-Ald No. 567BA List Price, 50c. 29¢

YOUR PRICE .....

#### **EBY Isolantite Sockets**



ties. It is especially effective at high Positive contacts. Mountave 1 4% inch centers. frequencies. Po

Stock Number	Prongs	Each	for
3D6125	4	25c	\$2.40
3D6126	5	27c	2.55
3D6127	6	30c	2.80
3D6128	7L	32c	3.00
3E6129	7S	32c	3.00

#### Hammarlund Isolantite Sockets



Lower leakage. Fits any stan forms or tubes. Mount
Mounting hole centers with fiber bushings

washers included. List, 60c Your Price 3E7210-4 pln 3E7211-5 pin 3E7212-6 pin 3E7213-7 pin -6 pin -7 pin large 35¢

#### **Bakelite Sockets**





contact. Easy to mount above panel or below panel of any material and not over % inch thick. Mounting holes have 135" centers.

Number	Prongs	Each	for
3C6120	4	16c	\$1.50
3C6121	5	17c	1.60
3C6122	6	19¢	1.80
3 D6123*	5-6	22¢	2.10
3 D6124†	7-78	22¢	

\*†These are combination sockets

#### Compact Sockets

Moulded bakelite socket for sub-panel mounting. Base consists of separate laminated bakelite which rests



beneath sub-panel. Stock Number Prongs 3E6750 3E6751 3E6752 3E6753 12¢ 13¢ \$1.15 6 7 small 7 large 3 E 6754

#### Small Space Panel Mount Sockets



With Moulded

Ears

Moulded black
Rody fits 1½" hole. Proa bove mounting surface and below top of mounting surface. Solder lugs project through bottom ber washer. jects %

With 153" Mounting Ctrs.

Stock	Na-ald	Con-	Price	Ten
Number	Code		Each	for
3D6700 3D6701 3D6702 3D6703* 3D6704†	424 425 436 437 437A	4 5 6 7	150	\$1.40

	1 114"			
3D6740° 3D6741†	437E  437EA	7 7	15c	81.45
7 2 1 I	n ha.a	02.11		mala

(\*) Large base, 85 pin circle (†) Small base, 75" pin circle

#### Tube Bases



Moulded, polished black Moulded, polished black bakelite. Standard size. Hollow brass prongs, polished nickel finish. Easy to solder leads on inside of prongs. Overall dlam. 134". Cavity size—132" dlam; \$\frac{13}{2}"\$ deep. Drong POUR PRICE

3E6089-5	prong	
3 E 6090-6	prong	
3E8149-7	prong	small
3E8148-7	prong	large



dur Handles are made of strong, ble, molded rubber. Pliable abreakable. Bakelite molded able, motided rubber, Flame and unbreakable. Bakelite molded pluss are of exceptionally strong construction and are securely gripped by the rubber handle. Particularly designed for public address equipment. Are shock proof and will withstand all weather conditions. Long rubber handle strengthen the connection at its weakest point and permits "yanking" of the cord from the connection socket without causing breakage or shorts. Made in two sizes. Short handle plug is 2½ "long and the long handle plug is 2½" long measuring from the base and not including the prongs. plugs unbroakable

#### Male Plugs Long Mandle

	Long manute	
Stock Number 3D7130	Number of Prongs	Your Price
307131 307132 307133	5 6 7 Small	15c
	Medium Handle	
Stock Number	Number of Prongs	Your
3D7134 3D7135 3D7136 3D7137	4	17c
	emale Plugs	
	Long Handle	
Stock	Number	Your
Number	of Holes	Price
3D7138	4	
3D7139	5 }	21c
3D7140 3D7141	7 Small	

#### 26c 7 Small **Bakelite Cable Plugs**

Medium Handle

of Holes

Price

Num

Number



#### Mike and Phono Adapters

5-6 and 7 Prongs 3E6180-5 Prong 3F6181 6 Pronc

3E6182-7 Prong small 3E6183-7 Prong

List Price. \$1.00.

54¢ YOUR PRICE .. YOUR PRICE
Split cathode connections. When used in connection with a microphone they supply the necessary current for operation of the microphone. Used as a phonograph adapter by inserting under detector or 1st stage audio tube.

#### Wafer Adapters With Lug Taps



Two dises of bake Holes punched for tube prongs. In each hole is a metal con-

note is a menu con-traction to the connected to a lug inserted between discs and is led to and projects from edge of adapters. Permits tamping into any circuit of tube for testing or obtaining current Leads not used can be cut off.

3C6 [45-4 prong.] List Each 50c. 3C6 [46-5 prong.] YOUR PRICE 3C6 [47-6 prong.] Each [2c] 3C6 [48-7 prong.] O for \$1.05

#### Analyzer Plugs and Adapters



old one

3E8082 Kit consists of a rorong analyzer plug, 5 ft. 8 wire cable, 8 prong cable plug, 8 prong panel socket. plug, 8 pr 4 adapters. ping, 8 prong panel socket.
4 adapters. All parts assembled and wired.
List Price, \$6.50.
YOUR PRICE ... \$3.82

Molded Bakelite 8 Hole Socket 3E6755-With lugs as shown in above lustration. Same as large 7 prong (.

locket with 8th contact in center 21¢ PRICE

8 Prong Cable Terminal Plug

For use with analyzers or on test bench Seven contacts on circle and eighth contact in center. Moulded bakelite. 3E6171—988S—Prongs on .85" e) circle. 50c. 21701 (Large s 29¢ YOUR PRICE

For Latch Type 7 Prong Plugs 3E8018-974DSA.-7 to 4. 3E8018—974DSA.—7 te 4 3E8017—975DSA.—7 to 5 3E80 | 6-976DSA.-7 to 6. 3E80 | 9-977DSA.-7 to 7 large 75e Each. 44¢ YOUR PRICE ...

**Associate Adapters** 

plug with 5 cable attached

#### Alden Analyzer Plug 906WL

6 Prong for 7 Conductor Cable

Plug equipped with special latch for locking adapters to plug. Detachable handle to plus. Detachable handle has two grid conections at top. Use this plug if most of your servicing is done on receivers using 6 prong tubes. No cable or adapter 3E6072 -List, \$1.50.

PRICE 3E6073 -With 5 ft. seven wire cable. No adapters. List Price \$2.25.

VOUR \$1.32 PRICE

Associate Adapters
For 906WL—6 Prong Plugs
3E6074—965DS.—To fit plug to 5

3E6075-964DS. To fit plug to 4

3E6076-967DS.—To flt plug to 7 hole (.85" Large size) sockets. 7— .75″ Sn. 75e. -967DSA.—To fit plug to 3E6077 7 hole (.7)

VOUR PRICE

#### Readrite **Analyzer Plug**

907 WLA KIt

3E8084-Kit consists of a

7 prong analyzer plug with 4 adapter. No cable included.

List, \$4.50. YOUR PRICE .. \$2.65

3E8014-7 prong analyzer plum. List, \$1.50. YOUR PRICE .... 88¢

3E8015-7 prong analyzer plug with 5 ft. of 8 wire

YOUR PRICE .. \$1.47

A knurled red project through top to control the latch for holding Adapter 167L, 167LS, 63L and 64L described below A spring gives a definite open or closed position as rod is turned tion as rod is turned. Has 6-prong small size base Bakelite Size, 1% drameter x 23," Iong.
3D8025—List \$1.75 turned long. \$1.75.

YOUR PRICE\$1.03

#### Associate Adapters

3D8026-167L Adapter for large size 7-prong socket. Has center pin to engage latch in above plug.

3D8027 167LS Adapter. Same, for small 7-prong socket.

3D8028 63L Adapter. Same, for 5-prong socket.

3D8029-64L Adapter. Same, for 4-pring socket List Price, 75

42¢ List Price, 75c.

#### Analyzer Plug and Adapter Kits



With Wired Adapters 3D8070—Plug and 4 wired adapters the dies ##" high may be attached to plug with 34" \$2\pi \text{ complete} with screen grid connecter. No cable screen grid connecte ded. List, \$2.85. \$1.69 YOUR PRICE

#### Molded Bakelite Bodies

Consists of seven-prong (large) Bake Consists of seven-prong (large) Bake-lite analyzer plug with detachable threaded handle and four adapters to permit use of plug in 4, 5, 6, or small 7 prong radio receiver socket. Used for replacement of old adapter plugs in obsolete set analyzers and in assembly of new point to point or set analyzer test instrument.

#### With Unwired Adapters

3E8071—Plug and 4 unwired adapters (bodies 3E8071—Plug and 4 unwired adapters shodles 114" high). Consists of two sections bolted together, that can be separated and wiring changed if desired. Complete with seven arid connector No. screen grid connector. No cable included.
List Price, \$2.35.

\$1.39

#### Speaker and Analyzer Plugs

Finger Grip Type



Bakelite body and cap. Finger grin ap covers connections, and from body. Male Plugs Without Cords

Male Plugs Without (
3C6059 4 preng,
3C6060 5 preng,
3C6061 6 preng,
3D8030 7 preng (Medlu
3D8031 7 preng (Small)
List, 25c.
YOUR PRICE (Medium) 15¢ Male Plugs With 36" Cords

Male Plugs With 36"
3C6062 - 4 prong.
3C6063 - 5 prong.
3C6064 - 6 prong.
3D8032 - 7 prong. (Medium
3D8033 - 7 prong. (Small)
List, \$1.25. (Medium) List, \$1.25. YOUR PRICE

Female Plugs remale Plugs Without 3C6065 For 4 prong plugs 3C6066 For 5 prong plugs 3C6067 For 6 prong plugs 3D8034 7 prong (Medium) List, 40c. Without Cords

24¢ YOUR PRICE

#### Flat Speaker Plugs 3C6049 3 prong. 3C6050 4 prong. 3C6051 5 prong. 3C6052-6 prong.

3C6052-6 prong 3D8035-7 prong (small)

Take up minimum space. Bakelite body. Cable leads solder into hollow

#### Standard Male



3D8036-7 prong 12¢

EACH

TEN FOR...\$1.10

Bakelite cap and base screw apart.
Connections easily made by soldering in hollow prongs of base and are covered by cap.

#### Cable Connector Plugs

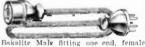
3C6110 Four Hole 3C6111 Five Hole 3C6112 Six Hole 3D8037 Seven Hole

3E8038-Seven Hole

EACH TEN FOR .... 5 \$2.20

Baketite receptacle. Screw cap connections, Fits standard male

#### Speaker Cord Test Set



fitting opposite end 5 Chassis may be tested out foot extension to speaker in cabinet. 3C6 | 41 - 4 prong, 4 conductor. 3C6 | 42 - 5 prong, 5 conductor. 3E6 | 43 - 6 prong, 6 conductor. 3E6 | 44 - 78 prong, 7 conductor. YOUR

59¢ PRICE, EACH

Cable Connectors



Suitable for tes cord cords tions. sockets. 10 temporary wiring in of tubes, etc. Sturdy moulded bakelite shell, very roomy, making for easy Standard socket and tube arrangement

holes and prongs.
Prices for two piece connector

3D6092 4 circuit. 3 3D6093 5 circuit Each 8D6094 6 circuit Ten for 19¢ ..\$1.75

PRICES REDUCED!

YOUR PRICE ....

Quotations on this Page are the Lowest Ever Offered on this quality Line



#### **New Tube Adapters**

#### Composite Adapter 9C7

Top receives all 4, 5 and 6 prong tubes. Bottom is large size 7 prong. For revamping small space analyzers like the

space analyzers like the Jewell No. 199 and Supreme Diagnometers. Use a combination large and small 7 prong socket in analyzer panel and then with this adapter you will be able to test all types of tubes in one socket.

3E8040-List, 60e. YOUR PRICE ...... 35¢

#### Alden 975DW Adapters

For Testing Type '59 Tube in Type 24 Analyzer Sockets



Enables any analyzer which can test type '24 tube circuits to test 7 prong tube circuits. Twin adapter aconnected with 60" cord. One adapter has five hole top and 7 prong base ('59 type -.85" pin circle). Other adapter has 7 hole top ('59 type-.85" circle) and 5 prung base. List, \$2.40.

3E6035—Your Price

#### Alden 975DSW Adapters

Same as 975 DW Adapters except for use with analyzer plugs having latch fastener. List, \$2.40. rastener. List, \$2.40. \$1.41

#### For Testing Type'33,'46,'47 PZ Tubes in 4 prong sockets



5 Hole Top 4 Prong Base

Test '46-'47 and PZ in 245 socket. Test '33 in 226 socket. Current for extra grid is supplied plate prong. Grid, plate and or connections through.

3C6000 - Alden 954KPC - Jewell J11385. List \$1,00. YOUR PRICE ..... 59¢

#### For Testing Type '33,'46,'47, PZ Tubes in 5 prong—227 UY socket 5 Hole Top-5 Prong Base

Cathode prong dead. Plate prong supplies current for extra grid. 3C600 1—Alden 975; Weston No. D. 19625. List \$1.00. YOUR PRICE ..... 59¢



#### 419X UX199 to UV201A

Adapts UX199 tubes to UV 201A sockets. Adds to diameter of 954D8 adapter, providing a bayonet pin to connect to old

UV sockets.

#### UY to UX

Fits five prong tube into four hole socket. Cathode hole connected to filament minus







#### Small 7 Pin **Tube Adapter**

Tests 2A7 and 2B7 in 24 checker socket and 2A7, 6B7, 6C7, 6D7, 6E7 and 6F7 in 36 checker socket. List. 66c. 3E8041—Alden 975AB7 YOUR PRICE .

Twin Adapter

For Testing Six Prong '57 and '58 Tubes in Set Analyzers Also tests '29-'41-'42-'55-'57-'58-69-'85-'89-PA-PZH-Wunderlich-6 prong.

One 5 Hole Top—6 Prong Base One 6 Hole Top—5 Prong Base



For analyzing 6 prong tube circuits with any 5 prong test plug. Designed for older style Analyzer plugs which do not have the latch lock. 5 ft. In-sulated wire connects suppression grid 3E6013-Alden 965DW; Jewell-

\$1.12

YOUR PRICE

For Testing
7 Prong Tubes in Set Analyzers
To be used with Alden 906 Latch
lock Analyzer Plug. Adapter with center stud gies on Analyzer Plug and
fits into seven prong socket of sets.
Adapter with seven hole top is connected by lead to suppressor grid contact and fits into six hole socket of
analyzer. List, \$1.90.
3E6014—Alden 967GL.976CG.
YOUR
BRICE
\$1.12

\$1.12 PRICE Type '57-'58 Test Adapter

6 Hole Top—5 Prong Base 6 Hote 10p—5 rrd
For testing '57 and
'58 tubes in set analyzers having a five prons
type '24 receptacle. The
suppressor and cathode
are connected together
and brought down to

the cathode prong. All other contacts are con-nected straight through

3C6010-Alden 965KS; Jewell 57; Weston D70157.

For Testing'41-'42 PA-PZH

## Offile

in Tube Testers

6 Hole Top
5 Prong Base
The control grid terminal of the top socket is connected to a cap on the

side of this adapter. All other connections through.

3C6009—Alden 965CG — Jewell D-70142. List, 75c. 44¢ 7 to 7

3D8007-Na-Ald 308007—Na - Ald 977MS, Prongs fit small (.75" pin circle) 7 prong sock-et, top socket takes large (.85" pin circle)

7 prong. 3E8042-Na-Ald

9778M. Prong fits large (.85" 7 prong socket, top socket takes small (.75" pin circle) 7 prong.
List Price 60c. YOUR PRICE

> For Testing '82-'83 Mercury Rectifiers Fits all type Tube Testers. Switch gives



readings for each plate. Internal resistance for limiting plate. Ilmiting plate current.
3D6006 Alden No.
982; Jewell No. 82;
Weston No. D-70182.
List \$3.00.

#### NA-ALD Multi-Adapter Type 950XYLA

Enables Your Tube Checker to test over 80 New Tubes

3D8001-NA-ALD 950XYLA Universal Tube

3D8001-NA-ALD SUGALLE Checking Adapter. List Price \$5.00.



If your tube checker has no filament voltage control switch, the 954 SGL adapter must be used

control switch, the 954 SGL adapter must be used on the base of the 950XYLA.

3D8002—NA-ALD 954SGL UY top UX bottom. Has grid lead. List Price 75c.

YOUR PRICE.

No leads—no wires—no jacks and only one toggle switch for all tests. Has the proper resistance network to protect all tubes and meters. Complete self-contained unit with simple directions for use on underside.

For use in checking tubes of higher voltage than your present tube checker will supply. To test tubes having flament voltage requirements of 10. 12.6, 14, 15, 25 and 30 volts, such as types 1223, 2725, 43, 48, etc. Insert Na-Ald Multi-Adapter 950 TR in the position in your A.C. tube tester

voltage selection. Diagrams and directions supplied.
3D8000—List, \$5.00. \$2.94

#### **Tube Adapter Forms**

Make any style tube or test adapter



Moulded bakelite socket top. Moulded base with hollow promss. The two sections are neatly and securely held together with center screw. Any desired connections from top to base can be easily made. Insulated or bare leads can be brought through promps from top and when top and bottom are assembled, slack in leads is pulled up. Leads so arranged are soldered and extra length cut off. A job equal to factory production is thus easily produced at great savings in cost. 44 inch hole in side of base permits taps from any circuit to be brought out. Body size: diameter, 1%"; height, 1"

Stock Number	Bottom	Тор	Stock Number	Bottom	Top
3E8050	4 prong	4 hole	3E8079	6 prong	4 hole
3E8052	4 prong	5 hole	3E8054	6 prong	5 hole
3E8057	4 prong	6 hole	3E8959	6 prong	6 hole
3E8077	4 prong	7 small	3E8066	6 prong	7 small
3E8078	4 prong	7 large	3E8063	6 prong	7 large
3E8051	5 prong	4 hole	3E8080	7 small	4 hole
3E8053	5 prong	5 hole	3E8056	7 small	5 hole
3E8058	5 prong	6 hole	3E8061	7 small	6 hole
3E8065	5 prong	7 small	3E8081	7 small	7 small
3E8062	5 prong	7 large	3E8064	7 small	7 large

YOUR PRICE.

22¢

YOUR PRICE. EACH

TEN FOR .. \$1.75 TEN FOR .. \$1.85 Note: Price includes top and bottom and screw for assembling.

#### Make Your Own ADAPTER KIT 308076







List Price \$2.00
YOUR PRICE

Contains: Five base sections, one each, 4, 5, 6, 7 and 7 small, prongs. Five socket sections, one each, 4, 5, 6, 7 and 7 small, contact. Five assembly screws. One Dozen assorted extension contact. Five assembly screws.

One Dozen assorted extension
solder and connection terminals.

Two phone tip connectors. Five phone tip terminals. Five control grid caps. With this outfit you can make 25 different assembly combinations. There are hundreds of possible wiring com-There are

#### Listening-in Adapters



#### **Balancing Adapters**

3C6042-Alden 944GP for UX 4 prong tubes. 3C6O43-Alden 955GP for UY 5 prong tubes.

List, 90c.

YOUR PRICE 53¢

For listening in on R. F. stages Breaks grid circuit so grid leak Weston No. D-70182. List \$3.00.
YOUR \$1.35
PRICE ... \$1.35

#### Radolek Condenser Box

#### 0.0001 to Over 15 Mfd!

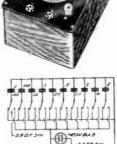
O.0001 to Over 15 Mfd!

A device for quickly substituting capacity values in a circuit suspected of having an open condenser.

Contains a calibrated straight line variable condenser of 0.001 Mfd. maximum eapacity and the following non-polarized \$50 voit condensers: 0.001; 0.01; 0.5; 0.5; 1; Mfd. Three electrolytic filter condensers rated for \$40 voit circuits: 2, 4, and 8 Mfd. respectively. Any of these capacities may be combined in parallel to secure a net value, the sum of the individual capacities. Each condenser is controlled by a SPD. Torgie switch. This switch automatically discharges its individual condenser when not the normal parallel to secure and thoroughly insulated. NEON POLARITY INDICATOR! May be switched across the test circuit to indicate polarity of circuit or genuine wainut with interlocking joint assuring rigidity. Size \$5½.783½.743% deep. Supplied with pain of 24.723½. This is the best value on the market in a Condenser Test Box.







#### Meter Repair Service



Guaranteed Precision Meter Repair Service for burned out or mechanically damaged meters. Erratic movements corrected. Any make, any range of A.C. or D.C. movement may be repaired in our special instrument Laboratory. Typical rates given below, on special sizes send meter for quote. Send Prepaid. We return Collect. Guaranteed Precision Meter Repair



YOUR \$3.75

2. Repair of Sluggish or Erratic movement of A.C. or D.C. meter where armature is not burned or shorted, includes cleaning and calibration.

\$2.95 COST ..... COST

1. Burned out or open armatures of 3. Replacement of cracked or broken standard 301 type 316" meters, including polishing of lewels, position correction, three point calibration.

4. Checking and calibration of any A.C. or D.C. Instruments rated by the manufacturer between 1% and 2%, with retouching of case or buffing of bakelite. Individual report with certification of calibration supplied.

#### **BULLE Electro-Magnetic Clock Movement** Universal Adaptability of Bulle



Movements These movements are particularly desirable in localities where 110 volt, 60 cycle, current is not available. Not depending on any outside source of supply for power they are especially useful in localities where electric service surfers frequent interruptions. Many electric localities that plug into A.C. Lines become noisy and faulty in operation after only a few months use. The Bulle movement will run continuously for years without any

#### Installation

Can be used to convert spring wound or unsatisfactory A.C. electric clocks into accurate and dependable time pleces. Will fit into a 5% " hole and extends less than 2%" back of panel. Equipped with 8" insulated leads with universal mounting and connection brackets for battery.

#### Appearance and Construction

Appearance and Construction

A 6" attractively finished dial is enclosed in a beautiful bevelled bronze outer case. The minute and hour hands are gracefully designed and can be reset from the front. The bevelled edge frame houses a convex crystal lens and is fitted with hinges for opening. Brackets and screws for mounting movement are included.

Thike other electric clocks, this modern invention does not depend upon synchronized current for its accuracy. It provides electric time with all its advantages in accuracy and convenience for all localities—and at low cost.

All localities—and at low cost.

No Winding—No Care
The Bulle Electric Clock is operated by an ingenius mechanism which at once commands admiration for its simplicity, and surprise at its rigid strength. More than 85% of the electrical energy needed for its operation is actually generated by its own Electro-Magnetic Motor. Less than 15% of additional energy is drawn from a small single cell 1½ yout flashlight battery which is conveniently concealed in the clock. The total current consumption of the movement is only 1.2 watts per year. No whiding. No outside wires or connections. Power is self-contained.



4D10496 - Movement only comple volt battery. mplete with

YOUR PRICE

#### Accurate—Noiseless

Accurate—Noiseless
Accuracy is Insured in every Bulle
movement. Very easily adjusted.
Weight on pendulum of clock is adjustable and can be raised or lowered
merely by a turn of the hand. Once
it is properly set it will remain constant for years. Because friction is
practically eliminated in these movements no lubrication is needed and
movement will always remain noiseless.
Starts liself when hattery is attached
and restarts itself immediately after
being stopped by accident or design,
so long as it remains in an upright
position. Will run continuously for
years without attention.

#### **Tube Adapters**

For Substituting New Type Tubes in Place of Older Types

Use 2A5 in place of 45 or 47 Use 47 in place of 45, 71A or 12A

#### Single or Push Pull



306029-List Price \$1.00. Your Price. Each 37¢ Ten for ......\$3.55 5 hole, 4 prong adapter.

5 hole, 4 prong adapter. Current for screen is brought from plate. Has iron core choke between plate and screen terminal of 247 tube.

#### For Replacing Single 171A with 47 3C6030 Code 954 KPF. List S List \$1.25

Each ..... 65¢ Ten for .....\$5.90
5 hole, 4 prong adapter. Screen hole con nected to
plate prong. Other connections through
except filament which has resistance
in series for reducing voltage from

in series for requests 5V to 2½V for 247 tubes. For Replacing



3C6031-Code 95 for Twin Set, \$1.20. 954FS. Price 70¢

#### For Replacing 224's and 35's with '57 or '58



3C6010-Code 965-58. List Price 50t. YOUR 30¢ PRICE

For using a '57 type tube in place of a '24

type tube and '58 type tube in place of a '35 or 551 tube. Has a six prong receptacle connected to a five prong plus. The suppressor and cathode are connected together and brought down to the cathode prong. All of the other contacts are connected straight through the adapter.

#### Adapters for Replacing Kellogg



401 with 485's 401 with 56's It is now possible to replace all the old type expensive Kellogg tubes with the latest types of more efficient and lower priced tubes. It is less expensive to buy these adapters and new type tubes than to replace with old style Kellogg

Overhead Heater Type Tubes

tubes Replace 401 with 485 3E6131-Na-Ald 954K27. List. 90c. PRICE

To Replace 401 with 56
3E6132—Na-Ald 954-401. List, 90c
YOUR PRICE

## **Benjamin Sub-Panel**

Mounting Shock-Proof Sockets 3E6726

4 Prong Only. YOUR PRICE 5¢ Ten for 35 c

#### For Replacing 245 with 47 | Increase Volume and Tone



Of Midget Radio Receivers
Replace Single type 47
tubes with 2A5 high
Mu Pentodes. Over 75 Mu Pentodes. Over 75
Mu additional gain.
Here is an item that
is easy to carry and
not only can it be
demonstrated quickly
but, it sells an extra
tube for you every time
a good demonstration.
els hole top for type

you make a good demonstration. Adapter has a six hole top for type 2A5 tubes and a five prong base fits socket of 47 tube. A filament center-tapped resistance connects the 2A5 cathode to the bias circuit of the 47 tube.

47 tube.

For best results the grld bias resistor of the 47 is changed to 400 ohms for the 2A5. Connect a 25 Mfd. ohms for the acceptance of the condenser between the chassis and the centertap of the resistor on the adapter, the rich deep tone you will then be able to hear will be a revelation in midget quality. Wiring diagram shows "before" and "after" appearance of

3E6015 PRICE...... 45¢ YOUR BEFORE CHEST STATE OF THE PARTY OF THE



of 6 voit receivtype tubes. (Do not make this

substitution in series heater circuits). Type 41 and 42 tubes have twice the amplification mu of 38 tubes. Change grid bias resistor to 600 ohms for 41 tube or 400 ohms for 42's. In Push-Pull circuits, half these values are correct. are correct

#### For Replacing G2, G4, With 55



A six hole, five prong adapter with heater and

adapter. The triode portion of the fisher and eather an

3E6017-55-G2 adapter. ... 39¢ YOUR PRICE.....

#### For Replacing 45 Tube With New 2A5



For using new 6-prong 2A5 Pentode Power Tube in place of 45. Requires spe-cial resistance for cial resistance
"C" bias. A
Type. 964KSPR. Type. 964K 3E8043-

YOUR PRICE ..... 44¢

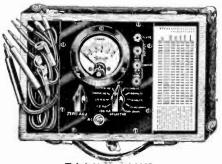
999 UX to UV199



44¢ PRICE

421X UX to WD11
Adapts UX tube to WD11 socket. Suited for Radlola 3 and 3-A and dry 3C6028-List, 75c. YOUR PRICE ..... 44¢





Triplett Model 1125

With output adapter, test leads, batteries, etc. Complete operating instructions. 1E2577—List Price, \$30.00.

#### Universal RIPLET A.C.-D.C.

#### MODEL 1125 VOLT — OHM — MILLIAMMETER

A Modern Portable Test Instrument
The Triplett Model 1125 Universal testing
meter consists of a sensitive microammeter
mounted in the panel of a convenient carrying case with a switching arrangement to
secure different ranges on the meter. The
range selector switch is a 12 point positive
action rotary type. A toggle switch shifts the
meter from D.C. to A.C. ranges. This arrangement permits the use of only 4 pin
jacks for external connections.

Quadruple Scale Meter

Quadruple Scale Meter
The lower scale, printed in red, for A.C. has
75 divisions marked 0-15. The middle scale
is likewise divided with the characters printed
in black. The upper scale is graduated from
right to left with 15 major calibrations in
ohms. The last two cipiers of each are printed in red, giving the effect of two scales
of ohm values. The selector knob position
indicates the interpretation of the meter scales.

14 Different Measuring Ranges

Maximum scale readings of A.C. Volts: 750, 150, 15. Maximum scale readings of A.C. Volts: 750, 150, 15. D.C. Milliamperes, 150, 15, 1.S. A.C. Mills. 150, 15. Three resistance ranges, 0 to 1500 ohms, 0 to 1.5 megohms, 0 to 3 megohms, 0 to 2 are adjustment for the ohmmeter is provided on the panel.)

Every Radio Measurement Possible an addition to the fundamental ranges listed above, the A.C. volt ranges may be used for output measurements. A special circuit (see diagram on the adjacent page) permits accurate capacity measurements.

The size of the Model 1125 case is 11%"x 7½"x4½". Shipping weight 11 lbs. The cover is removable.

Your cost is less than the meter and resistors alone would cost!

#### TRIPLETT ALL WAVE OSCILLATOR

For Modern All Wave Service
The New Triplett No. 1151 Hand Calibrated AllWave oscillator meets the latest requirements or radio service. Four Wave Bands. Ranges available through the four point selector switch:—
A-110 to 500 K.C; B-500 to 3.500 K.C; C-2.000 to 6.000 K.C; D-6.000 to 18.000 K.C; (Uses fundamentals and 2nd and 3rd harmonies.)
Smooth exact adjustment between each frequency limit. With this new Triplett oscillator you can accurately align and test the latest model receivers and all early model radios.

Uses "Dummy Antenna" Output

The pin jacks marked Min. and Gnd. when connected to a receiver have the characteristics of a broadcast receiver antenna circuit. Type 30 tube used as oscillator. Three 1½ volt flashlight cells light the tube and a standard 22½ Volt Midget "C" battery supplies the plate potential. The batteries are under the calibration chart.

Modulated or Unmodulated Signals Modulated or Unmodulated Signals
You can make the signals from the Triplett Oscillator audible in the outnut of the radio under
test or cause a high frequency wave to beat
against an incoming signal to produce the famfiltar "canary whistle" beat note. Size 11½"xx
1½"xx4½". Weight 15 lbs. With Calibration
Graph and Attenuator. Complete with Batteries.

Simplified Control Panel
1—Positive action, Four-range Switch.
2—Complete Attenuation Control: 0 to full power.
3—Modulation control Switch for Mod. or Unmod.
Signals.

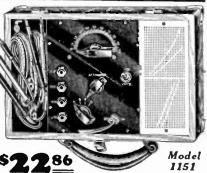
Signals. Easily read Dial with bar-knob pointer; 100

-Easily read Data Will and close if divisions.
-Bafety Battery Switch—Lid will not close if switch is on.

Triplett New All Wave Oscillator

Model 1151

1E2578—List, \$35.00. YOUR PRICE



Triplett Auxiliary Set Tester Model 1166 Complete with seven prong plug cable, Four adapter plugs, and directions. Neat oak case matches above instruments. I E 2579—List Price, \$16.00 with Case.

PRICE .....

IE2581-Less Case. YOUR PRICE .....

#### RIPLETT Auxiliary Set Tester Combines Point to Point With Set Analysis

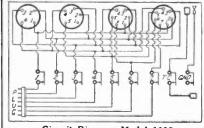
For Point To Point Testing
Extreme Flexibility For Service Analysis.
All the circuits which connect to the prongs of any type tube in any type radio may be reached through the handy pin Jacks. The row of red Jacks automatically open the circuit when a pin type plug is inserted. Upon placing another plug in the adjacent black pin jack, current measurements.can be made in series with any circuit, to any tube element. Using the black pin jacks, voltage and resistance tests may be made between any portions of the circuit. Examination of the diagram will disclose a large number of additional features which will facilitate the use of this equipment in analyzing the exact point of trouble in a receiver.

the exact point of trouble in a receiver. For Standard Analysis
The 'old timer' in the service business accustomed to conventional analytical methods of service will find the Triplet 1166 his most useful accessory. By connecting a milliammeter in series with the plate circuit and opening the grid circuit for insertion of a "C" battery, a change in place current will be observed. This is a dependable method of checking tubes under operating conditions as the change in plate current will indicate the mutual conductance of the tube.

Chart of Tube Prong Circuits

Chart of Tube Prong Circuits

A simplified chart of Tube Prong Circuits plus the
complete chart of all modern tubes published in
the Radolek 1934 Catalog will permit accurate
analysis of any receiving tube circuit. Careful
study of the accompanying diagram of the internal
wiring circuit of the 1166 Triplett Auxiliary
Tester will disclose many applications of this excellent unit. Voltages from any tube element to
ground may be quickly obtained, with the 1166.
All instructions included. Size of the case,
111/6"xx1/2"xx1/2". Shpg. Wt. 7 lbs.



Circuit Diagram Model 1166

#### Triplett 31/2 Inch Universal A. C.-D. C. Meter



Copper—Oxide Type
Accuracy within 2% on D.C.—5% on A.C. Scale
matches the Standard Scale supplied on the Triplett Models 1125, 1180, 1181 Meter movement
requires 1 milltampere for full sale deflection.
Primarily designed as a Universal Foundation Meter,
supplied with 50 obnes integers. supplied with 50 ohms internal resistance. (50 millivolt drop). No multiplier shunts or resistors included. Scale marking as follows: Lower scale, 0-15 with 75 divisions for the 15, 150, 750, volt A.C. range. Same scale is used for A.C. Mils. Middle scale, same markings for D.C. range. Top ohm scale 0-1500 ohms.

Triplett Universal Meter

75 Division Scale

Triplett Universal Meter 1E2580—List, \$15.00.

YOUR
PRICE

The copper oxide rectifier unit is housed with the proper compensating shunt for the 0-1 milliammeter in a separate case suitable for panel mounting. A DIPDT toggle switch is included in the assembly for quickly Changing the circuit from A.C. to D.C. Air damped movement. Jewelled sapphire bearings, Chrome steel magnets.



and 1E9586

Triplett 51/4" Giant Meters

Giant Panel Test Instruments Flush Mounting in 4%" hole requires 2%" to 3" clearance Knife Edge Pointers. Mirror back scales. All ranges available. Most popular sizes are listed below. A.C. models

in 4%" hole requires 2% Edge Pointers. Mirror ges available. Most p below. A.C. models employ repulsion type movable iron vane action. D.C. models use standard d'Arsonval jewelled bearing movements with chrome steel permanent magnets.

Special Scale



3E8388-For 1E9585 Has same markings as universal YOUR PRICE ..... \$1.00

Model 521 D. C.			1	Model 53	I A. C.		
Stock Number	Range	Resist. in ohms		Stock Number	Range	Resist.	Your
1E9585 1E9586 1E9587 1E9588 1E9589	1 M.A. 0-5 M.A. 0-2 M.A. 10 Amp. 300 Volts	33 156 185 .005 .3 meg.	11.11 12.42 9.15	1E9591 1E9592 1E9593 1E9594 1E9595	10 M.A. 250 M.A. 3 Amps. 10 volts 150 volts	1950 1 2 .02 160 151.500	\$ 9.80 9.15 9.15 9.15 10.45

### MODEL RIPLET 1181

#### Combines 3 Great Testing Systems

Point-to-Point, Standard Analysis, and Overall Performance with One Triplett All-Purpose Instrument Here is the Secret of Successful Servicemen! Here is how the 'oldtimers' in radio fix sets that defy the best efforts of beginners. The best features of the above three great general systems of servicing are combined. Triplett has perfected the one complete instrument which handles all three systems monocofully

Experienced servicemen with that fine instinct developed by conscientious workmanship, can usually tell from the customers' complaint which method to use first. You also can equal their work! With the assistance of modern up-to-date instrument designed to service both long and short wave receivers, you can do better and more satisfactory radio service than the most skillful 'oldimer' puttering away

with obsolete equipment.

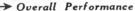


#### Point-To-Point

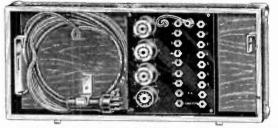
Point-To-Point
Use point-to-point testing when the signals are mushy or distorted; when hum distortion is present or when the standard analysis discloses wrong voltages. In this system the Auxilliary Set Tester plays the most important part, permitting the receiver to be left in its cabinet while the circuit of each tube is brought down to the test panel of the auxilliary tester. Here conveniently and quickly, you may use the ohammeter or capacity measuring portion of the Universal Vetrolmo-Output-Milliammeter to identify the defective portion within the classis. A temporary repair can usually be made until the exact part may be duplicated.



The old favorite method which is still used extensively by smart servicemen who know when to best apply it effectively. This is usually the fastest method of arriving at the couse of trouble when there is no signal audible through the raillo. Inserting the plug of the Auxilliary Tester, first in the rectifier tube socket and successively in the audio sockets, detector, I. F. and R. F. stages, will permit you to make current and voltage measurements at the same time testing the tubes by connecting a "C" battery in the eathoule or erid lead to give a mutual ments at the same time testing the times by connecting a "C" battery in the cathode or grid lead to give a mutual conductance test. Wrong voltages or absence of voltage indicates that you should change to Point-to-Point testing.



The one sure system of locating the cause The one sure system of locating the cause of intermittant reception. Also used for overall performance tests when replacing tubes and for alignment of trimmer condensors. The stability of the All-Wave Oscillator and the accurate indications of the A.C. meter used as an output indicator through the Auxilliary tester make overall performance testing interesting overall



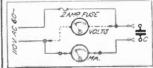


#### Triplett Perpetual All-Wave Tester 1181

Combines the Auxilliary tester and all associate plugs, adapters, test leads and instructions with the Universal Volt-Ohin-Output-Millianmeter supplied with a special scale on a separate chart to permit capacity measurements, and the new All Wave Oscillator, 110 to 18,000 KC, (2727 meters to 16.5 meters). Complete in quarter-sawed oak (16%,"%74,"%75%") carrying case with batteries, oscillator tube.

1E2575 Model 1181, List Price. \$57.00. VALID

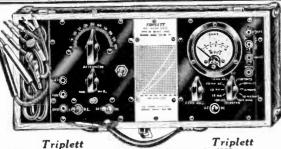
Capacity Tests
Capacity measurements of paper dielecric condensers can be made with the A.C. Millianmeter of the Perpetual Tester, employing the electric light. A.C. Millianmeter of the Perpetual Tester, employing the electric light-ing circuit as the source of A.C. The range of capacity on 115 V. 60 cycle is 0.0025 to 3.5 Mfd. Biagram below



#### Four Range Oscillator

16.5 to 2727 Meters

Be Up-to-Date with this latest all wave oscillator! Itadolek is the first to offer this superior equipment. Hand calibrated tuning chart with four colored trequency curves making exact solution of designed sizeal very colored trequency curves making exact selection of destreed strand very simple. Osciliator is adjusted to cover entire range with fundamental and 1st and 7nd harmonics of fundamental frequencies. An additional feature of the new oscillator is the output circuit which is coupled through a fixed cancelty, which prevent done of the fixed fundamental and fixed cancelty.



#### All-Wave Oscillator - Volt Ohm Milliammeter

For Overall Performance and General Testing

Model 1180

Model 1180

Offered in one unit—the two most essential instruments for radio service. Universal All Wave Oscillator with self contained power supply, and the Triplett Multi-ranse A.C.-D.C. Volt. Ohm. Milliammeter. All in portable form. Ready for bench or home radio service. This unit is particularly suited for the serviceman who has a selective circuit analyzer.

selective circuit analyzer.

Oscillator Ranges

Range A: 110 to 300 K.C. Range B: 540 to 3500 K.C. Range C: 2000 to 6000 K.C. Range D: 6000 to 18000. Fundamentals and 2nd and 3rd harmonics are used to cover this extensive frequency spread. All sizmals may be modulated at approximately 400 cycles for tests employing a standard output meter. Unmodulated signals may be employed for beat-frequency calibration of receivers. tion of receivers.

Measures all voltages encountered in modern radio receivers. 0-15-150-750 volts A.C. or D.C. at 1000 whims per volt. Measures all plate currents. 0-15, 15, 150, M. A. D. C. Two A.C. Milliampere ranges for cupnetty and power output tests, 0-15-150 M.A. Resistance ranges, 0-1500 ohms, 0-15-3 megohims, A.C. Volt seales may be employed for output indications. Supplied in oak case, 11½"x1½"x 4½". With slip hinged cover.

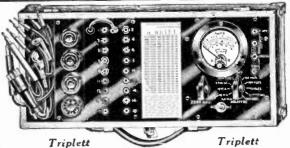
The Best Value Service

Equipment

Feet Value Service
Equipment

| E2644--Model 1180 in Oak case. Complete with Test Leads, List. \$45,00. \$45.00. YOUR PRICE ..... \$29.40

1 E2642-Model 1177 in Leatherette case with dual frequency oscillator covering 110 to 1500 K.C. List. \$36.00. YOUR PRICE ..... \$23.52



#### Universal Selective Analyzer

For Point-To-Point and Standard Analysis Model 1167

Model 1167

Excellent for the service shop equipped with a good ascillator. This is the modern type of equipment for "hot" or "cold" classis testing, enablement of the cold with the cold service of the old type analyzer flust he modern point to-point resistance style of locating trouble. The Schwitze Analyzer portion contains four sorkets for all standard base tubes, proof locking type analyzer plug with adapters to fit all standard radio sockets. Extra wires adjacent to the cabbe are for ground and ton grid circuits. Voltage test are made between the black pin-jacks, in serting the tip Jack in the red pin-jack opens the particular circuit to permit turrent, measurements.

Multi-Range Volt-Ohm-Milliammeter

Employs the Triplett Universal meter. Three A.C.-D.C. voltage ranges are provided, 0-15-150 750 at 1000 chms per voit. Three D.C. millampere ranges are available for all current tests in plate circuits and powerfack circuits, of 0-1.5, 15, 150 M.A. Two A.C. Millampere ranges are employed in capacity and inductance measurement. 0-15-150 M.A. One low ohm scale, 0-1300 chms, and two megohim cales, 0-1,5-3, megohims. Ohimmeter batteries are inclosed. A zero adjuster compensates for battery deterioration. A selector switch prevents possibility of damage to meter. 1E2576—Model 1167. Complete with test leads, batterles, and all instructions. the Triplett Universal

VALIR



#### The Selector Switch

Has 12 positions arranged to make the following tests:

- Grid or Screen Grid to Cathode. 1. Grid of Screen Grid to Cathodo. Grid volts and Heater type 3 element tubes. Screen Grid volts on Screen Grid type tubes.
- 2. Measures grid volts on triode and Direct Heater Pentodes. Screen Grid volts on Direct Heater Screen Grid tubes.
- 3. Measures Cathode volts on Cathode type tubes, and Screen volts on output Pentodes.
- 4. Measures Plate volts on Cathode pe amplifier and output tubes.
- 5. Measures Plate volts on Direct Heater amplifier and output tubes. 6. Measures the Control Grid volts of tubes having top cap.

  7. Measures the voltage from Sup-pressor Grid to Cathode on tubes having suppressor grids, and Plate on tubes

volts on double plate output tubes, such as 79.

8. Measures voltage from Control Grid to Cathode on Hester type out-Control put Pentodes.

- 9. Measures voltage from Plate to Cathode of double plate output tubes, such as 79.
- 10. Measures the voltage from Control Grid to Cathode of double plate output tubes, such as 79.
- 11. Measures the voltage between the second Control Grid and Cathode a double plate output tubes, such on do
- 12. Measures the voltage between the Conventional Plate contact and the Conventional Screen contact. The toggle switch marked positive and negative reverses the polarity of the D.C. volt meter. This switch will indicate polarity of the circuit tested.

## eadrite TESTERS

#### Models 710 and 712

Simply turn the selector switch—each position is recorded on the handy chart on the panel—and read directly on the meter the exact condition of every part of the circuits. Check the continuity and resistance of the A.V.C., diode resistance coupling, phase shifting, automatic noise suppression, automatic tone control, R.F., I.F., detector, oscillator, A.F., filter and similar circuits. In the same check filter, bipass and coupling condensers for shorts and opens, soldered joints for resistance, hook-up wires, bias resistance and and opens, soldered joints for resistance, hook-up wires, blas resistance and bleeder resistances for shorts and opens. Check the power transformer, primary and secondary for balance. Check the line voltage. With the use of the receiving set wiring diagram the serviceman can easily and quickly locate every

kind of trouble without removing the chassis from the cabinet. Has self-contained battery for continuity testing of transformers, chokes, etc. Capacity and resistance charts are furnished for use in testing condensers and measuring resistances up to 109,000 ohms. The 9 scale readings of the meters may be used separately with the jack terminals provided. Scale readings are 0.20-60-300-600 D.C. volts; 0.10-140-700 A.C. volts and 0.15-150 milliamperes. D.C. voltmeter resistance 300 ohms per volt. Has new small sized plug with latch for the four adapters furnished for accommodating all 4, 5, 6 and 7 prong sockets now in use. Substantial leatherette covered case size 10%x3\frac{1}{2}x8 inches. Removable cover.

man can easily and quickly locate every

Has Sockets for all newer 4, 5, 6 and 7 prong tubes.

Makes all voltage, current, capacity and continuity
tests required for any set and for the tubes in the
set, regardless of current used—whether A.C. or
any type battery current.

READRITE MODEL 710. As described above
with standard Readrite Meters. All meters accuracy guaranteed within 5%. Complete with
Test Leads. Battery, Adapters, Charts and Instructions.

3D2606—List Price \$27.50.

\$1617



#### Readrite Model 712

Readrite Model 712

The Model 712 differs from the Model 710 only in that it is equipped with the new Triplett D'Arsonval Voltmeter having 1,000 ohms per volt resistance. The reading is 0-15-60-300-600 volts, which covers a complete range for testing control grids, screen grids, cathode and plate voltages. The use of this precision indicating meter leaves little to be desired in the way of a fine testing instrument. No matter how many testers you have you can afford to put the ±712 on your payroll, because it will enable you to do a quicker, better and more accurate testing job. (2% accuracy.) 3D2590—List Price \$41.25.

\$24.25 PRICE

#### Readrite Model 1000 Resistance--Continuity and Capacity Tester "For Cold Chassis" Point-to-Point Testing 3E2622-YOUR

YOUR PRICE

New and Different! Permits testing of any receiver without the tubes in the receiver and without the power turned on the set. Uses two plus-in cables—one to the rectifier socket and the other to each tube socket in turn. A master selector switch permits resistance and capacity tests between all important circuits. Triplett 3½" Meter is employed for the resistance and any voltage or current measurements desired. A 2" A C. meter, used with a 60 cycle A C. 110 to 120 volt line is employed for capacity measurements. The precision D. C. meter has a 60 division volt-mil scale which permits reading 0 to 300, to 300, to 600 volts, also 0 to 30, to 300, to 600 volts, also 0 to 30, to 300, milliamperes. Resistance measurements may be made on the ohm scale, 0 to 500, to 50,000 to 3 megohms. An extra 22½ volt battery and 9 meg resister will extend the ohm range to 6 megohms. With adapters, in fabricold case, size 13½"x9½"x 4½". Shipping weight 11 lbs.

#### **Portable Tube Testers**

Test All Tubes without Adapters Including All New Types



Readrite Model 410

3E2600 YOUR PRICE .....

\$1617

A new and improved tube tester for checking standard base rectifier and radio tubes. Employs the grid shift method of changing the plate current reading which is a close approximation of the mutual conductance of the tube under test. A Readrite Milliammeter with an illuminated dial indicates the change in plate current. Filament control provides; 1½, 2, 2½, 3.3, 5, 6.3, 7½, 12.6 and 25 volts for all tubes. Both plates of rectifier tubes are tested. Complete instructions and standard values for good tubes are attached to the lid of the case. Leatherette case with sliphings lid. Size 11"T1%/x4%/" deep. Shipping weight 11 bs. For connection to 165-125 volts 60 cycle A. C. A new and improved tube tester for



#### Readrite Model 416

With Triplett Moving Coil
Precision Meter

3E2631-YOUR

For testing tubes with a greater degree of precision than is possible with the Model 410. A sensitive Triplett d'Arsonval type meter in the 416 tester employs a longer scale which permits very accurate reading of tube values. For house to house canvasing tube salesmen, this instrument is an excellent rugged type which will quickly identify weak tubes. With the slip-hinged lid removed it is suitable for counter or test bench service. Simple instructions and values for all standard tubes inside cover. Mounted in well bound leatherette case. size 11"x7%"x1%" deep. Shipping weight 11 lbs. For connection to 105-125 volts, 60 cycle A. C.



#### Readrite All Wave Oscillator

3E2597 — Model 554 without output \$1764

A New Graph Calibrated Self Medulat-

A New Graph Calibrated Self Modulated Service Oscillator. Meets requirments of latest model receivers with short wave and I. F. circuits. Four frequency ranges: 110 to 500 K. C. 500 to 3000 K. C.; 2000 to 6000 K. C.; 2000 to 6000 K. C. 163 to 6000 K. C. 163 to 6000 K. C. 164 to 7.27 meters, Desired range may be selected with a four point switch. The exact frequency is secured by adjustment of a tuning knob over a calibrated scale. This operates a new design semi-precision type condenser which is accurately calibrated on the Graph supplied with each instrument. This oscillator may be employed to align short wave and broadcast R. F. tuning sections, to peak I. F. transformers, to adjust oscillator trimmers. compare gain in tubes, to test sensitivity of receivers and locate cause of intermittant reception. A "Dummy Antenna" output matches all standard recievers. 100% Attanuator

Leatherette covered case. 12"78"x

Leatherette covered case, 12"x6"x 5" with slip-hinge lid. Batteries for the type 30 tube are self contained. the type 30 tube 100% Attenuator.

3E2598-Model 553 All Wave Oscillator same as above with Readrite output meter. \$20.58

#### TRIPLETT PRECISION METERS

Genuine d'Arsonval Moving Coll Type
Rugged dependable meters for radio service, experimental, and educational use. Standard in size, range and appearance. Clear white enameled dials. Balanced aluminum indicating pointer. Zero adjustment. Genuine pollshed sapphire jewelled bearings. Bakelito or Metal dustproof cases with glossy black finish. Cases should not be removed. Tribute meters offer the greatest value in the low price instrument field, having many features heretofore restricted to the higher priced meter lines.

Model 321 D.C. Flush Type, wide flange. 3½" diameter. Scale length 2½". Mary many features heretofore restricted to the higher priced meter lines.

Model 321 D.C. Flush Type, wide flange. 3½" diameter. Scale length 2½". Mary factory for a ver age and o service applications. The service applications of the service applications.

Guaranteed Accuracy Within 2% at 72° F.

Genuine d' Arsonval Moving Coll Type

31/2

3E9712 3E9713 3E9714 3E9715

3E9716 3E9717 3E9718

3E9720

3E9721 3E9722 3E9723

3E9724 3E9725

3E9726

3E9730

3E9773 3E9774 3E9775 3E9776 3E9780 3E9781 3E9782

\$3.75

3.75

\$ 4.55 4.55 5.39 6.05 7.18

9.31 11.43 3.75 3.75 3.75

\$5.39

\$ 5.71 5.71 6.53 7.18 7.18 10.88 10.29

1

40 60 60 10

LC. VOLTS

Stock Number | Your Price

Model 321



3E9750 3E9751 3E9752 3E9753

3E9759 3E9760 3E9761

3E9762 3E9763

3E9764 3E9765 3E9766 3E9767 3E9768

3E9800

3E9801 3E9802 3E9803 3E9804 3E9808 3E9809 3E9810

RANGE Stock

D. C. VOLTMETERS
125 Ohms Per Volt

0-1Volts 0-3 0-5 0-10

0-15 0-25 0-50 0-100

0-150

0-200 0-250 0-300

0-500 0-750

0-1000

0-1000 0-2000 3-0-3 50-0-50 150-0-150

D. C. VOLTMETERS 1000 Ohms Per Volt 0-5Volts 0-10 0-25 0-50

0-100 0-150 0-300 0-500 0-15-150 0-250-750 0-15-60-300-600

D. C. MILLIVOLTMETERS

Model 223

\$2.94

2.94

\$ 3.75 3.75 4.24 5.06 6.05

8 33

\$4.24

\$ 5.06 5.06 5.71 6.53 6.53 9.63

9.14

#### **Portable Meter Cases** For 2 Inch Readrite & Triplet-Meters A good selection of Portable Meters is indispensable in a properly equipped Radio lab-oratory or repair shop. These Cases are 3 inches in diameter. Cases are 3 inches in diameter, made of heavy gauge brass, durably finished in polished nickel. Nickeled bezel. Supplied with two 30 inch pintipped leads and necessary accessories for mounting

3D2798-List, \$1.75. YOUR PRICE .....

\$1,03

#### Readrite Model 65 Flange To Fit Model 55 Meters



Model 55 Meters
Wide flange 2% inches diameter. Fits over any type of
model 55 meter, converting it
into a flange mounting model.
Three screw holes. Three 8."
long 4-36 acrews with nuts included. Flange and screw heads
in matte black finish.

302799 List, Each 15c. YOUR PRICE .....

#### Readrite Model 55 A. C. Meters

Magnetic Solonold Type. For 50 to 100 evele Commercial A.C. circuits. Accurate within 10%. Renutres 2½ "mounting hole. Clamp maintains meter rigidly against panel from position in the rear. Readrite 55 A.C meters are satisfactory for checking line voltage, amplifier tube flament current and voltage, current drain of radio sets, and refrigeration service work. Magnetic Solonoid Type For



Voltmeters			Am	mete	rs
Stock Number	Scale Volts	Your Price	Stock Number	Scale Amps.	You
3C2778 3C2779 3C2780		1.62	3C2792 3C2793 3C2794 3C2795	0-1 0-3 0-5 0-10	\$1.62
3C2781	0-15)		3C2796	0-50	\$1.9
3C2782 3C2783 3C2784	0-150 0-300 0-600	\$2.65 3.23 3.82	Milli Stock Number	Scale M.A.	eters You Pric
3C2785 3C2786	0-750 0-10-140	4.56 2.65	3C2787 3C2788	0-25 0-50	\$1.62

#### Filament Meter

Oxidized Bronze Finish, flanged cases 23, in. diam. Mount 2-in.

3C2698-0-10 volts D.C. 39¢ YOUR PRICE



#### Readrite D.C. Panel Meters Model 55

Good serviceable Instruments. Guaranteed accuracy within 5% in both types. Suitable for practically all purposes except precision engineering. Require 2-5/64" mounting hole. White dial, black lettering, metal shell. Clamp included to hold meter tight against panel. Serew connections with binding nuts in rear. ZERO ADJUSTMENT TYPE has serew mounted on face



18			which contr		position			on tac			
Without	Zero I	D. C. V	oltmet	ers Adju	h Zero stment	Without	Zero nent	Millia	mmete	Wit ers Adju-	h Zero stment
Stock Num.	Your	Scale Volta	Ohms Resist.	Stock Num.	Your	Stock	Your	Scale M. A.	Ohms Resist.	Stock Number	Price
3C2735		0-1 0-3	30 175	3 D 7 7 3 5 3 D 7 7 3 6	-	3C2766 3C2767	51.32 1.18		2,160 700	3D7766 3D7767	\$1.47 1.32
3C2737 3C2738	59c	0-6 0-5	550 410	3D7736 3D7737 3D7738	750	3 C 2769	59c	0-15 0-25	295 85	3D7768 3D7769	73c
3C2739 3C2740 3C2741		0-8 0-10	850 1,475	3D7739 3D7740		3C2770 3C2771	376	0-50 0-100	20 5.5	3D7770 3D7771	750
3C2741 3C2742 3C2743		0-15 3-0-3 0-25	2,914 550 1,625	3D7741 3D7742 3D7743		3C2772 3C2773 3C2774	59c	0-150 0-200 0-300	3.3 1.9 .8		73c
3C2744 3C2745 3C2746	1.91	0-50 0-50	7.720 3,250 15,440	3D7744 3D7745 3D7746 3D7747	.73	3 C 2775 3 C 2776 3 C 2777	1.18	0-400 0-20-100 0-15-150		3D7775) 3D7776 3D7777	1.32
3C2747	-	0-100	30.888	3D7748				. C. A	mmet	ers	
3C2748 3C2749 3C2750	1.03	0-150 0-150	9,750 46,320 92,640	3D7749 3D7750 3D7751	1.18 2.06	Stock Number	Price		cale mps.	Stock Number	Your Price
3C2751 3C2752 3C2753 3C2754	2.65	0-300 0-500 0-60-300 0-750	154,400	3D7752 3D7753 3D7754	2.79	3 D 2 7 5 7 3 D 2 7 5 8 3 D 2 7 5 9 3 D 2 7 6 0	590	0- 0- 0-	3	3D7757 3D7758 3D7759 3D7760	73c

3D2761 3D2762 3.38 3D2763 59c

3 D 2764 3 D 2765



(Flush Mounting)			hole Ctrs., 3"		
31/2"	Model 3	321 2"	Model	223	
Stock Number	Your Price	RANGE	Stock Number	Your Price	
	D. C. M.	ILLIAMM	ETER	<b>S</b>	
3E9610 3E9611 3E9612	\$4.55	0-1 Mils. 0-1.5 0-3	3E9654 3E9655 3E9656	\$3.75	
3E9613 3E9614 3E9615 3E9616	3.75	0-5 0-10 0-15 0-25	3E9657 3E9658 3E9659 3E9660	2.94	
3E9617 3E9618 3E9619 3E9620	3.75	0-50 0-75 0-100 0-200	3E9661 3E9662 3E9663 3E9664	2.94	
3E9621 3E9622 3E9623 3E9624 3E9625	3.75	0-250 0-300 0-500 0-750 0-1000	3E9665 3E9666 3E9667 3E9668 3E9669	2.94	
3E9626 3E9627 3E9628 3E9629 3E9630 3E9631	\$ 5.39 3.75 6.86 6.86 6.05 6.05	.5-05 100-0-100 0-1-10 0-1-25 0-15-150 0-25-250	3E9670 3E9671 3E9672 3E9673 3E9674 3E9675	\$ 4.24 2.94 5.71 5.71 5.06 5.06	
	D. C	AMMET	ERS		
3E9676 3E9677 3E9678 3E9679	\$3.75	0-1Amps. 0-3 0-5 0-10		\$2.94	

3E9676 3E9677 3E9678 3E9679 3E9680	\$3.75	0-1Amps. 0-3 0-5 0-10 0-25	3E9700 3E9701 3E9702 3E9703 3E9704	\$2.94
3E9682 3E9683 3E9684 3E9685 3E9686	3.75	1-0-1 5-0-5 10-0-10 20-0-20 30-0-30	3E9706 3E9707 3E9708 3E9709 3E9710	2.94

	D.	C. M	ICROAM	METERS	
3E9811 3E9812	5	6.05	0-500 M.A. 0-200	3E9815 3E9816	\$ 5.06 6.86

D. C. RESISTANCE METERS 823—Type 321. 0/1.5 volts. 0/1000 ohms. 3E9823-Type 321. List. \$7.00. \$4.55 YOUR PRICE .....

3E9824-Type 321. 0/4.5 volts. 0,50,000 ohms.

\$5.39 YOUR PRICE ..... A. C. Vane Type Meters 31/2" TYPE 331 | 2" TYPE 233

Stock Number	Your	RANGE	Stock	Your Price
	A. C. M	ILLIAMN	ETER:	S
3E9825 3E9826 3E9827 3E9828 3E9829	\$3.75	0-15 Mils. 0-25 0-50 0-250 0-500	3E9830 3E9831 3E9832 3E9833 3E9834	\$2.94
	A. C	AMME?	TERS	
3E9835 3E9836 3E9837 3E9838 3E9839	3.75	0-1 A mps. 0-2 0-3 0-5 0-10	3E9842 3E9843 3E9844 3E9845 3E9846	2.94
3E9840	\$ 4.47	0-25	3E9847	5 3.75
	A. C.	VOLTMI	ETERS	
3E9849 3E9850 3E9851 3E9852	\$3.75	0-1Volts 0-3 0-5 0-10	3E9864 3E9865 3E9866 3E9867	\$2.94
3E9853 3E9854 3E9855 3E9856	3.75	0-15 0-25 0-50 0-100	3E9868 3E9869 3E9870 3E9871	2.94
3E9857 3E9858 3E9859 3E9860 3E9861	\$ 4.55 5.39 7.18 8.26 10.45	0-150 0-300 0-500 0-750 0-1000	3E9872 3E9873 3E9874 3E9875 3E9876	5 3.75 4.68 6.47 7.51 9.70
3E9862	8.26	0-3-15-15	0	

L. III C D.

3.23 0-20-60

3C2756

1.32 0-8-160 850/16,200 3D7755

73c

3D7761 3D7762 3D7763 3D7764 3D7765

1-0-1 3-0-3 6-0-6 10-0-10 20-0-20



For Point-to-Point analysis and "hot" elrcult testing of any type radio re-ceiver. Complete in Fabrikold carry-ing case 111/2"x111/2"x41/2", with all

#### New Macklyn Testers

#### New Model 101 Analyzer

Latest model test instrument for locating trouble in radio receiver. Com-bines the advantages of Point-to-Point "cold" chassis testing with standard voltage and current analysis. Uses selective analysis method. Arcurately measures the voltage between any tube prongs, the current in any D.C. circuit, and the resistance between any circuits supplying the tube orders. Uses four suckets, and a pairs of pin-jacks with two meters. Measuring ranges are: D.C. Volts, 0-15-150-600, at 1000 chms per volt and 0-15-150 milliamperes. Resistance 0-500 000 bioms per volt and process. A.C. voit ance 0-500,000 obms, A.C. volts 0-8-150-750. Capacity chart permits measurements between 0.01 and 5.8 Mfd. An 8 wire cable with a sera prong plug and four adapters are supplied. A top grid connection is located on the side of the plug.

Mounting Shad-

ow Humina-

tion Code TM 10 Stock

Number 3E2658

Stock Number

M.A.

M.A.

#### New Model 89 **Tube Tester**

True Tube Performance! Tests all tubes in the Radolek Tube Data Charts. Actually determines the merit a tube just as if it were within a radio receiver. Simple and fast for tube testing. A row of pin-jacks connect to all the Individual tube socket pins. Another row of pin-jacks countries. rube testing. A row or para-naces con-nect to all the individual tube socket plns. Another row of pin-jacks supply all the Voltages necessary to operate the tube with the correct voltage on each element. A chart gives the proper inter-jack connections for each element. proper tube. A filament selector switch provides 14, 2, 24, 3, 3, 5, 6, 3, 74, 14, 25, and 30 volts for all tubes. 14. 25. and 30 volts for an two-s.

Automatic Inter-element short check and gas check included. Engraved bakeFebrikald case. 314." Automatic Inter-element short check and gas check included. Engraved bake-lite panel. Fabrikold case, 3½" meter, sockets for 4, 5, 6, and large and small 7 prong tubes. Voltages of 10, 22, 45, 67, 90, 135, 180 and 250 available for tube tests. Complete instructions included.



E2537—Model 89.\$2.2 PRICE .....

Complete with pin tip insulated plug cords, and A.C. Line cord. We recom-mend this splendid tube tester because of the accuracy of its tests and be-cause of its fine construction.

not been sacrificed. 15 years exper-ience making meters has fully quali-fied the Beede Company,

#### **READRITE Tuning Meters**



Code TM 121



Code TM IOI



Code TMIDS



Code TM 103

For Accurate Visual Tuning dgewise

Rear Illu ed Trans Dial C TM 1	lucent 'ode	Front or Illumin Type ( TM	ated ode
Stock Cumber E2654 E2655 E2656 E2657	Max. M.A. 5 7 10 15	Stock Number 3E2650 3E2651 3E2652 3E2653	Max. M.A. 5 7 10

Shadow Graph Type: Code TM121

A solid shadow spreads over the 3E2666 translucent dial. Shadow becomes 3E2667 narrow as resonance is indicated. 3E2668
Complete with 2.5 volt lamp. 3E2669 Tuning Meter Escutcheon Prices 3E2663— For TM101-3, 3E2664—For TM108 3E2665—For TM121 List Price 30c. 18¢

Prices
Choice of above types without Escutcheon. \$1.50.**88**c VALIR PRICE

Visual Meter Tuning: Combine visible indication of exact station tuning with the audible tone to secure best results with modern radio. A.V.C. sets "lung onto" a station signal over a wider exsecure best results with modern radio. A.V.C. sects "lmag onto" a station signal over a wider expanse of dial than older types of receivers. Fallure to tune exactly is often the cause of other signals blurring and distorting the station you desire. Accurate tuning with a meter assures you of the best adjustment of the tuning dial for resonance with the station you want. Only by precise tuning can you secure the full range of tone a radio is capable of producing. Easy to Sell. Mount a tuning meter in a small box attached with two wires to a pair of pin-tins. Use NaAld 5 or 6 prong "listening in" adapters listed on page 20 to couple the meter into I.F. stages of receivers with A.V.C. Demonstrate to your customer how easy it is to tune with a "metered" receiver. The standard price most servicemen quote for installation of a tuning meter is \$4.85 for the complete job! You can make these sales and this handsome profit. Complete instructions furnished.

#### BEEDE D'Arsonval Meters

Accurate small instruments intended for panel test assemblies and as foundation units in multi-purpose meters. Under normal conditions of room temperature and where not subjected to price of these instruments quality has dation units in multi-purpose meters. Under normal conditions of room temperature and where not subjected to severe vibration these meters are as satisfactory for radio service as the most expensive types.

Features: Easy to open for inspection of movement or for pecial calibration of dlat. Ideal for use with for special campus with dial. Ideal for use with rectifier or thermocouple for measurements. For C. measurements. For est radio service requirents, these meters are as ments, these meters are as satisfactory as the more ex-pensive precision meters.

Model 701. 3½" Flush Model 411. 2½" narrow metal case. 1½" deep. Rim. flush metal case Mounts in 2½" opening. 1½" deep. 2½ Mg. hole.

Model 701

0-1 Milliammeter For use with custom-built radio test-ing apparatus. 50 ohms resistance. 50 scale divisions. 98% accuracy. 1E9600 0-1 Milliammeter

PRICE ..... \$3.53

1-0-1 Mil. Galvanometer

For Wheatstone Bridge circuits an Bridge Balanced Vacuum Tube Volt meter indicators. Zero position o pointer in middle of scale, 5 neter indicators. Zero positlor ointer in middle of scale, ale divisions.

E9601—1-0-1 Galvanometer.

PRICE ..... \$3.53

0-2000 Ohmmeter

Fills the need for an accurate low range shumeter with 1½ volt supply. Recellent for bench test panel. oxecllent for bench text panel, IE9602—0-2000 Ohmmeter. \$3.24 Model 411

1E9603-0-1 Milliammeter, 50 ohms resistance, 50 scale divisions, YOUR \$2.94 PRICE .....

3E9604-0-25 Milliammeter (For checking microphone button current Price ... \$2.20 IE9605-0-150 Milliammeter (P.A.

Amplifier plate current \$2.20 indicator.) Price.....

IE9606—0-5 Volts at 125 ohms per volt. (For checking filament sup-ply of D.C. Tubes.) YOUR PRICE .... \$2.20

IE9607-1-0-1 Mil. Galvanometer. Wheatstone Bridge ments.) Меазил YOUR PRICE \$2.94

1E9608-0-10 Amperes, +For testing current drain of Auto-radio YOUR PRICE ..... \$2.20

#### READRITE Tube Tester



1E2602 421 Counter type withou He 2002 121 Counter type without lid and carrying strap. \$23.52
1E2604—122 Portable type with slip hinged 1ld and earrying strap. YOUR \$24.99 PRICE

Models 421-422 Emission Type

Model Readrite Simplified Tube Latest Model Readrite Simplified Tube
Seller. Easy to operate, cannot be harmed
by inforrect manipulation. Large
Triplett meter with shaded pink
and green portions which quickly
indentify low emmission tubes.
12 Sockets are employed. Circuit
converts all tubes to simple diodes
or triodes for the emmission test.
Meter is equipped with a shuntselector switch as a range multiselector switch as a range multi-plier. Line voltage control is sepiler. Line voltage control is secured through a rheostat in the primary circuit of the power transprimary circuit of the power transformer. An A.C. line meter constantly checks the voltage. Cathode-heater shorts, checked while tube is hot. Grid shorts and second plate rectifier tests, made with push buttons. Quarter-sawed oak case, 9½"x10½" counter space, 5" high with cover in place. Wt. 9 lbs.

This tester is recommended for the non-technical dealer selling tubes,

#### **Portable** Volt Ohmmeter



Pocket Size 3E2503-YOUR \$2.32

Convenient as a pocket watch. 3"
Diameter, 15"
deep with 24" test deep with 24" test leads. Range 0-10,000 ohms, 0-300 D.C. volts. Self contained flash light cells.

#### Resistance Meter

Readrite Model 501

3E2685-YOUR \$1.62



Direct reading volt ohumeter, 0.4½ volts, 0.10,000 ohms, 2" flange type meter. Requires three small flash-light cells which with resistance to be a compared in series with measured are connected in series with the meter. Accuracy within 10% with fresh hatteries

#### Readrite Selector Switches



Rotating single contact non-shorting selector switches for custom-built analyzers, set lesters, etc. Mount in a single \$\frac{8}{\pi}\\$ hole. \$\frac{1}{2}\\$ threaded bushing. Complete with knob and mounting nut.

3E2672-Triple pole 2 | 3E2673 Double pole

3E2674 Double pole 12 positions, twin contacts. PRICE. Each \$1.03 3E2670 Double pole 6 positions, twin contacts.

3E2671-Single pole 15 positions, 1 contact in each position.

YOUR 59¢ PRICE. Each. ..

#### Triumph Signal Generator A New All Wave Oscillator

Fundamental Modulated Generates Generates Fundamental Modulated and Unmodulated Frequencies Between 100 K.C. and 10.000 K.C. Also 350 Cycle Audio Frequency. Electron Coupled. All Electric Four Range Attenuator. Complete Shielding. Filtered A.C. Line. Harmonic Range 10 megcycles to 50 M.C.

· Four Tuning Ranges

e Four Tuning Ranges
Four separate tuning coils. Range 1,
produces all 1.E. between 100 and
350 K.C. Range 2 covers L.E. and
Broadcast between 350 and 1080
K.C. Range 3 lies between 1050 and
250 K.C. Range 4 is for testing
the most advanced type of Short
Wave Receivers between 3200 and
10,000 K.C. Harmonics of this
last range are available as high
as 50,000 cycles giving a total coverage of 6 meters to 3000 meter erage of 6 meters to 3000 meters.

• Audio Frequency

A fith position on the frequency
selector switch cuts out the radio
frequency oscillator and generates a
powerful 356 eyele audio note for
Amplifier testing, speaker adjustment, bridge measurements, and audio gain tests.

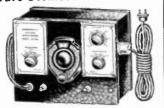
Pront panel 7"494". Depth of case Front panel 7"494". Depth of case 5". Black Crackle lacquer finish on metal. The case forms an electromagnetic shield about the entire unit. Individual coils are electro-statically shielded.

· Electron Coupled

Assuring the greatest stability of calibration and freedom from strays or birdies. The use of the new 77 Pentode tube makes this signal generator the most up-to-date unit of its type.

· All Electric

• All Liectric
Operates on 105 to 120 volts 60 cycle
A.C. A 37 acts as a diode rectifier
for "B" voltage. Line circuit is
filtered with twin bypass condensers
preceding the transformer primary.
No signal is radiated through the
A.C. Line.



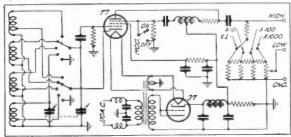
1E2525-Complete. S PRICE

#### Calibrated Attenuator

And Modulation Control. Ladder type power output control maintains semi-constant impedance for all output levels. The relative gain of different receivers adjusted to the same output level may be approximated from the position of the attenuator knobs. The accuracy of these tests is exceeded only Signal Generators costing hundreds dollars. Switch controls modulation of dollars. of dollars. Switch controls modulated circuit, permitting selection of the pure carrier wave for beat frequency tests, or the modulated signal for rereiver performance tests. Reversable output jack gives choice of full or attenuated output.

#### · Profitable

• Profitable
The Triumph Signal Generator will
quickly earn back its cost for the
radio serviceman who employs it on
overy service job. The improved tone
of a radio which has been accurately
aligned and balanced with this oscillator will pernalt maximum service
fees and complete customer satisfaction. The feature of having an audiotesting signal will prove of greatest
assistance in locating causes of intermittant reception through the audio
amplifier portion of a receiver.



#### A.C. D.C. Type-With Beede 1 Milli. D.C. Movement and Copper Oxide Rectifier



consists of a Standard 3½" Beede d'Arson-val meter with matched individually call-brated copper-oxide rectifier, and a special "foundation" style scale. D.C. meter re-quires 1 M.A. for full scale deflection. 50 ohms internal resistance. Separate D.C. binding posts on the rear. A.C. circuit produces full scale deflection with 1 M.A. 5 volts A.C. will cause full scale deflection. The special scale is printed with 20 divisions (0-100) for the D.C. ranges and a dual scale of 20 divisions each for the A.C. range, mark-ed 0-100 and 0-5. The upper scale is call-brated in ohms for use with a 4 to 4½ volt battery intended to check resistance to 100,000 battery intended to check resistance to 100,000

#### RCA Victor Midget Phono Motor and Electric Pickup

For Portable Combination Radio Phonographs For Portable Combination Radio Phonographs
used for demonstrating amplifiers and testing audio stages of ceivers.
Motor assembly only 7" in diameter and 2½" deep.
Synchronous Motor requiring manual starting. Regular
78 R.P.M. on 105 to 120 volt 60 excles. Electric Pickup has 6¾" tone arm.
2500 olms impedance. For 16" records. This assembly fife the Radolek Walnut case on page 35.
372.96.2—RCA Motor.



3E2962—RCA Motor

PRICE 3E2963-RCA Pickup

PRICE 3E2964 Assembly Hardward PRICE .....

Radolek-Hickok **Giant Precision Volt-Ohm** 

Foundation Meter

Built by Hickok The Front is 8 , Inches Diameter

Mr. Serviceman: Build your test panel around this meter. It is one of the finest, most accurate meters made. Replaces your Replaces

at the one of the finest, most accurate meters made. Replaces the five most popular meters employed in service work. In the one large, easy reading meter the following ranges are obtainable at 1000 olms per volt, 0 to 10 volts; 0 to 100 volts, 0 to 100 volts; 0 to 100 volts, 0 to 100 volts; 0 to 100 volts; 0 to 100 volts; 100 range of the first obtained with the first obtained with standard series resistors. Using standard, 50 millivolt shows high and low olm ranges may be added to fit your examt requirements. The do u bit to present the first object of the first object object of the first object ob

tion of Circuit I shown on page 36

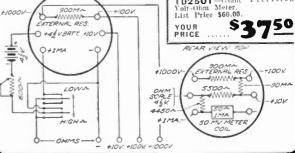
REAR VEN TOP



meter can also be used in circuit diagrams number IA, 1B and 6B shown on page 36. In these errouts, additional voltage ranges and milliampere ranges may be provided lian pere ranges may be p using shunts and resistors speci

Specifications: Specifications:
Front of Panel Type. Front Rim
of Black Bakelite, diameter 85%".
Base diameter 95%". Side and base
of steel in black enamel in 11 sh.
Depth 35% inches. Six completely
threaded connecting bolts diameter
14 inch, project 2 in ches beyond
linse. Double strength glass crystal.
Matte white bristol board mirror
backed scale with hand callbrated
characters in clear contrasting black
Front zero adjuster. K nife edse
resulter 48% inches long. Resistors tharacters in clear contrasting Data.
Front zero adjuster. K n i fe edge
pointer 4 % inches long. Resistors
shown in Diagram below are built in
an d included except external
900,000 ohn resistor, which is
not included. No batteries,
switch or potentiometer included.

1 D2501—Giant Precision Volt-Ohm Meter. List Price \$60.00.



#### Westinghouse Precision Meters



Flange 234", 234th mounting hole. Moldarts case. Mounts flush with clamp from rear. Specially designed for Photo-electric cells, Piezo

Crystals, etc.

Stock Num.	Scale		Res	istance	Price
1E9884 1E9885	0-100 Militar 0-250 Militar 0-0.5 Militar 0-1 Militar	mperes	Therr Recto	nocouple x (A.F.)	12.37

Meters

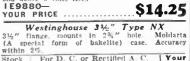


1E9881 0-20 Microamperes 2180 ohms 1E9882 0-500 Microamperes 110 ohms 1E9887 0-1 Milliamperes 110 ohms 1E9889 0-5 Milliamperes 10 1 ohms 1E9889 0-10 Milliamperes 2.3 ohms 1E9889 0-10 Milliamperes 1E9890 0-10 Amperes

Universal A.C.-D.C. Rectox

Foundation Meter. 3½" Flange Size Moldarta
case Knife Edge Pointer. 100 ohns resistance
in the D.C. circuit, 5000 ohns in A.C. circuit,
D.C. scale has 20 divisions calibrated 0 to 100
Middle A.C. Scale has a double set of graduations for low and high A.C. ranges. Upper
scale is marked in abbreviated values of ohns.
External resistors are required above 1 Ma. D.C.
and above 5 volts A.C.

1E9880-



Stock Num.	For D. C. or Rectified A. C. Scale Resistance	Price
1E9892	0-1 Milliampere   110 ohms 0-100 Microamperes   71 ohms 90 Volt — Ohmmeter   9 megohm	15.75

\$18.37



#### MODEL 661 TUBE CHECKER

Ultra Modern Design

1D9432 List Price \$50.00. **\$36.75** DEALERS PRICE

ID9433—Less Carrying Case. List Price, \$45.00. DEALERS PRICE \$33.07

Tests all 4, 5, 6 and 7 (large or small) prong filament and heater type tubes listed in Radolek's official tube data sheets. Easily learned system of operation. No memory work or complicated reference charts are necessary. Has line voltage regulator and filament voltage selector. Meter is a model 301 type with a 60 division scale. Indicates in direct reading comparative rating of tube. Accurate and reliable. Protective metal housing. Unit supplied in individual leatherette covered carrying case. Case size 8% x2x4% inches. Power line cord. Matches other 609 sectes on this page. Employs zero reset grid shift system of mutual conductance measurement. Shipping weight, 7 1bs.



#### MODEL 663 VOLT-OHMMETER

1D9436-List \$65.00. DEALERS COST ..... \$**47.77** | D9437 - Less Carrying Case. | List Price \$60.00, | DEALERS COST .......\$44.10

PEALERS COST

Provides the widest range of resistance readings ever afforded by an ohnmeter: 0.1 ohm to 10 megohns. This wide range made possible through use of an especially sensitive 60 mfcrombere instrument and selector switch. Energy for Ohmmeter supplied by self-contained battery of 15 volts mounted in back of case. Adjustment provided to compensate battery variations. Available ranges: 0-5-250-2.500-25,000-230,000 ohms center scale: 0-206-1,000-10,000-100,000-100,000-100 ohms full scale; 0-2.5-1w-100-250-500-1,000 wolts full scale. An ideal instrument for resistance analysis and point to point testing. Complete with leatherette case, battery and accessories.



#### Model 665 Type 1 Selective ANALYZER

1E9442-List, \$70.00 less case.

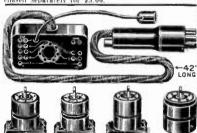
.....\$51.45 Consists of a multi-range A.C.-D.C. Volt-Ohm-Output-Milliammeter with a twenty-four point range selection switch. A.C. and D.C. Volts, 1000, 500, 250, 100, 50, 25, 100, 50, 25, and 1 at 1000 ohms per volt. D.C. Milliampere ranges 500, 250, 100, 50, 25, and 1 milliampere. Four resistance ranges accurately measuring all values between 1 and 1.000.000 ohms. The Model 665 is designed primarily to be used with the Type 1-A Socket Selector described helow for point-to-point and straight analytical radio testing. The A.C. portion consisting of a Weston full wave copper oxide type bridge rectifier and compensated circuit is suitable for all output voltage measurements.

measurements. Self looking push-buttons control the choice of the A.C. or D.C. circuit. An ohmmeter adjusting rheastat compensates for 20% deterioration of the battery supply. Panel size 5½ "x8½". Depth of case 3", made of pressed steel, attractively finished in black. Test lead included. Leatherette case supplied separate, at \$5.00 extra.

#### Model 665 Type 2 Selective ANALYZER

1E9443-List, \$55 less case. PRICE ..... \$40.42

Consists of the same meter and ranges as Type 1, but uses pin-jacks it nat e at of the Selector Switch. to choose the current. with the Western Policy of Especially designed to be used with the Weston Socket Selector Type 1A. Panel size 5½" x8½". Depth 3". Pressed steel black finished container matches the other units on this page. Test leads included. A leatherette carrying case may be purchased separately for \$5.00.



#### Weston Model 666-1A SOCKET SELECTOR

A device to permit individual circuit measurements through the tube sockets of a radio receiver with Models 663, 664, or either type of the 665 meters. The Socket Selector consists of a rectangular bake-lite box equipped with two pins spaced to fit the jacks located immediately above the meter in the four models of test apparatus mentioned. The top of the box contains a seven prong socket and a number of pin Jacks by which measurements may be made between the seven prongs or in series with the circuit of six connections to the tube under test. An 8 wire cable connects the box to a small seven prong plug which may be inserted in a receiver under test. Four double adapters are provided to permit tests of 4, 5, 6, and large 7 prong tubes.

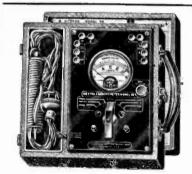
1E9444—Weston 666-1A Socket Selector. List. \$15.00. 



#### MODEL 694 **NEW OSCILLATOR**

List. \$60.00 109434-DEALERS PRICE ... \$44.10

DEALERS PRICE with our bands having fundamental range of 100 to 3,000 K.C. and ranges up to 6,000 K.C. and higher available on harmonics. Allows for peaking I.F. stages for greatest sensitivity or for "flat topping" for maximum quality in all modern Superheterodynes. Also provides for correct adjustment of condenser gang of T.R.F. Sets as well as R.F. stages of Superheterodynes. For these purposes a smoothly modulated, sharp R.F. signal whilen may be controlled in intensity and frequency is produced. The frequency ranges are divided into four bands. An output control adjusts from maximum to extreme low minimum in each hand. Has filtment rheostat to control voltage for its "32 tube. Perfect shielding insures complete control over signal. Fitted with durable leatherette covered case, necessary accessories, battery and type "32 tube.



#### MODEL 664 CAPACITY METER

ID9438 List \$60.00. \$44.10

1D9439—Less Carrying Case. List, \$55.00. DEALERS PRICE \$40.42

For Electrolytic or Paper Condensers.

For Electrolytic or Paper Condensers.

Covers a wide range of all types of canacity and A.C. voltage measurements. Indicates Microfrards: 10-200, 1-20, 1-2, 101-2, 0001-02; volts 4-8-40-400-800 A.C., 1,000 ohms per volts. An instrument that will never become obsolete. Operated much the same as a volt-ohmmeter. Power supply is from a self-contained transformer operating from any 105-130 volt 80 cycle line through a voltage adjustor. Indicates short circuited and open condensers as well as measuring capacities of those in good condition. In an individual carrying case, leatherette covered. Size 88; wys4% in. Shipped complete with test leads and full instructions for operation.

#### **WESTON PANEL METERS**

Weston Instruments Are Standard

"Is it as good as a Weston?" Weston Instru-ments are the established standards of comparison. They are made by the combined Weston and Jewell companies with the benefit of their experience of companies with the benefit of their experience of over 30 years of meter manufacturing behind each instrument. So exact is the construction of Wes-ton Instruments that any two meters of the same type—even though made years spart—are identical electrically and mechanically. You can depend on Weston meters.

Radolek carries a complete assortment of Weston Meters in the Models 301, 506, 517, 425, 476, and 600, ready for immediate shipment. Only the most popular Weston Instruments are listed here. You may depend upon prompt shipment and the lowest wholesale prices when you order your complete Weston testing equipment from Radolek. Weston meters may be employed in all special circuits prepared by Radolek for "Build It Yourself Kits:"

Weston Meters Have Superior Features Weston Meters Have Superior Features "Position Balanes".—Threaded counterweights exactly balance the movement to read the same in a horizontal, 45°, or vertical position. "Non-Fatigue Springs".—The sensitivity controlled partly by spring tension remains contant in a Weston Meter. Accurate at any temperature. "Jewelled Bearings".—Tool steel pivot points in diamond cut sapphire jewell hearings permit Weston meters to withstand terrific vibration.

Precision Calibration.

#### Volt-Ohm-Milliampere **Foundation Meter**

Weston Model 301 -For Custom Built Testers

3D9409. List Price. \$10.00. YOUR PRICE

\$7.35



(1000 ohms per volt ex-ternal resistors required for this purpose) or D. C. milliamperes up to 100 mils (using an external 50 M.V. shunt—Van Model 3E4891, tapped at 5-25-100 mils), and ohms up to 100,000, (fig conjunction with a 4½ volt battery and a 4450 ohm resistor).

1 Milliampere Full Scale Deflection when used without external resistors or shunts. Internal resistance of meter, 50 ohms (50 Millivolts).

Bakelite case, zero adjuster, etched metal dial with black figures on silver background. 50 scale divisions with figures at each 10 divisions. Figures at full scale are 50-250-1000, for use on voltranges. Divide by 10 for use on militamper ranges. Top ohm scale graduated in 100 ohm steps to 2000, 500 ohm steps to 80,000, the next to 20,000, 5000 ohm steps to 60,0 divisions being 100,000 and infinity.

Black bakelite case has front flange 3%" diameter. Case body diameter 24." Case depth back of flange, 1", with screws 1%". Only two binding posts with proper polarity marking.

Mr. Serviceman: Build your own analyzer or test panel with this precision multi-range foundation meter. Using the proper resistors and shunts additional ranges may be added for greater flexibility and adaptation to your particular test requirements.

#### Weston Model 301 DC



31/4 Inch Case A high grade matched line of meters to cover a wide variety of electrical measurevariety of electrical measure-ment requirements. Stand-ard throughout the world in the Radio and Electrical in-dustries. Excellent for gen-eral Radio use. Supplied in flush or surface type and in metal or bakelite cases, all Flush type metal case sent left.

unless otherwise specified.

#### Model 301 D.C. Milliammeters

Article Number	Range Milli.	Ohms Res.	Article	Range Milli.	Ohms Res.
3E9340 3E9341	1.5	27 18	3C9342 3C9343	2 3	18 18
List Price	\$10.00	). 		\$7	-35

#### Model 301 D. C. Microammeters

Article Number	Range Microamps.	Ohms Res.	List Price	Your
3E9363 3E9364	200† 500†	<b>55</b> 55	\$14.25 \$14.25	\$10.48
for use in	horizontal o	r 45°	position.	

#### Weston AC Model 301 Rectifler Milliammeters

Article	Milli-	Ohms Res.	List Price	Your
3E9379	0.5	2000	\$19.25	\$14.15
3E9380	1	2000	\$15.00	\$11.02

#### Weston Model 301 D.C. 1000 ohm per Volt-Ohmmeters

7000	Other Per	4016-011111111	0000
Stock	Volts	Ohm	YOUR
Number		Scale	PRICE
3E9420	1.5	0-1,000 }	\$7.72
3E9422	4.5	0-10,000 \$	
3E9400	4.5	0-100,000	9.92
3E9401	15.	0-500,000	9.92
3E9424	90.	0-2,000,000	11.02

#### Universal A. C.—D. C. Foundation 0-1 Milliampere Meter



3D2532 List Price \$19.00. YOUR \$13.97 PRICE PRICE ...

Designed particularly for use with external resistors and shunts to build up Multi-Range A.C.—D.C. Meter to read A. C. volts up to 1,000 volts; D. C. volts up to 1,000 volts; D. C. williamps up to 500 mils., and ohms up to 100,000 ohms.

Full Scale Deflection when used Resistors or Shunts.

i Milliampere Fult without External Rest D. C. Total Meter without External Resistors or Shunts.
D. C. Total Meter Resistance (with attached shunt in circuit) 50 ohms; A. C. Total Meter Resistance (with self contained rectifier in circuit) 5,000 ohms.

Bakelite Case. Knife Edge Pointer. Front Zero

Adjuster.

Etched metal dial—with black figures on silver background. Three sets of scale readings.

Lower D. C. Scale with 50 divisions having figures at each 10th division. This scale is for D. C. mils (when external shunts are used) or D. C. Volts (when external resistors are used) at 1000 ohms per volt.

Middle A. C. Scale with triple set of graduations having figures at each indicated 10th division. For A. C. voltage readings of 5 volts (1,000 ohms per volt, without external resistors); 10 volts; 50 volts and upward. Practically any voltage reading desired up to 1000 volts can be handled with the use of proper value external resistors.

Top ohm Scale for reading ohms 0 to 100,000. This arrangement requires in circuit, a 9 volt battery and 8,950 ohm resistor.

Dull black finish bakelite case, with france 3%" diameter. Case body diameter 2% Case depth, back of finge 1", overall w screws 1%". Four for A. C. 2 for binding post connections, D. C. Externelly moun shattle provided for connecting in when D. 2%". with readings are made.

#### Weston Model 506 D.C.



2 Inch Cases 1%" deep Miniature flush type panel Miniature flush type panel instruments with characteristics similar to the larger Weston 3½ inch line. Supplied with wide or narrow flange metal cases or wide flange bakelite cases. Narrow flange metal cases sent unless otherwise specified.

#### Model 506 D.C. Milliammeters

Article	Milli-	Approx.	Article	MIIIII-	Approx.
Number	SEDDS.	Regist.	Number	amps.	Resist.
3C9214	5	8.5	3C9219	100	.5
3C9215	10	3.2	3C9220	150	.33
3C9216	15	1.5	3C9221	200	.25
3C9218	50	1	3C9222	300	.16
		_	3C9223	500	.1
List Pri	re, \$7.50.			0	5.51
YOUR F	RICE .			Ş	<b>J•</b> J•
3C9210	1	27	3C9211	1.	
List Pric	re. \$8.50.				6 27
				<b>?</b> '	6.27

Permanent magnet, moving coil type. Accurate

#### Model 506 Voltmeters

Approximate resistance: 3 to 150 volts, 125 ohms

			erall 2A'		entions;
Article		Scale	Article		Scale
Number	Volts	Div.	Number	Volts	Div.
3C9183	3	30	3C9187	10	20
3C9184	5	25	3C91#8	15	30
3C9186	8	40	3C9189	50	25
List Price	e, \$7.50.			61	2 24
YOUR P	RICE			<b>Ə</b> :	5.51
Article			Scale	List	Your
Number	Volts	1	Division	Price	Price
3E9190	100		20	\$8.50	\$6.24
3E9191	150		30	9.75	7.16
3E9192	200		40	11.50	8.35

Weston Model 517 A. C. Voltmeter 150 Volt; 15,750 ohms total resistance. Approximate 10 mils. full scale, 2" diam. 2%" deep. 3E9245—List, \$9.75. \$7.16 YOUR PRICE ...

#### Model 476 A. C. Instruments

Movable iron type. Accurate within 2%. Dimensions—bakelite case; body diameter 2%"; overall diameter to outside of flange 3%".—Metal case; body diameter, 2½; overall diameter 3½".

model 476 Weston repulsion from vane instruments are not to be employed on frequencies exceeding 200 cycles. When used on D.C. reverse polarity to observe average deflection of indicator.

#### Model 476 A.C. Voltmeters

		Approx. Res.			Approx. Res.
Article	Range	Ohms	Article	Range	Ohm:
Number	Volts	Per Volt	Number	Volte	Per Volt
3C9141	1.5	3	3C9147	15	14
3C9142	2	4	3C9148	20	26.3
3C9143	3	6	3C9150	30	26.3
3C9144	5	10	3C9151	50	52
3C9145	8	10.5	3C9152	100	105
3C9146	10	14			
List Pri	ce, \$9.0	0.			664
YOUR	PRICE			٠ ٩	0.01
3E915			volts;	Resist	

YOUR PRICE A. C. Milliammeters—Ammeters

Number	amp.	Resist.	Number	amps.	Resis
3C9176	15	2000	3C9179	100	28
3C9177	25	690	3C9180	250	4.
3C9178	50	175	3C9181	500	1.
List Pri	ce. \$9.00			0	4 41
YOUR I	PRICE .			<b>ə</b>	6.61
Article		Approx.	Article		Approx
Number	Amps.	Resist.	Number	Amps.	Resis
3C9166	1	.2030	3C9170	5	.010
3C9167	1.5	.082	3C9171	10	.0058
3C9168	2	.05	3C9172	15	.0021
3C9169	3	.024	3C9173	20	.0016
List Pri	ce, \$9.00			C.	6.61
YOUR	PRICE .			🤝	0.01

#### Weston Model 425 -Galvanometer

Thermocouple Galvanom rhermocouple Galvanom-eter for use on A.C. current only. Very effi-cient high grade instru-ment—may be used on any frequency without impair-ing its accuracy. Approximate weight 6 ounces.

9399-Accuracy: Within two scale dimensions. Milliamperes. 5.2 ohms. List Price, \$18.00. 309399-YOUR \$13.23 PRICE

#### Weston Model 425-Milliammeters Safe Carrying Approx. Capacity Res. Ohms Milli-Article Number Capacity 500 600 309396 250

309397 309398 List Price, \$18.00. 1.18 1000 500 \$13.23 YOUR PRICE. Each

Stock Number

\$8.27

#### Weston Model 600 **High Sensitivity** Instruments

Most sensitive line of rugged small instruments made. Similar in appearance to Model 301. Flange diam. 3.5". Body diam., 2.8". Accuracy 2% on D.C.,

	% with a te Case.	ectifier on	A.C.	Bake-
		mperes		
	Res.	List		Net
Range	Ohms	Price		Price
30	2000	\$26.00	\$1	9.11
6.0	0000	22 50	- 1	7 20

3E9412	75	1750	23.50	17.30
3E9413	100	1300	21.00	
Stock Number 3E9417 3E9418 3E9419			List Price 26.00 19.25 19.25	Net Price 19.11 14.16

## SUPREME

Price and Terms 1E2556-Supreme Complete with Leads Model 333 and operating Instructions

Dealers' net cash wholesale price ... Time Payment Terms: \$15.00 down, five monthly payments of \$5.65 each. Write for contract.

#### Resistance Ranges Provided

Resistance measurements between any points in a tube circuit! Measure any resistance up to 0.1 megobm on one of the three resistance scales which operate from the self contained battery. The range can be increased ten times,—to a million omms,—with the addition of an external 45 volt battery. The self contained battery performs a dual function. may be quickly connected into the control grid cuit for mutual conductance tests. The advantage of making resistance and mutual conductance tests appeals to experienced servicemen.

#### NEW MODEL

ANALYZER

Make More Money Servicing With This New Instrument

Build your reputation with Supreme. The new Model 333 will simplify and speed up your service work. The fine appearance of the 333 service work. The fine appearance of the 333 identifies you as a professional serviceman. Know the pleasure of working with a precision

instrument. The publicity resulting from the excellent work you can do with the 333 will will you many new customers. Order your Model 333 Supreme now! Advertise that you own the best testing coulpment available.

Important Measurements and Tests Made with the Supreme-333

Measure Resistance Ranges:—0 to 1000, to 10,000, to 1,000,000 ohms. Current Chuck

Check Current Six milliampere ranges:—0 to 5, to 25, to 125, to 250, to 500, to 1250 Ma. Determine Voltage Six D.C. volt ranges:—0 to 5, to 25, to 125, to 250, to 500, to 1250 V. **Quick Point to Point Tests** 

The Supreme 333 Analyzer makes point to point testing easy. Resistance, voltage and current analysis can be made through the

current analysis can be made through the 8 wire analyzer cable plugged into any radio tube socket. Supreme pin jacks on the Analyzer panel permit use of headphones, loudspeakers, or microphones in the circuit under test without removing the radio chassis from its cabinet. Tube testing is accom-plished with a grid-shift battery and plate current reading.

PRE

S made bith the Supreme-333
Audio Outbut Tests
Six A.F. Volt ranges:—0 to 5, to 25, to 125, to 250, to 500, to 1250 V.
Measure A.C. Potential
Six A.C. Volt ranges:—0 to 5, to 25, to 125, to 250, to 500, to 1250 V.
Test Condensers

Over 3 Capacity ranges:—0.0025 to 0.125; 0.025 to 1.25; 0.25 to 12.5 Mfd.

Fine Precision Meter

Full Size d'Arsonval 314" meter compensated crystalline rectifier for A.C. neasurements. Both A.C. and D.C. readings appear on the same uniformly divided scale. (A patented Supreme feature.) A capacity block prevents D.C. from recording on the A.C. circuit. The high resistance and lack of a rectifier in the D.C. circuit prevents A.C. from registering through D.C. pin jacks. Capacity measurements appear on the uniformly divided scale. Output tests made direct.

Measure Any Voltage

current reading.

Up to 1250 volts A.C. or D.C. between any two points in any radio circuit! Four sockets take care Up to 1250 volts A.C. or D.C. between any two points in any radio circuit! Four sockets take care of all standard 4, 5, 6, and large or small 7 prong tubes. All the socket terminals and the top-cap connection are wired through an 8 wire analyzer cable. For making current measurement tests, push buttons are provided on the panel to open any circuit (except the filament) and permit the pinjacks above the button to be connected to the millammeter circuit. Short leads are provided for this purpose, and to couple the meter range tip jacks to permit analytical tests. Perpetual Tester

Perpetual Tester

No matter what circuit changes are made, the Supreme Model 333 remains up to date. All the meter ranges are fundamental and independent of the analytical portion of the tester. The Supreme 333 will serve your needs for years to come. Measures capacity between 0.0025 and 12.5 Mfd. The 60 cycle A.C. supply is used with the capacity measurements. All voltage, current, and capacity, readings appear on one simple scale—no 21gzag or offset A.C. scales to confuse the eye. This coordination of the A.C. and D.C. scale is a patented Supreme feature.

Supreme Model 35 Tube Tester

#### SUPREME MODEL 5-UNIT RADIO TESTER 444



1E2564—SUPREME
MODEL 444 Five Unit
Radio Tester. Dealers'
Not Cash Price
TIME PAYMENT TERMS:—

-\$30.00 Down and Five Monthly Payments of \$13.65 Each.

Improved Oscillator

The OSCILLATOR CIRCUITS of the Model 444 The OSCILLATOR CIRCUITS of the Model 444 are tuned by a tap switch arrangement so that calibration charts are not required, the frequency values being marked on the panel. Eleven fundamental frequencies between 130 and 1875 kilocycles are provided with a tuning signal in each of the 20, 40, and 80 meter short-wave bands. Oscillator may be operated with alten 110 Voit A.C. or D.C. power supply, and is completely shielded with a variable outbut attenuator. When operated with A.C. power supply 100% modulation is automatically provided.

operated with A.C. power supply 100% modulation is automatically provided.

All of the controls and parts of this tester are symmetrically arranged on a bakelite panel which is mounted in a beautifully finished hardwood carrying case, size 22½" long x 11½" wide x 61½" deep, with detachable cover. A commodious compartment is provided for the accessories which accompany the Tester. Operating instructions furnished.

1E2565-Supreme Model 35 Tube Tester YOUR

PRICE .....

TIME PAYMENT TERMS:-\$10.00 down and 5 monthly payments of \$4.60.

The latest Supreme achievement. A low priced, easy operated, tube tester built on the same general circuit design of the Model 85 and differing only in physical appearance and in not having the short checker employed in the 85. Four sockets, three simple operations, and you accurately test all the standard tubes.

all the standard tubes.

No mathematical computations to determine tube quality necessary—Three color zones on the meter dial indicate GOOD, DOUBTFUL, or BAD, where your customer can plainly see the result of the tests. It is impossible to barm the instrument by incorrect operation.

Tapped Primary Power Transformer. Steady voltage regardless of the power drain of the tube under test is possible with the tapped primary voltage regardless of the power drain of the tube under test is possible with the tapped primary voltage regulation. Ten taps ranging from 95 to 125 volts assures you of always getting the same test indication on a given tube. A self-contained 201A tube acts as a linear rectifier for the 3¼" d'Arsonval D.C. meter when the A.C. Line test button is pushed.

The Instrument panel is genuine bakelite with silver lettering. A sturdy white oak quarter-sawed natural finished case size 11" long x 94," wide x 54," high makes the Model 35 an impressive and confidence inspiring tube tester.



The Model 444 incorporates new FREE REFER-ENCE POINT SYSTEM OF ANALYSIS with all circuits of radio tube sockets extended through Analyzer cable to four moulded sockets and to convenient terminals to which any range of the meter may be applied for current, voltage, and reststance measurements.

The ANALYZER CIRCUITS of the Model 444

The ANALYZER CIRCUITS of the Model 444 are virtually a dualicate of those described under the Model 333 Analyzer: Same voltage, current, resistance, and capacity ranges. (See Table above). Also the same system of analyzing is used.

The TUBE TESTING functions employ a combination of the features of the Models 45 and 55 Tube Testers. A Gas Test is provided by inserting a high resistance in the circuit so that gas current will cause a change in grid voltage, thereby also causing a change in plate current which can readily be observed on the plate milliammeter. Provision is also made for testing individually the elements of new type tubes having more than one tube in a single envelope, such as the type 55, 286 stc., A Short Checker of advanced design is included.

#### Easy Terms

You may use a "Supreme" Instrument while you are paying for it, if you wish— They are available on Time Payments to responsible Dealers and Servicemen. If you wish to purchase one of these write us for time payment contracts and application blanks. Fill them out and return them to us with the down payment as shown in this catalog. However we wish to point out that you make a substantial saving when buying for cash.

#### Free Trial

You can try any Supreme Instrument at no risk. Send us your order. If you are not thoroughly pleased with its performance return the instrument to us in its original good condition within five ars original good condition within five days after you received it and if you desire, your money will be cheerfully and promptly refunded. No greater recommendation for this line of fine instruments can be given—We know that once you have had the opportunity to use one, you will not want to next with it. you will not want to part with it.



#### 45 Tube Tester

STRUM

Can you test ALL the new tubes? Can you test the more common types such as 24s, 27s, 45s, etc. and really determine the difference between a "good" tube and one that is only "Falr"? If you are not equipped to do this, think how many sales you are loshing and how much money is slipping away from you just because you are not showing your customers that new tubes are needed, eventhough those in the set still play.

#### Simplified Modern Tester

The Supreme Model 45 is a Tube Tester for the Radio Serviceman. It employs the point-to-point method of making circuit connections similiar to those utilized in the new Supreme Analyzers. Each element in the tube is connected to the contact arm of an individual selector switch so that the proper circuit connections can be made to each element REGARDLESS OF ITS TERMINAL CONNECTIONS AT THE TUBE. BASE OR TOP-CAP. . . . a 100% obsolescence-proof Tester for all tubes using seven prongs or less.

All socket holes are numbered in accordance All socket holes are numbered in accordance with R.M.A. standards. There is a rotary switch for each of these socket terminals bearing a corresponding number. The contact arm of this switch is directly connected to the socket terminal having the same number. By rotating the contact arm of the switch, the tube element located at the particular number corresponding to the switch can be connected to any part of the circuit or to any desired voltage. In this manner if a tube has a plate, for example, where the cathode is usually located, the plate element at the cathode location can be connected to a suitable plate voltage.

cated, the plate element at the cathode location can be connected to a suitable plate voltage instead of to the B minus postion in the circuit to which the cathode is ordinarily connected. A COMPLETE CHANGE IN THE LOCATION OF THE TUBE ELEMENTS MAKES NO DIFFERENCE TO THE SUPREME MODEL 45. Has a highly insulated bakelite panel heautifully lettered in silver. The entire assembly is enclosed in a handsome quartered white oak carrying case which includes a compartment in the back for the line voltage cord and other accessories. Size 11" L x 9½" W x 5" high. A chart showing the switch settings and tube readings for all the tubes on the market today is placed on the inside of the cover. As new tubes are announced new charts will be supplied.



IE2563—Supreme Model 45
Portable Type Tube Tester.
DEALERS NET CASH PRICE .....

Time payment terms: \$10.00 down, Five monthly payments of \$4.49 each. Write for time payment

#### Supreme Model 85 Tube Tester

IE2555-Supreme Model 85 Tube Tester YOUR PRICE

Time Payment Terms-\$15.00 Down and Five Monthly Payments
of \$5.85 Each
A tube tester that sells tubes! d'Arsonval 3\%"

meter shows tubes to be either Good or Bad. Neon Lamp short and leakage indicator for all tube ele-Lamp snort and reakage indicator for all tube elements. Only three simple operations to test a tube. Only four sockets. Emission type test. Tapped transformer type line adjustment, for 98 to 125 Volt 60 cycle service. Supplied in a quarter samed onk carrying case. Tests all tubes listed in the Radolek Tube Chart.



\$**7.4**45 1E2551— YOUR PRICE

Covers 100 K.C. to 4 Megacycles. Uses fundamental and harmonic signals. Precision type tuning dial laboratory calibrated. 100% modulation at frequency of A.C. line supply. Fixed attenuation assures positive frequency stability and full output at all times. Completely shielded with aluminum. Housed in a hardwood case with a bakelite panel attractively marked. Portable, with leather strap. Power supply is isolated from the A.C. line with a transformer, permitting direct connection of the oscillator to A.C.-D.C. sets without danger of shortling. Supplied with a type 31 tube, and a shielded antenna-ground cable. For use with 110-120 volt 60 cycle, A.C. A hand calibrated chart is supplied with each oscillator. Covers 100 K.C. to 4 Megacycles. Uses fundamental

#### New SUPREME STANDARD DIAGNOMETER

#### The Finest Test Instrument You Could Desire

Dominant Features

Point to Point Analysis GOOD-BAD Tube Test Line Voltage Regulator Test Dial

Line Voltage Regulator Mutual Conductance Test Protected Tube Meter Adapters Not Necessary For 1½ to 30 Ftl. Volts Tube Short Checker Modulated Oscillator Completely Shielded Stabilized Circuit

10. Completely Shielded
11. Stabilized Circuit
12. No Frequency Drift
12. No Frequency Drift
13. Capacitor Leakage Tests
14. No D.C. Register on A.C.
14. No D.C. Register on D.C.
16. d'Arsonval 3½" Meters
17. Simplified Tube Tester
18. Oversize Transformer
19. Analyzer Ground Circuit
20. Flexible For Future Use
21. Ohm Battery Compensator
22. Uniform A.C. Scale
23. Complete Instructions
24. Capacity Measurements
24. Capacity Measurements
25. Triple Range 0.0125—0.125, 0.025
-1.25, 0.25—1.24 Mfd. Capacity,
25. Triple Range 0.01000-10000-100,000 ohms,
26. Six A.C. Voltage Ranges: 0-5-25-125-250-5001250 volts. (Also for Output Tests.)
27. Six D.C. Voltage Ranges: 0-5-25-125-250-5001250 volts. ලලලම්

1E2566—Supreme Standard Diagnometer, for 110 A.C.
Dealers Net Wholesale CASH

27. Six D.C. Voltage Ranges: 0-5-25-125-250-500 1250 volts.

28. Six D.C. Milliampere Ranges: 0-5-25-125-250-500-1250, Mils.

The Supreme Multimeter is an exclusive patented feature with all A.C. and D.C. readings on the same uniform scale.

The Precision Calibrated Oscillator provides Fundamentals over the lower frequency ranges and powerful harmonics over the high frequency ranges and powerful harmonics over the law for the professional radius despectation of the specially for the professional radius despectation of the professional radius powerful harmonic of the professional ra

#### SUPREME Precision Multiwave Signal Generator Model 180 Portable Oscillator, Electron Coupled, Battery (self-contained) operated. Accurate Modern Test Instrument for Precision Radio Service.

#### 10 Superior Features

Circuit. Electron coupl- 1 ed circuit with seven sets of coils with seven fundamental ranges.

Carrier Frequency Range of 90 K.C. to 22 Megacycles.

Modulation. Separate modulator stage that modulates the carrier frequency approximately 50% at 400 cycles.

Frequency Calibration. Each Signal Generator is individually calibrat-

as individually canonated at all frequencies with a guaranteed accuracy of ½ of 1%. Stability. The calibration of the Signal Generator is independent of oderate variations plate potential and external loads.

6. Double Peaks. No misleading double peaks, this is accomplished by proper design of induc-tors and amount of feed-back.

Tubes. Two tubes, one type '32 utilized as an oscillator and one type '30 as a modulator.

Power Supply. Four batteries are requised, two 4½ volt filament batteries and two 22½ volt "B" batteries.

Power Consumption, A total nower consumption of 0.315 watts, insures long hattery life.

Stray Fields. The Sig-nal Generator and pow-er supply are complete-ly shielded, eliminating stray fields



113, "x814"x55a Size 19 lbs. Beautiful Oak Cabinet. Bake-lite Panel clearly engraved.

IE2550-Model 180, with tubes batteries. and

YOUR PRICE ..... Write for time payment price

THE RADOLEK COMPANY

#### Improved Model RCA Oscillator



Lower Price Extended Range

TypeTMV-97-B, Range 90 to 25,000 K.C.

NET PRICE

\$**29**50

Less Batteries

#### A Full Range Test Oscillator!

Specifications

A plate modulated tuned grid circuit using two type 30 tubes is employed. The A.F. modulator tube produces a 400 cycle note, modulating the R.F. oscillator 50°. Two binding posts are employed for the output circuit which is attenuated by a smooth control of the potentiometer type. Batteries required are: 1 22½ volt "B" battery and 1 standard size 4½ volt "C" battery which provides current for the two type 30 tubes in series. Entire oscillator and battery equipment enclosed in a black finished aluminum case provided with a leather carrying handle. Weight only 5 lbs. including batteries. Size of base, 9¾" wide, 4½" deep and heighth overall 8½". Specifications

Produces 8 fundamental frequency Produces 8 fundamental frequency ranges as follows: 90 to 150 K.C.—159 to 330 K.C.—330 to 720 K.C.—220 to 1460 K.C.—1460 to 3050 K.C.—330 to 720 K.C.—330 to 7400 to 14300 K.C.—7400 to 14300 K.C.—14300 to 25000 K.C.—Range selector switch is located on the front panel and plainly marked. Variable range tuning dial is an adjustable vernier type calibrated in frequency to an accuracy of 3% plus or minus. No special charts required.

1E2505-With tubes, less bat-YOUR PRICE ..... \$29.50 1E2506-Complete with bat-

YOUR PRICE .....\$30.71

#### Philco Signal Generator

Portable Model 024 Complete with Batteries and Type 30 Philco Tube

3E2507-YOUR PRICE.....

\$1350

For Intermediate and Broadcast Frequencies 110 K.C. to 2000 K.C.

Frequencies 110 K.C. to 2000 K.C.

Convenient Size

A portable self contained oscillator at a price within the reach of every service man. This is the smallest and most rugged signal generator for general service work we have seen. Stands only 7" high, 5" wide and 5" deep. Contains a 22½ volt "B" battery, firmly anchored in place, and uses a single No. 2 Flashlight cell to supply the type 30 tue.

The low voltage of the Flashlight cell to supply the type 30 tue.

The low voltage of the Flashlight cell may be a side porthole, without opening the oscillator case. Colwith etched brass panel and convenient carrying handle.

Technical Features

Technical Features

cell may be replaced through tor case. Completely shielded

Technical Features
o "A" pro- value. A Dual tuning range: Range vides fundamental frequencies between 110 and 250 K.C. and strong fourth harmonies from 440 to 1000 K.C. Range "B" provides fundamental frequencies between 220 and 500 K.C. with fourth harmonics between 880 and 2000 K.C. Self modulated to a pleasing audio tone of indeterminate

Features value. Accuracy of frequency selection within 10% of scale designation. Well within the tolerance limits of commercial broadcast receivers. Potentioneter type output attenuator. Shielded Antenna lead with universal clip for connection to receiver. Permits aligning any broadcast superheterodyne or R.F. type radio set.

#### Weston Selective Set Servicer Model 698

Model 698

Modern Fleid Analysis Equipment!
Employs the Weston Method of Selective Analysis which is a combination of "Cold Chassis" Point-to-Point testing and of "Hot Chassis" voltage and current analysis. An Analyzer Plug and cable brings the circuit of any tube socket to the Selector Unit on the rear of the multi-range meter. Short "Jumper" cords from the meter to the Selector Unit permit reading A.C. or D.C. voltage, D.C. mils, or D.C. resistance between any elements of the circuit under test.

Multirange 3" Weston Meter: Measures A.C. or D.C. volts, at 1000 ohms per volt on four ranges, 0-7½, 15, 150, 750, volts. D.C. only, 0-7½, -75 Milliamperes. Two resistance ranges, 5000, 500,000 ohms using an inclosed 4½ volt "C" battery. Toggle switch shifts from A.C. to D.C. scale. "A" Battery Adjustment rheostat compensates for battery deterioration. Complete Selective Set Servicer supplied in black leatherette case, 12½ "210" 25" high. Slip hinge removable Complete instructions and tube base chart included. Nothing else to buy. Complete Modern Field Analysis Equipm 1E9429—

YOUR PRICE.

Equipment

PRICE......\$34.50 OUR

#### ONFIDENCE

#### Wheatstone Bridge Model X

Now Only

Less Batteries

Less Batteries

A genuine Wheatstone Bridge for your "Lab" at the lowest price ever offered. Designed to use your own sensitive milliammeter or a single head-phone to indicate a balanced condition of the bridge. Will accurately measure any resistance heaven 0.1 ohm and 10 megohms! No mathematics or formula to work out—read resistance directly on the big precision calibrated dial. 3200 possible readings of exact resistance compared to 300 exact readings on the ordinary ohm.meter. Accuracy, independant of battery voltage, within 1% at all times. The Wheatstone Bridge system of resistance measurement is the only method approved by leading colleges and scientific laboratories! Supplied in a 5"x 3" case, 4" high with space for 2 "C" batteries.

1E2541—Complete, less battery, Model X 



#### Wheatstone Bridge

With Galvanometer

Model Z



Supplied as ill illustrated, less 2214

1E2542 Model Z\$2995

Model Z
Confidence Whatstone Bridge with a sensitive d'Arsonval galvanometer and a larger case which has space for a 22½ voit 'C' battery. This Increased battery voltage makes the selection of the exact balance point for high resistance measurements more precise than with Model X. You need a Wheatstone Bridge for exact resistance measurement. Correction of bias resistor values as given in the Radolek Tube Chart, with the Confidence Wheatstone Bridge will often double the efficiency of a radio receiver. Intermittant reception due to contact resistance or shorting I.F. coils can be quickly located. A business promotion plan envolving the use of the Confidence Wheatstone Bridge is offered to each purchaser. Details supplied on request, You can increase your earnings with a Confidence Wheatstone Bridge.

#### A Master Tube Seller "Confidence Special"

"Four simple steps and you've tested a tube on the Confidence Special!"

1. Adjust for correct line voltage.

2. Point selector to proper position.

3. Put tube in the proper socket.

4. Read the tube condition on meter.

Tests over 130 different types of tubes including special Arcturus, Kellogg, Kenrad, Majestic, Sparton, and Wunderlich types—all of which are arranged numerically on a complete tube chart furnished in lid. Accurate tests involving every element of every tube indicate true tube performance. The clearly understood "Good"— "Bad" marking on the dial will be appreciated by your customers.

marking on the dial will be appreciated by your customers. Red pilot lamp indicates shorts from plate or screen grid to any other ele-ment. Special Cathode to Heater hot element short test included. Panel of attractive Verl-chrome fin-lish. Black leatherette case with slip-hinged lid, size 14"x9"x5" deep. De-signed for 100 to 130 volts, 60 cycle, A.C.

IE2539-YOUR PRICE ...





#### Weston Jewell Model 540 Sylvania Tube Seller

Sylvania Tube Seller

A compact and easily operated portable tester for all 4 and 5 prong tubes. Simple adapters listed elsewhere in this catalog permit tests of all other type tubes on this high quality instrument. Uses Jewell, "Index of Merit" 3¾" meter, (20 Mil. movement). Has line voltage adjuster, interelement short checker, and tube voltage selector. Filament voltages of 1½, 2, 2½, 3, 3, 3, 5, 63, and 7.5 volts are available. Case is of dark green leatherette with removable Ild. Size 12"x 9¼"x5½". 4½ ft. A.C. Cord. This instrument makes an excellent foundation for building up a special panel tube tester. The meters alone are well worth the exceptionally low price we ask.

YOUR PRICE.....

#### New Clough-Brengle All-Wave Model OA

#### Electron Coupled Oscillator



140 Fundamental Frequencies Over 860 Strong Harmonic Waves

Intermediate **Broadcast** and Short-Wave

#### Modern Up-to-Date New Service Test Oscillator

This is the 1935 model oscillator with a new AC line filter, sharp peak tuning coils, 100% attenuator, 400 cycle modulation. Just the oscillator you need for servicing the new sets. Three tubes; a type 37 inodulator tube coupled through a special choke to the 36 oscillator tube, makes a stable efficient circuit with neglible frequency drift over years of service. Independant trimmers on each wave band permit accurate culturation against broadcast signals at any future time. Calibration is independant of line voitage or frequency.

Easy To Read Accurately

Easy To Read Accurately
Simplified controls permit accurate selection of any of the fundamentals and easy identification of the major narmonic signals. The modulator contamonic signals. The modulator contamonic signals. The modulator contamonic upper center in the illustration) gives a wide range of output from zero to maximum signal strength.

Sett contained power pack for A.C. or D.C. line supoly eliminates the heavy expensive batteries employed in most oscillators and assures a steady output signal of constant intensity. A 36 tube acts as a rectifier.

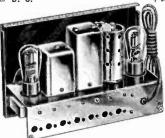
400 Cycle audio medulation is clear and pleasant to work with. It is the currect frequency with which to adjust the dynamic speaker cone. Any rectifier or thermo-coupled output meter will give accurate reading on the 400 cycle tone.

cycle tone.

Expertly Engineered

Expertly Engineered

The interior illustration and diagram below show clearly the superior features of this modern service instrument. The triple set of choice coils in the line circuit effectively block radiation of unwanted harmonics into the power supply system. Capacity irrsulation to chassis ground prevents danger of shock or short circuits. For 110 to 120 Volts. A. C. circuits.



Harmonic Waves
Harmonics of the fundamental frequencies extend the range of the oscillator over practically all the frequencies used in commercial receiving sets. The advantage of this type of oscillator over the ordinary variable type is the accuracy of the crystal calibrated frequency bands and the stability of each range. The following list gives the fundamental frequencies in each of the 20-K. Chands and the harmonica which may be obtained with ample strength for test purposes. purposes Fundamental Ranges in

rundamental Ranges on K.C. and Available Harmonics
120 to 130, First 5 harmonies: 165
to 185, First 4 harmonies: 252½ to
272½, Fundamental only: 436 to 466,
2nd, and 5th only; 590 to 610, 1st
to 10th, 15, 20th; 990 to 1010, 1st
to 21st harmonies; 1390 to 1410, 1st
to 6th, 10, 15th.

Completely Shielded

6th, 10, 15th.

Completely Shielded Completely Shielded
Each individual coil and E. F. circult within the oscillator is arranged
or shielded independently so as to prevent strays or transient oscillations
escaping from the steel case which
houses the entire instrument. The
case is finished with black crystal
enamel. Size 10½"x"""5"4" deep.
Ample length connecting cord and test
leads are furnished. Equipment includes 2-37 tubes and 1-26 tube.

Ask Yourself These Questions
When Buying An Oscillator
Compare the answers with those given
for the new Clough-Brengle Model OA.

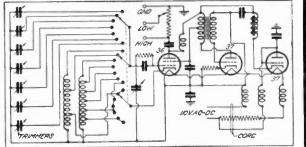
1. Is it electron coupled? The OA is.
2. Has it a separate modulator?
The O.A. employs a separate 37 tube.
3. Is its frequency calibration accurate? The OA is Crystal Calibrated.

its frequency calibration ac-? The OA is Crystal Calibrated. it be compensated for fre-drift? The OA has 7 band

4. Can it be compensated for frequency drift? The OA has 7 band trimmers.
5. Does it use expensive batteries?
The OA is all-electric.
6. Can I get any better value for my money in any other make oscillator?
The OA is the best buy in its class. You have to pay 25% more to obtain a better instrument.

Clough-Brengle Model "OA" Test Oscillator complete with tubes.

3E2572-List \$54.50. YOUR PRICE



#### Famous Analytical Tester

Consists of the Famous "88" and "71" (See description below) in one case with space for the adapters, plugs and test leads. Case is of durable black fabricold with a slip hinged cover, leather carrying strap and satchel type latch. The two individual units are not fastened in place and may be quickly lifted out for individual use. This type service equipment is particularly suited for tracing trouble in automobile radios. Its professional appearance makes a good impression npon customers when servicing radios in their home. This Analytical Tester with a good oscillator will permit you to locate trouble and make repairs on more than 98% of all radios sets. Size 94 "x10½" x4" deep. 1E2522-Complete

YOUR

\$**32**.34



#### Famous "88" Circuit Checker For "Selective Analysis" Testing

For "Selective Analysis" Testing a compact circuit analyzer with plug, adapters, and circuit opening push-buttons. Has five individual sockets besides one small seven hole socket for the 5 ft. Analyzer cable and plug. Four adapters match the small seven prong latch type plug to any tube socket, and ton-grid connection. Eight circuits pass through double pin-facks on the panel. Small red push-buttons between each pair of pin-jacks may be pressed to open any circuit for current measurement. Voltage and resistance measurements may be made between any of these circuits. To be used with the "77" or any good Volt-ohm-milliammeter. Size 4½"xi"x33%" deep.

1E2523—Complete YOUR PRICE, ONLY ....



#### Famous "77" AC-DC Unitmeter

A multirange volt-ohm-milliammeter for both A. C. and D. C. volts and mils. Uniformly spaced pin-jacks and a durable set of test prods with bakelite insulated connector to fit the pin-jacks make this the handlest instrument of 1is type on the market. Genuina 34" d'Arsonval meter with hand calibrated copper-oxide rectifier, 1% tolerance wire wound shunts and multiplier resistances. A.C.-D.C. Volt ranges, 0 to 5, 10, 50, 100, 200, 500, and 1000 volts. A.C.-D.C. current ranges. 0 to 10, 25 and 100 Mils. 0 to 1 Mil. D.C. Only Resistance ranges 0 to 1000 ohms, to 10,000, to 100,000 ohms. Size of case 4"xr"xx3" deep.

1E2524—Complete YOUR PRICE

**\$23**.23



#### Vacuum Tube Volt Meter

#### 0.1 to 3 Volts A. C. Of Any Frequency!

The Clough-Brengle VTVM consists of a power pack, micro-ammeter, and movable vacuum tube signal collector, in a stable modern circuit for the use of advanced servicement. design engineers, and universities. 1E2574—Complete

\$38.22



Specifications

Range 0.1 to 3 voits without drawing current from the circuit being measured. Up to 30 voits at 33.333 ohms per voit may be accurately determined. Meter is calibrated against Bureau of Standards tested Precision Standards to 160 Kg. C. Rheostat adjusts plate circuit bucking current for changes in line voltage and zero adjustment of meter. 5 ft. flexible cable between units permits location of voltmeter close to the circuit under test. Supplied complete with 1-606 tube, 1-84 tube, 1 grid lead, 1 ground lead, and tube shield. Diagram below. Specifications

#### Applications

I. Locating intermitant circuit breaks;
The VTVM measures the carrier
wave of an incoming signal at any
point in the circuit where the carrier is amplified to 0.1 volt. Thus
by touching the 6CS grid circuit to
successive IF grids, the break can be
located quickly.

2 Acquirative measures RF or AF

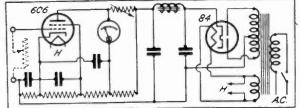
located quickly.

2. Accurately measures R.F. or A.F. gain; efficiency of AVC circuits, etc.

3. Locates broad tuning stages, in conjunction with an oscillator.

4. May be employed to measure inductive reactance at any frequency. Determines impedance in ohms.

Complete instructions furnished.



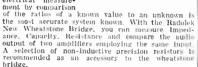
#### Radolek's New Wheatstone Bridge

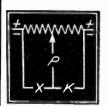
3E2544-

YOUR \$ 195

Consists of a 1000 ohm potentiometer mounted in a moulded bakelite A special case. A special scale etched on aluminum indicates proportional ratios between known and unknown electrical values. Operates on A.C. or hand-in-terupted D.C. Requires a sensitive headphone to indi-cate electrical bal-







Specifications

Moulded Brown bakelite case, 5"x27,"x21," Watt wire wound 1000 ohm precision potentio-Scale accurately divided. Four pin-jacks for phones and current circult. Two pair of flexible leads for con-nection to the known and unknown values are supplied.

#### Fabrikoid Tester Cases



These substantially constructed and durably covered cases are ideal for housing Testing Apparatus of one's own construction. Also often required to replace cases of Readrite Standard Testers which have become duranged through wear or necident. Model numbers indicate Readrite Testers they fit. Available in three sizes to meet a wide variety of needs. Fabrikoid cover with reinforced leather corners, carrying strap and nickeled snap catch.

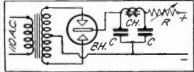
3E2609-Model 610-C.. Size 141/2x7x714" YOUR PRICE ....

3E2635-Model 410-C. Size 10%x6%x14". YOUR PRICE ....

3E2636—Model 1000-C. Size 13½x9¼x1½". YOUR PRICE......\$3.88

#### Speaker Field Supply Kit

Kit consists of the essential parts with which to build a 30 wait 300 volt Dynamic Speaker Field supply to operate from 110-125 volt, 60 cycle A.C. Line Finished unit will supply up to 100 mil-lammeres to a load of 3000 olms or less. The power Rheustat (R in the diagram) pernits ad-justment for speaker fields of hover resistance. As-many as 6-500 ohm speaker fields may be supplied



100 M.A. each (5 watts per field). Small portable carrying case supplied with the kit permits the most convenient arrangement of this esimpact A.C. operated D.C. speaker Field Supply Kit. A 5000 hour Elkon dry disc rectifier provides D.C. 3E392 | - Complete Kit of Essential parts. YOUR SPECIAL

#### Tube Tester

Modernize Your

Substitute a Modern Tube Tester Filament Transformer in your present tube checker! Employ a ten point non-shorting selector switch (Cat. Num. YC1640, 81.82 net) with the Tube Tester Filament Transformer (38:3929, 81.25 net) and you can rebuild your present equipment, or design a new tester to suit your swn requirements.

#### Tube Tester Filament Trans. $1\frac{1}{2}$ , 2, $2\frac{1}{2}$ , 3.3, 5, 6.3, $7\frac{1}{2}$ , 15, 25, 30 volts; at 2 amps.



PRICE... \$1.25

Por construction of tube testers or replacement in standard testers. Supplies the correct voltages for all types of tubes including the oldest types and all those just recently a n n o u n c d. Flexible 8" leads are color coded and a diagram is included which gives a 11 the connections. Dimensions:

23 " high, 3" wide, Mounting 23," high, 3" wide, 23," deep. Mounting hole centers 21/2x118". Primary 115 volts at 50 or 60 cycle.

#### Bakelite Bar Knobs



Tapered Pointer Type for Test Instruments

Replace old style round knobs Have standard 14" hole with set screw. White pin line screw. White pin line indicator. Furnished in black or brown bakelite. They add a factory appearance to home built instruments. 3E6817—244" Black. 3E6818—244" Brown. 2018.

PRICE, EACH 10¢ YOUR

#### Rectifier Assembly



EACH ..

3E6815-114" Black.

3E6816-114" Brown.

YOUR

PRICE.

For 1 M.A. Meters

3E2510 — For Weston 301 or 267 meters. With 301 Dial Scale.

List Price, \$5.00.

YOUR PRICE..... \$3.25

#### Full Wave Copper Oxide Rectifier



Type A 5 Milliampere Capacity

Miniature copper oxide rectifier. Guaranteed the finest made. For converting the finest made.



Type B 20 Milliampere Capacity
Size 76" round discs, 34" long.
Medium miniature size copper oxide rectifier for use in A. C. circuits of less than 5000 cycles frequency and rectifying not over 20 milliamperes D. C. May be used for external connection to D. C. meters employed in special capacity measuring circuits. Has 6-32 meaning circuits.

3D4856 \$1.88 YOUR PRICE

Type C 40 Milliampere Capacity

Size 34" round disks, overall size 1½""

Copper oxide rectifier for A.C. circuits of less than 5000 cycles frequency and not to exceed 40 milliamperes D.C. current. Exception of 115 voit A.C. current for field excitatin of dismined frequency and not to exceed 40 milliamperes D.C. current. Exception of 115 voit A.C. current for field excitatin of dismined field. Not recommended on circuits exceeding 600 voits. May be substituted for circuits exceeding 600 voits. May be substituted for Philos "B Eliminators" within 40 mill. Ilmits. Only servicemen familiar with copper oxide rectifier principles should attempt this replacement.

304867—YOUR PRICE

#### this replacement. 3D4857—YOUR PRICE \$1.75

#### Littelfuses For Test Instruments



Especially designed for protection of delicate equipment. Break circuit in 1/100 part of time required to burn instruments. May be used on 250 volts D.C. or A.C. the smaller sizes have been used without arching up to 1500 volts D.C. on a 2KW supply. Illustration is actual size. Length 1 inch. Diameter 1/2 inch. Average

Max. Resist. List Price Dozen

_		Max.	Res	151.	List	YOUR
Stock	Rating	Load	01.	1 5	Price	PHICE
Num.	Amps.	M.A.	Mil.	Load	Each	Dozen
3C6925	1100	5	138	ohms	20c	\$1.40
3C6926		15	65	ohms	20c	1.40
3C6927	18	65	21	ohms	20c	1.40
3C6928	18	100	3.5	ohms	20c	1.05
3C6929	1/6	100	26	ohms	15c	1.05
3C6930	24	200	6.2	ohms	15e	1.05
3C6931	3/4	300	3.0	oluns	15c	1.05
3E6932	36	400	2.5	ohms	15c	1.05
3C6933	3/4	600	1.0	ohm	15c	1.05
3C6934	1	1000		olung	10c	.70
3C6935	2	2000	.14	ohms	10e	.70

#### For Radio Receivers and Amplifiers

Type 3AG for use in the 105-120 volt primary line of the power supply. Tested and approved by the Underwriters Laboratories. Illustration is actual size 14" long, 4," diameter.

Stock Num.	Rating		Max.	List Price Each	PRICE
3C6936 3C6937 3C6938 3C6939	1 136 2	$\begin{array}{ccc} 250 & 60 \\ 250 & 80 \\ 250 & 150 \end{array}$	watts watts watts watts	10c	70c per dozen \$4.50 per C.
306940 306941 306942	14	500 150	mils. mils. mils.	15e	\$1.05 per

#### 500 500 mils. Littelfuse Mountings

Tinned shakeproof terminals and extra quality phosphor bronze, nickel-plated fuse clips. Molded bakelite base 1½x2,8x2,16 inches. inches

inches

3C6944-For



3C6945—For Instrument Littelfuse.

15¢ Per Dozen ..... \$1.05

#### Littelfus**e** Panel Type Mounting

For use where concealed wiring is required. Bakelite base, Clips as above. Studs 1 incline, threaded \$52 full length. Nuts and washers included. For lata fuses only. 3C6946-List each, 20c.

YOUR PRICE Dozen ..... \$1.40



#### Littelfuse Lug Connector



Designed for temporary hook-ups, experimental Designed for temporary hook-ups, experimental set-ups, etc., in the laboratory or classroom where time is valuable. Made of nickel plated spring brass, the connectors slip on the fuse caps with a snug fit. The large hole, B, inches in diameter will fit the binding posts of most instruments.

3C6947—List Price per pair, 15c.

YOUR PRICE ..... 9¢

#### Standard Radio Fuses

Fuse element enclosed in glass tube with brass caps on ends. Size 114"x 14". Will blow at a 50% overload. Type 3A.G.

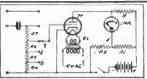
Box of 5, 

Per Hun	dred	\$	2.75	1
Stock Number	Amps.	Stock Number	Amps.	6
3C6915 3C6916	111/4	3C6919 3C6920	4 5	
3C6917 3C6918	2 3	3C6921 3C6922	10 15	MA

### Special Radolek Circuits

specifically for Radolek Servicemen and Dealers sircults have never been pub been published

These circuit plagrams and parts lists elsewhere, however they may be re-were developed by the Radolek Engin-printed in Radio publications where eering Department specifically for full credit is given the Radolek Company for development.



#### Vacuum Tube Voltmeter Kit of Essential Parts

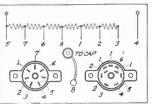
Of Essential Parts
Six volt filament lighting transformer
for 110 volts A.C. Two 10,000 ohm
precision resistors. I5,000 ohm potentiometer. Five Prong Socket. Five
point shorting type switch. Four
selected carbon resistors. DPST toxtox-satisfy Mine Condenser. Three gle switch. Mica Condenser. Three Tip Jacks. 512"x812 bakelite panel and Portable Walnut Instrument

3E2450 -Essentials Kit. S7787 PRICE

### Radolek V. T. V.M.

Bridge type Vacuum Tube Volt-Meter! A balanced bridge type circuit that is exceptionally stable and easy to calibrate. Resistance circuit that is exceptionally stable and easy to calibrate. Resistance R and RI must be wire wound precision type 10,000 ohm resistors. R2 is 15,000 ohms, wire wound. Initial adjustment requires setting R2 to equal plate circuit resistance of the 37 tube, indicated by "0" reading on the 0-1 Milliammeter. Presence of a signal across the grid circuit changes the internal resistance of the tube and causes current to flow cuit changes the internal resistance of the tube and causes current to flow through the meter. Normal range with 45 volts: "B" supply 0.01 to 1 volt. A series of tanped resistors in the grid circuit permits multiplying this range approximately 10 times. The essential parts are listed in the adjacent column. Any make of type 37 tube or any 0-1 millianmeter listed in this catalog may be employed in this circuit. 45 to 90 volts "H" may be used.

### Radolek Portable Tube Short Checker Kit

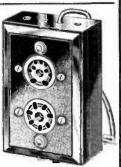


simplified tube short checker for use with A simplified tube short checker for use with any obmineter which will distinguish between 11,000 olms and 12,000 olms. Will detectathode heater shorts up to 1,22,000 olms.

Any interelement short will instantly be indi-

1 by a reading on an ohmmeter of less 12,000 ohms.

An open filament prevents any reading the meter. Six 2000 ohm resistors are con-nected between the numbered terminals, "Hot" tube tests may be made by connecting an A.C. to terminals 3-4.



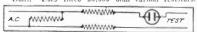
3F2451-Kit of merts to ube short-checker style as illustra nake tube umpact st illustrated. Complete instructions.

YOUR PRICE .....

### Neon Leakage Tester Kit

Consists of a neon builb mounted in a bakelite case with protective resistors. With flexible A.C. cord in 110 to 120 volt line, standard "banana" juin tip test leads may be plugged into the insulated tip Jacks and continuity tests may be made through resistors as high as 2 megohms. Without the A.C. line connected, the neon builb ferms a splendlel polarity indicator on circuits carrying over 100 volts. Also excellent for locating high frequency ignition leaks in auto-radio installations. Uses three 25,000 ohm carbon resistors.





### Radolek Police Call Alarm

For Use On Any Radio Within 10 Miles of a Police Trans-mitter. Does Not Prevent Normal Broadcast Reception!

Normal Broadcast Reception:
Radolek supplies complete parts to
build this auxiliary detector for use
with any radio to pickup local Police
Calls while the regular Broadcast
programs are being received.
Essentially this device is a one tube
receiver, deriving all its power from
a standard radio set and using the
audio amplifier of the standard set
for prestucing loudspeaker volume. It
should be tuned to the frequency of the local police radio station to bring in local police calls while listening to reguar broadcast stations.

TO ANT OF RADIO

Sales Possibillities

Every city official, fire station, police station, newspaper office, and thrill seeking radio owner are prospects for seeking radio owner are prospects for this Police Call Alarm attachment on their radio. Easy to build—Easy to demonstrate. Doubles the usefulness of standard broadcast radio revelvers. No competition. As this derice is not available in finished form, only

not available in finished form, only radio servicemen capable of wiring the parts will be able to supply it.

No profit-eating trade-ins. You make both the manufacturer's profit and your regular retail profit. Order your complete Kit Now. Supplied with a neat walnut box. Tube is not finding the line at 50 m 24k rate sets.

YOUR

PHONES

Salas

your complete Kit Now. Supplied, with a neat walnut box. Tube is not included. Use a 56 on 2½ velt sets or a 37 tube on 6.3 volt receivers.

Coll supplied for 1800-3000 K.C. tuning range, Ontional circuit in diagram for use with phones. Size of case 5½ vik ½ x 43,". Complete plans and instruction includes instruction included.

3E2453-Police Alarm Kit Recommended resale \$17.50.

\$690 PRICE .....



4E10445 \$245 custom YOUR PRICE ...

Panels listed on Page 93.

A professional type genuine walnut earry-ing ease for your nortable transprocessional type grounds wainty carrying case for your portable instruments. Takes standard 7"x14"x5" bakelite panel. Partition for panel support provides room for analyzer cable, test leads, etc. Inside dimensions 8½"x14"x3½" deep. Slip-hinged cover has 1½" inside deep. Slip-hinged cover has 1½% "inside clearance above panel. Metal handle, suft-case latch type catch. Lacquer flush without stain leaves the rich wainut grain with its natural appearance. This handly size case enhances the appearance of your custom built test equipment. Impress your customers by the professional appearance of your instruments.

Walnut Analyzer

Instrument Case

### 1/4 Watt Midget Precision Multiplier Resistors



Only %" diameter. wide. be stacked on a 6-32 threaded stud as illustrated. These are the smallest precision resistors. Accurate within We particularly recommend pre-resistors in the lower ranges of voltmeters.

Stock Number	Resist, in ohms		PRICE
3E8400 3E8401 3E8402	1450+ 2950* 4000	$\begin{bmatrix} 1 & 1 & 2 & 3 & 4 & 4 & 4 \end{bmatrix}$	41c
3E8403 3E8404 3E8405 3E8406 3E8407 3E8408 3E8409 3E8410	4450* 4950* 5000 5500 5950* 6000 7000 7450*	41 <sub>2</sub> 5 5 51 <sub>2</sub> 6 6 7	44c
3E8411 3E8412 3E8413 3E8414	8500 8950* 9950* 10000	81 9 10 10	45c
3E8415	90000	10	59c

kesistors matched to 50 ohm meters having 1 M. A. full scale deflection.

#### **Bakelite Test Case**



3E2455-With top panel. PRICE 95¢

Polished brown bakelite beveled lite top plate mounting two insulated screws, Siz-

case 15 "x276" ×15.11 Inside depth " between inside panel Supplied with six 4," holes supports. for small pin jacks, or wires. This is the ideal size small instrument case for short checkers, neon test circuits, standard resistors, standard wires. This capacities.

## Reflector Type Panel



Light 3E6769-Bulb YOUR 30¢

Take sta.

Illuminates mecc.

Saluminates mecc.

Saluminates mecc.

Saluminates mecc.

Saluminates mecc.

Saluminates mecc.

Saluminates mecc. standard tubular pilot lights. ake standard tubular pilot lights, llum inates meters on a test panel ithout glare. Saves your eyes, lounts in a ½" hole in ½" panels. (Genuine Mazda pilot lights listed Mounts in on page 91.)

### Rotary Tap Switches

#### For Test Instruments

Requires 34" or thinner panel. Single deck type extends

panel with for each extra deck, insulated knob shaft, 17.11 dlam. 1/2" Double wiping spring contacts.
Ball bearing pressure spring insures positive stop on each position. Low contact resistance permits use of this switch in circuits controlling milliammeter shunts and volt-ohimmeter cir-cuits. Built very rugged mechanical-ly. Supplied in Non-Shorting and

Shortin, types.
Ten Active Contacts Per Deck.

Non-Sho	rting	Your	Shorting	
Stk. No. 3E6326 3E6327 3E6328	De'ks 1 2 3	\$0.59	Stk. No. 3E6329 3E6330 3E6331	Decks

### Beede A. C. Voltmeter



Vane type A. C. meter with 15,000 resist-

ance and an exceptionally open scale. Permits clear definition of voltage in voltage in 2½ volt steps from 10 to 150 V. Mig. II. 2½" may be used constantly. 1E9599—0-150 volts. \$2.85



Wire Wound Potentiometers Made Ideal for test

**Smallest** 

Instruments ohmmidget Diameter less than a only 1 ½". Extends ¼" el. ¾" mounting hole, d shank, ¼" shaft, ¾" meters. hulf of panel. 34" mounting hore, of panel. 34" mounting hore, threaded shank. 4" shaft, 3" between shank. Furnished with black panels shank. Furnished scale, Linear bakeiite knob and etched scale. Linear resistance Used in Dayrad and

Weston. Stock Number Ohms Milis 400 70 J 1,000 30 730

### 3E3425 59c 3E3426 3E3427 3E3428 3E3429 3E3430 3E3431 3E3432 3,000 5,000 20 6,000

### Selective Analyzer Kit

Build Your Own Point-to-Point Selective Analyzer! Make current and voltage tests simultaneously. Kit consists of a plain 542"39" bakelite panel, walnut instrument case, seven prong Alden 8 wire test plug cable, four adapters, four tube sockets, one pair pin-jacks, 8 double circuit opening, Yazley Jacks, two rotary ten point selector switches. Insulated grid clip and grounding wire. Hookup wire and circuit diagrams, with suggested layout included. 3E2526-Kit not assembled.

VOUR PRICE ....

### Dial Scales for Use with 1 Milliampere Movement Meters

On Fine White Bristol Board with Black Figures: Brass Meter Plate



### Scale Num. 1.

### For Use on 1 Milliampere Move-ment Meters

Upper scale calibrated for use with 4½ voltohm battery .50 divisions marked 50, 250, and 1000 for D.C. Volt. Milliampere R a n g e s. Evently, replaces or least the scale of Exactly replaces

OUR	AEA
RICE	45¢
8E8380-For	Weston Model 301,
BE8381 For	Jewell Type 88.
	Triplett Model 321.
3E8383 For	Beede 314" model.
3E8430 For	Hoyt Model 557.
FRASI_FOR	Jewell Type 54.

### Diagram Number 1A.



### Multi-Range D.C. Volt-Milliammeter-ohmmeter

meter-ohmmeter
This shows a simple and popular use of dial to make up Multi-Range meter reading at full scale deflection; 10, 50, 250 and 1000 volts with resistance at 250 and above the tresistance at 1000 ohms per volt; 5, 25 and 100 milliam peres using tapped shunt; and an ohnmeter reading up to 100,000 ohms. Connections for this meter are made by the constant of the insu-

Connections for this meter are made by plugging into insulated tip jacks. The following materials in addition to I milliampere meter are required to make up this outfit: Meter Dial No. 1; 4½ volt buttery; 1 each precision resistor in ohms, 450, 10,000, 40,000, 750,000; semi-variable resistor to bring meter resistance up to 50 ohms; Van series shunt resistor, S. P. S. T. Switch; 11 pin jacks, panel, cabinet.

High—Low Ohm—Volt Scale

Num. 2.

### Scale Num. 2.

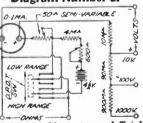


YOUR

Upper scale is for 4% volt Ohmmeter. Middle scale indicates ohms dle scale indicates ohms when unknown resistance is shunted across 50 ohm movement carrying 1 M.A. Lower scale has 50 uniform divisions marked, 10, 100, and 1000 otto. Use Manganin wire in series with meters less than 50 ohms resistance.

PRICE Triplett meter equipped with Scale 2)

### Diagram Number 2.



HIGH-LOW Ohmmeter and Triple
Range D. C. Voltmeter
A high range ohmmeter reading to 100,000
ohms and a low range ohmmeter reading up to
500 ohms, combined with 3 range voltmeter reading 10, 100, and 1000 volts. Switch provided for
either low to high ohm readings. Provides for
an instrument of maximum utility. Fasy to assemble and calibrate regardless of type 0-1 milliampere meter employed.
The following materials in addition to the 1
mil. meter are required to make up this outfit:
Meter Dial No. 2, D.P.D.T. Yazley jack switch;
Electrad 600 ohm potentiometer; 4½ volt battery;
50 ohm semi-variable resistor; 4,000 ohm wire
wound resistor; 900,000 ohm carbon resistor;
10,000 and 90,000 ohm Electrad precision reistors; 6 insulated pin jacks; panel; cabinet.
3D8390—All of above materials supplied in a
kit with hook-up wire, but without meter, panel or
case.

YOUR PRICE ...... \$8.25

Scale Number 3.

For Meters Equipped With Copper Oxide Rectifiers

For Weston Rectific Weston Rectifier Due to the variation in rectifiers on other meters, special resis-

meters, special resistance pads may be required with this scale on other meters.

3D8392—List Price, Each 75c. YOUR PRICE .....

Two voltage scales are provided to permit use of the meter in output circuits as across the voice cell of a speaker or using the high voltage scale, across the primary of the output transformer. Used as a high range ohmmeter in series with 110-120 volts A. C.

## 11.1.11 150 30 20

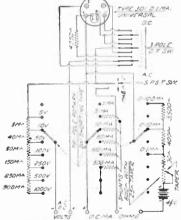
### Scale Num. 4.

For use with Weston Universal A.C.-D.C. Meter or equivalant 1 Mil. meters equipped with copper oxide rectifiers. Offset scale permits reading A.C. call-brated Range. 50 scale divisions marked 50. 250. 1000. volts or Milliamperes according red. Top Scale for 4½

to external circuit employed. Volt ohm battery. 3E8395—For Beede 314". 3E8396—For Weston 301. 3E8397—For Triplett 321.

YOUR PRICE, EACH .

### **Diagram Number 4**



For | Milliampere Universal Meter

Provides A.C.-D.C. Multi-Range Voltmeter-D.C. Milliammeter-Ohmmeter.

This arrangement provides for A.C.-D.C. Voltmeter: Seven ranges on full scale deflection of 5, 10, 50, 100, 250, 500 and 1000 volts. D.C. Milliammeter: Stranges, 1, 5, 10, 50, 100, 500 milliamperes; Ohmmeter: Three ranges, 1,000; 10,000 100,000 ohms. Selector switch for type readings desired. A.C.-D.C. Shifting switch. Individual ranges selected on insulated tip jacks.

The following materials in addition to the meter are required to make up the outift. Meter Dial No. 4; Yaxley 3 pole, double throw switch; Yaxley three deck. 8 contact rotary switch; S.P.S.T. Switch; 800 ohm tapered Potentiometer; 44% volt battery; 4 insulated tip jacks; one each Precision Multipliers 4,950, 5,000, 40,000, 50,000, 150,000, 250,000, 500,000 ohms; one each Shunts, 5, 10, 50, 100, 500 mils; one each Precision Resistors, 30, 400, 3,500 ohms; panel; cabinet.

Diagram Number 6

Circuit of a Universal A.C.—D.C. Ilnear Volt—ohmmeter. Volt ranges are accurate on all frequencies including radio. Use of a quick heating 99 tube as a half wave rectifier for the 1 M. A. circuit eliminates the characteristic errors of the copper oxide meter rectifiers. A.C. range may be calibrated on D.C. Resistor R3 is adjusted to equal the internal resistance of the 99 tube. R1 is then adjusted to permit 10 volts full scale reading on the 10 volt scale. R3, R4, and R2, are 1500 ohm whre wound Midget Yaxley potentioneters. R5 is a non-critical 8300 to 9000 ohm resistor. R6 is 90,000 ohm 2% resistor. R1 is 4000 ohms Capacity of 0.01 Mfd. is shunted across the meter to protect the winding on A.C. ranges.

### Scale Num. 5

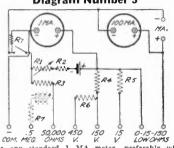


Special top ohm scale for use with 1 1/2 volt dry-cell, reads 1500 midscale a n d 50,000 o h m s maxi-mum. Lower scale has 30 divisions with nas 30 divisions with ranges marked, 15, 150, 450. With the special circuit listed below, this scale will enhance the value of installed upon. This

1 MA meter it is installed upon. This and circuit is an exclusive Radolek develop-

3E8436 3E8437 3E8438 3E8439 3E8440 For Beede 31 For Hoyt 557 For Jewell 88.
For Triplett 321.
For Weston 301. PRICE. EACH

Diagram Number 5



Con. reac Ornes V. V. V. Condens

Use any standard 1 MA meter, preferably with 50 olms internal resistance. Any 100 to 150 MA Meter will serve in the current circuit. Low resistances may be accurately measured by closing the switch circuit and adjusting R1 until exactly 100 MA is flowing through the unknown resistance. The unknown resistance in ohms is then equal to the reading on the 0-15 linear scale. When R1 is adjusted to permit 10 MA to flow through the unknown resistance, the reading on the 0-150 scale equals the unknown resistance in ohms. The top ohm scale calibrated for use with a 1½ voit dry cell, may be extended from its printed maximum to read 500,000 ohms with a suitable battery and resistor as indicated by dotted lines in the diagram. Volt ranges of 15, 150, 450 at 1000 ohms per volt extend the usefulness of this type test equipment.

In the diagram, R1 is 1500 ohms variable, (See Yaxley midget Potentiometers page 35). R2 is 150 ohm carbon non-precision. R3 is 1000 ohms non-precision resistor, R5 is 1450 ohms precision type. R6 is 300,000 ohms carbon or precision type. R6 is 300,000 ohms carbon or precision type. R6 is 300,000 ohms exemmended

11111

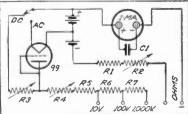
### Scale Num. 6 For Use on 1

Milliampere Move-Milliampere Move-ment Meters
Upper scale is marked
in ohms for use with
a 4½ volt battery.
Lower scale has 50
divisions and ten subdivisions without accompanying figures to
permit hand calibration
ssired.

for any particular scale des 3E8441—For Beede 3% 3E8442—For Jewell 54. 3E8443 For Triple 3E8444 For Triple 3E8445 For Hoyt For Triplett

3E8446 For Flowt 397. 3E8446 For Jewell 88. 3E8447 For Weston 301 with 75 divisions. YOUR PRICE,

Accurate Linear Scale A.C. Measurements Use scale number 1.2, or 6, with resistors suitable for securing the desired ranges at 1000 ohms per volt. A.C. readings will appear on the D.C. scale with less than 5% variation.



## Professional Type INSTRUMENT CASES

Genuine Walnut

Genuine Walnut

Attractive high quality walnut cases. Natural finish, unstained, hand rubbed and lacquered. Especially designed for custom built test equipment.
They give to your equipment that professional
laboratory appearance. Exceptionally strong and
sturdy. Rugged but graceful. Interlocking corner
joints. Rounded corners. Sizes are arranged to
accommodate standard sizes of "C" batteries and to allow ample clearance for resistors, switches, etc. clearance below meter studs and

### Standard Model—Less Cover



Genuine Walnut **Genuine** Wainut **4E10441** — For Panel 4%"x7". In-side size; 4" wide, 61," long, 3½" deep. YOUR PRICE, \$1.50

4E10442 4E10442 — For Panel 51/2"x81/2". Inside size: 43/4" wide, 73/4" long, 41/2" deep.

Fach

\$1.75

### Portable Model-With Cover



Genuine Walnut Cover allows 11/2" inside clearance above panel. Panel fits flush inside lower section. Cover is detachable, 4E10443 For Inside size: 43," wide, 7" long, 33,2" deep. YOUR PRICE, \$1.90

4E 10444 - For l'anel 5½"x8½". Inside size: 5½" wide, 8½" long, 4½" deep. YOUR

PRICE. \$2.25

Portable Case--With Cover Imitation Leather



Covered built of thin but very strong wood. Covered outside and top rim with finest quality black leatherette. Attractively grained. This case will stand years of hard service. Takes any 5½x8½" panel. Leather handle. De-tachable cover with class lock. Height clasp lock 4E | 0440-List Price, \$3.50 List Price, \$3.50. YOUR PRICE . \$1.69

### Circuit Opening Twin Tip Jacks



Clreuit opens when both oin the are in place. Closed while either one alone is in position. Used in Selective Analyzers for opening circuits for current measurement or for voltage measurements between elements without opening circuit. Mounts above or below panel with standard %2 serew. ½" holes required with %" centers for use under panels less than %" thick.

3E6419-No. 432 15¢ YOUR PRICE, Each .....

### Jewelled Pilot Light Brackets



Used as short indicators, signal light on test panels. Makes excellent soldering iron pilot when connected across 2 ohm resistance in series with a 100 watt iron, (2½v. bulb required.) Bracket takes standard sized pilot light bulbs. Mounts in ½" hole on any panel not over 75" thick. Red Jewel includ-

3E6765 YOUR PRICE, Each

**Jewels For Pilot Light** 

Colored jewel on threaded shank with mounting nut. Require ½" hole in panel not over 70". Very attractive when used in front of small neon or

dillament pilot lights.
3E6766—Red 3E6768—Green.
3E6767—Amber YOUR PRICE, EA.

### Radolek-Triplett 0-1 MA Foundation Meter



3F8389-YOUR PRICE \$466

31/2" Black Bakelite Case d'Arsonval Movement

Designed particularly for use with external resistors and shunts to build up a multi-range D.C. voltmeter and a dual scale ohmmeter em-D.C. voltimeter and a dual scale ohimmeter employing the same wiring diagram as given for Radolek Dial Scale No. 2 on page 36. Meter has 50 ohims internal resistance and requires 1 milliampere for full scale deflection. Resistors for voltage ranges are calculated at 1000 ohims per volt allowing the 50 ohims of Internal resistance as sufficient for 50 millionity. The meter may be made to read current by use of standard shunts for 50 ohim meter registance or by use of trand calibrated meaning the standard shunts for 50 ohim meter registance or by use of trand calibrated meaning the standard shunts for 50 ohim meter seasons. resistance or law use of hand calibrated man-ganin wire thunts.

Special Ohm OHMS

The Scale: The ohm scale sumes a c low s a current of 1 M A tiow-ing through the meter and full scale deflection of pointer



the pointer.

Shunting the meter with an unknown resistance causes a lower scale reading. (50 ohms oppears at midscale.) The high ohm scale is the standard type requiring a 4450 ohm resistance in series with a 4½ volt battery. This scale indicates 4500 ohms at midscale and 100,000 ohm at the highest ohm marking.

Bakelite case: Flange dlameter 3½", bealy dlameter, 2%". Depth back of panel to clear binding posts, 1%". White enamel dial with clear black fluures.

binding por clear black figure

Knife Edge Pointer: Assists in the con-gested portions of the chimic scale in deter-mining the exact resistance value. A front adjuster assures a constant zero return of ter. Dust-proof construction. Tungsten I magnet and genuine sapphire jewelled pointer.

### Servicemen-A Quality 0-1 Milliammeter at a Price! **Hoyt Model 557**



0-1 D.C. Milliammeter 3C2549 YOUR SPECIAL LOW PRICE SE36

50 Ohms Resistance

Used by many leading manufacturers of high grade test equipment. With the use of proper shunts and resistors can be converted into a high resistance voltmeter or higher range mil-Hammeter

Moving coil type D'Arsonal Movement. Accuracy within 2%. Case Diameter 2% inches. Flange Diameter 3% inches. Metal case.

### **WESTON 0-1 Milliammeter**



D. C. Model 301 3D9340- Metal 3D9339- Bake-List Price. \$10.00. YOUR \$7.35

Accepted as the standard for Elec-Accepted Measurements. improved est new with bl black

model Metal scale etched on silver background. Calibrated 0 to 0 with 50 equal graduations. Zero adjuster on front. Very uniform meter resistance of 27 chms. 1 with 50 equal graduations. Zero adjuster on front. Very uniform meter resistance of 27 ohms. Dull black enameled finish metal case. Flango 3½" diameter with 2½" diameter body, 1" deep back of flange. Black bakelite case, flange 3½" diameter with 2½" diameter body, ½" deep back of flange.

### **Black Bakelite Test Panels**

Polished Bakelite to fit Professional Type Instrument Cases. Supplied square, Corners strument Cases. Supplied square, Corners must be filed round to fit exactly on the stand-

Net Each Net Each Net Each Net Each

### Make Your Own Shunts with Manganin Resistance Wire

Standardize your milliammeters by making all have the same internal resistance! As 50 ohms is the standard value usually employed, we suggest adding insulated Manganin wire in series with the movement to secure the total of 50 ohms. Employ the 30 gauge for all series multiplier purposes. The 26 gauge is sultable for shunts carrying loss than 50 MA. Employ 22 gauge for shunts of less than 1000 milliamperes. This round wire is suitable for use as shunt and multiplier resistantial programs of the suitable for use as shunt and multiplier resistantials. the 30 gauge for all series multiplier purposes. The 26 gauge is suitable for shunts carrying less than 50 MA. Employ 22 gauge for shunts of less than 1000 milliamperes. This round wire is suitable for use as shunt and multiplier resistance for all styles of meters, wheatstone bridge slide wires, resistance boves of standard value, etc. Temperature co-efficient 0.000025 ohms per C. Practically no thermal co-efficient in contact with copper tact with copper.

22 Gauge B&S, 0.452 ohms per foot.
100 foot spool, Double Silk Covered.

3D4840-YOUR PRICE 26 Gauge B&S, 1.117 ohms per foot. 200 foot spool, Double Silk Covered. 3D4841-YOUR PRICE

30 Gauge B&S, 2.899 ohms per foot, 300 foot spool, Double Silk Covered. 3D4842-YOUR PRICE ...

### **Bare Resistance Wire**

**S1.15** 

For use at extreme high temperatures in heater or use at extreme high temperatures in neaser mements, of ranges, radiant heaters, tosaters, costats, bleeder resistances, etc., Temperature -efficient 0.000112 ohms per °C up to 500° 02° F,) and there remains fairly constant to 00° C (1832° °F). Non-oxidizing in air. Non-spacete. Bright finish. Round. Supplied withelements, rheostats, (1022 F.) an 1000° C (1832 magnetic. insulation.
Gauge B&S, 1.015 ohms per foot.

100 foot spool, bare wire.
3D4843—YOUR PRICE \$1.05 32 Gauge B&S, 10.15 ohms per foot.

500 foot spool, bare wire.
3D4844—YOUR PRICE ...... **S1.00** 

### "VAN" SHUNTS

Yery small and compact. Size about 114" long, wide. Resistance elements of non-corrosive alloy wire with tennerature co-efficient of practically nil. These shunts are intended for use in converting 0-1 milliampre movement meters for reading higher range currents with maximum milliamps specified.

### **Multiple Shunts**

For 1. Mil. Weston
D. C. Mod. 301
27 Ohms Meter
Realstance
List \$1.50. 25 M O 10

88¢ YOUR PRICE .. Stock Number 3D4878 3D4879 3D4880 Stock D. C. Milliamps Milliamps 3D4875 3D4876 3D4877 10 100

For Triplett Model 321 and 324 30 ohms Meter Resistance Each \$1.50. List Price. 88¢ YOUR PRICE ...

Stock Number 3D4862 3D4863 3D4864 Milliamos Milliamps 3D4859 3D4860 3D4861 10 100

For Beede and Jewell 54
35 Ohms Meter Resistance

Stock Stock Stora Number 3D4865 5 3D4866 10 3D4867 25 List Price Each \$1.50, D. C Number Milliamps 304868 304869 304870 100 500 88¢

Single Range Shu for 50 Ohm. 1 Mil. List \$1.50. YOUR PRICE ..88c Stock Stock D. C. Milliamps Number 3D4884 3D4885 3D4886 Milliamps 10 Series Tapped Shunts 3D4890—For I mil. D. C. Weston 301. 27 ohms Meter Re-sistance. Tapped for 10-100 mils.

A 5 M = 25 M = 100M 8 0

\$2.50 List \$2.50. YOUR PRICE \$1.47 3D4891—For Universal Model 301. 50 ohms Meter Resistance. Tapped for 5-25-100 mils. List \$3.00. YOUR PRICE.........\$1.76

Series Tapped Shunt

For Beede, Hoyt, Triplett, and Weston 1 milliam-For Beede, Hoyt, Tripiett, and Weston I milliam-pere meters having 50 ohms Internal resistance or with meters of lower resistance having an external series resistance of mangonin whre to secure a net 50 ohms. Tapped for 10 and 100 milliamperes. 3E4892—For 50 ohm, 1 Mil. meters \$1.47 YOUR PRICE

### Trimm Featherweight Head Set





-List Price Set \$10.00. 302350-\$5.88

Smallest, lightest weight headset made. It efficient. Total weight of complete set only ounces. Ideal for Aircraft, Hard-of-hearing Radio Amateurs, or anyone required to wear I phones for any extended time. Extremely sensitive the complete set only will respond to signals over 100 D.B. down. cision made of finest materials. Will give excelled service for many years. Complete strong, adjustable services. Highly sensitive service for many years. Complete with adjustable spring steel head band and five d. Total resistance 4,000 ohms. strong.



### Head **Phone** Cords

For connecting two headphone units to output of For connecting two neadphone units to output or radio receiver or other apparatus. Two double conductor cords are jointed together in series connection with one double conductor cord. Fine quality durable mercerized braid covering. Lgth. 5 ft. 3C2305—With pin tips on both ends. 3C2306—With space tips on phone unit end, pin tips on other end.

PRICE EACH
TEN FOR \$1.68

### **Two Conductor Cords**

For Speakers or Single Unit Headphones Finest quality glossy mercerized covering, Lgth. 5 ft. 3C2308—Pin tips one end, spade tips other. 3C2307—Pin tips both ends. 86

CE EACH ..... TEN FOR 76c PRICE

### "Tweeter" **Loud Speaker Horns** Complete with Baldwin

Phono Unit. Horn is scientifically moulded of polished hard rubber to give best acoustic results. Very satisfactory for some types auto sets and P.A. systems as high frequency reproducers. Also as monitor horn on sound recording systems. Height 9" overall, opening 31/4" 3D2369 PRICE EACH ... \$1.74

### **ROLA Permanent Magnet Dynamic Speaker**



Model PM-6 4E10620 YOUR PRICE

Model PM-8 Overall 4E10621 YOUR YOUR \$6.75

Output transformers are included. Specify on your order type of output tubes used and how they are connected.

Requires no field current. Especially designed for use in public address installations where it is impractical to apply energy for the field coll, for battery receivers or for remote use with a home radio or as a monitor speaker. Sensitivity and tone fidelity are comparable to that of the finest dynamic speakers. The magnetic air-gap and the voice coil of these speakers are shielded against the entrance of metallic particles and dust by a domed center cap fastened in the apex of the cone and a new dirt proof accountic filter. An entirely new construction of the magnetic core gives greatly increased flux density and greater power handling capacity. Highest quality steel used in the construction of full magnetic strength. The permanent arrangement of all parts is assured in the modern are welded construction which is used throughout.

Physical Specifications diameter, 7%"

Model PM-6-65%" cone flange dia magnet width, 3.8" maximum depth. Model PM-8-83." cone flange dia Model PM-8-83" cone flange diameter, 81/2" magnet width, 47/4" maximum depth.

### FROST FONES



Frost Fones satisfy the exacting demands of those wishing to obtain extremely wishing to obtain various sensitive instruments. Light in weight, comfortable to wear and easily adjustable. the very highest quality, and these phones are made by careful scientific workmen. For testing radio parts or complete sets—for lining up condensers—for peaking intermediate transformers or any similar uses these phones may be depended upon to give perfect satisfaction.

3C2357-Frost No. 174 2000 ohm headset. Alumi-

L1st, \$3.08. YOUR PRICE \$1.50

3C2358-Frost No. 175, 3000 ohm Aluminum shell.

I.iat, \$3.50. YOUR PRICE .....

#### FROST DX Special Fones 20,000 ohms Impedance

Designed especially for amateurs and DX fans.

Extremely sensitive to faintest signal. Same general construction as above model Frost Fones.

Specially selected materials give greatly increased sensitivity. The high impedance of 20,000 ohms at 1000 cycles make these phones especially suited for A C. Bridge work.

3D2356—List Price, Set \$5.00. \$2.50

### YOUR PRICE



The headphones listed here are thoroughly reliable and responsive to weak signals. Adjustable woven web covered headbands. Complete with cords. web covered headbands. Complete with cords. Aluminum shells, aluminum unbreakable cans that are more sanitary and will not dirty the ears even in warm weather. Total resistance 2800 ohms. Very light and confortable to wear.

### Acme Headphones

Exceptional value. Suitable for use in multiple inable for use in multiple installations of hospitals, hotels etc. Plan on 50 milliwatts per set for best results. Well made. Durable, Spring steel adjustable head band. Light tension, 4½ for best forced and cord. foot braid covered cord. All black finish.

3D235 | -Total resistance Single Lots. Set

TEN SETS FOR \$12.50 3D2374

Total resistance 2,000 ohms. PER SET

TEN SETS FOR \$9.40



Ear Phone Cushions 3C237 I-YOUR PRICE 22¢ PAIR

TEN PAIR FOR \$1.95

Made of soft sponge rubber. Very light and comfortable. Ease pressure from head set yet preserve best hearing. Fit all phones.

### Special Balanced Armature Type Unit

A good quality aluminum diaphragm unit with a hardened steel magnet, constructed for rough hardusage. Sultable for use on 500 milliwat output; should be used with an output transformer if more than 20 milliamperes of D.C. is liable to flow through its windings. Diameter of threaded portion %" a long double tipped phone cord. F 3C2370—YOUR NET PRICE

Supplied with list \$5.00. Former

TEN FOR \$3.48

### Genuine **Nathaniel Baldwin Phones**

Type C 3D2360— ur Very Special Price Set You

\$2.89 \$27.50

World famous for any years because their extreme sen-World for and sitivity great

sitivity and great efficiency. Balanced armature units accurately mutched and carefully tested. Used extensively by U. S. Signatore with the control of the



### Genuine Baldwin Units

New Stock-Guaranteed Perfect

Wonderful bargains at our prices. All are of the highly efficient Baldwin balanced armature type. Versensitive and carry great volume without distortion. Very ruuged. Excellent for battery type radio receivers and for use on Public Address born apeakers. Maximum undistorted power limit, 500 M.W.

### **Baldwin Concert**

Generally known as the best. Each unit hand made, carefully adjusted and tested. Precision made at every step. Widely imitated,

but not excelled for its faithful, onsistent reproduction. Threaded to fit all standard speakers and horns. Concentric corrugated diaphragms to handle strong signals without blasting. 5-foot cord with tips. Shipping wt., 2 lbs.

3C2362-Baldwin Concert Unit Not Shielded. NET

HIHIHI S

**Baldwin Rival** 

Ideal for all console and morning glory type horns. Handles enormous volume with rare faithfulness of reproduction. Shipping wt., 1 lb.

3C2364 -Without Shield. 45¢

### **Baldwin Lyric**

An especially desirable unit for outdoor use. Fully encased. No parts exposed. Very sensitive, yet sturdy and strong. Concentric corrugated diaphrams to handle strong signals without blasting. Slightly larger than the Concert or Rival. 3C2365-List, \$6.00

YOUR SPECIAL PRICE .....

\$1.25

### Phono Pedestal Speaker

For attaching to tone arm of any phonograph. Equipped with extra long cord and phone tips. Has durable imitation leather finish. Very sensitive magnets. Specify make of phonograph and we will supply correct actuate. rect adapter. 3C2366 Former List,

YOUR PRICE



### Standard Phono Unit

Exactly the same as above unit except supplied without pedestal. Unusually compact. 2 1/2" diam. 302367

YOUR PRICE .....

### **Utah Units**

The finest UTAH unit. Incorporates patented tri-Gives construction. pod construction. Gives faithful reproduction over a wide range and success-fully handles 2½ watts. 1000 o h m s Impedance. Pinished in nickel. Diam-eter 3". Five foot cord.



3D2377-List Price \$6.25. YOUR PRICE

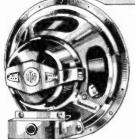
### **Utah Big Chief**

Same dimensions as above unit but does not corporate tripod construction. incorporate tripod construction 3D2378-List Price \$5.25.

YOUR PRICE

S2.45

# **OUTPUT TRANSFORMERS** A. C. MODELS



In ordering Speaker with Output Transformers, specify type of output tubes used and whether single or push-pull.

**Abbreviations Used** 

Pdf.: Power dissipation of field. Pwr : Power bandling

Voice coil in-Imp.: cycles.

coil.

Voice coll resis-tance at 72° Fahr. Res.:

Diam .: Diameter of Voice

These fine speakers are capable of handling enormous volume with exceptional fidelity. Substantially constructed of pressed steel, polished cadmium finish. Uses type '80 pollshed cadmium finish. Uses type '80 recitier tube (not included) operated at

175 velts, 70 M.A. Speakers handle 10 watts continuously or 16 walts peak load. Supplied with output transformer. Be sure to specify types of tubes used and how they are connected. For 105-120 volt 50-60 cycle A.C.



8, 10 and 12 Inch Speakers
Model "A". Have estra large field pots which
bring out the utmost in the diaphragms and
provides marvelous fidelity of tone at high as well
as low volume. Catinium finished steel frames.
Moulded ribbed diaphragms of special impregnated
composition. Pdr. 9 watts. Voice coil diam. 1".
Imp., 6 ohus, Pwr., 10 watts. (8" Spkr. 8 watts),
Res., 4.7 ohus.

8 Inch Speaker Diameter 8". Overall

A. Diameter 8". Overall Depth 4 %". Less Output Transformer Model 8A.

4E 10250T—2500 ohm field YOUR 4E 10251T—1500 ohm field PRICE \$4.35

10 Inch Speaker Diameter 10". Overall Model 10A. Diameter 10". Overan Less Output Transformer Overall Depth 43,".

Less Output Transformer
4E 10253—2500 ohm field | List Price, \$14.00
4E 10254—1500 ohm field | YOUR
4E 10256—1000 ohm field | PRICE \$4.81
With Output Transformer

4E 10253T-2500 ohm field 4E 10254T-1500 ohm field 4E 10255T-1000 ohm field PRICE \$5.40

### 12 Inch Speaker

Model 12A. Diameter 12". Overall D. Less Output Transformer Overall Depth 6".

4E 10256—2500 ohm field 4E 10257—1506 ohm field 4E 10258—1000 ohm field 4E 10258—1000 ohm field PRICE \$5.42

With Output Transformer
4E10256T = 2500 ohm field YOUR
4E10257T = 1500 ohm field PRICE
4E10258T = 1000 ohm field PRICE

### **UTAH 12" STADIUM SPEAKER** Model 12B (20 Watts)



Especially suitable for DeLuxe Console and Public Address installations. Handles 15 to 20 watts input without overloading, with 10 to 12 watts in the field. Cadn ium fin-ished steel frame. Improved moulded diaphragm. Large size universal trans-former, tapped to

match any output tube combination. Diameter 12" overall height 12½", overall depth 6½". Field Res., 2500 ohms. Fdf., 15 watts. Voice coil diam. 1½". Imp. 1.1 ohms. Pwr. 15 watts, Res., .8 ohm. For D.C. Field Power.

14E 10259—2500 field List Price, \$17.50.

14E10259-2500 field | 14E10260-1500 field | 14E10261-1000 field | YOUR \$7.95

With Universal 500 ohm Line to Voice Coil Transformer
(Permits use of 1 to 6 speakers on 500 ohm line).
14E10259T—2500 field YOUR 4E10260T—1500 field PRICE \$7.95

5 Inch Model 5-D

6 Inch Model 62-1

5 Inch Speaker Model 5D. Dismeter 5", Overall Depth 2 %".
Pdf., 5 watts. Volce coll diam. %", Imp., 5 ohms.
Pwr. 3 watts. Res. 2.7 ohms.

Less Output Transformer

4E10262—3000 ohm field | List Price, \$6.50. 4E10263—2500 ohm field | 4E10264—2000 ohm field | PRICE \$2.29

With Output Transformer

4E 10262T-3000 ohm field 4E 10263T-2500 ohm field PRICE \$2.64 6 Inch Speaker

Model 62J. Diameter 6". Overall Depth 3". Pdf. 7 watts. Volce coll diam. 3,", Imp., 3.8 ohms. Pwr. 6 watts. Res. 3.1 ohms. Less Output Transformer

4E 10275-2500 ohm field | List Price, \$8.00 4E 10276-1500 ohm field | Vour \$2.75

With Output Transformer

4E10275T—2500 olum field | YOUR \$3.25

Ric Clear on t out! Cadmium fin-ished steel frames. ished steel frames.
Impedance approx.
9,500 ehms at 1000 eycles. Resistance
1000 ohms. 2 Watts

4D10269. Diameter 5 inch. Ship. Wt. 1½ lbs. List Price \$4.50. Depth 211" \$1.78 YOUR PRICE .....

4D10270. Diameter 6 inches Ship. wt. 2 lbs. List Price \$5.00. \$2.02 YOUR PRICE .....

4D10271. Diam ter 8 Inche Ship wt. 2½ lbs. List Price \$6.00. YOUR PRICE Depth 31/

### Special Resistance Speaker Fields

Special Resistance Speaker Fields

Radolek Dynamic Speakers listed can be adapted for use in circuits requiring field coil resistances of values other than our stock sizes. For use in such circuits, select a speaker with resistance nearest to that required but lower in value. Place in series with the speaker a 10 watt resistance nearly to total resistance required in circuit. Improved hum filtration may be secured by connecting a 2 Mfd. condenser from the ground to the junction of the field coil and the resistor.

Discream Relow

Diagram Below



### 8, 10 and 12 Inch A. C. Speakers

Model 8A-AC. Diameter 8", overall height 8\%", width 10". Field Res., 2500 ohms, Pdf., 10 watts. Voice coil diam. 1", Imp., 6 ohms, Pwr., 8 watts. Res., 4.7 ohms. Shrg. Wt., 10 lbs.

List Price \$19.00. 4E10265. YOUR PRICE ..... \$11.17

Model 10A-AC. Diameter 10", overall height 10%", width 10", Field Res., 2500 chms, Pdf., 10 watta. Voice coll diam., 1", Imp., 6 ohms, Pwr., 10 watts, Res., 4.7 ohms, Ship. Wt., 12 lbs. List Price \$22,00.

14E10266. YOUR PRICE \$12.94

Model 12B-AC. Diameter 12", overall helght 123s", whith 10". Field Res., 2500 dims. Pdf., 12 watts Voice coll diam., 14", hup., 1.1 dims. Pwr. 15 watts, Res., 8 dims. Ship. Wt., 15 lbs.
List Price 525.00.

14E10267, YOUR PRICE \$14.70

### Utah "P. M." Speakers

3000, 4000 and 6000 Milli-watt Power Inputs

An improved Kinematic Power Loudspeaker with an automatic impedance matching circuit. Uses no field current. Handles more power and volume without distortion than any non-dynamic speaker we have tested. Chrome steel permanent magnets acting through lamin-ated pole pieces produce an Intense magnetic flux

an Intense magnetic flux In the 6/thousandths air gap. A heavy laminated silicon steel armature is suspended with phosopher-bronze flexible torque supports. No armature pivots to chatter or stick. Speaker will carry 35 Ma. direct current. Output transformers are not required. Speakers may be ordered for single or push-pull circuits. For improving battery radios, use in sound trucks, as extra speakers on any radio or P.A. system which does not pruvide field current, we recommend these speakers very highly.

6" Utah Orthovox

3000 Milliwatts Capacity. Frequency Response Equals the Finest Type 5" Dynamic Speakers

4E | 0280-For single tube. 4E | 028 | -For Push-Pull Tubes. List Price \$3.50. \$2.06 YOUR PRICE, EACH ......

8" Utah Orthovox

4000 Milliwatts Capacity Frequency Characteristic Uniform between 140 and 8000 Cycles.

4E10283—For single tube.
4E10284—For Push-Pull tubes.
List Price \$4.00.
YOUR PRICE EACH \$2.35

### 12" Utah Orthovox

12 Utah Orthovox
6000 Milliwatts Capacity.
Plenty of Bass in this Big Cone.
Excellent Response Between 80 and
8000 Cycls.
4E10286—For single tube.
4E10287—For Push-Pull tubes.
List Price \$6.00.

List Price \$6.00.
YOUR PRICE EACH .....

\$3.53

PRICE S2

### 6 Inch De Luxe



YOUR PRICE \$155

Less Transformer New Design-

Pertormance Superior

Superior Performance
Carries full output of any power
tube delivering up to 4000 mililwatts. Inductive Shant Hum
Bucking device permits the use
of the field circuit as part of
the power pack filter system.
Voice coil diameter, %". Imcodance 4½ to 6 ohms. Resistance 4 ohms. Field
power 6 watts. Overall diameter 6¼". Depth 3%".
Shipping weight 4 10s.

Shipping weight 4 lbs.

				i ransi		
YOUR	PRICE				9	1.55
EACH	Ten fo	DF			4.20	
Stook		Wiele	1 1	Strock	- 1	Flaid

Stock	Field	Stock	Field
Number	Ohms	Number	Ohms
14E10500	1000	14E10503	1800 tapped
14E10501	2000		at 300
14E10502	2500	14E10504	4 ohms for 6 volt

With Output Transformer (Specify output transformer desired by giving type letter indicated in table below.) Order field Restance wanted by stock numbers. OUR PRICE

	TEN FOR	\$17.5	50
Stock Number	Field	Stock Number	Fleld Ohms
14E10500T 14E10501T	1000	14E10503T	1800 tapped at 300
14E10502T	2500	14E10504T	4 ohms for 6 volt

### 6 Inch Standard

For 4000 Milliwatt Audio Output
Less Output Transformer
14E10565-2500 ohm 6 Watt

YOUR PRICE PRICE \$1.35 EACH Ten for ..... \$12.7 \$12.70

14E10565T-2500 YOUR PRICE, EA. \$1.65

Ten for.....\$15.70
Specify Transformer desired by giving type letter

Specify Transformer desired by giving type letter indicated in table below. A low cost good quality full dynamic speaker, strong rugged construction, voice coil and spider are aligned before cementing the cone in place, thereby assuring freedom from chatter usually found in competitively priced speakers. Voice coil dlameter 75". Impedance 4½ to 6 ohms. D.C. resistance 4 ohms. Overall diameter 61%", 3%" depth. Weight packed, 3% lbs.

## 81/2 Inch Standard For 6000 Milliwatt Audio Output



Less Output Transformer [4E | 0570-2500 ohm 6 Watt Field. FACH ..... \$2.10

Ten for \$19.50

With Output Transformer 14E10570T-2500 ohm 6 YOUR PRICE

EACH ..... \$2.45 Ten for \$23.00

Specify transformer desired by giving type letter

opecity transformer desired by giving type letter indicated in table below.

This 8½ inch Standard quality Dynamic makes a This 8½ inch Standard quality Dynamic makes a suitable replacement for the majority of five and six tube, single or push-pull, midget radio sets. The voice coil impedance is 4½ to 6 ohms. Restance 4 ohms, dlameter of voice coil '%". Speaker is 4¾ " deep. Shipping weight 5¼ lbs. Special size field foils of less than 3000 ohms can be supplied on order for 50c each extra.

### Universal 500 Ohm Line Matching Transformer



3E4140-YOUR PRICE 74¢

A flexible means of coupling I to 6 speakers to a 500 ohm Amolifer Output Circuit. Tapped secondary permits matching ratios within limits of I to 6 speakers, of 6 ohm impedance of approximately 6 ohms. The Chart gives the taps which may be used to match 3 ohms, 6 ohm, and 12 ohm impedance cruits to a 500 ohm line, instructions for connecting included with each transformer. See chart on page 109.

### 81/2 Inch De Luxe



Less Transformer
Brilliant Highs—
Rich Bass Tones:
A splendid overall performance characterize these speakers. For use with single or push-pull power tubes delivering up to 6300 milliwatts audio input. New Inductive Shunt Hum Bucking device eliminates effect

ing device eliminates offect ripple current in speaker filter system of dio. Voice coll diameter 7.". Impedance ohms. Resistance 4.2 ohms. Field power Overall diameter 8½". Depth 43.". Radio.

Shipping weight 5½ lbs.

Less Output Transformer
YOUR PRICE Ten for....\$2.45

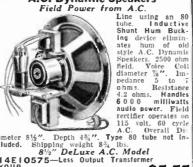
Stock	Field	Stock	Field
Number	Ohms	Number	Ohms
14E10520	1000	14E10523	1800 tanped
14E10521	2000		at 300
14E10522	2500	14E10524	4 ohms for 6 volt

With Output Transformer (Specify output transformer desired by giving type letter indicated in table below. Order field resist ance wanted by stock number.

Te	n for	\$2	6.50
Stock Number	Field Ohms	Stock Number	Field Ohms
14E10520T 14E10521T	1000	14E10523T	1800 tapped at 300
14E10522T	2500	14E10524T	4 ohms for 6 volt

Field Coils of resistance NOTE: other than stock sizes quoted can be supplied for 50c extra.

#### A.C. Dynamic Speakers Field Power from A.C.



14E16	D575—L	ess Output	Transformer	
YOUR				CE EE
PRICE			9	?3.33
14E1	0575T-	With Out	ut Transform	ner
YOUR				SE OC
PRICE				,J.or
	11" Do	I A	C Made	

11" overall diameter, 6" depth. Shipping weight 10 lbs. Electrical specifications same as above but responds to deeper tones better than 8½" Model. 14E10577—Less Output Transformer YOUR \$6.45 PRICE 14E10577T-With Output Transformer \$6.95 PRICE (Specify Output Transformer desired by giving type letter indicated in table below.)

### 11 Inch De Luxe

For 10 Watt Output With 10 Watts in Field YOUR



Less Transformer

Less Trensformer
The 11 Inch DeLuxe
Speaker is designed for
superior tone quality,
great volume, portability
and high efficiency. A
large size field pet and
extra large voice ceil insures high sensitivity at
all frequencies. For
traveling musicians, the
11 inch DeLuxe Model is
unexcelled. It is particularly suited to ballrooms and small theater
to accommodate the acoustics of undraped walls
and constantly chancing absorption factors. Extra
strong cone of moulded seamless material supported
at the edge by the heavy steel frame and at the
spider actually carries the voice coil. thus maintaining perfect alignment regardless of expansion
or contraction of the cone with temperature changes
Inductive Shunt Hum Bucking device is an integral
part of this speaker. Voice Coil diameter 1½."
Depth 6%." Shipping Weight 6½ ibs. A portable
housing or large baffle should be employed with
this speaker to properly reproduce low notes.

Less Output Transformer

Less Output Transformer YOUR PRICE \$2.95

16	11 101,	\$28.	
Stock	Field	1 Stock	Field
Number	Ohms	Number	Ohms
14E10540	1000	14E10543	2500
14E10541	1500	14E10544	3000
14E10542	2000	14E10545	6 V. 4

With Output Transformer (Specify Output Transformer desired by giving type letter indicated in table below.)

YOUR PRICE 80 EACH Ten for.....\$32.50

	Number	Ohma
1000 1500 2000	114E10543T 114E10544T 114E10545T	2500 3000 6 V. 4.
	1500 2000	1500 114E10544T

less than 3000 ohms other than stock sizes can be supplied for 75c extra.

SPECIAL NOTE: Universal 500 Ohm Line to voice coil matching transformer listed below for these speakers.



New 5 Inch Speaker YOUR PRICE \$1.45 . \$13.80 Ten for With Self-Adjusting-Ratio Coupling Transformer. 4E10560-2500 ohm field. 4E10561-3000 ohm field,

AE 10562—6 volt, 4 ohms, 9 watts.

4E 10562—6 volt, 4 ohms, 9 watts.
For use with tubes rated to deliver less than 3000 milliwatts output. The correct size for many of the new "Glar Box" sets and Auto Radios. New Style construction assuring freedom from chattering. The Self-Adjusting-Ratio Output Transformer employs a special damping design which makes impedance matching non-critical. The following single output tubes operate properly with this transformer; 38, 41, 42, 43, 45, 47, 245, 71A and 89 triode. Voice coll resistance, 2½ ohms, Impedance 3.3 to 4 ohms. Overall diameter 5", depth 2½". Shipping weight 2½ lbs.

Select Proper Output Transformer from This Chart

When Ordering Speakers Specify Output Transformers Required by Stating Type Letter of Transformer

as Specified Belo		Ratios are for 5 to 7 0hm Voice Colls				FOR SINGLE TUBES				
Transformer Type	0	0	0		0	1	<b>(</b>	(	•	(1)
Ratio	27 12:1	35:1	45	i:1	60:1	20:1	2715:1	3	5:1	45:1
For The Following Types of Radio Power Tubes	48 2A3	43 45 2B6 71A 12A5 482B 483	2A5 20 33 42 46 47 6A4 89	PZH GA KR5 59P 89P PZ LA P. or T.	10 38 41 49T 12A AE KR25	48	43 45 2B6 71A 2A3 12A5 48 50	2A5 20 33 42 46 47 6A4 89	PZH GA KR5 59P 89P PZ LA P. or T.	10 38 41 49T 12A AE KR25

### 121/2" Standard Dynamic



For P. A. Systems and large Sets. VOUR RICE\$635 EACH

> Less Output Transformer

Tremendous Vol Volume with 10 Watts of Audio Input. Requires only 9 to 10 watts for field excitation. Re-duced Air gap inten-sities magnetic flux. Voice Coli Main-tained in perfect

Voice Coli Main-tained in perfect alignment with full floating micarta spider suspen-sion—will not chatter against pole pieces reardless of expansion or contraction of cone diaphragm. This speaker should be mounted on a Baffle of at least 4 ft. diameter for good results. Voice Coil Im-pedance 6 ohms, Resistance 5 ohms, Diameter of V. C. 1½". Overall diameter 12½". Depth 8". Shpg. Wt. 14 bbs. Less Output Transformer

	Less	Output	I runsioi n	ier
Stock Number		Field Ohms	Stock Number	Field Ohms
14E10580 14E10581 14E10582		1000 1500 2000	14E10583 14E10584 14E10585	2500 3000 6 V. 4.
VOUR P	RICE			A4 0=

With	h Output	Transformer				
Stock	Field Ohms	Stock	Field			
Number		Number	Ohms			
114E10580T	1000	114E10583T	2500			
114E10581T	1500	114E10584T	3000			
114E10582T	2000	114E10585T	6 V. 4.			
YOUR PRICE			64 OF			

### \$6.85 121/2" Standard Dynamic

A.C. Model
Uses a Filtered Field Supply Rectified by a Type
80 Tube. For 115 V. A.C. 60 Cycle.
14E10595—Less Tube and Less Output Trans-114E10595T-Less Tube and with Output Transformer, \$12.85

Full 10 Watts of Field Power available from the filtered rectified A.C. line supply. Type 80 tube provides most economical system of rectification for this purpose. Voice coil and cone construction is the same as the D.C. 12½" Standard Dynamic described above. Shipping weight 19 lbs.

### 14" Standard Dynamic

For Permanent Public Address Installa-tions, Theaters, Auditoriums, Churches,

tions, Theaters, Auditoriums, Churches, Athletic Fields.

Handles Full 12 Watt Audlo Input—10 Watt Fleld.

A Super Power Dynamic Speaker for use with large P. A. Systems which must distribute great volume of sound without marked directional effect. Volce Coll:— Impedance 6 ohms; Resistance 5 ohms, Diameter 1¼". Overall diameter 14", depth 9". Shipping weight 15 lbs.

Less Output Transformer

YOUR PRIC	E 		\$6.95
14E10600 14E10601 14E10602	1000 1500 2000	14E10603 14E10604 14E10605	2500 3000 6 V. 4.
Number	Ohms	Number	Ohms

Witi	h Outpu	ut I ransformer				
Stock	Field	Stock	Field			
Number	Ohms	Number	Ohms			
114E10600T	1000	114E10603T	2500			
114E10601T	1500	114E10604T	3000			
114E10602T	2000	114E10605T	6 V. 4.			

YOUR PRICE EACH .....

### 14 Inch Standard Dynamic

A.C. Model

115 Voit A.C. 60 Cycle Rectified Field Supply.

Uses type 80 tube and Filter System. This is identical electrically to the 14" Dynamic described above.

14E10615—Less Tube and Less Output Trans-

1 14E 106 | 5T-Less Tube, with Output Trans 

### For all of Above Models

(Specify Output Transformer desired by giving type letter indicated in table on on page 40.) Special Field Coils under 3000 ohms can be supplied to order, \$1.50, extra.

### Dynamic and Magnetic Speakers

### Miniature Speaker Cabinets

4E 10488-YOUR PRICE \$ \$149 EACH ... Ten for \$13.50

Gothic design. Solid, rigid construction. Nat-ural walnut veneer front in rich band ural walnut veneer front in rich hand rubbed brown finish. Suitable for 5" Magnette and Dynamic Speakers. Handsome appearance. Provides excellent baffle. Overall size 9" high, 7" wide, 332" dags.



Cabinet with 5 Inch Magnetic Speaker Speaker chassis not mounted, no connecting cor-included.

4E10489-YOUR PRICE EACH .. \$2.65

Ten for.....\$25.00

### **New Walnut Cabinet**



For Magnetic Por Magnetic or Dynamic Speakers Takes any Speaker Not Over 9 Inches Dlameter 14D10481-Cabinet Only. List Price \$3.50. Your Price, \$1.85

**TEN FOR \$16.75** 

Attractive new design cabinet. Genuine Walnut front and sides in rich warm walnut brown finish. Neat grille with fine, dark gold, figured,

fine, dark gold, figured, two tone grille cloth. Very strong and rigid yet light in weight. Placed back of front grille is a heavy laminated baffle board with centered 5½" circular hole. Veneer back cover drilled with six 1½" holes makes for a finely finished job and insures best acoustic properties. Height 11". Width 10½". Depth overall 8½". Serve holes omitted so that properly finished job can be made with any specker. with any speaker.

Cabinet with 8 Inch Magnetic Speaker 14D10482-YOUR PRICE ... \$3.65 EACH TEN FOR \$31.50

### Special Speaker Cabinet

For Magnetic or Dynamic Speakers



Attractive Square
Design
14D10483— Price \$1.25 Each .. **TEN FOR \$11.90** 

Same cabinet knocked down, unfinished and with no grille in front 4D10484-Your Price, Your Price, 59¢

TEN FOR \$5.40 For speakers or midget sets. Takes any speaker not over 8¾" diameter. Genuine Walnut front. Rich two tone gold grille cloth back of attractive grille. Warm Walnut-Brown finish. Size overall 12½" high, 12¼" wide, 8" deep. Inside dimensions, 8¾" high, 10¾" wide, 7" deep.

### Walnut Cabinet



Speakers or Midget Sets 14D10480 Your Special Price

For

Gothic Cathen-in high beautifu

grade fine quality Suitable for mounting any speaker chassis finish. shown on this page or any other speaker chassis shown on this page or any other speaker not over 13½ inches diameter. Front frame of speaker is of beautiful walnut veneer in rich butt grain. The attractive grille backed with gold broske silk grille cloth is in contrasting lighter tone. Edge of grille base and routing on side of the case are outlined with dull black lacquer. Heavy ¾ in sides. Size 16 in black in wide 014 in days. 16 in. high, 14 in. wide, 914 in. deep.

### 5 Inch Magnetic



4E10451-List Price \$2.50. YOUR PRICE EACH .....

Ten for \$10.90 Improved design. Midget

Improved design. Midget type speaker. Sturdily built. Very fine tone qualities. Overall diameter 5-%". Overall depth 2". Heavy pressed steel frame, eadmium plated. Heavy magnet with improved balanced armature unit. Bakelite strip with mounting lugs. Recommended as a replacement speaker in Midget A.C.; A.C.-D.C.; Battery Sets; for Hotel Room or other P.A. multiunit installations; for extension speaker on any home or auto set. Handles about 1% watts without blasting. D.C. resistance about 1000 ohms.

6 Inch Magnetic Overall diameter 6"

ter 6". Same construction as 5" Size 4E 10454—List Price, \$3.50. YOUR PRICE, EACH \$1,49 Ten for......\$13.50

### 83/8" Magnetic



4E10450-List Price \$4.50.

Your Special \$195 Price, Each . Ten for \$17.90

A highly efficient speaker that gives more volume on

less energy input. Finest tone quality with true fidelity. Operates at peak with about 0.7 watts power input. Extra heavy magnet with balanced armature unit which is to fideal speaker for original installation in battery set or for use as an extra extension speaker in sets using dynamic seasons. ideal speaker for original installation in battery set or for use as an extra extension speaker in sets using dynamic speaker. Mounted in Walnut cablnets we supply, this speaker makes a very high grade installation on Hotel and P. A. jobs, D.C. resistance about 1000 ohms. Overall diameter 8% inches. Depth 4%". Rigid steel frame with mounting holes in outer diameter.

### Special 41/2" Dynamic



for solution Satisfactory Dy-The Smallest

namic Speaker Made. Three Point 2 inch micarta-spider-web Low resistance Hum-Bucking Point 2 inch micarta-spider-web voice coll support. Low resistance Hum-Bucking coil. Handles 1½ watt signal with surprising tone quality for such a small reproducer. Extends 2½ back of baffle. Output Transformer not included. Instruction sheet explains how to add this speaker to existing circuits without use of transformer, as a "second" or "high frequency accentuating" speaker. Low resistance field coil permits substitution of field in place of first filter choke in majority of receivers.

41/2" Twin Dynamics 4E10556-List Price, \$5.00. YOUR PRICE, "Twin-Speakers"

Same speakers supplied as Non-Resonant Twins with option of connecting fields for 125 or 500 ohm 50 to 100 milliampere circuit and the option of connecting the voice coils for 1 or 4 ohm impedance circuit. Especially recommended for use with small connecting the voice voice voice connecting the voice voice circuit. Especially recommended for use with small P. A. Systems where small speakers must be employed near the microphone without feed-back distortion and the large regular speakers used at a distance from the microphone. Handle 3 watts. We recommend our 500 ohm line to 4 ohm voice coil matching transformer to couple these speakers with larger dynamic units.



Metallic Rectifier

14010453 Your Price

\$4.76

by plugging in cord direct to 110 Volt A.C. line. Input transfermer matches single 45, 71A, 50 or 2A3 tube. Cone is 9"

**BEST'S Kinematic Power** Speaker

A new design. Handles amazing power without rattles or distortion. Has rattles or distortion. Has a me power handling capacity as Dynamic Speaker of same cone size. Requires no field current. Used to replace Dynamics where field current is not available. Especially suitable for P.A.

Sets. Die cast zinc budy secturely anchored to steel cone frame. Has permanent magnets. Impedance cult and capacity units mounted on frame prevents D.C. from entering impedance circuit and admits A.C. only to speaker windings.

4E10475— List Price, \$6.00. YOUR \$3.10 | List Trice, \$7.50. YOUR PRICE ... \$3.65

4E10476-

8" Diameter Cone
Overall depth 24". Power handling capacity 34" watts. Frequency 100 to 7000 cycles. Wt., 3 lbs.
4E10474—List Price, 38.50.

Without Impedance Capacity Unit Same physical and electrical specifications as those listed above except without impedance coil and capacity unit. Approx. 1000 ohms impedance.

5" Diameter Cone | 61/2" Diameter Cone PRICE .

\$2.10 PRICE \$2.65

8" Diameter Cone

4E10473-

# **Best Midget Dynamic Chassis**

Diameter 5 Inches Especially designed for Midget, and AC-DC Sets. Fidelity of tone surpassed only by the finest of large size speakers. Strong rugged construc-

large size apeakers.
Strong rugged construction. Rust proof aluminum in is h. Moisture proof cone. 16 mounting holes in flange of cone with the control of t

4D 10466 Single 43, 45 or 71A YOUR PRICE EACH LA

4010468 Single 38 4010469 Single 48 or 2A3

TEN FOR

### Best 61/2 Dynamic A Special Value



TEN FOR \$18.00

Full Size Genuine Be s t
Dynamic Speaker Chassis.
One-piece moulded c on e.
Disphragm type spider holds
voice coil in exact center
proof aluminum finish.
Strong, rugged construction.
d resistance 2500 olims. Output transformer
single type 47, 2A5, PZ, PZH, 79, 89, 33, 68,
tubes. Overall diameter 6½" Depth 23".
dlameter 53". Power handling capacity 3
power dissipation of helds 5 watts. TEN FOR \$18.00

Field resistance 2500 for single type 47, 2A; GA tubes

### Speaker Centering Shims



3E7970-Your Price, Per Kit .... 39¢ 

### Replacement Speaker Field Coils



They duplicate exactly the electrical and physical characteristics of the originals. All colls are double dipped in a special impregnating solution and will withstand extreme moisture and changes of temperature. Resistance guaranteed accurate.

Field Coils Supplied for All Speaker

We can supply any field coil not included in our listing. When ordering Special Field Coils please send us the following information: (1) Inside diameter of hole through center of coil, (2) Outside diameter of coil, (3) Width or height of coil, (4) Resistance for coil, (1 fyou cannot determine the resistance send a short pleee of wire used in the windings of the coils.) (5) If possible give us the name and model number of both speaker

and receiver.

Set or Speaker	Field Ohms	Stock Number	
ATWATER KENT46, 47, Late 53, 55F, 55FC 55, 55C, 60, 60C 61, 61C, 66	1,700 1,100 700		\$2.50 2.50 2.50
BRUNSWICK MODEL D11) 16 15 814, 821	2,500 2,500 600 5,000	3E7915 3E7916	2.10 1.35 3.53 4.70
CROSLEY MODEL M45 269 (Buddy Boy)	1,500		2.59 2.35
EDISON R7	4,500	3E7920	3.25
JENSEN Models D7-D8 D7-D8 D9-D15 D9-D15 D9-D15 D9-D15 D16	1,500 2,500 1,000 1,800 2,500 1,000	3E7922 3E7923 3E7924 3E7925	2.57 2.75 1.75 1.65 1.47 1.21
LYRIC No. 9	5,000	3E7927	3.50
MAGNAVOX 9'(Medium) 9" (Medium)	2,500 7,500	3E7928 3E7929	2.20 2.85
MAJESTIC Model G1, 71, 72 G2, 71, 72, 91, 92, 181	3,100		3.25 3.25
G3, 90, 91, 93, 101, 102, 103	2,730		3.30
G9	1,250	3E7934	4,41
G10B, 151, 153, 154, 155, 156 G10C, 351 G10D, 56, 57, 58 G103, 221 G11B, 251, 253, 254	1,750 200 1,650 765 570	3E7936 3E7937 3E7938	2.20 1.50 2.00 1.88 1.94

Set or Speaker	Field   Ohms	Stock Number	
MAJESTIC (Continued) G11C, 201, 203, 204 G13, 253, 254, 211, 214 G4, Models 130 G5 Models 131, 132, 233, 61, 72, 163	1,430 570 7,650 7,650	3E7933 3E7941	2.20 1.55 4.41 3.51
G6, Models 51, 52, 131 G7, Model 21 G8, Model 22 G9, Model 23 G13B, Model 353 G14, Model 351	1,000 1,250 1,250 1,250 1,250 300 750	3E7944 3E7945 3E7946 3E7947	3.55 4.41 4.41 4.41 1.95 3.88
G14B, Model 353 G14C, Model 223 G14D, Model 223 G14E, Model 221 G14E, Model 307 Models G13C, 215	550 5,350 720 5,350 1,040 570	3E7950 3E7951 3E7952 3E7953	3.88 3.88 3.53 3.88 3.88
OXFORD (Medium)	4,000	3E7955	2.7
PHILCO Model 20 86, 87, 65, 95, 76, 96, 77	3,300 2,000		1.1
RCA Model 66	7,000 6,000		2.2
ROLA Model F4	3,000	3E7960	1.7
STEWART WARNER Series 950, Models 200A, 445A, 565A Model R202	10,000 10,000		3.9
UTAH Model 9", A-100 Model Little Giant (Isdoyne)	2,250 2,500		3.0
VICTOR RE32-45-75	3.000	-	1.9

### Magnavox Automobile Speaker

Models 1504 - 1544
New fine quality and
predicted design are the
outstanding features of the
new, improved Magnaox
Auto Speakers. Tone in
full, rich and true—a



SINGLE STUD
MOUNTING
Installation simple and easy. Speaker can be mounted on dash-board or bulkhead. Round battle can is 8%" in diameter and 4" in depth. Finished in black enamel. Stud protrudes 2" from rear of unit. Two types are available: Type 150A with 6½" unit and type 154A with 8" unit. 6 volt. with 4 ohm field coil.

Output Transformer

When continuously types of type or types

When ordering specify type of tube or tubes speaker is for and whether connected in single or push-pull. The correct output transformer will be



4E 10625-Type 150A 612" mo List Price, \$10.00. YOUR \$4.21 PRICE

4E10626model. Type 154A 8" I List Price \$12.00 YOUR \$4.95

PRICE

### Magnetic Speaker Coils

for RCA R-100, 30, and Western Electric 540AW Magnetic Speakers 3E7968-Your Price, Per Pair 35¢

Exactly duplicate the original coils physically and electrically. Total Resistance 1500 ohms. Size 21/22" Outside diameter with &" hole. Thickness &". See Figure 52, Page 43, Gernsbach Manual Vol. 1.

For RCA R-100A, 100B and 103 D.C. resistance 1200 olms. Size of each coil, 114" outside diameter, 14" hole diameter, 14" thickness, For Speakers used in RCA Models 30A, 50 and 51. For use with any Speakers using this same size coil.

3E7969—

YOUR PRICE, PER PAIR .....

Special Speaker Field Coils For APEX, GLORITONE U. S. Radio & Telev. and Mont. Ward Sets

High grade coils wound more accurately and impregnated more thoroughly than the orimpregnated more thoroughly than the or-iginals. The complete specifi-cations given below assure you of receiving exact coil needed.

\$147 YOUR PRICE

Fact. Our Resist Stock Num. Set Spkr. Model Num. Field Ohms Dimensions D | O.D.| L. 3E7900 \*3E7901 \*3E7902 \*3E7903 5,935T 11,500T 11,500T 11,500T 26A 26P 26P  $\frac{2467}{2758}$ 2925 11,500T 7, \* 3261 3E7905 1.000 3E7906 11,000 2505 3E7907 700 2801 †3E7908 6.600T 2802 †3E7909 6.600T 3261 3E7910 1.000 26 P 27

\*Tapped at 2400 Ohms | †Tapped at 3000 ohms. Paper Rings For Speaker Mounting



Your Price, Per Set 25¢ An assortment consisting of

An assortment consisting of 9 rings. One each of the following sizes: 5". 6". 7". 8". 9". 10". 11" 12" and 13" outside diameters. A great time saver and convenience for any serviceman. An absolute necessity in mounting of speaker on cabinet or baffle.

3E7971-

Radio Repair Cement



For Speaker Cones, Anchoring Wires Etc. 3E2066-

YOUR PRICE. Per Set

39c

Waterproof. Makes extra strong durable joint Ready for use. Generous size metal can will last for months. Brush and can of thinner included Thinner is also useful for loosening cemented wire and removing voice coils.

### CONES **FPLAC**

For Majestic Speakers G1, G2

On e piece moulded, seamless fibre. The original part in these Speakers is of heavy paper and does not provide reproduction at all comparable with that of these replace-Make the change and note the

ments. Make 4E11560-For G1 4E11561-For G2

YOUR PRICE EACH ..... 94¢





For RE32, 45, 57, 75

Made of reinforced one plee fabric, coated with metalized lacquer. Apex is double reinforced, a feature not used in the with 4 layers of precision wound wire Far superior to the original part.

YOUR PRICE, EACH ..... 89¢

FOR RADIOLA 106, R80, R82, R86, R35, R39, RE57, R84, R50, R55, RAE59, RAE79, AZ774B, R41DC, R67, R64, 9.54, 9.18, 7.26, 9.56, 12-12, WEST-INGHOUSE WR4, WR5, WR6, WR7, RCA VICTOR RE57, 34, 35, GRAY-BAR GB678, GB700, GB700, GB900, GB100, GEN, ELEC, J80, J85, J76. 



For Philco
4 E I 1 5 8 3 — F o r
Models 87. 65, 95, 76,
96, 77, 40, 111, 90, 112.
YOUR
PRICE ...... 68¢

4 E I I 5 8 4 — F o r Models 90, 3, 7, 20, 21, YOUR PRICE. 61¢

### For Radiola 104, 105

Replaces the out-of-date seamed paper type cones used originally in the speakers of this type.

4E11585-\$1.19 PRICE .....

For Brunswick S81, \$82, 81, 82, 14 31, \$14, \$21, \$31 14, 21, 61 43 CT 10 4E11519-

One piece seamless cones.

2 Due to improved molded construction, these cones surpass the originals in tone quality and durability.

3— Coils are machine wound, same number of turns and size of wire as originals.

WE CAN FURNISH CONES FOR ANY

PRICE \$	1.1	PRICE	, EACI	\$1.10   4E	UR P	RICE	• • • • • • • •	\$1.42	SETS NOT L	ISTED:	Send in trached.	your of
Set or Speaker Model or Part Number	Diam. In.	Stock Number	Your Price	Set or Speaker Model or Part Number	Dlam In.	Stock Number	Your Price	Set or S or Pa	beaker Model rt Number	Diam.	Stock Number	Yeur Price
AIRLINE 62-70 Utah Large Cub No.3 332-W (Little Glant No.1)	8 8	4E11523 4E11507	\$1.23 1.23	LYRIC Model No.9 D Model 8-7 (Jensen D15 Model 10	10 ¼ 8 ¼ 9	4E11545 4E11529 4E11546	\$1.23 1.10 1.23	RCA (Con RCA M34, R-78 RAE	tinued) 28 84, CRD9AC,	5	4E11588	\$0.61
ATWATER KENT 43.				Model S-6 (Rola F-6) Model S8 Model S80	71 <sub>2</sub> 10 9 4	4E11547 4E11548 4E11549	1.34 1.23 1.23		R-24, SWA3 R77, RES1 R70	10 71 <sub>2</sub>	4E11589 4E11590	1.10
46, 55, 60, 66, 67, 64 (Part No. 15142) 43, 46, 55, 60, 66, 67, 64 (Part No. 14374)	10%	4E11500	51.19 1.19	MACHAVOY DE DE	9 815	4E11550 4E11551	51.34	R73, R75,	R70	614	4E11591 4E11593	1.10
80, 82, 84, 558, 627, 87, 90, 92, Early 83, 85 (Part No. 19465)	83,	4E11502	.98	130 Series, Model 136 130 Series, Model 138 140 Series, Model 142	81 <sub>2</sub> 91 <sub>2</sub>	4E11525 4E11553	1.22 1.22 1.22	Series F6 (Old Model D110	"J"),D90,	914	4E11594 4E11595	1.17
H2, L, F, P, H, (Part 18081)	10%	4E11503	1.23	Model 143 Model 144 Model 150	$\frac{11}{7}$ $\frac{1}{2}$ $\frac{6}{6}$	4E11554 4E11522 4E11556	1.34 1.18 1.10	Series "K"	(N.E.)	9 6	4E11592	1.27
77, 88, 89, 94, 96, 469, Late 83, 85, (Pt. 20737)	10%	4E11504	1.23	Model 154 Deep	11 1 <sub>2</sub> 6	4E11524 4E11559 4E11558	1.22 1.42 1.10	SPARTON 737, 931, 89	IA. 99, 101.			
BOSCH 58, 48 31, 73, 20J 5A, 39A	934 7 838	4E11510 4E11511 4E11512 4E11514	\$1.35 1.35 1.10 \$1.23	MAJESTIC G1—Models 71, 72 G2—Models 71, 72, 91, 92, 181	9	4E11560		109, 110, 591, 593, 1 737, 931, (3	11, 301, 589, 740, 750, 930	9 11 <sup>1</sup> 4 8 <sup>1</sup> 4 7 <sup>1</sup> 4	4E11550 4E11531 4E11529	1.34
BRUNSWICK 10 D, E D11, 12, 16, 18, 33	12	4E11516 4E11517	1.23	G3—Models 90, 91, 93, 101, 102, 103	10	4E11562	.98	Model 410	(Rola K)	714	4E11525 4E11596	1.10
D11, 12, 16, 18, 33 E17, 24, 25 S81, S82, 81, 82, 14 21, 31, 814, 821, 831	12	4E11518	1.42	G4—Model 130 G5—Models 131, 132.	12	4E11563	.98	STEWART	All Models -WARNER	10	4E11597	1.42
15, 22, 32, 42 <b>CLARION</b> 60, 80, 81, 85, 90, 91, 100, 120, 25-60 220, 260, 25-260	8 <sup>3</sup> 8	4E11505 4E11514 4E11515	51.22 1.10	233, 61, 62, 163 G6—Models 51, 52, 53 G7—Model 21 G8—Model 22 G9—Model 23	10 10 12 12	4E11564 4E11565 4E11566 4E11567 4E11568	1.42 1.22 1.22 1.42 1.42	200A, 445A Series) (2 445A (3 Po 104A R202	, 565A, (950 Point Spider) int Spider)	9 9 8 84	4E11598 4E11599 4E11600 4E11601	1.34
CROSLEY 262, 428, 408, 628 124 (Utah Cub No. 2) 124 (Jensen D-9) 124 (Magnavox 144) 125 (Utah Cub No. 3) 135 (Magnavox 154) 249 (Magnavox 154)	9 8 11 4 7 1 2 7 3 4 8 1 2	4E11520 4E11509 4E11521 4E11522 4E11523 4E11524 4E11525	\$1.19 1.41 1.34 1.34 1.34 1.23	G10B—Models 151, 153, 154, 155, 156 G11—Models 251, 253, 254, 201, 203, 204 G13—Models 253, 254, 211, 214, 353, 215 G14—Models 351, 353,	71 <sub>2</sub> 10 12	4E11569 4E11570 4E11571	,98 1.18 1.10	30, 31 (Uta		11	4E11508 4E11509 4E11602 4E11603 4E11604 4E11605 4E11606	\$1.42 1.22 1.10 .98 .98 .98
FADA Shallow Deep (Models 20, 32, 25, 15, 15B, 15C) KU45, 41, 412, 42, 422, 44, 46, 47	81,	4E11626 4E11627 4E11628	\$1.34 1.34 1.42	223, 221, 307 G19—Models 291, 293, 294, 303, 304, 324, 314 G22—Models 336, 344, 363, 393	12 10 12	4E11572 4E11573 4E11574	.98 .98	26P. Speak 27, Speaker 8A. Speake 10B, Speak 99A. Speak		8 8 10 8	4E11607 4E11608 4E11609 4E11610 4E11611	1.10 .98 1.10 1.22 1.10
GENERAL ELECTRIC T41, H31, H51, H32, H72, \$22, \$42, \$132, K62, \$42B J80, J85, J76		4E11526 4E11527	\$1.23 1.23	G25A—Model 381 G26A—Models 371, 373 G26C—Models 411, 413, 411A, 413A D65—Model 331 (Best) D-5—Models 371, 373	5 5 6	4E11575 4E11576 4E11577 4E11555	.68 .73 .71 .95	Cub (3 Poi: Large Cub Spider) Large Cub	(2 Point Spider) at Spider) No. 1 (Inside No. 2 (2 Point	734	4E11633 4E11613 4E11614	\$1.10 1.10 1.22
GENERAL MOTORS "Little General (Rola K)	714	4E11528	1.27	GJ-16B Model 311  NEWCOMB-HAWLEY	8	4E11578 4E11534	1.10	Spider)	No. 3 (3 Point No. 1 (Inside	714	4E11509	1.22
GRAYBAR GB678, GB700, GB770, GB900, (RCA 106)	1014	4 E 11 5 2 6	51.23	NH9 OXFORD 2 Point Spider	814	4E11550 4E11579	51.34	Spider) (I	No. 2 (2 Point	8	4E11507	1.07
GB8, GB989, GB9, GT7, GC13, GC14, GT8, (RCA 48)	10	4E11527	1.23	(Joy Kelsey) 2Pt. Spider 2 Point Spider 3 Point Spider 3 Point Spider	10 10 10 12	4E11580 4E11581 4E11632 4E11582	1.22 1.22 1.34 1.34	(Spider) Little Gian (Spider) A100	No. 3 (3 Point	8 9	4E11616 4E11506 4E11617	1.22 1.22 1.34
ISODYNE Utah Little Giant No.1 Inside Spider	8	4E11507	1.23	PHILCO 87, 65, 95, 76, 96, 77, 40, 111, 90, 112 90, 3, 7, 20, 21, 70	10	4E11583 4E11584	\$0.68	Stadium (6	RE32, 45, 75 (RCA106)	9	4E11508	50.89
JENSEN D4, D5 D7, D8 D9 (Outside Spider) D9 (Inside Spider)	1114	4E11530 4E11531 4E11532 4E11521 4E11533	\$1.42 1.42 1.32 1.32 1.18	RCA 104, 105 106, R80, R82, R86, R29, RF57, R34, R50, R55	s	4E11585	\$1.19	WESTING		1014	4E11526 4E11526 4E11527	51.22 1.22
D11 D15 D16	814	4E11529 4E11534	1.10	R46, RAE59, RAE79, AZ774B, R47, R41DC, R66, R41AC, R67, R62, RG4, 9054, 9-18,				WRIGHT- No. 107	DECOSTER	12	4E11631	51.42
DA6, DA7, J1, J2	13	4E11535 4E11536	2.70	7-20, 9-30, 12-13		4E11526	1.10	ZENITH 52, 72, (Ox 52, 72, (LL)	ord)	12	4E11620	51.42
343 D19 D1 D10 D12, D14	5 10 614 814 814 818	4E11537 4E11538 4E11539 4E11540 4E11541 4E11542	1.34 1.10 1.18 1.18 1.10	48, R7, R7A, R8, R10, R11, R12, R15, R18, R19, R20, R23, R42, R14, RE17, R29, R43ED, RAF 26, RE73, CE29, R6, R21, RE16, RE16A Photophone	10	4E11527 4E11586	.88 1.71	(Symingto 52, 72, (Ma 52, 72, (Fai 92 (Jensen 103 (Peter "Zenette"	n) gnavox) rand) D9)	1214 1114 12 1114 12 8	4E11621 4E11622 4E11623 4E11521 4E11624 4E11507	1.42 1.42 1.42 1.42 1.42 1.22
T1, T2	5	4E11543	.98	Photophone	712	4E11587	1.10	A, B, C, D		1 814	4E11551	1.22

### **EXACT** DUPLICATE

THEY FIT! Mounting holes, lugs, voltages and

THEY FIT! Mounting holes, lugs, voltages and everything exactly like the original. Better insulation and higher safety factor than the original but otherwise the same. If the transformer you desire to replace is not the one originally supplied with set, send us on a separate sheet with your order, make, model, and style mounting employed and we will supply the proper replacement. The leading transformer factories of the country are located only a few blocks from our plant and are grapured to dunlicate almost any transformer you.

prepared to duplicate almost any transformer you desire, very promptly.

## STANCOR

### REPLACEMENTS

### Complete Stock-Quick Shipments

### **Additional Models**

We are constantly adding to our stock additional models of Replacement Power Transformers. If the transformer you require is not quoted here, write us for price, stating make and model of the receiver and the number and type of tubes used. We will promptly send you a low quotation on the job and guarantee an exact replacement.

RADIO MODEL

### - POWER TRANSFORMERS

### **Diagram of Connections**

Each unit is packed in an individual carton containing a planograph which plainly designates the connecting leads, the voltages, and gives the circuit. When ordering, state name, model number of the set for which transformer is required together with the stock number and you will be assured of prompt shipment.

25 Cycle Can Be Supplied

Transformers for 25 cycle current can be supplied for any Radio Models listed at an additional cost of 60% above price quoted for 60 cycle Trans-formers.

Shpg. Radolek Stancor List Your Wt. Stock No. Type No. Price Price

RADIO MODEL	Shpg Wt.	Radolek Stock No.	Stancor Type No.	List Price	Your Price
AIRLINE (Mont. Ward) AE-10 11, 12, 16, 62-29 20-W, 62-520 26-P 32-W, 62-030, 62-232	8 5 3 3 7	3E3629 3E3680 3E3620 3E3621 3E3624	P-1478 P-1136 P-1070 P-1358 P-1291	\$9.25 6.50 4.15 5.00 6.25	\$5.44 3.82 2.44 2.94 3.67
26W 60 1238 1355, 1955 62-21, 62-22, 62-30 62-68 62-010	5 6 7 7 7	3E3623 3E3625 3E3628 3E3630 3E3626 3E3631 3E3627	P-1405 P-1404 P-1479 P-1016 P-1461 P-1495 P-1438	5.00 7.00 7.00 7.25 7.75 7.50 7.85	2.94 4.12 4.12 4.26 4.56 4.41 4.62

### Airline 26-W and Apex 26-W

Stancor Type No. P-1405. Shipping weight, 5 lbs. List Price, \$5.00.

3E3623-YOUR PRICE ......



	140							
ALL-AMERICAN MOHAWK (Lyric) 60, 61, 62, 65, 66, 80 83, 84, 85, 86, 88 90 Lyric D, Lyric H J, P 86	9 7 9 4 5	3E3638 3E3639 3E3633 3E3635 3E3637	P-1463 P-1038 P-1134 P-1406 P-1410	\$8.25 7.20 8.75 5.25 5.25	\$4.85 4.23 5.14 3.09 3.09			
ATWATER-KENT 37, 37C, 38 55-Early, 55C-Early 55-Late, 55C-Late 60-1st type, 60-2nd type 60C-1st type, 60C-2nd type	6 9 9	3E3649 3E3651 3E3650 3E3652	P-716 P-918 P-913 P-1066	\$5.75 9.25 9.25 9.25	\$3.38 5.44 5.44 5.44			
60-3rd type, 60C-3rd type 66 Early & Late — Plate 70-L1 chassis, 70-1.2 chassis 70-P chassis, 72-H1 chassis 72-H2 chassis, 74-L1 chassis 74-L2 chassis, 74-P chassis 76-L1 chassis, 76-L2 chassis 76-P chassis	5 10	3E3663 3E3653	P-1500 P-1213	6.10 8.50	3.59 5.00			
80, 83 82, 85 84-Early, 84-Late 87-1st type, 87-3rd type 89-1st type, 89-3rd type 89P-1st type, 89P-3rd type	5 5 5	3E3655 3E3657 3E3659	P-1088 P-1084 P-1086	6.10 6.10 6.10	3.59 3.59 3.59			

Atwater-Kent Models 70, 72, 74, 76 Chassis Models L1, L2, H1, H2P

Stancor Type No. P-1068. Shipping wt., \$259 List, \$6.10. 3E3654-YOUR PRICE .....



### Atwater-Kent Models 37, 37C, 38

Stancor Part No. P-716. Shipping wt., \$5 pounds. List Price, \$5.75.

3E3649-YOUR PRICE .....



BALKEIT 52, 55	3	3E3664	P-1149	\$4.00	\$2.35
BELMONT 41-series 40, 47-series 40 51-series 50	3 5	3E3665 3E3666	P-1000 P-453	4.25 5.00	2.50 2.94
51 A-series 50 A. 51 B-series 50 B 51 C-series 50 C 71-series 70	4 3 6	3E3667 3E3669 3E3668	P-597 P-1260 P-557	4.50 4.50 6.75	2.65 2.65 3.97
BOSCH 29, 825	10	3E3671	P-859	7.50	4.41
BREMER-TULLY 81, 82, S-81, S-82	11	3E3674	P-1112	8.25	4.85
BRUNSWICK S-14, S-21, S-31, S-81, S-82, 14, 21, 31, 81, 82 10 11-D, 11A-D, 12-D, 12A-D.	11 5	3E3674 3E3682	P-1112 P-1499	8.25 4.40	4.85 2.59
16-D, 16A-D, 18-D, 18A- D, 33-D, 33A-D (chassis)	5	3E3680	P-1136	6.50	3.82
5-KR, 2-KR0, 3-KR0, 5-KR0, 3-KR6, 5-KR6 3-NC8, 5-NC8	8	3E3677 3E3678	P-791 P-715	8.50 7.75	5.00 4.56

	-1				
CLARION AC-40	4	3E3682	P-1499	\$4.40	\$2.59
AC-60	7	3E3627	P-1438	7.85	4.61
AC-61, AC-70	7	3E3688	P-1429	8.45	4.97
AC-80, AC-81, AC-84, AC-85, AC-120	5	3E3683	P-1928	5.00	2.94
AC-90, AC-90-A, AC-91	8	3E3689	P-1166	6.25	3.67
AC-100	4	3E3610	P-1558	4.40	2.59
AC-160	8	3E3611	P-1974	6.25	3.67
AC-260	8	3E3612	P-1494	5.65	3.32
AC-280	9	3E3613	P-1927	6.25	3.67
AC-300	9	3E3614	P-1915	8.75	5.14
AC-320	5	3E3615	P-1916	3.45	2.03
AC-340	6	3F3616	P-1871	4.40	2,59
AC-260	6	3E3617	P-1861	4.70	2.76

### Clarion A.C. 90, A.C. 90A, A.C. 91

Stancor Type No. P-1166. Shipping wt., \$267

3E3689-YOUR PRICE .....



3E3689—100K TRICE					AL.
CROSLEY 40-8, 41-8, 42-8, 45-8, 82-8, (73 Chassis) 41, 41-A, 42, 704-B, 706-Show Box Series	7 8	3E3698 3E3699	P-1015 P-1472	\$7.00 7.00	\$4.12 4.12
EARL 31, 32, 338, 41	7	3E3700	P-893	7.00	4.12
C-2, R-1, R-2 (Plate—JR Chassis) C-4, R-4, R-5 (7R & 8P Chassis)	5	3E3703 3E3704	P-961 P-1143	5.25	3.09
FRLA 71, 72, 73, 271, 271-A 81, 82, 245 224, 224-B	<b>8</b> 9	3E3707 3E3708 3E3709	P-1464 P-1466 P-1465	7.75 8.50 9.25	4.56 5.00 5.44
EVEREADY 31-Series 30, 32-Series 30, 33-Series 30, 34-Series 30 Series 30-C	9	3E3712 3E3713	P-1030 P-1480	9.00 7.00	5.29 4.12
42-Series 40, 43-Series 40, 44-Series 40 52-Series 50, 53-Series 50, 54-Series 50	7	3E3714 3E3715	P-956 P-901	7.50 7.50	4.41 4.41
FREED-EISMANN NR-55 NR-78, NR-79, NR-90-8, NR-95 NR-85	7 7 9	3E3718 3E3700 3E3719	P-1471 P-893 P-1101	7.50 7.00 8.50	4.41 4.12 5.00
FRESHMAN Q15, Q16, 3Q15, 3Q16 QD16-8 31-8, 32-8, 41	9 9 7	3E3722 3E3723 3E3700	P-910 P-919 P-893	8.00 8.00 7.00	4.70 4.70 4.12
41-Series 40, 47-Series 40 51-Series 50 51A-Series 50A, 51B-Series 50B 51C-Series 50C	3 5 4 4	3E3665 3E3666 3E3667 3E3669	P-1000 P-453 P-597 P-1260	4.25 5.00 4.50 4.50	2.50 2.94 2.65 2.65
GENERAL ELECTRIC H-31, H-51, H-71 J-70, J-75 J-80, J-85, S-132 K-62	9 6 7 8	3E3726 3E3738 3E3736 3E3730	P-713 P-1487 P-1483 P-1474	\$8.35 5.20 6.90 8.00	\$4.91 3.06 4.06 4.70
S-22, S-22X, 8-42 S-22A T-12 T-41	7 7 5 9	3E3732 3E3734 3E3740 3E3728	P-1481 P-1482 P-1493 P-927	7.50 7.00 5.20 7.35	4.41 4.12 3.00 4.32

### General Electric H31, H51, H71

Stancor Type No. P-7 9 pounds. List, \$8.35. P-713. Shipping wt.,

3E3726-YOUR PRICE ......



GENERAL MOTORS 110, 180, 190 (Little General MA Chassis) 211 (8-0-A Chassis) 220 (8-10-A Chassis) 252, 253, 254, 255, 256, 257, 258 (8-3-A Chassis) 3E3743 3E3742 3E3744 P-1485 P-1271 P-1506 \$5.75 5.80 5.80 666 8 4.70 3 F 3745 P-1492 8 00

### **EXACT** DUPLICATE

## STANCOR REPLACEMENTS

### **POWER** TRANSFORMERS

	1711			1 1 1 - 1	V
RADIO MODEL	Shpg	Radolek Stock No.	Type No.	Price	Your Price
GRAYBAR 310, 311 340 500, 550 600 GB-4 GB-8	88998557	3E3677 3E3678 3E3748 3E3749 3E3740 3E3732	P-791 P-715 P-714 P-883 P-1493 P-1481	\$8.50 7.75 7.90 7.50 5.20 7.50	\$5.00 4.56 4.64 4.41 3.06 4.41
GB-8-A GB-9 GB-678 GB-700, GB-770, GB-900 GB-989, GC-14, GT-8 GC-13, GT-7	7 8 9 9 7 6	3E3734 3E3730 3E3728 3E3726 3E3736 3E3738	P-1482 P-1474 P-927 P-713 P-1483 P-1487	7.00 8.00 7.35 8.35 6.90 5.20	4.12 4.70 4.32 4.91 4.06 3.06
GREBE AC-7 (Synchrophase) HS-4 (PP 45s) HS-4 (Pentode) HS-8	7 5 5 5	3E3750 3E3751 3E3752 3E3753	P-1475 P-1476 P-1477 P-1489	7 00 6 00 6 00 6 00	4.12 3.53 3.53 3.53
GULBRANSEN 60-Series 60, 63-Series 60 200 (9 in line series) 201, 292, 295, 9950	6	3E3625 3E3629	P-1404 P-1478	7.00 9.25	4.12 5.44
KELLOGG 523, 533, 534, 535, 536	11	3E3756	P-868	9.50	5.59
KENNEDY 10, 20 26	8 8	3E3757 3E3758	P-792 P-1488	8.00 8.00	4.70 4.70

### Kennedy Model 10 and 20

Stancor Type No. P-792. Shipping wt., 8 pounds. List, \$8.00.

3E3757-YOUR PRICE .....



KOLSTER-BRANDES			- 1	三进门	
B-15, B-16 K-20, K-21, K-22, K-23.	9	3E3763	P-1193	\$9.50	\$5.59
K-25, K-27, K-28, K-37 K-24, K-36 K-43	8 11 9	3E3760 3E3761 3E3762	P-1190 P-1191 P-1192	8.25 10.00 9.00	4.85 5.88 5.29
KOLSTER-COLUMBIA 950 961	12 12	3E3764 3E3765	P-1194 P-1437	11.25 10.75	6.61 6.32
MAJESTIC 21, 22, 23 (Unmounted 20 chassis) 51, 52 (Uumounted	6	3E3773	P-954	5.80	3.41
50 chassis) 71, 72 (Plate, 70 chassis)	7	3E3776 3E3777	P-905 P-790	5.20 4.00	3.06 2.35
71, 72 (Fil. 70B chassis) 71, 72 (Fil. 70B chassis)	6	3E3778	P-798	4.00	2.35
71, 72 (Plate 70B chassis) 90, 91, 93 (90B chassis) 102 (100-B chassis)	6	3E3769	P-1486	4.00	2.35
103 (100-B chassis) 91, 92 (90 chassis)	12	3E3779	P-939	7.00	4.12
101 (100 chassis)	11	3E3780	P-757	6.20	3.64
130, 131, 132 (130-A chassis) 233 (230-A chassis)	13	3E3774	P-1102	8.00	4.70
151, 153 (Unmounted 15 chassis), 154 (Unmounted 15-B chassis), 155 (Un- mounted 150 chassis) 156 (Unmounted 15 chassis) 181 (Plate, 180 chassis)	4 11	3E3772 3E3782	P-906 P-789	3.70 5.80	2.29 3.41
181 (Filament 180 chassis)	11	3E3781	P-805	4.30	2.53
211, 214, 215 (Unmounted 210 chassis) 251, 253, 254 (Unmounted 25 chassis) 251-B, 253-B,	8	3E3783	P-1507	6.10	3.59
254-B (Unmounted 25-B chassis)	7	3E3775	P-1168	5.50	3.23

\$2.35

Filament Transformer Modela 71, 72 (70 Chassis)
Stancor Type No. P-798. Shpg.
List, \$4.00.
8-YOUR PRICE

3E3778 Majestic Models 91, 92 (90 Chassis) Model 101 (100 Chassis)

Power Transformer
Stancor Type No. P-757. Shpg. wt., 11 pounds.
3E3780—List, \$6.20.

YOUR PRICE						
NATIONAL CARBON CO.	(See	Eveready)				
NAVIGATOR 41 (Series 40) 47 (Series 40)	3	3E3665	P-1000	84		

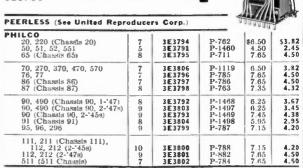
(See Eveready)						
NAVIGATOR	-	1	1			
41 (Series 40) 47 (Series 40)	3	3E3665	P-1000	\$4.25	\$2,50	
51 (Series 50)	5	3E3666	P-453	5.00	2.94	
51 A (Series 50-A)				0.00		
51B (Series 50-B)	- 4	3E3667	P-597	4.50	2.65	
51C (Series 50-C)	3	3E3669	P-1260	4.50	2.65	
71 (Series 70)	8	3E3668	D.557	6.75	2 97	

RADIO MODEL	Shpg.	Radolek Stock No.	Stancor Type No.	List Price	Your Price
OZARKA 90 93-A Viking 91	8 6 8	3E3785 3E3668 3E3786	P-220 P-557 P-1484	\$8.25 6.75 8.25	\$4.85 3.97 4.85

### Ozarka Model 90

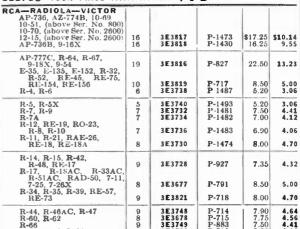
Stancor Type No. 1 pounds. List, \$8.25. P-220. Shpg. wt., 8 3E3785-YOUR PRICE ......

\$485



Philco Model 65 (Chassis 65) Stancor Type No. P-711. Shpg. wt., 8 lbs.	
List, \$7.65. 3E3795—YOUR PRICE \$4.50	
Philo Models 20, 220, (Chassis 2) Stancor Type No. P-762. Shpg. wt., 7 lbs.	
List, \$6.50. 3E3794-YOUR PRICE \$3.82	Ų
Philo Model 87 (Chassis 87)	

List. \$7.35. \$4.32 3E3798-YOUR PRICE



R-66 R-80, R-82, R-86 RCA Victor Radiola Models R 80, R 82, R 86 Graybar GB 700, GB 770, GB 900 Westinghouse WR5, WR6, WR6R, WR7

Stancor Type No. P-713. Shpg. wt , 9 pounds. List. \$8.35. 3E3726-YOUR PRICE .....

RCA Victor R 44, R 46AC, R 47 Graybar 500, 550

Stancor Type No. P-714. Shpg. wt., 9 lbs. List, \$7.90. \$4.64 3E3748-YOUR PRICE .... RCA Victor R 60, R 62, Brunswick 3 N Type No. P-715. Shpg. wt., 8 lbs. List, \$7.75. Brunswick 3 NC 8, 5 NC 8

3E3678-YOUR PRICE ... RCA Victor R 17, R 18 AC, R 33 AC, R 51 AC, RAD 50, 7-11, 7-25, 7-26X
Graybar 310, 311. Brunswick 5 KR, 2 KRO, 5 KRO 3 KR6, 5 KR6
Stancor Type No. P-791. List. \$8.50.

\$5.00 3E3677-YOUR PRICE RCA Victor Radiola Models E-35, E-135, E-152, R-32, R-52, RE-45, RE-75, RE-154, RE-156 Stancor Type No. P-717. List, \$8.50. \$5.00 3E3819-YOUR PRICE ...

Stancor Type No. P-715.



144141

**\$2.35** 

\$4.56

### EXACT DUPLICATE

## STANCOR REPLACEMENTS

### POWER TRANSFORMERS

RADIO MODEL	Shpg. Wt.	Radolek Stock No.	Stancor Type No.	List Price	Your Price
SENTINEL RADIO CORP. 108, 108A, 108B, 110 111, 112, 114, 115, 116 (Chassis 104)	5 7 7	3E3851 3E3850 3E3850	P-420 P-1253 P-1253	\$ 4.80 8.50 8.50	\$2.82 5.00 5.00
SILVER MARSHALL B, J D, E, F Q DeLuxe below No. 40,000	7 7 9	3E3822 3E3825 3E3826	P-1496 P-1439 P-1467	8.00 2.00 8.00	4.70 4.70 4.70
V, 728 Short-Wave Q Short-Wave R Sherldan 750 726 Short-Wave	9 10 5 10	3E3826 3E3823 3E3824 3E3830	P-1467 P-1491 P-1272 P-1490	8.00 9.00 5.00 9.00	4.70 5.29 2.94 5.29
SONORA A-30, A-32, A-40 2RP-25, 3-R, 4-R A-31, A-33, A-35	8 8 9	3E3828 3E3828 3E3829	P-1380 P-1380 P-1462	8.90 8.90 <b>8.</b> 00	5.23 5.23 4.70
SPARTON AC-7, 62, 63 9-A, 410, 420, 600A 610A, 620A 25, 26, 26AW, 30, 30A 30B, 45 35, 101, 110, 111, 111A	5 7 7 10 10 10	3E3807 3E3808 3E3808 3E3809 3E3809 3E3831	P-1373 P-1196 P-1196 P-1204 P-1204 P-1412	6.25 8.00 8.00 8.00 8.00 10.25	3.67 4.70 4.70 4.70 4.70 6.03
870 89-A 99, 109 103, 301, 301A, 564 570, 574, 574, 740, 750 589 591, 593, 931	12 8 11 7 7 7	3E3831 3E3810 3E3832 3E3811 3E3811 3E3812 3E3813	P-1412 P-921 P-1411 P-1372 P-1372 P-909 P-864	10.25 7.45 9.00 10.25 10.25 8.00 8.00	6.03 4.38 5.29 6.03 6.03 4.70 4.70

### Sparton Models 591, 593, 931 Power Transformer

Stancor Type No. P-864. Shpg. wt., 7 pounds. List, \$8.00.

3E3813-YOUR PRICE .....

SPLITDORF M-5 (Plate)	5	3E3703	P-961	\$5.25	53.09
STEWART-WARNER 801, 801-A, 802, (Series A) 801, 801-A, 802, (Series B)	7	3E3837	P-1108	7.25	4.26
901, 902, 903 (Series 900) 951, 952, 953 (Series 950) R-100-A. (Series R-100)	7 7 7 7	3E3839 3E3839 3E3839 3E3839 3E3839	P-1470 P-1470 P-1470 P-1470 P-1470	6.50 6.50 6.50 6.50 6.50	3.82 3.82 3.82 3.82 3.82

Stewart-Warner Models 901, 902, 903, (Series 900) 951, 952, 953, (Series 950) R-100 A (Series R-100)

Stancor Type No. P-1470. Shpg. wt., 7 lbs. List, \$6.50. 3E3839-YOUR PRICE ......\$3.82

STROMBERG-CARLSON	_	1			3
10, 11 641, 642, 652, 654 846, 848	10 10 10	3E3842 3E3843 3E3844	P-1209 P-834 P-1053	\$8.85 8.75 9.00	\$5.20 5.14 5.29
TEMPLE 8-60, 8-61, 8-80, 8-81, 8-90, 8-91	8	3E3846	P-219	6.75	3.97
TRANSFORMER CORP. OF					

### STANCOR FILTER CHOKES Top Quality at a Reasonable Price!

**EXACT-DUPLICATE REPLACEMENTS** 

RADIO MODEL	Shog. Wt.	Radolek Stock No.	Stancor Type No.	List Price	Your Price
ATWATER-KENT 36, 37, 38, 40, 42 43, 44, 52	0 7 0 7	3E3980 3E3980	C-1162 C-1162	\$1.45 1.45	\$0.85 .85
BELMONT 425, 525, 530 545, 625	0.6	3E3981 3E3981	C-1318 C-1318	1.20 1.20	.70 .70
CLARION AC-160, AC-260 25-160, 25-260 AC-300, 25-300 AC-360, 25-360	2 2 3 2	3E3982 3E3982 3E3983 3E3984	C-1315 C-1315 C-1270 C-1271	1.90 1.90 2.20 1.40	1.12 1.12 1.29 .82
FRESHMAN 425, 525, 530, 452, 625	0.6	3E3981	C-1318	1.20	.70
NAVIGATOR 425, 525, 530, 545, 625	0.6	3E3981	C-1318	1.20	.70
PHILCO 15, 40, 41, 42, 65, 76, 77, 87 (1st position), 95, 96, 111, 112 (using 2-45's), 4,1 4, 21, 48, 70, 90, (all models), 91, 470, 490, 87 (2nd position).		3E3986 3E3998 3E3987	C-1141-P C-1440-P C-1140-P	2.75 1.75 3.50	1.62 1.03 2.06

RADIO MODEL	Shpg. Wt.	Radolek Stock No.	Stancor Type No.	List Price	Your Price
TRAV-LER A B C	5 5 5	3E3847 3E3848 3E3849	P-149 P-130 P-187	\$4.75 4.75 4.75	\$2.79 2.79 2.79
TRUE-TONE	6	3E3625	P-1404	7.00	4.12
UNITED AIR CLEANER CORP. (See Sentinel Radio Corp.)					
UNITED REPRODUCERS CORP. 70, 71, 72 (Series K-70)	7	3E3788	P-1434	8.00	4.70
U. S. RADIO & TELEVISION CORP. 7 8, (Series 8-A) 8, (Series 8-B) 9, 19 (900 Chassis) 9, 19 (902 Chassis) 10, 10-C (1000 Chassis)	7 6 6 7 7	3E3626 3E3628 3E3628 3E3631 3E3631 3E3630	P-1461 P-1479 P-1479 P-1495 P-1495 P-1016	7.75 7.00 7.00 7.50 7.50 7.50 7.25	4.56 4.12 4.12 4.41 4.41 4.26
10-C (1001 Chassis) 20 (Cloriette-20 Chassis) 26 (Cloritone-26 Chassis) 26-P (Cloritone-26-P Chas.) 32 Series, (32 Chassis) 36, 37 (Apex)	7 4 5 5 7 9	3E3630 3E3620 3E3623 3E3621 3E3624 3E3645	P-1016 P-1070 P-1405 P-1358 P-1291 P-340	7.25 4.15 5.00 5.00 6.25 9.00	4.26 2.44 2.94 2.94 3.67 5.29

### Apex Models 36, 37 Power Transformer

Fits Monroe and Marvelo Model 6-7.

Fits Monroe and Marvelo Model 6-7. Stancor Type No. P-340. wt., 9 pounds. List, \$9.00. 3E3645— Shpg.

YOUR PRICE VICTOR (See R. C. A.



RADIOLA, VICTOR) VIKING (See Ozarka)						
WELLS-GARDNER C. CG 60, 63	8 6	3E3629 3E3625	P-1478 P-1404	\$9.25 7.00	\$5.44 4.12	
WESTINGHOUSE WR-4 WR-5, WR-6, WR-6-R, WR-7	9	3E3728 3E3726	P-927 P-713 P-713	7.35 8.35 8.35	4.32 4.91 4.91	
WR-7-R, WR-8, WR-8-R  WR-10, WR-12 WR-10-A WR-14 WR-15	9 7 7 5 8	3E3726 3E3732 3E3734 3E3740 3E3730	P-1481 P-1482 P-1493 P-1474	7.50 7.00 5.20 8.00	4.41 4.12 3.06 4.70	
ZENITH  10, 11, 12 (Super Zenith) 52, 53, 54, 55, 30, 61, 62, 64, 67, 71, 72, 73, 77	9	3E3853 3E3854	P-851 P-712	8.00 8.00	4.70	



Zenith Models 52, 53, 54, 55, 60, 61, 62, 64, 67, 71, 72, 73, 77

### Power Transformer

Stancor Type No. P-712. Shipping wt., 11 pounds. List, \$8.00.
3E3854—YOUR PRICE

### Universal Condenser Microphone



The New Model E Condenser Microphone is a professional instrument especially designed for use in Broadcasting Studios, Sound Recording, Public Address, Orchestral Music and all uses where absolute absence of hiss or other background noises is essential. Frequency response from 35 to 10,000 cycles. Connects to standard input transformers of 200 ohms where carbon microphones have been previously used. Two stage amplifier increases the output approximately 30 db. Signal output equals that of the highest quality type of carbon microphone but does not have the usual hiss associated with carbon microphones.

Uses two type 861 mon-microphonic tubes. Drain for tubes is \( \frac{1}{2} \) amp, at 6 volts and \( \frac{1}{2} \) mills, on 180 volt battery. Head has automatic barometric adjustment and diaphrasm is protected by a solid cast grating. 90° swivel of head permits used directly overhead. Supplied with tubes and 25 feet of shielded rubber covered cable.

3E22808—Black Crackie Finish.
3E22809—Chrome Finish.
List Price, 560.00.

YOUR PRICE

\$35.28



DeJur-Amsco 3 Gang .000365 Mfg.

Superhet Variable Condenser

Tuning Ratio 6:1. Increased tuning ratio is accomplished by gears which insure a smooth positive construction. Aluminum plates. Cadminum plated steel frame. W" shaft extends 14". Size 34" long, 3&" wide, 1%" high. Clockwise rotation.

3E7309
YOUR SPECIAL PRICE

### STANCOR Exact Duplicate AUDIOS Replacements for All Popular Sets

Part.

P. P. Input

Push-Pull Input for Sparton



RADIO MODEL

AIRLINE (Ment. Ward)

'n

Models 9A, 410, 410 DC, 420, 420 DC, 600 A, 610 A, Stancor Type A

3E3971-Your \$1.76 Push-Pull Input for Philco

Rado- Stan-lek No. cor No.

Models 30, 40, 41, 42, 73, 76, 77, 77A, 82, 83, 86, 87.

Stancor Type A 72 YCP.

3F3961-List, \$3.25. YOUR \$1.91 PRICE.



List

3E3954 A-2132 \$4.70 \$2.76

### **STANCOR Output Transformers**



Guaranteed finest quality. Coils are carefully wound and highly insulated. Laminations accurately made of fine silicon steel. Carefully varnished and stacked. Unshielded type. Cadmium plated mounting strips. Wire leads. Designed to withstand hard continuous usee, (For Class "A" Amplification.)



For Single Tubes

For Tubes in Push-Pull

Core Size 1/4" x 1/4". Dimensions: Height 2". Depth 1 %", Length overall 2 %". Hole Centers 2". 71A, 45, 48, 43, 59 76—Stancor A-2220 71A. Tubes: 71A, 3E4176-List, \$1.20. 3E4185-List, \$1.10. -Stancor

65¢ List, \$1.20. 71¢ YOUR PRICE Core Size ¾"x¾". Dimensions: Height 2", Depth 1%", Length overall 3 1/8". Hole Centers 2 1/8". Tubes: 71A, 45, 48, 43, 59 3E4175 -Stancor A-2200. List, \$1.50. 88¢ YOUR PRICE ..... Tubes: 12A, 10, 31, 41
3E4178—Stancor A-2231.
List, \$1.60. Tubes: 12A, 10, 31, 41 3E4177—Stancor A-2227. List, \$1.50.

YOUR PRICE ..... 88¢ YOUR PRICE ...... 94¢ Tubes: 33, 47, 2A5, 49, 46, 42 3E4181—Stancor A-2313. List, \$1.50. Tubes: 33, 47, 2A5, 49, 46, 42 3E4 182—Stancor A-2312. List, \$1.60. 88¢ YOUR PRICE ..... 94¢ YOUR PRICE ..... Tubes: 38, 89
3E4179—Stancor A-2347.
List, \$1.50. 3E4180—Stancor A-2348. 88¢ .94¢ YOUR PRICE ..... YOUR PRICE .....

Core Size 1/4"x1/4". Dimensions: Height 21/4", Depth 11/4", Length overall 31/4". Hole Centers 31/4". Tubes: 71A, 45, 50, 2A3, 43, 59, 48 | Tubes: 71A, 45, 50, 2A3, 4 3E4 | 83-Stancor A-2234. | List, \$2.10. | 43, 59, 48

\$1.23 List, \$2.20. YOUR PRICE .... Core Size 1"x1". Dimensions: Height 2%" Depth 2", Length overall 4\frac{1}{8}". Hole Centers 3\frac{1}{8}"

For Push-Pull Tubes 71A, 45, 50, 2A3, 43, 59. -Stancor type A-2235. List, \$2.50. \$1.47 YOUR PRICE

### STANCOR Audio Transformers

For single and pushpull stages. Unmounted with cadmium plated frames and bottom plates. To feed from types 28, 27, 30, 37, 56, 85, 01A tubes and all tubes having similar plate impedances. The 2 to 1 ratio en any size core is for use with all types of tubes listed and in addition will feed from 2A7, 2B7, 12A, 36, 57, 75, 199 tubes and others of higher plate impedances but which do not exceed 12 M.A. plate current.



Midget Size

2" HIÇ	n, 1%" Wide	, 2%" Long. Mtg.	Ctrs., 2". Core	8"X 1/4".
Radolek Stock No.	Stancor Type No.	Ratio	List Price	Price
3E4170 3E4171	A-64 A-64-C	Straight 4:1 P.P. Input 4:1		\$ .76
		Regular Size		

2" High, 15%" Wide, 3ff" Long. Mtg. Ctrs., 2f8". Core 34"x34". Radolek List Ratio

Stancor Type No. Stock No 3E4150 3E4151 3E4152 3E4153 3E4154 A-72 A-72-C A-73 A-73-C A-74 A-74-C \$1.90 2.00 1.90 2.00 \$1.12 1.18 1.12 1.18 1.18 1.12 Straight 2:1 P.P. Input 2:1 Straight 3:1 P.P. Input 3:1 90

2" High, 21/8" Wide, 33/6" Long. Mta Long. Mtg. Ctrs., 218". Core 3/4"x1". Stancor

Radolek List Price Ratio Stock No. A-74-YC Straight 4:1 P.P. Input 4:1 \$2.10

Large Size 21/4" High, 17/4" Wide, 31/4" Long. Mtg. Ctrs., 31/4". Core 7/6"x2/8" List

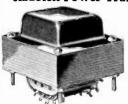
Radolek Stock No Type No. Price Straight 2:1 P.P Input 2:1 Straight 3:1 P.P. Input 3:1 Straight \$2.40 \$1.41 3E4158 A-82 A-82-C A-83 A-83-C Straight A-84 A-84-C P.P. Input 4:1 3F4163 Giant Size

Long. Mtg. Ctrs., 35a". Core I"xi" 2%" High, 2" Wide, 4 4" Stancor Type No. List

Radolek Stock No Ratio \$1.71 1.76 1.71 1.76 1.71 1.76 Straight 2:1 P.P. Input 2:1 Straight 3:1 P.P. Input 3:1 Straight 4:1 P.P. Input 4:1 \$2.90 3E4164 A-102 A-102 A-102-C A-103 A-103-C A-104 A-104-C 3.00 2.90 3.00 2.90 3.00

02-010	r . z . ziipus	323334	A-2102	94.70	32.76
BRUNSWICK—10 14, 21, 31, 8-31 14, 21, 31, 8-14, 8-21, 8-31, 8-81, 8-82	Output Ist Audio	3E3990 3E3950	A-2814 AU-101	1.90 3.50	1.12
	P. P. Input	3E3951	AU-102	4.15	2.44
14, 21, 31, 8-14, 8-21, 8-31, 8-81, 8-82	P. P. Output	3E3952	AU-103	3.25	1.91
14, 21, 31, 8-14, 8-21, 8-31, 8-81, 8-82 15-B, 15-DC, 22-DC, 32-DC, 42-DC	P. P. Input		AU-104	5.15	3.03
CLARION—AC-40 AC-60 AC-61, 25-61	Output P. P. Input P. P. Input	3E3990 3E3954 3E3955	A-2132	1.90 4.70 4.90	1.12 2.76 2.88
AC-80, AC-81, AC-84, AC-85, AC-90, AC-90-A, AC-91, 25-80, 25-81, 25-84, 25-85, 25-90	Output	3E3992	A-2774	2.50	1.47
AC-160, 25-160 AC-280, 25-280	P. P. Output P. P. Output	3E3993 3E3994	A-2836	2.50 2.50	1.47
AC-300, 25-300 AC-320, 25-320 AC-360, 25-360	Driver Trans.	3 E 3995	A-4126 A-2718	2.85 1.60	1.68
AC-360, 25-360	Output P. P. Input	3E3997	A-4016	1.70	1.00
GENERAL ELECTRIC H-31, H-51, H-71	Input-Output Assembly	3E3958	AU-100	7.00	4.12
GRAYBAR GB-700, GB-770, GB-900	Input-Output Assembly	3E3958	AU-100	7.00	4.12
PHILCO 3 (Transitone Chassis) 30 (30 Chassis) 82, 86 (86 Chassis) 83, 87 (87 Chassis)	Input	3E3962	A-74- YP	\$2.95	51.73
3 (Transitone Chassis) 70, 70-A, 270, 270-A, 370, 370-A, 470, 470-A (70 Chassis) 90, 90-A, 490, 490-A (90, 1-247 Chassis)	Output	3E3965	A- 2392-P	2 40	1.41
20, 20-A, 21, 220, 220-A (20 Chassis) 20, 22-A, 21, 220, 220-A (20 Chassis) 40,41,42,46,346 (Chassis 40) 62, 65 (65 Chassis) 73, 76 (76 Chassis) 77, 77-A (77 Chassis) 82, 86 (86 Chassis) 83, 87 (87 Chassis) 90, 90-A (90, 2-245's) 92, 95 (95 Chassis) 96, 96-A, 296, 296-A (96 Chassis) 11, 11-A, 21, 211-A (111 Chassis) 112, 112-A, 212, 212-A, (112, 2-245's)	P P Input	3E3963	A- 2318-P	2 35	1.38
30 (30 Chassis) 40, 41, 42 (40 Chassis) 73, 76 (76 Chassis) 77, 77-A (77 Chassis) 82, 86 (86 Chassis) 83, 87 (87 Chassis)	P. P. Input	3E3961	A-72- YCP	3 25	1.91
62, 65 (65 Chassis) 92, 95 (95 Chassis) 96, 96-A, 296, 296-A 96 (Chassis) 11, 11-A, 21, 211-A (11 Chassis) 112, 112-A, 212, 212-A (112, 2-245's) 511 (511 Chassis)	P. P. Input	3E3960 3E3959	CP	\$3.75 3.15	1.85
RCA—RADIOLA—VICTOR R-34, R-35, R-39, R-80, R-82, R-86, RAE-68, RE-57	Input-Output Assembly	3E3958		7.00	4.12
SPARTON 9-A,410,410-DC,420,	2 2 1		. 0:25	-	
420-DC, 600-A, 610-A, 620-A 39, 49, 69, 79, 79-A	P. P. Input Audio	3E3971 3E3970		3.00	1.76 1.76
55, 103, 111-A, 235, 301, 301-A, 564, 570, 574, 578, 591, 593, 740, 750, 870, 931-AC, 301-DC, 591, 593, 931-AC,	P. P. Output P. P. Input	3E3973 3E3972		2.75 3.25	1.62
931-DC  WESTINGHOUSE  WR-5, WR-6, WR-6-R, WR-7, WR-7-R, WR-8.  WR-8-R	Input-Output	3E3958	AU-100	7.00 World	4,12 d Radio

### Radolek Power Transformers



50-60 Cycle Highest quality, conservatively rated universal type shielded Power Transform-Power Iransformers made expressly for RADOLEK.
All primaries are
for 115 V. 50-60
cycle A.C. unless
otherwise speci-

Type R-609. Provides 5 volts at 2 amperes for the rectifier tube and 2½ volts at 5½ amperes C.T. for the heater tubes. 650 volts C.T. supplies 55 MA. for the power circuit. Mounting area 2½ "xil¾". Four mounting bolts ¾" in from each corner. 2" above panel, extends 1" below deck. Wt. 2½ lbs. Black enameled housing. 3E4085—List, \$2.00.

YOUR PRICE.

YOUR PRICE Watt for 4 Tube Midgets

Type R.504. Accomodates one type 80 tube on a 5 volt. 2 ampere winding and a 2A5. 57 and 58 on the 2½ volt. 4 ampere C.T. circuit. The high voltage circuit is 575 C.T. 40 MA. Hmit. 110 V. 50 cycle Primary. Mounting area 2½"x". Mtx. 2"x3%". Requires 1" clearance below deck and 134" above deck. 3E4084—List, \$1.65.

YOUR PRICE

Type R-756. 90 Watt for 7-11 Tubes

Type R-756. 90 Watt. For 7 to 11 tubes requiring equal or less current than rating of the windings given:—5 Volts, 2 Amps., 2½ Volts, 10 Amps. C.T. 700 Volts, 65 MA. C.T. Mounting area, 34,"x22". Two hole Mig. Centers, 23,". Allow 24," elearance above deck and 1½" below deck 1½, 214 the

212" clean... k. Wt. 3½ lbs.

3E4086—List, \$4.50.
YOUR PRICE

60 Watt for 4-5 Tubes
125 Volt—50-100 Cycles

For those localities where
power line voltage is apt to
run toe high.
Type R-795. A 60 watt replacement for four and
five tube receivers of the
110 volt type which overheat on 125 volts, or consistantly burn out tubes.
Flexible 8" tinned cooper
Insulated leads. Secondaries:
-5 volts, 2 Aups.; 2½ Volts, 5 Amps. C.T.; 700
Volts, 50 Ma. C.T. Mounting area 2½"x3". Mtg.
Centers, 2"x2½"
3E4087—List, \$3.00.

3E4087—List, \$3.00. YOUR PRICE \$1.29

### P-A Type Power Transformer



wer Transformer
Type R-758. Weight 7 lbs
handles 140 Watts. For
Public Address amplifiers or
large radio receivers. 115
Volt. 60 Cycle. Secondarles supply: 120 MA.
thru a 700 volts centertapped rectifier plate circuit, 5 volts at 3 amperes
for a 5Z3 or 80 tube, and
2½ volts, 14 Amperes. C.T.
for heater tubes. Mounting area 3¾ "x3¾". Height
4½".

3E4090-List, \$7.00. .uu. \$2**.45** 

### Semi-Universal **Output Transformer**

For use with single or push-pull power tubes drawing less than 35 MA, plate current and having less than 7000 ohms output load characteristic. Center-tapped primary. Off center tap on secondary permits choice of overall ratios of 25:1, 45:1, 70:1. Will exactly match Push-Pull 45 tubes to 1.5 Ohm, 3.5 Ohm, or 10 Ohm voice coil. Will match single 47, 2A5, etc. to 2 Ohm, 4 Ohm, or 12 Ohm, voice coil circuit. Mg. C. 2%", 1" core. 2"(24%", 1" the core. 2"(24%", 2") and 1.5 Ohm. 2016 10 Core. 300.

3E4092-List Price, \$3.00. YOUR PRICE ...... 84¢

### Radolek Multi-Tap Choke



3E3923-List. \$3.00. \$145 YOUR PRICE

For use with a tube short checking device, as a line balancing impedance, and as an audio autoformer. Excellent for balancing microphone mix circuits. D.C. Resistance 1500 ohms. %" stilion steel core. Regular shell type open transformer frame, 2"x2\frac{2}{x}"x1\frac{1}{x}" thick.

40 MA. current earrying capacity. Mtg. Holes 2\frac{3}{x}".

## HORDARSON

### **ORIGINAL** REPLACEMENT



89A

Separate (

25

g-75

New Sparton Power Transformers built by Thordarson exactly according to the original specifications of the transformers supplied Sparton.

### For SPARTON

FOF SPARI ON Models 52, 63, AC-7 For B-H, 401, and 71A tubes. Pt.1, 110 V, Sec. 3 V, 5 A. C.T., 5 V, 1 A., 900 V, 70 Ma. C.T. Sparton Part No. B-1454, 3 E 4366—Type T-2397. List, \$4.00. List, \$4.00. YOUR PRICE.. \$2.35

For Sparton Models 69, 79-A

For 80, 50, and 485 (or 484) tubes. Prl. 110-120-130 V. Sec. 5 V. 2 A. C.T., 600 V. 75 Ma. C.T., 7½ V. 1½ A. C.T., 3 V. 7 A. C.T. Shpg. wt., 6 lbs. Sparton Part No. B-1871. 3E4367—Type T-2907 D. List Price, \$6.00. YOUR PRICE .... \$3-53

For Sparton 89-A

For Sparton 89-A
For 2-81s, 50 and 485 tubes. Prl.,
110-120-130 V., Sec., 7\(\frac{1}{2}\) V. 2\(\frac{1}{2}\) A.
C.T., 1100 V. 90 Ma. C.T., 7\(\frac{1}{2}\) V. 1\(\frac{1}{2}\)
A., 3 V. 7 A. C.T. Sparton Part No.
C-292. Shpg. wt. 8 lbs.
3E4368—Type T-3321.
List, \$8.00. YOUR PRICE \$4.70

### For Sparton 109 and Ensemble

For 2-818, 2-508, and 6-485s. Pri.,
110-120-130 V. Sec., 7½ V. 2½ A.
C.T., 1000 V. 150 Ma. C.T., 7½ V.
2½ A. C.T., 3 V. 7 A. C.T., Shog.
wt., 11 lbs. Sparton Part No. C-257.
3E4369—Type T-2202.

List, \$9.50. YOUR PRICE ...... \$5.59

### For Sparton 101, 110, 111A, 574, 870

Voltages on Diagram 101

Has 1½ volt circuit for Phono-Combination sets. 300 Watt Capacity, sufficient for 12 and 13 tube Sparton receivers. Shpg. wt., 12 lbs. 3E4370—Type T-3865-B. 

For Sparton 301, 504, 570, 578, 740, 750

For 6-485s, 2-250s, and 2-281s. Pri. 110-120-130 V. Sec., 7½ V. 2½ A. C.T., 7½ V. 2½ A. 1200 V. 150

Ma. C.T., 3 V. 7 A. C.T., Shpg. wt.

6-15

### For SPARTON 931, 235, 589, 591, 737, 593, 600 Series

For 7-484s (or 485s), 2-482Bs (or 483s), and 1-80. Pri., 110-120-130 V. Sec., 5 V. 2 A. C.T., 600 V. 90 Ma. C.T., 3 V. 8 A. C.T. 5 V., 3 A. C.T. Shops. — wt. 7 lbs

3E4372—Type T-3770-C. \$4.12

For Sparton 930

For 6-484s (or 485), 2-482Bs, and 1-80, Prl., 105-115-130 V. Sec., 5 V. 2 A. C.T., 600 V. 70 Ma. C.T., 3 V. 7 A. C.T. 5 V. 3 A. C.T. Shpg. wt. 5 lbs. 3E4373—Type T-3487. List, \$5.00. YOUR PRICE ......

For Sparton 410, 420, 600A, 610A, 620A For 24A, 27, 483, and 80 tubes. Prl., 100-110-120 V. Sec., 5 V. 2 A. C.T., 600 V. 90 Ma. C.T., 5 V. 3 A. C.T., 2½ V. 7 A. C.T. Shpg. vt., 7 lbs. 3E4374—Type T-4555.

### **POPULAR SPARTON AUDIOS**

Made by Thordarson According to the Original Factory Specifications For Sparton 931, 301

Straight Audio sub-panel shielded style for use in extra stage audio supplied with 10-tube 931 and 11-tube 301 Models employing a first stage audio tube. Sharton Part No. B-2587. Type T-3978.
3E4375—List, \$2.00. \$1.18 YOUR PRICE

For Sparton 931, 589

Push-Pull Input. Matched to couple a 485 tube into push-pull 483s. Also fits the 10-tube Model 589. Sparton Part No. A-4104. Type T-3422. 3E4377—List, \$2.00. YOUR PRICE \$1.18

For Sparton 930, 931

Push-Pull Output. Matched to couple push-pull 482B or 483 Sparton tubes into 8" Magnavo or 10" Jensen Speakers supplied with Sparton Receivers. Sparton Part No. A-3763. Type T-3:99. 3E44378—List, \$1.75.

For Sparton 301, 564, 570, 578, 740, 750, 103

Push-Pull Output. Matched to couple push-pull 586 or P-P 50 tubes to 8" Magnavox Speakers. Open type. Sparton Part No. B-2430. Type 3E4379-List, \$2.75.

\$1.62 YOUR PRICE

### **Special Heavy-Duty Outputs**

T-5745. Open Style. Carries 60 Ma. in P-P circuits using type 50 and 2A3 tubes. Will match any 6 to 12 ohms V.C. circuit. Size 2½x2½x3"

3E4310-List. \$3.00.

YOUR PRICE

\$1.76





T-2903. Shielded. Carries 60 Ma. in P-P circuits with type 50 or 2A3 tubes Tapped for 4, 8, 15 ohm voice coil circuits. 50 or 2A3 tubes tapped for 4, 8, 15 ohm voice coil circuits. Size 3½x3x3½". List, \$4.00.

3E4311-YOUR PRICE .... \$2.35

### **Universal Output Transformer** Thordarson Type

T-5701 Designed to couple any except types 50 and 2A3 power tube or P-P "A" or "A prime" circuit to a n y Dynamic Speaker

or "A prime" circuit to any Dynamic Speaker roulee coil or combination of voice coils the impedance of which lies between 1/10th and 29 ohms. A high primary impedance and five secondary windings in series, each of a different number of turns, permit a wide selection of ratios. The correct ratio equals the square root of the quotient of the load impedance of the power tubes divided by the load impedance of the vice coil circuit. A complete chart showing all possible combinations is furnished. No measurement necessary to determine any application. Size 1 18.25.20.

3E4343—YOUR PRICE. \$1.18

### Manufacturer's Type Audio Transformers

### Interstage Straight Audio

Interstage Straight Audio
Intended for use in replacing standard
Manufacturer's type Audios in hundreds
of Sets. Exact replacement for first
and some second stage positions in
Monroe, Marvelo, Knight, Kennedy,
Bush-Lane, and others. High-grade
silicon steel core. Black Japanned
case. Sub-panel lug connections. Safe
plate current carrying capacity, 10
Mg. A special application of this
Transformer is for use as a phonoinput Transformer when used with
input Transformer when used with
a high impedance Pickup. Ratio 1:3.
Size 2"x2"s, "x2%" high. Mtg. hole
centers 25g.".
3E4335—List, \$2.00.

956

YOUR PRICE ...... 95¢



Push-Pull Audio Input

Push-Pull Audio Input
Replacement push-puil Manufacturer's
Type Audio Input for class "A" and
"A prime" audio systems. Tone
characteristic has a slight hump between 80 and 100 cycles giving a
pleasing bass effect without detracting
from the highs. Sub-panel lug connections. Safe plate current carrying
capacity, 10 Ma. Any triode tube
input may be used with plate voltage
under 250. Suitable grid impedance
for all "A" type ampithier tubes, both
pentode and triode. Ratio 1:3. Size
2"x2", "22%" high. Mtg. hole centers,
2%".

3E4337-List, \$2.50. YOUR PRICE ...... \$1.23

### **FACTORY TYPE** TRANSFORMERS

## **THORDARSON**



Philoo Transformers as originally built by Thordarson for Philoo. All are EXACT Replacements for Receivers specified. 50-60 Cy. AC.

### Power Transformers for PHILCO 20, 220

Philico No. 4234
For 24A, 27, 71A, and 80
Tubes. Pri. 115 V. Sec., 2½
V. 7 A., C.T. 5 V. ½ A. C.T.,
5 V. 2 A., 650 V. 70 Ma.
C.T. Shpg. wt., 7 lbs.
3E4382 Type T-4401-A.

List, \$6.00. \$3.53

PHILCO No. 4446 for Models 111, 112, 211 For 24A, 27, 45, and 80 tubes. Pri., 115 V. Sec., 2½ V. 14 A. C.T., 2½ V. 3 A. C.T., 5 V. 2 A., 750 V. 150 Ma. C.T. Shps. wt., 10 lbs. 3E4383—Type T-4558-A.
List Price, 36.00. YOUR PRICE .... \$2.49

PHILCO No. 3752 for Models 95, 96, 296
For 24A, 27, 45, and 80 tubes. Pri. 115 V. Sec., 2½ V. 104/A. A. C.T., 2½ V. 3 A. C.T., 5 V. 2 A., 326.4385—Type T. 4248.
List, \$6.00. YOUR PRICE.........\$3.53

PHILCO S-W Fil. Transformer For 2 tubes. Pri. 115 V. Sec., 2½ V. 3E4380—Type T-5061. 4 A. C.T. \$1.03 Type T-5061.
YOUR PRICE ..... List, \$1.75.

**PHILCO Audio Transformers** 

BUILCO Input Transfo

Eni	LCO Input	ransi	orme	12
Stock	Set Model	Type	List	Your
Number		No.	Price	Price
3E4323	20, 21	T-4400	\$2.25	\$1.32
3E4324	65, 95, 96, 111	T-4252	3.50	2.06
3E4325	30, 86, 87	T-3855	2.75	1.62
3E4326	47, 91	T-5204	2.25	1.32
3E4327	15, 112, 212 (2-47's)	T-4989	3.25	1.91

Philco P-P Output Transformers Stuck List | Your Price | Price Type No. Set Model Number

3E4329 3E4330 3E4331 15, 91 20, 220, 86 42, Twin Spkr 71, Twin Spkr T-5276 T-4814 \$1.40 2.00 50.82 T-5277 .79 1.35 70, 270, 470, 490 65, 76, 87, 90, 90-B, 95, 296, 111, 112 3F4332 T-4832 \$2.00 \$1.18 3F4333 T-4254 2.00 1.18

PHILCO No. 3400 for Model 87 For 28, 27, 45, and 80 tubes. Pt. 115 V. Sec., 1½ V. 4½ A., 2½ V. 3 A. C.T., 2½ V. 2 A. C.T., 5 V. 2A, 750 V. 100 Ma., C.T. 8 lbs. 3E4386—Type T-3648.
List, \$7.00. YOUR PRICE. \$4.12

PHILCO No. 3868 for Mod. 76, 77 

PHILCO 70, 270, 470

PHILCO No. 3516 for Model 65
For 24A, 27, 45, and 80 tubes, Prl. 115 V. Sec., 2½ V. 5½ A. C.T., 2½ V. 3 A. C.T., 5 V. 2 A., 600 V. 75 Ma. C.T. 8 pounds.
3E4390—Type T-3740. \$4.12 List. \$7.00. YOUR PRICE

PHILCO Part No. 5266 50, 51, 52 For 24A, 47, and 80 tubes. Pri. 115 V. 8ec. 2½
V. 7 A. C.T., 5 V. 2 A., 700 V. 70 Ma. C.T.
3E439 I—Type T-4918-A.
List, \$4.25. YOUR PRICE.
\$2.50

PHILCO Part No. 5362 for Model 90

Note: Same transformers employed in all Model 90

Receivers. Voltages are proper for all types of output tubes used in the Model 90 series. Pri. 115

V. Sec., 2½, V. 10½ A. C.T., 2½, V. 3 A. C.T., 5 V. 2 A., 750 V. 90 Ma. C.T. 6 pounds.

3E4392—Type T-4805. List, \$7.00. YOUR PRICE .......\$3.67

PHILCO 90-B, 390, 490

PHILCO Part No. 6672 for Model 15 For 4-14s, 4-37s, 2-42s, 1-80. Pri. 115 V. S 6 V. 4A. C.T., 5 V. 3 A., 650 V. 80 Ma. C.T. 3E4394—Type T-5292. List, \$5.50 YOUR PRICE ..... \$3.23

R101 P-P Input, 1:2 Ratio

### R-100 Universal Audio



3F4300-List, \$1.75 YOUR PRICE \$1.03

of many Designed for making convenient audio repairs. May be mounted in 75% of Receivers without drilling extra holes. Excellent tone. Ratio 1 to 3½. Size 2%x

3E4302-List, \$2.25. \$1.33 identical in appearance to the R-100 except that it has slightly larger core. Suitable for coupling any

core. Suitable for coupling any triode tube to any push-pull power tubes. High tension insulation permits use of 300 voit plate clicuit without danger of leakage to grid of power tubes. Due to modern design, the tone range is greater than most original Audios.

### Open Style P-P Input

Type T-3391. General characteristics similiar to R-101 except for 8 inch insulated coded leads instead of lugs and open style two-hole mounting. Mounting hole centers 28%. Size 17% x2.22%. Black ename finish. Similiar to original in ma-Black enamel finish. Sir jority of Radio Receivers.

3E4309 List, \$2.00. YOUR PRICE .....

\$1.18

## R-103 Universal Audio Replacement

Employs heavier core than R-100, resulting in hetter bass note response. At least an octave greater tone range. Ratio 1:3½. Size 1½x2x2½". Same style universal mounting brackets.

11/2" high. Convenient solder lug connections.



R-300 Straight Audio 3E4305 List, \$4.00. YOUR \$2.35

PRICE Known to custom Setbuilders as the finest Audio available, as the finest Audio available, as the finest Audio characteristics to 8000 cycles. Size 2½x2½x31" high. Excellent for use with type 56 or 2A6 stage working into a 56 or power stage.

Type T-2408 P-P Input (Matches R-300, 3E4307—List, \$4.00. 3E4307—List, \$4.00.

The last word in quality Push-pull Audio amplification. Ratio 1:2. Ideal for coupling 56 or 27 tube to any class "A" or "A" prime P-P Amplifier. Install this Transformer in any suitable Radio or Amplifier and note the improvement.

### Special Thordarson **Universal Straight Audio**



T-2999 1:3 Ratio Designed to feed from 01A, 26, 27, 30, 37, 55, 56, 75, or 2A6 into any single amplifier tube. into any single amplifier tube. Open frame mounting. Black enamel finish. Insulated ended 8" leads. Size 178,424.26" Mounting hole centers 2%". 3E4308—List, \$1.75.

YOUR \$1.03 PRICE

Universal Push-Pull Input. Type T-3391. signed to feed from 01A, 26, 27, 30, 37, 55, 75 or 2A6 into any push-pull combination amplifier tubes. Same physical specifications amplifier tubes. S. T-2999 listed above.

3E4309-List. \$2.00. YOUR PRICE

Radolek "2 A 3" Transformers

Built by Thordarson to Radolek Specifications.

## **Power Transformer** for 2A3 Amplifier Type T-5822 Extra heavy: cool Operating under 100 watt load. Shielded

black gapanned steel ing. Knockout provided to black gapanned stood housing. Knockout provided to permit wiring above chassis as in breadboard layout, or under chassis. For 110-12c sult 59-60 cycle. For 110-120 volt 50-50 cycle. Secondary whalings, 710 V., 150 Ma. C.T.; 5 V., 3a, 2½ V. 14 A. C.T. Dimen-sions: 4½ high, x 3½ x 3¼ ". Mounting hole cen-ters, 3½ x 3½ x 3. 3E 4 350 — List, \$6.00. YOUR 37611

YOUR \$3.53



115 KAC 5822 200r 2

### Push-Pull Input Transformer



3:1 Ratio, Type T-5741

Especially designed to feed from a single 27 or 56 into push-pull 56s or 2A3s. Shielded for under chassis wiring Mounts on 24% so, area 3" high. Mounting holes 2%" centers. Excellent fidelity on bass notes.

Carles of

3E4342—List, \$3.75. YOUR PRICE ..... **S2.21** 

Interstage Transformer Type T-5870 Couples push-pull 56s into push-pull Completely shielded. Insulated 3" of 1 2A3 tubes coded leads. Completely shielded. In Size 212 x 214 x 313" high. 3 E 4 3 5 4 - 1.1st. \$3.75.

\$2.2

YOUR PRICE

\$2.2

\$2.2

\$2.2

\$2.2

YOUR PRICE

\$2.2

Unshielded.

\$2.4

\$3.50.

YOUR PRICE

\$2.6

2A3 P-P Output Type T-5746

AS P-P Output 1 ype 1-5/46
Shielded sub-panel type. Efficiently transfers 15
watts from 2.33 P-P tubes into any speaker voice
coll combisation having net lead value of 8 to 12
ohms. Lew resistance—not critical in counling.
Extra heary windings for high plate current of
2.43 tubes. Matches P-P Input 2-5741 in dimen-2A3 tubes. Matches P-1 sions and appearance.
3E4358—List, \$3.25.
YOUR PRICE

\$1.91 2A3 P-P Output Open Type T-5745

Same electrical characteristics as Type T-5745. Size 2½x2½x3" high. 3E4359—List, \$3.00. YOUR PRICE

Filter Choke for 2A3 Circuit

Shielded Type T-1700
A heavy brute-force type filter choke capable of carrying 16 ma. Actual inductance of 8.75 Henries (for use with 8 Mfd. condensers preceding and following this choke.) D.C. Resistance 201 ohms. Size 3"x356"x336". Use as first choke only.

3E4349 - List Price, \$4.50. YOUR PRICE \$2.65

Second Position Filter Choke

Open Type—T.-5753
Actual inductance of 9.5 Hearies (equal to old style rating of "30" H.) at 110 Ma. D.C. Resistance 200 chms. Insulated 8" feads. Heavy silicon steel core. Bize 24 "x24" "x2" high. Mig. hole centers 3". Standard for 2.A3 amplifiers.
3E434 I—List Price, \$2.00.

\$1.18 YOUR PRICE ..

### Microphone Transformers

T-5837: A low priced shielded microphone Transformer, Transfers sharp, clear signals from 'Mike' to grid. Designed Primarily for the speaking voice. Split primary matches 200 ohm single or double button microphone.

E4365-List Price, \$3.00. PRICE .....

\$1.76 Orchestra: Shielded 1-22 ratio quality double button 'Mike' transformer. 50-5000 audio frequency range. For stance bands, vocal, and general speech service. Matches impedance of all standard carbon single or double button microphones. EE4346—T-3020. List Price, \$5.00. \$2.94 YOUR PRICE

Page 49

YOUR PRICE ..... Broadcast: The finest type high quality, micro-phone transformer. Ratio 1-27, 30-7000 audio frequency range. Will give satisfactory service on symphony concerts, wide range organ, etc. For

\$1.18 siagle or double button carbon microphones. 354347—1.3180. List Price, 38.50. \$5.00

THE RADOLEK COMPANY

### Universal Replacement Transformers A Style and Capacity for every Receiver

Replace Originals. These Transformers are Important Information. The first numIntended for use where original replacements are
not available, or are priced higher than you are
willing to pay. From these types you can select
the proper model for practically any Radio Set.

All Transformers are for 105-120 V. 50 60 Cy.



TYPE A

TYPE B



TYPE C



TYPE D



TYPE E

Solder lug connections on fibre Sories lug connections on hore strips extending from base. Mounting serew at each corner for flat mounting. Black enameled steel shield cover.

Unshielded type with 12" wire lead connections. Brackets le ad connections. Brackets supplied for horizontal mounting. For vertical mounting see bracket listing page 92.

cal with type B.

Unshielded type with solder Shielded type. Black enam-lug connections mounted on eled steel side plates totally libre strips projecting from enclose windings. Connections both sides. Otherwise identi- to solder lugs on baselite plate to solder lugs on bakelite plate at base. 12" primary leads.

Fitted with black Japanned brackets having a wide flex-ibility for various combina-tions of mounting positions and mounting hole centers.

Type E

3E4070— YOUR PRICE, \$1.40

Size: 2%"x3%"x3%" high. Min. Mtg. Centers 1%"x-11%". Shpg. wt., 3½ lbs.

Type E

3E4071-YOUR PRICE. \$1.60

Size: 218"x3 %"x3 %" high. Min. Mtg. Centers 15%"x 18". Shpg. wt., 3½ lbs.

Type E

3E4072— YOUR PRICE, \$1.85

Size: 218"x3 &"x3 &" high. Min. Mtg. Centers 1 %"x-118". Shpg. wt., 5 lbs.

Type E

3E4073-YOUR PRICE. \$2.10

Size: 2 # "x3 & "x3 &" high Min. Mtg. Centers 1 % "x-1 # ". Shpg. wt., 5 lbs.

Type E 3E4074-YOUR PRICE. \$2.25

Size: 218"x3 %"x3 18" high. Min. Mtg. Centers 134"x-118". Shpg. wt., 5 lbs.

Type E 3E4075-YOUR PRICE. \$2.45

Size: 3½"x3¾"x4½" high. Min. Mtg. Centers 2"x2½". Shpg. wt., 5½ lbs.

Type E

3E4076-YOUR PRICE, \$2.50

Size: 276"x3 & "x3 &" high.

Min. Mtg. Centers, 1 18"x 118". Shpg. wt., 51/2 lbs.

Type E

3E4077— YOUR PRICE, \$2.75

Size: 2 1 2 1 2 3 4 " x 4 4 4 " high. Min. Mig. Centers 2" x 2 1 4 ". Shpg. wt., 5 1/2 lbs.

St 4009— YOUR PRICE.... 97¢ Size: 2½"x3"x1½" above base. Mig. Centers 2"x2½". Shpg. wt., 2½ lbs.

Type A

3E4008-YOUR PRICE. \$1.20 Size: 2%"x314"x1%" above hase. Mtg. Centers 2%"x-2%". Shpg. wt., 2% lbs.

Type A 3E4007-YOUR PRICE. \$1.52

Size: 314"x334"x214" above base. Mtg. Centers 21/2"x-314". Shpg. wt., 334 lbs.

Type A 3E4006 3E4006-YOUR PRICE. \$1.77

Size: 314"x34"x214" above base. Mtg. Centers 21/2"x-31/4". Shpg. wt., 5 lbs.

Type A 3E4010—\$1.85 YOUR PRICE...\$1.85 Size: 3%"x3%"x2%" above base. Mtg. Centers 21%"x-3%". Shpg. wt., 5 lbs.

Type A

3E4005 3E4005-YOUR PRICE \$1.85 Size: 3%"x4¼"x2¼" above base. Mtg. Centers 2%"x-3½". Shpg. wt., 5¼ lbs.

Type A 3E4011- \$2.10

Size: 34"x34"x2½" above base. Mtg. Centers 2½"x-3½". Shpg. wt., 5¾ lbs.

Type A 3F4004 3E4004-YOUR PRICE. \$2.25 Size: 3%"x414"x214" above base. Mtg. Centers 2%"x-314". Shpg. wt., 534 lbs.

Type A 3E4003 3E4003-YOUR PRICE. \$2.45

Size: 3%"x4½"x2%" above base. Mtg. Centers 3"x3%". Shpg. wt., 5% lbs.

Type A 3E4002—\$2.95 YOUR PRICE...\$2.95 Size: 3½"x4½"x2¾" above base. Mfg. Centers 3"x3¾". Shpg. wt., 6 lbs. Types B and C
3E4024—"B"—Leads.
3E40239—"C"—Lugs.
YOUR PRICE, \$1.03

Size: 2"x21/2"x31/4" high. Mtg. Centers 2"x21/2", Shpg. lbs.

Types B and C Types B and 3E4023—"B"—Leads. 3E4023—"C"—Lugs. YOUR PRICE, \$1.30 Each ....

Size: 3¼"x3¼"x3" high. Mtg. Centers 2"x2½". Shpg 3 lbs.

Types B and C
3E4022-"B"-Leads.
3E4037-"C"-Lugs.
YOUR PRICE, \$1.62

5 lbs

Types B and C
3E402[-"B"-Leads.
3E4036-"C"-Lugs.
YOUR PRICE.
Each......\$1.87

Size: 3%"x34"x35" high. Mtg. Centers 3%"x2". Shpg.

Types B and C
3E4025-"B"-Leads.
3E4040-"C"-Lugs.
YOUR PRICE, \$1.90 Size: 3% "x3% "x3%" high. Mtg. Centers 3% "x2". Shpg.

5 lbs. Types B and C
3E4020—"B"—Leads.
3E4035—"C"—Lugs.
YOUR PRICE. \$1.95

Size: 3¼"x3½"x3¾" high. Mtg. Centers 3½"x2¼". Shpg. wt., 5½ lbs.

Types B and C
3E4819-"B"-Leads.
3E4034-"C"-Lugs.
YOUR PRICE, \$2.45 Each . . . . . . Mtg. Centers 31 Shpg. wt., 6½ lbs.

Types B and C Size: 4½"x4"x4½" high Mtg. Centers 3%"x2½" Shog. wt., 6½ lbs.

Size: 4½"x4"x4"x high. Mtg. Centers 3¾"x2½". Shog. wt., 7 lbs.

222 100 0 (00000) 2.5 5.25 50 Watt-For 4 Tubes

70 Watt-For 4-6 Tubes 2000 رووفوول لع لوه لوها 2.5 2.5 1.75 5.25

90 Watt-For 5-8 Tubes (00) (D) (00) (D) 7.75 2.5 VOLTS 5 AMPS. 3

95 Watt-For 6-9 Tubes 0000 (00000) ( D) ( D) 2.5

65 Watt—For 6-7 Tubes Special for Type 226-171A

لعقفه في الما لعلما لعها لعما VOLTS 5 5 2.5 1.5 600 AMPS. 2 0.5 2 4.5 70MA 115 Watt-For 7-10 Tubes

2000 (00) (b) (00000) 2.5 2.5 700 8.75 100MA

85 Watt-For 8-9 Tubes Special for Type 226-171A مفقف

لمعقوما لعالما لعلما لعما VOLTS 5 5 2.5 1.5 600 AMPS. 2 0.5 1.75 6.3 90MA

130 Watt-For 8-12 Tubes 0000 رووفوق لع لها روق VOLTS 5 AMPS. 3 10.5

145 Watt-For 9-14 Tubes لعقفهما لعالم لهما

2.5 2.5 700 3 12.25 110MA.

VOLTS 5 AMPS. 3

100 MA.

155 Watt-For 10-16 Tubes رووووي لع لها لوي 2.5 2.5

3E4054-YOUR PRICE, \$1.53

Size: 2%"x2%"x3&" hig Mtg. Centers 2"x2& Shpg. wt., 3% lbs. Type D

3E4053\_ YOUR PRICE, \$1.80 Size: 3¼"x3½"x4½" high. Mtg. Centers 2%"x2%". Shpg. wt., 4½ lbs.

Type D 3E4052-YOUR PRICE, \$2.12 Size: 3½"x3½"x4½" high. Mtg. Centers 2%"x2%". Shpg. wt., 4½ lbs.

Type D 3E4051-YOUR PRICE, \$2.30 

Type D

3E4043— YOUR PRICE, \$2.40

Size: 3½"x3½"x4½" high. Mtg. Centers 2½"x2½". Shpg. wt., 4½ lbs. Type D

3E4050-YOUR PRICE, \$2.55 Size: 3½"x3%"x4½" high. Mtg. Centers 2%"x2½". Shpg. wt., 4½ lbs.

Type D 3E4044-YOUR PRICE, \$2.65

Size: 3%"x3½"x4½" high. Mtg. Centers 2%"x2%". Shpg. wt., 5½ lbs.

Type D 3E4049-YOUR PRICE. \$2.80 Size: 3%"x3½"x4½" high. Mtg. Centers 2%"x2¾". Shpg. wt., 4½ lbs.

Type D 3E4048— YOUR PRICE, \$3.10

Type E 3E4078-YOUR PRICE, \$3.00

Type E

Type D 3E4047-YOUR PRICE, \$3.45 Size: 3\(\frac{2}{3}\)"x3\(\frac{1}{2}\)"x4\(\frac{1}{2}\)" high. Mig. Centers 2\(\frac{1}{3}\)"x2\(\frac{1}{2}\)". Shug. wt., 4\(\frac{1}{3}\) lbs.

3E4079— YOUR PRICE, \$3.40 Size: 3½"x3¾"x4½" high. Min. Mig. Centers 2"x2½". 8hpg. wt., 6½ lbs.

Page 50

THE RADOLEK COMPANY

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Approved Quality!

# PIONEER EXACT-DUPLICATE

REPLACEMENT POWER TRANSFORMERS

These transformers are faithful duplications of the originals in physical and electrical specifications.

Important mounting holes are exactly placed. No redrilling, no rewiring for practically every job.

The prices quoted are exceptionally low for the quality offered. Every transformer is new fresh stock.

### **Apex Gloritone**



Shpg. wt., 4 lbs.
3E8681—List, \$5.50,
YOUR SPE-Model 26-A YOUR SPE-CIAL PRICE. \$2.20

Model 26-P Shpg. wt., 8 lbs.

3E8683	-List.	\$5.00.
YOUR	•	2.00
PRICE		2.00

RADIO MODEL	Shpg	Stock Number	Your Price
ALL AMERICAN MOHAWK Lyric J	4	3E8670	\$1.61
APEX 36, 37 10 20 32	9 7 3 7	3E8671 3E8672 3E8673 3E8674	4.10 3.75 1.75 3.45
8 99 7 7, 25 cycle	6 5 7 6	3E8675 3E8676 3E8677 3E8678	3.25 2.50 2.95 4.10
9 46 26A (Gloritone) 27 (Gloritone) 26P (Gloritone)	5 6 4 6 8	3E8679 3E8680 3E8681 3E8682 3E8683	3.10 3.85 2.20 2.75 2.00

Atwater-Kent 37, 38

Models 55, 55C

Late Model
Shpg wt., 9 lbs. List. \$9.75.
3E8688—Late.
YOUR PRICE, Ea. \$2.70



RADIO MODEL	Shpg	Stock	Your
	Wt.	Number	Price
ATWATER-KENT 37, 38 55, 55C, late model 55, 55C, early model H1, H2, L1, L2, L 82F, 85F		3E8687 3E8688 3E8689 3E8690 3E8691	\$1.75 2.70 4.20 3.35 3.35
84 (All)	5	3E8692	3.35
84F	8	3E8693	3.65
80, 83	5	3E8694	3.35
80F, 83F	8	3E8695	4.85
87, 89, 89P	6	3E8696	3.65
89F	10	3E8697	5.10
66 (Plate)	10	3E8698	4.25
82, 85	5	3E8699	3.35
60, 60C	9	3E8700	4.75
BOSCH 29, 825 48 58 60	10 6 6 6	3E8702 3E8703 3E8704 3E8705	3.95 3.35 3.35 3.75
81, 82, 8-81, 8-82	9	3E8707	3.55



### **Brunswick**

Models 3NC-8, 5NC-8 Shpg. wt., 8 lbs.

3E8710 List, \$6.75.

YOUR PRICE \$265

RADIO MODEL	Shpg Wt.	Stock Number	Price
BRUNSWICK 10 3NC8, 5NC8	5 8	3E8709 3E8710	\$2.30
12, 12A, 16, 16A, 18, 18A, 33, 33A 2KR0, 3KR0,	5	3E8711	3.60
3KR6, 5KR, 5KR0, 5KR6 14, 21, 31, 81, 82,	8	3E8712	1.40
\$14, \$21, \$81, \$82, 60 cycle 15, 22, 32, 42	11 13	3E8713 3E8714	3.75 3.95
FRESHMAN Q15, Q16, 3Q15, 3Q16 QD168	9	3E8726 3E8727	2.95 3.75
GENERAL ELEC. H31, 51, 71 T41, K60	9	3E8729 3E8730	2.25

RADIO MODEL	Shpg. Wt.	Stock Number	Your Price
GRAYBAR GB700, 770, 900 GB500, 550 GB340 GB310, 311 GB600 GB678	9 9 8 9 9	3E8729 3E8733 3E8710 3E8712 3E8734 3E8730	\$2.20 2.65 2.65 1.60 3.25 2.25
KENNEDY 10, 20	8	3E8736	2.95
KNIGHT 6-7, (2 sec. Choke)	9	3E8671	4.10
MAJESTIC-90, 9P6 180, 8P6 (plate) 70, 7P6 (plate) 70, 7P6 (filament)	11 7 6 6	3E8746 3E8747 3E8748 3E8749	3.75 3.25 2.10 2.10
180, 8P6 (filament) 50 unmounted 15A unmounted 20 chassis,	7 7 4	3E8750 3E8751 3E8752	2.95 3.75 1.75
21, 22, 23, chassis 20 90B, 100B	6 12	3E8753 3E8754 3E8755	3.95 3.15 3.90
130A, 230A, sets 130, 131, 132, 133 25, 25A 91, 92	13 7 12	3E8756 3E8757 3E8758	3.70 3.75 3.35
MARVELO-MONROE 6/7 (2 Sec. Choke)	9	3E8671	4.10

### Philco Model 65

Shpg. wt., 8 lbs. 3E8763—List. \$7.00. YOUR PRICE ..... \$2.45

Model 87

Shpg. wt., 8 lbs. 3E8766—List, \$7.00. YOUR PRICE ..... \$2.45

Models 20, 220

Shpg. wt., 7 lbs. 3E8762—List, \$6.00, YOUR PRICE \$2.45 Stock Number Shog Your RADIO MODEL 3E8762 3E8763 3E8764 PHILCO-20, 220 \$2.45

78778 65 76, 77, 77A 86, 82 87 2.45 2.65 2.65 2.45 95, 96, 296, 92 70, 270, 370, 470, 570 111, 211, 112, 212 490, 90 (45 or 47) 511, 521, 531, 541, 551, 561, 571, 581 2.65 2.65 2.65 2.65 3E8767 3E8769 3E8770 10 6 7 3F8771 2.65 4 14, 43, 71, 89, 91 50, 51 15 21 3E8772 3E8773 3E8774 3E8775 2.50 2.65 2.65 2.95

Radiola 17, 18, 33, 50, 51 Victor 7-11, 8-25, 7-26, 17-8

Brunswick 2KRO, 3KRO, 3KRO, 5KRO, 5

The Original Part 3E8712—List.\$6.00. YOUR PRICE....

Radiola 44, 46, 47

Shpg wt. 9 lbs. 3E8733—List. \$6.50. YOUR \$2. \$2.65 PRICE.

RCA Victor RE 32, R 52, RE 45, RE 75

Shpg. wt., 10 lbs. 3E8784—List, \$6.75. YOUR PRICE			2.65
RCA-VICTOR- RADIOLA 80, 82, 86 60 62 44, 46, 47 17, 18, 33, 51, 50	9 8 9	3E8729 3E8710 3E8733 3E8712	\$2.20 2.65 2.65 1.60
66 42, 48 R15, 14 64, 67	9 9 9 19	3E8734 3E8730 3E8730 3E8782	3.25 2.50 2.50 8.75
7-11, 7-25 R32, R52, RE45, RE75 R35, R39, RE57 R34, R37 World Rad	8 10 9 9	3E8712 3E8784 3E8730 3E8730	1.60 2.65 2.25 2.25

Stock Your Price RADIO MODEL Number SENTINEL-SILVERTONE 108, 108A, 108B, 110 109 3E8816 3E8817 3E8818 3E8786 3E8787 3E8788 55545 \$3.75 3.91 3.75 2.45 114, 118 3.65

### Sparton 591, 593, 931

Shpg. wt., 7 lbs. 3E8792—List, \$7.00. YOUR PRICE..... \$3.85

### Sparton 301

Shpg. wt., 10 lbs. 3E8797—List. \$12.00. \$3.95 PRICE



Bargain

Prices!

### Sparton 930



\$2.50 PRICE Exactly

Total Committee	Shpg.	Stock	Your
RADIO MODILL	Wt.	Number	Price
589 591, 593, 931 89A 109 ensemble 930	7 7 8 11 5	3E8791 3E8792 3E8793 3E8794 3E8795	\$3.85 3.85 5.90 6.75 2.50
25, 26, 26AW, 30, 45 301 110, 111, 101 410, 420 103, 301A, 578,	10 10 12 7	3E8796 3E8797 3E8798 3E8799	6.25 3.95 4.45 3.50
740, 750 69, 79, 89 62, 63, AC7	7 6 6	3E8800 3E8801 3E3937	5.75 3.45 2.30
STEINITE 40C, 41C, 60C, 102C 40, 50, 70, 80, 102	11	3E8803 3E8804	4.95 5.55
STEWART-WARNER 801, 801A, 802 811, 811A, 25 cycle 961, 962, 963 102A	7 8 12 6	3E8808 3E8809 3E8810	3.40 5.40 3.65 3.25
STROMBERG- CARLSON 641, 642, 652, 654 10, 11 846, 848	10 10 10	3E8811 3E8812 3E8813	3.45 3.75 4.25
TEMPLE 6-60, 8-80, 8-90, 8-61, 8-81, 8-91	8	3E8814	3.50
U. S. RADIO & TEL. CORP. (See Apex & Gloritone)			
UNITED AIR CLEANERS (See Sentinel-Silvertone)			
WESTINGHOUSE WR4 WR5, 6, 7	9	3E8730 3E8729	2.50 2.20
<b>ZENITH</b> 52, 53, 54, 55, 57, 60, 61, 62, 64, 67, 602, 613, 622, 642, 672, 522, 532, 542, 95 10, 11, 12	11 9	3E8822 3E8823	3.75 3.60

### Zenith

52, 53, 54, 55, 57, 60, 61, 62, 64, 67, 95, 602, 513, 622, 642, 672, 522, 532, 542

Shpg. wt., 11 lbs. 3E8822-List, \$7.25. YOUR \$3.75 PRICE.



### Filament Transformers



Made of the best quallty, new materials. Cores carefully wound and var-nished. These transformers are excellent for use as pre-heaters, short testers, filament supply, and to light the filaments of the light the filaments of the tubes in short wave sets and converters. When used with "B" eliminator will convert battery sets to A. C. operation. Can also be used in tube testers. Silent in operation—no objectionable hum. All taps marked.

2½ Volt Center Tapped, 30 Watts
3E4225—Secondaries 2½ V. 4 anp., 2½ V.
9 amp. Height 3½", width 2¾". Mounting holes—center to center 3¾", width 2¾". Mounting holes
1.15 \$4.50. YOUR PRICE

1½-2½-5 Volt, 30 Watts
3E4226 Secondaries 1½ V. 7 amps. 2½ V.
2 amp. 5 V. 2 amp. Height 3½". Width 3".
Mounting holes center to center 3½x1¾". \$2.25 YOUR PRICE



### Special **Filament Transformers**

3E4227-List \$2.25. 95¢ YOUR PRICE

Good quality and dependable in operation. Good quality and dependable in operation. For use as pre-heater, in short wave sets, etc. 110 volte primary. Secondary 2½ V., 5½ amp. Mounting holes—center to center—2½ inches. Height 2% inches. Width 14% inches. Weight, 1 lb. Silent in operation. 15 watts.

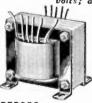
2½ Volt—12 Amp. Filament Transformer
Same as above except that it delivers 12 amps.
Center tapped. 30 watts.
3E4228—List, \$2.75.
YOUR PRICE \$1.10

6.3 Volt Filament Transformer Size and former. De Size and appearance, identical to above transformer. Delivers 6.3 volts at 3 amps. For use with the new 6.3 volt tubes on 115 volt A. C. Can also be used on 7.5 volt tubes. 20 watts.

3E4229-List, \$2.25. YOUR PRICE .. 7.5 Volt Filament Transformer

2½ Amp. Sec., 115 Volt Prishape matches 3C4227, 20 watts. 3E4230—List, \$2.50. Primary Size and PRICE

Tube Tester Filament Transformer 1½, 2, 2½, 3.3, 5, 6.3, 7½, 15, 25, 30 volts; at 2 amps.



3F3929 \$1.25 PRICE

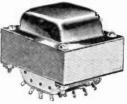
For construction tube testers or replace-ment in standard testers. Supplies the ment in standard testers. Supplies the correct voltages for all types of tubes including the oldest types and all those just recently a nnounced. Flexible 8" leads are color coded and a diagram is included which gives all the conjection. Dimensions: 2%", high, 3" wide, 2%" deep. Mounting 71, 115 V. 50/60 cycles.

### Special Value Midget Power Transformers

For 4 Tube, 35 Watt Sets

3E4069 YOUR PRICE EACH .. 76¢ YOUR PRICE EACH ...

For 4-Tube Midget Receivers using 57, 58, and 47 or 2.50 power tube with an 80 rectifier. Furnishes 650 V. 40 Ma. C.T., 2½, V. 3¾ A. C.T., 5 V. 7. A. For 115 V. 60 to 100 cycles A.C. Mounting area 2½-331½ inches, above chassis. Mtg. hole center's 27214.



For 4-5 Tube, 50 Watt

YOUR PRICE EACH .. 89¢ YOUR PRICE EACH ... Ye For early model 4 Tube or late model 5 Tube Midget Sets. Will supply a 47, 80, and 2-24As or 3-57 type tubes. Pri. 115 V. 50-60 cycle A.C. Sec., 650 V. 50 Ma. C.T., 2½ V. 7 A. C.T., 5 V. 2 A. Lug terminals. Size 3:2½", projects above chassis 1¾"; below chassis ½".

### Bargain! 30 Henry Choke

303926

PRICE 45C

100 M.A. D.C Resistance 230 Ohms

A full size heavy

A full size heavy duty choke. Best quality silicon steel 1" core. Coil highly insulated and machine wound with exacting precision. Laminations carefully varnished and stacked. Entire assembly mounted in a black enameled heavy steel frame. Leads securely fastened and anchored in fibre plates which protect the coil assembly. An unusual value. Dimensions: 3%" high, 2%" wide, 2%" deep. Mounting hole centers 2x1 1/4".

Special Thordarson 30 Henry **Filter Choke** 



T-3174 3E4339—List, \$1.50. YOUR PRICE EACH PRICE 65¢ EACH
60 Ma. Resistance 600
ohms. 1%"x2"x2.76" high.
Mtg. hole cen. 2 %".
%" Mtg. hole cen. 245". 74" S licon steel core. Used as second choke in sets using 26 type tubes and P-P 71A tubes. Black, steel mounting strap.

#### **Universal Output Choke** Center Tapped

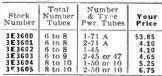
3E4338-List Price YOUR PRICE. 80¢

For matching any standard power tube to a load of 12 the recommended value for that particular tube. Will match a 34, 42, 47, 48 or 2.45 tube to a speaker designed for use with 71A or 45 tube. Outside terminals connect to plate exempt.



### **Power Transformers Repaired** Rewound—Rebuilt—Guaranteed Like New

Duplicate the Original . . . We Prepay the Return Postage How it is done: The old winding is measured and then removed. The core laminations are cleaned and restacked. The original Manufacturer's specifications are checked with what remained of the old winding. Your description of the tubes used checks our findings. New coils are wound exactly like the original and assembled on the old laminations. All connections are made exactly as in the original Transformer. The casing is cleaned and refinished. We return the Transformer postpaid, guaranteed as good as new.



For Sets with Cardon or Kellogg Tubes 3E3606 | 8 to 9 | 2-82B | 4.40 3E3606 | 8 to 9 | 2-82B 3E3607 | 9 to 11 | 2-50 8.25 Add \$1.00 extra for Units sealed

## Highest Quality Workmanship

All work is done under the direction of skilled, experienced transformer Engineers. We guarantee that the remanufactured transformer will be returned to you in perfect working condition and with electrical characteristics exactly like the original design was faulty, with improved corrected characteristics.

### How to Obtain Fast Service

(1) Send in old Transformer presaid, with your name and address. (2) Send your order by mall in the regular manner, paid in full or with a 20% deposit. (3) Specify on your order make, model, and exact tube combination of the Receiver using the Transformer. State line voltage and frequency it is to be used with.

### "Multi-Tap" Universal Power Transformers

3E3939-

Tapped filament windings supply wide selection of voltages. Suitable for 1377 models for 1377 m of Receivers. Universal mounting with 16 "H" slot mounting holes, Removing side shield exposes lugs for exposes lugs for various circuit combinations. Excellent for experimental use. For 115 V. 50/60 cycle A.C. supply.

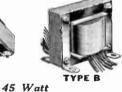
Dimensions in Inches

Stock	1	1			1	1 1	1		
No.	A	В	С	D	E	F	G	н	3
3 E 4 0 5 6	276	334	374	21/8	214	31/4	134	2	2 14
3E4057 3E4058	34	3 14	419	3 M	314	4	214	214	31

Voltage and Current Data tion | 60 watts | 75 watts | 100 watts | 1-00 tubes | 7-8 Tubes | 9-10 Tubes EH 650 Volts 700 Volts 700 Volts 60 Ma.CT 80 Ma.CT 100 Ma. CT H 1 | V or 2 | V | 1 | V or 2 | V | 1 | V or 2 | V | 3.1 A or 5A | 4.2 A or 7A | 6 | A or 10 | A 00000000 B 2 j V 3 j A 21V 31A 3 i A 21V or 5V 21V or 5V 21V or 5V 3A or 1 4A 3A or 1 4A 3A or 1 5A C.T. C.T. C.T. C.T. C.T. C.T. 60 5V 3A C.T. 5V 3A C.T C.T. 3E4056 3E4057 Your price Your price 3E4058 \$2.79 \$3.23 \$3.53

### **Power Transformers** for the New 6.3 Volt Tubes





Primary 115 volts, 50-60 cycle. Secondary 600 V. 50 Ma., 6.3 V. 2 A. C.T. and 5 V. 2 A. Mig. centers: Type A 2½x2½"; Type B, 3x2". Used as general replacement in the 4, 5, and 6 tube Sets which employ 6.3 volt tubes. Each Transformer individually boxed. Wiring diagrams furnished. Shpg. wt., 3 lbs.

3E4065 Type A Mounting. 3E4066-Type B Mounting YOUR PRICE EACH ..... \$1.38

70 Watts

Primary 115 volts, 50-60 cycles. Secondary 700 V. 70 Ma. C.T., 6.3 V. 3 A. C.T., and 2½ V. 4 A. C.T. and 5 V. 2 A. Mounting centers: Type A. 3%x3%"; Type B, 3%x2". Used as general volt tubes and 2.5 volt power tubes. Each Transformer individually toxed. Wiring diagrams furnished. Ships. wt. 8 lbs.
3E4067—Type A Mounting.

700 Watts

Primary 115 volts, 50-60 cycles. Secondary 700

150-60-60 cycles. Secondary 700

150-60 cycles. Secondary 700

1

YOUR PRICE EACH \$2.19 3E4068-Type B Mounting. YOUR PRICE EACH .....

A Complete Selection

Radolek has the most complete selection of transformers ever included in a single catalog. Our prices are right and the quality guaranteed. Buy all your transformer requirements from Radolek with confidence. See Page 142 for the best buy ever offered on Phileo general replacement transformers. formers

### Carter Universal **Output Transformers**

Correctly Matches All Tubes to any Speaker 252020 YOUR PRICE.....95¢

An Essential stock item



An Essential stock item for every serviceman, ibenstined with a high impedance primary having a special tapped secondary to permit ratio of turns in winding to match any standard power tube plate impedance not exceeding 14,000 ohms and passing less than 40 milliamperes plate current. (Push-Pull tubes, both drawing less than 40 mils each are satisfactory but parallel power tubes with a total current over 40 mils may not be used with this transformer.) Secondary taps can be selected to match tate impedance to any voice outli having this transformer.) Secondary taps can be selected to match plate impedance to any voice coil having an impedance (practically the same as the D.C. resistance) between 0.11 ohm and 15 ohms. Complete instructions, and table for selecting proper connections for single or push-pull power tubes coupled to any standard dynamic voice coil, included. Do not use with type 50 tube.

#### Pioneer Shielded Universal Audio



Standard 2 to 1 ratio ver special value A very special value. Standard 2 to 1 ratio audio. Designed for first stage audio position in Kennedy Model 210, Monroe 8-7, Marvelo 8-7, Knight 6-7 and all sets, either A.C. or D.C. usling 201A, 226, 112A or 171A or 245 amplifiers. Busky sized windings and laminations insure fine tone quality. Mounts above panel. Size 3¼x2x2/4 inches. Mounting holes 2½ inch centers. Steel shell,

sized windings and laminations insure nne con-quality. Mounts above panel. Size 3½x2x2½ inch-es. Mounting holes 2½ inch centers. Steel shell. Cadmium plated.

Flexible color coded leads. Many servicemen using this transformer in small two stage portable P. A. amplifiers because of its audio curve which limit hiss and distinctly favors bass tone reproduction.

### **Special Output Transformer** For Tubes in Push-Pull 71A, 45, 50, 2A3, 43, 59



PRICE ... 49¢ Will carry 65
mil plate current.
3000 turn, center
tapped primary.
100 turn secondary. Silicon steel
core. To determine voice coil
impedance to fit
this transformer:

this transformer; for push-pull, di-vide twice the plate impedance of one tube by 225; vide twice the plate impedance of one tube of 22,00 for single tube, using entire primary, divide the plate impedance by 900. See tube chart in this catalog for plate impedance (called A.C. plate resistance). Dimensions: Height 2\%", depth 1\%". Length overall 3\%", Slotted mounting hole centers, from 3\%" to 3\%".

### Universal Replacement Audios and **Output Transformer**

All with universal mounting brackets and universal electrical characteristics. High quality transformer suitable for use in the finest of receivers. Size of all units: 24" high, 2" wide, and 24" deep. Can be mounted on either side or either end. Bright cadmium finish. The small size of these units permits mounting below as well as above chassis base. Diagrams and instructions included.



### Straight Audio Transformer

3E4190—Designed to feed from any type of general purpose tube into a stage of single audio. Can be used on either A.C. or D.C. sets. 81¢

Universal Output Will couple all combina-tions of power tubes, either single or push-pull to any dynamic or mag-netic speaker. For voice netic speaker. For voice coil impedances from 1 to 30 ohms. 3E4191-

PRICE

Input Ratio 3:1
Designed to feed from any type of general of power tubes, single or push-pull dynamic or maxpeaker. For voice npedances from 1 ohms.

91
81¢

Designed to feed from type of general purpose tubes in either single or push-pull into a stage of either single or push-pull audio. 3E4192YOUR
PRICE

88¢

Universal P.P.

### Radolek Audio Repair Bridge

- Fastest Audio Repair Device
- Improves Tone Quality

1000

- Utilizes Old Transformer
- Easily Installed Under Chas-sis Deck

3F3920-List. \$3.50. YOUR PRICE ...... 59¢

Completes Circuit Around Defective Audio Transformer

May be connected in less than 5 minutes in any Radio receiver or amplifier. Simple Instructions furnished. Consists of a selected resistance-capacity network in a moisture proof rectangular case. Flexible color coded leads permit quiek connections to faulty audio circuit. Will repair audio transformer circuits of either straight or push-pull typo in which the primary of the transformer has opened or shorted to the secondary. Also corrects circuit of straight audio type when transformer secondary is open.

A gain in tone quality accompanied by a slight loss of volume occurs when this type of repair is made. Substitution of type 56 tubes for type 27 tubes preceeding the circuit repaired compensates for the slight loss of volume.

The Radolek Audio Repair Bridge provides the fastest method of repairing audio transformer failures without the necessity of removing the old transformer. Size 1½ "x 1½" deep.

Stancor 30 Henry Filter Chokes

### Stancor Universal Output

Stancor Universal
Designed to couple any power
tube or push-pull output (except
2A3 & 50 tubes) to any
voice coil load approximately 1.
4, 8, 15, or 30 ohms impedance.
Six secondary taps. Complete
instructions, including arrangement for use of a magnetic speaker furnished with transformer.
Size 1½ "x2"x2"½" high. Mig.
C, 2½" wt, 1½ lbs.
3E3925—List, \$2.10.
YOUR PRICE



\$1.23 YOUR PRICE.....

### Stancor Universal Input

A companion transformer to the above output. Center-tapped secondary for input to grids of any Class A power tubes. Size 1½"x2"x2½" high

3E3924-List, \$2.20. YOUR PRICE.....

\$1.29

Replacement Chokes

For A.C.-D.C. Receivers 3E3932—12 henries at 40 Ma. D.C. resistance 375 ohns. For 4-tube sets, Size: 1½"22½"21½" high. Mtg. Canters, 2.7." 1½"x2½"x1 Centers 2,7 Center PRICE.....





Type C1002

Guaranteed quality. Five inch flexible leads. 75 Ma. Resistance 400 ohms. Core size "x"-x". Mig. C. 3%". Frame size 3%" 1%"x2%" high. For 2nd filter position.

3E4201—List,

\$1.45. YOUR PRICE. 85¢



### **Pioneer Replacement Audio Transformers**

New Deal Values—The lowest priced these Audio Transformers of satisfactory agains we have ever offered. New method of winding the primary last with high speed special machine makes this price range possible. We have tested cycles,

these Units in our own Laboratory against Transformers of much greater cost. Audio range of Ploneer transformers from 75 to 90 cycles according to size to a high range of 3800 cycles, within 4 db.

	Size: I!	4x134x136	
Stock			Your
No.	Type*	Raitio	Price
3E4100	S A.	1:2 1	
3E4101	S. A.	1:3 ( 🕳	
3E4102	P.P	1:2 (	QC
3E4103	P.P	1:3)	
			/ a ) C

Stock	Size: I	%x1%x19	8"high.
No.	Type*	Raltio	Price
3E4105	S. A.	1:2)	
3E4106	S. A.	1:3 ( 4	
3E4107	P.P	1:2 (	59c
3E4108	P.P	1:3	
., Straig	ht At	idio, P-	P, Push-

4	Standard	Size:	1%x21/4x2"	high
1	Stock			Your
L	No.	Type*	Raltio	Price
П	3E4110	S. A.	1:2)	
1	3E4111	S. A.	1:3(	-
1	3E4112	P-P		QC
1	3E4113	P-P	1:3)	•
h.	Pull			

### **Pioneer Replacement Output Transformers**

How to Select the Right Transformer

Locate in the vertical column the type power tube or tubes your radio or ambilitier employs. In a horizontal line speaker voice coil, impedances. To depower tube or manufacture of the property of transformers for resistance of the V.C. by 1½. These ber for the types of transformers for Transformers carry 45 MA safely.



**Push-Pull Output Transformers** P. P. Plate | Transformer Type Num-

Power Tube Type	to Plate Load Imped.	bers to use on various Voice Coil Impedances and Output Tubes.							
Voice C	Coll Imped.	<b>→</b> 2	3-4	5-7	9-16				
2A5 1	14000	IP80	P60	P45	P35				
6A4	16000	P80	P60	P45	P35				
10	20000	P80	P60	P60	P45				
20	13000	P80	P60	P45	P35				
31	14000	P80	P60	P45	P35				
33	14000	P80	P60	P45	P35				
38	22000	-	P80	P60	P45				
41	18000	P80	P60	P60	P45				
42	14000	P80	P60	P45	P35				
43	8000	P60	P45	P35	P2735				
45	8000	P60	P45	P35	P27 12				
46	12800	P80	P60	P45	P35				
47	14000	P80	P60	P45	P35				
48	4000	P45	P35	P271/2	P27 1				
49Tri.	20000	P80	P60	P60	P45				
2B6	10000	P60	P45	P35	P2712				
59Pen.	12000	P80	P60	P45	P35				
71A	9600	P60	P45	P35	P27 1/2				
89Trt.	14000	P80	P60	P45	P35				
89Pen.	16000	P80	P60	P45	P35				

	PRI	CE LIS	T	
tock Num.	Size	Ratio	Туре	
E4130 E4131 E4132 E4133 E4134	Medium	27 1/4:1 35:1 45:1 60:1 80:1	P27 1/2 P35 P45 P60 P80	Your Price Each
E4135 E4136 E4137	Large	25 1/3:1 35:1 45:1	P27 34 P35	Your Price Each

80:1 16 P80 Dimensions: Medium, 1%"x2"x1%" 2%". Large Size: 1%"x24"x2"

### Single Quenut Tube Transformers

Power Tube Type	Plate Load Imped.	bers	Transformer Type Num bers to use on various Voice Coil Impedances and Output Tubes.						
Voice C	oil Imped.	<b>→</b> 2	3-4	5-7	9-16				
2A5	7000	IR60	R45	R35	R27 14				
6A4	8000	R60	R45	R35	R27 14				
10	11000	R80	R60	R45	R35				
20	6500	R60	R45	R35	R27 14				
31	7000	R60	R45	R35	R27 W				
33	7000	R60	R45	R35	R273				
38	11600	R80	R60	R45	R35				
41	12000	R80	R60	R45	R35				
42	7000	R60	R45	R35	R27				
43	4500	R45	R35	R27 14	R20				
45	3900	R45	R35	R2714	R20				
46	6400	R60	R45	R35	R27				
47	7000	R60	R45	R35	R27 14				
48_	2000	R35	R27 1/2	R20	-				
49Trl.	11000	R80	R60	R45	R35				
2B6	5000	R45	R35	R27 1/2	R20				
59Pen.	6000	R60	R45	R35	R27 4				
71A	4800	R45	R35	R2714	R20				
89Trl.	7000	R60	R45	R35	R27 4				
89Pen.	8000	R60	R45	R35	R27 1				

Stock Num.	Size	Ratio	Type	
3E4115	Medium	20:1	R20	Your
3E4116	84	2734:1	R2714	Price
3E4117	11	35:1	R35	Each
3E4118	- 11	45:1	R45	
3E4119	6.5	60:1	R60	440
3E4120	"	80:1	R80	440
3E4121	Large	20:1	R20	Your
3E4122		27 14:1	R2734	Price
3E4123	1	35:1	R35	Each
3E4124	**	45:1	R45	
3E4125		60:1	R60	650
3E4126	**	80:1	R80	036

### Jefferson Transformers

Universal Audio Replacement **Outputs, Chokes** 

Straight Audio, 1 to 2 Ratio



For underchassis replacement in any A.C. or D.C. set. Brackets for vertical or horizontal mounting. Range ± 4 db, 120 to 5000 cycles. Wt. 34 lbs. Size 236"x218"x38". Flexible

3D4281-Code 467-164.

List Price, \$1.35. 73¢ YOUR PRICE

### **Push-Pull Input or Straight Audio**

For use in any A.C. or D.C. receiver. Designed for push-pull, 1 to 3 ratio, amplification. By not connecting center tap, a 1 to 6 ratio straight audio is obtained. May be mounted in four positions with universal brackets. Lugs and thread leads combined for brackets. Lugs am-leads combined for mentions. The connections. audio response curve is ± 4 db. from 80 to 3500 cycles at 1 to 6 ratio. Size 12"x23%"x13," high. Wt.,



3E4278-Code 467-168. List, \$1.95 94¢ YOUR PRICE .....

Jefferson Universal Output

Center tapped primary, six terminal secondary, 40 Ma, current carrying capacity. Pri. 3000 turns, C.T. Sec. 114 turns tapped at 25, 35, 47, and 78. Gives choice of ten ratios fitting practically all power tubes to a range of voice coil impedances between 1 and 15 ohms. Full instructions. Size 2"x234"x134".

3E4297-Code 467-170. List. \$1.60. 94¢ YOUR PRICE

General Purpose Choke

80 Ma. 220 ohm. approximately 10 henries absolute inductance. (Equal to old rating of 30) 34'' core cross section.  $2'' \times 2^3 \xi'' \times 1^3 4''$  high.

3E4298-Code 466-135. List, \$1.25. YOUR PRICE

> Jefferson "Quality Series" Oversize Push-Pull Input

Oversize Push-Pull Input
A husky new universal mounting input transformer. Windings are machine wound and vacuum treated. New high permeability core of increased cross section. The high impedance of the primary winding particularly suits this transformer to the new type high-mu triode tubes of the 56, 2A6, and 75 type. The earlier triodes work better with high impedance coupling than with their original transformers. The mechanically center tapped secondary delivers uniform potential to the grids of any type power tubes. 2"x28"x2" high. Wt. 1½ lbs.
354-429-5-Code 407-175. List \$2.00.

3E4295—Code 467-175. List, \$2.00. **\$1.17** 

### Oversize Universal Output



Designed upon the principle of adjusting the ratio of the transformer by proper selection of secondary taps. The primary is 3000 turns C.T. The secondary is 141

The primary is 3000 turns C.T. The secondary is 144 turns tapped at 25, 35, 47, 78, turns. To match any (except 2A3 and 50) power tube or push-pull output to any voice cell, a chart showing the relations of the respective windings is furnished. No mathematical calculations are necessary. Universal mounting brackets, instructions, etc. 8ize 27x23 x22 high. Stock this transformer as a regular Item—Its wide application guarantees non-obsolecence. Wt. 1½ lbs.

3E4279—Code 467-176.

3E4279-Code 467-176. YOUR PRICE ...... \$1.17

## Universal Choke "30" Henry

An all-purpose filter the state of the state all-purpose filter



3E4296-Code 466-125. List Price, \$1.75. List Price, \$1.7 YOUR PRICE

79¢

### **Replacement Type Audios**

Straight Audio

Manufacturer's type, ra-tio 1 to 2. Used in many sets to couple 27 detector to 26 tube or from a 26 to a 71A. 10 Ma. Plate current limit. Size 3"x15g"x15g". Wt. 1

3E4265— Code 467-401. List Price, \$1.05. YOUR PRICE



Push-Pull Input

Manufacturer's type, ratio 1 to 2. For coupling a 26, 01A, or 27 tube to push-pull 112A, 71A, or 45 tubes. 10 Ma. Plate current limit. Sizes 3"x 15," x15,". Wt. 3 lbs.
3E4266-467-402. List Price, \$1.10.

YOUR PRICE

### Push-Pull Output

YOUR PRICE .....

#### Large Size Replacement Push-Pull Input



Ratio 1 to 3 3E4268-467-404. List YOUR PRICE... 82¢

Increased core size and heavier wire greatly improve the audio response curve of this transformer. Sell this transformer on service jobs where results better than obtained with the original unit are desired. ± 4 db. from 90 to 4000 cycles.

Push-Pull Output

Ratio 62:1 total primary to total secondary. 3% Watt. Designed to couple 71A or 45 tubes in push-pull to wide colls of approximately 5 ohms D.C. resistance or 6 to 8 ohm impedance. When the center tap is not used, tubes of the 33, 42, 47 and 2A5 type may be coupled to the same voice coil as above. 40 Ma. Plate current limit. 3E4269—467.410. List, \$1.15. PRICE ....

150 Milliampere Choke

150 Milliampere Choke

A heavy current, "First Section Choke" of the open vertical type, D.C. resistance 425 ohms. Approximately 30 henries at 150 mils. Weighs 3½ lbs. Size 2½"x3"x4½" high. Careful laver insulated, machine wound coils thoroughly impregnated prepares this choke for hard service use. Used in series with a 50 watt 5000 ohm rheostat, and the shielded Universal Output (467-171) a dummy speaker substitute circuit for test bench use may be built which will duplicate any dynamic speaker requirement of any standard radio chassis brought to your shop for repair without the speaker. 3E4270—466-210. List, \$1.75. \$1.03 YOUR PRICE

### **Shielded Universal Output**



Shielded Universal Output

The finest Universal Output on the market—23½ lbs. For coupling any single or pushpull tubes including type 50
or 2A3 to any dynamic voice
coils or magnetic speaker.
Primary consists of 3200 turns of 36 enamel covered
wire, insulated layers, C.T.
at 1600 T. The first secondary is 200 turns tapped at 750 turns. The next section
of the secondary is 155 turns tapped at 27, 37, 50, 83. A chart showing the relations of the
turns ratio to the tube impedances and the speaker
load is furnished. This is a splendid instrument
for the test bench to substitute one test speaker
on all chassis brought in for repair. Size 2½%
x3½% 36 "ligh. Mounting hole centers 2"
3E4280—467-171. List Price \$5.00 A...

-467-171. List Price, \$5.00. \$2.35 3E4280-467-171. YOUR PRICE .....

### MicrophoneTransformer Two Button-Shielded



double button "Mike" transformer with extra layer insulation to prevent capacity losses within the winding which would reduce the resultions 200 ohm microphones or using 16 the primary winding will match a single 200 ohm button. Size 27%"x27%"x27%" high. Mtg. centers

3E4271-467-263. List, \$5.00. \$1.47

#### **Filament Transformers**

2½V, 3½A, 10 Watts

Open type, 115 Volt 50-60 cycles. A small, well invalided filament s u p p 1 y transformer for short-wave adapters, etc. Size 1 % x 3 ½ "x2" high. Wt. 1 lb. 3 E 4 2 7 2 — 46 4 - 2 1 l. List, 5 1.40.

YOUR PRICE ... 82¢



2½V, 12½A, 35 Watt

Open type, 115 volt 50-50 cycles. Extra heavy insulation, rafe for 866 type tubes. 2½"x2"x2%".

Wt. 2 lbs. Center tapped.
3E4273-464-201. List, \$2.00.

\$1.18 YOUR PRICE .

6.3 V, 4A, 30 Watt

Open type, 115 volt 50-50 cycles. For the new type
6.3 volt tubes. 10 to 12, 0.3 or 0.4 ampere tubes
may be operated from this trunsformer. Center tapped.
3E4274—464-221. List, \$2.00.

S1.18 YOUR PRICE

### Class "B" Plate, Filament, Audio, Transformers and Chokes

#### Class "B" Plate Supply--90 Watts

For use with type 82, 5Z3, or 83 tubes. Has single secondary 775 V. C.T. Will operate steadily at 200 Ma. load. 115 V. 50/60 cycle primary. Side lug connections. Size: 3% "x 34," x 44;" high. Diagram

3E4282—Code 465-151. List, \$8.75. YOUR PRICE ... \$4.41



### Class "B" Filament Transformer

For use with above Plate Transformer. Has 5 V. 3 A., 2½ V. 3½ A. and 2½ V. 14 A. secondary windings. 115 V. 50,60 cycle primary. Lugs on side of case. Size: \$\frac{3}{2}\cdot x^3\frac{1}{2}\cdot x^4\frac{1}{2}\cdot high.

side of ease. Size: 3,"x31,"x41;" high.
3E4283—Code 464-191. List, \$6.95. \$3.24
YOUR PRICE....

### Class "B" Input Transformer 3E4286-Code 467-271.



YOUR PRICE \$2.94 For interstage or straight audio coupling to a class "B" power stage. Primary and secondary center tapmed. Side lug connections. Size 2½" x2½" x2½" high Diagrams turnished. Shpg. wt., 2½ lbs.

Class "B" Output Transformer

Has tapped primary and tapped secondary for coupling Class 'B' 46, 53, or 59 type tubes to either 1, 3, 6, or 10 ohm valce coll. Shpg. wt., 2½ lbs. 10 ohm valce coll. Snpg. wt., -72 -- Code 467-281. List, \$6.25. \$2.94 YOUR PRICE .

Class "B" Buffer Choke

For use as first choke of a Class 'B' filter system, 190 ohms, 18 henries, 150 Ma. capacity. Size 24, "33", 334," high. Shpg. wt., 24, lbs.
3E4284—Code 466-190. List, \$3.20. \$1.47

YOUR PRICE .

Class "B" General Purpose Filter Choke Is particularly applicable as second section class "B" amplifier choke. Resistance 190 ohms; nominal inductance 10 henries, 150 M.A. Construction and dimensions are identical with above choke. Diagram included. Shipping wt. 242 lbs.

3E4285-Code 466-200. List, \$3.20. YOUR PRICE

### Jefferson "STAR" Audios

Jefferson "STAR" Audio cases to prevent moisture from getting into colls. For use in either A.C. or D.C. receivers. Finest rolled high silicon steel por c. Nickeled binding posts mounted on bakelite insulation. 2% "high by 2%" wide and 2%" deep. Mounting hole ce nters 2%," Windings are completely shielded and clearly marked for proper connections. Shpg. V 314276—Code 467-113. 3 to 1 Ratio. 314276—Code 467-116. 5 to 1 Ratio. Vour PRICE.



Shpg. Wt., 1 1b.

\$1.18 YOUR PRICE.

Tapped Push-Pull Input Type 3E4277—Code 567-118. 3 to 1 Ratio with on hottom. List, \$2.50. with lugs \$1.24 YOUR PRICE



**Filterette** Type RF2 3E8502-List Price, \$4.95 YOUR PRICE

An Inductance Capacity Filter. Eliminates scratchy or buzzing noises caused by leaky power-lines, defective house wiring, etc. The inductance capacitive action of this unft is especially adapted for filtering out line noises and assuring a flow of smooth filtered current to the radio. Contains a dual-capacity filter followed by a dual inductance, which establishes a high impedance circuit preventing line noise and diverting interference to the ground. A ground connection is provided on the case of the Filterette. Size of case 2½"xi½"x3½" high. For use on A.C. or D.G. lines under 130 volts and with radio receivers drawing less than 150 watts.



### Falck Claroceptor

3E2427— List, \$5.00. Your Price \$2.94

Especially effective for reducing noises in A.C.-D.C. Sets. A Dual inductance capacity-fil-

Inductance capacity-filter.

The electric lighting wires of a city are endless antennae which collect not only signals from broadcast stations, electric motors and countless electric devices used within and outside the home. These disturbances penetrate into A.C. radio sets through the wall socket connection and are heard as blare, squeal, fry and scratch—"Man-made static." Block out these noises by plugging in a Claroceptor between the wall socket and set. tween the wall speket and set.



Stranta.

NE VOLTAGE

#### Thordarson A. C. Line **Booster Auto** Transformer

3E4321-100 watt Auto-Transformer. Tapped for boost-ing either 90 or 100 volts to 115

volts.
List Price, \$4.00.
Your \$2.39

3E4322-150 watt Auto-Transformer. Tag for boosting either 90 or 100 volts to 115 volts. List Price, \$5.00. Tapped YOUR PRICE \$2.96

Fundoyed to Step up A.C. line voltages in districts at a considerable distance from a line-transformer as in ouzskirts of a city or in rural districts. Built with 18" cord for connection to wall socket A.C. outlet. Neat fireproof metal container equipped with two standard A.C. female plug



Junior 3E8503—List, \$2.25. \$1.32

**Filterette** 

compact unit, easy to install, for A compact unit, easy to install, for eliminating interference caused by household appliances, such as electric fans, heating pads, vacuum cleaners, light switches, etc. Has standard plug-in prongs and receivale for between electrical outlet and receiver. Operates on 110-120 volts A.C. or D.C. A demonstration at the home of your customer will assure an easy, profitable sale.

### Filterette Senior

3E8504-

List. \$5.50.

VOLLE YOUR . \$3.23



A larger Filterette than the Junier. Especially A larger Filterette than the Junier. Especially recommended for appliances causing more Intenainterference than that suppressed by the Filterette Jr. Can be used on appliances drawing up to 5 amps. 110 voits A.C. or D.C. In metal case 2" diameter and 4" long. Has binding post for grounding Filterette to frame of appliance. Supplied complete with cord, plug and receptacle.

### Clarostat A.C. Line Voltage Regulator

For sets with critical line voltage requirements where a dependable

3E3102 0 3E3100 A 3E3101 B (Ten for. \$7.95)

### I. C. A. "Junior" Filtervolt



A capacity type line filter which diverts interference from the electric line to the earth and acts as a filter to eliminate interference caused by heating pads, light switches, and motors of less than 148 H.P. Operates on 110-120 Volts A.C. or D.C. Tell your customer why he should buy this item with a demonstration. Make \$1.24 extra on your regular service calls. item with a demonstration.

### Line Voltage Reducer



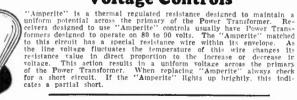
List \$3.00.

YOUR PRICE

EACH

Maintains a constant potential on lines on which voltage climbs. Protects tubes, condensers and resistors against line surges by automatically reducing line voltage to a normal operating voltage. Air-cooled type, with plug for standard outlet. Usually sells for \$1.00. Servicemen can make 88e extra on each call where the set owner has been tubes burned out. extra on each call where the set owner ha

### Amperite Self Adjusting Voltage Controls



### Special "Amperite" Controls Standard Amperites 3E2409-- 9-20\* 3E2409-- 9-20\* 3E2410--11-20 For Bremer-Tully S-81, S-82 For Brunswick 14, 21, 31 For Grebe HS4, 1285, 450 For Hammerlund-Roberts

3E2410-11-20

3E2410-11-20

3E24|0-11-20 3E24||- 90 3E24||9-18-20

For 110 volt Sets operated on 115-130 volt lines. Stock No. Amperite Num Tubes Number Num. 3E2412 3E2400 3E2402 3E2404 3E2406 3E2407 4-5 6-7 7A5 8-9-10 11-12 11A5 125 Watt Sets. -125 3E2407—125 Watt Sets. 3E2408—175 Watt Sets.

20-A-5 List. \$3.00. \$1.25

\*9-20 Amperite replaces old Duresite 110 tubes.

HI-O 30

Your Price Ea. \$1.25

3E2414—Special Bakelite mounting base for "Amperites."
For A.C. D.C Radio Sets List Price Ea. 25c. YOUR PRICE
World Regio History

For Kylectron K-71, K-72, Peerless 21 to 25

For Sonora 30, 32, 40 For Majestic 90, 91, 92 For Star-Raider (Sets use 2)

3E2301-876 For RCA 876 Ballast. YOUR PRICE EA. .. \$2.25

**Filterette** Type OB 110

3E8524-List. \$9.50, Your Price \$5.60 For application to all

oil burners to prevent distribution of radio noise caused by elec-tric ignition or by the universal motors

used with some burners Mounted in a standard black enameled steel cutout box 7"x638"x334". Flexible leads for connection to burner wiring. Has detachable clamps to allow to burner wiring. Has detachable clamps to announce to burner wiring. Has detachable clamps to announce mounting on a pipe standard or flat surface. Maximum potential 110 volts A.C. or D.C. Maximum current four amperes. Supplied with complete installing with any type of burner. structions for installing with any type of burner. Should be located as close to the interfering mechanism as possible and should be grounded to the oil tank pipes and to the water system.

### WIRT Voltage Regulator

No. 211

The Wirt Voltage Regu-

The Wirt Voltage Regulator installs between the house current convenience outlet, or wall receptacle, and the plug from the Set. Provides five resistance values which are controlled by simply rotating the fibre ring at the end. When properly adjusted it protects tubes, condensers, and reduces noises and hum. Enclowed in nickel plated heavy metal case. Fits any standard outlet. For use on Sets having six or less tubes, or less tubes.

3E2430 List, \$2.45. YOUR SPECIAL PRICE .....

### Automatic Voltage Control

For Reducing Line Voltages

3E2267-List. \$1.75. 57¢ YOUR PRICE

Ten for \$5.48

Ten for \$5.48
Protects tubes, resistors, and condensers by preventing excessive line voltage. Automatically compensates for line surges by increasing in resistance as voltage rises. This assures a constant flow of smooth current and prevents overleading. Aircooled type. Fits any standard socket or outlet, and supplies 110 volts A.C. or D.C. on any line up to 130 volts. This unit usually sells for \$1.75. Servicemen can easily sell a control like this to every set owner who has had trouble with burned out tubes, condensers or resistors due to excessive line voltage. line voltage.

### Clarostat Replacement **Line Ballasts**



Compensates line voltage changes for Sets designed for use with Ballast Will maintain the normal voltage across the primary of the power transformer within allowable limits for ef-ficient operation, regardless of line fluctuation between 95 and 155 volts. fluctuation between 95 and 155 valts.
WE CAN ALSO SUPPLY REPLACEMENT BALLASTS FOR SETS NOT
LISTED BELOW. Send your order
giving make, model and number of giving make, tubes in Set.

Number Set Bremer Tully Brunswick, HI Q-30, Scott Silver and Sonora 3E3103 3E3104 2169 2179

3E3117 2408 Clarion

\*MAJESTIC 70, 71 \*MAJESTIC 708, 72 \*MAJESTIC 180, 181 \*MAJESTIC 90, 91, 92, 100 3E3105 3E3106 1012

3E3107 3E3108 1210 3E3109 6310 United Reproducer, Peerless and

Grebe Stark Piano and Belmont 2518

3E3||0 3E3||1 3E3||2 3E3||3 3E3||4 List Price, 2516 5001 5002 Stank Fland and Belliott Simplex, Baldwin Stewart-Warner 900-61816 Stewart-Warner 950-62152 Stewart-Warner R100-66756 5003 Each \$2.50. \$1.18 YOUR PRICE ...

(\*) Ballasts also available for MAJESTIC Sets operating on 25-30-40 cycles; and 230 volts 60 cycles. In ordering please mention power unit type, frequency and ballast markings.

THE DEVICES listed on this page are for reducing line noises and regulating line voltages. Shielded antenna systems and noise reducing aerial systems are listed on pages 98 and 99.

### itreous Enameled Resistors



Wire wound on a %" porcelain tube 1½" long with a %" hollow center. Coated with high quality Vitreous enamel and fired at red heat making an enamel coating which is fused tightly to the wire, terminal connections, and base. Either the solder lugs and 1½" tinned wire leads may be used for mounting unit in circuit.

Non-Porous Waterproof Coating

YOUR PRICE, EACH 180 Ten for.....\$1.75

						_			
Stock Number	Ohms	Stock Number	Ohms	Stock Number	Ohms	Stock Number	Ohms	Stock Number	Ohms
3D1925 3D1926 3D1927 3D1928 3D1929 3D1930 3D1931 3D1932 3D1933	3 4 5 7.5 10 15	3D1934 3D1935 3D1936 3D1937 3D1938 3D1940 3D1941 3D1942 3D1943	30 40 50 75 100 125	3D1944 3D1945 3D1946 3D1947 3D1948 3D1949 3D1950 3D1951	250 300 350 400 500 600	3D1956 3D1957 3D1958	1,250 1,500 2,000 2,500 3,000 3,500	3 D 8 2 0 0 3 D 8 2 0 1 3 D 8 2 0 2 3 D 8 2 0 3	5,000 6,000 7,500 10,000 12,000 15,000 20,000 25,000

20 Watt Size—2 Inches Long

Stock Number	Resist- ance Ohms	Stock Number	Resist- ance Ohms	Stock Number	Resist- ance Ohms	Stock Number	Resist- ance Ohms
3C1825	5	3C1839	750	3C1853	3000	3C1866	15,000
3C1826	10	3C1840	800	3C1854	3250	3D1867	25,000
3C1828	50	3C1841	1000	3C1855	3500	3D8210	30,000
3C1829	75	3C1842	1100	3C1856	3750	3D8211	35,000
3C1830	100	3C1844	1250	3C1857	4000	3D8212	40,000
3C1831	150	3C1845	1500	3C1858	4500	3D8212	45,000
3C1832	200	3C1846	1750	3C1859	5000	3D8214	50,000
3C1833	250	3C1847	1850	3C1860	6000	3D8215	60,000
3C1834	300	3C1848	2000	3C1861	7000	3D8216	70,000
3C1835	350	3C1849	2250	3C1862	7500	3D8217	75,000
3C1836	400	3C1850	2400	3C1863	8000	3D8218	80,000
3C1837	500	3C1851	2500	3C1864	10000	3D8219	90,000
3C1838	650	3C1852	2750	3C1865	12500	3D8220	100,000
YOUR	19c	YOUR	23c	YOUR	<b>27</b> c	YOUR	35c

50 Watt Size-4 Inches Long (with lugs)

PRICE	29c	PRICE	35c	PRICE	39c	PRICE	48c
3C1879	250	3C1887	2000	3C1895	7500	3C1902	50,000
3C1880	500	3C1888	2250	3C1896	8000	3C1903	70,000
3C1882	750	3C1889	2500	3C1897	9000	3C1904	100,000
3C1875	10	3C1883	1000	3C1891	4000	3C1898	10,000
3C1876	20	3C1884	1150	3C1892	5000	3C1899	12,000
3C1877	50	3C1885	1250	3C1893	6000	3C1900	15,000
3C1878	100	3C1886	1500	3C1894	7000	3C1901	25,000

### Adjustable Voltage Dividers



Vitreous Enameled

N.E.M.A. Ratings

N.E.M.A. Ratings

Will replace any tapped voltage divider. Wound on Isolantile tube and covered with high grade vitreous enamel. A narrow track of exposed wire provides a simple means of adjusting the slider lug. Small contact button on adjustable lug shorts out minimum of resistance tube permits the use of more than one adjustable tap where required. Rated strictly in accordance with the requirements of the National Electric Manu-djustable mounting brackets.

30	Watt		50	Watt		75 Watt			
Size Minimur	212"x58 n Mtg. C	3"	Minimu	n Mtg.	C5"	Minimum Mtg. C7"			
Stock Number	Resist. Ohms	Max. Curn't M.A.	Stock Number	Regist. Ohms	Max. Curn't M.A.	Stock Number	Resist. Ohms	Max. Curn't M.A.	
3E1676 3E1678 3E1680 3E1682 3E1683 3E1684	5 15 50 100 150 200	2450 1410 770 545 445 385	3E1703 3E1704 3E1707 3E1709 3E1711 3E1714	10 50 100 200 500 1000	2340 1048 740 520 330 234	3E1732 3E1733 3E1734 3E1736 3E1737 3E1738	100 250 500 1000 1500 2000	865 545 387 270 223 190	
3E1685 3E1686 3E1687 3E1688 3E1689 3E1690	250 500 750 800 1000 1500	345 245 200 193 173 141	3E1716 3E1718 3E1719 3E1720	2000 3000 4000 5000	165 135 117 104	3E1739 3E1741 3E1742 3E1743 3E1744 3E1745	2500 5000 10000 15000 20000 25000	173 122 86 70 61 55	
3E1691 3E1693	2000 3000 5000	122 100 77	List Pric YOUR PRICE		65¢	YOUR		88¢	
3E1696 3E1698 3E1699 List Pric	7500 10000 10000	63 54	3E1757 3E1721 3E1722 3E1723 3E1724 3E1725	7500 10000 12000 15000 20000 25000	85 74 67 60 50 45	3E1746 3E1748 3E1750 3E1751 3E1752 3E1753	30000 40000 50000 60000 80000	50 43 39 35 31 27	
PRICE		449	List Pric	e, \$1.25		YOUR		94¢	
3E1700 3E1701 3E1670 3E1672 3E1674	12000 15000 20000 30000 50000	50 44 38 32 25	YOUR PRICE 3E1726 3E1727	30000	_	For use ditional required.	taps a	1	
List Pric		56¢	List Pric YOUR PRICE	e, \$1.35	79¢	3E 1751 List. 10c YOUR PRICE.		000	

### **New Radolek** Resistance Indicator

Calibrated Variable Resistance Box

3E2547-List Price, \$6.50.

YOUR PRICE

> Every Serviceman Needs This!

This!

Makes any resistance between 0 and 100,000 ohms instantly available. Consists of a calibrated 25,000 ohm potentiometer with the first 1000 ohms spread out over half the arc of rotation. Three selected 25,000 ohm resisturs in series with the potentiometer permit adjustment of resistance to any value from 0 up to 0.1 megohm, through insulated pinjacks. Excellent temporary substitute for burned out resistors or voltage divider sections to determine the original value of resistor. May be employed as "known" variable resistance in Wheatstone bridge circuits. Used for calibrating hand made ohmmeters; selecting best bias resistances; extending voltmeter scales; as shunt multipliers, ede.

New! Exclusive Radolek

Invention!
Designed and built in Radolek's lab-Designed and built in Radolek's laboratory. Safety, convenience, speed, accuracy, and general utility built into the finest calibrated resistance indicator available at a moderate price. Will meet your severest service—will sare you hours of tedious searching for proper size resistors. Specifications: Moulted brown bakelite case with modernistic close fitting indicator knob, etched aluminum scale, six piniacks, special tapered "pot and resistors. Matches finest precision built apparatus in appearance. 330 eleg are of rotation, over 7 inches of wire wound contact surface. Size: 5"x



Many Advantages of Radolek Indicator

Indicator

Tapered resistance permits more exact adjustment under 1000 clims than possible with ordinary resistance indicators. Has 15 watt cannetty up to 1000 clims. Has 15 watt cannetty up to 10000 clims. Safety factor of 50% overload. Beautiful easy reading etched aluminum dial plate with circuit diagram. Pire-proof bakelite case protects user from burns or shock. No exposed "hot" terminals. Excellent non-pitting constant pressure rollar contact on resistance element. May be carried in hip pocket. Can be used as 25,000 clim calibrated potentiometer. Has highest quality 24" test leads with spring-prong pin tips and tapered Alligator jaw test clips. All values of resistance have 50% or better accuracy. A resistance indicator years ahead in design.

### Radolek Megohm Indicator

Decade 0.1 Meg. Resistance Steps

Calibrated resistance standard con-Calibrated resistance standard consisting of ten 100,000 ohm resistors connected in series and wired to ten taps on a constant contact selector switch. Makes available any resistance from 0.1 meschm to 1 meschm in 100,000 ohm steps.

5% асситасу. 3D2546-List Price, \$6.50. YOUR

PRICE .....



Primarily designed to extend the range of the Radolek Resistance indicator, to 1,100,000 ohms. This is a particularly suitable trial substitute for burned out resistors suspected to have had a value between 0.1 meg, and 1 meg. The Megohm Indicator may also be used as a multiplier for converting an 0-1 milliammeter to a voltmeter having ten ranges from 100 to 1000 volts maximum. Ohummeters may be calibrated with special voltages and resistors by comparison of reading with scale of the Megohm Indicator. Experimental work on Loftin-White circuits is greatly facilitated with this resistance box. The Megohm Indicator is built in a moulded bakelite box to match the Radolek Resistance Indicator. Perfect insulation. No possibility of shock or burn regardless of how the box is handled. Rated at one watther 1000 of the color of the col

### Calibrated Resistance Indicator Set

Consists of One Radolek Resistance Indicator and One Megohm Indicator

Indicator
3E2527
Regular Value, \$13.00.
YOUR SPECIAL PRICE
FOR COMPLETE SET.
Radolek's calibrated Resistance Indicator gives the serviceman a complete range of test resistors between 0 and 1,100,000 ohms—any odd value instantly available for experimental or test use. Serves the purpose of Decade Resistance boxes that usually sell for more than \$100.00 Excellent for all resistance substitution in radio receivers, for test purpose.

The most useful and needed accessories in a modern service shop now available at a price in reach of every servicenan. Cases are 2H"134%"114" deep. Etched dial plates. New style modernistic knobs 100% shock-proof bakelite cases. No possibility of a burn. Accuracy better than 5%.

Each Calibrated Resistance Indicator is small enough to be carried in your pocket or in your portable tool box. Mounting holes within are arranged for

pocket or in your portable tool box. Mounting holes within are arranged for permanent mounting against a wall or on a test panel.

### Carbon Resistor Assortment



Resistors Your Price

(1/5 watt size) One of each size Radolek Certified Carbon Resistors list at

Stock Number	Asst. Size	Price	
3E1225 3E1226 3E1227	1/5 Watt	\$4.25 4.30 4.40	

Exery serviceman, engineer and laboratory should have each of these kits on hand. One of each resistance listed in tables at right included in the kits. Every resistor color coded and guaranteed accuracy of 10% of lughest quality. In these assortments, practically every possible resistor requirements for any type circuit or apparatus is instantly found. It will pay you to invest in a set of these kits.

### 3 WATT Carbon Resistors



Same high grade guaranteed qual-y as other resistors quoted on this

3C1264 3C1265 3C1254 1.000 50.000 3C1266 3C1267 3C1268 3C1269 3C1255 1,500 75.000 3C1257 3,000 150,000 3C1258 3C1259 5.000 250,000 500,000 7.500 10.000 3C1270

### Giant Spaghetti For Insulating Resistors, etc.

3C1260



Glant Spachetti — Cambric %"
tubing. To insulate 1 watt Carbon. Metalilized and similar small
Resistors. 1000 volt insulation.
Heat resisting up to 350° F. Excellent for slipping over junctions
of three or more wires, and insulating joints in shielded wire. May
be filled with hot tar for air
tight seal of soldered joints. Tubular shape, %" diameter, 3 ft.
lengths.

BE2054-YOUR PRICE 18C Each 36" Length .....

Ten lengths for \$1.60

### **Grid Leak Mountings**



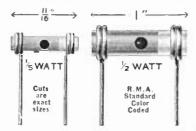
NET. Each ...

Bakelite Base Phosphor Bronze Springs For I Watt Resistors of Durham Type

1 Meg.

3E 1970-Single. 19¢ 3E 1971 - Double.

#### **Carbon Resistors** Radolek Certified





### **Certified Quality**

Finest quality, new fresh stock direct from the factory. The development of years of extensive research and manufacturing experience. Resistance is permanent, within a narrow range even when operated at overloads for a long period of time. Have only slight temperature coefficients at ordinary voltages. The resistance—after first few minutes of operation becomes constant. Free from capacity effect. Unaffected by humidity. Negative temperature coefficient. Conservative wattage rating, will carry reasonable overloads safely. oads safely.

At Our Price, No Serviceman Can Afford to Waste His Time or Jeopardize His Reputation Using Infecior "Job Lot" or "Surplus" Resisitors. Resistors Offered At Lower Prices Are of Inferior Quality and Expensive At Any Price.

### **Guaranteed Accuracy**

Variations from values are negligible. Ratings guaranteed within 10% average variations close to 5%. Unusually queet and become MOLE QUILET the longer in use. Very strong and sturdy. Will stand all reasonable handling in manufacturing and repairing. All have welded-on 1½ finh tinned copper wire leads. Perfect and permanent electrical and mechanical contact. Each resistor marked with standard R.M.A. color code or labeled with rated resistance.

Be Fair to Yourself and Your Customer! We recommend a resale price of \$1.00 for Certified Quality Resistors. With this generous profit you cannot afford to risk your reputation as a serviceman with "odd lot" or "second" quality cheap resistors.

1/5 WATT Price Each

Per Dozen

1/2 WATT Net.

1 WATT Net.

Specify Size and Resistance by Stock Number

ı,	48 M 344	72 Watt	1 Watt		1/8 Watt	1/2 Watt	1 Watt		1 % Watt	3 Watt	1 Watt	
ŀ	Stock	Stock	Stock	Resistance	Stock	Stock	Stock	Resistance	Stock	Stock	Stock	Resistance
	Number	Number	Number	Ohms	Number	Number	Number	Ohms	Number	Number	Number	Ohms
1	3C1000	3C1075	301150	100	3C1021 I	3C1096	301171	1 3,500	3C1041	3C1116	3C1191	1 100.000
P	3C1001	3C1076	3C1151	150	3C1022	3C1097	3C1172	4,000	3C1042	3C1117	3C1192	150,000
į	3C1002	3C1077	3C1152	200	3C1023	3C1098	301173	4,500	3C1043	301118	301193	200.000
1	3C1003	3C1078	3C1153	250	3C1024	3C1099	3C1174	5.000	3C1044	301119	3C1194	250,000
4	3C1004	3C1079	3C1154	300	3C1025	3C1100	3C1175	6,000	3C1045	3C1120	3C1195	300,000
1	3C1005 I	3C1080 I	3C1155		301023	301100	301173	1 0,000	3C1046	3C1121	3C1196	400.000
ų	3C1006			350	3C1026	301101	3C1176	1 7.000	301040	301121	301130	
3		3C1081	3C1156	400	3C1027	3C1102	3C1177	8,000				Megohms
1	3C1007	3C1082	3C1157	450	3C1028	3C1103	301178	9.000	3C1047	3C1122	301197	.5
1	3C1008	3C1083	3C1158	500	3C1029	3C1104	3C1179	10.000	3E1061	3E1136	3E1211	.6
1	3C1009	3C1084	3C1159	600	3C1030	3C1105	301180	12.500	3E1062	3E1137	3E1212	.75
1	3C1010	3C1085	3C1160	700				1 12,700	3E1063	3E1138	3E1213	.9
1	301011	3C1086	3C1161	800	3C1031	3C1106	301181	15,000	3C1048	301123	3C1198	1.0
1	3C1012	3C1087	3C1162	900	3C1032	3C1107	3C1182	17,500	3C1049	3C1124	3C1199	1.5
	3C1013	3C1088	3C1163	1.000	3C1033	3C1108	3C1183	20,000	3C1050	3C1125	3C1200	2.0
П	3C1014	3C1089	3C1164	1.250	3C1034	301109	3C1184	22,500	3C1051	3C1126	3C1201	2.5
1	-				3C1035	301110	3C1185	25,000	3C1052			
1	3C1015	3C1090	3C1165	1,500					3C1053	301127	3C1202	3.0
1	3C1016	301091	3C1166	1.750	3C1036	301111	3C1186	30,000		3C1128	3C1203	3.5
1	3C1017	3C1092	3C1167	2,000	3C1037	301112	3C1187	40,000	3C1054	3C1129	3C1204	4.0
1	301018	3C1093	3C1168	2,250	3C1038	301113	301188	50,000	3C1055	3C1130	3C1205	5.0
1	301019	3C1094	3C1169	2.500	3C1039	301114	36(189	60,000	3C1056	301131	3C1206	6.
1	3C1020	3C1095	301170	1 3.000	3C1040	301115	3C1190	75.000	3C1060	3C1135		10.
1					-			-	-	The same of		-

## The RADISTOR Kit



Color Code Chart FREE

Included is our special chart which gives R.M.A. color code. You can in-stantly determine resistance of any re-sistor by referring to this chart.

3E1233-Case only. No Resistors

YOUR PRICE

These kits enable the serviceman to make practically any resistor repair regardless of any unusual value resistoneen needed. Twenty-five of the most popular value resistors are included as follows: 1 cach-100; 250; 400; 500; 800; 1,000; 2,000; 3,000; 4,000; 5,000; 5,000; 10,000; 10,000; 3,000; 60,000; 75,000; 25,000; 30,000; 60,000; 75,000; 100,000; 200,000; 800,000 ohms; 1 megohm; 2 megohms. If value wanted is not in kit, combinations can be made to give a resultant resistance of any exact value needed. Simple chari and calculating formulae included in kit. Accuracy guaranteed within 10%, and most values are actually within 5%.

In the Metal Box

Resistors are always ready and safe.
These sets of resistors are packed in
these sets of resistors are packed in
steal boxes. The boxes protect the resistors against the roughest handline.
Just drop the kit in your tool box and
forget it. When you get on a job, you
are always sure to have the correct
dependable resistors ready to uso.

### SPECIAL Carbon Resistors



Per Dozen Assorted for 100 Assorted for 5.85 Supplied in all Resistances listed in above quotations.

Specify Resistance Wanted.
Guaranteed first quality, fresh, new, clean stock. We never have and will not handle "factory rejects" nor "job lots" of carbon resistors. Every renot handle "factory rejects" nor "job lots" of carbon resistors. Every re-sistor supplied on this quotation is standard size, standard specification standard R.M.A. color coded. Have 1½ inch tinned copper leads welded to ends of carbon rods. Ohmage tol-erance guaranteed within 10% plus or minus.

erance guaranteed within 10% plus or minus. We recommend that every conscientious Radio Service Man use the best quality Carbon Resistors like our Radolek Certified Line listed above. But if you feel you must use low cost resistors, you will find this Special line the BEST VALUES in the low priced field. No one can ever afford to use the resorted, recolored, cheap reject resistors usually offered at job lot prices.



## RC Metallized Resistors

E NATH



### **IRC** Certified Resistor Kits

In Factory Sealed Boxes

Handy Kit No. 1 20-1 Watt Resistors

3E1475—List, \$5.00. YOUR PRICE ..........\$3.00

YOUR PRICE
Contains 20 metallized units of the most used sizes. Makes it possible for the man who is doing repair and replacement work to secure hundreds of different values. Pocket size. Contains one each of: 500, 1,000, 2,000, 5,000, 10,000, 15,000, 20,000, 25,000, 50,000, 50,000, 10,000, 10,000, 10,000, 200,000 olums; 3a, 3a, 1a, 1, 1a, 2 and 3 megohus.

### Handy Kit No. 2 20-2 Watt Resistors

3E1476-List, \$7.00. \$4.20

20 replacement Ohms: 500, 20 replacement 2 watt relistors 500: 2000; 5000; 10,000; ; 20,000; 25,000; 50,000; 60,-; 0,000; 75,000; 100,000; 200,-000; 70,000; 75,000; 100,000; 200,-000; 250,000; 500,000. Megohns 1.0; 1.5; 2.0; 3.0; 5.0.

### Handy Kit No. 3

20 Midget 1/2 Watt Resistors One each: Olims 50, 100, 250, 500, 1000, 1500, 2000, 5000, 5000, 10,000, 20,000 25,000, 50,000, 75,000; Meghons 1, 25, .5, 1, 1.5, 2, 3.

3E1478 List, \$5.00.

YOUR PRICE \$3.00

### Handy Kit No. 4

12-5 Watt Resistors

12-5 Watt Resistors
One each of the following sizes: Ohms
-50, 100, 200, 500, 1000, 1500, 2000,
5000, 10.000, 12.500, 15.000,
3E1479 — List, \$5.40.
YOUR PRICE \$3.24

### Handy Kit No. 5

12-10 Watt Power-Wound Resistors, Safely Replaces burned out sections of voltage dividers. One each of the following Ohms 160, 560, 1600, 2600, 3000, 5000, 7500, 10,000, 15,000, 20,000, 25,000

3E | 48 | List, \$7.80. \$4.68

YOUR PRICE ..

### Handy Grid Bias Kit

3E1477-List, \$3.20. \$1.92

Contains 10 assorted Resistors of 1 watt, 2 watt and Power Wire Wound (5-watt) types, required to bias the following type tubes: '21-'26-'27-'71A-'10-'45-'50-'47. Contains resistance

Genuine IRC-The original Metallized Resistors-depend-able, most efficient made for modern Radio Sets. Accurate within 10%.

IRC 1/3 Watt



Stock Number	Ohms	Stock Number	Ohms
3E1280	50	3E1445	11,000
3E1281	100	3E1446	12,500
3E1282	200	3E1447	15,000
3E1283	250	3E1448	20,000
3E1284	300	3E1449	25,000
3E1285	250	3E1450	30,000
3E1286	400	3E1451	40,000
3E1287	500	3E1452	50,000
3E1288	600	3E1453	60,000
3E1289	750	3E1454	65,000
3E1290	850	3E1455	70,000
3E1291	1,000	3E1456	75,000
3E1292 3E1293 3E1294 3E1295 3E1296 3E1297	1,250 1,500 2,000 2,250 2,500 3,000	3E1457 3E1458 3E1459 3E1460 3E1461	Megohms 0.1 0.15 0.2 0.25 0.3
3E1298	3,500	3E1462	0.4
3E1299	4,000	3E1463	0.5
3E1440	5,000	3E1464	0.75
3E1441	6,000	3E1465	1.0
3E1442	7,500	3E1466	1.5
3E1443	8,000	3E1467	2.0
3E1444	10,000	3E1468	3.0

### **IRC 1 Watt**



Stock Number	Ohms	Stock Number	Ohms
3E1375	100	3E1402	30,000
3E1376	150	3E1403	32,000
3E1377	200	3E1404	40,000
3E1378	250	3E1405	45,000
3E1368	300	3E1406	50,000
3E1369	350	3E1407	51,000
3E1370	400	3E1408	60,000
3E1379	500	3E1438	65,000
3E1371	600	3E1409	70,000
3E1372	750	3E1410	75 000
3E1373	850	3E1411	99,000
3E1380	1.000	3E1412	100.000
3E1374	1,250	3E1413	150,000
3E1381	1,350	3E1414	190,000
3E1382	1,500	3E1415	200.000
3E1383	2.000	3E1416	240,000
3E1384	2,250	3E1417	250,000
3E1385	2,500	3E1418	300,000
3E1386	3,000	3E1419	400,000
3E1387	3,500	3E1420	490,000
3E1388	4,000	3E1421	500,000
3E1389	5,000	3E1422	750.000
3E1390	6,000	300	Megohms
3E1391	7.000	3E1423	1.0

## REDICED PRIC

### On IRC Metallized Resistors

ALL SIZES 15 WATT 12 WATT I WATT

New List 20c YOUR PRICE

2 WATT: List Price, 30c, YOUR PRICE, 18c

3E1475 List \$4.00 \$2.40 YOUR PRICE EACH

3E1476-List \$6,00, YOUR PRICE. . . \$3.60

IRC 1/2 Watt

Length 1"

List 25c Your Price Each 15¢

		1	
Stock	Ohms	Stock Number	Ohms
3E1355	50	3E1323	20,000
3E1300	100	3E1324	25,000
3E1356	200	3E1325	30,009
3E1301	250	3E1326	32,000
3E1302	270	3E1327	40,000
3E1357	300	3E1328	45,000
3E1358	350	3E1329	50,000
3E1359	400	3E1330	51,000
3E1303	500	3E1331	60,000
3E1360	600	3E1366	65,000
3E1361	750	3E1332	70,000
3E1362	850	3E1333	75,000
3E1304	1,000	3E1334	99,000
3E1363	1,250	3E1335	100,000
3E1305	1,500	3E1336	150,000
3E1306	2,000	3E1337	160,000
3E1307	2,250	3E1338	200,000
3E1308	2,500	3E1339	240,000
3E1309	2,700	3E1340	250,000
3E1310	2,900	3E1341	300,000
3E1311	3,000	3E1342	330,000
3E1312	3,500	3E1343	400,000
3E1313	4,000	3E1344	490,000
3E1314	5,000	3E1345	500,000
3E1315 3E1316 3E1364 3E1317 3E1318 3E1319	6,000 7,000 7,500 8,000 9,000 10,000	3E1346 3E1347 3E1348 3E1349 3E1350	750,000 Megohms 1.0 1.5 2.0 2.5
3E1365	11,000	3E1351	3.0
3E1320	12,500	3E1352	3.5
3E1321	15,000	3E1353	4.0
3E1322	17,500	3E1354	5.0

### IRC 2 Watt



Stock Number	Ohms	Stock Number	Ohms
3E1500	50	3E1520	12,500
3E1501	100	3E1521	15,000
3E1582	200	3E1522	20,000
3E1502	250	3E1523	25,000
3E1583	300	3E1524	30,000
3E1584	350	3E1525	40,000
3E1585	400	3E1526	50,000
3E1503	500	3E1527	51,000
3E1586	600	3E1591	60,000
3E1504	750	3E1592	65,000
3E1587	850	3E1593	70,000
3E1505	1,000	3E1528	75,000
3E1506	1,250	3E1529	100,000
3E1507	1,500	3E1530	125,000
3E1508	1,750	3E1531	150,000
3E1509	2,000	3E1532	175,000
3E1510	2,250	3E1533	200,000
3E1588	2,500	3E1534	250,000
3E1511	3,000	3E1535	300,000
3E1512	3,500	3E1537	400,000
3E1513	4,000	3E1538	500,000
3E1514	5,000	3E1539	750,000

## **IRC** Resistor Guide

6,000

7,500 8,000 9,000

10,000 11,000



and

3E1513 3E1514 3E1515

3E1517 3E1518 3E1519

3E5981-Price .... \$1.00 Given Free with Orders for 20 IRC Resistors

3E1540

3E1594 3E1542

3E1547

Gives detailed informatlon on Resistors used in practically all lead-ing Radio Sets.

### Metallized Auto Radio Suppressors



### Special Ford Type

For Ford V-8, 50,000 olms. Also suitable for all other cars except those having recessed plugs. 3E1489 List, 40c.

24¢ Elbow

Cable End Type 3E1490-List, 40c. 24¢

Especially made for Bulcks and other cars having recessed plucs.

Standard Spark Plug Type

TIRL TO

adaptable for all standard systems. 15,000 ohms. ignition systems. 15,00 3E1485 -List, 40c, YOUR PRICE .....

Standard Cable Type

Metallized

For insertion in park plug cable. Generally u ed where Spark Plug Type connected 3F1486 List, 40c.

24¢ YOUR PRICE ..... Standard Distributor Type

3E1487 List, 40c. 24¢ YOUR PRICE

### New IRC Fused Dual Resistance Indicator



YOUR PRICE ..... \$2.70

YOUR PRICE
Two ranges obtained by filting ball bearing slider to the scale desired. Low range, 100 to 10,000 ohms, high range 10,000 to 100,000 ohms. Littelfuse protects the resistance element against overheating.

New improved narrow-jaw alligator clips on test leads. Choice of pottentionierer or straight resistance eircuit. 11 inches of resistance contact surface. Size 7"X12" 22" 1" High. Featured Apolications. Featured Applications

Experimental substitute for defective resistors. Calibrated rheostat for limiting current or adjusting voltage, As "known" resistance branch of a wheat-tone bridge circuit.

### **New IRC Volt-Ohmmeter**



Invaluable for accurate servicing through the point-to-point Exclusive Vacuum Relay.

Easy to read knife edge pointer.

Extra large 37 etched scale. Bakelite case. Special moulded knob. One set of pin jacks for all readings. 17 Precision Wire Wound Resistors used exclusively. Very compact—fits easily into service kit. Voltage Ranges 2/30/300/800; Resistance ranges: 0/1.000/100.000/ohms and 0/1 megolim. 1E 1474—List, \$42.50.

Megohms 1.0

1.5

## CONTINENTAL CARBON Inc.

### Certified Molded Carborite Resistors

1000 Volt Ceramic Coat Insulation The first quality molded carbon resistors.
Their special feature is the Ceramic Coating having a 1000 Volt Insulation. This style of construction permits them to be mounted close to or in contact with the chassis and to come in contact with "live" wires or places of the paralles with the chassis and to come in contact with "live" wires or places of the paralles wires with to or in contact with the chassis and to come in contact with "live" wires or plees of apparatus, without danger of shorting. This coating is very tough, will not chip off and is especially effective at the ends covering the connecting wire fully. Only the tinned lead wires away from the body are bare. These efficient and accurate resistors are highly recommended for all repair work. While slightly higher in price, their superior quality and performance make them worth more than the added cost. The exclusive manufacturing processes used by Continental have reduced the effects of load, age, temperature and humidity to a minimum, Permanent resistance value. Modern laboratory machines and methods remove all units that do not pass the ricid continental standards of accuracy. Quietess:
Their exclusive mechanical construction and the highly developed resistance material have eliminated noisy operation. eliminated operation. noisy



Prices

List Price, 25c. YOUR PRICE, EACH

TEN FOR \$1.38 nated noisy operation. TEN FOR \$1.38 Non-inductive: Sturdy construction. Over-size current carrying capacity. R.M.A. Color Codling, plus Certified Seal. Body sizes:—1/2 watt. %" dlameter, %" long.—I watt, %" diameter, 134" long. 11/2" tinned wire leads.

Specify Size and Resistance By Stock Number

L. Watt	11 Worth		P5 Watt	I Watt		Pa Watt	Il Warr	
Stock	Stock Number	Resist.	Stock		Resist	Stock Number	Stock	Resist. Ohms.
3E7800 3E7801 3E7802 3E7803	3E7840 3E7841 3E7842 3E7843	250 400	3E7813 3E7814 3E7815 3E7816	3E7853 3E7854 3E7855 3E7856	6,000 7,000	3E7826 3E7827 3E7828 3E7829	3E7866 3E7867 3E7868 3E7869	75,000 100,000 150,000 200,000
3E7804 3E7805 3E7806 3E7807	3E7844 3E7845 3E7846 3E7847	1,000 1,500	3E7817 3E7818 3E7819 3E7820	3E7857 3E7858 3E7859 3E7860	12,500 15,000	3E7830 3E7831 3E7832 3E7833	3E7870 3E7871 3E7872 3E7873	250,000 300,000 400,000 500,000
3E7808 3E7809 3E7810 3E7811	3E7848 3E7849 3E7850 3E7851 3E7852	2,500 3,000 3,500	3E7821 3E7822 3E7823 3E7824	3E7861 3E7862 3E7863 3E7864	30,000 40,000 50,000	3E7834 3E7835 3E7836 3E7837	3E7874 3E7875 3E7876 3E7877	1. Meg 1.5Meg 2. Meg 3. Meg

### **Continental Certified Carborite Molded Resisters**

### 3 Watt

1000 Volt Ceramic

Coating Insulation
Same high grade quality and style of construction as above ½ watt and 1 watt but 3 watt capacity. Body size—Diameter 23", Length 1%", 1½" tinned wire leads.

Snecity Resistance by



TEN FOR ....\$1.95

	Specify Resistance by Stock Number							
Stock Number	Resist. Ohms.	Stock Number		Stock Number		Stock Number	Resist, Ohms.	
3E7880 3E7881 3E7882 3E7883 3E7884	1,000 2,000 5,000	3E7885 3E7886 3E7887 3E7888 3E7889	12,500 15,000 25,000	3E7890 3E7891 3E7892 3E7893 3E7894	75,000	3E7895 3E7896 3E7897 3E7898 3E7899	250,000 300,000 400,000 500,000 1 Meg.	

### Continental Ignition Interference Suppressor

High quality ignition noise Suppressors developed to afford complete absorption of motor interference with minimum effect upon operation of the motor. "Carbonite" element assures permanent satisfactory performance despite heat, vibration, or moisture.



The new Flexo-terminal spark plug suppressor. The terminal can be bent to mount the supressor in a vertical or horizontal position.

SIZA O 3E1801-YOUR

PRICE
New Buick, Packard and Chrysler
Type Ellow spark plug suppressor. The
suppressor takes the place of the suppressor takes the place terminal on the ignition cable

### Bakelite Spark Plug Suppressor

3E1805-YOUR PRICE. 18¢



Resistance type. Bakelite body. Has threaded insert for screwing Suppressor directly into spark plug. Threads fit any spark plug.



Cable suppressor. Meets requirements where it is necessary to cut the ignition cable at any point and install a SUDDITESSOT 3E | 804-List, 40c. 515

YOUR PRICE Standard Type Universal Spark Plug Suppressor with "U" terminal.

Insulated Container Auto Filter Condenser



For installations where the condenser cannot be botted directly to ground. Has insulated case and a flexible insulated lead coming out of each end. Capacity ½ mfd. Measures 2" in length and %" in diameter.

3E 18 13—List, 60c.

YOUR PRICE ...

## PRICES REDUCED

### On Continental Carbon Resistors **And Auto Ignition Suppressors**

16 WATT ALL SIZES 1 WATT OF

New List 20c VOUR PRICE

3 WATT: List Price, 30c, YOUR PRICE, 18c

### Continental Auto Suppressors

3E1800 3E1801 3E1802 3E1803 3E1804

New List Price 30c Your 18<sup>C</sup>

trical elec-static ality Body:

ntro

con to Distributor Cables: Suppressor oscillating absorbs interference distributer points and solder to reduce this gap to minimum.

3— Low Tension Breaker to Coils:
Install Type GB025, GB05, or GB05B
Filter Units. Especially necessary Filter Units, Especially necessary with rolls mounted on dash or through bulk-head.

4- Generator Commutator:

Noise introduced to electrical system by sparking at brushes. Clean brushes to minimize and install Types GB05, GB1, or GB05B and GB1A Filter to minimize and install types GDUS, GBI, or GBOSB and GBIA Filter Units, where greatest mechanical strength is desired, with terminal of lead wire on battery side of generator cutout. If noise persists when idling motor, install second condenser across generator side of control.

5- Horn;

Spark at horn annature causes inter-ference that works back into set. GBI or GBIA Filter Unit across terminals will usually eliminate all interference.

- Radio 6-Volt Input:

Miscellaneous noise entering the re-ceiver through the power input can be effectively eliminated by installing in the "A" lead to the receiver the Type GB05DH Dual Capacity and Induct-ance Filter Unit. Such interference may persist, although all electrical

be radiated from every wire that is not enclosed by metal. Dome light, stop light, tall light, and other wiring that passes near the radio antenna cause this interference to enter the radio receiver. The offending wires may be located by disconnecting, one at a time, each cable where it connects to the light switch, ammeter, or starter switch. When a wire is found by the disconnection of which the interfence is eliminated, reconnect it and connect a Type GB05 Filter Unit from it to ground. If this does not remove the noise, a Type GB1 or Type GB05H chapetty and Inductance Filter Unit may be necessary. The Type GB05E Clapetty and Inductance Filter Unit may be necessary. tainer of the other type units to a grounded metal part of the car and still have it close to the radiating

still have it close to the radiating circuit.

P-14.— Electric Windshield Wiper, Electric Fan, or Hot Water Heater; Sparking of commutators and switch boints in such accessories cause interference which may be removed by use of Type GB025, GB05, or GB1 Fiter Units. Make installations as close to the devise as possible. The larger the capacity of the Filter used, the more effective will be the noise elimination. Some heaters may require the use of a Type GB05H Capacity and Inductance Filter Unit.



Diagram at left shows Type GB05DH Capacity-Inductance Filter consisting of two 15 mfd. Condensers and Filter Choke. Diagram at right is of Type Choke. Diagram at 1190. GB05H having 16 mfd. and Filter Choke. Condenser

### Auto-Filter Condensers

For elimination of noise from auto-radio installations, where capacity alone is sufficient to filter out the where capacity disturbance. Used to stop interference from the generator commutator, electrical windshield wiper, horn, dis-

tributor points, ignition coil, fan, heater motor, and other accessories. They have test voltage ratings many times that required. Vacuum impregrated and sealed proof against moisture, oil, dirt, and vibration.

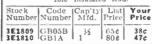
### Standard Filter Condensers

Container sealed against moisture and oil. One side is connected to the container which has a flange for bolting to the classis, for bolting to the chassis, tact to ground. The owier terminal has long insulated terminal has long insulated lead with convenient screw



### Super-Duty Filter Condensers

Recommended for instal-lations in the motor compartment or other places where excesses of heat and are an metal metal me moisture are encountered. Has extra large heavy metal container, measur-Mas extra large heavy metal container, measur-ing 21/6" in length and 11/4" in diameter, with mounting strap going all around. One side con-nected to container and other furnished with ible insulated lead. flex-



### Capacity and Inductance **Auto-Filter Units**

For use where noise suppression prob-lems cannot be solved by the filtering effect of capacity alone. Especially effect of capacity alone. Especially effective where car lighting wiring radiates interference into the antenna. These units are usually connected be-tween the light system switch or am-meter and the leads to lights and accessories.



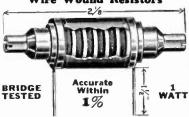
YOUR
Type GB05H
Consists of 14 mfd. Condenser with
choke suitable for carrying up to 5
amus. Housed in insulating container three insulated flexible leads, ong, %" diam. with long.



Type GB05DH. Type GB05DH.

Complete of two ½ mfd. condensers and a filter choke. Housed in a metal case which makes connection to ground. Two flexible insulated leads connect to the circuit, which is opened for insertion of the filter. Size 2"x 2"x11%". Used to filter power supply from battery to receiver or for lighting circuits not completely filtered by choke and single condenser units.

### ELECTRAD Precision Wire Wound Resistors



Designed for use in high grade test instruments, laboratory equipment and custom built apparatus. Particularly useful as voltmeter multipliers or for the construction of a 1000 ohms per volt multipliers or for the construction of a 1000 ohms per volt multipliers or for the construction of a 1000 ohms per volt multipliers or for the construction of a 1000 ohms per volt multipliers or for the construction of a 1000 ohms per volt multipliers or for for grade voltment of a 1000 ohms per voltment of the construction of the co



-		>[]			
Stock Number	Resist. Ohms	Max. Volts Poten- tial	Cur- rent M. A.	List Price	YOUR
3E8341 3E8300 3E8344 3E8301 3E8346 3E8347 3E8349 3E8350	.1 2.08 5. 10, 25 30, 33,33	.38 1.2 1.77 2.7 3.8 6.1 6.82 7.1	3875 1225 847 548 387 245 220 210	\$0.75 .75 .75 .75 .75 .75 .75 .75	44c
3E8302 3E8353 3E8354 3E8303 3E8355 3E8304 3E8356	45 50. 190 150 200 400 500	8.25 8.6 12. 15. 17. 25 27.	182 173 122 100 86 61 55	\$0.75 .75 .75 .75 .75 .75 .75	44e
3E8305 3E8357 3E8358 3E8306 3E8307 3E8359	700 750 1,000 1,450 1,500 2,500	32.4 34. 38. 40. 45. 61.	46 44 38 37 33 24	\$0.80 .80 .85 .85 .85	47c 50c
3E8360 3E8308 3E8361 3E8309 3E8362 3E8363	3,500 4,000 4,450 4,500 4,950 5,000	65. 79. 83. 84 86 87	23 19 18 18 17 17	\$0.90 .90 .90 .90 .90	53c
3E8364 3E8310 3E8311 3E8366 3E8312 3E8367	5,500 7,450 9,950 10,000 12,500 14,950	90 107 122 125 137 150	16 14 12 12 11 10	\$0.95 .95 .95 .95 1.00	56c 59c
3E8368 3E8369 3E8313 3E8370 3E8371 3E8372	20,000 25,000 30,000 35,000 40,000 50,000	173 194 212 229 245 274	8.6 7.7 7. 6.5 6.1 5.5	\$1.25 1.25 1.25 1.25 1.25 1.25	73c
3E8314 3E8315 3E8316 3E8373 3E8317	60,000 75,000 90,000 100,000 125,000	300 336 375 387 433	5. 4.4 4. 3.8 3.4	\$1.50 1.50 1.75 1.75 2.00	88c \$1.02 1.16
3E8318 3E8374 3E8319 3E8375	140,000 150,000 175,000 200,000	450 475 510 548	3.2 3.1 2.9 2.7	\$2.25 2.25 2.25 2.25 2.25	1.32
3E8320 3E8376 3E8377 3E8378 3E8321	225,000 250,000 300,000 400,000 450,000	580 610 670 750 750	2.5 2.4 2.2 2.2 2.2	\$2.50 2.50 2.75 2.75 2.75 2.75	1.47
3E8379 3E8322 3E8323 3E8324 3E8325	500,000 600,000 750,000 900,000 1 Meg.	750 770 750 1000 1000	2. 1.6 1.3 1.	\$3.25 4.00 4.00 5.00 5.00	1.91 2.35 2.94

Removable Ferrule Terminals
Furnished without ferrules with 1½ in tinned
wire leads. Can be converted to ferrule type unit
as illustrated above by screwing ferrule into each end of resistor.

YOUR PRICE, per Pair, per Pair, 15e. 9¢ 3E8299-Ferrules List, per Pair, 15e.

### **ELECTRAD TRUVOLT** Wire Wound Adjustable Resistors



3/8"x13/4" Long

High quality non-oxidizing low temperature co-etticient resistance wire, space wound on heat resisting asbestos insulated flexible core which in turn is wound on thread cut groove channels in special high tensile strength fire-proof white lava tubes. Advantages are high power dissipation due to natural air cooling design, easy connection of taps, and durability. Improved adjustable clip permits tapping at any desired point. Protective fiber insulating sleeve. Mounting brackets included. Type A-10 Watts

### Type B-25 Watts 11/6"x2" Long

Stock	Resist.	rent	Max.
Num.	Ohms	M. A.	Volts
3E150	1	3150	3
3E151	2	2200	4.5
3E152	2.5	2000	5
3E153	3	1800	5.5
3E154	5	1400	7
3E155	7.5	1150	8.5
3E156	10	1000	10
3E157	15	815	12
3E158	20	700	14
3E159	25	630	16
3E160	30	570	17
3E161	50	450	22
3E162	75	360	27
3E163	100	315	31
3E164	200	220	45
3E165	300	180	55
3E166	400	158	63
3D167	500	141	70
3E168	800	112	89
3E169	1000	100	100
3E170	1250	89	111
3E171	1500	81	122
3E172	2000	70	141
3E173	2500	63	158
3E174	3000	56	173
3E175	4000	50	200
3E176	5000	45	222
3E177	7500	36	274
3E178	10000	31	316
3E179	15000	26	388
3E180	20000	20	395
3E181	25000	16	400
List P YOUR		50c. ach	29¢

Adjustable Sliding Clips

To adjust Truvolt re-sistors to exact value desired. 3E231—For Type
"A" Truvolt,
3E230—For Types
"B" and "D." YOUR PRICE, Each ... 6¢

EACH Lug Type



1/2 Watt Capacity
Wire wound on fiber strip. End
lugs firmly clamped on, cannot
pull off. Can be bent to any
angle for mounting. Overall
length a bo ut 11/2". Accuracy
guaranteed within 5%. 1 Stock 1

Number	Ohms	Number	Ohms
3E475 3E476	1 2	3E482 3E483	15 20
3E477 3E478	2 3 4	3E484 3E485	25 30
3E479	6	3E486	40
3E480 3E481	10	3E487 3E488	100
_			_

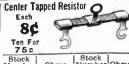
. 1			Cur-	
- 1	Stock	Resist.	rent	
8	Num.	Ohms	M. A.	
5	3E112 3E113 3E114 3E115 3E116 3E117	100 200 250 300 400 500	500 353 320 289 250 224	
	3E118 3E119 3E120 3E121 3E122 3E123	750 800 850 1,000 1,250 1,500	182 177 165 158 141 129	List Price 85¢ YOUR PRICE
	3E124 3E125 3E126 3E127 3E128 3E129	2,000 2,250 2,500 3,000 3,500 4,000	112 105 100 91 84 79	Each
	3E130 3E131 3E132 3E133 3E134 3E135	4,500 5,000 6,000 7,000 7,200 7,500	75 71 64 60 59 58	
	3E136	8,000	56	
-	List Pr YOUR	PRICE.		530
	List Pr		53	560
Ć	3E138 3E139 3E140	10,000 12,000 15,000	50 45 41	
	List Pr	ce \$1.00		

List Price \$1.00 YOUR PRICE 58c 3E141 | 20,000 3E142 | 25,000 List Price \$1.15 YOUR PRICE 67c

3E143 | 30,000 List Price \$1.25 YOUR PRICE 73c 3E144 | 40,000

List Price \$1.30 76c 3E145 | 50,000 | 22.5

List Price \$1.40 YOUR PRICE. 82c



75c	0		
Stock Number	Ohms	Stock Number	Ohms
3E490 3E491 3E492	6 10 15	3E494 3E495 3E496	25 30 40
3E493	20	3E497	50

1000 Volt Insulation

MOUNTING BACKES SELF-MARKON AND THE SELF-MARKO

Sectional View of Electrad Truvolt Adjustible Resistor

rent M. A Ohms

> 865 610 500 100 200 300 400 500

387

182 173 158

List Price \$1.60

YOUR

94c

Each

96c

\$1.12

\$1.26

\$1.32

\$1.47

Ohms

60 70 80

100 150 200

300 400

39

Type D-75 Watts

11/6"x6" Long Cur-

Resist.

750 800 1,000

1,250 1,500 2,000 2,250 2,500 3,000

3,500 4,000 4,500

5.000 6,000 7,000 **7,200** 

15,000 **20,**000 List Price \$2.15 YOUR PRICE

Stock Num.

3E190 3E191 3E192 3E193 3E194

3E195 3E196 3E197 3E198

3E199 3E200 3E201 3E202 3E203

3E204 3E205 3E206 3E207

3E210

3E214 | 10,000 3E215 | 12,000 List Price \$1.90 YOUR PRICE

3E218 | 25,000 3E219 | 30,000 3E220 | 40,000

List Price \$2.25 YOUR PRICE

3E221 | 50,000

List Price \$2.50 YOUR PRICE

3E222 | 60,000 3E223 | 80,000 3E224 | 100,000

WHINES ADJUSTABLE

3E396-EACH.... 10 For 45 c For Type 30 Tube on 2.9 Volts. • Wound on a 1/4" wide 1/4" long fibre strip.

List Price \$2.75 YOUR PRICE..... \$1.62

15 Ohm Resistor

fibre strip.

fibre strip.

fibre strip.

1 watt. Terminance of the mounting. Can be used for mounting in practice of the mounting in practice.

"" any position. Mounting arrib are %".

### Wire Wound Resistors-Pigtail Types Wound on genuine Bakelite Strips 1\%" long, \( \frac{1}{2}'' \) wide, \( \frac{1}{2}'' \) thick, wire leads \( \frac{1}{2}'' \) long. Wire May Be Unwound for Special Values of Grid Bias Resistance.

Standard Type 1 Watt Center Tapped YOUR PRICE, Each 10¢ YOUR PRICE, EACH ... 11¢ Ten for 95c Tolerance 1 Stock | Ob Stock | TEN FOR ......98c 1 Stock 1

Number	Ohms	Number	Ohms	Number	Ohms	Number	Onms			
A GAMOCI	OHLIG							Stock		Stock
3E400	14	3E412	15 20	3E425 3E426	200 225	3E439 3E440	700 750	Number	Ohms	Number
3E401 3E402	1	3E414 3E415	25	3E427	250	3E441	800	3E455	.6	3E464
3E403 3E404	11/2	3E416 3E417	30 36	3E428 3E429	275 300	3E442 3E443	900 1000	3E456 3E457	10	3E465 3E466
3E405	3	3E418	40	3E431	350	3E444	1250	3E458	15	3E467
3E406	4	3E419	50	3E433	400	3E445	1500	3E459	18	3E468
3E407	5	3E420 3E421	75 100	3E434 3E435	450 500	3E446 3E447	1750 2000	3E460 3E461	20 25	3E469 3E470
3E408 3E409	8	3E422	125	3E436	550	3E448	2250	3E462	30	3F471
3E410	10	3E423	150	3E437	600	3E449	2500	3E463	40	3E472



250 watts. Especially suited for P. A. amplifiers, for repairing sections of voltage dividers in power pack of receivers and for trans-critters. Cannot deteriorate with age now change in resistance value. Accuracy sunaranteed plus or minus 10% and actually average about 6%. 1½ inch timed

	10 WATT	List, Each 35c.					
Siz	e 134x38 Inches.	YOUR PR	ICE				
Stock Num.	Ohms 1 Stock Num	Ohm   Stock Num.	Ohms   Stock Num.	Ohms			
3D   599 3C   600 3C   601 3C   602 3C   603 3C   604 3C   605	3 C   6   0   1   2   3 C   6   1   2   3 C   6   1   2   3 C   6   1   3   4   3 C   6   6   4   5   3 C   6   6   5   7.5   3 C   6   6   6	25   3C   62   30   3C   62 2 35   3C   62 3 40   3C   62 4 50   3C   62 5 75   3C   62 6 100   3C   62 7	300 3C 1632 400 3C 1633 504 3C 1634 600 3C 1635 750 3C 1637 1.200 3C 1638	3.500 4.000 5.000 6.000 7.500 10.000 12.000			
301606 301607 301608 301609	10 3C1617 12 3C1618 15 3C1619 20 3C1620	125 3C   628 150 3C   629 200 3C   630 250 3C   631	1.500 2.000 3.01640 2.500 3.000 3.01641	15.000 20 000 25.000			

### Center Tapped 10 WATT

3E1657 3E1658 3E1659	15	3E1660 3E1661 3E1662	40	3E1663 3E1664 3E1665	75 100 200	PRICE 27¢
----------------------------	----	----------------------------	----	----------------------------	------------------	-----------

### 20 WATT Size 2x 7 inches.

ESTOUR ATMILL	Omma	PATRICE PARTIE	Olitina	College Partition	-
301642	30,000	301647	55,000	301652	80
301643	35,000	301648	60,000	301653	85
301644	40,000	301649	65,000	301654	90
301645	45,000	301650	70,000	301655	95
301646	50,000	301651	75,000	301656	100

List 75c 0.000 VOUR PRICE 44¢ .000

### **OHMITE** Wire-Watt

List, 20c 12¢ YOUR PRICE, Each ..... WIREWATT" RESISTOR One Watt Wire

wound Resistors

Especially distance of the control of the control

CHEACY	guarante	ed within	0.1.
Stock Number		Stock Number	Resist.
3 D8250	100	3D8271 3D8272	2,250 2,500
3D8251 3D8252	125 150	3 D 8273	3.000
3 D 8 2 5 3	200	3D8274	4.000
3 D 8 2 5 4	250	3D8275	
3 D 8 2 5 5	300	3 D 8 2 7 6	4,500
3 D 8 2 5 6	350	3 D 8 2 7 7	5,006
3 D 8 2 5 7	400	3D8278	6.006
	500	3D8279	7.006
3D8258 3D8259	600	3 D 8280	7.500
3 D 8260	700	3 D 8 2 8 1	8,000
3 D 8261	750	3 D 8 2 8 2	9,000
3 D 8262	800	3 D 8283	10,006
3 D 8263	900	3 D 8284	
3D8264	1,000	3 D 8285	15.000
3D8265	1,100	3 D 8 2 8 6	16.000
3D8266		3 D 8 2 8 7	17.500
3D8267	1,250	3 D 8288	18,00¤
3D8268	1,500	3 D 8289	20,00¢
3D8269	1.750	3 D 8290	22,500
3D8270	2.000	3 D 8291	25,000
3D8292	30,000		

List Price ...30s 3 D 8293 35.000 40,000 3D8294 45 000 PRICE .....18c 3 D 8296

Center	Tappe	d Wire-W	att
3E8240	10	3E8245	40
3E8241	15	3E8246	50
3E8342	20	3E8247	7.5
3E8243	25	3E8248	100
3E8244	30	3E8249	200

21¢

### **Power Cords Line Cord Resistor** For AC-DC Sets



Replacement for voltage resistor in older AC-DC sets. Consists of a line cord and plug in which is built the resistor for dropping the line voltage to the correct value for the tube flaments. Extramal position dissipates heat readily and protects condensers and other set paris from the degenerative heat effects of poorly voltage internal resistors.

Stock Total Filament

Stock	Total	
Number		Voltage Drop
301815	290	25.2 to 31.5
3D1816	160	56.5 to 68.9
3D1817	135	68.9 to 75.2
List Price, \$1	.50.	496
List Price, \$1 YOUR PRICE		405

### "Dual-Scale" **Resistance Indicator**



Two accurate resistance rantes with scales 0-1000 and 0-100,000 ohms. Determines values of burned out resistors. Connect the two clips across the burned out resistor and run the contact slowly along the resistance scale. When the set plays properly the correct value for the replacement resistor is read directly on the scale. Complete unit is built into a polished fibre case. Directions included. 3D1 820—List \$4.00. 3D1820—List \$4.00. YOUR PRICE .....

### New Candohm Replacement

**Armoured Resistors** Wire Wound

Used by leading set manufacturers. De-signed especially for replacement of or-dinary type resistors. Wound on genuline bakelite core, covered with 1500 volt insulation—outer steel case protects unit from breakage or abrasion. Guaranteed 5% accurate.

1 Watt
Below 12,500 ohms. Size 1/2x1"—Above 10,000 ohms. Size 1/2x11/2".

Number	Ohms	Stock Number	Ohms	Stock Number	Ohms
3E4900	100	3E4909	700	3E4918	3000
3E4901	150	3E4910	750	3E4919	3500
3E4902	200	3E4911	800	3E4920	4000
3E4903	250	3E4912	1000	3E4921	5000
3E4904	300	3E4913	1250	3E4922	8000
3E4905	350	3E4914	1500	3E4923	10000
3E4906	400	3E4915	2000	3E4924	15000
3E4907	500	3E4916	2250	3E4925	20000
3E4908	600	3E4917	2500	3E4926	25000

List Price, 25c.

YOUR PRICE

**12c** 

	21/2 Watt	11/2 Watt Center Tapped		
Stock Number	Ohms	Stock Number	Ohms	
3E4927 3E4928 3E4929 3E4930 3E4931	30000 35000 40000 45000 50000 35000 35000 45000 50000 35000 45000 50000 35000 45000 50000	3E4932 3E4933 3E4934 3E4935 3E4936 3E4937	10 Size 12 x 132 20 List 25c 40 YOUR PRICE 80 12¢	
	44.11			

#### 10 Watt Size 3/4x13/4'

Stock Number	Ohms	Stock Number	Ohms	Stock Number	Ohms
3E4940	10	3E4950	500	3E4960	4000
3E4941	20	3E4951	600	3E4961	4500
3E4942	50	3E4952	750	3E4962	5000
3E4943	100	3E4953	1000	3E4963	6000
3E4944	150	3E4954	1200	3E4964	7500
3E4945	200	3E4955	1500	3E4965	10000
3E4946	250	3E4956	2000	3E4966	12000
3E4947	300	3E4957	2500	3E4967	15000
3E4948	350	3E4958	3000	3E4968	20000
3E4949	400	3E4959	3500	3E4969	25000

List Price, 40

### Candohm Original Equipment Resistors

Exact duplicate of the original Candohm units used in the sets listed below. Candohm part number shown in listing is identical to number stamped on metal shell of original unit to be replaced. Where resistor to

replaced has no number send unit to us properly tagged with name of

Part Num.	Resistance Each Section	Stock Num.	Your Price	Part Num.	Resistance Each Section	Stock Num.	Your Price
Belm R258 R261	350 (15000-2500 150-350	3E4984 3E4985	20¢ 69¢	U. S. 1752 1959	Radio and Te 3500-8400 10700 4700-8400	levisio 3E4988 3E4989	n \$1.56
Cros1 20176	J10-10-10	3E4970	49¢	2303 2381	10700 1000-2640 8000-8000	3E4990 3E4991	39¢ 69¢
20452 b	10-860 (320-225 2000-1750	3E4971	69¢	2811	{550-600-600 1200-1000	3E4992	69¢
20909 21955 21956	1000 3250-3250 3160	3E4972 3E4986 3E4987	49¢ 49¢ 29¢	2811A	50-500 550-600-600 1200-1000-500	3 <b>E</b> 4993	69¢
28471 22574	25000-8500 (3000-2150	3E4938 3E4973	39¢ 59¢	3111	2500-425-600 1800-1000-500	3E4994	78¢
22574	1220-45 (1790-2150 1220-45	3E4974	59¢	3360	{300-10000 11000-3000	3E4995	88¢
28755 a	246-28	3E4975	78¢	3476 3621	1100-3200-180 225-250-200 7200-290-225	3E4996 3E4997	78¢
Grigs	by-Grunow	3E4976	39¢	4145	1800-800   300-10600 10000	3E4998	59¢
7818 8292 9239	2000-140-500 2000-350-500 (7000-40	3E4977 3E4978	39¢ 69¢	4353	(850-850	3E4999	49¢
10145	3000-300 408-134-1800 360-9000-10000	3E4979	69¢	5463	5000-1600 (400-1400 800-4200-250	3 E 4895	59¢
10252 10535	10.000 300-1500-500	3E4980 3E4939	29¢ 39¢	5807 6749	{400-1400 500-4200 60-17500	3E4896 3E4897	49¢
Inter R302	national Kad 1500	3E4981	29¢	Zenit 63-251		3E4898	69¢
R303	Victor	3E4982	78¢	63-251	1845-60.5 (900-2400	3E4899	59¢
67822	315	3E4983	78¢	00 302	3300-900		

### Candohmeter Resistance Indicator

Two Candohm uniform wire wound resistors in a single mounting with accurately calibrated 0.10.000 and 0.100,000 ohm scales. Furnished with slide-contact prod with insulated handle and two alligator test clips. Quickly determines the value of any burned out or defective resistor.



3E4894-List, \$2.50.

YOUR PRICE.....

\$2.35

### **New Standard Replacement** RADIOHM VOLUME CONTROLS

Centralab with its unequalled experience in the design and manufacture of over 18,000,000 volume controls for set manufacturers and replacement has developed a new improved Radiohm. A newly designed patented non-rubbing contact turns smoothly with an absolute minimum of wear. New small size, with long shaft, easy to saw to fit practically every set application. Case diameter 1% in., depth & in., shaft 2% in. long milled flat. The Switch Model is equipped with C-II underwriters Approved Snap Switch mounted on back cover. Switch capacity 2 Amps., 125 V; & Amp., 250 V. Switch depth %", total depth switch type %".

### With Switch





61 c

F	ive for	\$3.70		Five	for \$2.70
- Resis	tance Taper	Curve Num.	Number with Switch	Number Less Switch	Use In Circuit Number (See Page 68)
500 1,000 2,000 3,000 4,000	Unif. Unif. Unif. Unif. Unif. Unif.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	62-118 62-107 62-101 62-108 62-109	72-118 72-107 72-101 72-108 72-109	9, 17, 20 9, 17, 20 4, 9, 17, 19, 20 4, 9, 19, 20 4, 9, 19, 20
5,000 5,000 10,000 10,000 10,000	Unif. L. H. Unif. L. H. R. H.	1 6 1 3 4	62-110 52-204 62-114 62-113 52-205	72-110 70-204 72-114 72-113 70-205	4, 9, 19, 20 4, 19, 20 4, 9, 10, 11, 19, 20 5, 7, 8 5, 7, 8
$\begin{array}{c} 10,000 \\ 15,000 \\ 15,000 \\ 20,000 \\ 25,000 \end{array}$	L. H. L. H. R. H. L. H. Unif.	6 3 4 3 1	62-100 62-115 99-006 62-119 62-111	72-100 72-115 79-006 72-119 72-111	4, 19, 20 5, 7, 8 2, 5, 7, 8 5, 7, 8 4, 9, 10, 11, 19, 20
25,000 $25,000$ $25,000$ $50,000$ $50,000$	R. H. R. H. L. H. Unif L. H.	2 4 3 1 5	62-133 52-206 62-102 62-103 62-117	72-133 70-206 72-102 72-103 72-117	2, 5, 19 2, 5, 7, 8 5, 7, 8 4, 19, 20 4, 5, 6, 15, 16, 19 20, 21
75,000	L. H.	5	62-123	72-123	4, 6, 15, 16, 19,
75,006 100,000 100,000 200,000 200,000	R. H. Unif. L. H. Unif. R. H.	1 5 1	52-202 62-104 62-122 62-120 62-131	70-202 72-104 72-122 72-120 72-131	20, 21 2, 18 14 6, 12, 13, 15, 16, 2 14 18
250,000 500,000 500,000 500,000 1 meg. 3 meg.	L. H. L. H. Unif. R. H. L. H. L. H.	5 1 2 6 6	62-121 62-105 62-106 52-103 62-116 62-132	72-121 72-105 72-106 70-203 72-116 72-132	6, 12, 13, 21 6, 12, 13, 21 14 3 12, 13, 21 16

All standard Radiohms are 3 terminal (potentiometer) type. Where 2 terminal control is required use center and one outside terminal. Taper is more important than maximum resistance. The curve of each control listed is shown on the two charts on the opposite page. Typical circuit applications on Page 88.

### New Switch Cover - Plate

For all Centralab Standard Radiohms
Any plain Radiohm listed above may be converted
to the switch type by replacing the back cover
with this new switch coverplate. Approved switch

3E3000 List, 50c. YOUR PRICE

Latest Centralab



### Volume Control Guide

32 pages of up-to-the-minute data. Includes type and resistance of Volume Controls and gives part number wherever possible. Also has standard RMA color code. Pocket size.

FREE With every order for 5 or new controls.
3E3001—If ordered separtely.

106

### Special ATWATER **KENT Replacements**

Models 82 and 82F Early and Late Models



RI-433P-List, \$2.25. YOUR PRICE

\$109

Special 550 ohm volume con-trol with switch. Exactly du-plicates the original electric-ally and mechanically but not necessarily in appearance. YOUR PRICE......

Volume Control Strips
Atwater Kent

Models Models 37, 37 F, 38, 40, 40F, 41-DC, 42, 42F, 43, 44, 45, 46, 53, 450 ohm strip. 46, 47, 52,

R-1738-List, 75c. YOUR PRICE..... 25¢

Early Models 55, 55C, 55F, 55FC, 60, 60C, 61, 61C. 600 ohm strip. R-1742-List, 75c.

## RADOLEK REPLACEMENT

### Electrad—Centralab and Radolek

This new Radolek Replacement Volume Control Guide has been prepared for you after months of investigation. We have carefully checked set manufacturers original circuit data and have compared the original specifications with Centralab and Electrad special replacement listings.

Model Receiver	Resist.	Electrad Number	Your	Cen- tralab No.	Your	Radolek Control Number	Your
ALL AMERICAN-MOHAWK 226 A. C. Improvement (Vol.) Cherokee (Vol.) 1st Mohnwk-Kellogg, A. C.	75M 500M	RI-203 RI-202	\$0.59	72-116 72-105	50.61	3E3002 3E3003	50.45
1st Mohnwk-Kellogg, A. C. Lyric J3, J8, P4, P8, P9, C6, 550, (Vol.) 2D Mohawk-Kellogg A. C., Duet, Sextette, Forte, Lorraine, Sover- eign, 7 Tube D. C., Lyric K, 115, 810, SW8, SW80, SA65, SA90, SA91, SA110, SA130, (Vol.)	7500	R1-240	.59	72-114	.61	3E3004	.49
S10, SW8, SW80, SA65, SA90, SA91, SA110, SA130, (Vol.)	500M	R1-203	.59	72-105	.61	3E3002	.49
Lyric K (Tone) 810, Sa90, Sa91, Sa110 (Tone) 8A91, 2d. Sa90 (A. V. C. Adj.) 8A110 (A. V. C. Adj.) 2d. Sa130 (A. V. C. Adj.) 60, 61, 62, 65, 66, 77, 80, 83, 84, 85, 86, 88, 99, 8 Tube D. C. (Vol.)	35M 500M 7500 2000 10M	R1-241 R1-203 R1-560 R1-232 R1-283	.59 .59 .59 .59	72-117 70-203 72-114 72-101 72-114	.61 .61 .61 .61	3E3002 3E3011 3E3006	.49
	75M	R-166	.66	72-116	.61		
70, 73, 75, (Vol.) 90, 93, 94, 95, 96, (Vol.) 86, 87, 88, DC65, 7 Tube S. G. D. C. (Vol.) 87 (Tone)	12M 10M	R-1880-T R1-201 R1-240	1.32 .59	70-501 79-006 72-114	1.47 .61	3E3007 3E3008 3E3004	1.04
and the second s	30M	R1-241	.59	72-117	.61		
S8, S50, S63, SW8, SW80, SA65, SA130, (Tone) Lyrie D11, D19, D29, D39, D69, H19, H29, H60, B30, B31, B80, D, C, with 222 Tubes, (Vol.)	7500 10M	RI-240 R-1802-T	.59 1.32	72-100	.61 1.22	3E3004	.49
B80 (Tone)	25M	R1-280	.59	74-601 72-111	.61	323003	1.04
7 Tube D. C. Super (Vol.)	7500 10M 10M	R-1802-T	1.32	74-615	1.47	3E3009	1.04
B7, (Vol.) 227 A. C. (Vol.) 880, (Vol.)	50M 500M 15M	FB-479-T R1-203 R1-201	2.10 .59 .59	74-602 72-106 72-115	1.22 .61 .61	3E3010 3E3002 3E3008	1.04 .49 .49
880, (Tone) U55, (Vol.)	250M 20M	R1-208 R1-279	.59	72-121 72-119	.61 .61	3E3012 3E3013	.49
ATWATER KENT MFG. CO. 37, 37C, 37F, 38, 40, 40F, 41 DC, 42, 42F, 43, 44, 45, 46, 47, 52, 53,							
42, 42F, 43, 44, 43, 46, 47, 52, 53, (Vol. Strip) 1st, 55, 1st, 55C, 1st, 55F, 1st, 55FC, 1st, 60, 1st, 60C, 61, 61C, (Vol. Strip)	400 6000	R-1738 R-1742	.25	72-112	.61	3E3014 3E3015	.49
	6000	RG-460P	.92	2011905	.98	363013	.22
80, 80F, 83, 83F, 90, 90F, (Vol.) 2d, 55, 2d, 55C, 2d, 60, 2d, 60C, 66, (Vol.) 2d, 55F, 2d, 55FC, (Vol.)	6M 10M 6M 6M	RI-524T	1.76			3E3016	1.47
3d, 55F, 3d, 55FC, (Vol.)	1011	RI-1880T	1.32	74-548	1.22	3E3007	1.04
3d. 60, 3D. 60C, 70D, 70D2, 74D, 74D2, 76D2, (Vol.) 67, 67C, 2d. 82Q, 85Q, 228Q, Vol.) 70F, 70L, 70L2, 74F, 74L, 74L2, 75P, 76E, 76L2, 76E2, 76P, 89P,	2500 6000 100M	RI-385 RG-465	.66 .66	72-104	.61	3E3017	.49
( ( 01.)	5600	FB-1T	2.10	74-521	1.22	3E3018	1.04
567, 567F, (Vol.) 70Q, 76Q, (Vol.)	(2500 )	RI-278	.59	72-001	.98	3E3033	.49
72H, 72H2, (Vol.)	250M 100M	RI-385 R-1757T	2.06	25-426	1.47	3E3120 3E3019	1.24
81, 81B, 81C, 91, 91B, 91C, (Vol.)	650M	R1-203	.59	62-105	.83	3E3002	.49
89, 89F, 92, 92F, 96, 96F, 99, 99F, 155, 228, 228D, 228F, 246, 260, 260F, 469, 469D, 469F, 558D, 588, 612, 627, 812, (Vol.) 1st. 82Q, 1st. 84, 84D, 1st. 84F, 84Q, 1st. 85, 1st. 85F, 188, 188F, 469Q, 558Q, 756, 756B, (Vol.)	500M	R1-206	.59	62-105	.83	3E3025	.49
		R1-203	.59	72-105	.61	3E3002	.49
82D, (Vol.) 480, (Vol.) 82, 82F, (Vol.) 86, 86F, (Vol.) 2d, 85, 2d, 85F, (Vol.) 2d, 84, 2d, 84F, 87, 94, 94F, (Vol.)	500M 500M 550 550 550 550 3500	RG-464P RI-203 RI-433P RG-463PG RI-433P RI-277	.92 .59 1.19 1.19 1.19 .59	62-105 52-203 62-118 62-118 72-118 62-109	.83 .83 .83 .61 .83	3E3002 3E3020 3E3020 3E3021	.49 .49 .49
87D, (Vol.)	{2500 } 5000	R-1823T	1.32				
2d. 96, 96P. 1st. & 2d.99, (Neon) 3d. 99, 99F. (Neon) 3d. 96, 1st. 469, 1st. 469F, 480, (Neon)	40M 14M 8000	R1-205 R1-201 R1-560	.59 .59	72-103 79-006 72-114	.61	3E3022 3E3008 3E3011	.49
636, 756, 756B, (Vol.) 1st. & 2d. 260, 1st. & 2d. 260F,	500M	RI-954	.73	51-122	.73		
(Neon) 3d, 260, 3d, 260F, 2d, 469,	15M	RI-201	.59	79-006	.61	3E3008	.49
2d. 469F, 612, 812, (Neon)	20M	RI-279	.59	72-119	.61	3E3013	.49
165, 217, 217D, 275, 310J, 310T, 427, 427D, 510, 667, 667D, 708, 711J, 711R, 711T, 808A, (Vol.) 2d, 188, 2d, 188F, 3d, 260, 3d, 260F, 2d, 469, 469D, 2d, 469D, 558D, 588, 612, 812, (Q, A, V, C, 240)	500M	RI-953P	.92	62-105	.83	3E3023	.49
***************************************							

## **VOLUME CONTROL GUIDE**

### Volume, Tone, Sensitivity and Hum Controls

With the aid of you servicemen who have called to our attention errors in our former listings, we offer a more complete and accurate Guide. The Radolek Replacement Controls are made to our specifications by Centralab, Electrad, Carter, Clarostat, Stackpole and Frost.

Model Receiver	Resist. Ohms	Electrad Number	Your Price	Cen- tralab No.	Your Price	Radolek Control Number	Your Price
AUDIOLA RADIO CO. 4T31, 4T32, 5T31, 5T-Jr., 6T, 6T31, 6T-Jr., 7T31, 8T, 8T31, 9T45-31, 9T47-31, 10T31, 13T5, 23T5, 23T5-8W, 31, 31 Super.	10M 75M	RI-204 RI-202	\$0.59	99-006 70-202	\$0.83 .61	3E3024 3E3003	50.49
\$430, (Vol.) 889, 23-88, (Vol.)	500	R1-282	.59	70-204	.61		
31, 31 Super, 9T45-31, 10T31, (Tone) 5T-Jr., 6T31, 6T-Jr., (Tone) 30B, 7330, (Vol.) 2388, 23810, 23812, (Tone)	1 Meg 10M 2700 50M	RI-206 RI-240 RI-233 RI-205	.59 .59 .59	72-116 72-100 72-103 72-117	.61 .61 .61	3E3025 3E3004 3E3026 3E3022	.49 .49 .49
BELMONT RADIO CORP. 40A, 50C, (Vol.) 41, 42, 41A, 42A, 45DC, 46DC,	12M	RI-573	.59	52-205	.83	3E3027	.49
	10M	RI-202	.59	52-205	.83	3E3003	.49
(Vol.) 50, 51A, 52A, 53A, 54A, 51B, 52B, 53B, 54B, 51C, 52C, 53C, 54C, 51D, 52D, 53D, 54D, 61, 62, 63, 64, (Vol.) 525, (Vol.)	10M 10M 500M	RI-202 RI-202 RI-203	.59 .59	62-113 62-116 62-105	.83 .83 .83	3E3003 3E3003 3E3002	.49 .49 .49
110, (Vol.) 550, (Vol.) 18t, 600, (Vol.) 2d, 600, 625, (Vol.) 750, 1050, (Vol.) 50F, 70A, 71C, 100, (Vol.) 71C, (Tong)	1 Meg 50M	RI-206 RI-203	.59 .59	62-116 62-105	.83 .83	3E3002 3E3003	.49
1st. 600, (Vol.) 2d. 600, 625, (Vol.)	75M 500M 500M	RI-202 RI-203 RI-957	.59	52-202 62-105 72-105	.83 .61	3E3003 3E3002 3E3028	.49
750F, 70A, 71C, 100, (Vol.) 71C, (Tone)	75M 1 Meg	RI-202 RI-206	.59	52-202 72-116	.83	3E3003 3E3025	.49
BREMER-TULLY MFG. CO 6-40, 6-41, (Vol.) Counterphase 8, BT6, (Vol.) 7-70, 7-71, (Vol.) 8-20, 8-21, 8-22, (Vol.) 83A, (Vol.) 81, 82, (Vol.) 41, 21, 31, 81A, (Vol.) 8-81, 8-82, (Vol.)	25M 500M 10M 10M 10M 3M 25M 25M 25M 1000	RI-203 RI-203 RI-283 RI-283 RI-233 RI-642P RI-202 RI-233	.59 .59 .59 .59 .59 .59 .59	72-102 70-203 72-169 62-102 72-108 52-206 52-206 52-206	.61 .98 .83 .61 .83	3E3002 3E3002 3E3006 3E3006 3E3026 3E3026	.49 .49 .49 .49 .49
THE PARTY OF PARTY COPP		DT 401		70.100		252020	.49
BPR5, 1st. PR17-8, (Vol.) R1, 2KR, 2KR0, 3KR0, 3KR6, 3KR8, 5KR, 5KR0, 5KR6, (Vol.) 3NC8, 5NC8, 5NO, (Vol.)	2000	RI-401 RI-402	.79	72-100	.61	3E3029 3E3029	.49
3NC8, 5NC8, 5NO, (Vol.) B17, BPR5, 2d. PR17-8, (Vol.)	450 (2000 \ 60	RI-404 R-1824T	1.32	72-118	.61	3E3074	1.04
3NW8, (Sens.)	1200 2750	RI-276 RI-404	.59	72-107 72-108	.61	3E3026	.49
3NW8. (Vol.) 814, 821, 831, 881, 882, (Vol.) 814-25, 821-25, 881-25, 882-25,	3000 50M	RI-424P RI-208	1.32	62-108 72-103	.83	3E3012	.49
15B, (Tone) DC14, DC21, DC31, (Vol.)	4100	R1-234	.59	62-109	.83		
DC14, DC21, DC31, (Vol.) 11, 12, 16, 33, (Vol.) 10 Midget D15, D17, D18, D24	15M 4100	RI-365 RI-234	.79	52-205 . 55-004	.61	3E3031 3E3032	.49
D11, D12, D16, D17, D18, D24, D25, D33, (Tone)	20M	RI-280	.59	72-119	.61		
D11, D12, D16, D17, D18, D33, (Vol.) 17, 24, 25, 4A, 4PA, (Vol.) 11, 12, 16, 18, 33, (Tone) 14, 21, 31, 81, 82, (Vol.) 11, 12, 16, 33, (Vol.)	500M 500M 200M 25M 15M	RI-203 RI-203 RI-281 RI-280 RI-365	.59 .59 .59 .59	72-105 72-105 72-120 52-206 99-006	.61 .61 .83 .83	3E3002 3E3002	.49
CLAGO RADIO CO. 4131, 5134, 8235, 9342, (Vol.) 31 Mayflower, (Vol.) Cavaller Midget, (Vol.)	3000 500M 10M	RI-233 RI-203 RI-240	.59 .59 .59	72-108 62-106 62-114	.61 .83 .83	3E3026 3E3002 3E3004	.49
COLONIAL RADIO CORP. 25, 56, (Vol.) AC32, DC32, (Vol.)	500M 75M	RI-203	.59	62-105	.83	3E3002	.49
AC32, DC32, (Vol.) 44, 47, 48, 73, (Vol.)	10M 15M ±	R-1651T		25-417	1.71		
19 (7/61)	150BI 15M	RI-240	.59	99-006 62-115	.83	3E3004 3E3008	.49
46, (Vol.) 50, (Vol.) 52, (Vol.)	15M 15M	RI-201 RI-201	.59	99-006 72-115	.83	3E3008	.49
40, (Vol.) 50, (Vol.) 52, (Vol.) 62, 76, (Vol.) C399, C495, T345, T397, (Vol.) 51, 52, 56, 62, 69, 71, 76, (Tone)	15M 15M 500M	RI-201 RI-201 RI-203	.59 .59	79-006 99-006 62-105	.61 .83	3E3008 3E3008 3E3002	.49 .49
C399, C495, C595, C695, C995, T345, T397, (Tone) C595, C695, (Vol.) 129, (Vol.)	500M 1 Meg 725M	RI-203 RI-206 RI-792P	.59 .59 .92	72-105 72-116 72-116	.61 .61	3E3002 3E3025	.49
106, 106B, (Vol.)	500M 500M	R1-793 R1-794P	.66	72-106 72-106	.61		
150, (Vol.) 144, (Vol.) 173, (Vol.) 119, 128, (Vol.)	500M 500M 3000	RI-795P RI-796P RI-817P	.92 .92 .92	72-106 72-106 72-108	.61 .61	3E 3026	.49
COLUMBIA PHONO. CO. C1. C2, C3, C4, C5, C6, C7, 920, 930, (Vol.) 900, 901, 902, 930, 931, 950,	1 Meg.	RI-203	.59	72-116	.61	3E3002	.49
301, 300, (Fibile)	50M	RI-384	.66	72-117	.61		1
930 Combination, (Vol.) 950, (Vol.) Columbia Phone. — Con't on	25M next	RI-280	.59	75-525 72-100	1.71	3E3029	.49

New Standard Twin Replacement **Volume Controls** 

Two variable resistances on a common shaft completely insulated from each other and from the shaft and bushing. Many receivers giving troublesome operation with single controls may be improved considerably when a twin is used as described below:

74-601—For

TA-601—For use where the original control was in the C-bias circuit. Panel resistance 10,000 ohms tapered for antenna. Rear section 25,000 ohms tapered PRICE.

tenna. Rea for C-bias.

on Page 68).

for C-bias.

74-602—For use where the original was in the screen grid circuit. Panel resistance 10,000 ohms tapered for antenna. Rear section 50,000 ohms tapered as screen grid potentiameter. screen grid

### TAPER CURVE CHARTS

TAPER CURVE CHARTS

For Standard Centralab Radiohm Controls
Correct chole of Volume Control permits smooth, even change
of volume on any Radio Receiver;
Curvo 1—Uniform Voltage Divider or S-G Potentiometer
Curve 2—C-Bias Control where low portion is important
Curve 4—For both Antenna shunt and C-bias of 3 tubes
Curve 3—For Antenna and C-bias of 2 tubes
Curve 5—Audio Pot. or Tone Control; also AVC and QAVC
Curve 6—Input to Grid, Ant. Shunt, or 1st audio Tone Control.
NOTE: All Volume (ontrols are arranged to increase volume
with clockwise rotation. Refering to diagrams below: The
graphs given are arranged to indicate minimum volume at left
(Designated terminal "A" in diagrams on Page 68). The Graph
lines indicate the per cent of change of resistance for a given
amount of rotation of the control shaft. Curve i is uniform.
Curves 2 and 4 (L. H. taper) indicate volume controls used in
circuits in which volume is increased by decreasing resistance in
circuit. Curves 3, 5 and 6 (R. H. taper) indicate volume control used in circuit. In the diagrams the extreme right indicates maximum volume (designated terminal "C" in diagrams
on Page 68).

31ATURN 4 TURN 40 TURN 75% 50% 25% 312TURN INTURN 1/2TURN 6

Control Num- ber	Control Num- ber	Restst Ohms	Curve	Safe Max Vol- ume	Millian 90% Rot.	50% Rot.	Min. Vol- ume
62-118 62-107 62-101 62-108 62-109	72-118 72-107 72-101 72-108 72-109	500 1,000 2,000 3,000 4,000	1 1 1 1 1	70 50 50 50 50	70 50 40 35 35	60 40 25 20 18	60 40 25 20 18
62-110 62-114 62-113 52-205 62-115	72-110 72-114 72-113 70-205 72-115	5,000 10,000 10,000 10,000 15,000	1 1 3 4 3	50 35 20 40 20	35 25 14 30 12	15 10 7 13 6	15
99-006 62-119 62-111 52-206 62-103	79-006 72-119 72-111 70-206 72-103	15,000 20,000 25,000 25,000 50,000	4 3 1 4 1	40 18 30 30 20	30 10 15 18 10	12 5 7 4	
52-202 62-104 62-131 62-106 52-203	70-202 72-104 72-131 72-106 70-203	75,000 100,000 200,000 500,000 500,000	4 1 4 1 2	30 10 20 10 15	10 7 10 2 10	5 3 1 2	

### **Brunswick Replacement Volume Control**

Model 10 Midget

Special 4100 ohm replacement volume control. Identical value electrically and same overall size as original. Appearance may differ slightly.

Num-55-004 List, \$2.00. YOUR PRICE ...





### Senior Potentiometers and Gain Controls

Where accuracy of control is important the Senior Gain Control is superior for uniform volume attenuation because of its large size and the care used in manufacturing. The Bakelite Case is made tight against dust or hundrily and resistances are absolutely perunanent. Shaft and bushing insulated from all terminals. Furnished with two locknuts for mounting and with large black Bakelite knob. Gain controls are potentiometers especially tapered for uniform rolume attenuation of audio amplifier and may be calibrated in decibels by the user. Bakelite case 2¼"x½". Threaded bushing %"x½" long. Shaft ½"x½" long. **Potentiometers** 

### Gain Controls

List	Pr	lce,	- 1	3	.;	50			S	1	71	1
Y 0 U	R	PR	I C	E	,				•	-	71	1

Stock	Ohms.	Attenua-			
Number	Resist.	tion			
24-083	500,000	50 Db.			
24-084	250,000	50 Db.			
24-085	100,000	50 Db.			
24-086	500,000	30 Db.			

# 

above but with sistance taper.

IStock

Num.	Ohms	Num.	Ohms
24-108 24-110 24-111 24-112 24-023	2,000	24-050 24-100 24-200 24-500	50,000 100,000 200,000 500,000

### Giant Power Rheostat

50 Watt



Resistance Resistance
wire wound
on metal
frame insulated with
asbestos.
Capable of
operating at

high temperature without damage. Will dissipate up to 50 watts. All resistances have 3 potentiometer or rheostat. A convenient portable control for radio recevers, soldering irons, and other shop enulpment. Contact lever is connected electrically with mounting sleeve. Insulating washers for mounting on metal panel furnished. mounting 64-301

Stock Number	
18-025	
18-060	
18-151	
18-501 18-811	

tock umber	Ohms	
B-025 B-060	25 60	PRICE
8-151 8-501	150 500	S¶ 22
8-811 — 8-851	5,000	\$1.35

#### Centralab Straight Resistance Fader A straight



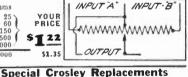
center tap-ped Poten-tiometer for simple pickup cir-cuits that do not re-quire con-stant im-pedance. Resistances given a rethose of 214"x12".

Mounts in

half. Case Shaft 4"x12" long.

sulated	bushing a	nd knob.
Stock Num.	Resist. Ohms.	List \$4.00 Your Price
64-305	100.000	Each.

50,000 25,000 **\$1.96** 

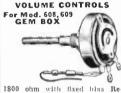


# Models 305, 315, 335, 345

Part W-7022. 3E3288 PRICE 75¢ MODEL 48 -Part W-22148-A

3E3290 73¢ YOUR PRICE.

MODELS 53, 54, 55, 56, 57, 58, Part W-20558. 3E3291 64¢ YOUR PRICE



1800 ohm with fixed bins Resistor. 114" shaft. YOUR PRICE..... **CROSLEY 122, 123** 



W-6596.



CROSLEY Model 26 Volume Control 125,000 ohm, long shaft Part W-20114

RI-504-YOUR PRICE .... 66¢ CROSLEY MODELS
705, 706, Show Box
Part Number W-6352.
3E3299—YOUR PRICE......



73¢



CROSLEY Model 804 3rd Jewel Box	13
10000 Ohm Volume.	
Control Part W-5669 R-296— YOUR 66¢	10

### RADOLEK REPLACEMENT

				1	4		_
Model Receiver	Resist. Ohms	Electrad Number	Your Price	Cen- tralab No.	Your Price	Radolek Control Number	Your
	5000 25M 4100 10500 250M	RI-278 RI-203 RI-277 RI-573 RI-208	\$0.59 .59 .59 .59 .59	70-204 72-102 62-110 52-205 72-121	50.61 .61 .83 .83	3E3033 3E3002 3E3027 3E3012	50.49 .49 .49
C80A, C80B, C800, (Tone) C90, (Tene) C90, (Vol.) C100, (Vol.) 120B, (Vol.)	50M 250M 200M 300M { 10M 10M	RI-205 RI-208 RI-281 RI 208 RI-772T	.59 .59 .59 .59	72-117 72-121 72-131 62-104	.61 .61 .61 .83	3E3022 3E3012 3E3012	.49
COLUMBIA RADIO CORP SG5, (Vol.) 1st. SG8, (Vol.) 2d. SG8, (Vol.) SG9, (Vol.)	75M 30M 6000 (1500 10M)	RI-202 RI-240 R-1827P	.59 .59 1.19	70-202 82-028 72-100	.61	3E3003 3E3004 3E3029	.45
SG9. (Tone) SG-10, (Vol.)	60M	R1-203 R1-205	.59	72-105 70-202	.61	3E3002 3E3022	.45
CROSLEY RADIO CORP. AC7, AC7C, (Fil.) 608, 609, Gembox, (Vol.) 804, 3d. Jewelbox, (Vol.) 610, (Vol.)	10M 1500	R1-282 R1-1723G R-296 R-1712	.59 .65 .66 .79	72-118 51-039 51-039	.61 .73 .73	3E3034 3E3035 3E3036	.56 .56
1st. 704, 1st. Jewelbox, (Vol.) 1st. 706, 1st. Showbox, (Vol.) 32, 40, 41, 41A, 42, 61, 62, 705	10M 10M	RI-348 RI-347	.66 .79	70-113 70-113	.98	3E3037 3E3038	.67
1st. 704, 1st. Jewelbox, (Vol.) 1st. 706, 1st. Showbox, (Vol.) 32, 40, 41, 41A, 42, 61, 62, 705 2d. 706, 2d. Showbox, (Vol.) 602, 2d. 704, 704A, 704B, 2d. Jewelbox, (Vol.)	350 350	R-1725 R-1839	.79	51-037 51-037 70-118	.73	3E3039 3E3040 3E3131	.65
Buddy, Chum, (Vol.)  20, 21, 22, 23, (Vol.)  26, (Vol.)  27, 28, (Vol.)  53, 53E, 53F, 53M, (Vol.)  54, 55, 56, 57, 57V, 58, (Vol.)  308, 318, 338, 348, (Vol.)	400	R1-274 R1-202 R1-504 R1-203 R1-242 R1-686 R-1687	.59 .66 .59 .59 .66	70-202 72-045 72-019 72-111 72-111 72-019	.61 .73 .73 .61 .61	3E3003 3E3042 3E3002 3E3043 3E3043 3E3044	.45 .56 .45 .45
1st. 408, 1st. 418, 1st. 428, 71A, 1st. 828, (Vol.) 2d. 408, 2d. 418, 2d. 428, 2d. 828, (Vol.) 1st. 48, 59, (Vol.) 2d. 48, (Vol.) 608, 618, 628, 638, (Vol.)	25M 15M 25M 40M 4500 40M 25M	R-1711 R-1711 RI-592G RI-205 RI-279	.66 .66 .79 .59	70-503 74-511 79-006 52-206 72-111	1.22 1.22 .61 .83 .61	3E3045 3E3045 3E3046 3E3022 3E3013	.56 .49 .49
74. (Vol.) 75. 76, 77A, 77B, 77L, 84C, 84D, (Vol.) 77-1, (Vol.) 90 Auto, 91 Auto, 92 Auto, (Vol.) 95 Auto, 96 Auto, Roamio, (Vol.)	300M 15M 60M	R1-205 R1-203 R1-592G R1-205 R1-203 RG-489	.59 .59 .79 .59 .59	72-103 72-047 79-006 72-117 72-104 62-132	.61 .73 .61 .61 .61	3E3022 3E3002 3E3046 3E3022 3E3002	.49 .49 .49 .49
120, (Vol.) 120, 121A, 121-1, 121-B, (Tone) 121A, (Vol.) 121-1, 121-B, (Vol.) 1st. 122, 8moker, (Vol.) 2d. 122, (Vol.)	10M 100M 650 650 2500 3000	R1-201 R1-242 R1-282 R1-282 R1-278 R1-278	.59 .59 .59 .59 .59	99-006 99-006 72-118 72-118 72-101 72-108	.83 .83 .61 .61 .61	3E3008 3E3069 3E3021 3E3021 3E3033 3E3033	.49 .49 .49 .49
122, 123, (Tone) 123, (Vol.) 124, (Vol.) 125, (Vol.) 124, 125, (Tone) 124-1, (Vol.)	40M 10M 10M 10M 25M 4500	FB-557 R1-240 R1-616P R1-616P FB-556 R1-616P	1.27 .59 .92 .92 1.27	72-117 52-205 52-205 52-205 72-117 72-110	.61 .83 .83 .83 .61	3E3047 3E3004 3E3031 3E3031 3E3047	.49 .49 .69 .69
124-1, (Tone) 126, (Vol.) 126, (Tone) 126-1, (Vol.) 126-1, 128, (Tone) 127, (Vol.)	80M 650 100M 650 300M 500M	R1-202 R1-282 FB-558 R1-282 R1-203 R1-203	.59 .59 1.27 .59 .59	72-123 72-055 72-122 72-055 62-121 62-121	.61 .73 .61 .73 .83	3E3003 3E3002 3E3002	.49
127-1, (Vol.) 127, (Tone) 127-1, 129, 129-1, 132-1, 136-1,	500M 1 Meg.	R1-203 R1-206	.59		.61 .61	3E3002 3E3025	.49
146, (Tone) 128, (Vol.) 131, (Vol.)	80M 1500 1500	FB-558 RI-232 RI-232	1.27 .59 .59	52-202 72-101 72-101	.83 .61 .61	3E3055 3E3055	.49
129, (Vol.) 133, (Vol.) 129-1, (Vol.) 132-1, 146, 150, (Q. A. V. C. AdJ 143-1, (Vol.) 133, 134, 134-1, 135, (Tone)	4500 15M 4500 400M 10M 400M	R1-278 R1-201 R1-278 R1-203 R1-240 R1-203	.59 .59 .59 .59 .59	72-115 72-115 72-115 72-121 2013901 62-105	.61 .61 .61 .61 .98 .83	3E3033 3E3008 3E3033 3E3002 3E3004 3E3002	.49 .49 .49 .49 .49
134, 134-1, 143-1, 146, 146-1, 150, 157, 158, 160, 164, 168D, 170, 171, (Tone) 133-1, 135, 141, 146-1, (Vol.) 132-1, 136-1, (Vol.)	80M 4500 500M 500M	FB-558 R1-278 RI-950T	1.27 .59 1.32	52-202 62-110	.83	3E3033	.49
137, (Vol.) 147, (Vol.) 148, (Vol.) 155, (Vol.) 156, (Vol.) 160, (Q. A. V. C. AdJ.)	500 4500 4600 4000 10M 5000	R1-282 R1-278 R1-278 R1-278 R1-240 R1-278	.59 .59 .59 .59 .59	72-118 62-110 62-110 62-110 52-205 70-202	.61 .83 .83 .83 .83	3E3033 3E3033 3E3033 3E3004	.49 .49 .49
154, (Vol.) 98 Auto, (Vol.) 99 Auto, (Vol.) 160, (Vol.) 163, 166, 176, (Vol.) 99 Auto, (Tone) 159, (Vol.) 169, (Vol.)	10M 3 Meg. 3 Meg. 3 Meg. 4800 80M 4600 10M	RI-283 RG-489 RG-489 RG-489 RI-234 FB-558 RI-278 RI-283	.59 .66 .66 .59 1.27 .59	62-100 62-132 62-131 72-132 62-110 70-202 52-204 52-205	.83 .83 .61 .83 .61	3E3006 3E3032 3E3033 3E3006	.49 .49 .49

## **VOLUME CONTROL GUIDE**

V V D V 1,12							_
Model Receiver	Resist. Ohms	Electrad Number	Your Price	Cen- tralab No.	Your Price	Radolek Control Number	Your Price
THOS. A. EDISON, INC. R200, (Vol.) C1, C2, M1, R1, R2, JC, JR,	50M	RI-205	\$0.59	70-203	\$0.61	3E3022	5.049
C1, C2, M1, R1, R2, JC, JR, SC, (Vol.) C1, C2, M1, R1, R2, JC, JR,	2000	R-1675	.66	26-021	.98	3E3048	.56
SC, (Regen.)	3000	R-1713	.66	24-008	.98	3E3049	.56
C4, R4, R5, (Vol.)	5M) 10M	R-1714TP	1.59	76-003	1.47		
R4-DC, R5-DC, (Vol.)	5M 10M	R-1714TP	1.59	76-003	1.47		
R6, R7, (Vol.) Abbey Jr., Abbey Bat., (Vol.) R6, R7, Early Model (Phono)	500M 500M	R1-203 R1-203	.59	74-512 70-203	1.47	3E3002 3E3002 3E3002	.49 .49 .49
ELECTRICAL RESEARCH	500M	R1-203	.59	64-306	1.47	3E3004	
LARS INC.	10M	RI-203	.59	72-100	.61 .61	3E3002 3E3008	.49
R1, (Vol.) 30, 31, 32, R2, R3, AR3, (Vol.) 74, 76, 210, (Vol.)	10M 10M 20M	RI-201 R-1714TP	1.59	72-115	1.22	3E3050	1.04
225, (Vol.)	10M 5M	R-1714TP	1.59	75-506	1.71	3E3050	1.24
71, 72, 73, 271, 271A, (Vol.)	10M) 5M	R-1714TP	1.59	75-506	1.71	3E3050	1.24
224AC, 224B, (Vol.) 35, 37, 38, 39, 225, 230, (Tone) 35, 37, 38, 39, 230, (Vol.) 75, 77, 231, (Vol.)	6000 1 Meg. 250M	RI-205 RI-206 RI-208	.59 .59	72-110 72-116 72-121	.61 .61	3E3022 3E3025 3E3012	.49 .49
	75M	R1-202	.59	70-202	.61	3E3003	
30, 81, 81P, 82, 82P, 245, 248, (Vol.) 81, 82, 245, (Tone) 30, 81P, 82P, 248, (Tone) 61, 62, 63, 250, (Vol.) 271A, 335, (Tone) 335, (Vol.) 336, (Vol.)	10M 500M	RI-240 RI-202	.59	52-205 72-105	.83	3E3004 3E3003	.49
81, 82, 245, (1016) 30, 81P, 82P, 248, (Tone) 81 62, 63 250, (Vol.)	500M 25M	RI-202 RI-240	.59	72-105 62-111	.61	3E3003 3E3004	.49
271 A. 335, (Tone) 335, (Vol.)	500M 10M	RI-203 RI-234	.59 .59	72-105 52-205	.61	3E3002 3E3032	.49
336, (Vol.)	10M 15M	RI-240 RI-201	.59	62-113	.83	3E3004 3E3008	.49
550, (Vol.) 263, (Vol.) 264C, (Vol.) 264, (Vol.) 268, (Vol.) 257, (Vol.)	10M 500M	RI-240 RI-203	.59	62-113 62-105	.83	3E3004 3E3002	.49
264, (Vol.) 268, (Vol.)	500M 10M	RI-203 RI-240	.59	62-105 62-113	.83	3E3002 3E3004	.49
620, 630, (Tone)	1 Meg. 50M	RI-206 RI-205 RI-203	.59	72-116	.61	3E3025 3E3022 3E3002	.49 .49 .49
602, (Vol.)	500M	K1-200	.59	2011045	1.22	3E3001	
<b>EVEREADY</b> 50, 52, 53, 54, (Vol.)	500M \ 10M	FB-478T	2.10	74-503	1.47	3E3051	1.24
FADA RADIO & ELECT.	-						
CORP. 10 10Z 11 11Z 30, 30Z, 31.							
31Z, D, (Vol.) 50. 50Z, 70, 70Z, 71, 72,	20M	R-147	.66	70-017	.98	3E3052	.56
31Z, D, (Vol.) 50, 50Z, 70, 70Z, 71, 72, 1st. E, (Vol.) 35B, 35BZ, 2d. K., (Vol.)	20M { 12M }	R-147	.66	70-059	1.47	3E3052	.56
40, P, (Vol.)	10M	RI-747T	1.30	74-513	1.41		
	1 Meg.	FB-570T RI-206	1.59	74-513 72-116	1.47	3E3025	.49
40, P. (Tone) 41, 42, 44, 46, 47, KA, (Vol.) 43, 761, 762, 764, 766, 767, KF, KG, (Vol.)	1 Meg.	RI-206	.59	72-116	.61	3E3025	.49
	3M/	RI-633T	1.59	74-541	1.47	-	
1st. 45, 1st. 45Z, 51, 251, KO, KO-220, KU, (Vol.) 2d. 45, 2d. 45Z, 53, 57, 57 Phono. 61, 63, 171, 173, 253, 257, 257 Phono, KOC, KOC-DC, KOC- 110, KOC-220, KX, (Vol.)	7500	RI-278	.59	62-114	.83	3E3033	.49
61, 63, 171, 173, 253, 257, 257 Phono, KOC, KOC-DC, KOC-				*0.005	,,	*52011	.49
	7500	RI-560	.59	52-205	.83	3E3011	
48, 48Z, 49, 49Z, 65, 65Z, KW, (Vol.) 48, 48Z, 49, 49Z, 65, 65Z,	500M	RI-203	.59	62-105	.83	3E3002	.49
48, 48Z, 49, 49Z, 65, 65Z, KW, (Vol.) 48, 48Z, 49, 49Z, 65, 65Z, KW, (Neon) 55, RG, (Vol.)	7500 25M	RI-560 RI-280	.59	72-114 62-100	.61	3E3011 3E3127	.49
122, 1113, (101.)	25M	RI-280	.59	72-111	.61	-	-
66, 73, 73Z, 74, 76, 83, 85, 85Z, 87, 88, 89, 512, 532, 572, KOF, KY, RA, RE, RE-110, RE-220, (Vol.)			1				
(Vol.) 74, 76, 78, 78Z, 79, 79Z, 83, 87,		RI-203	.59	72-116	.61	3E3002	.49
74, 76, 78, 78Z, 79, 79Z, 83, 87, 88, 89, 97, RA, RC, (Neon) 75, 77, 2d. E., (Vol.)	30M 25M	RI-241 RI-279	.59	72-111 79-019	.61	3E3043 3E3013	.49
78, 79, RC, (Vol.)	500M 1 Meg.	R-1848T	1.32	62-132	.83		
78, 79, RC, (Q. A. V. C. AdJ.) 81, 82, 84, 86, KB, (Vol.) 81, 82, 84, 86, KB, (Sens.)	10M 1 Meg.	RI-283 RI-206	.59	72-114 72-116	.61	3E3006 3E3025	.49
104, RK, RO, RV, Motoset,	6000	RI-278	.59	70-204	.61	3E3033	.49
(Vol.)	1 Meg	RI-821P	.92	62-115	.83	3E3004	.49
103, RL, Radalette, (Vol.) 93, 95, 106, 107, RN, RP, RY, RX, (Vol.)	1 Meg.		.92	72-116	.61	32300-	
101. 102. RW. (Vol.)	1 Meg.	RI-820P RI-822P	.92	72-116 72-116	.61	i	
	1 Meg 250M	RI-823P RI-825	.92	72-116 72-121	.61		
NA, (Tone) NF, (Tone) RU, (Tone)	150M 250M	R1-826 R1-827	.66	1010033 72-121	.73		
FEDERAL RADIO CORP.		1				-	
K10-25, K10-60, K40-25, K40-60, K41-25, K41-60, (Vol.)	750M 25M	RI-203	.59	72-116 74-514	1.47	3€3092 3€3053	
L, (Vol.)	30M	F		14-014	2.50	32333	

How to Select the Proper Attenuator
Resistance of "Pad" should equal Impedance of Circuit or Line.
Where possible use a "T" or Constant Imp. Fader type control
to maintain best audio tone quality. If tone is not Important
as in individual speaker control on a multi-speaker circuit, use
a combination "L" Pad. Straight Resistance Faders are used
with high impedance inputs such as radio or phono pickup

Constance Impedance "L" Pad



4-watt attenuator for individually con-Speakers operating from a central Wire wound. Bakelite case 31/2 impedance doon \$4.00

YOUR PRICE, Each Imped Ohms 10,000 Stock Num 96.003 06.003 5 000 500 200 96-007 96.006 06 005 50

Junior Twin "L" Pad-1 Watt

Stock No. Ohms List, \$3.00.
74-544 10,000 YOUR \$147
74-543 5,000 PRICE...... For individual control of magnetic speakers from centralized system. Provides smooth, individual volume control for each speaker. No switch Bushing diam.,  $\frac{3}{3} \times \frac{3}{3} = \frac{1}{3}$  m. Shaft diam.,  $\frac{3}{4} \times \frac{3}{3} = \frac{1}{3}$  Bakelite case clam.,  $\frac{3}{4} \times \frac{3}{3} \times \frac{3}{3} = \frac{1}{3}$  deep. Shaft and bushing insulated. With knob.



List price

\$7.00 VOLLE

PRICE

\$343 Regist

13c

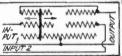
#### Constant Impedance Fader

83-

List price \$8.00 VALLE PRICE 5292

				.0
oek	Resist.		Resist.	Stock
im.	Ohms		Ohms	Num.
006	3,000	83-003	500	93-008
001		83-004	200	93-001
002		83-005	50	93-002
ed to	fade f	rom film	to film,	93-003

Usi used to take from film to film, pickup to pickup, microphone to microphone or line to line. Bakelite case 3\%"x1\%" deep, single or three hole Mig. single or With knob





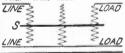
Doolat

Constant Impedance

Num Ohms 5,000 1,500 500 200 93-005 50 15 93-006 network of S

A network of 3 Provides smooth while maintaining pedance. Bakelite 1%" deep, single Mtg. With knob. attenuation constant 1msingle or three hole

Stock



### Dial Plate and Knob for Above Controls



For use with constant Impedance or gain controls. Heavy brass silver finish with etched black callbrations, 0-10. Dlam. 3". Use 60-60-490-255 rotation for 1-watt "L" Pad 60-489-325 rotation, for all others

List, 50c. 25¢

YOUR PRICE, EACH .....

66-487 Black Pointer Kneb, EACH. EDISON Models C1, C2, M1-M5, M6, R1, R11, JC JR, SC Abbey Junior. Regener-ative Volume Control. MODELS R6, R7 Phonograph 64-306-List. \$3.00.

24-008-List, \$2.00. YOUR PRICE. 98¢ EDISON Models C4, R4, R5, R6, R7 Twin Vol-ume Control.

74-512-List, \$3.00. YOUR \$147 PRICE

EVEREADY 50 SERIES Twin Volume Control 74-503-List, \$3.00. YOUR \$147

\$147 PRICE

ERLA MODELS 74, 76, 210 10,000 - 20,000 Twin Volume Control 74-601— List, \$2.50. YOUR \$ 1 22 PRICE

ERLA Models 71, 72, 73, 225 271, 271A Twin Volume 75-506-

List, \$3.50. YOUR \$171

FADA MODELS 10, 10Z, 11, 11Z, 30, 30Z, 50, 50Z, 70, 70Z, 71, 72, D, 1st E

20,000 ohm Volume Control-long shaft. R147-List, \$1.25.

66¢

YOUR PRICE ....

### Special RCA Reference Chart Of General Electric, Graybar and Westinghouse Receivers Built By RCA Victor

You can easily find the correct control for any General Electric. Graybar or Westinghouse receiver. Locate on this chart the model number of the equivalent RCA Victor receiver and refer

General Electric Model Num.	Graybar Model Number	Westinghouse Model Number	Identical to R.C.AVicto Model Num
K50, K51 K50P, K51P K60 K65 K54P 842B H32			R28 R28P R37 R38 RE40 R43 R50
H72 J72 J82 J86 J100 J105	GB100 GT8-56 GT8-69 GT10-69 GT10-88		R55 RAE59 R70 R71 R72 R74 R76
J107 J125 J109 K106 K107 A90 A60 B40 A81	GT10-99		R77 R78 R1281 R90 R90P M32 M34 P31
T41 H31 H51	GB 311 GB 500 GB 555 GB 678 GB 340 GB 600 GB 700 GB 770	WR 4	33 44 46 48 62 66 80 82
H71 K43 K52, K53 K63 K64 K80, K85 B81, B86 K66	GB 900	WR 6 WR 7	86 100 110 120 121 140 142B 220
K126 K48 K58 K79 J70 T12 T12E	GT 7 GB 4	WR 9	280 300 310 331 T5 R4 R5 R5X
J75 822 822A J80 842 8132	GG15 GB8 GB8A GT8	WR14 WR10 WR10A	R6 R7 R7A R8 R9
K62 J85 BX K40A L50, L51 K40	GB989 GC14	WR12 WR15	R10 R11 R12 R17M R18W R22 R27

### Electrad Model "B" Super Tonatrol

Electrad Model "B" Super Total Capacity 3 Watts

Variable Resistance units for use as volume controls in radio receivers, attenuators in transmitters, and regeneration controls for short wave receivers. The resistance element consists of a carbonaceaous material fused to the surface of a vitreous enamel coated metal strip. Enclosed in a moulded bakelite case. Resistance is varied by means of a revolving self-aligning phosphor spring. A smooth, stepless flow of current is insured. Unit was extra lone life with practically no variation in resistance value. ("ase is "diameter. Depth shaft is &" diameter. 13" long. Mount in single 3%" hole on any panel not over \$\frac{\pi}{\pi}\$ thick, potentiometer type and have no switches.

Single Unit Super Tonatro.

	Single Uni	t Super	Tonatrols
<b>tock</b>	Resistance	•	
Vumber	Ohmst	Taner	

FB551	500	Uniform	List Price, Each
FB552	1.000	**	\$2.40
FB553	2.000	4.6	
FB554	5.000		YOUR NET
FB555	10,000	Reverse	PRICE
FB556	25.000		
FB557	50,000	**	ST 41
FB558	100,000	Uniform	

Dual Unit Super Tonatrols
Case Diameter 2"; Depth 1&"; Shaft 24"

FB228T. Panel unit 50,000 ohms for antenna control. Rear unit 50,000 ohms for sereen control. List Price, 33.00.
YOUR PRICE. \$1.75

FB478T. Panel unit 15,000 ohms for antenna control. Rear unit 75,000 ohms for cathode

FB4797. Panel unit 15,000 olums for antenna control. Rear unit 50,000 olums for screen-grid control. List Price, \$4.00. YOUR PRICE, EACH .....

\$2.35

All units are

### RADOLEK REPLACEMENT

Model Receiver	Resist. Ohms	Electrad Number	Your Price	Cen- tralab No.	Your Price	Radolek Control Number	Your
FREED-EISEMANN CO. NR55DC, NR56DC, NR60, NR- 60DC, NR70, NR78DC, NR79-							
60DC, NR70, NR78DC, NR79- DC, (Vol.) NR56, NR56, (Vol.)	250M 250M	RI-201	\$0.59	72-116	\$0.61	3E3008	\$0.49
NR908, (Vol.)	10M 50M	R-1748T	1.32	74-506	1.47		
NR95, (Vol.)	50M 50M	R-1833TG RI-202	1.45	74-506 70-202	1.47	3E3003	.45
NR80, NR80DC, NR85, NR85DC, (Vol. Strip) 51DC, 58, (Vol.) 58, (Tone) 54, 56, 59, 72, 74, 90, 91DC, 92, MB5, MB7, MB9, (Vol.) 98, (Vol.)	1300 20M 50M	R-1891 R1-279 FB-557	.24 .59 1.27	72-119 72-117	.61	3E3013 3E3047	.49
54, 56, 59, 72, 74, 90, 91DC, 92, MB5, MB7, MB9, (Vol.) 98, (Vol.)	10M 15M	RI-204 R1-201	.59	72-114 72-115	.61 .61	3E3024 3E3008	.49
98, (Tone)  JESSE FRENCH & SONS	500M	R1-203	.59	72-105	.61	3E3002	.49
PIANO CO. ACS, 5093, H2DC, (Vol.)	2000	RI-201	.59	72-103	.61	3E3008	.49
G-Jr., H2Jr., H2Pent., (Vol.)	2000 10M 10M	RI-1745TP RI-240	1.59	75-507 62-113	1.71	3E3054 3E3004	1.24
H2 Special, (Vol.) H2Jr., S2, (Tone)	5000 1 Meg.	RI-278 RI-206	.59	72-110 72-116	.61	3E3033	.49
H2Jr., H2Pent., (Vol.) H2 Special, (Vol.) H2Jr., S2, (Tone) U1, (Vol.) U1, (Tone) 87, (Vol.)	2000 50M 75M	R1-232 R1-205 R1-202	.59 .59	62-101 72-117 70-202	.83 .61	3E3055 3E3003	.49
CHARLES FRESHMAN CO.						323003	.43
INC. G, 2H, N, Q15, Q16, (Vol.) 2N, 3Q15, 3Q16, QD168, (Vol.) M, (Vol.)	2000 2000	RI-201 RI-201	.59	72-101 41-200	.61 .73	3E3008	.49
G60, H, K, K608, L, LS, (Vol.)	2000 500 M	R1-201 R1-201 R1-203	.59	72-105 72-105	.61	3E3008 3E3002	.49
21, 22, (Vol.) 21DC, 24DC, 31DC, 33DC, (Vol.)	10M 250M 250M			25-416 72-121	1.47		
31, 32, 33, (Vol.) 31, 32, 41, (Vol.)	50M 50M	R-1833TG	1.45				
GALVIN MEG CO	75M			70-202	.61		
Motorola 5, (Vol.) 5T71, (Vol.) 6T12PL, Motorola 6, (Vol.) 7T38, (Vol.)	15M 20M 300M			99-006 62-119	.83	3E3147 3E3147	.59
7 I 38A, 7 I 47A, 88, 61, (VOI)	100M 500M	R1-242 R1-203	.59	70-036 72-104 62-105	.98 .61 .83	3E3147 3E3069 3E3002	.49 .49
S10, Lazy Boy. (Vol.) 44, 77, S6, (Vol.)	500M 500M	RI-958P RI-959P	.92 1.05	62-105 62-105	.83	3E3023 3E3023	.49
GENERAL MOTORS RADIO CORP.							
AC5, (Bias) AC6, AC6Jr., 32DC6, 110DC6,	400	RI-274	.59	72-118	.61	3E3131	.49
AC6, AC6Jr., 32DC6, 110DC6, AC6-80, 5051 M. G. Set, 5052, 5057, 5060, 5065, 5066, (Vol.) 25, 26, 27, 28, 43, 48, A5003, A5010, 5069, 5091, (Vol.)	20M	RI-279	.59	72-111	.61	3E3013	.49
	15M	R1-201	.59	72-100	.61	3E3008	.49
AC8, 5077, 5080, (Vol.) 93, 94, A5005, A5020, 120, 130, 140, (Vol.)	15M 50M 4000	R1-201 R1-205	.59	72-102 72-103	.61 .61	3E3008 3E3022	.49
120, 130, 140, 150, 160, 170, A Chas., B Chas., E Chas., (Tone)	15M 1 Meg	FB-567T RI-206	2.10	74-602 72-116	.61	252025	
110 180 100 314 310						3E3025	.49
Little General, (Tone) 110, 180, 190, (Vol.)	15M 15M 5000	R-1387	.59	72-114 74-602	.61 1.22	3E3071	.49
MA, Little General, (Vol.)	15M 5000	i i		62-117	.83		
216, 217, 219, 81A, 81B, 85A, 85B, (Vot.)	50M	RI-IIIP	1.05	62-103	.83		Commission
251, S2A, S2B, (Vol.) 251, S2A, S2B, (Vol.) 252, S3A, S3B, (Vol.) 253, 254, 255, 256, 257, 258, (Vol.)	10M 10M	RI-156P RI-156P	1.05	52-205 62-114	.83	3E3056 3E3056	.89
255, 254, 255, 256, 257, 258, (Vol.) 290, 291, S4A, S4B, (Vol.)	10M 200M	RI-156P RI-132P	1.05	62-103 62-114	.83	3E3056 3E3056	.89
200, 201, E2, (Vol.) 211, 89A, 89B, (Vol.) 220, 810A, 810B, (Vol.) 281, R1A, (Vol.)	50 M 45 M	R1-205 R1-236P	.59 1.05	62-103 62-103	.83	3E3022 3E3022	.49
	12500 10M 50	R1-255P	1.05	62-115 74-552	1.47	3E3057	.49
250, (Vol.)	50M	RI-111P	1.05	62-117	.83		
GRIGSBY-GRUNOW CO. 70, 7013, 71, 72, (Vol.) 180, 181, (Vol.)	10M	R1-240	.59	72-180	.73	3E3004	.49
180, 181, (Vol.) 100, 101, (Vol.)	75M 30M	R-1809T	1.32	74-561	1.47		
90, 90B, 91, 92, 93, (Vol.)	75M 30M 75M	R-1809T R1-202	1.32	74-561 70-063	1.47	3E3003	.49
90, 90B, 91, 92, 93, 100, 100B, 101, 102, 103, (Equalizer)	500 to 2500	R-1688	.79	78-007	.98	3E3058	.67
ROOB, 102, 103, (Vol.)	75M 500M	RI-715T	1.32	74-562	1.22	323030	.07
130, 130A, 131, 132, (Vel.) 230, 233, (Vel.)	1260 1260 500M	RI-438 RI-739T	1.32	72-181 74-563	1.22		
29 21, 22, 23, (Vol.) 30, 31, (Vol.)	4800	R-1513PG	.92	52-205	.83	3E3031	.69
50, 51, 52, (Vol.)	550 10M 645	R-1741TP	1.59	75-537	1.47		
60, 61, 62, 160, 163, (Vol.)	10M 900	R-1810T	1.19	74-523	1.22	3E3059	.97
15, 150, 151, 153, 155, 156, Castlewood, Ellswood, Haven- wood, Sherwood, (Vol.)	115001 +264Bi	RI-441 RI-440PG	1.19	72-073 55-010	.73	3E3060	20
	on nex	t page	4.47	010-010	.00	3E3000	.72

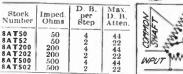
## VOLUME CONTROL CUIDE

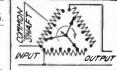
VOLUME	C	111	K'	OT	GI		上
Model Receiver	Resist. Ohms	Electrad Number	Your Price	Cen- tralab No.	Your Price	Radolek Control Number	Your Price
GRIGSBY-GRUNOW CO. 15B, 154, Fyfewood, (Vol.) 15, 55, 56, 57, 58, 150, 151, 153, 155, 156, Ardmore, Berkshire, Castlewood, Ellswood, Haven-	Con't						
wood, Sherwood, Viking, (Tone) 15B, 154, Fyfewood, (Tone) 25, 251, 253, 254, 1st. Brent- wood, 1st. Brucewood, 1st. Cheltenwood, (Vol.)	50M 50M (6500 +)		\$0.66	41-060 41-060	\$0.73 .73	3E3061 3E3061	50.56 .56
150, 155, 160, 163, Castlewood, (Phono.)	160Bi	RI-444PG RI-439	1.19	55-014 72-117	.88	3E3062	.72
25, 251, 253, 254, 1st. Brent- wood, 1st. Brucewood, 1st. Chettonwood, (Tone)	85M						
25B, 251B, 253B, 254B, 2d. Brentwood, 2d. Brucewood, 2d. Cheltonwood, (Vol.) 25B, 251B, 233B, 254B, 2d. Brentwood, 2d. Brucewood, 2d.	6000	RI-240P	.79	62-110	.83	3E3065	.72
Cheltonwood, (Tone)	85M	RI-240P	.79	55-014	.88	3E3065	.72
35, 351, 353, 1st. Abbeywood, 1st. Collingwood, (Vol.) 35, 351, 353, 1st. Abbeywood, 1st. Collingwood, (Tone) 55, 56, 57, 58, Ardmore, Berkshire, Viking, (Vol.)	6000 10M (11500+) 264B1	RI-278P FB-555	1.27	62-110 72-110 55-010	.83 .61	3E3066	.69
110 Auto, (Vol.) 111 Ford Auto, 114 Auto, (Vol.) 66 Auto, (Vol.)	100 M 250 M 200 M	RI-242 RI-551 RI-903P	.59 .66	72-088 72-121 62-121	.73	3E3067	.97
116 Auto, 118A Auto, (Vol.) 120, 121, (Vol.)	250M {10M} 10M	RI-551 R-1880T	1.32	62-121 74-548	.83 .83	3E3067 3E3007	.56 1.04
120B, 123, (Vol.) 200, 201, 203, 204, Explorer	{10M }	R-1880T	1.32	74-548	1.22	3E3007	1.04
200, 201, 203, 204, Explorer, Fairfax, Sheffield, (Vol.) 210, 211, 214, 215, Croydon Stratford, Whitehall, (Vol.)	500M 200M	RI-549 RI-551	.66	72-105 72-121	.61 .61	3E3028	.49
220, 221, 223, 2d. Abbeywood, 2d. Collingwood, (Vol.) 290, 291, 293, 294, 300, 300A, 303, 304, 307, 310A, 310B, 311, 314, 315, 320, 324, 330, 331, 336, 77, Adams, Madison, Monroe, Vol.	200M	RI-551	.66	72-121	.61	3E3067	.49
(, 0)	250M	RI-651	.66	72-121	.61	3E3067	.49
290, 291, 293, 294, Adams, Madson, Monroe, (Q.A.V.C. Adj.) 300, 300A, 303, 304, 307, 320, 324, (Q.A.V.C. Adj.)	6000 20M	RI-278P RI-279	.79	72-110 72-119	.61 .61	3E3066 3E3013	.49
300, 300A, 303, 304, 307, 320, 324, 330, 331, 336, 77, (Tone)	250M	RI-551	.66	62-121	.83	3E3067	.49
340, 344, 360, 363, 390, 393, Vol.) 340, 344, 360, 363, 390, 393, Tone)	200M	RI-551	.66	72-121	.61	3E3067	.49
Tone) 40, 344, 360, 363, (Q.A.V.C.	250M 20M	RI-551 RI-27	.66	62-121 72-119	.83	3E3067 3E3013	.49
80, 381, (Vol.)	20M X 250Bi 50M X 250Bi	RI-904PG RI-205	.92	37-006 62-103	.98	3E3022	.49
00, 400A, 411, 411A, 413, 412A, Vol.)	20MX 250Bl	RI-904PG	.92	37-006	.98	3E3022	.43
4, 49, 194, 440, (Vol.) 7, 68, 69, 161, 196, 460, 461, 63, 666, 776, 886, Century 6, daster 6, Lido, Park Ave., Ritz,	7500	RI-900PG	.92	62-114	.83		
Riviera, (Vol.)  7, 68, 69, 161, 196, 460, 461, 63, 666, 776, 886, Century 6, daster 6, Lido, Park Ave., Ritz, Diviera, Carrotte	200M	RI-889	.66	72-121	.61		
siviera, (Tone)	250M	RI-551	.66	62-121	.83	3E3067	.49
90, 491, 493, (Vol.) 90, 491, 492, (Tone) 5, 59, 75, 195, 500, 560, 566	200M 250M	R1-902 R1-551	.66	72-121 62-121	.61	3E3067	.49
90, 491, 493, (Vol.) 90, 491, 492, (Tone) 5, 59, 75, 195, 500, 560, 566, 99, (Vol.) 5, 86, 800, 998, (Vol.) 5, 86, 800, 998, (Tone)	200M 200M 250M	RI-901P RI-902 RI-551	.92 .66 .66	62-121 72-121 62-121	.83 .61 .83	3E3068 3E3067	.69 .49
HOWARD RADIO CO. 35DC., (Vol.) 10, SH245, Green Diamond 8.	5000	RI-278	.59	70-204	.61		
Vol.) GA, SGC, (Vol.)	50M 6000 50M	R-179	.66	72-117 74-601	.61 1.22		
GB, Miniature, (Vol.) 5, 35-47, 40, 40-47, EX, H, I-47, (Vol.)	10M 10M	RI-201 RI-278	.59	70-205 70-205	.61	3E3008	.49
5, 35-47, 40, 40-47, EX, H, 1-47, (Vol.) 5, 35-47, 40, 40-47, 400, 420, 1, 11-47, K. L. M, (Tone) 5, 60, AVH, EX, (Tone) 5, 45, 60, AVH, AVO, (Vol.) 0, 25, 30, 32, (Vol.) 0, T, (Vol.) 20, L, M, (Vol.) 00, K, (Vol.) 5, AVO, (Tone) 3, (Vol.)	1 Meg. 500M 500M 9M 10M 500M	RI-206 RI-203 RI-203 RI-201 RI-201 RI-203 RI-242	.59 .59 .59 .59 .59	62-116 62-105 62-105 72-113 62-114 72-106 72-104	.83 .61 .83 .61	3E3002 3E3002 3E3008 3E3008 3E3002 3E3069	.49 .49 .49 .49 .49
00, 11, (101.)	100M						
INTERNAT'L KADETTE	500M 10M 8020 X	RI-203 RI-201	.59	72-106 62-113	.61	3E3002 3E3008	.49

### New ELECTRAD Tapped "T" Attenuator Constant Impedance

New high quality T Pad utilizing wire wound non-inductive resistors with a triple gang tap-switch of new design with self cleaning contacts. Absolute quiet attenuation is obtainable in 11 steps. Ideal for high quality P. A. and broadcast application. 8 watt capacity.

List Price, \$12.50. PRICE, EACH.....





**ELECTRAD Model U Constant** Impedance Volume Control

Simple inexpensive method for controlling volume of electric pickup, individual control of magnetic speakers or headphones operating on the same line where impedance is required. Case 17a" diam. relatively constant impedance is required. Case 176" \$\frac{1}{2}\"\ \text{depth.} \quad \text{" shaft 2" long. Single \( \frac{1}{2}\) \" mounting. List, \$2.00 YOUR PRICE, Ohms Line Imped.

		Ro	valt	V "T" E
$\stackrel{\sim}{=}$	_	_	9	U10000
3	⋛▔	***	S	U500 U4000
77	₹.	*	120	Stock Number

500 10000

EACH ST 18

### Pad Attenuator

Constant impedance volume control for individual control of 2 or more micro-phones, speakers, or electric pick-ups without disturbing the impedance of the input system. Case diam. 1½" depth 1½" shaft 1½" lang Slinte 34" lang St

long. Sing	tle %" hole.		A. ( P. ( ) A. ( )
Stock Number	Impedance in Ohms	List Price Each \$3.50	
TR-15 TR-200 TR-500	15 200	YOUR	UNE 3
TR-3000 TR-5000	500 3000 5000	\$206	5 3 5

### 5000 Royalty "L" Pad Attenuator

Constant impedance volume control for variable series and shunt resistor. For individual control of one or more units on a common line maintaining relatively constant impedance.

Stock Number	Impedance   in Ohms	Price 52.50	600
LR-15 LR-200 LR-500 LR-3000 LR-5000	15 200 500 3000 5000	YOUR PRICE \$147	WPUT WWW

**Exact Replacements for Majestic** 

Majestic Models 15, 15B, 150, 151, 153 154, 155, 156, Castlewood, Ellswood, Fyfe-wood, Havenwood, Sherwood, Vel-ume Control 11,500 ohms plus 264 ohm bias resistor with witch. 55-010. List, \$1.80. 88¢

YOUR PRICE ...... Volume Control—Models 25, 251, 253, 254.

1st Models Brentwood, Brucewood, Cheltenwood 154, Fyfewood, 10,000 ohm control with switch, 55-014. List, \$1.80. YOUR PRICE

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YOUR PRICE Majestie Models 50, 51, 52. Majestie control.



World Radio Histor

Models 90, 90B, 91, 92, 93, 100. 100B, 101, 102, 103. Equalizer-5000 ohms. R-1688. List. \$1.50

R1810T. List, \$2.50. YOUR PRICE

\$1.32 PRICE 79¢

88¢

# Volume Control Hook-up Diagrams Cathode Bias Rheostat

Plate Voltage Rheostat Diagram 6 Diagram 5 Diagram 4 Taper I or 6

Cathode Biss

Potentiometer

Diagram 12 Tuper 6

A. V. C.

Taper 6 Grid Tone

Diagram 18

nnensating

Diagram.

A' Taper 5

for A, B, C

Taper 6

**Controls** 

Diagram 7
Taper 3
I or 2 Tubes
Taper 4
Over 2 Tubes Diagram 8 A Antenn Antenna Shunt Cathode Bias Potentiumeter

Diagram 11 Toper 1 Plate A Bleeder

Potentiometer

Tone

Diagram 14 Diode A. F. Output Potentiometer

Taper 1 Plate Circuit Grid Bias Potentiamete

Diagram 19 Taper 4 Taper 3 Dual Antent

Diagram 20 Taper 4 for A, B, C Taper 1 for A',B', C' Dual Antenna Shunt and

See page 63 for volume control taper curve charts Genuine PHILCO Replacement Volume

Phileo Model Number	Stock Number	Dealers Net Price	Philco Model Number	Stock Number	Deal's Net Price
3 (Trans.) 6 (Trans.) 7 (Trans.) 9 (Trans.) 12 (Trans.)	L-4463 L-7525 L-6109 L-7525 L-7525 L-8054	\$1.06 1.06 1.06 1.06 1.06	65 70 70 (AVC) 71 76 77	L-3528 L-5039 L-6015 L-6499 L-3879 L-4094	\$0.71 1.06 .59 .59 .59
15 19 20 21 30	L-8054 L-7050 L-33-5000 L-4094 L-4094 L-4093	.88 .59 .85 1.06 1.06	80 81 86 87 89 90 (2-45)	L-33-5005 L-33-5002 L-3076 L-3076 L-8003 L-5039	.85 .59 .82 .82 .85
35 (Batt.) 37 (Batt.) 40 (D. C.) 41 (D. C.) 42 (D. C.) 43	L-5317 L-7239 L-4056 L-4094 L-4094 L-6892	1.06 1.06 .59 1.06 1.06	90 (1-47) 90 (2-47) 91 95 96	L-5724 L-6015 L-8054* L-7049 L-3790 L-4093	.59 .59 .88 .59 .91
46 (D. C.) 47 (D. C.) 48 (D. C.) 50 51 52 53	L-4141 L-6499 L-5839 L-5232 L-5839 L-5839 L-33-5001	1.06 .59 .59 1.06 .59 .59	111 112 (2-45) 112 (2-47) 470 490 511 *Used in mo	L-4093 L-4093 L-4093 L-5039 L-5366 L-3076 odels with Bation.	.82 .82 1.06 .73 .82

**Special Philco Replacements** For Models 20, 20A, 21, 220, 40DC, 41DC, 42DC, 77, 77A. Phileo Part No, 4094. SL4094-List. \$1.25. YOUR PRICE ... 73¢

> Phileo Models 70, 70A, 270A, 570, 90 (2-45), 90A (2-45), (2-45), 90 470, 470A.

SL5039-Philco Part No. 5039. List. \$1.50. YOUR PRICE .....

## RADOLEK REPLACEMENT

RADULER	,				-		_
Model Receiver	Resist. Ohms	Electrad Number	Your Price	Cen- tralab No.	Your Price	Radolek Control Number	Your Price
INTERNAT'L KADETTE — J. JS. (Tone) KS. (Vol.) KS. (Tone) Kidette, (Vol.)	Con't 100M 8000 10M 200M	RI-242 RI-560 RI-240 RI-281	\$0.59 .59 .59	72-122 72-114 72-100 72-131	\$0.61 .61 .61	3E3069 3E3011 3E3004	\$0.49 .49 .49
Kadette Jr., (Vol.)  AW55, (Vol.)  A, B, (Vol.)  A, B, (Tone)  T, (Vol.)	2 Meg. 15M 10M 20M 15M	RG-489 RI-201 RI-798P RI-799 RI-201	.66 .59 .92 .66	62-132 99-106 62-113 72-119 99-006	.83 .83 .83 .61	3E3008	.48
KOLSTER K42, K43, K44, K45	( 25M) 10M	RI-67OT	1.32	76-006	1.47	3E3070	1.12
MONTGOMERY WARD							
& CO. 26W, 26WX, 27W, 27WX, 29W, 32W, 1500, 14000, 15000, 62000, 62-030, 62-232, Cavailer, Colle- glan, Commander, Lafayette, Troubadour, (Vol.)	8000	R1-240	.59	62-114	.83	3E3004	.49
1800, 3035, 3037, 3065, 3067, 62- 080. 62-070, Challanger, Jr., Coronado, Cortez, Princess, (Vol.) 27W, 1500, 15000, Collegian,	8000 50M	RI-240 RI-205	.59	79-006 72-103	.61	3E3004 3E3022	.49
26 W. 26 W.X. 29 W. 29 W.X. 32 W. 3035, 3037, 3065, 3067, 62-030, 62-232, Cavaller, Commander, Coronado, Cortez, Lafayette, Troubadour, (Tone) 62-040, 62-181, Commodore,	500M	RI-203	.59	72-105 62-108	.61	3E3002 3E3026	.49
Sovereign, (Vol.) 181, 187, (Vol.) 181, 1872, 1562, 11000, 62-020, Challanger, (Vol.) 2955, 2955X, 2957, 2957X, Fantusy, Solo, (Vol.) 81, 811X, 1111, 1111X, 62-1611, 62-1711, (Vol.)	2500 2500 11500 { 15M 11500	RI-233 RI-278 RI-240 RI-573 RI-202	.59 .59 .59	52-204 79-006 74-602 99-006	.83 .61 1.22	3E3033 3E3004 3E3027 3E3003	.49 .49 .49
1611, 62-1711, (Vol.) 49, 811, 811X, 181, 187, 1111, 1111X, 1522, 1562, 1122, 2955, 2955X, 2957, 2957X, 62-040, 62-055, 62-181	7000	RI-206	.59	72-116		3E3205	.49
49, 1922, 62-055, (Vol.) 1238, 1355, 62-1838, 62-1955, Minstrel, Recital, (Vol.)	10M 1 Meg.	RI-240 RI-206	.59	52-205 62-116		3E3004 3E3025	.49
500, 2800, 2822, 2827, 2895, 2897 10000, Balboa, DeSota, Dicta- tor, Serenader, (Vol.)	400	RI-274	.59	72-118	.61	3E3131	.49
2822, 2827, 2895, 2897, Balboa, DeSota, Minstrel, (Tone) 1st. 2622, 1st. 2655, 1st. 2775, 1st. AF10, (Vol.) 2d. 2622, 2d. 2655, 2d. 2775, 2d. AF10, (Vol.)		RI-281 RI-240	.59		.83	3E3004	.49
62-11, 62-12, 62-14, 62-19, 62- 27, Grenadler, Recltal, (Vol.) 62-20, 62-25, 62-26, 62-26X, (Vol.) 62-21, 62-22, 62-30, (Vol.)	5000 300 500M	RI-234 RI-274 RI-203	.55	Al.			
62-11, 62-12, 62-14, 62-19, 62-20, 62-21, 62-22, 62-25, 62-26, 62-26, 62-27, 62-30, 1238, 1355, 62-1838, 62-1955, Grenadier, Recital, (Tone)	150M	R1-281	.59	72-13	.61		
1st. 11-12, 62-7, 62-8, 62-9, 1st 62-29, (Vol.) 1st. 11-12, 1st. 62-29, (Tone) 2d. 11-12, 2d. 62-29, (Vol.) 2d. 11-12, 2d. 62-29, (Tone)	15M 200M 500M 20M	RI-208 RI-203	.5:	9 72-13 9 62-10	5 .63	3 E 301	2 .4
13, 15, 16, 16X, 17, 18, 18X, (Vol.) (2-010, (Vol.) 62-38, 62-40, 62-50, (Yol.) 62-38, 82-40, 62-50, (Tone) Auto Radio Super 6, (Vol.) 62-7, 62-8, (Tone) 4G, 20W, 26P, 26PX, (Vol.)	3000 25M 1 Meg 200M 500M 25M 10M	RI-206 RI-208 RI-203 RI-280	.5 .5 .5 .5 .5	9 62-13 9 62-11 9 72-13 9 72-10 9 70-20	3 .8 6 .8 1 .6 5 .6	3 3E301 3 3E302 1 3E301 1 3E300	3 .4 5 .4 2 .4 2 .4
PHILCO RADIO & TELE VISION CO. 3, 1st. Transitone Auto, (Vol.) 5, 2d. Transitone Auto, (Vol.) 6, 9, 3d. & 6th. Transitone Auto	500N	1 R-1664	.5	9 72-10	0 .6	1 3E302	2 .4
(Vol.) 7, 4th. Transitone Auto, (Vol.)		1 RI-242	5	72-12			-
8, 12, 5th. & 8th. Transitone Auto, (Vol.) 10, 7th. Transitone Auto, (Vol.) 1st. 14, 14-126, 14-226, 141.ZV, 15, 15A, 23X, 1st. 91, 91-121, 9 221, 91X, 91LX, 91LZX, (Vol.)	500N 500N 1- 350N	1 RI-203		72-10 72-10 72-10	5 .6	3E300 3E300	12 .4
2d. 14, 16, 16X, 17, 17X, 2d. 9 (Vol. Tone Tapped) 16, (Q.A.V.C. Adj.) 17, (Tapped Q.A.V.C. Adj.)	1, \[ \begin{pmatrix} 350 M \ 30 M \ 10 M \ (6600 \ 3400 \end{pmatrix} \]	RI-834 R-1664		32 22119 53 72-11	4 .6	3E30	71 .
1st. 19, 19-121, 19-122, (Vol.) Philco Con't on next page	3501			72-16		3E30	28 .4

## VALUE CANTRAL CUIDE

VOLUME	CC	NT	R	OL	Gl	JID	) <u>D</u>
Model Receiver	Resist. Ohms	Electrad Number	You	Cen- tralab No.	Your Price		Your Price
PHILCO-Con't 2d. 19, 19LX, 19LZX, (Vol.) 41, 41E, 42, 220A, (Vol).	500M	RI-203	\$0.59	72-106	\$0.61	3E3002	\$0.49
30, 96, 96A, 296, 296A, 111, 111A, 211, 211A, 112, 112A, 112, 112	{ 5000 250 }	R-1735T	1.32	74-560	.93	3E3072	.79
	500M	RI-479	.66	72-177	.64	3E3073	.56
37, (Vol.) 38, (Vol.) 40, (Vol.) 18, (Vol. Tone Tapped)	5000 210 20M 1750 (350M+	R-1824T RI-832P RI-232 RI-834P	1.32 .92 .59	74-579 72-119 72-118 2211900	.93 .61 .61	3E3074 3E3055	.69
25X, 43, 43-121, 43-221, (Vol.) 44, (Vol.) 46, 46E, (Vol.)	500M 350M 5000 210	RI-203 RI-833P R-1824T	.59 .92 1.32	72-106 62-105 74-579	.61 .83	3E3002 3E3074	.49
22L, 47, 47-121, 47-221, 71, 71-121, 71-221, 71-125, 71-225, 71-225B, (Vol.)	1 Мек.	R1-206	.59	51-095	.49	3E3025	.41
48, 51, 51A, 52, (Vol.) 50, 50A, (Vol.)	5000 { 5000 }	RI-201	.59	51-076	.49	3E3008	.41
53. (Vol.) 54, (Vol.) 57, (Vol.)	1750 20M 500M 20M	R-1823T RI-832P RI-203 RI-835P	1.32 .92 .59 .92	74-55 62-119 72-106 62-119	.93 .83 .61	3E3075 3E3002 3E3075	.69 .49 .69
60, 261, (Vol.) 65, (Vol.)	350M 3000	RI-833P RI-233	.92	62-105 72-108	.83 .61	3E3023 3E3026	.69
65, (Vol.) 70, 704, 270, 2704, 570, 90-2-45, 90A-2-45, 470, 470A, (Vol.) 80, 2d. 81, (Vol.) 1st. 81, (Vol.)	20M 20M 20M	R-1824T RI-832P RI-832P	1.32 .92 .92	74-579 62-119 62-119	.93 .83 .83	3E3074 3E3075 3E3075	.69 .69
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R18AC, R18DC, R33AC, R33DC, R51DC, (Vol.) R4 R6 (Vol.)	10M (4350 +)	RI-402	.79	72-100	.61	3E3029	.49
	(150Bi )	RI-383G	.79	72-110	.61		
R5, R5DC, R5X, (Vol.) R5X, (Regen. Cont.) R4, R6, R8, R10, R12, R19, R23, (Tone) R7, R9, R10DC, RE16A, 1st.	20M 28M	RI-382 RI-241	.66	72-115 72-100	.61	3E3005	.49
R23, (Tone) R7, R9, R10DC, RE16A, 1st. Superette, (Vol.) R7LW, (Vol.)	3800 3800	RI-205 RI-383G RI-383G	.59 .79 .79	72-110 72-110	.83 .61 .61	3E3022	.49
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	+1011	RI-385	.66	1210900	.73	3E3120	.62
R7A, R11, RE16A, RE18, RE- 18A, R21, RO23, RAE26, (Tone) RE20, R50, R55, RAE59, RAE-	200M	RI-380P	1.05	62-121	.83	252424	.49
79, (Vol.) RE20, R50, R55, RAE59, RAE79, (Tone)	50M 500M	RI-413 RI-379	.66	72-103	.61	3E3121 3E3028	.49
RAE26, RAE79, (Phono.) RAE59, (Phono.) R. C. AVictor — Con't on	60 60 next	RI-384 RI-661P page	.66	48-050 48-050	.98		

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With Long Shafts



Easy to select the proper value and Taper for most satisfactory operation. With some carbon types wound on fibre carbon types wound on fibre carbon types covered with separate wire segments on which smooth contact is made, therefore the segments of a minimum and providing quiet operation. Shaft insulated—may be mounted on metal panels. Standard controls have plain back covers and may easily be

netal panels. Standard controls have plain back covers and may easily be converted to switch type by substituting Electrad Snapr-On Switch Cover Case diam. 126", Depth 18", Bushing fits 3" hole. Shaft 14" diam., 1%" long.

25¢ depth will be ready within the next few months. We will supply the new type as soon numbers will be the same as listed below.

PRICE

ohms Snap-on Switch

Underwriters approved.
Converts any plain
Standard Electrad control
switch type control. 3E3030 List Price, 50c, YOUR

### **Standard Electrad Controls**

Without Switch List Price, \$1.00. YOUR PRICE...

Stock	Used in Circuit Number	Taper Curve	Taper Indicated by Ohmage Readings in Sections					
Num.	(See page 68)	Num.	Start	34	12	14	Finish	
R1-204 R1-269 R1-270 R1-271 R1-272	1 1	1 1 1 1	Open 10 0 0 0	8 Unif. Unif Unif. Unif.	Unif.	Unif.	0 20 30 50 100	
R1-282 R1-275	9, 17, 20 9, 17, 20 9, 17, 20 9, 17, 20 9, 17, 20	1 1 1 1 1	0 0 0 0	Unif. Unif. Unif. Unif. Unif.	Unif. Unif. Unif.	Unif. Unif. Unif.	200 400 600 800 1000	
R1-233 R1-277 R1-234	4. 9, 17, 19, 20 4. 9, 19, 20 4. 9, 19, 20 4. 9, 19, 20 4, 19, 20	1 1 1 1 5	0 0 0 0	Unif. Unif. Unif. Unif. 300	Unif. Unif.	Unif. Unif.	2000 3000 4000 5000 5000	
R1-240	4, 9, 10, 11, 19, 20 5, 7, 8 2, 5, 7, 8	3 1 3 4 3	0 0 0 12M 0	350 Unif 20 5M 100	1500 Unif, 2000 1M 2M	Unif.	7500 10,000 10,000 0 15,000	
R1-280 R1-241 R1-205	4, 10, 11, 19, 20 4, 16 2, 5, 19 4, 19, 20 2, 3, 18	1 5 2 1 4	0 0 0 0 75M	Urif. 1500 800 Unif. 25M	Unif. 6M 2M Unif. 2M	Unif. 12,500 15M Unif. 200	25,000 25,000 30,000 50,000 0	
R1-281 R1-208 R1-203	6, 12, 13, 21	6 1 6 2 6	0 0 0 0	6M Unif. 15M 2M 60M	25M Unif. 60M 20M 250M	200M	100,000 200,000 250,000 500,000 1 Me	

outside terminal. Uniform controls in values to 5.000 ohms are wire wound.

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Models 82, 86, 87, 511, 521, 531, 541, 551, 561, 571, 581. 10,000 ohm volume control. 24-016-List. \$1.50. YOUR

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51-076-List, \$1.00.

Philco Models 30, 96, 96A, 296, 296A, 111, 111A, 112E, 112X, 212, 212E, 112(2-'45), 112(2-'45), 120, 000 ohm volume control. 72-177—List, 51.30. 44¢

YOUR PRICE...... 49¢ Philco Model 95. 500,000 ohm valume control. 24-264—List, \$1.50. 73¢

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YOUR PRICE ..... World Radio Histo

### **Special Replacement Controls for** RCA-VICTOR-RADIOLA

Victor Models VV9-18X.

VE9-54 Radiola

2,000 ohm sen-

sitivity control. RI-406 List, \$1.50.

YOUR PRICE .... Radiola Model R66 550 ohm volume control.
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RI-381G—List, \$1.50.
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Special twin volume control, 3,800 ohms each section. An improved type, exactly replaces the original unit and will provide smoother, more satisfactory service.
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PRICE .....

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o h m volume control Duplicates e-lectrical specia-

50.000

volume control

\$2.10

R64. 9-54

4 000 ohm volume complete with spe-cial wire wound

> Victor Models RE34.

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Special twin volu 50,000-1,000 ohms.

Models 7-11, 7-25. 7-26 ¥ R50. R51AC

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Special 2,000 ohm wire wound volume control Exactly duplispecial 2,000 ohm wire wound volume control Exactly duplicates the original electrical and mechanical specifications. Slightly different appearance. R1-401—List. \$1.50.

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tapped at 3,000 ohms. replaces original part number

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cations of other inal control.
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cations of orig-

Electric

This attractive sign will quickly pay for itself by the

itself by the mew business it Substantial metal case, antique gold finished frame, glass panel with transparent red lettering against opaque black background. Two 6 inch tubular bulbs inside case provide strong, evenly distributed illumination. Has attention compelling attractiveness either day or night. Closely resembles expensive neon sign in appearance. Overall size 14% in long, 5½ in. high, 3½ in. deep. Complete with two 25 wat bulbs and 6 Ft. cord with plug.

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Model Resist, Electrad Your trand Your Con		
	mber	Your Price
T5, RE16, RE16A, RE17, RE57, RAF68 (Phone) 60 RI-384 .66 48-050 .98	3022	\$0.49
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RE34, RE35, RE39, RE57, RE73, (Tone) R80, R82, R86, (Phono.) R80, R82, R86, Remote Control Models, (Vol.) 3500 R1-324 .66 72-109 .61		
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218, (Tone)	3027 3022	.49
Sears Roebuck — Con't on next plage		1

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VOLUME	CU	NI	K	DL	GI	UIL	)E
Model Receiver	Resist.	Electrad Number	Your	Cen- tralab No.	You		Your Price
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110, (Vol.) 111, (Vol.) 111, (Vol.) 1111, (Vol.) 112, (Vol.) 1620, 1622, (Fll.) 1703, 7064, (Vol.) 1704, 1706, 1707, 7070, 7071,	10M 4000 15M 100M 15M 28 250M	R-1812TP R1-277 R1-573 R1-242 R1-573 R1-270 RG-930P	\$1.59 .59 .59 .59 .59 .59	62-110 79-006 72-104 98-003 48-015 72-121	50.83 .61 .61 .98 .98	3E3027 3E3069	50.49 .49
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1705, (Vol.) 1705, (Tone) 1708, 1709, 1720, 1725, 7065, (Vol.)	500M 5000 1 Meg. 500M 1000	RI-925TP RG-932 RI-926T	1.59 .66	72-116	.61		
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1725, 1750, (Tone) 1750, (Vol.) 7073, 7074, 7075, 7076, 7077, 7078, 7091, 7092, 7093, 7094, (Vol.)	500M 500M	RG-934P RG-928	.92	72-106 72-106	.61 .61		
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31, 32, (Vol.) 550, 560, 561, (Vol.)	3000 (14750 ±	RI-233	.59	72-108	.61	3E3026	.49
614, (Vol.) 440, (Vol.) 106B, 444, 660, 666C, (Vol.)	250Bi 500M 10M 10M	RI-201 RI-203 RI-573 RI-201	.59 .59 .59	62-115 62-105 62-115 72-115	.83 .83 .83	3E3008 3E3002 3E3008	.49 .49
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(Vol.) 55, 99, 101, 109 DeLuxe, 930, 931, 931DC, (Vol.)	50M 50M	RI-357	.66	79-006	.61	3E3046	.49
110, 111, (Vol.) 600, 610, 620, 740, 750, (Vol.)	75M 15M	RI-357 RI-655	.66	70-206 70-202 70-202	.61 .61	3E3129 3E3124	.49
18t. 41, (Vol.) 2d. 41, (Vol.) 591, 593, (Vol.)	200M 30M 50M	RI-281 RI-241 RI-357	.59 .59 .66	72-131 30-010 70-202	.61 .73 .61	3E3005 3E3129	.49
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806, 806B, (Vol.) Stewart-Warner—Con't on	next p	RI-202 age	.59	72-118	.61	3E3003	.49

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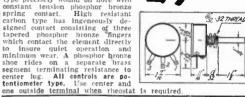
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Wire wound type up to 10,000 ohms. Carbon resistnance type over 10,000 ohms.
A new high quality series
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of the oldest and foremost
variable resistance manufacturers in the industry.
Both wire wound and carbon types will safely disaipate 2 watts. Wire wound
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constant tension phosphor bronze
apring contact. High resistant
carbon type has ingeneously designed contact the element directly
to Insure quilet operation and
minimum wear. A phosphor bronze
shoe rides on a separate brass
segment terminating resistance to

cover for plai

3E3450-List, 50c. Your PRICE.....





#### **Control With Switch**

C-H Underwriters' approved snap swite

List. \$1.75. YOUR

#### Snap-On Switch

Converts any Standard Radolek control into switch type by substituting switch C-H underwriters' ap

Taper Curve Numbers Refer to Graph on Page 63.

ilicuit ism	innera trei	er to D	lagiams	on rage ob.
		Taper	Taper Curve Number	Used in Circuit Number
3E3452 3E3453 3E3454 3E3455	3E3452S 3E3453S 3E3454S	Unif. Unif. Unif. Unif.	1 1 1 1 1	1 1 1 1 17 17
3E3458 3E3459 3E3460 3E3461		Unif. Unif. Unif.	1 1 1 1	9, 17, 20 9, 17, 20 9, 17, 20 9, 17, 20 4, 9, 17, 19, 20 4, 9, 19, 20
3E3464 3E3465 3E3466	3E3463S 3E3464S 3E3465S 3E3466S 3E3467S 3E3468S	Unif. Unif. L. H. Unif. L. H. Unif.	1 5 1 5 1	4, 9, 19, 20 4, 9, 19, 20 4, 9, 19, 20 4, 9, 19, 20 4, 19, 20 4, 19, 20 4, 9, 10, 11, 19, 20
3E3470	3E3469S 3E3470S 3E3471S 3E3472S 3E3473S 3E3474S	L. H. L. H. Unif. L. H. L. H. Unif.	3 3 1 3 3	5, 7, 8 5, 7, 8 4, 10, 11 5, 7, 8 5, 7, 8 4, 20
3E3479	3E34795	R. H. L. H. Unif, L. H. L. H. L. H.	2 6 1 6 6	2, 3, 18, 19 6, 12, 13, 15, 16, 21 14 6, 12, 13, 21 6, 12, 13, 21 12, 13, 21
	Number Without Switch 3E3451 3E3453 3E3453 3E3455 3E3456 3E3456 3E3460 3E3461 3E3462 3E3463 3E3463 3E3464 3E3464 3E3464 3E3464 3E3464 3E3464 3E3464 3E3464 3E3467 3E3467 3E347 3E347 3E347 3E347 3E347 3E347 3E347 3E347	Number Number Without Switch 8 witch 363451 363452 363452 363455 363454 363455 363456 363456 363456 363456 363456 363456 363456 363461	Number With Switch Switch Switch Switch 3 23451 3 23452 3 23452 3 23452 3 23452 3 23454 3 23454 3 23454 3 23454 3 23454 3 2345 3 2345 3 2345 3 2345 3 2345 3 2345 3 2345 3 2345 3 2345 3 2345 3 2345 3 2345 3 2345 3 2345 3 2345 3 2345 3 2345 3 2345 3 2345 3 23475 3 3 23475 3 3 23475 3 3 23475 3 3 3 23475 3 3 3 23475 3 3 3 23475 3 3 3 23475 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Without   With   Switch   Sw

#### **Special Sparton Volume Controls**

Models 9A, 410, 420AC, 420DC, 430, 750DC, 870, Junior, Jewell. Twin volume control 30,000-50,000 ohms.

1717TP-List, \$3.00. \$1.59 YOUR PRICE



Sparton Models 55, 69, 79A, 89, 99, 101, 103, 109, DeLuxe, 110, 111, 301, D. C., 591, 593, 930, 931, 931 D. C. 50,000 ohm volume control. Thin shaft type. 66¢ YOUR PRICE.....

Sparton Models 89A, 103, 354DC, 570DC, 574, 600, 600DC, 610, 610DC, 620, 620DC, 737, 740, 740DC, 750, 870, 15,000 ohm volume control. 66¢

Special Stewart Warner Control Models R100A, R100B, R100E, R101A, R101B, Metropolitan, 950 AC, 951 AC, 952 AC, 953 AC, 961 AC, 962 AC, 963 AC. New improved type. 32,000 ohm volume R1-298 List, \$1.25.

#### **Octave Tone Control**

And Static Suppressor

#### Frost Wire Wound Volume Controls

Very smooth wiping contact made by high pressure self cleaning contact arm. Straight line resistance, no taper. Case 1½" diam. ½" deep, switch type 1" deep ¼" shaft 2" long.

Rheostats—Without Switch

Ohms	Stock Num.
6	3E3300
10	3E3301
20	3E3302
30	3E3303

YOUR PRICE, 39C



**Potentiometers** Ohms Stock Number

Stock Number Less Switch		Ohms	Stock Number With Switch	
3E3312 3E3313 3E3315 3E3317	YOUR PRICE 40c	200 400 2000 5000	3E3304 3E3305 3E3307 3E3309	YOUR PRICE 59c
Frost 70 Vo	lume an			

Compact carbon resistance type control. Smooth wiping contact. Potentiometer type. Uniform taper. Very quiet operation. Switch type has electro static shield. Diam., 1½" depth h.", shaft ½" by 2" long. Single ¾" hole mounting.

#### With Switch

59c
PRICE
YOUR
\$1.50
.ist Ea.

3E3333 3E3334 3E3335 3E3337 2,000 3,000 10,000 75,000 100,000 40c 3E3341 Frost

Stock Num

Less Switch Ohms

1,000

mtg.

#### \*\*2880" Controls Carbon po-tentiometer e. Bakelite

ype. Bakemerase. Roller type case. Roller smooth and quiet. long.

Jour Price		1
500,000	3E3390	3E3399
250,000		3E3398
00,000	3E3388	3E3397
75 000	3E3387	3E3396
25.000	323302	3E3394
5.000	3E3382	3E3391
Ohms	Switch	Switch

Fach...... 55c 69c

#### **Potentiometers** Shaft

insu-Shaft insulated to withstand high voltage.
Positive smooth wiping action. Uniform
taper. Bakelite case
18": depth 4": 4"
2" long, Single 3" hole
Graphite element. liam.

Ohms	Number	
1,000 2,000 3,000 50,000 75,000 100,000	3E3320 3E3321 3E3322 3E3326 3E3327 3E3328	Your PRICE
100,000	3E3328	

Stock

#### Special Stromberg-8-61, 8-81, 8-91, 5-55. Carlson



Vol. Control

R1:32-List, \$1.25. 66¢

10.000 ohm Vol. control with rear extension (Dbl. shaft.) RI-1437—List, \$1.00. 53¢

Models 641, 642, 652, 654 20,000 ohm Vol. Control with long shaft. R1-31—List, \$1.25.

YOUR PRICE .... 66¢

800 ohm Vol. Control with rear extension double shaft). R-1436—List, \$1.00. YOUR PRICE ..... 53¢

# **Temple Models**

volume 15,000 ohms-500,000 ohms. Exactly reoriginal value. 74-515-List. \$3.00.

YOUR \$1.47 PRICE. **United Bosch** Models 28, 29.

250,000 ohm vol-ume control with special threaded ex-tended shaft. Identical electrically and mechan-ically to original.

R-1747—List, \$1.75. 92¢

#### RADOLEK REPLACEMENT

							_
Model Receiver	Resist. Ohms	Electrad Number	Your Price	Cen- tralab No.	Your Price		Your Price
STEWART-WARNER - Con't 530, 535, (Vol.)	75M	RI-203	\$0.59	70-202	\$0.61	3E3002	\$0.49
	75M 15M	RI-202	.59	70-202	.61	3E3003	.49
715, 720, (Vol.) 750, (Vol.)	10M	R1-201 R1-240	.59	72-115 72-114	.61	3E3008 3E3004	.49
801, 801A, 801B, 802, 811A, 811B, (Vol.) 715, 720, (Vol.) 750, (Vol.) 950 Bat., 950DC, 951 Bat., 951 DC, 952 Bat., 952DC, 953 Bat., 953DC, 970AC, 970DC, 971DC, 972, DC, 973DC, 980 Bat., R- 100C-DC, (Vol.)		i i					
972, DC, 973DC, 980 Bat., R-	100M)						
950AC 951AC 952AC 953AC	1000	R-1759T	1.32	74-602	1.22		
950AC, 951AC, 952AC, 953AC, 961,AC, 962AC, 963AC, (Vol.) 900, 901, 902, 903, 911, 912,	32M	RI-298	.66	30-010	.73	3E3132	.56
	6000	RI-202	.59	28-031	.73	3E3023	.49
R100F, (Vol.) R100A, R100B, R100C,	32M	RI-298	.66	30-010	.73	3E3132	.49
R100A, R100B, R100E, R100A, R100B, R100C, R100A, R100B, R100C, R100E, R100F, (Tone) R101A, R101B, Metropolitan,	60M	RI-201	.59	72-117	.61	3E3008	.49
	5000 8500	RI-298 RI-283	.66	72-110 62-105 62-105	.61 .83	3E3132 3E3006	.49
R102A, R102B, R102E, (Vol.) R104A, R104B, R104E, (Vol.) R105, 50, 59, (Vol.)	400M 60M 500M	RI-612 RI-205 RG-611P	.66 .59	72-117 62-105	.61	3E3022	.49
R106, (Vol.) R106, (Sens.)	8000	RI-560	.59	62-113	.83	3E3011	.49
R106, (Sens.) 1st. 108, 1st. 108X, 1st. 10, 1st. 20, (Vol.) 2d. 108, 2d. 108X, 2d. 10, 2d. 20, (Vol.)	250M 1250M +	RI-208	.59	62-105	.83	3E3012	.49
2d. 20, (Vol.) 109, 1090, (Vol.)	140BI 500M	RI-208 RI-203	.59	62-105 62-106	.83	3E3012 3E3002	.49
1099, (Vol.) R110, R110A, R110E, (Vol.)	500M 500M	RI-203 RI-682P	.59	62-106 62-106	.83	3E3002	.49
20. (vol.) 109, 1090, (Vol.) 1099, (Vol.) R110, R110A, R110E, (Vol.) R111, R115, R1111, R1112, R1113, R1114, R1116, R1117, R1118, R1119, (Vol.)							
R1118, R1119, (Vol.) R112 Auto, R1121 Auto, (Vol.)	500M 500M	RI-682P RI-939P	.92 .92	62-105 62-106	.83		
R112 Auto, R1121 Auto, (Vol.) R116 R116A, R116AH, R116- AL, R116X, R116XH, R116- XL, (Vol.)							l
XL. (Vol.) R119, R119EF, R1191, R1192,	500M	RI-203	.59	62-106	.83	3E3002	.49
Ri19 Ri19EF, R1191, R1192, R1193, (Vol.) R120, R120A, 1201, (Vol.) R120EF, 1209, (Vol.)	500M 500M	RI-203 RI-203	.59	62-106 72-106	.83	3E3002 3E3002	.49
	500M	RI-203	.59	62-106	.83	3E3002	.49
STROMBERG-CARLSON 635, 636, 638, (Short Shaft) (Double Shaft)	{10000 }	RI-32 R-1437	.66	72-161	.73	3E3133 3E3136	.62
641, 642, 652, 654, (Long Shaft) (Double Shaft)	20000	RI-31 R-1436	.66	72-162 72-159 72-160	.73	3E3134 3E3135	.49
TEMPLE	( 000 ,	100		78.00			
8-61, 8-81, 8-91, 5-55, (Vol.)	{15M 500M }	R-1618T	1.32	74-515	1.47	3E3137	1.10
TRANSFORMER CORP.							
OF AMER. 51, 53, 60, 60 Jr., 25-60, (Vol.) 55, 56, (Vol.)	25M	RI-205	.59	62-111	.83	3E3022 3E3022	.49
55, 56, (Vol.) 40, (Vol.)	25M 4100 +1	RI-205 RI-234	.59	51-005 55-004	.73	3E3022	.49
61, 70, (Vol.) 80, 25-80, 81, 25-81, 84, 25-84, 85, 25-85, (Vol.)	120Bl 12M	RI-201	.59	79-006	.61	3E3008	.49
	10500	RI-283	.59	72-114	.61	3E3006	.49
83, (Vol.) 90, 90A, 91, 92, 94, 94-25,	75M	R1-202	.59	79-006	.61	3E3003	.49
95, (Vol.) 90, 90A, 91, 92, (Tone)	435 12M	RI-274 RI-573	.59	62-118 62-113	.83	3E3131 3E3027	.49 .49
83, (Vol.) 90, 90A, 91, 92, 94, 94-25, 95, (Vol.) 90, 90A, 91, 92, (Tone) 94, 25-94, 95, (Tone) 120, 121, 139, (Vol.)	12M 10500	RI-283 RI-573	.59	62-114 70-205	.83	3E3006 3E3027	.49
120 121 139 160 25-160 (Tone)	100M	RI-242	.59	62-114	.83	3E3069	.49
1349, (Vol.) 300, 320, (Vol.)	1000	RI-276 RI-573	.59 .59	62-107 306-001	.83	3E3027	.49
1349, (Vol.) 300, 320, (Vol.) 300, (Q. A. V. C. Adj.) 420, (Vol.)	500M 500M	RI-203 RI-790P	,92	72-105 62-105	.61 .83 .83	3E3002	.49
422, (Vol.) 470, (Vol.)	20M 750M	RI-791P RI-785	.92	62-119	.83		
UNITED AMERICAN BOSCH CORP.							
4, AC5, 7, 7A, 7C, 20, 20J, 20K, 20L, 31, 32, Essex 4, (Vol.)	10M	RG-493P	.92	72-114	.61	3E3071	.49
36, 37, (Vol.) 73, 74, (Vol.)	10M 10M	RG-493P RG-493P RG-493P	.92	62-114 62-100	.83	3E3138 3E3127	.69
805CH CORP. 4, AC5, 7, 7A, 7C, 20, 20J, 20K, 20L, 31, 32, Essex 4, (Vol.) 36, 37, (Vol.) 73, 74, (Vol.) 20, 20J, 20K, 20L, 60, 60D, 60E, 61, 62C, 62DC, 63DC, (Tone)	500M	RI-203	.59	72-105	.61	3E3002	.49
10 40 41 91 92 (Vol.)	500M	R1-203	.59	72-105	.61	3E3002	.49
28, 29, (Vol.) 226, 242, 243, (Tone) 73, 74, (Tone)	500M 500M	R-1747 R1-203	.92	72-207 70-203	1.22	3E3139 3E3002	.49
5A, 5B, 205, 205B, 505A,	50M 10M	RI-205 RI-409P	1.05	72-117 99 <b>-0</b> 06	.61	3E3022	.49
200, 201, 206, 210, 211, 224,	1034	DI 040		70 205	64	3E3004	40
200, 201, 206, 210, 211, 224, 236, 237, 242, 243, (Vol.) 226, 250, 251, 312, 313, (Vol.) 260, 261, (Tone Tapped Vol.)	10M 500M	RI-240 RI-203	.59	70-205 72-105	.61	3E3002	.49
200, 201, (1 one Tapped vol.)	400M + 100M	RI-203	.59	99-006	.83	3E3002	.49
U. S. RADIO & TELE-							
5A, 7D, 25, 25A, 500, 700, (Vol.)	8000 8000	RI-240 RG-678P	.59	72-113 99-006	.61	3E3004 3E3140	.49
7, 7A, 7B, 69, 906, (Vol.) 7, 7A, 7B, (Q. A. V. C. Adi.)	500M 200M	RI-203 RI-281	.59	72-105 72-120	.61	3E3002	
VS10N CORP. 5A, 7D, 25, 25A, 590, 700, (Vol.) 2d, 27, 2d, 27P, (Vol.) 7, 7A, 7B, 69, 906, (Vol.) 7, 7A, 7B, 69, 0, 0, (Vol.) 8, AA, 8B, 10, 10C, 1000, 10C, 1000, 1001, (Tope	1 Meg.	RI-206	.59	72-116	.61	3E3025	.49
12, 100, 100, 1000, 1001, (1010)		R1-281	.59	72-131	.61	3E3025	.49
9, 12, 12B, 19, 120, 120B, 900, 902, 1006, 1007, 1200, (Vol.) 9, 19, 900, 902, (Q. A. V. C. Adi. 9, 1st. 12, 1st. 12B, 19, 1st. 120, 1st. 120B, 900, 902, 1st. 1200, (Topp.)	200M	RI-281	.59	72-131	.61		
9, 19, 900, 902, (Q. A. V. C. Adj.) 9, 1st. 12, 1st. 12B, 19, 1st. 120,	8000	RI-560	.59	72-114	.61	3E3011	.49
		RI-242	. 59	72-122	.61	3 E 3 0 6 9	.45
U. S. Radio & Television-	con't on	∥ next page		Н	1		
							-

#### **VOLUME CONTROL GUIDE**

		-				,	
Model Receiver	Resist. Ohms	Electrad Number	Your Price	Cen- tralab No.	Your Price	Radolek Control Number	Your
U. S. RADIO—Con't 2D. 12. 2D. 12B. 2D. 120, 2D. 120B. 2D. 12pp. (Vol. Tone Tapped) 2D. 12. 2D. 12B. 28. 29. 31. 31 Remote, 32, 32A. 32B. 48W. 2D. 120. 2D. 120B. 482. 2D.	(500M +	}RI-203	50.59	72-105	50.61	3E3002	\$0.49
1200, (10ne)	500M	RI-203	.59	72-105	.61	3E3002	.49
24, 36, 37, 50, 60, 90, 160, 400, (Vol.) Case 80, Case 81, Case 81B, Case 81C, 250, 506, 3040, 3056, (Vol.)	5M	RI-278	.59	70-204	.61	3E3033	.49
		RI-201	.59	72-100	.61	3E3008	.49
1st. 27, 1st. 27P, (Vol.) 29, (Vol.) 31, 31 Remote, (Vol.) 30 Auto, 32, 32A, 32B, 33DC, 49 Auto, (Vol.)	1000 8000 8000	RI-276 RI-560 RI-560	.59 .59 .59	62-107 79-006 52-205	.83 .61 .83	3E3011 3E3011	.49
49 Auto, (Vol.)  11, 11A, 14, 14A, 28, 41, 42, 43, 44, 46, 46A, 47, 47A, 48. 48A, 48W, 482, (Vol.)  99, 99A, 99B, (Vol.)  1010, (Vol.)  1010, (Vol.)  1010, (Tone)	400 8000 50M 500M 250M	RI-560 RI-274 RI-560 RI-205 RI-203 RI-208	.59 .59 .59 .59 .59	72-115 72-118 72-113 72-117 62-105 72-121	.61 .61 .61 .83	3E3011 3E3031 3E3011 3E3022 3E3002 3E3012	.49 .49 .49 .49
WELLS GARDNER WG24, 291, CG, 9 in Line (new) (Vol) 9 in Line (old)	{ 15M } 500M ] 15000	RI-232	.59	74-509 78-005	1.47	3E3141 3E3142	.73
ZENITH RADIO CORP. ZE3, (Vol.) 35APX, 35PX, 37A, 341, 342, 342P, 352, 352A, 352APX, 352- PX, 362, 362X, (Vol.)	1000	RI-276	.59	72-107	.61		
97 20 204 404 209 2094 (3/61)	100M	RI-205	.59	62-104	.83	3 E 3 0 2 2	.49
27, 39, 39A, 40A, 392, 392A, (Vol.) 41, 42, 422, (Vol.) 52, 53, 54, 55, 57, 522, 532, 542, (Vol.) 60, 61, 62, 64, 67, (Vol.) 602, 612, 622, 642, 672, (Vol.)	100M 100M 100M	RI-771P RI-771P RG-971P RG-971P	.92	62-104 62-104 62-042 62-104	.83	3E3143	.79
	100M	RG-971P RI-205	.92	62-104 62-104	.83	3E3022	.49
70, 71, 72, 73, 77, 712, 722, 732, 777, (Vol.) 80, 81, 82, 89, 822, 892, Hypermetron, 10, 11, 12, 102, 112, 122, (Vol.)	{11500 110M}	R-1434TP		75-614	1.47	3E3144	.49
80 81 82 80 822 802	50M	R-205P	.92	62-042	.98	3E3145	.79
Hypermetron, (Tone) 1st. 91, 1st. 92, 1st. 912, 1st. 922, 1st. 103, 1st. 2017, 500, 501, 503, 514, 515, 516, 600, 604, 610, 616, 618, 2037, (Vol.)	50M 250M	RI-205	.59	72-104	.61	3E3022	.49
91, 92, 912, 922, (Tone)	250M 50M	RI-705P RI-205	.92	72-104	.83	3E3022	.49
91, 92, 912, 922, (Tone) 2d. & 3d. Models of 91, 92, 912, 922, 103, 2014, (Vol.) 103, 2014, (Tone) AH, CH, RH, Zenette 8, (Vol.) AH, CH, RH, Zenette 8, (Tone)	250M 500M 10M 1 Meg.	RG-706P RI-206 RI-729P RI-206	.92 .59 .92 .59	62-121 70-203 52-105 72-116	.83 .61 .83	3E3025 3E3025	.49
BH, 2018, 2021, (Vol.) LH, MH, WH, 210, 210-5, 211-5,	11M	RI-573	.59	52-205	.83	3E3027	.49
BH, 2018, 2021, (Vol.) LH, MH, WH, 210, 210-5, 211-5, 220, 221, 250, 260, 270-5, 272, 2022, 2024, 2031, (Vol.) LP, (Vol.)	10M 10M	RI-201 RI-573	.59	52-205 52-205	.83	3E3008 3E3027	.49
BH. LH. MH. WH. 210, 210-5, 211-5, 220, 221, 250, 260, 270-5, 272, 2020, 2021, 2022, 2023, 2024, 2031, (Tone) A. B. C. D. Zenette 6, (Vol.) A. B. C. D. Zenette 6, 2004, (Tone)	500M 50M 50M	RI-205 RI-205 RI-205	.59	72-105 62-103 72-117	.61 .83	3E3022 3E3022 3E3022	.49 .49
000007 Females F (VI-1)	10M 50M	RI-283 RI-205	.59	62-100	.83	3E3006	.49
20. & 3d. 103, 2d. & 3d. 2017, (Vol.)	SUZVA	R1-205	.59	72-117 75-503	1.47	3E3022	.49
230, 240, 245, 500, 501, 503, 514, 515, 516, 600, 604, 606, 610, 616, 618, 2037, (Vol.)	500M	RI-203	.59	62-106	.83	3E3002	.49
230, 240, 245, 410, 411, 420, 430, 440, (Tone)	50M	RI-205	.59	72-117	.61	3E3022	.49
230, 240, 245, 410, 411, 420, 430, 440, (Tone) 410, 411, 420, 430, 440, (Tone Tapped Vol.) 563D. C (Vol.) 701, (Vol.)	{3000 + } 10M } 50M 500M	RI-385 RI-205 RI-203	.66 .59 .59	62-103 62-106	.83	3E3022 3E3002	.49
333, 353A. (Vol.) 27. Ruper Zenith, (Vol.) 2044, 2053, 2054, (Vol.) 2052, (Vol.) 4. A5D, IAD, N6S, V6, (Vol.) 2047, (Tone) 2051, (Vol.)	100M 2000 500M 500M 500M 20M 20M	RI-771P RI-232 RI-946P RI-947P RI-812P RI-944P RI-945	.92 .59 .92 .92 .92 .92	62-104 72-101 62-105 62-105 62-105 72-131 72-131	.83 .61 .83 .83 .83 .61	3E3055	.49

#### **Carter Midget Controls**

Stock Number	Ohms	Stock	Ohms	Stock Number		Stock Number	Ohm
3C3413 3C3414 3C3415 3C3416 3C3416	6 10 15 20 200	3C3418 3C3419 3C3420 3C3421	500	3C3404 3C3404 3C3405 3C3406	10 15	3C3407 3C3408 3C3409 3C3410 3C3411 3C3412	20 25 30 40 50 75

Rraum

abvright 1024 by W

Type M Dissipate 1 Watt

Rheostat Diam. 1tiometer

diam. 1½". Projects back panel ¼". Mounts in si ¾" hole on panels not over thick. ¼" diam. Shaft ext 1½". No knob included. back Mounts in single extends

RADOLEK Heavy Duty

Replacement Volume Controls New Fused Carbon Resistance

Carries 5 Watts at Any Setting Used by leading Set Manufacturers. Especially adapted for use in circuits where current dissipation is sufficiently heavy

cults where current dissipation is sufficiently heavy to break down ordinary types of Volume Controls. Will carry 5 watts continuously with arm set at any point of resistor segment. This is nearly 5 times the capacity of the conventional control.

Solid moulded resistor element of bakelite-carbon mixture, formed by baking under terrific pressure. Silding disc contactor of nickel-chrome steel provides perfect low resistance contact to elements. Dustproof rust-less steel housing on genuine bakelites and the steel provides perfect low resistance contact to elements. Dustproof rust-less steel housing on genuine bakelites the steel provides perfect low resistance contact to elements. Dustproof rust-less steel housing on genuine bakelites and the steel provides perfect low resistance contact to elements. Dustproof rust-less steel housing on genuine bakelites and the steel provides perfect low resistance contact to elements. Therefore the steel provides perfect low resistance contact to elements. Dustproof rust-less steel housing on genuine bakelites and the steel provides perfect low resistance contact to elements. Therefore the steel provides perfect low resistance contact to elements. Therefore the steel provides perfect low resistance contact to elements. Therefore the steel provides perfect low resistance contact to elements. Therefore the steel provides perfect low resistance contact to elements. Therefore the steel provides perfect low resistance contact to elements. Therefore the steel provides perfect low resistance contact to elements. Therefore the steel provides perfect low resistance contact to elements. Therefore the steel provides perfect low resistance contact to elements. Therefore the steel provides perfect low resistance contact to elements. Therefore the steel provides perfect low resistance contact to elements the steel provides perfect low resistance contact to elements. The steel provides perfect low resistance contact the steel provides perfect low resistance contact the steel provides perfect

CONSTANT TENSION SPRING RINGS long. Approved AC Switch mounted on back approved

approved AC snap switch cover-plate. Switch capa-city 2 Amp. 125 V., ½ Amp. 250 V. 1/4

Less Switch With Switch C List. \$2.25. YOUR PRICE List. \$1.75. \$2.25. PRICE ...

Number Taper | Taper Used in Circuit (See Curve Number Switch Switch (See page 68) Ohme 9, 17, 20 9, 17, 20 9, 17, 20 4, 9, 19, 20 5, 7, 8 5, 7, 8 3E-3500 3E-3501 3E-3502 3E-3503 3E-3520 3E-3521 3E-3522 3E-3523 Unif. Unif. 5 000 3E-3504 3E-3505 10,000 10,000 3E-3525 10,000 3E-3526 Unif. Unif. Unif. Unif. 3E-3506 4, 9, 10, 11, 19, 20 4, 19, 20 100,000 250,000 500,000 3E-3508 3E-3509 3E-3510

#### Frost Dual Controls

quality tandem units

Controls two separate insulated circuit is Uniform taper. Bakelite case diam. 134", depth 134", " shaft, 2" long. Single 36" mtg. Without

Stock Number	Panel Unit Ohms	Second Unit Ohms
3E-3331 3E-3332	10,000	50,000

YOUR PRICE.

YOUR PRICE.

Frost **Potentiometer** 12,500 ohm. Roller contact. (

Centralah

Volume Controls Special value 3000 ohm Radi

ohm two terminal

18¢

type. Case 2%" shaft 1 inch long.

bon eleme.
Diam. 13 depth %". long. Single shaft ½ in. 79¢ | mtg. 39¢

**Special Kennedy Dual Control** 

diam., 1/4" shaft Single %" mtg. 3E3095

YOUR PRICE

Models 12 S G and 20 (Above Serial
15,000) and Late Model 20B
Exact Centralsh Replacement
Identical to the original control. Has
10,000 ohm section for antenna shunt and
50,000 ohm section for grid bias control. Long shaft. 3E3099-List, \$3.00. 49¢

YOUR SPECIAL PRICE U. S. Radio and Television Corp. Replacement Volume Controls

For Late Model Gloritone 27 and 27P
Special 8000 ohm volume control with switch.
Improved type—electrically identical to original—will give more satisfactory service.
RG678P—List, \$1.75. 92¢

# Special Zenith Controls For

Models 52, 53, 54, 55, 65, 60, 61, 62, 64, 67, 522, 532, 542

Improved 5,000 ohm volume control. Complete with wiring diagram of new circuit arrangement to provide smoother control action as suggested by the manufacturer.

RG971.P—List, \$1.75. 92¢ YOUR PRICE.

Zenith Models 70, 71, 72, 73, 77, 712, 722, 732, 777

dual volume control 11,500 0,000 ohms. Same electrical c tics as original unit—de-110,000 ohms. ohms, 110,000 ohms, same e characteristics as original uslened to give improved service. R1-1434TP—List, \$3.00. YOUR PRICE.....

\$1.59

### Exact Duplicate Replacement Condensers

Paper Foil Type Unless Otherwise Specified

#### ATWATER KENT Condenser Blocks



Models 37 and 38 Including Chokes P5100 YOUR 5169

Contains 3 mfd. filter block and 3 chokes, two high voltage filter chokes and one speaker choke. Six color coded insulated 6" leads and ground terminal 812-5 ville 2121 "

inal. Size 5x1 ax3 4".
Part No. 9575 for Battery Set
.25 mfd. bypass condenser size
1 % x3x 16. Two leads.
P5180-List, \$1.25.
P5180-List, \$1.25. YOUR PRICE
Part No. 9497 for Models 37,
38, 39, 40, 42, 46, 52
.252525 mfd. bypass condenser size
3x23x14. Three leads.
P5497 List, \$1.50.
P5497—List, \$1.50. YOUR PRICE
Part No. 14097 for Models 55, 55C. 55F
.25 mfd. bypass condenser size 31/4 x
11 x 17. Two lug terminals.
P5930—List. \$1.25. 71¢
VOLLE PRICE

YOUR	PRICE			🚜 '	~~
	Part	No.	16318		
.35 mfd.	bypass	size	3 1/4 x 1 1/4	Σŵ.	T $w$ $0$
lug term	Inals				
P2757	List,	\$1.13	5.	6	SC.
					7
E	ypass	for	Model	35	
.2 mfd.	bypass	size	318x1%	X 18.	One
Insulated	1 flexib	le lea	ıd.		
P7507	-List,	\$1.25	).	7	1c
YOUR	PRICE			#	-,-

#### **EVEREADY Model 50 AC**

Part No. 2832 PEROR-List. \$1.75. PRICE ... 86¢



.25-.25-.25 mfd. bypass condenser. Will exactly replace part number 2832 in Model 50 AC— Size 2x2x1 inch. Three lug terminals.

#### PHILCO Filter Condenser Model 87



Part 3401 P7237-YOUR PRICE \$245

Exact dupli-

Exact duplicate of original part with greater margin of safety. Has 8 sections as follows: 1-.01 Mfd. 600 V. 1-1 Mfd. 400 V. 1-2 Mfd. 400 V. 2-2 Mfd. 600 V. nad 1-1 Mfd. 600 V. Rectangular metal contacts 5.4 M/s 2.8 Monthly context. 600 V. Rectangular metal con-54x44x24. Mounting centers

#### Philco Midget Electrolytic Part No. 10709

mfd. 350 working volts, wn rectangular metal Drawn metal Drawn rectangular metal container with mounting flange. Size 3%x13xx% inches. Mounting centers 1%". Three insulated 11" flexible leads, color coded. 3E9000—List, \$1.45. YOUR PRICE ..



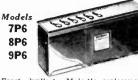
#### **FADA Filter Condenser** Models 70, 78



Duplicates the original Part No. 1492 MS. Total Capacity. 10.5 Mfds. P1492MS-List, \$9.00

**\$3.15** 

MAJESTIC **Filter Condensers** 



Exact duplicate Majestic replacement condenser blocks. Built to the original specifications they fit exactly and will give better service due to increased safety factors. All terminals marked

Part No. 7P6 for Model 70
Total 9 mfd. Five lug terminals.
Container 9x4x2¼ inches.
7P6—List, \$9.00. \$1.90

YOUR PRICE Part No. 8P6 for Model 180 Chassis 8P3 and 8P6 Power Packs

Total 9 mfd. Six lug terminals. Container 9x4x2¼ inches.

BP6—List, \$12.00. YOUR PRICE ..... \$3.70

Part No. 9P6 for Model 90
Power Packs
Total 7 mfd. Six lug terminals. Container 9xx24 inches.
9P6—List, \$9.00. \$1.90 YOUR PRICE .

Majestic By-Pass 350 D. C. Working Volts

Part 504705 mfd. bypass 1%x%x%.
P1382—List, \$0.50. YOUR PRICE 28¢
Part 5049-4 mfd. bypass, 1%x1x%.
P1398—List, \$0.65.
Part 50506 mfd. bypass, 2x1%x1.
P1393—List, \$0.85.
P1393—List, \$0.85. YOUR PRICE 54¢
Part 51402 mfd. bypass, 1%x1x%.
P1394—List, \$0.55.
P1394—List, \$0.55.
Part 523001 mfd. bypass, 2x %.
P1406—List, \$0.20.
P1406—List, \$0.20. YOUR PRICE
Part 5231005 mfd. bypass, 2x fs.
P1405—List, \$0.20.
P1405—List, \$0.20. YOUR PRICE
Part 52331 mfd. bypass, 2x18.
P1409—List, \$0.20.
Part 52341 mfd. bypass, 2x12.
P1408—List, \$0.20.

YOUR PRICE Part 5236-.02 mfd. bypass, 2xth. P1407-List, \$0.20. 11¢ YOUR PRICE Majestic Replacement

Electrolytic Part No. 10662

6-8 mfd. 450 W.V. Cardboard Container 4 1/4x13/x1. Three lug term inals. Exact duplicate of the dual term used in the late Majestic. Cardboard Condual used in the late 3E9001-88¢ YOUR PRICE

#### **Majestic Pirate Chest**

380-381 Part No. 8755

4-8 mfd. 450 W.V. electrolytic condenser. Cardboard container 4%x1%x 1 d. Four lug terminals. 3E9002-List, \$1.35. YOUR PRICE

#### Majestic Electrolytic Replacement

6-8 mfd, 450 W.V. Round aluminum container. Inverted stud mounting; container nex. Mounts in single %" hole. Large lock nut clamps securely to chassis. Container 1% x 34. Two 10" insulated flexible leads

3E9003-List, \$1.55. 91¢ YOUR PRICE

#### **CROSLEY Replacements**

Midget **Electrolytic** Travette 95, 163 Part W25857B



Two sections 8 mfd., 200 volts 8 mfd. volts. Cardboard co 114. Three lug ter 9004—List, \$1.10. container terminals.

3F9004-YOUR PRICE Crosley Fiver 148, 167, 187 Part W27488

Two section 6 mfd. 300 volts—8 mfd. 25 volts. Cardboard container 2 1/4 x 1 1/4 x 1 1/4. Three lug terminals. 25 volts. Cardboard of lax1%. Three lug terr 3E9005—List, \$1.10. .56c

#### Crosley Travette and **Dual Travette**

Part W26870A 6 mfd. 25 volts. Card-board container 24x 34x34. Two lug term-3E9006-List, \$0.60.

YOUR PRICE Crosley Models 163, 400, 402 20068
La mfd. 200 volts.
Cardboard conti Part W28068

24.x14.x118. Two lug 3E9007—List, \$0.95. Two lug terminals 56¢ YOUR PRICE ..

#### Crosley Model 167, 169 Part W29150A

Electrolytic Triple section 7 mdd. 450
W.V.—6 mfd.—400 W.V. 8
mfd. 25 W.V. Inverted
aluminum container, stu d
mounting for single %"
hole. Container common negative. Size 4%x1%. Three

terminal. 39008-List, \$1.90. PRICE ..... \$1.12

Part W30419

Dual section electrolytic 8 mfd. 250 W.V.—8 mfd. 25 W.V. Inverted atuminum container, stud mounting for single %" hole. Container insulated. Size 3%x13%. Two positive lug terminals one common negative lug 3E9009-List, \$1.10.

#### U. S. Radio & Television Filter 1

PART No. 733 for Model 41 Receiver

PRICE

YOUR

Total capacity 4.5 mfd. 4 insulated color coded 12" leads. Dimensions: height 5", width 2 l8", depth 2 l/2", 4 mounting 4 mounting ueptn 2½". 4 mounting bolts at bottom, ½" long for 1½"x1½" mounting hole centers.

YOUR PRICE .....

U. S. Radio Apex Model 37

\$1.95

Part 854
5.5 mfd. filter condenser size 5x3½x2.
Eight lug terminals, Exactly duplicates the original condenser block— Eight lug terminals. Exactly dupil-cates the original condenser block— built with a greater safety factor. P4322—List, \$5.00. YOUR PRICE......\$2.82

#### U. S. Radio Model 26 Apex Gloritone Part 2235

Special multiple section bypass, 1-1-4-4-4-4. Size 4½x2;3x83. Exact duplicate of the original part. Eight insulated flexible leads and one lug terminal. P7530—List, \$3.00.

YOUR PRICE .....

#### U. S. Radio and Television

Models 46, 47—Part No. 975
Total capacity 5.6 mfd. 5 insulate
color coded 12" leads. Appearance insulated color coded 12" leads. and dimensions exactly th the above filter condenser. Appearance the same as

YOUR PRICE ..... \$1.75

Crosley Part B30017 Dual section 4-8 mfd, electrolytic condenser. Round aluminum container. Insulated. Size 4½1½. Complete with mounting ring. Two positive lug terminals; one common negative lug terminal.

3E9010-List, \$1.45.

#### **Crosley Paper and Foil** Replacement Condensers

Model 77 Part W20446 1-.5-.1 filter size 2x2x1 h". Three lug .1-.5-.1 med-terminals. PS754—List, \$1.50. YOUR PRICE ..... 63¢

Model 54 Part W7753
1-.5-.1 Bypass size 2x2x1&". Three lug terminals. P5832-List, \$1.50.

Part W6428 .. 5-. 5 Bypass 2x1 &x%". Three lug terminals. P5896 List, \$1.25.

YOUR PRICE ......

Part W21456—.1-.1-.1 Bypass 2x1 #x %". Three lugs and one lead. P5897—List, \$1.00. YOUR PRICE ..... Part W5496 ... 1 Bypass 11/2 x %". Two

terminals. P5898—List, \$0.50. YOUR PRICE ...... 28¢

Part W23736-.25-.5-.25 Bypass 21/4 x 

#### **SPARTON FilterCondenser**

Rincks Constructed to duplicate the specifications of the original blocks. Equal or superior to the original units. Wherever possible, the safety margins have

possible, the safe-ty margins have been increased. AC62\_Clliustrated) for receivers AC62\_AC7 and AC63. Total capacity 9 mfd. 7 color coded 15" leads. Di-mensions: Length 7", width 3%", depth 24". Mounting screws are ½5%;" for 6%x2" mounting hole

YOUR PRICE ..... \$3.25

P79A—For models AC69A, 79A, 89, and 78A. Total capacity 7½, mfd. 8 color coded 10" leads. Dimensions: 5%" high. 3½" wide, 2½" deep. 2½" mounting hole centers. PRICE .

P7290-For Sparton Model 930 Receivers. Total capacity 6.1 mfd. 5 insulated color coded ledas. Dimen-sions 5%" high, 3%" wide, 2%" 95¢ YOUR PRICE .....

#### Sparton By-Pass

Exact replacement for Sparton receivers—2%" Sparton receivers—2%"

long—1%" diameter.

Bracket on end for %2
screw. Mounting lug with
slot at side. Fibre case
with hermetically sealed
ends. Paper and foil ends. Paper and type. 1928-31 models.

Cap. Stock Mfd. 3E5290 3E5291 3E5292 .25 Price Each 26e

\$2.46

Page 74

**Exact Duplicate Replacement Electrolytic** Condensers for Midget Sets



YOUR PRICE

Num. 7589, for Victor Part Models 28, 110, 111, 115; G-E Models K52, K53, K58.

3E9013-List. \$1.75 Your Price \$1.03



reater safety factor than the original. Will stand up. 4 mfd., 150 V mfd., 450 v. Cardboard conta with mounting tabs. 3%x1½x1′

Part Num. 6518, for Victor Models 22W, 22S; G-E Models L50. L51



Six inch flexible leads, same as original. 8 M Cardboard container wi iginal. 8 Mfd., 250 V.; container with mounting color tab. 3%"x1%"x1%

Part Num. 6511 RCA Victor 22W, 22S G-E Models L50, L51 3E9015—List, \$1.60. YOUR PRICE ....

10-8 mfd. 35 v. 4 mfd. 250 v. Card-board container 3% x1 2 x1 is in. Single mounting tab. Five inch color coded mounting tab. Five Inch color code flexible leads, insulated.

Part Num. 3538 RCA Victor

17M, 18W, 27 G-E Model K40A

3E9016-List. \$1.00. Your Price 59¢



4-4 mfd. 140 volts. Tubular card-board container. 21/4x1 in. Bare flexible leads.

Part Num. 6513 (old Num. 3536) RCA Victor 17M, 18W, 27 General Electric K40A 3E9017 -List, 75e.

YOUR PRICE ..... 44¢ 5-5 mfd. 35 volts. Tubular cardboard container, 2 1/2 mf. Bare flexible

Part Num. 66143, for RCA Victor Model R28P

3E9018-List. 90c. YOUR PRICE



4 mfd. 150 v, 4 mfd. 300 v. Cardboard container, 3%x1 2x1 in in mounting tabs. Lug terminals.



1 to. Lug terminals. RCA Victor Part Num. 66140 3E9020 -I.ist, \$1.55. YOUR PRICE ...... 91¢

4-4 mfd., 175 w.v. Tubular carboard container, #8x3 % in long. Flexible bare wire leads. Used in a number of RCA Victor A.C.-D.C. and compact receivers.

RCA Victor Part Num. 66140-2 RCA Victor Fun.
5-5 mfd. 35 w.v. Tubular cardboard container 18x2½ in. long. Flexible bare wire leads.
3E9021—List Price, \$1.15.

YOUR PRICE .....

Gillfillian Part Num. 10267

3E9031-List. \$1.35. YOUR 7 PRICE. 79¢



mfd, 150 working volts, Card-container with mounting tabs. 16-8 mfd. 150 working volts, board 4x2x1 Inch.

Part Num. A407, for International Kadette Standard Model 3E9022-List, \$1.00. YOUR

PRICE. 59¢ 4-4 mfd., 175 v. Cardboard container 3%x1\4x\4, in. Color coded insulated flexible wire leads.

Part Num. A408, for Kadette Standard Model

3E9023-Your Price 44¢

5-5 mfd. 35 volt. Cardboard container. Color coded flexible insulated leads. Exactly duplicates the original part. Part Num. A424, for Interna-

tional Kadette Models A and B 3E9024— List, \$2.10. Your Price



\$1.23 4-10-10 mfd.-Cardboard con tainer 37hx114x1 in. flexible insulated leads. Color coded

Kadette Part Num. 10627

10627
3-3 mfd. 100 w.v., 3 mfd.
15 w.v. Carboard container
2 %x1 %x% in. Color Coded
flexible insulated 12" leads. 3E9025-List Price

PRICE \_\_\_\_\_56¢ International Kadette Part

Num. A427 3E9026—List Price, \$1.20. 3.5—3.5 mfd. 100 v.; 3.5 mfd. 25 v. Cardboard con-tainer 2x1/8x% in. Four color coded 5 inch flexible insulated wire leads.

Part Num. HC31 for Emerson Models 20A, 25, 25A,



mfd. 200 volts. Cardboard con-er with single mounting tab. tainer with single mounting tab.
Three flexible insulated wire leads color coded.

Part Num. HC32 for Emerson
Models 20A, 25, 25A
5-5 mfd. 35 volts. Cardboard container with single mounting tab.
Three insulated flexible leads, color
orded

3E9028-List, 75c. YOUR PRICE ..... 44¢

Part Num. KC68 for Emerson Model 250W 4-8-16 mfd. 175 volts. 3E9035—List, \$1.80.

\$1.06 YOUR PRICE

Colonial Model R9150 3E9029-List. \$2.35. YOUR YOUR ... \$1.38 8-8-8 mfd. 200 working volts. Exact dupli-8-8-8 miss. Excising volts. Exc

cate of the original with high peak rating for greater safety.

Moisture proof card-board container 4x3½x1½ in. with mounting lugs identical to the original unit. Six insulated flowible and the safety of the safe Six insulated flexible color coded leads.

Colonial Model R9181

3E9030-List, \$1.00. List. S PRICE. 59¢

16 mfd. 150 working volts. cardboard container Tubular with center strap mounting, inch insulated flexible leads inch with Seven incl each end.

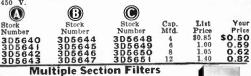


#### Dry Electrolytic Replacement Condensers

Surge-proof and "self-healing." Withstand high operating tempera-tures—absolutely dry—may be mounted in any position.



A Type for Every Replacement Job
High capacity available in the minimum amount of space.
Furnished in universal upright or inverted containers. Dry electrolytic.
Negative terminals grounded to can. Standard container size 4%"x11%" for all capacities. Inverted types furnished with lugs or 6" leads, mounted in %" hole. D. C. working voltage 450 V.



#### 4 Working Voltage 450 V. D. C. Round Aluminum Containers

Binding post and lug connections for post-tives. Container is tives. Container is common negative. All are 4%" high. 8-8 size is 2½" diam. All others are 3" diam.

ltock lumber	Capac. Mfd.	List Price	Your Price
D5652 D5653 D5654 D5655	4-4 8-8 8-8-8 9-9-18 8-8-8-8	\$1.30 1.60 2.70 3.75 3.60	\$0.76 .94 1.59 2.20 2.12

#### Dry Electrolytic **By-Pass Condensers** Cardboard Containers



ecially suitable to replace n" paper by-pass filter sections, compact. Container dimensions thick; 1%" wide; 2%" long. "blown" Very compact. Contain 1 %" thick; 1 %" wid Solder lug connections.

Stock Number	Cap. Mfd.	Working Volts D. C.	Price Each
3D5671	.5	450	29 c
3D5672	1.0	450	32 c
3D5673	2.0	450	38 c
3D5674	4.0	200	38 c
3D5675	8.0	150	44c
3D5676	8.0	200	47 c
3D5677	10.0	100	410
3D5678	25.0	50	47 c
305679	10.0	25	29 c
3D5680	20.0	25	35 c
17.4			Tubi

#### Rectangular Metal Containers

Containers
Six inch, color
coded, flexible
insulated wire
leads for each
a e c t i o n .
Flanges for conventent mounting. are 4%" and 1%" de easy All deep.

Stock



	Elect				
3D5660 3D5661	4-4-4 8-8-8	2 48 "	1.24		
305658 305659	4-8 8-8	1 76 "	\$0.97		
Number	Mfd.	Width	Price		

Cardboard Containers Voltage 450 Volts D. C. Working



of single units 4½" by 1½" wide. Dual units 4½" long by 1½" wide. Six inch, color coded, flexible insulated wire leads.

Stock	Cap.		Your Price
Number	Mfd.		Each
3D5662	2	110	38 c
3D5663	4	110	44 c
3D5664	6	110	53 c
3D5665	8	110	56 c
3D5666	4-4	2	70 c
3D5667	4-8		79 c
3D5669	6-8		85 c
3D5670	8-8		88 c

#### **Tubular By-Pass Condensers**

In Cardboard Tubes

Replacement cartridge type dry electrolytic condensers. Scaled with special wax to withstand high temperature. 2 inch timed leads will not pull out. Length 24". Diameter %" to 1%".

itock Sumber	Cap. Mfd.	Volts D. C.	Your Price	Stock Number	Cap. Mfd.	Volts D. C.	Your
D5681 D5682 D5683	50 10 25 10	5 25 25 25 50	44 c 29 c 38 c 38 c	3D5690 3D5691 3D5692 3D5693	8 2 4 8	150 200 200 200	44 c 32 c 38 c 47 c
D5685 D5686 D5687 D5688 D5689	25 5 10 25 4	50 100 100 100 150	47 c 32 c 41 c 56 c 35 c	3D5694 3D5695 3D5696 3D5697	2 4 8 2	300 300 300 450	35 c 4 l c 53 c 38 c

Wurlitzer Part Num. 11007 3E9032-

YOUR PRICE ... 44¢ 10-10 mfd. 25 WV. Round aluminum container with center mounting stud. Case common negative. Lug terminals. Container 136x1.

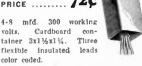
Wurlitzer Part 10656 3E9033— \$1.12 12-16 mfd. 150 w.v.; 10 mfd. 25 flexible in w.v. Cardboard container 23/x15/x13/2. color coded. Four flexible insulated leads.



Lyric Part No. 10678PE

3E9034-List. \$1.25.

PRICE 4-8 mfd. 300 working volts. Cardboard con-



Page 75

THE RADOLER COMPANY

3333

# Keystone Dry Electrolytic Condensers Fully Guaranteed—Built to Give Constant Capacity

Reystone is the Radolek Trademark for Sciected Quality Products built by Prominent Manufacturers to Radolek Laboratory Specifications. Keystone Condensers are Fresh New Dry Electrolytic capacity units guaranteed for Full Capacity and Rated Voltage. Each type and size has been selected after careful test to have the lowest power factor, the greatest safety factor, and the longest life under extreme conditions. From the many production samples submitted for test, Radolek Engineers selected the best type in each size. Samples of each shipment are tested to maintain the highest standards. When you buy Keystone Condensers you receive the "cream" of the best menufactured products at the lowest honest prices.

#### **New Universal Replacement**

Aluminum Case and Leads Insulated

450 D.C. Working Volts 500 D.C. V. Peak Surge Suitable for all replacements where inverted al-uninum container type is required. If grounded container is destred the negative lead may be con-nected directly to the chassis.

3E5701-1 Mfd. Can size, 1%"x2%" List. 85c. VOUR PRICE

3E5703-8 Mfd. Can size 1 a"x4 List, \$1.05.

YOUR PRICE

#### **Dry Electrolytic**

In New Tab Type Fibreboard Cases

450 D.C. Working V. 500 D.C. V. Peak.

Mounting tab at each end facilitates installa-tion. Tabs may be cut off without damage to unit. if not needed. 2 wire leads, 1-Neg., 1-

3E5760 4 M f d 1-5/16"x44,"x5/8". 1-5/16"x4 List. 75c. YOUR PRICE .. 35¢

Case 1fa"x4¼"x7a". List, 95c. YOUR PRICE. 42¢

#### **Aluminum Case Inverted Stud Mounting**

Case Negative—450 D.C. Working Volts—500 D.C. Volts Peak Hernetleally sealed. Unaffected by temperature. For single %" hole mounting. Anode projects through threaded insulated terminal.

Cap.	Container	Stock	List	Your	Ten
Mfd.	Size Inches	Number	Price	Price	For
2 4 6 8	1 4 x 2 % 1 2 8 x 2 % 1 2 1 x 4 1 8 1 2 x 4 1 8 1 8 x 4 1 4	3E5705 3E5706 3E5707 3E5708 3E5709	\$0.75 .85 1.00 1.05 1.60	\$0.35 .39 .45 .47 .67	\$3.39 3.85 4.27 4.47 6.40

#### Dual Sections-Container Common Negative

Cap, Mfd. at Anodes	Total Cap.	Container Size Inches			Your Price	
4-4 6-6 8-8	8 12 16	1 x41 1 x41 21 x11	3E5710 3E5711 3E5712	\$1.30 1.55 1.60	50.60 .73	\$5.75 6.95 8.64

Ail-Purpose Dry Electrolytic, Aluminum Case
450 D.C. Working Voltage—500 D.C. Volt Peak—Container and Leads Insulated
Buth positive and negative leads are brought out through insulated threaded
nipple. If grounded container is required Neg. lead may be soldered to
chastis. For single 2." hole Mtg. Locknut for clamping to chassis.

Cap.	Container	Stock	List	Your	Ten
Mfd.	Size Inches	Number	Price	Price	For
2 4 6 8	1 % x2 % 1 % x2 % 1 % x4 % x4	3E5700 3E5701 3E5702 3E5703 3E5704	\$0.75 .85 1.00 1.05 1.60	\$0.36 .40 .46 .47 .69	\$3.45 3.85 4.35 4.47 6.55

#### Dual Sections-Container Insulated

Three Insulated leads: two positive, one common negative

Cap. Mfd.	Total	Container	Stock	List	Your	Ten
at Anodes	Cap.	Size Inches	Number	Price	Price	For
4-4	8	13 x4 18	3E5713	\$1.30	\$0.62	55.90
6-6	12	14 x4 19	3E5714	1.55	.75	7.15
8-8	16	21 x4 1	3E5715	1.60	.99	9.49

#### New One-Inch Diameter Aluminum Cases

Compact for Small Receivers

450 D.C. Working Volts 500 Volts D.C. Peak Container Regative
For use where mounting space is limited. The one-inch diameter containers will fit most midget and compact receivers. Inverted container for single 5/8" hole mounting. Container negative. Positive Ing terminal

Mfd.	Container	Stock	List	Your	Ten
	Size Inches	Number	Price	Price	For
2 4	1x2 %	3E5716	\$0.75	\$0.35	\$3.39
	1x2 %	3E5717	.85	.40	3.85
	1x4 1	3E5718	1.00	.46	4.35

#### Low Voltage Electrolytic Condensers

For C Bias Circuits

Aluminum container with mounting boit and nut at bottom. Fits
1/4" hole Container negative. Positive connection on top with soldering lug.

Cap.	Work	Peak	Container	Stock	List	Your	Ten
Mfd.	Volt	Volt	Size	Number	Price	Price	For
5 5 10 10 20 20	25 50 25 50 25 30	35 75 35 75 35 50	13 x 34 1 x 34 13 x 136 13 x 136 13 x 136 12 x 136	3E5730 3E5731 3E5732 3E5733 3E5734 3E5735	\$0.60 .65 .70 .80 .95	\$0.25 .29 .29 .31 .35	\$2.34 2.72 2.72 2.90 3.29 3.85



#### **Multiple Section Dry Replacements**

Top Connected-475 D.C. Working Volts

Universal replacement for upright, top-connected wet electrolytics. Aluminum Container. Complete with Mtg. rings.

Capy. Mfd. at	Container	Stock	Your
Anodes	Size Inches	Number	Price
8-8	2 12 X4 18	3E5740	\$0.87
5-15	2 12 X4 18	3E5742	1.10
8-8-8	3 x4 18	3E5744	1.29
9-9-18	3 x4 19	3E5745	

#### Dry Electrolytics with Lugs

In New Tab Type Fibreboard Cases 450 D.C. Working Volts-500 D.C. V. Peak

e-proof containers. Mounting tabs at each end simplify ion. Soldering lug terminals—1-Pos., 1-Neg.

Cap.	Size of	Stock	List	Your	Ten
Mfd.	Container	Number	Price	Price	For
2468	2 1 4 X 15 6 X 5 6 4 1 4 X 15 6 X 5 6 4 1 4 X 1 5 X 7 8 4 1 1 1 1 4 X 7 8	3E5755 3E5756 3E5757 3E5758	\$0.65 .75 .90	\$0.28 .35 .39 .42	\$2.65 3.30 3.70 3.95



#### Dry Electrolytics with Leads

In New Tab Type Fibreboard Cases 450 D.C. Working Volts-500 D.C. V., Peak

Moisture proof containers with mounting tabs on each end. 6". No. 18 wire leads with high voltage insulation. 1-Pos., 1-Neg.

Cap.	Depth	Stock	List	Your	Ten
Mfd.	Container	Number	Price	Price	For
2 4 6 8	2 1 g x 15 4 x 5 6 4 1 4 x 15 6 x 3 6 4 1 4 x 15 6 x 7 6 4 1 4 x 15 6 x 7 6 4 1 4 x 1 6 x 7 1	3E5759 3E5760 3E5761 3E5762 3E5763	\$0.65 .75 .90 .95 1.40	\$0.28 .35 .39 .42 .62	\$2.65 3.30 3.70 3.95 5.90

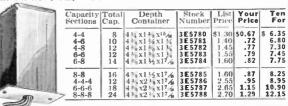
#### **Dual and Triple Dry Electrolytic Condensers**

In Tab Type Fibreboard Cases. 400 D.C. Whg. V., 500 V. Peak

		breboard contai		tab o	n each	end. 6	inch lea	ds.
Cap. Mfd.	Polarity of Leads	Depth Container	Stock Number	List Price	Your Price	Ten For		1
4-4 4-4 6-6 6-6 8-4 8-4	1N-2P 2N-1P 1N-1P 2N-1P 1N-2P 2N-1P	4   4 x 1   8 x 15 4 4   4 x 1   8 x 15 4 4   4 x 1   8 x 1   4 4   4 x 1   x 1   4 4   4 x 1   x 1   4 4   4 x 1   8 x 1   4	3E5765 3E5766 3E5767 3E5768 3E5769 3E5770	\$1.20 1.20 1.35 1.35 1.35 1.35	\$0.53 .53 .63 .63 .65	\$ 4.95 4.95 5.95 5.95 6.10 6.10		100000000000000000000000000000000000000
8-8 8-8 8-8 4-4-4 8-8-8	1N-2P 2N-1P 2N-2P 3N-3P 3N-3P 3N-3P	4 4 x 1 1/4 x 17/6 4 4 x 1 1/4 x 17/6 4 4 x 1 1/4 x 17/6 4 4 x 2 1 x x 17/6 4 1 x 2 1 x x 17/6 4 2 2 1 x 2 1 x 17/6	3E5771 3E5772 3E5773 3E5774 3E5775 3E5776	1.50 1.50 1.50 1.50 1.90 2.70	.72 .72 .72 .85 1.05	6.95 6.95 6.95 7.93 9.85		

#### Multiple Dry Electrolytics—Metal Containers

Inverted rectangular metal cases, completely insulated. Each section is separate and each has separate positive and negative leads. Leads are No. 18 flexible stranded 6 in, long; high voltage insulation. Condensers hermetically sealing -not affected by temperature variations.



#### Small Ribbed Aluminum Container

450 D.C. Working Volts—600 Volt D.C. Peak
Corrugated surface provides a greater heat dissipating area
coder operation and higher efficiency. Smaller containers
higher working voltage are possible with this unique design.
single 3/4" hole mounting. Container negative.

Cap.	Container	Stock	List	Your	Ten
Mfd.	Size Inches	Number	Price	Price	For
4 6	1 3 x2	3E5720	\$1.05	\$0.44	\$4.15
	1 3 x3 14	3E5721	1.20	.53	4.70
	1 3 x3 15	3E5722	1.25	.56	5.30



#### **Voltage Doubling Dual Sections**

Fibreboard Cases-220 Volt D.C. Peak

Especially designed and matched for voltage doubling circuits employing 25Z5 or similar type tubes. Have pos.-neg. (neutral) common lead. Flexible 6 inch insulated wire leads.

	Capacity Sections	Container Size	Stock Number	List Price	Your Price	For
,	10-10 12-12	414 x1 14 x1 14 414 x1 14 x1 14	3E5789 3E5790	\$1.35	\$0.67	\$6.36 6.84
	16-16	414x114x114	3E5791	1.65	.85	8.07

# **KEYSTONE Electrolytic Condensers**

All Dry-Built to Give Constant Capacity

#### Dry Electrolytics in Round Metal Cases

With Flush Lug-Type Mounting Screws

450 D.C. Working Volts-500 Volt Peak Container Insulated-Leads Insulated

Round aluminum container with lug type %2 studs riveted flush with sides of case. Mounting centers 1½ " For inverted mounting where studs must clear material beneath chassis. Container insulated. Six inch flexible leads; high voltage rubber and braid insulation. Where grounded container is desired the negative lead should be grounded direct to chassis.

Cap.	Polarity	Container	Stock	List	Your	Ten
Mfd.	Leads	Size Inches	Number	Price	Price	For
2 4 8 4-4 4-8 8-8	1N-1P 1N-1P 1N-1P 1N-2P 1N-2P 1N-2P	1 4 X2 5 6 1 4 X2 5 6 1 4 X4 1 6 1 4 X4 1 6 1 1 X4 1 6 2 1 X4 1	3E5723 3E5724 3E5725 3E5726 3E5727 3E5728	\$0.85 .95 1.25 1.50 1.65 1.80	\$0.39 .44 .51 .64 .77	\$3.70 4.17 4.85 6.12 7.30 9.76

# **Electrolytics in Tubular Fibreboard Case**

Dry Electrolytics in Ludular Pideboard Case

With Flush Lug-Type Mounting Screws
450 D.C. Working Volts—500 Volt Peak

Moisture-proof tough fibre board tubular containers sealed with
high melting point compound. Stranded flexible 6 inch leads
with high voltage rubber and braid insulation. Leads tinned for
easy soldering. Lug type %2 mounting studs riveted flush with
sides of container. Mounting centers 14".

Cap.	Polarity	Container	Stock	List	Your Price	Ten
Mfd.	Leads	Size Inches	Number	Price		For
2	1N-1P	1 1 4 X2 3	3E5749	\$0.75	32¢	\$3.04
4	1N-1P	1 1 1 X2 3	3E5750	.85	39¢	3.70
8	1N-1P	1 1 4 X4 4	3E5751	1.50	45¢	4.33
4-4	1N-2P	1 1 4 X4 4	3E5752	1.30	57¢	5.45
4-8	1N-2P	1 1 4 X4 4	3E5753	1.45	69¢	6.62
8-8	1N-2P	2 1 2 X4 1 5	3E5754	1.60	77¢	7.40



#### Dry Replacement Electrolytics-Universal Upright

Top Connected-Complete with Mounting Brackets

450 D.C. Working Volts—500 Volt Peak
These multiple section dry electrolytics are very popular for replacement of wet electrolytics used in earlier model receivers. Each section is a separate condenser and all nexative terminals are grounded to the aluminum container. Hermetically sealed against moisture. Unaffected by wide temperature variations. Solder-jut terminals. Compiler with temperature varia variations. Solder-lug terminals. Complete with

Capacity	Total   Cap.	Container	Stock	List	Your	Ten
Section		Size	Number	Price	Price	For
4	4	13 x 25 4	3E5737	\$0.85	50.39	\$ 3.77
8	8	1 x 4 1 4	3E5738	1.05	.47	4.47
12	12	13 x 4 1 4	3E5739	1.60	.72	6.80
		Dua	Sections			
8-8	16	21 x41 q	3E5740	1.80	.87	8.25
9-9	18	212 x41 q	3E5741	2.00	1.05	9.95
5-15	20	212 x41 q	3E5742	2.30	1.10	10.40
		Tripl	e Sections			
2-4-8	14	1 3 a X4 1 a	3E5743	2.90	1.05	9.95

8-8-19	- 1	30		o.	34 14		3E3/43		0.79		1.79	- 1	16.90
	á				Quad	rup	le Secti	ons					
8-8-8-8	1	32	1	3	X41%	T	3E5746	1	3.60	T	1.65	1	15.65
8-8-18-18		52		3	x41,	- 1	3E5747		4 75	-	2.49	1	23.60
9-9-18-18	1	54	1	3	X4 14		3E5748	-	5.25		2.55		24.25

#### **Dry Electrolytic Condensers**

In Tubular Fibreboard Containers
Wax impregnated moisture-proof tubes hermetically sealed. 2" bare solld wire flexible leads. One lead negative, one positive. For bypass, filter and

Cap.	Work Volts	D.C. Peak	Size LgthDia.	Stock Number	List Price	Your Price	For
0.5	300	400	15 6K 35	3E5792	\$0.45	\$0.16	51.50
0.5	400	500	18 16 X 1	3E5793	.55	.19	1.82
1	300	400	1 8 X 13 /6	3E5794	.50	.24	2.20
1	400	500	1 X 13 16	3E5795	.55	.27	2.57
2	400	500	113 16X 15 16	3E5796	.65	.31	2.85
2 4	500	600	113 16X 15 16	3E5797	.75	.34	3.19
4	400	500	1 14 82 14	3E5798	.75	.35	3.34
1	200	250	1 × 13 6	3E5799	.50	.22	2.10
2	200	250	11 X 18 4	3E5800	.55	.24	2.28
2	125	175	1 5 x 11 4	3E5801	.50	.22	1.95
4	125	175	13 X 13 %	3E5802	.60	.24	2,20
6	125	175	1 x21/	3E5803	.70	.29	2.76
1 2 4 6 8	125	175	1 1 x x 2 1 7	3E5804	.75	.31	2.95
10	125	175	11.8217	3E5805	.85	.33	3.15



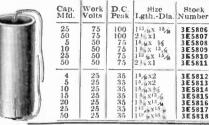
#### Special Dry Electrolytic Condensers

In Fibreboard Containers 450 D.C. Working Voltage

Special value dry electrolytics of considerably better quality than usually offered at these prices. Full capacity and safely rated but not the same grade as Keystone Condensers. Moisture-proof containers. Six inch insulated wire leads.

Cap. Mfd.	Container Size Inches	Stock Number	List Price	Your Price	Ten For
2 4 8 4-4	21 x 115 6 x 9 41 x 115 6 x 5 9 41 x 115 6 x 7 9	3E5860 3E5861 3E5862 3E5863	\$0.65 .75 .95	50.23 .26 .30	\$2.15 2.50 2.90 4.45
8-8	41, x1 5, x17,	3E5864	1.50	.55	5.25

#### Low Voltage Tubular Dry Electrolytics



#### **Compact Dry Electrolytics**

In Fibreboard Cases

450 D.C. Working Volts-500 Volts Peak This new series of compact high voltage dry ren

	ics is a boon to the midget A.C. sets m. Standard quality	where space is	when at		
ip. fd.	Container Size	Stock Number	List Price	Your Price	Ten For
0.5	2x x1 x 7/6 276x1 5x 9/6 276x11 x 9/6	3E5820 3E5821 3E5822	\$0.80 .85	\$0.22	\$2.10 2.45

#### Midget Filter and Bypass Dry Electrolytics

For Midget Sets
Low Voltage—Fibreboard Cases
Special low voltage compact multiple
section dry electrolytics for midget and
A.C.-D.C. receivers. Furnished with 6
inch insulated flexible leads in moistureproof fibreboard containers with mounting tabs.

\$4.25 5.60 2.20 2.40 3.30 4.65

1.80 1.95 2.15 2.35 2.56 2.72 3.98

\$0.95

1.20

.55

50.45

.59 .24 .26 .36

Cap. Mfd.	Peak Volts	Polarity of Leads	Container	Stock Number	List Price	Your Price	Ten For
4-4 4-4 5-8 8-8 8-8 12-4	200 200 200 200 200 200 200	1N-2P 2N-1P 1N-2P 1N-2P 2N-2P 1N-2P	1 1 ( x 1 3 3 x 2 3 8 1 3 4 x 1 3 4 x 2 5 8 1 4 x 1 3 3 x 2 5 8 1 4 x 1 3 4 x 2 5 8 1 4 x 1 3 4 x 2 5 8 1 1 4 x 1 3 4 x 2 5 8 1 1 4 x 1 3 4 x 2 5 8	3E5825 3E5826 3E5827 3E5828 3E5829 3E5830	\$0.85 .85 1.10 1.25 1.25 1.15	\$0.44 .44 .51 .63 .63	\$4.15 4.15 4.80 5.97 5.97 5.62
12-8 16-8 4-4 5-5 4-8 8-8	200 200 35 35 35 35 35	1N-2P 1N-2P 1N-2P 1N-2P 1N-2P 1N-2P	15 4 X 1 3 4 X 4 1 4 1 1 4 X 1 9 4 X 4 1 4 3 4 X 9 4 X 1 5 8 3 4 X 9 4 X 1 5 8 3 4 X 3 4 X 2 3 4 X 3 4 X 2	3E5831 3E5832 3E5833 3E5834 3E5835 3E5836	1.25 1.50 .75 .80 .85	.65 .72 .27 .29 .35	6.23 6.95 2.52 2.75 3.31 4.45

#### Tubular Condensers for Midget Sets Low Voltage Dry Electrolytics

Multiple section dry electrolytics in moisture-24 3 x44 3E5744 2.70 1.29 12.15 proof fibreboard tubular containers. For midget set replacement. Container has tab at each end for mounting. Six inch insulated flexible leads.

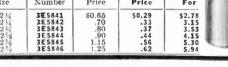
5	Cap.	Peak	Polarity	Container	Stock	List	Your	Ten
	Mfd.	Volts	of Leads	Size	Number	Price	Price	For
	4-4 5-5 8-5 8-8	35 200 200 200 200	1N-2P 1N-2P 1N-2P 1N-2P	11 48 X 2 3 % 11 46 X 2 3 % 11 46 X 2 3 % 11 46 X 2 3 %	3E5837 3E5838 3E5839 3E5840	\$0.85 .90 .95 1.20	\$0.27 .47 .51 .63	\$2.52 4.44 4.80 5.97

Tubular Dry Electrolytics

Fibreboard Case—200 D.C. Working Volts

A.C.-D.C. midget set replacements. Tubular fibreboard containers, moisture-proof and hermetically sealed at each end. 6 inch insulated flexible leads tinned for easy soldering. Single units have one positive, one negative lead each end; dual sections have common negative and two positive leads. Especially designed with higher working voltage limits than condensers customarily used in the midget sets. 6 Inch Leads.

Cap.	Container	Stock	List,	Your	Ten
Mfd.	Size	Number	Price	Price	For
4 6	1x2 ¼	3E5841	\$0.65	\$0.29	\$2.78
	1x2 ¼	3E5842	.70	.33	3.15
4-4 4-8	1x2 \(\frac{1}{2}\)	3E5843 3E5844 3E5845	.80 .90 1.15	.37 .44 .56	3.53 4.15 5.30
8-8	1 x 2 7 y	3E5846	1.25	.62	5.94



#### Special Dry Electrolytic Replacements Aluminum Containers-450 D.C. Working Volts

First quality condensers offered at a special low price. Conserva-tively rated and well-made but not quite equal to Keystone stand-ards. Container negative. Single units have lug terminal, dual sections have six inch flexible insulated leads. For single 75 in. hole mounting. Large locknit clamps unit securely to chassis base.

Cap.	Container	Stock	List	Your	Ten
Mfd.	Size Inches	Number	Price	Price	For
2 4 8 4-4 8-8	1 \$6 x 2 b <sub>1</sub> 1 \$8 x 2 b <sub>2</sub> 1 \$8 x 2 b <sub>2</sub> 1 \$4 x 4 b 1 \$8 x 4 b 2 b <sub>2</sub> x 4 b	3E5855 3E5856 3E5857 3E5858 3E5858	\$0.65 .75 .95 1.20 1.50	\$0.29 .33 .37 .54	\$2.75 3.15 3.55 5.10 6.60

#### **Keystone By-Pass Condensers**

#### Tubular Condensers



Linen Paper and Foil Type

These By-Pass Condensers represent an exceptional value at our new low prices. They are carefully made of the finest materials and in accordance with the most advanced principles of condenser manufacturing processes. We recommend this line to you for use wherever a strictly first-class unit at a moderate price is required. Metal foll and linen paper, wax impregnated. Hermetically scaled in tubular fibre cases. 1½ inch tinned leads, securely anchored. Approx. 2" long, %" to 1½" Diam.

400 Volts D. Working Vo		600 Volts D. C. Working Volts
Stock Num.	Cap. Mfd.	Stock Num.
3D5400 3D5401 3D5402 3D5403 3D5404	.0001 .0002 .00025 .0005	3D5425 3D5426 3D5427 3D5428 3D5429
3D5405 3D5406 3D5407 3D5408 3D5409	.004 .005 .006	3D5430 Your 3D5431 Price 3D5432 3D5433 3D5434 each
3D5410 eacl 3D5411 Lot 3D5412 of 3D5413 3D5414 10	.008 .01 .02 .03	3D5435 3D5436 Lots 3D5437 of 3D5438 10 3D5439 85c
3D5415 3D5416 3D5417 3D5418 3D5419	.04 .05 .06 .07 .08	3D5440 3D5441 3D5442 3D5443 3D5444
3D5420 9c e 3D5421 9c e 3D5422 10c e 3D5423 12c e 3D5424 15c e	a2 a25 a3	3D5445 11c cm 3D5446 17c cm 3D5447 17c cm 3D5448 18c cm 3D5449 23c cm

#### Multiple Tubular Condensers



Metal Foil and Linen Paper Paraffin impregnated, hermetically sealed in fibre cases. One continuous non-inductive winding; each section remains non-inductive. 1½" bare wire non-inductive winding; each section remains non-inductive. 1½" bare wire common leads. 4" insulated stranded wire section leads.

400 D.C. Working Voltage

Number		Each Sec.	Each
3E5460	12 X1 7 4	0101	16¢
3E5461	12 X1 7 8	.010101	21c
3E5462	11 4 X1 14	.11	19¢
3E5463	11 4 X2 14	.111	26¢
3E5464	13 14 X 2	.1111	34¢
3E5465	15 14 X 2	.11111	41¢
3E5466	15 16 X 2	.2525	26¢

600 D.C. Working Voltage

Stock	Container	Cap, Mfd,	Price
Number	Size	Each Sec.	Each
3E5470	$\begin{array}{c} 1^{3} \times x^{9} \times \\ 1 \times x^{15} \times \\ 2^{3} \times x^{13} \times \\ 2^{3} \times x^{15} \times \end{array}$	0101	21c
3E5471		.010101	26c
3E5472		.11	24c
3E5473		.11	34c
3E5474	2 3 4 X 15 216	.1111	41¢
3E5475	2 3 4 X 1	.1111	51¢
3E5476	2 4 X 1	.2525	34¢

Special Value By-Pass and Filter Condensers 1/2 Mfd. 300V D.C.

V. D.C. working

voltage. Metal can is 1½ in. high % in. deep. Three mounting hole centers lx 2½ in. high % in. 24x2½". Solder lug terminals are plerced, making wiring and soldering

3E549	0-	_									1	9	4
PRICE.	E	ACH							,		1	7	١
1 ats	nf	0.1			ı			4	:	í	7	5	

#### **Best Quality Paper Type By-Pass Condensers**



Metal Cased Popular among manufacturers, servicemen and xperimenters.

experimenters.
Will give long
and satisfactory service. Hermetically
sealed in metal containers. Metal foil
elements. Paper insulated. Size %x 3 x1 ta inches.

Stock Number		Volts	Price
3E5206	.05	400	14¢
3E5200	.1	400	15¢
3E5201	.25	400	19¢
3E5202	.5	400	22¢
3E5207	.05	600	19¢
3E5203	1.1	600	20€
3E5204	.25	600	22¢
3E5205	.5	600	32c
3E5208	.1	1000	29€

#### **By-Pass** Condensers Lugs from End

Non-inductive "paper" Condensers sealed in metal cans. Size 112x 34x2 inches.

Stock Number	Capy. I	Voltage	Price
E5218	1.	400	30¢
E5217°	2.	400	49¢
E5211	.5	400	32¢
E5212	.25	600	22c
E5213	.5	600	31c
E5214	1.	600	44c
E5218*	2.	600	72c

in size 2"x1"x2" \*Note-Supplied

#### By-Pass Condensers







Stock Number		D.C. Working Voltage	Price
3E5220 3E5221 3E5222 3E5223 3E5224	1. .5 .25 .5	400 400 600 600 600	30¢ 32¢ 22¢ 31¢ 44¢

#### **Combination By-Pass** Condensers



Non-inductive, "paper" conden-"paper" conden-sers sealed in metal cans. Small

size, convenient practically all Sets. Mtg. Centers 21/8".

Stock		D.C. Working	Your
Number		Voltage	Price
3E5241	.11	400	26¢
3E5242		600	31¢

#### **Combination By-Pass** Condensers



cans.	Size	%x1;	2x2	8
inches. Ninche . venient f	Size	is o	on-	N.
practical:				-
Stock Num er	3	ap. Ifd.	D. C. Volts	Pri
3E5230	.1	1	400	2

Num er	Mfd.	Volts	Price
3E5230	,1-,1	400	27c
3E5231	,1-,1-,1	400	36c
3E5240	.1111	400	52c
3E5232	.2525	400	32¢
3E5233	.252525	400	49¢
3E5234	.55	400	39c
3E5235	.11	600	37c
3E5236	.111	600	42c
3E5237	.2525	600	38€
3E5238	.252525	600	49c
3E5239	.55	600	52¢

#### Potter By-Pass Condensers

Metal Case By-Pass with Lugs

Compact, non-inductive units in Designed to permit large (ans. minimum space. High resistance paper dielectric, chemically impregnated. diclectric, chemically impregnated. Size of can %x%x1 % inches. Mounting centers, 2 % inches.

9		D	Dane	
E5034	A-602	25	600	32c
E5033	A-601	1.1	600	27c
E5032	A-403	.5	400	33¢
E5031	A-402	.25	400	27¢
E5030	A-401	.1	400	24c
Stock Sum.	Code Num.	Cap. Mid.	Work, Volt.	Your Price



By-Pass and Filter Condensers with End Lugs

Non-Inductive

Type A. Size: 142x 44x2 inches. Mtg. H ole centers 142 and 242 inches.

Stock Sum.	Code Num.	Cap. Mfd.	Work. Volt.	Your Price
E5040	A-404	1.	400	44¢
E5041	A-403	.5	400	33€
E5042	A-602	.25	600	27c
E5043	A-603	.5	600	39e
E5044	A-1002	25	1000	47c



By-Pass and Filter with Side Lugs Non-Inductive

Type AA. Size 1 12x 34x2 inches (same size as Crosley RF by-pass condensers). Mtg. centers 243 centers 23 Inches.

Stock Num.	Code Num.	Cap. Mfd.	D. C. Work Volt,	Your Price
3E5050 3E5051 3E5052 3E5053 3E5054	AA-203 AA-302	1. .5 .25 .5 .25	400 400 400 600 1000	44¢ 33¢ 27¢ 39¢ 47¢

#### **Cub Condensers**



3" Leads, 2%" Long. 1/2" to 134" Diam.

improved fibre casing, having ferrules which seal the ends of metal ferrules which seal the the condenser. Non-Inductive.

Number	Mfd.	Volts	Price
3E5500	.0001	600	EACH
3E5501	.00025	600	
3E5502	.0005	600	
3E5503	.001	600	
3E5504 3E5505	.002	600	12c
3E5506 3E5507 3E5508 3E5509 3E5510 3E5511	.005 .006 .0075 .01 .02	600 600 600 600 600 400	TEN FOR \$1.10
3E5512	.1	200	12c
3E5513	.1	400	15c
3E5514	.25	200	15c
3E5515	.25	400	20c
3E5516	.5	200	20¢
3E5517	.5	400	25¢
3E5518	1.	200	30¢

#### **CUB Combination** By-Pass Condensers 21/2" Leads, 23/4" Long, 1/2" to 1" Diam.

Stock	Cap.	Working	Your
Numer	Mfd.	Volts	Price
BE5525	.11	200	25¢
BE5521	.2525	200	37¢
BE5530	.0101	400	20¢
3E5522	.0505	400	250
3E5526 3E5527	.11	400 400	25¢
3E5523	.2525	400	42¢
3E5524		600	32¢



Easily wired in circuit. 2-inch sewire leads. Easily wired in circuit. 2-in curely anchored tinned wire Covered with a tough durable "rwax" insulation. Moisture proof to 2½" Long. %" to 1½" Di

Stock	Capacity	Working	Your
Number	Mfd.	Voltage	Price
3D5000 3D5001 3D5002 3D5003 3D5004	.001 .002 .004 .006 .006	400 400 400 400 600	12c EACH
3D5005 3D5006 3D5007 3D5008 3D5009 3D5010	.01 .01 .02 .02 .05	400 600 400 600 400 600	14c 14c 14c 17c 17c 17c
3D5011	1/10	200	15c
3D5012	1/10	300	19c
3D5013	1/10	400	20c
3D5014	1/10	600	30c
3D5015	14	200	19 c
3D5016		400	27 c
3D5017	1 j	200	24c
3D5018	1 j	300	30c
3D5019	1 j	400	30c
3D5020	1 j	200	31c



By-Pass Size 38x34x118"

Mtg. Mtg. Cen-Compact Units In Metal Cans

With 6-Inch Insulated Leads				
Stock Num.	Code Num.	Cap. Mfd.	D.C. Work. Volts	Your
3E5075 3E5076 3E5077	XA-101 XA-102 XA-103	.1 .25 .5	200 200 200	15¢ 19¢ 22¢
3E5078 3E5079	XA-201 XA-202	.1	300 300	18¢ 20¢
3E5089	XA-301	.1	400	22¢

Filter or **By-Pass** 1 MId. 300 Volts

Metal can size s in wide, 1% 17s in. wide, 1% in. high, 7s in. deep. 3C5491 YOUR PRICE, EACH ...

19¢ \$1.70 Special Value Tubular

#### Condensers Paper and Foil Type

wax impreg-nated. Tubular fibre cases, 1½" wire leads, 2½" Long, ½" to 1" Diam. Stock |Cap. | Work. |

Num.	Mid.	Volts	Price
3E5450	.006	4001	Ten Ass't, fo
3E5451		400	470
3E5452		400	47c
3E5453	.05	400	100 for
3E5454	.1	400]	\$4.15
3E5455	.25	200	6¢
3E5456	.5	200	9¢
3E5457		400	10c
3E5458	.5	400	12c
	Adin	chabl.	. Mica

#### Adjustable Mica Condensers



For equalizing or balancing variable con-

denser sections in superheterodyne and other critical circuits. Insulated bakelite base; size
%x1 1 inches.

74 X 1 9 X 1 I I	CHES.			
Stock	Cap.	Mfds.	List	Your
vum.	Min.	Max.	Price	Price
3C5638		25]		
3C563€		50 }	50c	16c
3C5637	5	100]		
3C5638	3 75	250 }	75c	27 c
305639	75	350 \$		Ea.

#### **Certified Filter Sections and Mica Condensers**

#### **FLECHTHEIM**

#### Non-Inductive Uncased Filter Condensers

Type N. U .- 600 Volts D.C.



ing is impregnated in ing is impregnated in a non-hygroscopic compound and the whole is wrapped in a waxed paper wrapper, thus making the condenser absolutely moisture-proof. Super covered wire leads

plied with rubber that won't pull out

Stock	Cap.	Size	Your
Number		Inches	Price
3C5365	.10	$\begin{array}{c} 2\times 1^{1} \times 2^{-1} \\ 2\times 1^{1} \times 1^{-1} \\ 2\times 1^{-1} \times 1^{-1} \\ 2\times 1^{-1} \times 1^{-2} \\ 2\times 1^{2} \times 1^{-3} \end{array}$	50.20
3C5366	.25		.25
3C5367	.50		.32
3C5368	1.0		.45
3C5369	2.0	2x1 <sup>24</sup> x1 <sup>14</sup>	.75
3C5370	2.0	4x1 <sup>24</sup> x 34	.75
3C5371	4.0	2x1 <sup>13</sup> 6x3 <sup>1</sup> 6	1.30
3C5372	4.0	4x1 <sup>74</sup> x1 <sup>14</sup>	1.30

#### Flechtheim Type H. S. M.

(F)

For continuous operating voltages up to 600 V. A.C., R.M.S. —1000 volts D.C.

all amplifiers using type '71, '45, '46, '47, '10, '50 and similar heavy duty amplifier tubes. Metal ampilier tubes. Metal containers, black finish. Fork type terminals. Conservative ratins. Over 1000 megodinis per mfd. Non-inductive. Flash breakdown over 3000 volts D.C.

Stock	Cap.	Size Inches	Your
Number	Mfd.		Price
3D5350 3D5351 3D5352 3D5353	.05 .1 .25 .5	2x13 6x11 6 2x13 6x11 6 2x13 6x11 6 2x13 6x11 6 2x13 6x11 6	50.67 .73 .81
3D5354	1.0	2x1 <sup>3</sup> -x <sup>1</sup> / <sub>6</sub>	1.21
3D5355	2.0	4 x2 x <sup>3</sup> / <sub>4</sub>	1.89
3D5356	2.0	21 <sup>1</sup> -x2 +	1.89
3D5357	4.0	4 x2 x1 <sup>3</sup> / <sub>6</sub>	3.02
3D5358	4.0	2xx2 <sup>3</sup> -x2 +	3.02

#### Flechtheim Type AZ Midget Tubular Condensers

#### FLECHTHEIM -MIDGET

1000 v. d.c. 660 v. a.e., r.m.s. Ideally suited for use as plate blocking condensers in low power trans-nitters; r.f. by-pass work; for coup-ling condensers in resistance coupled Moisture proof container. amplifiers. Stock Cap. Your Stock Cap. Your Num. Mfd. Price Num. Mfd. Price Num. Mfd. Price Science 3 3C5320 .00005 3 3C5334 .006 1 27c

3C5322			3C5336	.01	2.0
3C5323 3C5324 3C5325 3C5326 3C5327	.0004 .0005 .00075	16c	3C5337 3C5338 3C5339 3C5340 3C5341	.02 .025 .03	
3C5328 3C5329 3C5330 3C5331 3C5332 3C5333	.0025 .003 .004	27c	3C5342 3C5343 3C5344 3C5345 3C5346 3C5347	.05 .06 .07 .08	38c

#### **BARGAIN Low Capacity** Mica Condensers



Type Some with lugs and mtg. holes.

Midget

POLYMET-MICAMOLD					
Stock Number	Cap.	Your Price			
3D5478 3D5479	.00007	5¢			
3D5480	.00005	Each			
3D5481 3D5482	.000035	Ten for 45 Lots of			
3D5483 3D5486	.000025	50 Assorted \$1.95			

#### **Potter Replacement Condensers Sections**



Stock	Code	Cap.	D. C.	Working	Size	List	Your
Number	Number	Mfd.	Test	Voltage		Price	Price
3C5150	104	1.	400V	200	132x 33x314	\$1.25	\$ .69
3C5151	105	2.	400V	200	34x2 x438	1.75	.99
3C5152	107	4.	400V	200	112x214x314	3.75	1.60
3C5154	305	2.	750V	400	1 X2 X4 2 g	3.00	1.20
3C5156	404	1.	1000V	600	19 (6X   11 / 16X 4 3 g	2.00	1.30
3C5157 3C5162 3C5163 3C5170 3C5171	405 507 603 707 803	2. 4. .5 4.	1000V 2000V 2500V 3000V 4000V	600 1000 1250 1500 2000	134 x3 88 x4 38 234 x4 42 x4 38 1 4 x2 48 x4 36 3 4 x7 x4 38 1 4 x3 45 x3 84	3.50 10.00 2.75 13.50 4.50	1.95 6.00 1.85 9.11 3.31

#### Moulded Bakelite Condensers

Micamold—Aerovox—Pol Tested at 750 volts D.C. -Polymet

#### Combination Mounting



Midget Туре Case size 14" long.

ters 1%". Insulated mounting centers in case 114".

Number	Cap. Mfd.	Price	Price
3C5575 3C5576 3C5577 3C5578	.0001 .00025 .00035 .0005	30e 30e 30e 30¢	each 9C
3C5579	.00075	35¢	11¢
3C5580	.001	35¢	11¢
3C5581	.0015	35¢	13¢
3C5582	.002	40¢	13¢
3C5583	.0025	45¢	15¢
3C5584	.003	50e	16¢
3C5585	.004	50e	21¢
3C5586	.005	50e	18¢
3C5587	.006	60e	22¢

#### Sangamo Mica Condensers

Molded in smooth brown bakelite. Extremely fine limits of accuracy. Will retain their capacity under all conditions. Absolutely water and damp proof. 1000 v. D.C. Test.

Stock Number	Cap. Mfd.	List Price	Price
3C5605	.00005	\$ .60	35 e
3 C 5607	.0001	.60	35¢
3C5609	.0002	.60	35¢
3C5610	.00025	.60	35¢
3C5612	.0005	.60	35c
3 C 5 6 1 3	.001	.60	35€
3C5614	.0015	.60	35€
3C5615	.002	.65	38c
3C5617	.003	.85	50€
3C5618	.004	.85	50e
3C5619	.005	.85	50¢
3C5620	.006	1.00	59€
3C5621	.008	1.20	71¢
3C5622	.01	1.40	82¢
3C5623	.015	1.60	94c

Condensers Resistor Clips mounting grid leak Resistor s Sangamo Condensers. 6¢ 3E5629-PER PAIR .....

#### A Complete Assortment Mica Condenser Pad Kit

35 Units—Assorted Sizes Micamoid and Polymet Midget T Mica Condensers as Illustrated at 

PER KIT (35 units) .....

The very highest quality line of condensers on the market. Only the finest materials used in their manufacturing. Processed in the most scientific manner in one of the best equipped factories of its kind in the world. Paper Di-electric impregnated with enduring compounds sealed in moisture-proof metal containers. These condensers guaranteed for rated voltages under proper working conditions.

#### Case



Size long. Lug centers 1%".

Stock	Cap.	List	Your
Number	Mfd.	Price	Price
3C5590	.003	\$0.45	15c
3C5591	.004	.45	18c
3C5592	.0045	.45	22c
3C5593	.005	.45	24c
3C5594	.006	.55	26c
3C5595	.0075	.65	28¢
3C5596	.009	.70	34¢
3C5597	.01	1.00	35¢
3C5598	* .015	1.10	45¢
3C5599	* .02	1.25	54¢

\*Note- Case size 17 n' square



Case size 34" square. 114" Wire Leads. Cap. 1 List

Number	Mfd.	Price	Price
3C5550 3C5551 3C5552 3C5553 3C5554 3C5555 3C5556	.00005 .0001 .00015 .0002 .00025 .0003 .0004	25¢ 25¢ 25¢ 25¢ 25¢ 25¢ 25¢ 25¢	each 9¢
3C5558 3C5559 3C5560 3C5561	.0003 .00075 .001 .0015 .002	30¢ 30¢ 30¢ 35¢	12¢
3C5562 3C5563	.0025	40¢ ( 45¢)	15¢

Midget Type

Lug Cent	ers 18,".	long. 9	wide.
Stock	Cap.	List	Your
Number	Mfd.	Price	Price
3C5565 3C5566 3C5567 3C5568	.0001 .00025 .00035 .0005	25¢ 25¢ 25¢ 25¢ 25¢	PACH
3C5569	.00075	30¢	10c
3C5570	.001	30¢	10c
3C5571	.0015	35¢	12c
3C5572	.002	35¢	12c
3C5573	.0025	40¢	14c
3C5574	.003	45¢	15c

#### Postage Stamp Type



#### Uncased Replacement Condenser Sections



Wax-sealed, paper dielectric. Guar-anteed for one full year—free re-placement when used under proper conditions. Scientifically designed, conditions. Scientifically designed, carefully built. Safety factor in excess of that required to withstand both R. M. A. and N. E. M. A. retest requirements. Pure linen paper dielectric.

"HANG-UP" TYPE Compound Coated with 8 inch leads tinned "push back" wire:

300 D. C. Working Voltage Capacity Mfd. Price Each Stock No. Size In. 3C5250 3C5251 3C5252 1 2 23, x 16 x 14 23, x 3, x 3, 23, x 1 x 12 12c 18c 29c C5252 2 273332 500 D. C. Working Voltage Price

Capacity Mfd.

| Capacity | Capacity

Stock No. Mfd. Size In. Mfd. Size 1 4x2x1<sup>1</sup>8 9 4x2<sup>1</sup>4x1<sup>1</sup>6 3C5261 3C5262

#### Case Renewal Condenser Sections

Consists of a wax sealed paper di-electric condenser ection housed in wax impregnat-d cardboard box which protects around condenser sections and pre-

tion and damend when not used with mounting streps. Chipping and resultant short circuits are eliminated. Six inch insulated leads. Standard

Dimensions In. L. W. D. Stock Cap. Number Mfd.

200 D. C. Working Voltage 3E5300 1.0 3 x1 kg x 9 4 .2 3E5301 2.0 3 x1 kg x 16 .4 Working Voltage 400 D. C. 3 x1 5 x x 9 10 3 x1 15 4 x 14 3 x27 4 x 15 4 3 E 5 3 0 2 Pa 3 F 5 3 N 3 2.0 E5304 600 D. C. Working Voltage 3E5305 3E5306 3E5307 3 x1<sup>15</sup>/4x <sup>7</sup>/4 3 x2<sup>7</sup>/4x1<sup>8</sup>/4 4 <sup>1</sup>/4 x2 <sup>1</sup>/4 x1 <sup>1</sup>/4 800 D. C. Working Voltage

3 x27 x15 4 416 x2 1 x1 1 1000 D. C. Working Veltage 3 x274x154 4 4 x2 4 x1 4 4 4 x2 4 x2 4 1.0

#### R.M.A. Standard Mica Condenser Color Code

Capacity of Mica Condensers is figured in terms of Micro-Microfarads. The first dot appearing on the condenser represents the first figure of the capacity; the second dot represents the second figure and the third dot represents the number of ciphers following the first two figures.

Color	The Figure	Code	Flgure
3lack	0	Green	5
3rown	i	Blue	6
Red	2	Violet	7
)range	2 3	Gray	8
rellow	4	White	9
E	_1 11	I4Ai	AL.

Examples Standard

Deci- 1st, 2nd, mais, MMFDS Dot Dot Dot BrownBlack Brown .0001  $\frac{100}{250}$ Red Green Green Black BrownBlack Brown Brown 00025

# New CONTINENTAL-IGRAD High Voltage Paper Condensers



#### New Type E Units Cardboard Containers

Cardboard Containers
For replacing defective electrolytic sections in filter systems. Cardboard containers, same size as standard electrolytic units. Non Inductive.

D, C. Working Voltage, 450

—Peak, 600

Stock Num.	Capy. Mfds.	Size In. L. W. T.	Your Price
3E8900	40	4 1/4 X 1 3 x X 1 5 /4	\$0.56
3E8901		4 14 x 1 16 x 18 6	.68
3E8902	8-80	4 3 x 1 3 x 1 3 g	1.12

#### D. C. Working Voltage, 500-Peak, 800

Stock Number	Capy. Mfds.	L. Size In.	Price	Price
3E8903 3E8904 3E8905 3E8906 3E8907 3E8908	2* 4* 6* 8* 4-4* 8-8*	4 ½ x1 ½ x1½ 4 ¼ x1½	\$1.10 1.35 1.50 1.65 2.25 2.75	\$0.65 .79 .88 .97 1.32 1.62

All values are equivalent to electrolytic condenser capacities of the same rating, due to improved filter action.

#### To Replace Electrolytic Units

Improved reception and freedom from future breakdowns can be assured by replacing defective elec-trolytics with CONTINENTAL-IGRAD high-voit-age Paper Condeniers. Higher voltage rating and great resistance to heat are some of the advantages they offer. They have the same outside dimensions as standard electrolytic Units, thereby allowing

#### Type IE Inverted Stud Mounting

To replace Electrolytics. Same size and appearance as standard electrolytic Units. Round aluminum containers. appearance
Units Round alumnum.
Non-inductive.
D. C. Working Voltage, 450Peak, 600

Siva In. | Ye

Number	Mids.	Lgth.Dia.	Price
3E8909 3E8910	4* 8*	434x134 434x134	\$0.62
D. C.		g Voltage, k 800	500—
Stock	Capy.	Size In.	Your

3E8912 3E8913

#### Type UE Universal Upright Units

For replacing Electrolytics. Round aluminum cans. Same size and appearance as stand-ard electrolytics. Fits standard electrolytics. Fits stand-ard ring Mtg. clamps. Non-inductive.

D. C. Working Voltage,

Stock Num.	Capy. Mfds.	Size		Your		П
3E8916 3E8917 3E8918 3E8919	5-15* 8-8-8*	43 X 43 X 43 X	3 3	\$1.18 1.97 2.06 2.94		
-					500-Peak	800



Stock	Capy.	Size In.	List	Price
Number	Mfds.	L. Dia.	Price	
3E8920	4*	4 1 x1 36	\$1.50	\$0.88
3E8921	8*	4 6 x1 36	1.80	
3E8922	4-4*	4 1 x 2 1/2	2.40	1.41

3E8923 | 8-8\* 3E8924 | 5-15\* 3E8925 | 4-4-4\* 3E8926 | 8-8-8\* 3E8927 | 9-9-18\* 2.79 2.06 2.94 4.12 4.75 3.50 5.00 7.00 Values are equivalent to electrolytic condenser capacities.



#### Replacement Condensers

Uncased

Ideal for replacing "blown" condenser block sections in filter circuits or power units. Compact, rated safely.

40	00 Volt
Cap.	Dimensions Ht. Wd. D.

111/4X 5/4X 3/	
11/6x 3/x 3/6 11/6x 3/x 3/6 11/6x13/x 3/6 11/6x13/x 3/6 11/6x13/x 3/6 4/6 x13/x 3/6 4/6 x13/x 4/6	\$0.20 .26 .33 .59 1.00 .50
	11/6x156x136 416 x134 x 38

	600 Volt				
3D7531	.1	III MX BRX B	150.2		
3D7532	25	111/6X11/MX TH	.3		
3D7533	.5	111 4x15 4x 56	.4		
3D7534	1.	1116x21 x 34	.6		
3D7535	2.	111 wx214x134	1.1		
3D7536	1.	414 X13aX 32	.5		
3D7537	2.	414 x174x1	. 8.		

	01	DO A OIF	
7538 7539 7540	.1 .25 .5	111/4 x 7 8 x 1/4 111/4 x 15 8 x 1/4 41/5 x 1 1/4 x 1/2	.3

1000 Volt x1 x x3<sup>7</sup> x x3<sup>7</sup> x

#### Cartridge Condensers

Compact service re-placement ndensers

and wide range of sizes available for practically all circuits. Non-inductive. High insulation resistance.

200 V	olt		400	Volt
Stock Num.	Your Price	Capy. Mfds.	Stock Num.	Price
3E8929 3E8930 3E8931 3E8932 3E8933 3E8934 3E8935	\$.09 .09 .09 .09 .09	.001 .002 .005 .006 .01 .015 .02	3E8943 3E8944 3E8945 3E7634 3E7635 3E7636	5.10 .10 .10 .10 .10 .10
3E8936 3E8937 3E8938 3E8939 3E8940 3E8941	.10 .11 .12 .14 .16 .24	.03 .05 .1 .15 .25	3E763E 3E7639 3E7640 3E8946 3E7641 3E8947	.14

3E8940 3E8941 3E8942	.16 .24 .18	.25 .5 .0101	3E7641 3E8947 3E8948	.21 .32 .19
600 V	olt		1000	Volt
3E8949 3E7643 3E7644 3E7645 3E7646 3E7647 3E8951 3E8952	\$.11 .11 .11 .13 .14 .24	.001 .006 .01 .02 .05 .1	3E8953 3E7648 3E7649 3E7650 3E7651 3E8955	5.12 .12 .12 .14 .21 .29



\$0.88

**Dry Electrolytric Condensers** 

Dry self healing. Dependable 525 volt D.C. neak voltage. Surge proof. May be mounted in any position. Complete with mounting rings.

Type E-Upright Mounting

Stock Number	Capacity Each Sec.	Size Dia. IIt.	List Price	Your Price
3D7547	2	13 x 25 g	\$1.35	\$0.44
3D7548	4 1	12 x26 g	1.55	.50
3D7549	4-4	212×41	2.70	1.00
3D7550	5-15	2121414	4.10	1.35
3D7551	6	13 x41a	1.80	,59
3D7552	6 8	1 4 x 4 1 g	1.85	.62
3D7553	8-8	212x416	3.25	1.06
3D7554	8-16	216x414	4.10	1.62
3D7556	10	138×416	2.25	.91
3D7558	16	212x418	2.80	1.20
307561	2-4-8	3 x41 <sub>8</sub>	4.10	1.70
3D7562	2-8-8	3 x41 a	4.40	1.82
3D7563	4-4-4	3 x416	3.95	1.50
3D7564	8-8-8	3 x4 La	4.90	1.59
3D7565	8-8-16	3 x412	5.85	1.88
3D7566	9-9-18	3 x41	6.70	2.20
3D7567	8-8-8-8	3 x41,	6.55	2.12
3D7570	9-9-18-18	3 x41	9.00	3.09

#### Inverted Mounting Container-525 V.D.C.Peak

Insulated type—is provided with insulating boss segregating case from chassis. Grounded type—Case grounds to chassis.

NSULATED Stock Number	GROUNDED Stock Number	Mfd. Cap.	Can Size	List Price	Your Price
3D7571 3D7572	3D7580 3D7575	2	114x134 14x24	\$0.75 .85	\$0.44
3 D 7 5 7 3 3 D 7 5 7 4	3D7576 3D7577	6 8	13x25x 13x34	1.00 1.05	.59 .62



#### Replacement Electrolytics For A.C.-D.C. Midgets

Identical to original units. Cardboard con-tainers (\*) De-notes Common

Positive On all others Common Terminal is negative. Stock Capy. Number Mfds. Working Voltage 25 Volts

3E8957 10-16	0 1 1/4 x 1 1/4 x 2 3/4	.44
Working	Voltage 150	Volts
3E8958 4-4	1 1/x 1 1 x 2 6	.50
3E8959*4-4	1 1/4 x 1 3/4 x 2 3/6	.50
3E8960 4-8	1 1/4 x 1 3 x 2 5/4	.65
3 28961+12-4	1 4 x 1 3 8 x 2 5 6	.76
3E8962 12-4	114x13x254	.76

3E8962	12-4	114 x 1 3 x 2 5 4	.76
Work	ing V	oltage 200	Volts
3E8963	4-4	1 14 x 1 3 n x 2 4n	.53
3E8964	4-4	1 1/x 1 1/4 x 2 5/4	-53
3E8965	4-8	1 1/x 1 1/x 2 4	
3E8966	8-8-4	1 15 x 19 6 x 4 36	1.06
3E8967	8-8-8	11 x 12 4x 43x	1.12
3EU968	8-8-16	116x19 4x4 Lg	1.23
3E8969	12-4	1 14 x 1 3 a x 2 5 6	.76
3E8971	16-8	11xx19 4x416	
3E8972	16-8	1 56 x 119 6 x 25	85

#### **Compact Electrolytics** In Cardboard Containers

Suitable substi-

tute for paper units. Very com- pact. Double sec- clons have a com- non negative ter- ninal.	A Service
---	-----------

Number			Price
D.C. W	orkins	Voltage 50	Volts
3E8974	5	11.6x11.6x236	29¢
3E8975		11/6×11/6×2 %	38€
3E8976	25	1 14 x 1 14 x 2 56	47e
D.C. W	orking	Voltage 150	Volts
3E8977		11 6x114x236	35¢
3E8978	6	11.6x11.6x234	41¢
3E8979	8	114x114x2*4	44¢
D.C. W	orking	Voltage 200	Volts
3E8980	1	11/4×11/4×23/6	32¢
3 <b>E</b> 8981	2	11/4×11/4×23/	32¢
3E8982	4	114x114x234	38€
250000		11 7 11 7 0 17	

3E8984	8	11/6×11/6×23/6	41c
		g Voltage 300	
3E8985	$\frac{r_{Rin}}{2}$	114x114x24	35¢
3E8986 3E8987	6	11/6×11/6×23/6	41¢
3E8988	8	1 14 x 1 36 x 2 56	53€

#### Dry Electrolytic Condensers Cardboard Container

Type P5. Peak volt-ge 525 volts D.C.

age 525 voits D.C. Ideally suited for service replacement work. May be used in most standard filter circuits to replace broken down condenser sections. Comand rugged. shielded.

Electrostatically

Stock		Size, Inches	Your
Number		L. W. D.	Price
3D7605 3D7606 3D7607	1. 2. 22.	212x14 x 5 212x14 x 5 212x14 x 5 212x14 x 14	32¢ 38¢ 65¢
3D7608	24.	41/4X1 8X114	70¢
3D7609	26.	41/4X13 X112	85¢
3D7610	4.	41/4X13 X 58	44¢
3D7611	44.	41/4X13 8X114	70¢
3D7612	6.	414x13,x73	53¢
3D7613	68.	414x13,x13,	85¢
3D7614	8.	414x13,x3,	56¢
3D7615	88.	414x13,x3,	88¢

#### By Pass Condensers



Metal Case Hermetically sealed. Non-inductively wound. Size 2½x18x75".

200 V	olt		400 V	olt
Stock   Num.		Capy Mfds	Stock   Num.	
3E8989 3E8990 3E8991 3E8992 3E8993 3E8994 3E8995	25¢ 28¢ 34¢ 42¢ 38¢ 44¢ 50¢	.05 .1 .25 .5 .11 .2525	3E7500 3E7501 3E7502 3E7503 3E7564 3E7506	27e 29c 35e 44¢ 40¢
500 V	olt		600 T	olt
Stock Num.		Capy Mfds	Stock Num.	Your Price
3E8996 3E8997 3E8998	28¢ 32¢ 38¢	.05 .1 .25	3E7507 3E7508	29¢ 35¢

#### 3E8999 42c .1-.1 3E7510 44c Metal Case By-pass Condensers



Type 61 Flat type metal Flat type means case by-pass nen inductive condensers. Dimendensers. Dim. sions 2 h

200	Volt		400 V	'olt
Stock Num.			Stock Num.	Your Price
3E7625	53¢	1.0	3E7511 3E7632	59¢ 56¢
3E7626	59∉	.55	3E7512	65¢
3E7627	59¢	14-14-14	3E7513	71¢
3E7628		.555		
3E7629	62¢	.1111		
		600 Volt		
3E7630	1.	Your Pri		
3E7631		5 Your	Price	. 97c

Sprague Emergency Kit



3E7729 List. \$5.50. YOUR PRICE, Only...

Sprague "600" Emer-gency Kit centains five most useful values of most useful values of electrolytic capacity. Dry cardboard case. Pigtail leads, type. One each of following: 8 Mfd., 6 Mfd., 4 Mfd., 2 Mfd., and 1 Mfd. Working voltage 475 peak 600

#### Double **Emergency Kit**

ontains two each of the following E.C. capacities; separate cardboard cases with pigtail leads; 8 ffd., 6 Mfd., 4 Mfd., 2 Mfd., and 1 Mfd. 475 bits working potential and 600 volts surge peak, etail value, \$11.20. 3E7730-YOUR PRICE

#### **Individual Handy Units**



As in Emergency Kit Mig. type E.C. Small enough to be taped in pace than original double units. May be volt working potential connected in series for 850 volt working potential

Stock	Cap.	Size in	List	Your
Number	Mfd.	Inches	Price	Price
3E8450	0.5	21 x 17 6x	\$0.80	\$0.47
3E8451	0.75	21 x 17 6x	.85	.50
3E8452	1	27 6x 11 x 9 6	.85	.50
3E8453	2	27 6x 11 x 9 6	.95	.56
3E8454 3E8455 3E8456	6 8	27, x1 1, x11,4 27, 11, x1 1, 27, 11, x1 1, 27, 11, x1 1,	1.15 1.30 1.35	.68 .76 . <b>79</b>

#### High Capacity, Low Voltage **Cardboard Cased Condensers**



Tubular type, with pigtail leads color-coded. Designed to stand midget A.C.-D.C. the hig receivers. high temperatures of Dry Electrolytic. Sprague type H.C.

Stock No.	Cap.	D. C. Volts	Length & Dia, Inches	List Price	Price
3E8457	10	25	2 12 L.X 11, 11D.		\$0.36
3E8458 3E8459	25	25	2 1/2 X 11/4 2 1/2 X 18/4	.80	.51
3E8460		50	kages for A	.CD.	.66. sets
3E8461	4-4	130	2° x X 1 1/4 X 13 /4 27 x X 1 1/4 X 3 /4	\$1.05	\$0.63

#### **AC-DC Dry Tubular Electrolytics**



Similar in appearance to above Units. Universally used in present receivers which perate directly from he line without a the line without a step-up power transformer. Will with-stand high temperature of a midget A. C-D.C. receiver. Pigtall leads of covered push-back wire. typical

Cut shows typical example of Three Low Voltage Tubulars connected with mounting strap. Used as substitute for exact replacement.

Stock No.	Mfg. No.	Cap. Mfd.	Volts	List   Price	Your Price
3E8470 3E8471 3E8472 3E8473	ST-22 ST-42	2 4 8 12	200 200 200 200 200	\$0.60 .70 .90 1.05	\$0.36 .42 .54
3E8474 3E8475 3E8476 3E8477	ST-162 ST-41 ST-81	16 4 8 12	200 100 100 100	1.20 .60 .75 .90	.72 .36 .45

#### **Famous Sprague Midgets**

Twenty million sold. Unexcelled as general by-pass and grid con-densers. Non-induc-



densers.	nd grid con- Non-induc- inting hole inches. T VOLTA	GE—1000	VOLT	S
Stock Number	Catalog Number	Capacity Mfd.	List Price	Your Price
3E7715 3E7716 3E7717 3E7718 3E7719 3E7720	MC-31 MC-325 MC-34 MC-35 MC-21 MC-24	.0001 .00025 .0004 .0005 .001	\$0.25 .25 .25 .25 .25 .25 .25	\$0.15 .15 .15 .15 .15 .15
3E7721 3E7722 3E7723 3E7724 3E7725 3E7726 3E7727	MC-25 MC-26 MC-11 MC-12 MC-15 MC-16 MC-1	.005 .006 .01 .02 .05 .06	.25 .25 .25 .30 .30 .35 .35	.15 .15 .15 .18 .18 .21

#### **GUARANTEE**

Sprague (E.C.) Electrolytic Condensers are Guaranteed

For use on continuous working voltage of 425 volts and will stand momentary surges as high as 600 volts. Power Factor (Watts divided by volts times amperes) in Sprague condensers is less than 10%. This means that you get the same filtering action with a Sprague 8 Mrd. E.C. unit as with 12 Mrd. of capacity in ordinary electrolytic condensers. Therefore the actual cost of Sprague capacity is 33½,% less than ordinary electrolytic condensers cost you.

#### Dry and Wet Electrolytics (E.C.) In Cylindrical Aluminum Cans



DRY-Manufacturer's Type A.C.
Mount in any position-Working Voltage 475
Peak 600.

Stock Number	Cap. Mfd.	Dla. & Hgt., In.	List Price	Your Price
3E7655 3E7656	2	1 x31/4 1 x31/4	\$1.10	50.66
3E7657 3E7658	6	1 x47 14 136 x47 6	1.45	.87
3E7659 3E7660	10 12	1 34 x 47 44 1 34 x 47 4	1.80	1.08
3E7661	16	1 1 3 8 x 47 4	2.30	1.38

#### DRY-Multiple Section Single Can

3E7662	8-8	134×47/4	\$2.40	\$1.44
3E7663	4-4-4	13x x47 6	2.80	1.68
3E7664	8-8-8	3 x41/2	1 4.00	2.40
3E7665	5-15	21/2x41/2	3.35	2.01
3E7666	9-9-18	3 x412	5.80	3.48
3E7667	9-9-18-18	3 x414	8.15	4.89
3E7668	8-8-8-8	3 x414	5.35	3.21
3E7669	8-8-18-18	3 x43/2	7.55	4.53
3E7670	18-18	212 x4 14	4.90	2.94

DRY—Inv	erted	Screw	Meg.	I ype	S.C.
3E7671	4	[ 1	x3	\$1.25	\$0.75
3E7672	6	1	x3	1.45	.87
3E7673	- 8	1 2 9	X47	1.50	.90
VET COO	Wale	DC	Pagh	Type	WC

WET-500 Volt D.C. Peak-1 ype W.C. Aluminum can 4½ inches high, with non-tamperable vent. Self healing. Long life.

Stock Number	Cap.	Dia. Inches	List Price	Your Price
3E8465	4	1	\$1.25 1.40	\$0.75
3E8466 3E8467	8	1	1.45	.87
3E8468 3E8469	10	156	1.50 1.55	.90

#### SPECIAL REPLACEMENT

Dry E.C. Multiple Units.

To be used where dual capacity units with special working voltages are employed. Aluminized cardboard casings.

Stock No.	Mfg_ No.		D. C. Volts	Size	List Price	Your Price
3E8481 3E8482 3E8483 3E8484 3E8484	CM-88 RM-444 RM-554 CM-55 DM-44 RM-144	4-4 5-5 5-5 4-4 1-3.6	140 35 25-200 450-150 300-100	2 x1 x1 3 x1 D. 2 x D. 2 x D. 2 x1 x1 2 3 x1 x1 2 2 x D. 3 x1 x1 2 2 x D.	1.05 .85 1.05 1.45 1.00	.63 .51 .62 .87

\*These numbers are in tubular containers.

#### **Auto Radio Filter Condenser**

Sprague Type A.R.

A Steel Jacketed Noise Filter condenser with standard mounting bracket permanently welded to the jacket. Steel Jacketed Notice For use where tem-perature and heat ruin ordinary condensers



Metal Cased By-Pass Condensers

400 volt working range, 600 peak. Enclosed in an inverted "bathtub" metal verted "bathtub" metal case, with special moisture proof impregnation protect-ing the condenser di-electric. Tinned lugs for handy sol-dering. Sprague type B.F.



Stock	Cap. Mfd.	Dimensions in Inches	Mtg. Cen.	Price	Your Price
3E7686 3E7687 3E7688 3E7689	0.1 0.25 0.5 1.0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	21, 21, 28	\$0.50 .60 .75 1.00	\$0.30 .36 .45
3 E 7 6 9 0 3 E 7 6 9 1 3 E 7 6 9 2 3 E 7 6 9 3	.11	1 4 8 X 15 16 X 13 16 2 X 4 4 X 1 3 16 2 X 1 4 X 1 2 X 1 4 X 1 2 X 1 1 X 13 16	21, 23, 23,	.65 .80 1.00 .85	.39 .48 .60

#### Small Tubular Cartridge By-Pass

Non-Inductive "600" Peak Voltage. Tinned Pig-tail Leads.

Sprague's small tubu-lar condensers are the most compact 600 volt condensers on the market. Made for



market. Made for use in spaces no other condenser of equal capacity and rating will fit. Impregnated moisture press tube with ferruled caps 2nd secured pigtail lends.

Stock Number	Cap. Mfd.	Length & Dia. in Inches	List Price	Your Price
3E7695 3E7696 3E7697 3E7698 3E7699 3E7700	.0001 .00025 .0004 .0005 .001	15 & L. x * 8 D. 26	\$0.25 .25 .25 .25 .25 .25 .25	\$0.15 .15 .15 .15 .15
3E7701 3E7702 3E7703 3E7704 3E7705 3E7706	.003 .004 .005 .006 .01	1	.25 .25 .25 .25 .25 .25 .30	.15 .15 .15 .15 .15
3E7707 3E7708 3E7709 3E7710 3E7711	.05 .06 .1 .25	1 1 4 x7 6 15 x7 6 15 x7 6 13 x 29 6 13 x 29 6 13 x 27 5	.30 .35 .35 .45 .60	.18 .21 .21 .27 .36

#### Dry E. C. Cardboard Cased Condensers



With special mount-With special mounting flanges and tin-ing flanges and tin-ned push-back insu-lated leads. In at-tractive aluminized cardboard casings with orange and blue markings. Neat appearance m makes densers easy. Mfg. type D.C.-(capa-

Voltage 475. Surge Peak 600 volts Maximum.

Stock	Cap.	Size in	List	Your
Number		Inches	Price	Price
3E7675 3E7676 3E7677 3E7678 3E7679 3E7680	2 4 6 8 2-4 4-4	236 x11 6 x 1 18 4 1 x 1 1 x 2 4 4 1 x 1 2 x 3 4 4 1 x 1 3 x 1 4 1 x 1 3 x 1	\$0.95 1.15 1.30 1.35 1.65 1.80	\$0.56 .68 .76 .79 .97
3E7681	4-6	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1.95	1.15
3E7682	4-8		2.00	1.18
3E7683	6-6		2.15	1.26
3E7684	6-8		2.20	1.29
3E7685	8-8		2.20	1.29

**Sprague Capacity** Indicator 16 to From

.00025 Mfd. in 56 Steps.





Ax7x3 in.

The Sprague Capacity Indicator increases the efficiency of any service laboratory. The Capacity Indicator, housed in a beautiful bakelite case with modern selector knobs, and convenient pin jacks, it contains the popular sizes of standard capacities. The first selector switch connects the non-inductive, paper-dielectric, capacities to the pin jacks, in the following order: 0.0025 Mfd. 0.01 Mfd. 0.005 Mfd. 0.001 Mfd. 0.005 Mfd. 0.01 Mfd. 0.05 Mfd. 0.05 Mfd. 0.01 Mfd. 0.01

FREE With each order for ten or more sprague Condensers we will, upon Free copy of that handy volume: SPRAGUE TELL-U-HOW CONDENSER GUIDE

#### **New Hammarlund Double Spaced Midget Condensers**

Midget Condensers

Wide spacing, special bearings
and isolantite make these condensers particularly suitable for
ultra short wave receivers and
transmitters. Air gap between plates
is o'115". Their small size adapts
them to the compact types of transmitters now so much in vogue. For
uning amplifier stages in crystal controlled transmitters and for neutralizers up to 210's and 50
watters. Also as tuners for 5 meter oscillator
nower amplifiers.

amplifiers.

Stock Num.	Code Num.	Max.	Min.	List Price	Your Price
	MC-35-X	35 mmf.	6 mmf.	\$2.25	\$1.32
	MC-50-X	50 mmf.	7 mmf.	2.75	1.62

#### Double Spaced **Dual Midget Condensers**

Designed for efficiency at ultra high frequencies for either receiving or transmitting. Wide spacing between plates materially aids frequency stability. Isolantite for insulation assures the low loss factor so necessary in 5 meter work. An ideal condenser for compact 5 meter transmitters using tubes up to 245's or 210's in push-pull. Actual air gap between adjacent rotor and stator plates is 0715". Midline shaped plates and special bearings provide easy and accurate tuning. Other specifications are standard except for omission of the shield plate.

standaru	ercebt	101 0111	1221011	Of the	BUILD		
Stock Number				Li			Your Price
30723	B Cod	le MCD	-35-X	\$3	.50	\$2	.06
(Capac	ity per	section	33 mf	d. mar	., 6 E	nmf. n	itn.)

#### **New Hammarlund Band Spread Midget Condensers**



Designed for use as "band spread" tuning condensers for short wave receivers and for use in amateur band frequency meters. The "tank" section can be set and locked at any desired and locked at any desired the range of the band or the coils used.

Code Tank Tuning I.ist Your

frequency ranges

pac. Capsc. Price Price mmf, 20 mmf. \$3.00 \$1.76 mmf. 50 mmf. 3.25 1.91	Code Num. Capac. MC-120-B 100 mmf. MC-150-B 100 mmf. MC-175-B 100 mmf.	3C7241
mmf. 75 mmf. 3.50	MC-175-B 100 mmf.	3C7242

#### Compensating Neutralizing Condensers



For use in circuits where a For use in circuits where a small, variable capacity is needed for neutralizing, compensating or as a vernier or balancing condenser. Fine quality. Excellent design and construction. Rugged. Accurate. Aluminum plates. Supplied without knob. Shaft diameter 4, inch. Mounts in single 36" hole.

Stock		Max. Cap.	List	Your	
Number Plates		Mfd.	Price	Price	
3E7301	3	15	\$0.60	\$0.35	
3E7302	5	30	.65	.38	
3E7303	7	45	.70	.41	
3E7304	9	60	.75	.44	
3E7255 3E7256 3E7257 3E7258	11 15 18 20	80 100 125 140	.80 .85 .90 1.00	.47 .50 .53	

Minimum Capacities from 3 to 5 mmfd.

#### Insulated Flexible Coupling

An insulated flexible coupling device ganging condensers. Shpg. wt.,

3C7265-List, 60c. YOUR PRICE .....



#### Equalizer

23¢

A small neutralizing or bal-

A small neutralizing or balancing condenser, having an exceptionally wide capacity range. For equalizing the units of a multiple-tuning the units of a multiple-tuning heavy phosphor-bronze spring plate. Minimum caracity 2 mmfds. 8hgs. wt., 6 oz. 2007 266 EC-35-2 to 35 mmfds. 307266 List, 50c. YOUR PRICE.....

3C7267-EC-80-20 to 100 mmfds. List. 60c. YOUR PRICE.....

#### Improved Hammarlund Midget Condensers



For use as short ware and ultra short ware tuning condensers. Designed to meet the strict demands of frequencies running up to 50 and 60 mexacycles. Isolantite insulation reduces dielectric losses to a minimum and assures maximum and uniform efficiency under all conditions of temperature and humidity. A brush type four point wiping contact eliminates objectionable inductive reactance. Accurately fitted bearings at both ends of the condenser provide for long life, quiet operation and stability of calibration. Non-corrosive soldered brass plates eliminate vibration and effect lowest series resistance. All parts either soldered or riveted. End plates are of heavy aluminum and provisions are made for both single hole panel mounting and base mounting.

General Specifications: Plates are .0225" brass

General Specifications: Plates are .0225" brass with .0245" airgap between plates. Standard condensers include stops and are made to increase capacity by clockwise rotation. Individually tested for breakdown on 500 volts A.C. and packed with 1½" bakelite knob. Quality fully guaranteed.

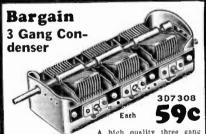
Stock Number	Code Num. and MMf. Capacity	Plates	Min. Cap. (MMf.)	List Price	Your Price
3C7215	MC-325M	43	12	\$3.50	\$2.06
3C7216	MC-250M	34	10	3.00	1.76
3C7217	MC-200M	27	10	2.75	1.62
3C7218	MC-140M	19	7	2.50	1.47
3C7219	MC-100M	14	6	2.25	1.32
3C7220	MC-100S	14	6	2.25	1.32
3C7221	MC 75M	11	6	2.00	1.18
3C7222	MC-758	11	6	1.60	.94
3C7223	MC-508	7	5	1.80	1.06
3C7224	MC-358	5	4	1.50	.89
3C7225	MC-20S	3	20	1.40	.82
"M"-N	Idline Plates	. "S"	-Semi-	Circular	Plates.

#### New Hammarlund Dual

#### **Midget Condensers**



Stock Number	Code No.	List Price	Price
307230	MCD-140-M	\$4.00	\$2.35
(140 mmf. 3C7231	mcD-100-M capacity per section)	3.50	2.05



A high quality three gang condenser made in one of the best equipped plants by skilled workmen. Very accurate and unusually efficient. Each unit has separate neutralizing device for micrometric balancing. Rigid stamped steel frame, cadmium plated. Best quality aluminum plates. Each unit .00035 capacity. Body is 7% in. long, 3% in. wide.

#### "Star" Midget Condenser

Manufactured for the Rad-lek Company by Hammar-and. The most popular by priced midget for set lund. builders, experimenters and laboratories. Sizes for short wave tuning, regeneration, antenna coupling verniers,



	.000015 mfd.	SM- 15	Price \$0.85	Price
3D7286 3D7287	.000015 mfd. .000025 mfd.	8M- 25 8M- 50	.85	.49
307288 307289 357282	.000100 mfd.	SM-100 SM-140	1.00	.59 .74

#### Quality .00015 Mfd. Midget Condensers



A high quality small size condenser. Especially designed for all types of short wave receivers and converters employing either a one or two-gang condenser. Rigid construction provides for electrical and mechanical efficiency. Accurately fitted ball hearings at end of condenser shaft provide for long life, quiet operation and stability of calibration. Both models have counter clockwise rotation, trimmers on left side, and a 1%" long, ¼" diameter shaft.

3D7284. Size: Height, 1%"; width, 2%; depth, 1%". Four threaded size %2 mounting holes depth, 1%". Four threaded in base. List Price, \$1.25. YOUR PRICE

3D7285. Size: Height, 114"; width, 34". depth. 21/4". Three threaded size %2 mounting depth, 21/2". holes in base. List Price, \$2.25. YOUR PRICE

# 3 Gang .00015 Mfd. Midget Condensers

A high quality small size 3 gang condenser, Espesmall size condenser, Especially designed for the advanced short wave custom astom
attider. Allows maximum
efficiency by tuning the antenna
circuit, grid input and plate
circuit at the
like "!



circuit at the same time. Is constructed exactly like the popular one and two gang condensers listed above. Counter-clockwise rotation, trimmers on left side, and a 134" long, 14" shaft.

150 Mmf. Three Gang
3E7283-Size: Height 13", width 34", depth 34". Three threaded size 8/32" mounting holes in base. List Price, \$3.25.

YOUR PRICE ..... \$1.48

#### Thordarson Vernier Condenser Capacity .001 Mfd.

(43 plates)
3D7307
List Price, \$4.50
YOUR PRICE

YOUR PRICE
Completely a hielded against body capacity. Dust is hield protects plate. Pouble cone adjustable metal bearing. Bearing secured directly to the shielding base plate without any delectric. Lowest possible zero capacity and dielectric loss. Especially useful for the reception of long waves or for construction of wave traps. Supplied complete with vernier adjustment, knob and dial. Drilling template included.

#### 4-Gang Condenser



3D7306 List Price \$5.00. YOUR

79¢

Shielded between sections. Heavy aluminum plates. % inch diam, steel shaft. Self adjusting bearings at both ends of the shaft. Smooth easy rotation. Heavy steel frame, cadmium plated. Width 31%". Height, 3" Length, 9". Shaft, 114" long. Capacity .00035 Each Section.

#### Hammarlund Padding Condensers

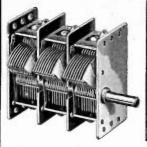


For trimming, aligning, compensating and padding purposes. A compact, adjustable condenser. The higher capacity units are

higher capacity units are used as oscillator series condensers. Bases a relation shaped to provide straight-line-capacity increase. Adjusting screws have machine cut threads and self-aligning conical seats. Solder dipped terminals. Fixed plates are securely anchored.

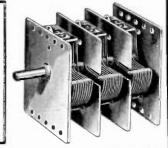
Number	Min.	Max.	Price	Price
3E7260	10	70	\$0.50	29¢
3E7261	70	140	.60	35¢
3E7262	140	220	.70	41¢
3E7263	600	1000	1.00	59¢
3E7264	1000	1300	1.25	73¢

# Quality Variable Condensers



The Condensers described on this page are the finest made. They are the first quality product of the originators of the variable Gang Condenser carrying a section with specially shaped plates for tuning the oscillator of Superheterodyne circuits, and the Company which supplies the majority of the largest nationally known Radio Set Manufacturers. Their long experience in this field is reflected in the superior work-manship and advanced mechanical and electrical features to be found in these fine units: Frames and shields of heavy cold rolled steel finished in bright cadmium plate, heavy aluminum plates, ball bearing shafts, new vernier mechanism; and extremely accurate calibration-capacity variation between gangs plus or minus 1%. There is a type for every replacement or constructional need available.

Note: All Condensers Illustrated are of Clockwise Rotation.



#### Low Shield Superheterodyne Model

Special oscillator section at rear of condenser for tuning the oscillator of superheterodyne receivers without the use of a padding system. For use with a 175 K.C. intermediate frequency. Maximum capacity of R.F. section .000365 mfd. Minimum capac-Clarkwise Rotation

ity .000020 mfd. Maximum capacity of oscillator section .000354 mfd. Minimum capacity .000020 mfd. Size of end plate: 2.5 in. Length: 2-gang 214", 3-gang 4", 5" ball bearing shaft.

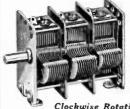
Ciberatise Motation			Counte	-CIUCAL	2136 710	tution	
Stock Number	Num. Gangs	Trim- mers on;	Your Price, Each	Stock Number	Num. Gangs	Trim- mers on:	Your Price, Each
3D7350 3D7351	2	Right	\$1.11	3D7356 3D7357	2	Right	\$1.11
3D7352	3	Right	1.67	3D7358	3	Right \	1.67
3D7353	3	Left 5		3D7359	3	Left	

LowShield	T.R.F	. Models(C	apacity:	000365 mfd.	Max.,.000	020 mfd. Min.)
3D7362	1 2	Right	\$1.11	3D7368	2   1	tight \  \$1.11
3D7363	2	Left		3D7369	2 1	.eft f
3D7364	3	Right	1.67	3D7370	3 1	Right   1.67
3D7365	3	Left f		3D7371	3 1	eft f

#### High Shield Superheterodyne Model

Has special section at rear for tuning oscillator of superheterodyne circuits without the use of a "padding" system. Designed for 175 K.C. intermediate frequency. Capacity of R.F. sections, maximum: 000035 mfd. bill bearing shaft.

Cle	chwise	Rotatio	n	Counte	r-Clock	wise Ro	tation_
Stock Number	Num. Gangs	Trim- mers on:	Your Price, Each	Stock Number	Num. Gangs	Trim- mers on:	Price, Each
3D7374	2	Right	\$1.18	3D7380	2	Right \	\$1.18
3D7375	2 3	Left	1	3D7381	2	Left {	1.76
3D7376 3D7377	3	Right	1.76	3D7382 3D7383	2 2 3 3	Right	1.70
3D7378	1 3	Left   Right	2.35	3D7384	3	Right	2.35
3D7379	4	Left	2.35	3D7385	4	Left	2.30
HighShie	IdT.R.F.	Models	Capacity:	.000365 mf	d. Max.,	.00002M	fd. Min.
3D7386	1 2	Right	S1.18 I	3D7392	2	Right	\$1.18
3D7387	2	Left f		3D7393	2	Left J	
3D7338	3	Right \	1.76	3D7394	3	Right }	1.76
3D7389	3	Left f	1	3D7395	3	Left /	
3D7390	4	Right 1	2.35	3D7396	1 4	Right \	2.35
3D7391	4	Left f		3D7397	4	Left	1



#### **New Compact Condensers**

Superheterodyne and T.R.F. Models

SUPERHETERODYNE MODELS for use with 175 KC i.f., Maximum capacity of r.f. section .000365 mfd., minimum .000016 mfd. Maximum of oscillator section .000275 mfd., minimum .000013 mfd. Covers 1800 to 535 KC. When used to cover this range the r.f. inductance should be 240 M.H. and oscillator inductance 166.5 M.H. Size of end plates 3 &x1 33". Length, 2-gang 2 76". 3-gang 3 %" Ball bearing shaft %" diameter.

Counter-Clockwise Rotation Clockwise Rotation Your Price, Trimmers Your Price. Stock Stock Num. Gangs Num. Trimmers Gangs Each Number 3D7314 3D7315 3D7316 3D7310 3D7311 Right Left Right Left \$1.00 Right' \$1.00 Left Right 1.47 3D7312 1.47 3D7317

#### T. R. F. Models

Maximum capacity .000365 mfd. Minimum capacity .000016 mfd.

	Clockwise Rotation			Cour	iter-Clock	kwise Kota	tion
Stock Number	Num. Gangs	Trimmers on:	Your Price, Each	Stock Number	Num. Gangs	Trimmers on:	Your Price, Each
3D7318	2	Right	\$1.00	3D7322 3D7323	2	Right) Left	\$1.00
3D7319 3D7320 3D7321	3 3	Right Left	1.47	3D7324 3D7325	3 3	Right   Left	1.47

#### New 6 to 1 Ratio Vernier Variable Condensers

A new ingenious arrangement in the shaft of these condensers provides for a vernier drive which eliminates the use of costly vernier dials and still allows for critical tuning which is most essential with modern broudcast or short wave receivers. Ball bearing 4," shaft extends 4,". Distance from end of shaft to shield 14,". Construction details, physical dimensions, electrical specifications and applications same as those of the New Compact Variable Condensers listed above. listed above.

#### Superheterodyne Models

	Clockwise Rotation			Cour	ter-Clock	wise Rota	tion
Stock Number	Num. Gangs	Trimmers on:	Your Price, Each	Stock Number	Num. Gangs	Trimmers on:	Your Price Each
3D7334 3D7335	2 2	Right) Left	\$1.13	3D7338 3D7339	2 2	Right) Left	\$1.13
3D7336 3D7337	3 3	Right Left	1.60	3D7340 3D7341	3 3	Right Left	1.60

	Clockwise	Rotation	T. R. F.		er-Cloc	kwise Rota	tion
3D7342	2	Right Left	\$1.13	3D7346 3D7347	2 2	Right	\$1.13
3D7343 3D7344 3D7345	3 3	Right	1.60	3D7348 3D7349	3 3	Right Left	1.60



#### New 456 K. C. Condenser

Stock No.	Trimmers	On	Rotation
307327	Left		Clockwise
307326	Right		Clockwise
3D7329	Left		Counter Clockwise
307328	Right		Counter Clockwise
YOUR PRICE			\$1.00
F - 1			

#### 2 Gang 456 K. C. Model Vernier 6 to 1 Ratio

Has an extended range of 1800 to 535 K.C. The high ratio vernier device on the shaft allows for fine tuning on the low waves

K.C. The high ratio vernier device on the shaft allows for fine tuning on the low waves as well as on the regular broadcast b and.

" shaft.				
Stock No.	Trimmers	On	Re	otation
3D7331 3D7330 3D7333 3D7332	Left Right Left Right			
YOUR PRICE				\$1.13



#### Single Gang Condensers Low Minimum

Cadmium plated. End plate 3 1 2 ½ ". Heavy aluminum plates. Wiping phosphor bronze rotor connections. Shielded minimum compensators with accorded districts. with grounded adjusting screw. Steel shaft % inch diameter—ball bear-

Page 83

ing	s.	Duit Dour
Cap.		Price '
Mfd.	Plates	Each
.0001	6	59c
.00015	8	69c
.00025	12	74c
.00036	17	78 c
.00046	21	89 c
	Cap. Mfd. .0001 .00015 .00025 .00036	Mfd. Plates .0001 6 .00015 8 .00025 12 .00036 17

Short-Wave Plug-In Coils Short wave colls are not just cylinders wound with wire. These new Colls are the result of research by competent engineers. Wire correctly spaced on each individual coil for efficiency—outspaced on each individual coil for efficiency—outperform other coils. A form with a solid backing for the winding finures the wire staying on the form as originally wound and prevents a change of inductance. Higher frequency coils have plated wire. All coils are for use with a 140 or 150 mmfd. short-wave condenser.



3E6680-Set of 4, YOUR PRICE ..... S¶ 18

Regular standard 2-circuit 4 prong base coils. P-imary and secondary on each coil. 15-200 meters. 4 coils to a set.

3E6668-Ultra Short Wave Coll. Range to 21 meters. 4 prong. 

YOUR PRICE, Set on a Source of Sourc and secondary on each same as above but 5-pubase interchangeable with band spread colls. to 200 meters. 3E6670 Se Set of 4 coils.

YOUR PRICE ..... \$1.47 3E6671 -Broadcast colls same as above but tune 3E66/1 Strong bases. 190-550 meters. 5 prong bases. YOUR PRICE. Set of 2 coils ...

6 Prong Coils
Regular standard 3-circuit 6-prong coils. Primary and secondary and tickler on each coil. 15-200 3E6672 Set of 4 colls. YOUR PRICE ..... \$2.04

3E6669-Ultra Short Wave Coil. Range 9.5 to 21 meters, 6 prong.

YOUR PRICE

3E6673—Broadcast colls same as abouting 190-550 meters, 6 prong bases.

YOUR PRICE as above but

\$1.18 Set of 2 coils .

Band Spread Coils

Short Wave. Low loss ceramic padding con-denser mounted on each coll. For use on the congested "ham" bands. Spreads all bands for congested "ham" bands. Spreads al convenient tuning with usual 140-150 mmfd. condenser.

5 prong bases. Range in Megacycles Stock Number Range in Number 3E6676 3E6677 3E6674 3E6675 14.0-14.4 7.0- 7.3 3.5-4.0 1.7-2.0 YOUR PRICE 59¢

Each coll ......\$2.35 Long Wave. Highly efficient hand windings.
Used in any short wave receiver using .00014 S.W.
tuning condenser. For use on the interesting
transatlantic code, ship traffic, European broadcast,
airplane and weather report bands, etc.

5 prong bases.

Range in Stock Number Range in Megacycles Number 15.1-15.4 11.7-11.9 3E6761 3E6762 9,5-9,6 5 95 6 15 YOUR PRICE



#### Plug-In Coil Forms

Without Windings

Moulded black bakelite. In top flange is groove with colored bands of red, aouided black bakelite. In top flange is growe with colored bands of red, yellow, green, blue. One of each color form included in set. Hand rim on top of coll form makes removal form socket easy. Diam. 1½". Winding Length 2 inches.

Stock	Number		Your Price
Number	Prongs		Per Set of 4
3E6682	4	\$ .80	47¢
3E6683	5	.80	47¢
3E6684	6	.80	47¢
3E6687	7	1.20	71¢
3E6688	8	1.20	71¢

#### **New Band Spreading** 5 Prong Coil Forms

A high quality ceramic adjustable padding con-denser is mounted on top of each coil form. Size of form is the same as those listed above.
3E6695—5 Prong form with 80 mmfd. cond.
3E6696—5 prong form with 180 29¢ YOUR PRICE

#### NEW ALDEN SHORT-WAVE Coil Selector Unit For All 4, 5 and 6 Prong Coils

Use this new model coil selector in any receiver new or old and secure the utmost convenience in changing coils. Any coil instantly swings into circuit by turning the knob. All 4, 5 and 6 prong coils are rigidly held by the specially constructed multiple combination 4, 5, and 6 hoe sockets without adjustment of any kind.

Compact and Efficient

Compact and Efficient
Knob and Indicator plate mounted on the face of
the panel show what toil is in circuit. Single units
have sockets for 4 coils. Two units can be mounted
in tandem so that 8 coils can be individually thrown
into circuit a pair at a time. Reliable self-cleaning pressure contacts provide trouble-free operation at
all times. Two size 6/32 threaded mounting holes
in bottom of unit allow unit to be firmly mounted,
814" knob shaft on unit has a %" threaded bushing
for panel mounting. Shaft extends %" beyond
bushing. See Page 200 August '34 Radio Craft.

Illustration shows two units combined in Tandem. Price is for single unit.

Single Unit Price

3F6697 Coll Selector. Complete with escutcheon and knob, No coils included. \$206 YOUR PRICE .....

#### **New Antenna Trimmer Assembly**



3E6698— List Price, 75c. YOUR PRICE: 44¢ 7 to 80 mmfd Insulated Shaft Extension

Complete assembly for placing the antenna adjustment where it belongs—on the front panel, 7" long insulated extension shaft fits adjustment strew of trimmer condenser which mounts on back of chassis near antenna binding post. Collar and knob supplied. Entire assembly is 8½" long. A high quality 7 to 80 mmfd. trimming condenser is used. Best grade of mica and porcelain for base is used. The handlest thing in short wave.

#### **Isolantite Short-Wave Coils**



Wound on a non-hygroscopic ceramic material. High frequency losses are kept to a minimum. Eight mouthed ribs on coll forms hold the windings so they are practically air core wound. Colls are for use with a 150 mmfd. tuning condenser.

4 Prong Short-Wave Coils
3E8085-Set of 4 coils. Covering from 16 to 217 meters. Individual Ranges of Individual coils are 16-36, 33-65, 57-115, 108-217. 2 windings. List, \$4.00.

YOUR PRICE \$2.35

4 Prong Broadcast Coils 3E8086—Set of 2 coils. 190 to 550 meters langes of individual coils are: 190-310; 300, 550 2 windings. List, \$2.50. YOUR PRICE .....

4 Prong Ultra Short-Wave Coil 3E8087—One coil with a range of from 9.5 to 21 meters. 3 windings. List, \$1.35.

6 Prong Short-Wave Coils
3E8088—Set of 4 coils. 16 to 200 meters. 137, 135-200. 3 windings. List, \$5.00. YOUR PRICE ..... \$2.94

6 Prong Broadcast Coils
3E8089-Set of 2 coils, 190 to 550 meters.
Ranges of individual coils are: 190-310, 300-550.

Ranges of 3 windings. List, \$3.00. YOUR PRICE .....

6 Prong Ultra Short-Wave Coil 3E8090 One coil with a range from 9.5 to 21 meters. 3 windings. List, \$1.50. ... 88¢ YOUR PRICE

#### SPECIAL VALUE

Short-Wave Plug-In Coil Kit



Supplied in matched sets having uniform induc-Supplied in mattered sets naving unform inductance with accurate space-winding, incorporating the proper relation of tube-diameter to wire size. Wound on green, brown, black and red 4 prong bakelite forms covering from 16 to 217 meters. Ranges of individual coils are: 16-36, 33-65, 57-16-10-217. Wound on green, brown, base with the bakelite forms covering from 16 to 217 meters. Ranges of individual coils are: 16-36, 33-65, 57-915, 108-217.

3E8091 — Set of 4 coils. Complete with diagram and suggested circuits. List, \$2.00.

#### Short-Wave Plug-In Coil Kit 4 Prong Base



Four colls wound on low loss moulded bakelite. Cover wave band of 16 to 217 meters when tuned with a .00015 condenser. Supplied with 16 different circuit diagrams, instructions, and parts list. and parts list.

Coll. Range from 3E2274-Ultra Short-Wave

PRICE ..... 6 Prong, 3 Windings

Have primary, secondary and tickler windings, 16 to 200 meters. Supplied with 16 circuit diagrams instructions.

3E2270—Ultra
9.5 to 21 meters. List, \$1.25.
YOUR PRICE

3E2271—Broadcast Coils. Range 190 to 550 meters. Individual Ranges 190-310, 300-550.
List Price, \$2.25.
\$1.32

#### Plug-In Coil Forms

Ribbed Made of special low loss moulded bake-lite with prongs set in to fit either 4 or 5 prong standard tube sockets. Size of form overal! 2% 11½ inches. Winding space 2½ inches high. Colors: Black, brown, red, green, and orange. Order by number to indicate color wanted.

	Stock	Stock	Stock	Stock
Color	Number	Number	Number	Number
Black Brown Red Green Orange	3C2277 3C2278 3C2279 3C2280 3C2281	3C2282 3C2283 3C2284 3C2285 3C2286	3C2287 3C2288 3C2289 3C2290 3C2291	3E2292 3E2293 3E2294 3E2295 3E2296
Net	18c	20c	22c	26c

#### Isolantite Coil Forms Ribbed

Lowest loss. Especially effective on short waves. Has prongs in base which it standard tube socket. Permit instant change in circuit of colls for different wave lengths. Diameter 15% inches. Overall length 3 inches. Winding space 23% inches long. Holes in body for leads and taps.

M List Stock Number

Your Base Price 50c 3C2488 3C2489 3C2490 3E2487 29 c 32 c 35 c 4 prong 5 prong 55c 60c 78 prong

#### Hammarlund Isolantite Coil Forms

Especially efficient for short ware (high frequency colls). Lower lesk-age, less moisture absorption. Yorugged. Diameter 1½ inches. ¼" wide moulded depression for primary. 2 inch winding space for secondary with moulded holes in form for tapping at any desired point Convenient ebonized cap.

List, \$1.00.

List. \$1.00. YOUR PRICE 4 pin | 5 pin | 6 pin | 58¢

#### R. F., I. F., and Antenna Coils, Chokes and Transformers

#### F. Transformers



. 2 of all I. F. transformers necessary for new set design. Can be used in

any combination required for the I. F. stages. The tuning condensers are of the mica compression type, on Isolantite bases and are adjustable from the top of the shield can. Leads are color coded. Diagram is furnished with each unit. The inductances are the lattice wound type mounted on dehydrated wood forms specially impregnated and impervious to molature.

1. F. Coils in Large Size Shield
Can Size 234"x3" high

Double Tuned	Peak Frequency in Kilocycles	Frequency Range	Single Tuned
3E6600 3E6601 3E6602 3E6603	465 262 175 115	442-470 248-277 168-180 100-130	3E6604 3E6605 3E6606 3E6607
YOUR PRICE E	ACH. 84¢	YOUR PRICE EACH	64¢

Center-Tapped For use with Wunderlich, 55's, 75's, 85's, 2A6's, etc.

Double	Peak Frequency	Frequency	Single
Tuned	in Kilocycles	Range	
3E6609	465	442-470	3E6614
3E6610	262	248-277	3E6615
3E6611	175	168-180	3E6616
YOUR PRICE E		YOUR PRICE EACH	704

#### 1. F. Coils Regular Size Shield

sies 11/ +22/1 II Cam size 11/1411/

high Mtg. hole		high Mtg. hole		
centers 1%		centers 1%		
Double	Peak Frequency	Frequency	Single	
Tuned	in Kilocycles	Range	Tuned	
3E6617	465	442-470	3E6621	
3E6618	262	248-277	3E6622	
3E6619	175	168-180	3E6623	
3E6620	115	100-130	3E6624	
YOUR PRICE F	ACH . 84¢	YOUR PRICE EACH	64¢	

#### Center-Tapped For use with Wunderlich, 55's, 75's, 85's, 2A6's, etc.

YOUR	88d	YOUR	70¢
3E6626 3E6627 3E6628	262 175 115	248-277 168-180 100-130	3E6631 3E6632
3E6625	465	442-470	3E6629
Double Tuned	Peak Frequency in Kilocycles	Range	Tuned

#### **Antenna and Oscillator Coils** For Superheterodynes



Lateral wound antenna, and oscillator coils for superheterodyno use. These can be used in pairs or the oscillator coil can be used in conjunction with antenna and R. F. coils shown in other listing. The windlings are dipped and have a 1" round bakelite terminal mounting panel. The broadast coils are wound on a 3"x"x" special dowel while the combination short wave and broadcast coils are wound on a special 18"x1%" dowel. For use with a .000365 mfd. (.00035) tuning condenser.

3E6633-Antenna	Broadcast Co	ii (175	0 to 55
meters). YOUR PRICE, Each	Col1		. <b>42</b> 9
3E6634-Antenna	Shortwave		Broadcas

3E6634-A	tenna	Shorty	vave	and	Broadcas
Coll (550 to 150 YOUR PRICE,	00 and	1500 to	4000	K.C.)	570
YOUR PRICE,	Each	Coll			7/1
	Osci	llator	Coil	S	

U	scillator Colls	
Broadcast 550 to 1500 K.C.	Broadcast ar 550to1500and150	d Shortwave
Stock Number	To Secure I.F. Specified Below	Stock Number
3E6635 3E6636 3E6637 3E6638	465 Kilocycles 262 Kilocycles 175 Kilocycles 115 Kilocycles	3E6639 3E6640 3E6641 3E6642
YOUR SO	C YOUR	FA 65¢

#### Litz Wound Antenna and R. F. Amplifier Coils



We are showing a complete line of colls systematically listed so that the particular needs of the service man or set builder can be readily filled. Matched to a .000365 mfd (.00035) variable condenser. This value condenser is used in the majority of sets that are in operation today. We recommend that a complete set of colls be replaced in a receiver in order to obtain maximum efficiency as it is impossible to have best results by just substituting one coll where the original inductance cannot be matched. In selecting colls of a particular classification, i. e., one Antenna and two B. F., etc., whatever combination desired will be shipped in perfectly matched set of colls. Colls are precision machine wound and use the best of materials. Thoroughly impregnated and impervious to moisture. The proper relation between tube diameter and wire size has been efficiently chosen and, regardless of the size of the coil to be substituted, the particular size shown will make an excellent replacement. The difference between low impedance and high impedance coils, in the primary windings. Instead of having a primary with comparatively few turns wound over the secondary as furnished in all low impedance coils, the high impedance antenna coil has a lateral or honey-comb winding directly adjacent to the secondary. The high impedance R. F. has the lateral winding wound on a dowel inside the coil form. High impedance coils are necessary where sereen-grid tubes are used in the circuits and furnish a maximum gain throughout the entire wave band. Litz coils can be readily substituted for Enamel and furnish approximately 20 per cent higher gain and increased selectivity over the broadcast band.

#### Shielded Litz Coils

shielding and

Low Impedance Primaries
The proper relation between the shield the coll insures a minimum of loss.

Can Size 17/6"x21/4" high.

Mtg. hole Centers 13/4"
3E6643—Low Impedance Antenna Coll.
YOUR PRICE
EACH 

3E6645—High Impedance Antenna Coll. 3E6646—High Impedance R. F. Coll. YOUR PRICE 40¢ FACH

#### Unshielded Ant. and R. F. Coils



The same as those listed above except without shield. Supplied on a standard % outside diameter by 2% high coil form. Mounting bracket and dowel with mounting screws supplied enable mounting of coil in any position.

3E7 150—Low Impedance Antenna Coil.
3E7 151—Low Impedance B. F. Coil.
YOUR PRICE

EACH .... 3E7152—High Impedance Antenna Coll. 3E7153—High Impedance R. F. Coll. YOUR PRICE EACH

#### Solenoid Plain Enameled Coils

The same as above colls except have a plain enameled single layer winding. All dimensions are the same as for similar litz wound colls listed above.

Shielded Coils 3E7 | 54 — Low Impedance Antenna Coll. 3E7 | 55 — Low Impedance R. F. Coll. YOUR PRICE EACH

3E7|56—High Impedance Antenna Co 3E7|57—High Impedance R. F. Coll. YOUR PRICE EACH ...

Unshielded Coils 3E7158—Low Impedance Antenna Coll. 3E7159—Low Impedance R. F. Coll. YOUR PRICE 20¢ EACH 3E7160—High Impedance Antenna Coil. 3E7161—High Impedance R. F. Coil. YOUR PRICE

#### **Combination Short Wave** and Broadcast Antenna and R. F. Amplifier Coils

We are showing the five most popular types of short wave coils for R. F. sets which will give sufficient variety to accomplish the majority of uses required in building combination short wave and broadcast sets. In all cases circuit diagrams are included with each coil to give a clear and concise method for replacing in old sets or building and changing over new short wave ampliliers. In cases where shunts are specified, this means an additional winding adjacent to the secondary to cover the short wave band. These are recommended for maximum efficiency in comparison to the tapped coils where the secondary winding, itself, has been tapped to provide a lower inductance for short wave tuning. All these cover the wave lengths specified with a standard .000365 mfd. (commonly designated .00035 mfd.) variable condenser. condenser.

#### **Unshielded Plain Enamel**

75 to 550 Meters Unshielded high



50 Meters
Unshielded high impedjance primary plain enamel
secondary with additional
plain enamel short wave
shunt to cover wave bands
75 to 200 meters and 200
to 550 meters complete
with wiring diagram.
Coil size % 0. D. x
2% long.
3E7162—Antenna Coil.
3E7163—R. F. Coil.

YOUR PRICE Each Coll ...

#### Unshielded Bank Wound

80 to 550 Meters Unshielded high impedance primary bank wound litz secondary with tap on secondary for short wave covering wave lengths 80 to 200 meters and 200 to 550 meters complete with wiring diagram. Coil size %" O. D. x 2\%" long. 3E7165—R. F. Coil } Each Coil... 42¢

#### Shielded Bank Wound

120 to 550 Meters



primary bank wound litz.
Secondary tap on coll for short wave coverage covering 120 to 200 meters and 200 to 550 meters complete with wiring diagram. Coll size 1" O. D. x 2½" long.
Size of shield cap 1"" Shielded h | g h primary bank v Impedance

with the disarant coll size of sheld can 1%" O. D. x 2%" long. Size of sheld can 1%" diameter x 2½" ligh, two spade bolts for mounting with centers 1½". 7166—Antenna Coli | Your Price 7167—R. F. Coli | S Each Coli ... 47\$ 3E7 | 66-Antenna Co 3E7 | 67-R. F. Coil

#### Shielded Bank Wound

75 to 550 Meters

Shielded high impedance primary bank wound litz secondary with shunt winding of primary for short wave coverage. Wave length range 75 to 200 meters and 200 to 550 meters complete with wirling diagram. Size of coil form 1" 0. D. x 2½" long. Size of shield can 1%" 0. D. x 2½" high with two ½s spade bolts for mounting centers 1½". Wiring diagram included.

3E7168—Antenna Coll } Your Price 3E7169—R. F. Coll } Each Coll....

#### **High Gain Coil** 80 to 550 Meters

High Impedance special short wave coil both primary and secondary for lateral winding secondary and short wave shunt using 11tz wire exceptionally high gain covering 80 to 200 meters and 200 to 550 meters wound on special dowels 14" diameter x 14" long with 1" round bakelite lug panel, one screw mounting. Wring diagram includes H i g h impedance special



long with 1" round bakelite lug pan nounting. Wiring diagram included. 70—Antenna Coil Your Price mounting

3E7170—Antenna Col 3E7171—R. F. Coll Your Price S Each Coil ...

#### S. W. Plug-In Octo Coils



Finest quality S.
W. Coils. Moulded bakelite forms. Care ful, accurate design Fit standard 4-prong UX sockets. Four UX sockets. Four coils, covering band-16 to 30, 29 to 58.

110, 103 to 225 meters. 685-List, \$5.00. 306685 \$1.47 YOUR PRICE, Set Four Colls ..

3C6686-Broadcast coil range 200 to 550 meters

EACH

27¢

#### Coil and Matched Condenser Kits

Scientifically Engineered

Badolek has correctly engineered the receiver that can be constructed from each coll kit listed on this page. Our engineers in collaboration with the engineers of leading coil and variable condenser manufacturers have scientifically designed these kits and actually built laboratory models of the completed receivers. Our tests have proved that these variance to these these hards have been also as the contraction of the completed receivers. hat these sets are the finest obainable in their class. The coils have been specially wound and designed for the ariable condensers specified for use

with each set of coils. Satisfactory performance can only be assured when the variable condenser we supply is used. Our organization realizes that coils are of no use to the set butilder unless they are made up in marched kits and constructed to the exact specifications of the variable condenser with which they are used. We have done this and in addition are supplying all the Information and listing all the parts necessary to properly complete the receivers.

#### 8 or 11 Tube Superhet Kit



175 to 550 Meters (1720 to 540 K.C.) 308616

Complete with Variable Condenser and 2 sets of diagrams for building either an 8 or 11 tube

Great Distance Range

The receivers that can be built from these coils are truly masters of the air. They are capable of bringing in far distant stations with magic ease and at full volume. In addition to all the powerful stations located throughout the entire Western Hemisphere you will enjoy the thrill of pulling in the faintest of radio signals broadcast by hundreds of smaller and less powerful stations; police calls from all over the country can be easily received. The unusual selectivity of this receiver eliminates interference from even high powered local stations. A colossal achievement of engineering skill.

stations. A colossal achievement of engineering skill.

Tubes Used in 11 Tube Kit

Designed for use with 1-56, 2-57, 4-58, 1-55, 2-2A5, 1-5Z3 type tubes. A type 58 is used in the first R.F. stage and one as a first detector and another as an I.F. tube. A type 56 is used as an oscillator tube. A 55 as second detector and A.V.C. tube operating as a full wave rectifier. A 57 as a first A.F. tube. A 57 as a squelch control and a type 58 used as a phase reverse for operating the 2-2A5's resistance-coupled in push-pull. The 5Z3 is a full wave power rectifier. Send for list of other parts required.

Added Features on 11 Tube Receiver

1. SQUELCH CONTROL—or noise suppressor for quiet tuning. Eliminates noises encountered between stations when tuning.

2. Resistance Coupled Push-Pull Amplification—Allows for an unusually wide audio frequency response.

3. Phase Reverser for Push-Pull stage.

Thuse Used in 8 Tube Kit

Designed for use with 1-56, 3-58, 1-55, 2-2A5, 1-5Z3 type tubes.

A type 58 is employed in the K.F. stage, also one is used as a first detector and another as an I.F. tube. A type 56 is the oscillator. A 55 is used as a 2nd detector and A.V.C. tube operating as a full wave rectifier and in addition as a first stage A.F. tube. 2 type 2A5 Pentode power output tubes and a 5Z3 resolution.

The colls and circuits for both receivers are designed to incorporate automatic volume control, tone control and visible meter tuning. These features in addition to the expertly engineered chassis make these receivers the finest radio it is possible to build.

308616-Kit of 5 colls .000400 mfd.. 3 gang variable condenser, list of parts and 2 sets of diagrams for building either an 8 or 11 tube receiver. .....\$5.95

Designed for construction on a size 17" long, 10" wide, 3" deep chassis base.

#### 7 Tube Shortwave and Broadcast Superheterodyne



75 to 500 Meters (540 to 4000 K.C.) 3D8613

Complete with Variable

Complete with Variable Condenser
Tubes Used: 1-56, 1-57, 2-58, 1-55, 1-2A5, 1-80.
75 to 550 meters (540 to 4000 K.C.). Kit of 6 coils consisting of 1-Antenna and Preselector coil, 1-Detector Input coil, 1-Oscillator coil, 2-Intermediate Frequency coils peaked at 175 K.C., and 1-Short Wave Chake. These coils are all precision machine wound and with them a receiver selectivity can be constructed.

of 5 microvolt sensitivity and 10 K.C. selectivity can be constructed.

Const to coast reception can be obtained on the regular broadesst band.

Foreign broadeast, police calls, ship to shore communications and amateur transmittings are all instantly available on the short wave band.

A.V.C. and Tone Control

Circuits are designed for automatic volume control and tone control. Both the features are easily built into this receiver.

3D8613—Kit of 6 coils, 000365 mfd., 3 gang variable condenser, list of parts and all diagrams.

YOUR PRICE ......

Designed for construction on a Chassis Base 121/2" long, 9" wide, 21/2" deep.

#### Instructions—Diagrams—List of Materials Cut Out and Drilling Template

Three drawings are supplied with each coll kit. A Schematic wiring diagram, Pictorial wiring diagram and Chassis layout diagram. The pictorial wiring diagram applied shows the connection of every wire ints exact position and relation to each part. All wiring is done under the chassis. The chassis layout diagram shows the exact position for with little or no supervision.

#### 5 Tube Shortwave and Broadcast

Superheterodyne 75 to 550 meters (540 to 4000 K.C.)

308610 \$3<sup>75</sup>

Complete with Variable Condenser Tubes Used 1-57, 1-58, 1-1-2A5, 1-80. 1-55.

Tunes from 75 to 550 meters (540 to 4000 K.C.). Kit of 6 colls consisting of 1-Antenna and Preselector coil, 1-Detector input coil, 1-Qscillator coil,

Input coil, 1-Oscillator coil,
2-Intermediate Frequency coils peaked at 175 K.C., and 1-Short Wave Choke.
These coils are all precision machine wound and with them a receiver of unusual sensitivity and selectivity can be constructed. Coast to coast reception under favorable conditions can be obtained on the regular broadcast band. Foreign broadcast, police calls, ship to shore communication and amateur transmittings are all instantly available on the short wave band.

A.V.C. and Tone Control
Circuits are designed for automatic volume control and tone control. Both these features are easily built into the receiver.

3D8610—Kit of 6 coils, .000365 mfd., 3 gang Variable Condenser, list of parts and all diagrams.

YOUR PRICE ..... Designed for construction on a Chassis base 121/2" long, 8" wide and 21/2"

#### 5 Tube A. C., D. C. Superhet



175 to 550 Meters (1720 to 540 K.C.) Tubes Used: 2-6D6, 1-75, 1-43, 1-25Z5.

1-2575.
Kit of 4 colls consists of 1 Antenna Coll, 1 Oscillator Coll and 2 Double Tuned Intermediate Frequency colls peaked at 456 K.C. These colls are precision machine wound and with them a receiver of unusual sensitivity and selectivity can be constructed. Coast to coast reception under average conditions can be obtained. Police calls of many of the larger cities are available. In order to obtain the best results the condenser we supply with the coll kit must be used.
3DRSOBE-Kit of 4 colls. 2 Gang

3D8608—Kit of 4 colls. 2 Gang .000365 mfd. special superhet variable condenser, schematic diagram, and list of materials.

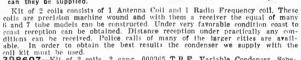
YOUR PRICE .....

4 Tube A. C.—D. C. T. R. F. 175 to 550 Meters (1720 to 540 K.C.) Tubes Used: 1-6D7, 1-6E7, 1-43,

1-25Z5.

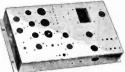
A Schematic Diagram, and List of arts are supplied with the 4 tube nd 5 tube AC, DC coil kits. No ther diagrams are included, neither and

can they be supplied.



3D8607-Kit of 2 coils, 2 gang .000365 T.R.F. Variable Condenser, Schematic diagram and list of materials.

YOUR PRICE .....



#### **Cut and Drilled Chassis Bases**

Made of 18 gauge terne plate lead coated steel. Sides spot welded to corner posts. Each size listed Lid out, punched and drilled to fit component parts specified in lists of parts furnished with matched Concenser and Coli Kits listed above. The bright rust-proof finish of these Bases give them a very professional appearance, especially suitable for custom-Set builders.

11 11 1512	8 TUBE	TTUBE	2 LOBE
4D10905		4D10907	Size 8x1214x21/2" 4D10908 Your Price \$1.95

#### HAMMARLUND



Isolantite R.F. Choke

This low-loss radio frequency choke is designed particularly for short wave and ultra short wave receivers and transmitters, but its employed activation activation of the control of the control of the control of the choke activation of the choke a its effi-

and ultra short wave receivers and transmitters, but its emclency actually extends well about. Its compactness permits mounting in isolated positions well removed from stray RF. fields, which, together with its load characteristics, specially recommend it as a grid choke for multi-stage transmitters. A sectionalized Isolantite spool carries the four windings which are moisture proofed and protected by radio frequency lacquer and a covering of Cellonhane, Flexible leads and removable brackets permit any desired style of mounting. No metal screw passes through the choke to increase losses and distributed capacity. The choke measures 136 "X2", has an inductance of 8 millihenries, a D.C. resistance of 70 ohms, a distributed capacity of 3 mmf., and a current carrying capacity of 125 milliamperes.

3D7-20.3—Code CH-8

List, \$1.10.

#### **HAMMARLUND**

Heavy Duty Transmitting Choke



consmitting Choke
Designed for parallel
feed in high power transmitters operating in the
20, 40, 80 and 160 meter
amateur bands. In these
bands it has the exceptionally high equivalent
impedance of more than
500 0000 ohms. Lasses are

impedance of more than 500,000 ohms. Lesses are 500,000 ohms. Lesses are negligible. Equally effective from 1500 to 15,000 and 5400 and between 8000 and 9000 kc. Inductance 2.5 mh. Distributed capacity less than 1.5 mmf. D.C. resistance 8 ohms. Maximum recommended D.C. (continuous) 500 milliamperes. Over-all size (without brackets) 1½" diameter by 2½" long

3E7204 - Code CH500. List, \$1.75.

YOUR PRICE \$1.03

#### New HAMMARLUND

Midget R.F. Choke Invaluable for use where

space is at a premium.

So small in size and so light in weight that it can be supported by its own light in weight that it can be supported by its own leads. For use in any position where radio frequency filtering is desirable such as detector plate circuits, all B plus leads and all grid return leads. Mounted on a %" Isolantite core. Coits are impreparated to insure ruggedness as well as to minimize the effects of atmospheric changes. Tinned copper wire leads. Length across caps is 1½". Diameter ½". Maximum recommended The commended the comme

D.C. 125 milliamperes.

3E7200-Code CH-X.

\$0.75

44¢ YOUR PRICE .....

#### HAMMARLUND



Improved Shielded R.F. Choke

A new shielded R.F. Choke

A new shielded choke for general use in high gain circuits. The coil unit is completely shielded in an aluminum shell resulting in minimum external field and permitting compact receiver thoroughly impregnated to prevent moisture effects. The multiplicity of pies provides both high inductance and low distributed capacity resulting in externely high impediance to all frequencies within the short ware and broadcast bands. The mounting legs provided are on 1½" centers. When mounting space is limited the legs can be removed and the choke mounted by means of two tapped holes on 1½" centers. When mounting space is limited the legs can be removed and the choke mounted by means of two tapped holes on 1½" centers in the aluminum bottom plate of the choke. The shield can measures 1½" high by 1½" diameter. Connections made to terminals on side of can. Inductance 10 m.h.; D.C. resistance 65 ohms; purrent carrying capacity 100 milliamperes.

Stock Number Code List Price \$1.00. 59\$

#### HAMMARLUND

High Impedance R.F. Chokes

Have a large inductance with a very low distributed capacity. Very effective in both broadcast and short wave receivers. Suitable for detector plate circuits, B-plus and grid return leads and for R.F. filtering in general. Current carrying capacity 60 milliampeters. Bakelite case is

1 18" hig	h by 1 18"	diameter.		
Stock Number	Induc.	Capac.	D. C. Ros.	Your Price
3E7201	85 m. h. 250 m. h.	3 mmt. 2 mmt.	215 ohms 420 ohms	\$1.18 1.32

#### HAMMARLUND Intermediate Transformers



Specially designed for experimental and replacement purposes. Their sensitivity, selectivity, and other characteristics are such as to make them equally satisfactory in superheterodynes employing either one or two stages of 1.F. in connection with any type of second detector. Made in six special types for broadcast ware, short ware and long ware receivers. All transformers are of the tuned grid, tuned plate type with lattice wound coils impregnated to prevent moisture effects. Litz windings are used in the 465 K.C. short wave transformers. Tuning condensers are the highest grade mica compression type mounted on Isolantite bases and adjustable from the top of the shield can leads are R.M.A. color coded and tagged for easy installation. Secondaries are either plain for standard screen grid tubes or center tapped for tubes requiring split input circuits such as Wunderlich tubes. 55 s., 75 s. 85 s., 2.84 s. etc. Aluminum shield cans measure 21st outside diameter by 31st high. Mounting is by means of threaded lugs on 2" centers. Screen grid cap and mounting nuts included. Will tune 10 K.C.

Stock Number	Code	Peak	List Price	Your Price
3D7270	T-465	465 K.C.	\$1.65	97c
3D7271	T-175	175 K.C.	1.65	
3D7272	T-115	115 K.C.	1.65	

Center Tapped

T-465-CT | 465 K.C. T-175-CT | 175 K.C. T-115-CT | 115 K.C. 3D7276 3D7277

Beat Oscillator

3E7185 | 7BO-465 | 465 K.C. | 2.00

#### HAMMARLUND "Air Tuned"



WIII Tune 5 K.C. Each Side of Peak
Intermediate Transformers
Where 100% efficiency and absoture stability are essential requirements, these new laboratory
type "air tuned" units are an
absolute necessity. Tuned primary, tuned secondary type with
both plate and grid coils of Litz
wire. They are tuned to resonance by means of air dielectric
artable condensers of special design. The coils have the exceptional "Q" of 115, a coupling coefficient of 0.77%, the transformers providing a gain in excess of ers providing a gain in excess of 200 per stage together with un-equalled selectivity. "Air-tuned"

\$1.18

equalled selectivity. "Air-tuned" units actually provide increased selectivity and sensitivity since the peak setting is constant regardless of temperature or atmospheric conditions and the L.F. amplifier is functioning at peak efficiency at all times. As used in the famous Comet and "Pro" these transformers provide a sensitivity better than one quarter microvolt per meter and selectivity of better than 10 kc. at 1000 times input. Standard transformers are designed for 57's and 58's and other tubes of this type such as 24's and 35's, and other tubes of this type such as 24's and 35's, and units are available for tubes requiring split input circuits such as Wunderlieb tubes, 55's, 75's, 85's, 2A6's, etc. The shield can is 28' diameter by 5" high mounted by two screws through the bottom of shield.

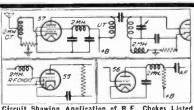
Stock

Peak Price Price Number ATT-175 175 K. C. ATT-465 465 K. C. ATT-525 525 K. C \$2.65 3F7186  $\frac{4.50}{4.50}$ 2.65

Center Tapped

\$2.65 2.65 2.65 3E7189 ATT-175-CT | 175 K. C. 3E7190 ATT-465-CT | 465 K. C. 3E7191 ATT-525-CT | 525 K. C.

"Air Tuned"



Circuit Showing Application of R.F. Chokes Listed In Column at Right.

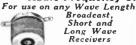
#### "Imp" Miniature Size R. F. Coils



1 7/16" Square 1%" High
Unusually small aluminum shielded coils with
spade bolt mounting. Designed for superheterodyne spade bolt mounting. Designed for superheterodyne and tuned rado frequency receivers and is being supplied at the present time for AC and DC receivers. Entirely new four hank "Litz" winding is used. Although these coils are extremely small there is no sacrifice of efficiency and they compare fuvorably with all coils regardless of size. At 600 K.C. the Interstage coil when measured in a single stage gain test with a type 58 tube proved a gain of 110 times input and at 1500 K.C. a gain of 65 times input. The four bank winding produces a low distributed capacity and permits a coverage of 540 to 1700 K.C. Especially constructed for use with .000365 condensers. Stock Number YOUR PRICE

3D8600—One R.F. coil, One Ant. coil \$0.95 3D8601—Two " " One " " 1.35 3D8602—Three " " One " " 1.75

#### Radio Frequency Chokes



Lateral wound wire on bakelite form. Carefully

wire on bakelite form. Carefully and accurately made.

Unshielded coils have solder lugs securely anchored to bakelite form.

Shielded coils are completely shielded in aluminum case 13 " diam., 14 " long. Insulated wire leads. Single mount serew projects "."

Un	shielded	Sh	ielded
Stock Number	Millihenri e s	Stock Number	Millihenries
3D6650 3D6651 3D6652	80 60 30 <b>42c</b>	3D6660 3D6661 3D6662	80 60 30 } <b>52</b> 0
3D6653 3D6654 3D6655 3D6656	10 514 31-2 2 12 3 3 6 C	3D6663 3D6664 3D6665 3D6666	10 514 312 212 420

#### **Lattice Wound Mounted** Chokes

An R.F. Choke mounted on a bake-lite washer with two lugs for in-stallation and provided with an eye-let large enough for a 6/32 screw to be used as a center mounting.

Num.	henries	Num.	henries	Num.
3E8635 3E8636 3E8637 3E8638 3E8639 3E8640	1.33	3E8641 3E8642 3E8643 3E8644 3E8645 3E8646	7.98 9.25 10.62 13.90 16.00 17.80	3E8647-30 mh. YOUR PRICE30¢
Your Price E	.15¢	Your Price Ea	22¢	3E8649-80 mh. Your Price Ea. 59¢

#### Radio Frequency Chokes and Untuned Transformer

Unshielded chokes and transformers are wound on a %" by %" special impregnated dowel form with a 1" round bakelite wafer to hold the mounting lugs. The untuned transformer is supplied with four 5" coded leads. Shielded coils are in a 1%"x1%" high shield can. Spade boits have 1%" mounting centers. Single hole mounting by use of extra length serew at the top of the can. Shielded coils supplied with 5" flexible coded leads. See Diagram at Unshielded R.F. Chokes

ded leads. See Diagram at Unshielded R.F. Chokes

Stock	Inductance	For Circuit	Your
Number		Frequency	Price
3E8655	700 Microh'y	4000-15000 KC	11e
3E8656	2 Millih'y	1500-4000 KC	14c
3E8657	2 Millih'y	Cen. Tap. Ant.	15c
3E8658	4 Millih'y	456-1500 KC	16c
3E8659	50 Millih'y	175-262 KC	34c
3E8660	85 Millih'y	142 KC	62¢
3E8661	15 Millih'y	(UT) Untuned	

Shielded R.F. Chokes				
Stock	Inductance	For Circuit	Your	
Number		Frequency	Price	
3E8662	700 Mieroh'y	4000-15000 KC	19¢	
3E8663	2 Millih'y	1500-4000 KC	20¢	
3E8664	2 Millih'y	Cen. Tap. Ant.	24¢	
3E8665	4 Millin'y	456-1500 KC	24¢	
3E8666	50 Millin'y	175 KC	42¢	
3E8667	85 Millin'y	142 KC	82¢	
3E8668	15 Millih'y	(UT) Untuned	46¢	

Dama

**Beat Frequency Oscillator** 

Employs air dielectric condensers and is tunable by means of a vernier condenser to which is attached a lever. By moving the lever one way or the other, a 1000 or 1500 cycle beat note (assuming the carrier is tuned precisely on the peak of the I.F. amplifier) is produced. When so adjusted a rereiver will provide a remarkable degree of "single signal" selectivity for C.W. reception. 3E7193—Code ATO 465 K.C.
List Price, \$4.50. YOUR PRICE ... \$2.65

RCA Licensed ICA Complete Short Wave and Broadcast Kits Instructions — Diagrams Scientifically Engineered

wave kits are designed to give maximum efficiency over the entire short wave and broadcast band. The stations are spread over the entire dial by use of a new principle of band pass spread mechanical tuning. A stock

A new line which incorporates every
Latest Engineering
Development in short wave practice.

All ICA short wave practice.

All ICA short wave practice.

All ICA short wave practice and have actually brought in the chasts are designed to give maximum efficiency over the entire short wave and broadcast band. The stations are spread over the entire dial by use of a new principle of band pass, spread mechanical tuning.

A stock and have actually brought in the chast type tube for a new principle of band pass, spread mechanical tuning.

A stock and have actually brought in the chast type tube for a new principle of band pass, and the set supplied in these circuits to insure highest sensitivity and the best audion of each part in its correct place on each part in the correct place on promise and diagram and chassis, layout diagram and chassis layout diagram and chassis layout diagram and will help the radio servicement of ealer who has had no experience in the construction of short-wave receivers. This diagram gives an Illustration of each part and the connections of which wave and broadcast band. The stations are spread over the entire dial by are utilized in these circuits to insure highest sensitivity and the best audion of each part in its correct place on promise and diagram say as supplied with each kit.

All ICA short wave as usually brought in the chassis. The point to point the chassis. The point to point the chassis. The point to point the chassis. The point of each part in its correct place on each part in its correct place on each part in its correct place on each part in its correct place or each part and diagram part in its correct place or each part in its correct place

#### Universal Mascot "1"

1-Tube Battery Operated



Tunes from 16 to 200 Meters. 4E10775-List Price. \$9.95.

YOUR PRICE

Complete kit of parts including sis base and c sis base and cabinet and four 6 prong colls. Less

batteries.

An efficient one tube receiver designed for battery An efficient one tube receiver designed for battery operation. An attractive highly polished black bake-lite cabinet is included with this kit. The tuning range can be extended to cover the entire broadcast band by the use of the additional coils listed

Efficiency and Compactness

Efficiency and Compactness
The one tube receiver incoporates a new non-inductive regenerative control. The tuning is easy and allows a high entire short wave stations including band. Brings in short-wave ships at sea, etc. Complete kit of parts includes windings covering wave lengths from 16 to 200 meters. All necessary parts, hardware and wire. Packed in an attractive display box. Size of set 8¼" high, 5½" wide, 2½" deep.

3E7175—Ultra short-wave coil. Wave length

3E7175—Ultra short-wave coil. Wave length range 91/2 to 21 meters. List Price, \$1.00. 59¢ YOUR PRICE

3E7 176—Broadcast Colls, Set of 2. Wave length range 19 to 310 and 300 to 550 meters. List Price, \$1.85. YOUR PRICE .....

Batterles and Tube
4E10776—1 No. 6 Dry Cell, 1-45 Volt "B"
battery and 1-type 30 tube. \$1.64 YOUR PRICE ......\$1.64

#### Universal Mascot "2" 2-Tube Battery Operated



Tunes from 16 to meters. 4E 10777— List Price \$17.50. YOUR PRICE

\$1029

Complete kit of parts, 4 s i : prong colls, chas is base, and One of the finest

dry cells,

panel. Less tubes and batterles. One of the finest battery operated two tube short-wave receivers. Although designed especially for headphone reception, when conditions are favorable moderate loud speaker reception is possible. Requires only two milliamperes from 135 voits of "B" Battery which permits use of the smallest "B" cells and longest possible battery life. Less than ½ ampere finament consumption from two No. 6 dry cells. Colls with convenient handle grips plug in from the front of the namel.

the panel. the panel.

Band Spread Tuning Control! Permits accurate
tuning on the crowded Foreign bands. Controlled
regeneration permits extraordinary sensitivity for
weak signals. Uses 1-32 and 1-19 dual Triode
giving the equivalent of 3 tubes.

Tubes and Batteries

4E10778-1-32, 1-19, 2 No. 6 dry (1-4) V. "C", and 3-45 volt "B" batteries. YOUR PRICE

Tuning Range Extension Coils For Mascot 2, 3, 4, Tube Sets
Addittion of these coils to the Mascot Kit Sets gives a range of 540 to 31500 K.C.
With Special Shields and Panel Grips;
3E7 179-9½ to 21 Meters, Ultra Short Waves,
List Price, 54.00. \$2.35

YOUR PRICE ..... 3E7180 Two Colls for Broadcast Ranges, 190 to 310 and 300 to 550 meters.
List Price, \$7.50.

YOUR PRICE ..... \$4.41

#### Masterful Performance

Masterful Performance

Single dial control of the R.F. and detector circuits is featured as well as band spread tuning for both stages also operated from one dial. An antenna compensating condenser is provided to insure perfect tracking of the antenna and detector circuits. Regeneration control is also incorporated in this receiver by use of a non-inductive resistance in series with a fixed capacity. This system gives very smooth and precise control of regeneration. Connections are provided for phonograph pick-up to allow the reproduction of phonograph records from the loud speaker of this receiver. A head phone jack is also provided in the plate circuit of the 77 audio amplitier. The receiver can be used with either a magnetic speaker or dynamic speaker having a field resistance of 2500 ohms and a pentode '42 input transformer.

High Quality Audio Amplification

#### High Quality Audio Amplification

The arrangement of the circuit is such that even The arrangement of the circuit is such that even feeble foreign signals can be built up to great volume. European as well as reception from many other parts of the world is consistently possible with this receiver. The type 42 tube with a gain of 220 delivers an output of 3000 milliwatts of undistorted power.

8 Coils Included



The eight coils supplied plug in from the front panel into specially shielded cans, which thoroughly isolate coils from the tube circuits. A set of 2 coils for each of the following wave bands are furnished:

meters. 2 colls-73-137 meters. meters. 2 colls-135-200 meters. colls-16-38 meters.

#### 5 Tube Universal Mascot Kit

An A.C. all-electric set that combines receiver and power pack all in one unit. After completion of this receiver it is only necessary to plug into regular A.C. socket for operation. The Mascot "5" requires greater tuning ability than the less powerful receivers but the results which will be secured will equal the reception usually attributed to far more expensive and complicated receivers. This set is recommended for the short wave enthusiast who revels in the enjoyment which only perfect short wave reception can bring. Chassis size 7" high, 17" wide, 12" deep.

high, 17" wide, 12" deep.

Tubes Used

This De Luxe Model Receiver uses one type '78

Variable Mu Screen Grid Pentode as R.F. Amplifier, one type '37 Triode as sensitive regenerator detector, resistance capacity coupled to one '77 high gain screen grid pentode audio amplifier which in turn is again resistance capacity coupled to one type '42 Pentode Power Output tube. One '80 type full wave rectifier is used in the power supply which is an integral part of the receiver.

Price List

145 10783 Complete kit of parts consisting

of: Cut and drilled chassis base. 8-six prong coils with 3 windings, all necessary parts, hardware display box.
List Price. \$38.75.

Optional Accessories

3E7183—Ultra Short Wave Coils. Set of 2.
Wave length range 9.5 to 21 meters.
List Price, \$4.00.

\$2.35 YOUR PRICE \_\_\_\_\_ \$2.35

3E7 | 84-Broadcast Colls. Set of 4. length range of colls 190-310 and 300 to meters. List Price, \$7.50. \$4. \$4.41

4E10784-Kit of 5 Tubes. 1-'78, 1-'37, 1-'77. \$2.89 YOUR PRICE .....



Universal Mascot "4" Kit

Universal Mascot "4" Kit

For 16 to 200 Meter Short Waves Requires 2500
ohm field Dynamic Speaker with output transformer for '42 tube.

All Electric—105-130 Volt 50/60

Cycle A.C.

A fascinating receiver kit to build—educational
for a boy, entertaining for an adult. This kit
includes all the latest improvements in amplification assuring best short wave reception. (See
the Radolek Trans Atlantic Aerial Kit especially
suited for this receiver.) Illustrations show the
professional appearance of the finished Mascot "4"
receiver. One 68T? Dual Pentode-Triode Tube. one
77, one powerful 42 Pentode output, with an 80 rectifier constitute the modern tube assortment in this
receiver. While headphones may be used with ther constitute the models that a small this receiver. While headphones may be used with this receiver, it is intended for use with a small dynamic speaker! anels size 7"x14" Chassis Depth 634"....

Universal Mascot "4" Kit

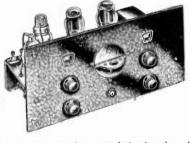
[14E1078]—Complete Kit of Parts consisting
of all parts for the 4 tube model.
List, \$30.00. Less Tubes.
YOUR PRICE
4E10782—Tubes for Mascot "4", 1-6F7, 1-77,
1-42, and 1-80.

YOUR PRICE

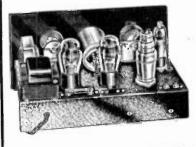
Universal Mascot "3"

For 16 to 200 Meter Short Waves Uses Magnette Speaker or Headphones All Electric—105-130 volt 50-60 Cycle A.C. Appearance similar to the Mascot "4". Employs 1-6F7, 1-79, and 1-80 tubes. Panel size 7"x14" (Thansla depth 6%".

14E10779—Complete Kit of Parts, Less Tubes. List Price, \$22.50. \$13.23 4E10780—Tubes for Mascot "3". \$2.10



View showing convenient plug in View emphasis neat finished appear



Copyright 1934 by W. C. Braun

#### Coil Shield with Base



0781—Basecode PER SET ..... 10¢

#### **Aluminum Coil Shields**

24" outside diameter x275" overall height. Heavy 22 gauge metal insures perfect grounding and eliminates interstage interference. Holes punched for standard spade bolt mounting lugs.



Lugs not included. Bright natural finish. 3C6959 - Coil Shield 0319.

PRICE EACH ..... 10¢ TEN FOR .... .. 79c Per Hundred ... \$6.50

3C6960-Same as above except 4" high for longer coils. Coil Shield—Code 0318.

12¢ EACH \$8.50

#### **Aluminum Coil Shields**



3D7001-YOUR PRICE EACH Ten for .....45c

#### Coil Shield with **Bayonet Lock Base**

... 6¢



3C6961-Coil Shield -Code 0579-0580. 10¢ TEN FOR ......85c
PER HUNDRED .....\$7.90

#### Universal Coil Shield



A shield of many uses. Heavy drawn aluminum top. Height 4". Diameter 234" 4". Diameter 2%".
Base diameter 3%" with 3 mounting holes. Solid friction fit between top and base. 8 holes in base center for leads, etc.

3C6964—Your PRICE, EACH ..... 19¢ Ten for ....\$1.48 Per Hun. \$12.25

#### **Chassis Base** 8 Tube

Drilled for n 8 e t. Reinforced welded 4D10909 YOUR SPECIAL NET PRICE ...



New Ventilated Tube Shields For 55, 57, 58 Tubes Improved Non-

Rattle Type
Ventilated shell has
three formed ribs which ess against the side the tube to hold rigidly—dampens vibration and micro phonic disturbances. phonic disturbances. Natural finish aluminum Natural finish aluminum metal. A wide range of base mounting sizes. Cap height 1½" slotted for grid lead. Shell di-ameter 155", height 315". Overall height assembled 4½".

Aluminum Stock Number	Base Mounting Centers	Price 12¢	ci h p
3D7110 3D7111 3D7112	11/6" 11/6"	Ten for 95c Hund'd \$7.75	st un per
CA	andaud T	vno	S

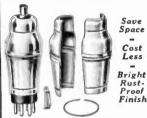
#### Standard Type Ventilated Tube Shields

For 55, 57, 58 Tubes

Same specifications as tube shield described above except that ventilated shell does not have the extruded the features for holding the. Complete with base

nd slott	ed cap.		31
Alumi- num Stock Number	Base Mount- ing Centers	Radio Metal Stock Number	STATE
3D6950 3D6951 3D6952	112" 1116" 1212"	3D6967 3D6968 3D6969	
Ten for \$	Price Each 0.80 Ten 1	8c	

#### Close Fitting Tube Shields



Cost Less Bright Rust-Proof

For use where space is limited or to For use where space is limited or to replace spray-shield type tubes. Provides magnetic as well as electrostatic shielding. Made for both small and large size bulbs. Two parts of shield fit snugly around the tube and are firmly held in place by a clamp ring. Clamp ring and grounding elin furnished with each shield. Supplied with a chimney where shielding of grid cap is desired. A small slot in chimney admits grid lead.

Type \$T-12.

Type ST-12 For new dome type (2.48, 2.47, 2.B7, 6.47, 6.B7, 6.C6, 6.D6, 6.F7, 5.5, 5.6, 5.8, 7.5, 7.7, 7.8, 7.9, 8.9, etc.) tubes. 3E7107—With Chimney. 3E7106—Withhout Chimney.

Type ST-14
For large diameter dome type
27, 32, 33, 34, 35, etc.) tubes. 3E7108-With Chimney. YOUR PRICE. EACH ..... 7¢

10 FOR 60c 100 FOR \$5.00

#### One-Piece Shields with Base

For 82 Tubes

Ventilating holes in top and base. Height 448" Diam. 214". Base mount-ing holes for 148" and 184" sockets.

3C6955 - Tube Shield —Code 01132. 11¢



#### Radio Metal Chassis Bases

Rustless—Stainless Extraordinary Low Price for this

Stock	Size	YOUR PRICE
Number	Inches	Each
4E10912	10x12	\$0.89
4E10913	10x17	1.14
4E10914	10x23	1.45

Ideal for building power amplifiers, Broadcast or shortwave receivers, autoradios or rest equipment. Special aluminum Radio alloy, with clean rustless non-tarnishing lustrous finish. Non-magnetic. Easy to work, drill adminim Madio alloy, with clean rust-less non-tarnishing lustrous finish. Non-magnetic. Easy to work, drill and tap. Solders readily.

To not confuse these high grade

# chassis with ordinary plated sheet steel jobs which are hard to work. These are brand new, clean undrilled bases made to our special design and order. All sizes are 3 inches deep and open on bottom. Enclosed top and four

#### **Aluminum Panels**

Commer ially pure, ered alum in um heets. Natural bright



		70	
Stock	Size	List	Your
Number	Inches	Price	Price
3C7475	7x10	\$1.02	\$0.49
3C7476	7x12	1.26	.58
3C7477	7x14	1.50	.69
3C7478	7x18	1.98	.93
3C7479	7×21	2.28	1.05
3C7480	7×24	2.10	1.16
3C7481	7×30	3.00	1.43
3C7482	24x36	11.40	5.47
_			
Special stre	a trumba	11111 12000	In most to

Special size aluminum panels cut to your specifications. Any width or length. Thickness about & inch.

104E7485-Per Square Foot. PRICE ..... \$1.25

NOTE: Minimum charge for specially ut aluminum panels per order \$1.25

#### Perforated Steel Shield



Ten for ......79 c

#### Radio Metal Shield 🖼

Provides superior shielding. Non-rusting. Fits all acreen grid and detector tubes. 4% high. 2" diam. Mounting hole centers 1%, 11% and 14% inches. 3C6966—EACH.

TEN FOR ......69c PER HUNDRED..S4.75

#### Two-Piece Tube Shields

For 24 and 27 Tubes For 24 and 27 lubes
5" height when assembled,
diameter 118". Bottom
punched for spade bolts but
bolts not furnished. Fits
standard 118" mounting hole
center socket. Top and bottom
well ventilated. Long slot for
grid lead. 21 gauge polished
aluminum.

3C6953 - Shield -01015-01016. EACH ..... 12¢

#### Ten for .... 98c | Per Hun. \$8.25

#### Copper Foil

Thin copper foil for shielding panels, cabinets, automobile bulkheads, etc. .005 inches thick. Any length supplied.

3C6997-6 in YOUR PRICE, -6 in. wide. 10¢ Per Foot ..... 3C6998-81 in. wide.

Per Foot ..... 3C6999-12 in. wide.

NOTE: This foil will be cut to any length. Minimum billing price on any one order is 50c, so order your money's worth.

Per Foot ...

#### Steel Chassis Bases



A high quality lead coated steel chassis base. As easy to cut or drill as other at competitive bases listed above. Template is heavy and substantial. Supplied undrilled. All sizes are 3 inches deep and open on bottom.

Stock Num.	Size	Your Price Each
4E10915 4E10916 4E10917	10x12 10x17 10x23	59 c 77 c 86 c
	_	

#### **Corner Posts**

For use with Chassis Bases. 3D6993. Per Set, Posts, Screws and Nuts. YOUR PRICE ..... 29¢

Heavy cast corner posts. Mount in corners of above chassis. They close the corners perfectly and make the entire job very solld and without the slightest "sive". Three tapped holes on each side. Drill holes in chassis and mount with \$\frac{9}{2}\times \text{screwe}\text{supplied}. Base of post also tapped to take serve coming through base on supported. Base of post also tapped to take screw coming through base on which chassis is mounted. Complete set includes: 4 Corner Posts; 24 %c screws; and 4-14 % long 482 screws for anchoring to any base.

#### Radio Alloy Shield Cans

All six sides made of m" thick nonthick non-rusting zinccopper-cadmilim allog superior shielding qualities. Atqualities. At-

num



corner

posts drilled and tapped for %2 screws which are included. Shipped knocked down. Easily assembled in a few min Shipped knocked

3069	989	7x14	3.50	2.06
3Ç69		8x10	3.50	2.06
3069		6x12	2.75	1.62
3069		8x8	3.00	1.76
3C69		6×6	2.75	1.62
3E69		5x9	3.00	1.47
3C69	184	5x5	2.25	1.32
3069		4x5	\$2.00	1.18
Numbe		nches	Price	Price
Stock		Size	List	Your
	Height		can o	inches.

#### **Aluminum Corner Posts**



Build your own shield boxes, 6 in-

YOUR PRICE 20¢

Per Foot

NOTE: Minimum size order billing
for special length aluminum corner
posts is 50c i. e.—Four 15-inch pieces
would be billed at 50c, same as a
single 12 inch piece.

20¢

#### RADIO **Convenience Outlets**

Brown bakelite plates in attractive, soft parts finished in nickel or finish, Metal parts intisned in nicket or bronze, Finest quality material and workmanhip. Fits standard outlet boxes. Mounting screws included. Aerial and Ground outlet



Provides a neat convenient and efficient outlet for aerial and ground wires. Jack Provides a neat con-venient and efficient outlet for aerial and ground wires. Jack springs have exception-ally long contact sur-face to tightly hold the tip plug.
3E2415—List, 75c.
YOUR

39¢ PRICE

#### Aerial and Ground With A.C. Outlet

With A.C. Outlet
Combining the popular
aerial and ground terminals with a single electrical A.C. outlet. Extensively used in rewire
jobs in homes, apartments, hotels or offices.
3E2416—List, \$1.35. 62¢





DUPLEX A.C. Outlet with Aerial and Ground Connections A erial and ground outlet lacks with duplex electrical receptacle—an A.C. outlet for the set and one for lamp,

Adapt-

and one for or utility requirements. ble to any installation.

E2417—List, \$1.25. 3E2417-List

76¢ Spring Clamp

#### **Binding Posts** 3C6204-Plain (not

3C6205—"Ant." 3C6206—"Gnd."



5¢ 10 for 50c.
Per hundred, \$4.50.
Per thousand, \$43.50.
Insulated top. Spring clamp holds
wire securely. \$52 screw projects ¼".
Length over all 1".

#### Spring Clamp Binding Post Assembly 306207



12¢ Ten for \$1.10 Two

automatic, spring clamp, insu-lated top bakelite

binding posts mounted strip 2" long, 11" wide, ing holes 112" centers pinging posts mounted on bakellic strip 2" long, \(\frac{1}{42}\)" wide, with mount-ing holes \(\frac{1}{124}\)" centers. Completely equipped with soldering lugs—one grounded to chassis. Posts marked "ant." and "gnd."

#### Non-Removable Bakelite Top Binding Posts FACH

3C6113 Plain. 3C6114 3C6114—Ant. 3C6115—Gnd. 3C6116- + -Inout

3C6119 Output.

9¢ 95c

Captions engraved on polished black Capra. bakelite top. Diameter, 1/2 screw, % inch long top. 14 inch.

#### Polarized Aerial-Ground Outlet



A convenient device for connecting set to acrial and ground lead-in wires. Impossible to reverse connections. to reverse connect Black bakelite cap. 3C2245-List Price, Each 50c.

YOUR

D	ouble	Binding	<b>Posts</b>
	3065	98	0

QC EACH ..... Dozen 95c
Made of brass, polished
nickel finish. Has two holes
for wires or cord tips. Fits
any thickness of panel.



#### **Bakelite** Trio-Tap

Three connections from one outlet. Bake-lite body. Very strong, sturdy connection. Retails at 25c. Each

3D7027 Brown

#### 56c 60 **Outlet Plug Cap**

Pluss cord in receptacle and has an additional re-ceptacle on top for con-necting another cap into it. Wired same as ordin-ary cap. Body of brown bakelite. 307032



#### **Edison Socket Adapter**



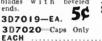
EACH

Edison screw ceptacle and pin type connector. Permits insert-ing lamp or screw plug at flush receptacle.

EACH ..... 11¢ 307033 Ten for ............95 c

# **Two-Piece Attachment**

A sturdy, well designed, good quality composition plug. Brass blades with beveled ends.





#### Soft Rubber **Cord Connector**

Unbreakable, Eastly wired into cord. For 110 volt lines. Standard size pin 3D7035—Each. 18¢

#### **Cord Connectors**



For 110 volt service. Screw protect connections. Composition Overall length 2½". protect 3D7036—Each ..... 16¢ Ten for ......\$1.49

#### Rubber Handle Cap



Strong, durable and conven-ient. Scientifically designed finger grip. Stiff, pliable, un-breakable rubber body. 3D7025—Black, Each 4C

Ten for 35c

#### Green Back Bulb

50 Watt 115 Volt Very rugged. Recom-mended for use where light is subject to vibration. Top of bulb is finished in green. Protects the eyes and throws the light down.



#### **Laundry Iron Elements**



Standard replace ment element for all 6 pound elec-tric such as Westinghouse, Eagle, Sunbeam, etc. Fits 90% of

#### **Double Flush Receptacle**



Bakelite body. Finest quality phosbronze contacts. Takes standard pin caps.

3D7037 Brown 10c

\$0.95

#### **Bakelite** Flush Plates

Guaranteed genuine akelite. Beautiful eggfinish. Screws

Brown

3D7039. For gle switch.

307040. Duplex flush receptacle EACH ..... 55 c

#### Plug Fuses

Underwriters ap-roved. Tested finest hality. Porcelain body. proved. quality. quality. Porcelain body.
Clear mica window in
top shows at a glance
if fuse is blown. For
110-125 volt current.
The amperage of each
fuse is clearly stamped on

Stock Carton of Num Amns 3D7 101 3D7 102 3D7 103 3D7 104 3D7 105 18¢ 10 15 20 25 Per 100 \$2.94 30

#### **Insulated Staples**



#### **Bell Wire**

Size 18 paraffined	cotto	n l	wire braid	he	15	1	il Si	a h	p	g	d	1	w1 w	tł
3C2153 3C2154	50	ft.	coll								٠	ı	2	c
302154	100	ft.	coll	•	٠	•	٠	٠	٠	٠	٠	2	2	C
				_		_	Ξ	Т	Ī	_	_	_		_

#### Friction Tape



Best quality.
Cotton fabric.
Free from pinholes. Impregnated with adhesive ber compound. Holds fast. 3C7 | 25 - Four

Ounce Roll, YOUR PRICE 3C7 (26-Eight Ounce 17¢ YOUR PRICE ...

#### Nichrome Wire Lengths



EACH ...... Coiled niehrome wire, round size 22. Each length is 600 watts at 110 volts. Requires no further cutting and may be stretched to any lengths required.

#### **Heater Element**



307097 22¢ EACH ....... Eagle.

m. etc.

% of of grade colled nichrome wire wound on ceramic form. 110-120 volts, 600-660 wats.

#### Terminal Strip Assemblies

With "Screw and Collar" Ter-minals and Single Unit Lug







uine laminated bakelite strip thick, %" wide. Latest type and collar terminals with rigidthick, serew and conar terminals with rigid-non-shift lug. Collar and lug is one single piece and mounted rigidly and securely through the terminal strip. Screws are brass nickel plated. non-shift strin

Stock Number	Term- inals	Mount. Centers	Price
3D8150 3D8151	2 3	2'	10c 15c
3D8152 3D8153 3D8154	5 6	312	18c 23c 28c
3D8155	7	416"	30c



the top.

#### New Lug Terminal Strip Bakelite Insulation

3D8160 3D8160 YOUR PRICE 8¢ Ten for 36c

Simplifies wiring and provides Simplifies wiring and provides a ready means of mounting resistors. Center terminal may be grounded by mounting directly to chassis. May be used in several combinations as 2 insulated, 1 grounded terminal; or 2 insulated; or 1 grounded—1 insulated. 1½ inch long. Lugs tinned.

#### Terminal Strip



Five tinned lugs mounted securely on laminated bakelite strip 2%" long. High Insulation factor. Lugs widely spaced. Two lug mounting provides a timple, secure means of grounding any terminal by soldering short wire from either mounting lug to any terminal on the strip.

... 10¢ YOUR PRICE......

#### Screw and Lug Assembly



Genuine bakelite strip 1/2" thick, 2" long, 1/4" wide. Mounting holes 1/4" eenters. Wide head cadmium plated screws on 3/4" centers. Solder lugs riveted on, extend 1/2 inch.

306208 .7¢ PRICE EACH ...... Ten for .....59 c Per Hundred .....\$3.95

#### **Bakelite Current Tap**



Two side outlets for attachment plugs and one Edison screw recepuno-thread tacle with shade holder. 3D7031

11¢ EACH ..... Ten for ......\$1.05

#### Carter Speaker Plugs



Jadn. top 1. ing ring. Made of steel. Cadmium plated. Fibre top is held by spring ring, with hole in center for wire leads. Supplied only in 4 and 5 prong. 3E6150-4 prong.

3E6151-5 prong. YOUR PRICE .....

10¢

**O** c

AIRPLANE TYPE 21/2" Dial

EACH .....

With Escutcheon and Lamp Socket -1 Ratio COMPLETE .... 89¢

With Amber Face 3E6772—Clockwise, 3E6773—Counterclock. With Green Face

3E6774—Clockwise. 3E6775—Counterclock

"Airplane" type pointer.
Positive acting, friction drive,
no backlash. Illuminated
translucent amber or green colored face with distinct indicating figures. Convex crystal lens. 3½"
liameter embossed escutcheon. bronze finished. Fits
%" shaft. Clockwise scale is marked 0-10 in upper portion with lower portion for Kilocycles 5501500. Counterclockwise is marked 10-0 and 1500550 respectively. 550 respectively.

#### Airplane Scale, Pointer, Escutcheon For Direct Drive

Escutcheon and one dial face with two airplane pointers for mounting on \( \frac{1}{2}'' \) or \( \frac{4}{2}'' \) condenser shafts. Exactly the same face as supplied on the

shafts. Exactly the above dial scale.

3E6776 Green.
3E6778 Amber 3E6779 Amber YOUR Scale 10-0. 1500 to 550 K.C Scale 0-10. Scale 10-0. 550 to 1500 K.C. 1500 to 550 K.C. 550 to 1500 K.C. Amber. Scale 0-10. Amber. PRICE ..

#### 312" Airplane Dial For Broadcast and Short-wave



With Escutcheon and Lamp Sockets Ratio 21-1

3E6792-...\$1.45 EACH Short-wave and Broadcast scales on dial face can

be Illuminated Separate. and Independently of each other.

Mounts on condenser permitting a full floating dial mounting.

"Airplane" type pointer. Convex crystal lens. Translucent amber scale. Two lamp sockets are supplied. This permits broadcast and shortware scale to be illuminated independently by connecting pilot lights to a section on the coil chance switch. Unusually smooth drive, no backlash. 4% bronze finish escutcheon Fits 3%" shaft. Supplied with 0-100 marking on broadcast scale, Lower portion or short-wave scale is marked only with divisions and can be accurately calibrated, by the builder.

#### New Dual Ratio For Short-Wave and Broadcast



Ratio 30:1 and 6:1 Your Price 97¢

Complete with Socket Escutcheon 3E6780—Scale 100-0
3C781—Scale 0-100 100-0.

Ratio of dial can be alternated from 30-1 to 6-1 by simply pushing in or pulling out on knob shaft. Suppled for use with a %" shaft condenser and \( \frac{1}{2} \) knob. Tan celluloid scale 4" knob shaft are 2\( \frac{2}{2} \)".

#### Vision Dial for Long and **Short Wave Work**





3E6782-3E6783

65¢ Complete

Dial and escutcheon with pilot light socket. Extra high ratio 12 to 1. Fric-tion drive. Full vision illuminated scale ing pointer. Bronze finish escutcheon with traveling ; pointer. Bronze fl., 24" high. Takes finish escutcheon es %" shaft.



Midget Dial 42¢ 3F6784-3E6785 Counterclock

3E6786-Escutcheon plate. Extra 15c
Tuning Ratio 4½ to 1. For very
Scale 3" wide. Bronze finish. Escutcheon
le, 24" high. Pilot light socket. Takes wide, 214' Takes condenser shaft

**Spot Light Full Vision** Complete



68¢ 3E6787-3E6788 Counterclock Tuning Ratio,

Tuning Ratlo, 4½ to 1. Light travels with pointer Pilot ight socket in-Bronze finished. Escutcheon 4½" wide; 3%" Amber celluloid scale. high.

#### Spring Friction Drive



Dial only, Each 3E6789 3E6790-Counterclock 3E6791-

-Escutcheon plate extra. 14¢

Tuning Ratio 6 to 1. Outside diameter dial 4½". Shaft hole for %" shaft. Knob shaft ½". Celluloid scale. Pilot light socket. Bronze finish. Escutcheon plate 2%" high, 2%" wide.

3E6771-As above with hole for 14" shaft and calibration 55 to 150. 34¢ PRICE YOUR

DRUM DIAL 3E6800 81C

3E6801-Escutcheon Extra each

Full Vision. Illuminated, Insulated socket included but no bulb, Tuning ratio 7½ to 1. ½ inch shaft for knob: % inch hole for condenser shaft. cliuloid scale 0-100. Benoze finish escutcheon plate 3%" high, 2½" wide. Fits Marvelo Model 30.

Note:--"C" (Clockwise) reads 0-100, "CC" (Counter-Clockwise) reads 100-0. Both scale are also marked with kilocycle calibrations. Both scales

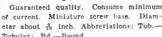


Miniature base sockets for pilot lamps. Carefully insulated. Lug connection mountings as used in various types sets. No bulbs included.

A. 3E6796—Upright clip mount.
B. 3E6797—Rivet mounting.
C. 3E6798—Reverse clip mount. insulated.

3E6799—With rubber grommet.
Ten for....78c—Per 100....\$7.25

#### Genuine G. E. Mazda Pilot **Light Bulbs**



Article	1 1		1.	TEN
Number	Shape	Volts	Amns.	FOR
3E6900 3E6906 3E6901 3E6902	Tub. Tub. Rd. Tub.	2.5 3.2 3.8 6.3	0.50 0.35 0.30 0.15	54c
3E 6913	Tub.	68.	0.20	65c

Low Drain Pilot Lamas

Low Drain Pilot Lamps											
Article Number	Shape	Volts	Amps	Price Each	TEN FOR						
3E6903 3E6904	Tub.	2. 2.	0.06	20c 24c	\$1.47 1,65						

#### Imported Pilot Light Bulbs Not equal to domestic bulbs in length of life nor efficiency. All tubular shape,

Article Number Ten For Volts Hundred 2.5 3.8 6.3 \$2.45 2.45 2.45 3E 6812 3E 6813 3E 6814 33c 33c

#### Victor R-32 Pilot Lamp

110 Volt. 10 Watt Inside Frosted Especially for Victor R-32 and Colonial Receivers. May also be used in continuity tests to indicate open or short circuits. Intermediate base.

YOUR PRICE EACH .....

3E6909-

#### Walnut Knobs

Finest Quality. Rich Looking
Turned out of solid end cut genuine Walnut. All
one plece. Finely finished. Solid brass, bushing
with set screw. Fit all ¼ inch shaft controls, including those with flattened side for push-on spring
type knobs. Dimensions given are diameters.
Hatchic all shout ¾ inch Heights all about % inch.

#### **Futuristic**



Hexagonal









306839\_306838 306835 La Rose







306847 306846 EACH 9¢

306843 3C6842 Ten for 76c Per Hundred \$7.25

(May be assorted)

#### **Bakelite Knobs**







3E6828 Each .... 6¢

Set screw.

Finished in

walnut.

10¢

20¢

3E6827— Ten for 55 c Per Hundred Per Hundr \$5.25 beautiful Will with wooden panels.

4¢ Each .... autiful two-tone Ten for 34c harmonize well Polished black nels. 14" shaft bakelite. White arrow pointer.

#### Newest Bakelite Knobs



Cleanly moulded of best quality Newest patterns. All for genuine bakelite.

3D6855 Style A 1" across. 12" high. Walnut

3D6856 Style B 1\%" diameter. \%" high. For Midget Sets. Polished black finish. 3D6857 Style C 1" across. \%" high. Polished

inish.

Style D with Pointer. 1\(\frac{1}{2}\)'' across ing pointer. \(\frac{4}{2}\)'' high. For smallest midgets. 3D6858 Style D cluding pointer, %" Fine Walnut finish.

7¢ Ten for Drive Cables, Bands, Belts

For Standard Receiver Dials-Condensers

	Stock	Your
Make of Set Model	Num.	Price
Atwater Kent 35, 37	3E6862	18c
Crosley 40s, 60s, 804	3E6876	18c
Crosley 601, 602, 607	3E6877	24c
Majestic No 1 70, 71, 72	3E6886	14c
Majestic No. 2 70, 71, 72	3E6887	9 c
Phileo All	3E6890	13c
RCA Cord 16, 17, 18, 33	3E6893	12c
We can supply dial cables for	All Receivers	. Many
not in our listing are in sto	ck and availa	ble for
immediate shipment.		

#### **Bakelite Vernier Dial**



Requires only one hole for condenser shaft and two small holes to secure dial to panel. No gears to strip. No backlash. Ratio 14 to 1. Size 2%" wide. Translucent scale marked 100-0-100. Fits \%" shaft.

3E6825-Black. 3E6826-Walnut. List YOUR PRICE. Each 42¢ 

# Indispensable Hardware for Servicemen

# Angle Brackets

Brass nickel plated. For mounting panels, tubes, colls, grid leaks, etc.

Sub-E	lamal	Denalia	4
304822	24	1/2 x 1/8	15c
304821	23	1/2 x 1 1/2	29c
304820	17	1 high	25 c
304819	16	3/8 x 7/8	16c
304818	15	3 long	29 c
304817	12	2 high	39 c
304816	11	% high	17c
304815	10	1/2 x 2 1/4	36c
3C4814	7	1 1/2 x 1 1/2	35 c
304813	6	114x118	26 c
3C4812	4	34 X 34	19c
3C4811	3	%x %	16c
304810	1	36 x 36	9 c
Number	Num.	Inches	For
Stock	Code	Size	Ten
** 14411 78 211			

#### Sub-Panel Brackets



Strong light weight aluminum brackets designed to accommodate subtransformers 3C4823-21/2 in.

204004 011 1	In Land			
3C4824-21/2 in.	nign	X	11	in.
long. YOUR PRICE. Pa	lr		39	¢



**Brackets** Nickel plate brass brackets especially suit-able for mounting power or audio transformers, chokes and con-

304825. Type 18. Mounting hole centers 2½".

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3	<b>D</b> 4	8	2	6			T	/p	e	2	25		N	Í	οu	'n	tin	g	he	ile
ne	nte	Г8	3	14	2"												-	•	<b>n</b>	d

YOUR PRICE. 4 for ..... 30C 3D4827. Type 26. Mounting hole 40¢ YOUR PRICE. 4 for





#### Fibre Washer Assortment



27¢ 100 piece assort-ment of fibre wash-

grommets. A complete range of sizes, Plain and shoulder types to fit number 4-6-8-10 screws and ½", %" and ½" holes.

#### **Metal Tapping Screws** Gimlet Point-**Round Head**

Self-tapping monel screws that cut their own thread in metal of any gauge and drive home as securely as a machine serew in a machined thread. Just drill

machined thread. Just drill a hole and drive in the screw—no nut or tapping Ideal for replacing rivets, s required. ideal for replacing rivets, set screws in stripped castings, repairing sprung spot welds or any type of construction. 1 C:-- NI-Cian Na C I

3126			SIZE N	0. 4
Stock Number	Price Per Gross	Length Inches	Stock Number	Price Per Gross
3D8175 3D8176 3D8177 3D8178 3D8179	30c 32c 35c 37c 40c	% % %	3D8185 3D8186 3D8187 3D8188 3D8189	32c 34c 36c 38c 41c
Size N 3D8180 3D8181 3D8182 3D8183 3D8184	0.8 34c 36c 38c 40c 42c	3/8 1/2 8/6 1 1	Size N 3D8190 3D8191 3D8192 3D8193 3D8194	0. 10 40c 42c 45c 50c 55c

#### Self-Tapping Screw **Assortment**

Most popular sizes used by set manufacturers. Can be used for replacement on Atwater-Kent, Bosch, Crosley, Fada, Majestic, Philco, etc. Ideal for general work. Does not require a nut. Consists of 24 screws of assorted sizes. quire a nut. Consists of 21 account assorted sizes.
308195—List Price, 50c 29¢

YOUR PRICE .....

#### **Rubber Grommets**



For insulating holes in metal plate on chassis, transformers and other Radio and electrical parts. Tough strong vulcanized black rubber. All for metal about 18" thick.

Stock	Fit	Inside	Per	Per
Num.	Hole	Diam.	Doz.	Hun.
3D4806	A "	å."	15c	59c
304807	3/ "	83 "	17 c	64c
3D4808	16"	A"	19c	69 c
3D4809	12"	3/4"	210	74c
204000	1		6 10	The Sales of

3D4828. Assortment of 48 Rubber Grommets. 12 each of above size. YOUR

#### Rubber "Feet -Bumpers"

For use on bottom of cabinets, amplifiers, cabinets, amplifiers, speakers, etc. Have receised cavity for head of screw. Cannot scratch. Will support heavy weight without marring ordinary surface. For use with 6/32 or 8/32 machine screw and sizes 6 or 8 wood screws. 3D4792. % "diam., h" high. 3D4793. 34" diam., h" high.

19¢ Per Dozen Per Hundred .. 95c

#### Machine Screw Washer and Nut Assortment

Contains assortment of 100 6/32 Round head machine screws from 4" to ½" long 100 sets of nuts and washers included. A very handy as-sortment for it contains the most necessary sizes of ma-chine screws—furnished in proportions most

304837. YOUR PRICE .....

#### **Ornamental Head Screws** For fastening Speakers

to Grilles, etc.

Attractively embossed. Wide flat head, % inch diameter, Will not pull through wood. 6/32 serews. Antique Statuary Bronze finish.

Stock	Length	Per	Per
Number	Serew	Dozen	Hundred
3D4794	%"	15 c	47 c
3D4795	1"	17 c	61 c
3D4796	114"	190	75c

#### Stranded Phosphor **Bronze Dial Cable**



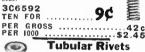
306851 

#### **Braided Bronze Dial Cable**

Fourteen number 36 bronze whree braided over strong linen thread center, of better quality than cabe usually offered at a low price, 3C6852—25 foot coil ... 28c 3C6853—100 foot spool ... 87c

Spade Lug For Anchoring Shield Cans to Chassis, etc.

Steel Cadmium plated. Flat end with size 6 hole for rivet or screw; threaded end size 6/32. Illustration is actual



Rivets for replacement and repair are a necessity for the property of the prop U Rivets for replacement and

Rivet Clinching Tool For Tubular Rivets

For Tubular Rivets
Every serviceman needs this
handy tool for "driving home"
tubular rivets. Tool is 43,"
long—½" diameter, tapered at
one—1½" diameter, tapered at
one—1½ this special machined
face which centers on rivet and
when driven with hammer will
turn the rivet body back against
the material and ellnehes as
securely as a power driven rivet.
For ½" and ½" body diameter
tubular rivets. Every tubular rivets.

YOUR PRICE, Each . 59¢



#### 3E6571— Package of 100 ... **Escutcheon Plate Screws**

16c

**Nickel Plated Cap Screws** 

The state of the s

ESCUTCHEON Flate SCIEWS
Especially suited for use in attaching escutcheon plates to cabinets. The size offered is used most commonly and will fit with practically no exception every style of escutcheon plate. Length ¼ inch. 306570. No. 1 Round Head Wood Screws.

Highly polished hexagonal head ½" across and ½" thick. Screw is %" long with standard %2 thread.

Wood Screws. Per Gross ...

#### **Push Button Switch**

3D6358. Open Circuit. YOUR PRICE 27¢

Ten for \$2.50

Fine quality. Pearl center with polished nickel rim. Fits %" hole. Screw connectors eliminate soldering. Suitable for circuits up to 250 voltes, 2 amps. Phosphor bronze contact.

3D6360. Same as above but for mounting in a %" diam. hole.
List Price 75c.

YOUR SPECIAL PRICE. Machine and Wood Screw

# **Assortment** Contains

assorted lengths 6/32 nickel plated brass machine screws. Available in round head, flat oval head styles. Consi 20-1/2", 15-1/8", 10-3/4 PRICE

of 30-36", 20 10-1" lengths. 3D4831, Round Head. 3D4832, Flat Head. 3D4832

Wood Screw Assortment Contains 85 assorted sizes round head, flat and oval head wood screws, nickel plated.

nickel plated.

YOUR PRICE **Condenser Sealing** 

#### Compound

For "sealing in" paper in sulated or dry electrolytic condensers on repair or special work. The proper compound chemically same

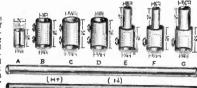
as used by leading condenser manufacturers. Low melting point. Cools hard. Positively excludes moisture. Put up in a convenient size 1-1b. cake size 1½,8%.
3D4838—Per Package ... 16¢

Transformer Sealing Compound
Good thermo conductivity. Has the
quality of displacing developed heat
in transformers. Put up in a conrement size 2-lb. cake size 1½x8½.
3D4839. 

#### Shaft Couplings, Reducers, Extenders Brass and Fibre

Shafting Machined brass fittings

machined orass nutings for coupling shafts of uniform or dissimilar di-ameter; for extending rheostat, volume control or switch shafts. Exten-sion fittings are furnished to expand or reduce shaft diameter. Shafting is available in brass or



Supplied In Either Brass or Bakelite. Specify Brass or Bakelite on your order. Stock

S	Number	Style	Length	Description	Price
e l.	3D7290 3D7291 3D7292 3D7293 3D7294 3D7295 3D7296	A B C D E F G	%" Long %" Long %" Long %" Long 1-16" Long 1-14" Long 1-14" Long	Hole I.D.   10 D. Dial Bushing   Hole I.D.   15 O.D. Coupling   Hole I.D.   15 O.D. Coupling   Hole I.D.   16 O.D. Coupling   Hole I.D.   16 O.D. Coupling   Hole I.D.   17 O.D. Extender   Hole I.D.   17 O.D. Reducer   Hole I.D.   18 O.D. Reducer   18 18 O.D. Reduce	4e 12c 12c 12c 12c 12c 12c
d	3D7297 3D7298 3D7299 3D7300	H	6° Long 12° Long 6° Long 12° Long	<ul> <li>¼ Diameter Brass Shafting</li> <li>¼ Diameter Brass Shafting</li> <li>¼ Diameter Fibre Shafting</li> <li>¼ Diameter Fibre Shafting</li> </ul>	12c 18c 18c 28c

#### Screws-Nuts **Round Head Machine** Screws

#### Brass-Nickel Plated

	2100 0-04	- 1
Stock	Length	Price
Number	Inches	Gross
306500	1/4	\$0.30
	1/4	.42
306501	3/4	.55
3C6502	74	.63
306503	1	
3C65O4	1 1/2	.76
306505	- 2	1.05
306485	assortment equal	quantities
of each abov	e lengths.	
PER GROSS	3	69c
LII GIIOO		

#### Steel-Cadmium Plated

	2156 4-90	
Stock	Length	Price
Number	Inches	Gross
306525	1/4	.19
306526	3/4	.21
3C6527	1/2	,21
306528	3/4	.24
306529	1	.27
306486	assortment equal	quantities
of each alm	ove lengths.	
PER GRO	SS	24c
-		-
	S170 6.32	

	S12e h-32	
Stock	Length	Price
Number	Inches	Gross
306530	178	.15
306531	3/4	. 16
306532	3/8	.17
306533	₹6	.18
306534	8/8 1/8 5/4 3/4	.19
306535	24	.20
306536	7/8	:24
3C6537	114	.31
3C6538 3C6539	11/2	.35
3C6540	134	.42
3C6541	2	.45
306487 889	ortment equal	
of each above	lengths.	
PER GROSS		З6с
	Size 8-32	
Stock	Length	Price
Number	Inches	Gross
306542	1/4	.25
306543	- <del>1</del>	.28
306544	1/8	.33
306545	1	.35

Number	Miches	G11033
306542	1/4	.25
306543	1/4	.28
306544	1/8	.33
306545	1	.35
306492	1 1/6	.39
3D6493	1 1/2	.41
306522	2	.52
306523	3	.63
306524	4	1.35
306488 at	ssortment equal	quantities
of each above	lengths.	
PER GROSS		69c
		_
	Size 10-32	
Stock	Length	Price
Number	Inches	Gross
306546	14	.30
3C6547	114	.45



#### Flat-Head Machine Screws

#### Brass-Nickel Plated

Stock	Length	Price
Number	Inches	Gross
306506	14	\$0.30
306507	1,6	.42
306508	34	,55
306509	1	,63
306510	11/4	.76
306511	2	1.05
306489	ssortment equal	quantities
of each of al	ove lengths.	
PER GROSS		69 c

#### Steel-Cadmium Plated

	Size 6-32	
Stock	Length	Price
Number	Inches	Gross
306548	178	.15
306549	1/4	.18
306550	1/2	.20
3C6551	34	,22
306552	1	.25
306490	assortment equal	quantitie
	bove lengths.	
PER GROS		226

#### Round Head Wood Screws Brass, Nickel Plated

Proper th	ickness for	radio w	ork.
Stock	Length	Size	Price
Number	Inches	Diam.	Gross
306512	34	5	240
306513	1/6	5	270
306514	3/4	6	36 €
306515	1	6	45c
3D6491	assortment	equal c	uantities.
	above length		
PER CROS	38		42c

D.



Handy Hardware Assortment. 900 Assorted nuts, screws, bolts, washers, eyelets, lockwashers and grommets. 306584

YOUR PRICE

real Bargaint Purchased senarately. A real Bargain! Purchased separately, this assortment would cost over \$2.50. Contains all these type items the busiest serviceman would ordinarily use. Included are approximately: 125 assorted \$6.2 machine screws \$\frac{1}{4}\$" to \$2" length: 100 \$\frac{4}{2}\$ nuts; 100 assorted \$6.32 machine screws \$\frac{1}{4}\$" to \$2" length; 75, 8/52 nuts; 100 assorted wood screws,

escutcheon serews, set screws, etc.; 150 assorted rivets and cyclets; 100 assorted fiber washers, and rubber grommets; 150 assorted brass washers, look washers, solder lugs, eyelet lugs. Packed in neat box with ers, lock washers, solder lugs, eye-let lugs. Packed in neat box with removable compartments for each assortment.

#### **Bakelite Tubing**



Genuine bakelite or micarta tubing, mooth polished surface. Natural fin-th. All tubing listed has &" wall high makes the inside diameter %" which makes the inside diam less than the outside diameter.

1000 talula	Length 3	Inches	
Stock	Outside	Price	Ten
Number	Diam.	Each	For
3C743	5 1 "	100	\$0.95
3C743	6 11/2"	13c	1.15
3C743	7 2 "	15c	1.35
30743		17c	1.60
30743	9 3 "	19c	1.80
	C . A . A	F A L	

Cut to Length

Any length may be specified. Minimum charge is price quoted per foot.

Stack Outside Price Four

Number Diam. Foot Feet for

3C7444 3C7445	114"	35 c 40 c	\$1.30
3C7446	1 14"	45 c	1.70
3C7447	1 34"	50 c	1.90
3C7448	2 "	55 c	2.10
3C7449	2 14"	60 c	2.30
3C7450	21/2"	65 c	2.50
3C7451	23/4"	70 c	2.65
3C7452	3 "	75 c	2.80
3C7453	31/2"	80 c	2.95
367454	4 "	85 c	3.25
367455	5 "	92 c	3.50
367456	6 "	98 c	3.75
Halla	W Bak	alita E	Dade

#### Hollow Bakelite Rods

Genuine Bakelite. Concentric hole. Supplied in 18 inch lengths. Longer proportionate lengths supplied at

			Phick-	18 inch
Stock	Overall	Center	ness	Length
Number	Diam.	Hole	Wall	Each
307465	· **	18"	à'	49 c
307466	14"	18 "	da '	59 c
307467	34 "	16"	18,	49 c
307468	36"	16"	1/8	59 c
307469	%"	14"	के'	49 c
307470	1/2"	1/2"	16	59c
Other siz	es supp	lied to	order	at pro-
portionate	prices.	\$1.5	i0 M	linimum
Order.				

#### It'd Deligitas Dede

20110	ı Bak	ente <b>r</b> t	ous
Solid bal	relite re	ods. Polish	red black
flaish. Sur	pplied 1	n 18 inch	lengths.
langer leng	ths sup	plied at p	roportion-
ate prices.	\$1.50	Minimum	Order.
Stock	Diam.	Price	Ten
Number	Inches	Each	For
3C7457	11/6	50c	\$4.25
307458	ris.	50c	4.25
307459	14	50c	4.25
307460	A	55c	4.75
307461	36	65 c	6.00
307462	178	75c	6.90
307463	1,6	90c	8.10

#### **Combination Rivet** -Solder Lug

Rivet fits &" hole. Illustration exact size. Plated with solder coating. 3C6585 PER HUNDRED. 29¢ Per Thousand ....\$1.95

#### **Bakelite Panels**



We supply best grade bakelite panels. Machine well without chipping. Black finish. without chipping.

	A" Thick	Each
Each In.	NO.	
\$0.59 7x10	3C7424	\$0.98
.75 7x12	3C7425	1.18
.89 7x14	3C7426	1.38
1.15 7x18	3C7427	1.77
4 7x21	3C7428	1.95
7 - 94	3C7429	2.15
	3C7430	2.35
	3C7431	2.55
7x30	3C7432	2.70
7 136	3C7433	3.20
	\$0.59 7x10 .75 7x12 .89 7x14 f.15 7x18 7x24 d 7x26 d 7x28 7x30	Each In. No.  \$0.59 7x10 3C7424 .75 7x12 3C7425 .89 7x14 3C7426 t.15 7x18 3C7427 (7x21 3C7428 d 7x24 3C7429 d 7x25 3C7430 f 7x26 3C7430 f 7x30 3C7432

#### Special Size Panels

#### **Hard Rubber Panels**

Made of special compound having a rubber base. Can be drilled or cut without chipping. Will not warp. A perfect insulator for radio us-Smooth, clean edges. Thickness & Inch. Averago shipping weight, 3 pounds.

Black	Price		Walnut	
Number	Each	Inches	Number	Each
3C7400	\$0.56	7x10	3C7408	\$0.68
3C7401	.69	7x12	3C7409	.82
3C7402	.82	7x14	3C7410	.94
3C7403	1.03	7x18	3C7411	1.24
3C7404	1.19	7 x 21	3C7412	1.45
3C7405	1.35	7x21	3C7413	1.63
3C7406	1.51	1x26	3C7414	1.76
3C7407	1.76	7x30	3C7415	2.06
		mount	stima V	Vach

# Lugs-Washers

#### **Hexagon Nuts**

Made of brass, nickel plated. Chamfered and plated. Cham-countersunk for mahly work.



Size 306520—Per hundred ......22c Steel—Cadmium Plated

	Flat W	ashers
C6558	19/32	35 c
C6557	9/32	20c
C6556	952	19c
C6555	980	180
umber	Size	Hundred
tock		Price



Made of brass, nickel lated. Fit size 6 plated.

3C6521-Per hundred ..... nundred .....210

		201 0
C6563	10	28 c
C6562	8	20c
C6561	6	19c
C6560	4	18c
umber	Size	Hundred
tock		Price
DECCI	·	

#### **Locking Lugs and Washers**





Insure permanent tight connections. Then nut is tightened down they ill not loosen regardless of vibraon or shaking. Tinned. down the When will not loosen tion or shaking.

3C6588-%" lug with #8 hole. 3C6589-%" lug with #8 hole. 3C6590-%" washer with #6 hole. 3C6591-%" washer with #8 hole. Per Hundred 25c. \$1.75 PER THOUSAND



3C6586 18¢ PER 100 .....

PER 100

Per Thousand S1.55

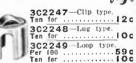
Flat lug with two holes. Illustration is actual size. Best tinned luc
on the market; makes soldering easy.
Punched from sheet copper—eventy
bot tinned, no bare spots. Vastly superior to electro plated or flashed lugs
quoted at competitive prices.



#### Shield Grid Clips-



top of shield grid tubes.
Lug type solders, and clip
type clips to grid. Made of
spring steel to insure close
contact with terminal. White metal coated to prevent rust.



#### **Insulating Washers**

For insulating equipment mounted on flat metal panels or chassis. E1-4 31/---Stock en for

	riat	w asners		
Stock Number 3C6450 3C6451 3C6453 3C6455 3C6455 3C6456	Outside Diameter 1½" 1½" 1½" 1½"	Hole Diameter 74" %" 3 " 15"	Thick ness &"	Ten for 8¢ Per Hundred 65¢

#### Extruded Washers

Shoulders fit into panel holes, insulating shaft, etc., in N CO

passing through panel. Stock Outside Number Diam. 3C6458 1 " 3C6459 4 " 3C6460 4 " 3C6461 4 " 3C6462 5 "	Hole Diam.	Shoulder Diam. 1½" 1½" 3½" 3½"	Washer Thick th" th" th"	Shoulder Raise &" &" &" &"	Ten for 12¢ Per Hundred 95¢
--	---------------	---	--------------------------------------	---	-----------------------------

# Servicemen's Supplies—Jacks—Plugs—Switches

#### Molded Bakelite Twin Tip Jacks



Fully insulated finest quality tip jacks molded in genuine bakelite. Phosphor bronze positive contact for any standard phone tips. Widely spaced solder lugs tinned and plerced. Spaced solder lugs tinned and plerced the standard property with the Mounting centers 14%. Will mount in cut 11% "Xy". Engraved "Speaker" or "Phone." Priced far below its actual value.

3D6356. Engraved "Speaker." 3D6357. Engraved "Phono." YOUR PRICE TEN FOR 35c

#### Yaxley Push Button Switches

Same con-struction as Jack switches Jack switches except that in place of turn place of turn knob an insulated push button is provided.
Contacts made
and broken by



and broken by
pressure on knob. No indicating plate
included. Non-locking type returns to
original position when pressure released. Locking type, is automatically original position when pressure re-leased. Locking type, is automatically locked in depressed position and must be pulled back to return to original position.

position.

Single Pole-Single Throw
Makes Contact in Single Circuit.
3C6430—Code 2001. Non-locking.
3C6440—Code 2001L. Locking.
VOUR PRICE 536

Single Pole-Single Throno Breaks Contact in Single Circuit. 3C6431—Code 2002. Non-locking. 3C6441—Code 2002L. Locking. List Price 50.90 YOUR PRICE

Single Pole-Double Throw ne circuit completed in up position depressed position, first circui In depressed position, first circuit broken and one of contacts switched to

broken and one of control of the second circuit.
3C6432—Code 2003. Non-locking.
3C6442—Code 2003L. Locking.
List Price \$1.00. YOUR PRICE

#### Double Pole-Single Throw;

Makes contact in two separate circuits when depressed. Both circuits open in "up" position.
3C6443—Code 2004L Locking.
3C6443—Code 2004L Jocking.

70¢ YOUR PRICE Double Pole-Single Throw;

Closed

Breaks contact in two separate cir-cults when depressed. Both circuits closed in "up" position. 3C6434—Code 2005. Non-locking 3C6444—Code 2005L. Locking. List Price \$1.20. YOUR PRICE

Double Pole-Double Throw Two separate circuits closed in "up" position. In depressed position, one contact from each circuit is connected to a second set of separate circuits. 3C64435—Code 2006. Non-locking. 3C6445—Code 2006L. Locking. List Price \$1.50. YOUR PRICE .

Double Pole-Double Throw 6 springs makes and breaks both leads of two separate circuits. Connects in second circuit before breaking first circuit and vice versa. 3C64437 Code 2008 Non-locking. 3C6447 Code 2008 L. Locking. List Price \$1.65. YOUR PRICE .

Three Circuit

Three Circuit
Breaks one circuit into two circuits
4 springs. When button is up, two
center springs contact; when depressed,
2 center springs break and each makes
contact with an outside spring completing two new circuits,
3C6436—Code 2007. Non-locking,
(Also known as Code 2880.)
3C6446—Code 2007L. Locking,
List Price \$1.30.

VOUR PRICE ..... 76¢

New Insulated Tip Jacks

Fine quality tip jacks with positive contact phosphor bronze spring. For any standard phone tip. Especially suitable for terminal strip and for making quick, easy connections to test equipment. Bakelite color coded caps.

Mounts in ¼ inch hole or will fit %" hole if used with extruded mounting washer listed below. Solder lug terminal.

3D6345 Green 3D6346 Red 3D6347 Black 3D6346 Red 3D6347 Black 3D6348 Brown

YOUR PRICE, Each 5c TEN FOR ......40c Per Hundred

Fibre Washers to insulate jacks when mounting on metal panel or chassis lameter ½ inch, extruded to fit % inch hole. 3D6461.



#### **Short Jacks**

Smallest made. Sol-der lugs widely spaced. Heavy bakelite insula-Heavy bakernetors eliminate leak Mount in % inch hole on % to fo inch panels.

3C6366-No. 1-Open Circuit. List, 25c. Net. .... 15¢

3C6367-No. 2A-Single, Closed Circuit List, 30c YOUR PRICE ....

#### Frost Gem Jacks

Very compact. Extend 1 inch inch back of panel.
Mount in single
&" hole on any
panel not over thick Nickel plated. Solder lug connections. Two



3C6396—Code 953-Open circuit. EACH ..... 3C6397-Code 954-Closed circuit. EACH .... -Single 19¢ 3C6398-Code 951-Double circuit. EACH 3C6399—Code 955 flament control. 20¢ EACH



#### Extension Connector

Evelet anchors se and relieve strain from terminals.

Ten for 55c Per hundred \$4.95

#### **Fahnestock Connectors**



Wires held firmly in spring grip, may be instantly released.
3C2243—Single connector.
down corners prevent turning. Hundred ..... Dozen 3C2244-Double connector. Per Hundred 

Flat Jack Plug 3C6364 List Price 50c. YOUR PRICE

29¢ EACH . Body 1 in diameter, in thick Best for wall late connection. Polarity diameter, t for wall

#### Standard Jack Plug



Two Way Jack Plug



Unbreakable fiber barrel.

#### Standard Tip Jacks

Solid brass, nickel plated. Takes any phone tip. Positive connection. Not insulated from panel. Requires ¼" hole on panels of thickness up to ½". With nut and solder lug. 8111-1110 3D6370

Ten for 35c. Fer Hundred \$2.75

Fibre washers to insulate jacks when mounting on metal panel or chassis. Diameter 1/2 inch, extruded to fit 1/4 3D6461. Ten for ......12c

#### Yaxley Jack Switches



Small and Mount in 170 inch hole on panels up to a inch thick. Insulated knob with Indicating pin

Lock nut, washer, ethed indicating plate included. ¼ inch dlam shaft. Including lugs, they project 1¼ inches back of panel. 1% inches wide. 1% inches high. Rugged steel frame. Nickel plated. Perfect insulation. Suitable for all apparatus in low wattage circuits.

Single Pole-Single Throw 3C6420-Code 720. 2 spring. "On" and "Off," Makes and breaks one cirand ' List Price 70c. YOUR PRICE

Single Pole-Double Throw 3C6421—Code 730. 3 spring. Connects input circuit to either one of two output circuits. List Price 85c. YOUR PRICE .....

3C6422—Code 732. 3 spring. Same as Code 730, except has center neutral position. List, 90c. YOUR PRICE ..... 50¢

Double Pole-Single Throw 3C6423—Code 740. 4 spring. Makes and breaks two circuits.
List, 95c. YOUR PRICE ..... 55¢

Three Circuit

3C6424—Code 745. Five sp two position contact. Two input cults. Both connect to output in position; in second position, ci one is broken, circuit two is broken but input spring is conn 745. Five spring, ict. Two input circut to output in first connected fifth spring, closing third circuit st. \$1.10. YOUR PRICE ..... 65¢

Double Pole-Double Throw 3C6425—Code 760 Six spring. Connects two input circuits to either of two pairs of outputs. List \$1,20. 

3C6426—Code 762. Double pole, double throw. Same as Code 760, but with center neutral position. List, \$1.20. YOUR PRICE .....

Triple Pole-Double Throw 3C6427—Tode 763. With cen neutral position. List, \$1.55. YOUR PRICE

Four Pole-Double Throw 3C6428—Code 764. neutral position. List, \$1.95. With center YOUR PRICE ..... \$1.15 **Push Button Switch** 



6-Springs.
Fully in ulated.
Non-corrosive poslitive contacts.
Uniformly tempered springs

their tension permanently. Double Throw-double pole opens two circuits and closes two other circuits. Mounts in %" hole. Terminal lugs widely

3C6354 Non-locking | Price 3C635% Locking Each

S. P. S. T. Toggle Switch

A quality II & H switch with 8" stranded insulat-ed leads. Stand-ard 3" bushing is 6" long and fitted with a looking ring di ah' fitted lock' fitted ... locking ring. 3E6344— YOUR TOC

Ten for 75e

306371-

"Panel" Rotating Type



Single Pole, Single Throw. Shaft takes knob.
Threaded 3" diam. mounting sleeve 4" long. Shaft extends 4" beyond Locknut included.

3E6325-YOUR PRICE Ten for \$1.35

#### Solder Cord Tips

Nickel Plated Brass.

FOR

Per hundred.....25c
Solderless Tip Plug

#### -

306368 YOUR PRICE, Each

35c. Per hundred, \$3.25 and to cord or wire without g or use of tools. Positive Attached soldering soldering or use of tools. Positive connection. Fit above jack or any standard tip fack or jack assembly made of brass nickel finish.



Twin Tip **Jacks** 

Sure contact, nickel tip jacks mounted in bakelite strip, 2" long, th" wide. Mounting holes 1 th centens.

Two Jack Assembly 3C6200—Plain (not marked). 3C6201—Marked "Phono." 3C6202—Marked "Speaker." Each, 6c. Ten for ... .. 55 c

Three Jack Assembly 3C62O3—Plain. Each, 9c. Ten for

#### Yaxley Junior Jacks



Same construction as jack switch exfor receiving any standard jack. Mount in in hole on panels not over

3C6405—Code 701. One insulated spring. List Price 40c. "Open Circuit." YOUR PRICE

3C6406—Code 702. "Clos cuit." Two insulated springs. List Price 55c. YOUR PRICE "Closed Cir-

springs. Same as 366406 Code 702, except has solder lug on frame. For use on insulated panels. List Price 55t.

33¢ YOUR PRICE 3C6408-Code 703. "Two Circuit.

Three in ulated springs. List Price 65c. YOUR PRICE "Circuit Re-

Page 94

# Toggle, Rotary and Knife Switches

#### **Toggle-Panel Switches** Miniature Size

Underwriters approved, 3 amp., 125 V.—1 amp. 259 V. For controlling radio sets, small motors, lamps, meters, etc. Mounting sleeves all \$\frac{1}{8}\tilde{m}\] diameter. Two locknuts included. Very rugged. Best quality. H. & H. brand. Laminated bakelite or fiber insulation. Selder lug connections.

#### Single Pole-Single Throw



Carl III	diameter.			
Stock	Sleeve	Price	Ten	
Number	Length	Each	For	
3C6300	1,2	17¢	\$1.58	
3C6301		21¢	1.95	
3C6302		24¢	2.10	
300302			-	

#### Single Pole—Double Throw or Three Way

#### 3 Connections

Can be used as Three way, or single pole double throw. Mounting sleeve & " diameter.



Stock	Sleeve	Price	Ten
Number	Length	Each	For
3C6303	14	22¢	\$2.10
3C6304		24¢	2.20
3C6305		27¢	2.50

#### Double Pole-Single Throw



4 Connections Cuts two cir-cuits in and out. "On and "Off" "On and "Off" for two circuits. Mounting sleeve diameter.

Stock	Sleeve	Price	Ten
Number	Length	Each	For
3C6306	14	24¢	\$2.20
3C6307		27¢	2.50
3C6308		30¢	2.80

#### Double Pole-Double Throw

6 Connections

6 Connections
Feeds two circuits
into either one of
two pairs of circuits. A new development of many
uses. Mounting
sleeve \(\frac{49}{2}\)" diam-



Stock	Sleeve	Price	Ten
Number	Length	Each	For
3C6309	14:	44¢	\$4.25
3C6310		47¢	4.50
3C6311		49¢	4.60

#### Special Toggle **Switches**

Underwriters approved 125 V. 6 amp.; 250 V. 3 amp. Bakelite body. Solder lug connections. Mountains meter. Two locknuts H" diameter.

#### Single Pole-Single Throw

2 Connections Makes and breaks a single circuit

2172002	and biene	D II 011119,10	
Stock	Sleeve	Price	Ten
Number	Length	Each	For
3C6335	1, "	14c	\$1.30
3C6336	1, 2 °	16c	1.50
3C6337	7, 4 °	18¢	1.75

Double	Pole-Double	Throw
	6 Connections	

6 Connections					
Stock	Sleeve	Price	Ten		
Number	Length	Each	For		
3 D 6 3 4 1	14"	28¢	\$2.76		
3 D 6 3 4 2		32¢	2.95		
3 D 6 3 4 3		35¢	3.20		

#### **Rotary Panel Switches**



Underwriters apoperation. 3 knob amps. proved. For knob operation. 3 amps. 250 voits. Be st quality. H.&H. brand. Cadmium plated lugs. Supplied with locknuts. Mounting sleeve % diameter. K n o b extend 1" beyond threaded

#### Single Pole-Single Throw 2 Connections

Stock	Sleeve	Price	Ten
Number	Length	Each	For
3E6312	14	19¢	\$1.70
3E6313	14	22¢	1.95
3E6314	14	25¢	2.25

#### Single Pole-Double Throw 3 Connections

Stock	Sleeve	Price	Ten
Number	Length	Each	For
3E6316 3E6317 3E6318	14 . 32 .	24c 27c 31c	\$2.20 . 2.50 2.95

#### Double Pole-Single Throw

4 Connections				
Stock	Sleeve	Price	Ten	
Number	Length	Each	For	
3E6319	14.	36¢	\$3.40	
3E6320		42¢	3.95	
3E6321		46¢	4.32	
Double	Pole-D	ouble Ti	hrow	

Stock Number	Sleeve Length	Price Each	Ten For
3E6322	36 "	42¢	53.95
3 E 6323	100	48c	4.60
3E6324	11.	51c	4.95

#### **Key Lock Switch**

Double Pole-Single Throw 4 Connections

306315 Price Each 50¢



\$4.75 Makes and breaks one or two cir-cuits by turn of key. Key removable when circuit is broken. Mounting sleeve "dam... ½" long. Attractive lock when circuit is bloken, admiring seever have been seeved and a seever have been successful and a seever have been successful and seever have been successful and seever have been successful as a seever have been successful and seever have been successful as a seever have been successful and successful and

#### Multi-Polar Rotary **Switches**



A high quality snap action switch applicable to the wide variety of new circuit requirements. All steel corresion proof frame. Bakelite insulation. Silver plated. Low resistance contacts of high grade spring phosphor bronze. 1, 2 and 3 pole switches are equipped with a standard %" bushing for single hole mounting. 4, 5 and 6 pole switches are equipped with 2 mounting lugs. Lug mounting hole centers 1\(\gamma''\). Shaft extends 1". Switches are \(\frac{\pi}{2}\)" wide and 1\(\frac{\pi}{2}\)" high.

Stock Number	Num. of Poles	Num. of Positions	Your Price
3D6288 3D6289	1 1	1 2	\$0.35 .45
3D6290 3D6291	2 2	1 2	.59 .65
3D6292 3D6293	3 3	1 2	.77 .87
3D6294 3D6295	4 4	1 2	.93 1.07
3D6296 3D6297	5 5	1 2	1.17 1.30
3D6298 3D6299	6	1 2	1.40

#### Porcelain Base **Knife Switches**



Glazed white porcelain bases. Copper contacts and blades with screw lug connections. Porcelain or composition finger holds. Base lengths; S.P.— 28g"; D.P.—37g". Widths 1" and 2". Rated 125 V., 25 A. For con-cealed or open wiring.

3E63	75—Single pole,	10¢
3E63	76-Single pole,	130

double	throw,	Each.	 	132
3E63				18¢

3E6378-Double pole, 20¢ double throw, Each ....

#### **Bakelite Base Knife Switches**

Size

Base lengths: -Double throw 2½ inches; Single throw

15% inches.

Moulded bakelite base
Contacts and blades,
plated. Suitable for r
panels, instruments, etholes for screws or bolts. and handle brass n nickel Mounting etc.

#### Single Throw

Stock	Poles	List	Your
Number		Price	Price
3C6380	One	\$0.50	26c
3C6381	Two	.70	37c
3C6382	Four	1.40	74c
3C6383	Five	1.75	97c

#### Double Throw

3C6384	One	\$0.60	50.33
3C6385	Two	.80	.45
3C6386	Three	1.20	.65
3C6387	Four	1.50	.81
3C6388	Five	2 00	1.17

#### Minature Switches



Compact, neat. base panel mounting. Bake-lite base 1½ in. long. Niekel plated blades and

single thro 3D6390—Single pole, single throw List, 20c. YOUR PRICE ...... 10c 3D6391-List, 30c. -Single pole, dcuble throw YOUR PRICE ..... 17c -Double pole, double throw 3D6392-YOUR PRICE ..... 26c

#### Switch Levers

With black knob. 10¢

Tapered polished knob. Nickeled metal parts. Lever adjustable from 11/4 to 11/2 inch radius.

#### Non-Locking Push **Button Switch**

Contact is made when knob is pushed in and is broken when pressure is released. 3C6350 — No. wo spring. Closes one contact 22 A. T. 29¢ YOUR PRICE 3C635 I-No. 444-A. Four springs. ikes ...

two contacts.

YOUR PRICE .....

#### Yaxley Sectional **Rotary Tap Switches**



New design, ex-cellent construction. For general ra and laboratory t circuits. Mount radin on panels not over 14 inch thick. Locknut holds switch securely in place.



curely in place.
Contacts securely
mounted on punched bakelite form.
Phosphor bronze wiping contact arm
makes continuous contact on ring lug makes continuous contact on ring lug and makes and breaks contact on each point positively and quickly. Ganga are rigidly clamped together on three posts and are regularly spaced 1/2 inches, between gangs. Etched panel plate supplied indicating contact positions. Diameter overall 1/2 inches. Four gang izo projects 2 inches back of panel; one gang projects 3/4 inch. These are smooth working and solid switches, No wearing nor play even in multigang with wide spacing.

	Sing	te Gui	ng	
Short's Type Steck Number	Non Short'g Type Stock Number	Points	List Price	Your Price
YC1512 YC1513 YC1514	YC1612 YC1613 YC1614	3 4	90c	53c
YC1515 YC1516 YC1517	YC1615 YC1616 YC1617		95c	56c
YC1518 YC1519 YC1510	YC1618 YC1619 YC1610		\$1.15	68c

#### Two Gang

YC1522 YC1523 YC1524	YC1623 YC1624	3 4	\$1.50	88¢
YC1525 YC1526 YC1527	YC1625 YC1626 YC1627	5 ] 6 } 7 ]	\$1.60	94c
YC1528 YC1529 YC1520	YC1628 YC1629 YC1620	8 9 10	\$1.90	\$1.12

#### Three Gang

YC1532 YC1533 YC1534	YC1632 YC1633 YC1634	2 3 4 \$2.10	\$1.23
YC1535 YC1536 YC1537	YC1635 YC1636 YC1637	5 6 7 \$2.20	\$1.29
YC1538 YC1539 YC1530	YC1638 YC1639 YC1630	8 9 > \$2.50	\$1.47

#### Four Gang

YC1543 YC1544	YC1643 YC1644	3	\$2.70	\$1.59
YC1545 YC1546 YC1547	YC1645 YC1646 YC1647	5   6	\$2.80	\$1.65
YC1548 YC1549 YC1540	YC1648 YC1649 YC1640	9 10	\$3.10	\$1.82

Note: This type switch can be supplied up to 9 gams. 10 point, at prices proportionate to above.

#### **Push Button Switch**



Locking Type Two position; locks in both positions. Contact is made when knob is pulled out. 3C6352 — No. springs

3C6352 422. Two st contact. List, 50c. YOUR PRICE .....

3C6353 - No. 444. Four springs 70c. YOUR PRICE .....



#### MAGNET WIRE

Finest quality. Uniform. Carefully inspected insulation. One continuous length only on each spool. Sizes are exact standard B & S gauge. Specifications conform to those given by leading manufacturers for radio apparatus, motor and generator windings, etc. Guaranteed.

PLAIN

WHITE DOUBLE COTTON COVERED WHITE SINGLE COTTON COVERED

Stock Number	Price 8 oz, Net wt. Spool	Ft. per Spool	SIZE	Stock Number	Price 8 oz. Net wt. Spool	Ft. per Spool
3E2100	22¢	63	16	3E2115	24¢	61
3E2101	24¢	100	18	3E2116	27¢	96
3E2102	29¢	155	20	3E2117	31¢	150
3E2103	31¢	245	22	3E2118	33¢	232
3E2104	35¢	380	24	3E2119	37¢	355
3E2105	43¢	600	26	3E2120	48¢	540
3E2106	46¢	925	28	3E2121	61¢	815
3E2107	54¢	1430	30	3E2122	73¢	1210

NOTE: Magnet wire of any size or insulation and in any weight spools supplied at proportionate prices. Minimum size order accepted for any magnet wire not listed is \$1.00. Minimum order may be for more than one kind of wire if desired.

We quote very low prices on 5 to 10 pound lots of a size. Write for quotations.

E	NAME				COVE	
Stock Jumber	Price 8 oz. Net wt. Spool	Ft. per Spool	SIZE	Stock Number	Price 8 oz. Net wt. Spool	Ft. per Spool
E2130	20¢	62	16	3E2145	42¢	62
E2131	21¢	101	18	3E2146	45¢	100
E2132	22¢	148	20	3E2147	47¢	157
E2133	25¢	232	22	3E2148	55¢	247
E2134	27¢	402	24	3E2149	63¢	389
E2135	29¢	640	26	3E2155	72¢	610

	Price 8 o				rice 4 oz. Wt. Spoc	ol
3E2138 3E2139	\$0.38	2550 4040	32 34	3E2158 3E2159	50.71	1142 1745
3E2140 3E2141 3E2142	.59 .75	6400 10150 16050	36 38 40	3E2160 3E2161 3E2162	1.29 1.82 2.59	2625 3875 5325

# PUSH-BACK WIRE

#### Push-Back Hook-up Wire

Tinned copper wire, cotton servand covered with a paraffined damp-proof braid. Simply push back braid when soldering.

Num.	20	Solid	Coppe		
25 Ft. Re	elfo	F	100	Ft.	Rolls

YOUR PRICE	YOUR	PRICE
3E1772	Maroon	3E1781
3E1771	Gray	3E1780
3E1770	White	3E1779
3E1769	Brown	3E1778
3E1768	Black	3E1777
3E1767	Green	3E1776
3E1766	Blue	3E1775
3E1765	Yellow	3E1774
3E1764	Red	3E1773
Stock Num.	Color S	tock Num

YOUR PRICE . 10¢ ROLL

9 Rolls (One Each Color) for 85 c

PER ROLL 9 Rolls (One Each Color) for \$2.95

Stranded Copper Core Num. 23 (10 strands of +30 Wire)

25 Ft. Rolls Stock Num.	Color	100 Ft. Rolls Stock Num.
3E1782	Red	3E1791
3E1783	Yellow	3E1792
3E1784	Blue	3E1793
3E1785	Green	3E1794
3E1786	Black	3E1795
3E1787	Brown	3E1796
3E1788	White	3E1797
3E1789	Gray	3E1798
3E1790	Maroon	3E1799
YOUR PRICE	Y0	

YOUR PRICE ROLL . 12¢

9 Rolls (One Each Color) for 99 c

PER ... 43¢ 9 Rolls (One Each Color) for \$3.68

Num. 18 Solid Copper Core

#### 25 Ft. Rolls Stock Num. 100 Ft. Rolls Stock Num. Color 3E2000 3E2001 Red 3E2009 3E2010 Yellow Blue 3E2002 3F 2011 3 E 2003

Brown White

Gray Maroon 3E2008 YOUR PRICE .13¢ ROLL

3F2004

3E2005 3E2006 3E2007

9 Rolls (One Each Color) for \$1.08

YOUR PRICE PER ROLL . 47¢ 9 Rolls

3E2019

3F 2017

(One Each Color) for \$3.85

Stranded Copper Core Num. 18 (16 strands of 730 Wire)

Stock Num.	Color	Stock Num.
3E2020	Red	3E2029
3E2021	Yellow	3E2030
3E2022	Blue	3E2031
3E2023	Green	3E2032
3E2024	Black	3E2033
3E2025	Brown	3E2034
3E2026	White	3E2035
3E2027	Gray	3E2036
3E2028	Maroon	3E2037

YOUR PRICE 14¢ ROLL

YOUR PRICE ROLL

9 Rolls (One Each Color) for \$1.15

9 Rolls Each Color) (One Each Cole for \$4.05

"Spaghetti" Tubing



30-inch lengths. The language of quality 30-inch lengths. The best quality spaketti made. Made of high grade cambrie tubing impregnated with high insulation transparent varnish. Different colors can be used to mark different circuit. Don't be fooled by law price spaghetti with gelatin or cheap oil impregnation. We know of no other brand on the market to approach our stock spaghetti in quality and our price is positively the lowest for this grade of quality. 3E2055—Black 3D2060—Blue 3E2056—Plue 3E2056—Blue 3D2060—Blue

3D2061-White 3D2062-Gray 3D2063-Maroon

#### Beldenamel **Antenna Wire**



Seven stra strands, size 22 Enameled

Stock Number		Length Ft.	List Price	Your Price
3E2381	8820	75	\$0.65	50.39
3E2382	8821	100	.85	.51
3E2383 3E2384	8822	150	1.25	.74
3E 2384	8823	1000	8.00	4.71

#### Belden Shielded Lead-In

Belden Shielded Lead-In and Ground Wire

Stranded conductor with heavy easystrip rubber insulation and overall 
braid of fine tinned copper\_wire. 
In service the shielding is grounded 
to pick up disturbances and carry 
them to the ground. 
3E239[-No. 8856, 50 ft. No. 14 
shielded. List, \$2.35. 
\$1.35

YOUR PRICE \$1.35

3E2392—No. 8854, 250 ft. No. 14 shielded. List, \$11.25. \$6.60 YOUR PRICE 3E2393—No. 8894, 50 ft. No. 16 shielded. List, \$1.50.

shielded. List, ...88¢ 

Belden All Rubber Lead-In and Ground Wire

Insulated with special rubber com 53¢

3E2396 No. 8851. 250 ft. No. 14 seven strand. List, \$4.25. YOUR PRICE \$2.50

3E2397—No. 8852, 50 ft. No. 16 seven strand. List, 50c. YOUR PRICE YOUR PRICE 3E2398 No. 8853. 250 ft. No. 16 seven strand. List, \$2.35. \$1.32

#### Saturated **Braided Tubing**

36-inch lengths. The correct size for all general purposes. Fits over sizes 14, 16 and 18 wire and can be used on size 12 wire with little stretching. Thoroughly saturated with a high quality wax impregnation.

3E2052-Red 3E2053 Black lengths for

#### Shielded Lead-in and Ground Wire

3333



Size 18 stranded inner conductor Size 18 stranded inner conductor.
Rubber insulated with outer braided
shield of tinned copper wire. When
used as lead-in, by grounding the outer
shield, the tendency to pick up manmade statte between aerlal and rereview is practically eliminated.

3E2195-50 foot coil. foot coll. 45¢ 3E2196-100 foot coil. EACH 3E2194-250 foot coil. \$2.15

#### Lead-in Wire



Copper wire, rubber insulated. Used for lead-in and ground wire. Also makes good aerial wire.

Solid Conductor

With outer weatherproof braid.

Number	Feet	Coil	Coils for
3E2165 3E2166 3E2167 3E2168	25 50 100 1000	50.16 .27 .55 4.75	\$1.40 2.45 4.95

#### Stranded Conductor

HUDDO	0010100	0016	or breitu.
Stock Number	Coil Feet	Per Coll	Ten Coils for
3E2169 3E2170 3E2171 3E2172	25 50 100 1000	\$0.12 .23 .45 3.95	\$1.05 2.05 4.20



Rubber Covered Hook-up Wire Stranded, tinned

copper wire covered with &"
live rubber insulation to withstand any voltage ordinarily

used in radio. Best for short leads and ease of wiring. Belden 25-foot coils in carton

2040—Red. 2041—Green. 2042—Blue. 2043—Black. 2044—Yellow. 2045—Gray.	YOUR Per	PRIC Coll
:2045-Gray.		

#### **Insulating Cement** 3E2065-Per 2-oz. bottle..... 22¢

#### Universal Coil Winder

GREEN DOUBLE



PRICE YOUR YOUR PRICE
For winding Honey Comb, Spider Web
and Solenoid Cotts of different widths
and diameters. Will use wire of different gauges. Accurate coils can be
made. Equipped with necessary accessories for winding various types of
coils. Has a recorder with adjustable
pointer for counting number of turns.



Litz Wire

65 strands No. 38 enameled wire. Will not stretch. Maroon cotton covered.
3E2385-125 ft. List, \$1.75. YOUR PRICE \$1.13

20 strands No. 38 enam, wire with double covering of stilk.
3E2386-100 ft.
List, \$1.00. YOUR PRICE. 19¢

#### **Bare Copper Wire**



#### 7 Strand Conductor

Stock	Equiv.	Coil	Per	Coils
Number	Size	Feet	Coll	
3E2175	27	50	9¢	\$0.80
3E2176	24	50	13¢	1.25
3E2177	22	50	17¢	1.65
3E2178	27	75	13¢	1.25
3E2179	24	75	19¢	1.80
3E2180	22	75	25¢	2.40
3E2181	27	100	17¢	1.60
3E2182	24	100	22¢	1.10
3E2183	22	100	31¢	2.95

3E2184 | 14 | 100 | 28¢ | 2.70 **Enameled Copper Wire** Strand Conductor

	Dirani		uucto,		11 45 4 4 1 14 75 14 4
		Coil Feet	Per Coil	Ten Coils	different circuit. Don't be for low price spaghetti with gel- cheap oil impregnation. We k
3E2185	22	50	21¢	\$1.90	no other brand on the mar approach our stock spagnetti in
3E2186 3E2187	24 22	75 75	24¢ 35¢	2.25 3.30	ity and our price is positive lowest for this grade of quality 3E2055—Black 3D2060—Blu
3E 2189	26 24 22	100 100 100	22¢ 30¢ 41¢	2.10 2.90 3.80	3E2056 - Yellow 3E2057 - Brown 3E2058 - Green 3D2062 - Gra
3E2191	14	Condu 100 100	31¢   38¢   48¢	2.95 4.50	3E2059—Red 3D2063—Ma YOUR PRICE 10 lengths for
	Number 3E2185 3E2186 3E2187 3E2188 3E2189 3E2190 3E2191	Stock   Equiv.   Size	Stock   Equiv.   Con   Number   Size   Feet	Number   Size   Feet   Coll	Stock   Equiv.   Coil   Per   Number   Size   Feet   Coil   Coils

59¢

#### Shielded Low Capacity Cable



For Auto Antenna Lead-in and Short Wave Converters. Stranded copper conductor size 18. Rubber insulated, Jute or cotton filter over conductor with tinned copper shielding overall. Extremely low capacity between conductor and shield permits shield grounding without loss of signal. 4E11065—½" Outside Diam.

67¢ 10 feet for 100 feet for \$6.23 4E11066-4" Outside Diam

Shielded Low Capacity Cable



Rubber Jacket Overall
Outer rubber Jacket insures Positive
Weatherproofing. Can be used for
Auto Antenna Lead-in or wherever a
love capacity cable must withstand ellmatic conditions. Constructed like
above cable except enclosed in a heavy
rubber jacket.
4EIIO67—%" Outside Diam.

Shielded Low Capacity Weatherproof Tubing



fa" Inside Diameter and approximate-A" Inside Diameter and approximately 4" Outside Diameter. Small outside diameter permits easy assembly
in corner post of auto as shield for
antenna lead-in. Excellent for shielding output of signal generators, or any
cables with a diameter of less than
A". Consists of a thoroughly impregnated loom tubing covered with a finely
woven tinned copper shield.

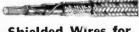
4EI 1068—10 ft. coil. 

100 feet for \$3.95 Shielded Ignition Cable



7 M/M shielded secondary high tension wire. For leads from plugs to coil, distributor to coil, etc. Conductor consists of 16 strands size 27, tinned copper wire, over which is covering of high tension rubber compound and a specially impregnated cotton braid. Overall is woven shielding of tinned copper wire. Very flexible

65¢ 4E11071-10 feet for ....



#### Shielded Wires for **Auto Radio Installations**

For "A" Battery Leads For "A" Battery Leads
Conductor is B & S size 12 equivalent, consisting of 65 size 30 stranded
copper wires. Insulation consists of
two wrappings of varnish impregnated
cambric tapes over which is a woven
cotton braid. Overall is woven shielding
of tinned copper wire. Very flexible.

4E11069—10 feet for ... 52¢

For "B" Battery and
Speaker Land

Wire No. 14. Cut into two-foot lengths. 100 lengths (200 feet) .....\$1.05

# Radio Cables

Stock

Number

4011016

4D||040 4D||041 4D||042 4D||043 4D||044

4011045

**Rubber Jacket Overall** 

Each conductor size 18 of stranded copper wires, he rubber insulated, list incitely colored for easy tracing, Individual conductors are cabled together and enclosed in outer water-proof super service rubber Jacket overall. A very flexible and rugged cable that will withstand severe wear.

Num. 10 feet

Woven Shield Covered With

**Rubber Jacket Overall** 

Rubber Jacket Overall

Each conductor size 18 of stranded copper wires, & "rubber insulated and braid covered. Each covering is distinctively colored for easy tracing. Individual conductors are cabled together and covered over all with close woven shield of fine size tinned copper wire. Over shield is an outer super-tubber Jacket providing a water-proof practically wearproof covering. This cable is recommended for theater, and outdoor service on P. A. systems, as microphone cable, extensions, etc. The finest cable made. Very fiexible. Will stand hardest use.

Stock Num. 10 feet 100 feet Number Cond. for for \$2.50\$

**Emergency or Temporary** Microphone Cable

A 3-conductor cable constructed of No

18 solid copper conductors. Conductors are double cotton served, twisted together and covered overall with a

gether and covered overall with a paraffined cotton braid. Conductors are colored red, white and blue. Especially designed for thermo-relay circuits, oil burners and heat control devices but will make an excellent temporary cable for microphone current where the cable is not subject to any handling or abuse; should not be used for permanent installations.

It will safely carry any current for microphone operation but insulation is too light for speaker circuits.

3E2203-100 ft. rdl. YOUR PRICE ...... \$1.19

Cond

for

240

45e

57c

100 feet

for

\$2.19 3.40 4.00

5.25

8.00

\$2.50

3.85 4.45 5.75

7.00

300

43c 55e 67e

82e

covered overall with a otton braid. Conductors

Co.C.



#### Glazed Braid Overall

Each conductor size 18 of stranded sopper wires, A" rubber insulated and braid covered. Each covering is distinctively colored for easy tracing. Individual conductors are cabled together and covered with brown glazed braid overali. Very flexible.

Shock Num. 10 feet 100 feet

Cond.	for	for
1	8c	\$0.68
2	18c	1.54
3	22c	2.15
4	28c	2.65
5	34c	3.10
6	38e	3.70
7	48c	4.45
. 8	58c	5.10
	Cond.  1 2 3 4 5	Cond. for  1 8c 2 18c 3 22c 4 28c 5 34c 6 38c 7 48c



#### Shielded Covering Overall

Each conductor size 18 of stranded Each conductor size is of stranger copper wires, &," rubber insulated and straid covered. Each covering is distinctively colored for easy tracing. Individual conductors are cabled together and covered overall with woven shield of fine size tinned coperative wires. Very flexible. Perfect electrostatic shield.

Stock Number	Num. Cond.	10 feet for	100 feet for
4D11020		17c	\$1.53
4D11021	2	28c	2.50
4D11022	3	35e	3.25
4D11023	4	41c	3.85
4011024	5	50c	4.60
4D11025	6	60c	5.75
4D11026		70c	6.25



#### **Woven Shield Covered** With Glazed Braid Overall

Each conductor size 18 of stranded copper wires, & "rubber insulated and braid covered. Each covering is colored for easy tracing. Conductors cabled together and covered with close woven shield of fine size tinned copper wire. Over the shield is an outer of all purpose where shielded cable is required and not subjected to too much mechanical wear. For Auts Radios, Home Radios, P.A. Systems, etc., where cable might touch grounded from reproduced program with its use. its use.

Number	Cond.	for	for
4D11030	2	\$0.33	\$2.92
4D11031	3	.39	3.60
4D11032	4	.46	4.30
4D11033	5	.57	5.06
4D11034	6	.69	6.25
4D11035	7	.81	7.00
4D11036	. 8	.88	7.90

Num 10 foot 100 foot

Note: Wire on orders for multiples of 10 feet or for more than 100 feet will be shipped in continuous lengths.

#### **Extension Cords**



Fine Stranded Copper Wire Conductors. Each conductor rubber insulated and covered with cotton braid. Two such conductors laid parallel with braid covering over all. Cord tips each end.

Stock	Length	Price	Ten
Number	Feet	Each	For
302310	10	18c	\$1.71
3C2311	20	24c	2.28
3C2312		35c	3.33
302313		49c	4.65
1	With Co	onnector	
Stock		Cord	Price
Number	1	onath	Each

20 foot 30 foot

50 foot

#### Analyzer Cable



Has two heater leads of size 16 stranded tinned coppe; wire. Balance of conductors are size 20. All conductors are cotton served, covered with a \$\frac{1}{2}\]," rubber insulation, and a lacquer dipped color-coded cotton braid. Black glazed braid overall. Supplied in 5 ft. lengths. Longer lengths are available. Add fic for each additional foot of 8 wire cable and 9c for each additional foot of 9 wire cable.

3E8072—8 wire cable.

29¢ 5 foot length ........... 3E8073-9 wire czble. 36¢ 5 foot length .....

#### Copper Shielding



For Use on Any Wire
This shielding is used on amplifiers, speakers, public address conduits, automobile radios and wherever it is desirable to eliminate electrical interference. Forms nerfect electrostatic and interference shield. The conductors are run through the sleeting and the sleeting is grounded. Very flexible; can be expanded to nearly double its original diameter, but the length is reduced proportionately. Prices quoted are for lengths of that wire. Shortening of shielding when opened up to sizes we specify is about 25%, so order 25% more flat length than opened up length actually needed.

Natural Copper Finish
Stock
Diam. Wide 10 ft. 50 ft.

Stock	Diam.	Wide	10 ft.	
Num.	Open			For
4E11072		% In.		
4E11073				1.25
4E11074				.85
4E11075	14 in.	a in.	_15c	.60
Indivi	dual WI	res Ti	nned	

Stock Diam Wide 10 ft. 50 ft For For 60c \$2.44 Open 4E11076 4E11077 4E11078 4E11079 % in. l in 1 In 41c 1 35 24c in. in.

#### **Lead Sheathed Wire**



tinned copper wire strands with inch rubber wall, over which is a inch lead sheath. Size 18 single conductor made

is inch lead sheath. The only absolutely perfectly shielded wire. Necessary for best results on Low Voltage transmission line transformers like the Elim-O-Stat. tine transformers like the Elim-O-Stat, Toble, etc., when used in locations near ignition systems for oil-burning furnaces, X-Ray and Electrotherapy high frequency apparatus and other similar devices generating intensive interference. May be used underground or in water. Will also improve reception on Auto Radio Sets when used in primary circuits of spark-coil. Overall diameter about & tech.

3D2197-50 foot coil. YOUR PRICE \$1.25 3D2198-100 foot coll. \$2.18

#### **Duplex Wire Lead** Sheathed



conductor cable of the same Two conductor cable of the same specifications of the single wire listed above covered with he lead sheathing. Waterproof and weather-proof. Completely electrostatic shielded. Recommended as replacement for exposed wiring feeding small motors or light equipment. Eliminates

primary radiation.
3D2199—50 ft. coil
YOUR PRICE ..... 3D2200-100 ft. coil \$3.95

#### **Pigtail Wire**

The second secon 3C2387 10 foot. List Price, 35c. .....20¢ YOUR PRICE

A braided wire cable made up of very fine threads of copper wire, which gives it extreme flexibility. Use it for making connections on your variable condensers, variometers, and switches and avoid high frequency resistance losses.

#### Parallel Lamp Cord All Rubber Covering



2 Conductors of No. 18 (41 atransk of No. 34) wire with  $\frac{1}{12}$  wall of rul-ber, cotton braid over each conductor, laid parallel and covered overall with a  $\frac{1}{12}$  wither jacket. Beautiful smooth brown finab. Flat oval shape W. Wide 16 (4) which I have the brown finsh. Flat oval shape %"
wide, ½" thick. Illustration is actual
size. Extremely flexible.
4EI | 049-10 foot length.
YOUR PRICE
250 foot roll for \$4.50

#### insulators Wall Insulator

For supporting wirfor supporting wir-ing or instruments, or may be used out-side for supporting lead-in or ground wires. Glazed brown wires. Glazed brown porcelain. Nuts and s as shown. Dimensions inches. Shpg. wt., 8 oz.

3E2230 YOUR PRICE ..... 

#### **Aerial Insulators**



Glazed porcelain, deeply corrugated

100 Lots, \$1.75

3E2233-4 inches long. Ten for, 46c

3E2234—5 inches long. 

#### Insulator 3E2237-With 21/2C

ong screw. Each ..... Ten for 22c 100 Lots, \$1.95

3E2238-With 7 inch screw. 4¢

Ten for 35c 100 Lots, \$2.75
For attaching lead-in or ground wire to posts or side of building. Center of porcelain, mounted in gaivanized screw eye. Shpg. wt. 4 oz.

#### Nail Knobs



Glazed, white porcelain square insulators. Separ-able cap with base. As-sembled together with nail having leather washer un-der head. Ready for use. Grooves for two wires. For lead-in or ground wires. Diameter 1% in. Height,

.....15¢ Ten for Per Hundred ......850

#### Stand-off Insulators



Made of porcelain. 4 inch lengths only. For finest antenna installations. Shpg wt., 6 oz. 3E2229-4 inch.

3E2229-4 inch. 7¢ Ten for ......65c

#### Porcelain Strain

Designed especially for insulating extra long seri-als or guy wires. Extra strong. These insulators help prevent antenna les. Shpg. wt., doz-





heat or cold or other atmospheric con-ditions. Finest quality. Approximately Ten for .....29¢ long 3F2231-

Hundred .....\$2.65 Weatherproof



Stand-off Insulator

Porcelain Body 2% in. high. Diameter % in. Heavy large screw. For outside work. 3E2236-°- 10¢ Ten for ......85c

#### **DX** Lifetime Aerials



#### Giant Aerials for Roof or Attic

4E 1 07 50 -25 foot. (Has 125 feet wire.) \$1.69 List. \$3.95. Your Price ..... 4E10751-50 foot. (Has 250 feet wire.)
List, \$4.95. Your Price \$2.23

More selective and powerful. Superior to straight wire with any type set! Gives effect of a long aerial in a confined space. Sharpens tuning. Non-directional. Excellent signal strength. No. 7/24 stranded enameled copper wire. Zinc ring separators, assembled with two porcelain insulators, ready to string up. 25 feet lead-in wire soldered to aerial.

Best Type aerial for short wave sets. This type used by army and navy.

#### Aerial Kits-Priced Right

#### **STANDARD** KIT CONTAINS:

50 ft. No. 7/26 stranded aerial wire; 25 ft. rubber covered lead-in wire; 1 approved light-ning arrester; 2 porcelain insulators; 1 ground clamp; 1 window lead-in; 2 porcelain nall



KIT CONTAINS: 75 ft. No. 7/28 stranded aerial wire; 50 ft. rubber covered lead-in wire; 25 ft. ground wire; 1 standard approved lightning arrester; 2 porcelain insulators; 3 porcelain nall knobs; 2 galranized screw eyes; 1 window lead-in strip; 1 ground clamp; 1 instruction sheet.

SPECIAL

3E2076-YOUR PRICE ..... 63¢

#### Special High Frequency All-Wave Aerial Kit U.S. Signal Corps Pattern

A scientific aerial designed for permanent installa-tion with all-wave sets intended to receive European and American Broadcasts.

and American Broadcasts.

Kit includes 100 ft. Beldenamei No. 12 Solid Copper Wire. 2-glass tension insulators, 2-stand-off, 3" insulators, 1-low-loss Alr-Gap Lightning Arrestor, 1 Reinforced Ground Clamp, 1-Spring Antenna Tightner and 1-Porcelain Lead-in Insulator. The 100 Ft. of solid wire should be divided 65 ft. for the lead-in and aerial, 35 ft. for the ground circuit. This makes an ideal length for Trans-Atlantic reception. The solid wire offers less impedance to High-Frequency signals than twisted multi-strand wire. The non-inductive stand-off insulators eliminate the loss caused by looping the wire around the iron core of Nail-It-Knobs. The one piece solid aerial prevents noise from loose joints; the spring aerial tightener reduces fading from aerial swaying.

3E2078—List Price \$3.50.

\$1.29

#### **Ground Clamps**



Reinforced frame Reinforced frame. Teeth cut through rust and paint. Separate screw for attaching wire. Fits pipe up to 1½ inches diameter. 3E24439— 5¢

FACH Ten for ... Per Hundred

#### **Braided Ribbon Antenna**

25 strands of copper wire braided into lat ribbon. 100 ft. contains nearly 1/2 mile of wire. Gives maximum conductive surface to radio waves. 25 strands of copper



3E2298-Per 100 Ft. Coll PRICE

#### **Baby Insulator**

For suspending wire inside of house. Rubber insulator. Screw 11/2 in. over all



#### Filtered Aerial Wire



List, \$1.50. 302464 Your Price 86¢

60 Foot Coll

revolutionary prin-Designed on Designed on revolutionary prin-ciples. Filters and amplifies incom-ing signal. Excellent for distant re-ception. Reduces static. Composed of solid copper core. insulated over which is helically wound an enamel in-sulated fine copper wire. Inner core wire to be grounded at each end. Outer wire connected to aerial on set.

#### "Super-Thru" Combined Radio Outlet, Aerial-Ground and

Lightning Arrester

Lightning Arrester

The only Aerial-Ground entrance fitting that is approved by the Underwriters Laboratories. Should be used in every first-class residential installation. Provides greatest convenience with maximum protection.

All parts of moided Bakelite. Mounts through single % hole. No outlet box required. Fits any wall up to 15 inches in thickness. Inside-plate held by tension, no screws. Special polarized attachment plug will not fit electric outlet and can not be reversed in its own plate. Installation consists of a special Plug, inside wall-plate, and exterior Lightning Arrester. Connection from inside plate to Arrester plate made by 12 gauge insulate wires which are furnished. Easy to install.

### Arresters

Superior Arrester



A dependable air gap type arrester. Porcelain case. Shpg. wt., 10 oz.

3E2207—Each ..... Lots of 10 \$3.85

#### **Belden Bakelite** Lightning Arrester



Moulded bakelite body. Suitable for use inside or out of doors. Sturdy. Reliable. Underwriters standard. Furnished with \$100.00 lightning damage guarantee,

3E2379-List, 25e. YOUR PRICE ..... 14¢ 



Brach Storm King Arrester

28¢

Made of genuine bakelite. Non-air gap principle. For indoor installation, \$100.00 insurance policy aga in st lightning, for your radio set, goes with this arrester. Shpg. wt., 1 pound.

3E2211-List, 50c. Price

#### **Glass Arresters**



Base of clear crystal glass. Carbon clement held between brass conductors. Clearly visible. \$100.00 insurance with this arrester.

3E2224-List, \$1.00.

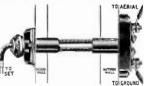
36¢

#### **ELECTRO-STATIC**



Has choke coil and condenser connected has choke coil and congener connected between aerial and set terminals which act as a statle and noise reducer and filter. Sold with a \$100.00 free in-surance bond against lightning.

3C2463—List Price, \$1.00. 58¢



Two Types-for Regular or Shielded Lead-In

3E2205 Standard Type "Supercomplete. List. \$1.85. YOUR PRICE ......

3E2206—Special Type "Super-Thru" for use with Shielded Lead-In. List Price, \$2.45. YOUR PRICE ..... \$1.25

Radolek Noise Filter System New Tobe Model 33 Filterizer Kit



transmission line antenna leadin with auto-transformer for elimination of man-made the statie.

static.

Simply put up an aerial outside the field of interference, install one transformer at aerial and run shleided lead to second transformer installed in or near set. Connection from this transformer is to set aerial, shleiding is grounded. Signal strength is preserved—even amplified, and long leadina of several hundred feet are entirely bractical when necessary to put practical when necessary to put aerial in the clear. Many installa-tions of this system are giving ex-cellent results here in Chicago in locations where previously no Radio Receiver could be satisfactorily op-erated because of interference.



complete kit includes The complete kit includes:—
One highly efficient antenna stepdown auto transformer enclosed in
water-proof copper case and
mounted on a special impregnated
block; 60 feet of shielded wire
lead-in cable which is soldered to
antenna transformer; one step-up
auto transformer for use at the
R ad io Receivers. Complete instructions included. Weatherproof.
Eastly and nuckly installed Easily and quickly installed.

Step-up multiple Auto Transformer with Fleron Plugs and receptacles and 6 Ft. of shielded wire. May be used with

Step-down Trans-former for any number

List, \$2.50. \$1.47

of outlets from

3E8513-

#### **Auto-Transformer Kit** Multiple Outlet Assembly



Step-up Auto Transformer-couples low voltage lead-in transmission line any receiver. ceiver. Step-Down couples antenna t d-in Transmission n Auto to low Transformervoltage lead-in Transmiss Mounted on insulating bar.

in above kit.

3E8514—Kit 2 pieces. \$1.95

3E8508 Step-Up Auto Transformer only, YOUR PRICE ...95c 3E8509-Step-Down Auto Transformer only, YOUR PRICE \$1.05

#### Antenna Lead-in Window Strips 10 0 0

Duco impregnated web covered copper conductors. Waterproof insulation. 3E2470—12 inches long. 4¢ EACH 100 for .. \$3.25 Per Doz ... 54c; Per Doz ... 36c:

Antenna Lead-In



A new type lead-in strip with a screw and self locking terminal on copper strip. Webbing covering impregnated with Hygloss Duco.
3E2475—12 inches long.

EACH 100 for..\$4.95

#### Lynch Antenna Systems

There is a Lynch Antenna Kit for every type of home-operated Receiver; each will improve the reception of the type of Set for which it was designed. They eliminate "man-made" static and greatly increase signal pick-up and clarity. Every Set owner should have one . . You can make many extra dollars by calling them to the attention of your customers.

De Luxe All-Wave Kit



For Cage Deublet and Transposed Transmission line. Guaranteed to give better results than any other Antenna when used with any

any other Antenna when used with any All-Wave, Short-Wave, or Broadcast Set Kit includes: 300 feet "HI-MHO" enameled short wave wire (light weight), 20 Transposition Blocks, (enough to make 25 Ft. of transmission line), 10 Cage-Aerial Spreaders, 8 Navy standard Insulators, 1-Universal Couplet instructions with each Kit. 3E8521-List, 512.50.

YOUR PRICE \$7.35

#### Short-Wave Kit

Combines high noise-reduction Combines high noise-reduction and pick-up efficiency on wares shorter than 200 meters. The Lynch Short-Wave Doublet Antenna Kit comprises the following parts; 15 Lynch Transposition Rlocks; 8 Lynch Commercial Type Insulators; 1 Lynch Doublet Coupler; 200 feet Special Lightweight "Hi-Mho" wire.

3E8522-List, \$6.00.

YOUR PRICE .....

#### Giant Killer All-Wave Kit

Giant Killer All-Wave or Broadcast Receiver. Closely approaches the performance of the more expensive kits and is far superior to any ordinary aerial. Consists of: 50' "Hinary aerial. Consists of: 50' "Hinary aerial. Evilone of the second o celain Screw Eyes, 2 Nail Knobs.

3E8523-List, \$3.50. YOUR PRICE ..... \$2.06

#### "No-Stat" Broadcast Kit

For noiseless operation and maximum signal strength on broadcast receivers. Consists of: Antenna Transformer, Receiver Matching Transformer, 50'

Shielded Lead-in Cable, 3E8520 List, \$6.00. YOUR PRICE .....

3E8519—Same as above except with 100' shielded Transmission Caple. List Price, \$7.00. \$4.12 YOUR PRICE ...

#### All-Wave Kit

For use on all wave bands, fartory tests have been ma For use on all wave bands, Satisfastory tests have been made with Scott, General Electric, RCA, Stewart Warner and other high-grade all-wave reseivers. Complete kit consists of: 15 Transposition Blocks; 8 Commercial Type Insulators; 1 Universal Coupler; 100 ft. "Hi-Mho" (Special high conductivity) Antenna Wire; 50 ft. "Hi-Mho" Enameled Transmission-Wire.

3E8516-List, \$6.50. \$3.81

A Shielded Antenna Lead-in Noise Suppressor System

\$321

3D8500-List Price \$5.45

YOUR PRICE

Outfit Includes tenna filterizer transformer, mounted in weatherproof aluminum housing; 75 feet atuntum mousing; 73 reet shielded lead-in whre; one Receiver Filterizer adjusted for matching lead-in impedance to the input circuits of dif-ferent Radio Receivers. This new improved model is designe matter, what kind of outside m

revent Madio Receivers, 1913 new improved model is designed in accordance with proven principles. No matter what kind of outside noise is interfering with radio reception, the Filterizer Kit will provide effective relief. Installation instructions included.

#### Tobe Model 32 Filterizer Kit



For use with receivers operated on electric supply lines over which

#### Tobe Model 36 Auto Filterizer Kit

Keeps noise out of the auto radio by protecting the parts through which noise is most likely to enter. Consists of: (1) Aerial Filterizer with 10 ft. of Filtered Lead-in which eliminates motor noise from lead-in and permits us of aerial at rear of car beyond range of ignitive interference. (2) Done Light Filteriance. on serial at rear of car beyond range of igni-tion interference. (2) Dome Light Filterette. (3) Ammeter Filterette to stop noises from low tension wires and electric car heaters. (4) Instruction Booklet.

3E8499—List Price, \$2.95. \$1.74



#### Noise Reducing Antenna Products

#### Transposition Blocks



YOUR PRICE EA. .. 5¢ 

Cage Aerial Spreaders

For use wherever a cage type of aerial is to be type of aerial is to employed. Construc of special moistructed proof gland glazed no

material. Electrical losses are reduced to a minimum.

3E8551-YOUR PRICE, EACH 90c 10 for

# Antenna Spreaders

Reduces electrical loss of leakage across the antenna insulators.

\*\* wide.
3E8576—3%" long unglazed
3E8577—6" long unglazed
10¢ Your Price Each 10 for 90c 

#### Airplane Insulator



Antenna Spring Tightener slack in Aerial.

3E2376-Spring only,

3E8575 — 1% diameter.

# 

#### Universal Coupler

Complete with trostatic shield. mits the use of an un-grounded trans-mission line with any type of receiver without sacrificing stability which grounding the chassis sometimes provides. Especially useful with all-wave receivers.

YOUR PRICE, EACH ...

**Double Lightning** 

#### Arrester For use on two wire tr



two wire transtwo wire transmission lines.
Provides suitable
protected between the

3E8555-YOUR PRICE, EACH ...

"Hi-Mho" Antenna Wire

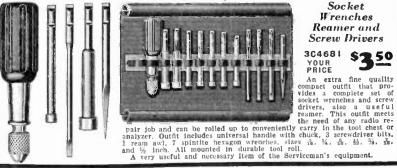
Excellent for All-Wave Sets. High conductivity or low resistance at all resistance resistance at all radio frequencies. Half the weight of solid copper but with the same A-C resistance. The shorter the wave length the more effective "HI-MHO" be-

3E8556-Light Weight 100 List, \$1.00. NET ..... 3E8557-Heavy Weight 50 List, 75c. NET .... 46¢ 3E8558—Heavy Weight 100 Ft List, \$1.50.

See Page 142 for RCA World Wide Antenna

7¢ System.

#### Serviceman's Spintite Kit



Socket Wrenches Reamer and Screw Drivers

304681 YOUR

#### Genuine Spintite



30468 <b>7</b> 30468 <b>8</b>	1/2	45c/
304686	78	45c
304685	30	30c
304684	Te.	30c)
304683	1/4	30c
304682	fb.	30c/
Number	Size	Each

set Seven Wrenches Your Price 230

#### Special Socket Wrench Set



3C4652—Handle and five sockets.

YOUR PRICE

A specially selected set of five detachable sockets, together with a special tight-grip handle in which is set a sturdy steel shaft firmly held with long steel feruie. Fine quality steel sockets with very thin but strong walls. Sizes: ¼, Å, %, Å, Å and ½ inch for hexagonal nuts. Hollow stems take screws projecting not over % inch.

This is a special quality Set, worth more than the small difference in price between

than the small difference in price between it and inferior quality, similiar Sets of-fered by others to create a low price impression.

#### Super Grip Screw Drivers Insulated Handles—Insulated Blades



The finest made and at bargain prices! Tight grip, moulded, polished black hard rubber handles. Offer perfect insulation. Radio sizes have slender hardened steel blades, diameter hinch. Reach the difficult spots. Blades can never get loose or turn in handle. Very strong and rugged. Every serviceman and have a complete set. Blade & diameter. Stock Blade Price

3E4731—Set of 6 One of each size.

Stock	Blade	Price	)
Number	Length	Each	- i
3C4725	31/2"	15c	- 1
3C4726	4 1/2 "	17c	
3C4727	51/2"	20c	1
3C4728	614"	24c	- 1
3C4729	81/2"	28¢	- 1
304730	1014 "	320	- 1

YOUR PRICE **\$ 1 23** 



4 in 1 Screw Driver

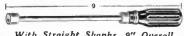
3D4745 YOUR PRICE, Per Set ......39¢ 

#### **Hollow Stem Hex-Nut Wrenches**

High quality tools. Have deep hollow in socket to take any ordinary projection of screw above nut. Fine tool steel shanks. Sockets of specially hardened tool steel. Shank and socket cadmium plated. Finely finished grooved wood handles, provide sure grip. Shanks securely set in handles to prevent turning. Every Radio Serviceman needs a complete set of all three styles. Our quotations represent big values. 6



With	Straight Shan	ıks, 6" Overall
Stock		YOUR PRICE EACH
Num.	Nuts	12¢
3E4711	n In.	125
3E4715	1/4 In.	3E4719-Set of 6
3E4716	n In.	Wrenches Complete
3E4717 3E4718	78 In.	101
3E4712	1/2 In.	09C
354/12	/2 111. /	



With	Straight Sha	nks, 9" Overall
Stock	For Hex.	YOUR PRICE EACH
Num.	Nuts	104
3E4713	ng In.	19¢
3E4720	14 In.	3E4724-Set of
3E4721	n ln.	Wrenches Complete
3E4722	% In.	
3E4723	is In.	\$1.05
3E4714	⅓ In. ∫	Y-1-3
	_	



With 90° Offset Shanks, 7" Overall
Easily and quickly handle nuts in positions not accessible with straight shank wrenches. Except for 90° bend in shank construction is exactly same as above.

Stock	For Hex.	YOUR PR	ICE EACH
Num.	Nuts	-	- 4
3E4732	ra in.	19	)¢
3E4733	14 In.		
3E4734	is In.	3E4738	
3E4735	% In.		k wrenches
3E4736	iα In.	YOUR	
3E4737	1/2 In. J	PRICE	\$1.05
		1	
		and the same	

# Radio Wrench Set

304700 YOUR PRICE

The handlest tool in the serviceman's kit. Hollow handle holds screwdriver socket and 5 wrench sockets: size ½", 56", 38", 76" and ½" all of which are included in set. Ideal for radio and general repair use. Handle and shank are 7½ inches long. Handle is heavily knurled, providing good gripping surface. Finished in white nickel.

#### **Burgess Flashlight Screw Driver**



#### Puts the Light Directly on the Screw

A combination flashlight and screw driver. Handle screws in dark places quickly and efficiently. Enables use of both hands. Large secure grip safety insulated handle. Fine tool steel blade handles all radio screws. Switch turns light off and on. Bulb included. Very Special Value!

3D4747—Screw Driver, Less Batterles.

596

3D39-No I. Uni-Cell Batteries (2 Required)
Two for .... 12c

#### SERVICEMAN'S Vest Pocket Screw Driver

OPEN



Real quality tools to handle tiny screws in recesses. Tight grip, moulded polished black hard rubber handles offer perfect insulation. ½-inch diameter hardened steel blades, small enough and strong enough for any radio set screw. Blade lengths 1½, 2½ and 3¼ inches. Blades will never loosen or turn in handles.

#### DeLuxe Super-Grip Radio Screw Driver Set

Transparent High Insulation Handles

Handles
Super quality, classy appearance. 15,000 voit, test, unbreakable lusterous transparent non-in-flammable handles. Moided to blade; will never loosen. Blades of fine hardened tool steel. Will handle tightest screws without bending or chipping. Blades are rust-proofed and highly pollshed. Vest pocket cilp prevents losing. An extra-quality American made tool for the Professional Radio Serviceman. Blades % "diameter: 11-2", 24" and 314" long. Handles perfectly all types of machine screws, dial screws, small wood screws, etc. 3E4744—Per Set of Three. 

#### Maple Handle Screw Drivers



Substantially made to stand the gaff yet low in price. Handles are of white hardwood in natural varnish finish, fluted for sure grip. Blades of hardened and polished tool stret. Will not turn in handles. Extra heavy steel ferrules. Four Drivers with 6, 5, 4, and 3 in blades. A set of these drivers will handle practically every machine and wood serew, except very smallest ones, used in Radio Service Work.



Quickly places any type screw in spots not ac-cessible with ordinary screw driver. Screw gripper holds screw firmly while screw is being placed and instantly releases it when desired. Gripper slips along blade to upper end when not in use. Strong insulated unbreakable handle. Hexagonal tool steel blade & "diameter"

3E4743-10"	Blade,	Each	 	• • •	39 с
3E4742-4"					
3E4741-3"					
steel blade 32"					25c

Screw Holding Screw Drivers 

Four finger-like prongs hold nuts, screws, lock washers, etc, in vise-like grip. Works in places impossible to reach with fingers or ordinary tools. Nickel plated tempered steel blade. Moulded bakefite handle. This is one of the most satisfactory tools of this type that we have seen. 3C4635- 8 inch. Each..... 3C4636-10 inch. 

**Utility Set** 

304701-YOUR PRICE PER SET......\$1.95

Includes a motor arbor to fit ½ inch shaft, held by double set screws; chuck for drills up to ¼ inch; 4 inch wire scratch brush; ½x4 inch emery wheel; 4 inch steel saw and two 4 inch cotton buff wheels. A handy set for the shop and well worth the price. Overall length 5¾".

#### Polishing Head



YOUR PRICE. 85¢

Holds emery wheel up to 1" thick and buft wheel. Has chuck for drills up to \(\frac{1}{2}\)". Fulley 1\(\frac{1}{2}\)" odds. For \(\frac{1}{2}\)" round belt. Overall height ?". Shaft length 8". Long bearings with oil cups. Sturdy cast fron base, well finished in red enamel. Two screw holes for fastening.

# 3C4709 PRICE. 73¢

#### Saw Table and Guide

Accurately made and Accurately made and clamps onto our number 3 C 4 7 0 2 polishing head. Size 8 x8 inches. Makes a complete cutoff saw. Fine for sawing bakelite or wood panels. Neatly finished. Will make your polishing head of much more value to you. Adjustable guide with steel bar marked off as 6 inch rule included.

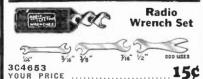
#### **Ball Pein Hammers**



3C4704-10 oz. Hammer, Your Price... 3C4705-16 oz. Hammer, Your Price... 25 c



The best size for the radio serviceman. 7 inches overall length. Rounded and polished cutting blade 2 inches long. Very strong. Drop forged steel. Nicely finished.

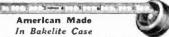


Set of three wrenches in leather case. For all ex nuts measuring %. As. %s. %s. 7s and ½ inch the allgator jaw for odd sizest. Very handy, very service man and set builder needs them. hpg. wt., 6 oz. Shpg.

YOUR PRICE .....

5

#### Spring Steel 72 Inch Rule



A new semi-flexible steel rule, which may be bent, twisted or folded in practically any manner and will always spring back to its natural form. The spring tape is so tempered and curved with the width of the rule that it holds its nearly rigid shape for all ordinary measuring purposes and may be bent or curved at will without damage to the rule. Rolls up in a compact bakelite case 2" diameter. 1" thick.

304535—Volus Prices 

D.

137

**Diagonal Jaw** Nippers 3C4565

Price

For fine electrical and radio work. Made For the electrical and radio work, Mage or hardened tool steel. Cuts wire clean in tight places, A high grade tool, fine polished finish. Well worth the price but not the equal of Klein's for profes-sional work. Size 5½ inches.

#### **Long Nose Pliers**



The handlest pliers for radio work, quality tool made of fine hardened to finely finished. Wonderful value, but a equal to Klein's for professional work. hardened tool steel

#### **End Cutting Nippers**

3C4659 56¢



Cuts wire and small screws in tight places rop forked steel. Hardened jaws. Guaranteed Will stand lots of rough handling.

#### Genuine Mathias Klein Pliers

The World's Standard of Quality

Klein pilers are made of the best fine tool steel, guaranteed the highest quality on the market. Dw not confuse these instruments with low-priced pilers. Considering the quality and long life of Klein products, the values offered here are exceptionally good. Customers Judge a serviceman by the quality of his instruments as well as by his work.

#### Klein's Narrow Nose **Oblique Plier**

Kleins Cat. No. 202 Cuts close,

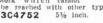
perhead g use in confined places. Knives perfectly so that they meet accurately at all points mitting use

Each \$1.76 5 inch. 6 inch. ........\$1.96

#### Klein's End-Cutting Plier

Klein Cat. No. 232

Has stout jaws and broad, cutting knives. Useful on enclosed work which cannot be reached with other type pliers.



Each....

#### Klein's Long Nose

#### **Side Cutting** Plier

Klein Cat. No. 203

Fine cutting assured. Knives carefully fitted. Body of the piler is hardened and tempered. Point is inch round. Each ..... \$1.87 5 inch.

304754 304755 6 inch. Each .....\$2.06

#### Klein's Side-Cutting Plier

Klein Cat.



For use on pare or insulated wire. Handles it hand. Powerful leverage and keen re-inforced cutting knives. Adaptable for heavy cuting. Clearance for wire insulation back of knives. 3E44758 6 inch. YOUR PRICE. \$2.20

#### Reamer

304601 17¢ YOUR PRICE ..... For enlarging drilled holes to proper size. Perfect for bakelite, hard rubber, wood, etc. Shpg.

**Counter Sinks** 

EACH .....19¢ DOZEN .....\$2.08 Round shanks to fit hand or power drills. Made of tool steel carefully hardened.

3C4567. ½" cutter.
World Radio History

**Insulated Side Cutting Pliers** 304665

Made of fine quality tool steel with hardened jaws. Knurled opening permits tirm grasp on screws, condenser and volume control shufts, etc. A very handy and useful tool for radio servicing and light electrical work. "5,100 volt" insulation on handles. Length 6¼ inches. Jaws fo inch wide.

#### Utica Flat Nose Stub Pliers

3D4666 YOUR PRICE 69¢

59¢

Made of

Flat noso
pliers with short stub sure gripping jaws. Particu
larly handy when working in tight places. Madof line tool steel hardened and tempered. Wel
finished and polished. Size 57 Well

#### Special Thin Nose Pliers

3D4667 PRICE 34¢

radio pliers

Handy with long thin jaws reaching into narrow places. Stub nose will hold nuts firmly. Knurled jaws 13%" long, tapered from 1,4" to 1,4". Overall length 612". Drop forged steel. Brightly chromium plated.

#### Close Cut Hack Saw

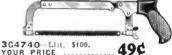
Cuts steel, bakelite, wood, etc. quickly and cleanly. Strong tight grip frame. 9 inch long saw blade. Gets into hard corners. Blade Gets into nard corners.

Reaches many places ordinary hacksaw cannot touch.

Blade very durable; almost unbreakable. Blade easily replaced. Very fine teeth, 19 per in. 59¢

..69c

#### Pistol Grip Hack Saw



American made. Finest quality. A real bargain at our price. Not to be compared with the poor quality, imported saws selling at slightly lower price. Strong, adjustable to take 8, 10 or 12 inch blades. Moulded rubber handle. One 10" blade included.

#### Hack Saw Blades

MACK SAW BLADES / / 0 8-in. Your Price Dozen.

-10-in. -12-in. Dozen. Dozen. Your Price Your Price Radio-Lectric Counter Sink

#### 3C4657

17¢

For shaping holes in hard rubber, bakelite, fibre, wood, etc., to depress heads of flat head screws. Every service man needs this tool. Firm grip, grooved wood handle. Hardened steel blade, firmly

#### Magic Electric Pencil Engraves and Embosses

Engraves and Embosses

An electrically heated scriber about the size of a fountain pen. Writes electrically, like embossing, in beautiful colors—copper, gold, silver, green, blue, purple, on any material—silk, paper, metal, cloth, leather, wood, frosted glassware, celluiold, bakelite, etc. Reproductions can be made of drawings, designs, special lettering, nameplates, monograms, initials, embleme, etc. Very useful to Radio Servicemen for marking test panels, Radio Sets, tools, books, advertising materials, tube bases, etc. Enough enbossing paper supplied to emboss hundreds of words. A wonderful tool, Will make a profit for you of many times its cost every month. Works on 100-120 volt A.C. or D.C. Heats quickly. Maintains even temperature. 8 feet cord, with attaching plug included.

#### Radio Serviceman's Tap and Die Set



Prices Greatly Reduced

YOUR PRICE \$3.45

Contains 5 taps and 5 dies for machine screws size 4-36, 6-32, 8-32, 10-24, and 12-24. Tails make female threads in holes drilled in metal. Dies cut male threads on rods or whre to make screws. One Die Stock (holder) and one Tap Stock with screw driver included. Complete outfit is put up in wooden case recessed to take all parts of set. Very convenient for shop or portable use. Covers all screws regularly used in Radio and electrical construction. size 4-30, make female Dies cut mal of set. Very convenie Covers all screws re electrical construction.

#### Signal Portable Electric Drill

Chuck for Steel Drill Up to 1/4"

3E4647-YOUR PRICE \$14.95

A quality tool in every respect. Will meet respect. Will meet every need of Radio Serviceman and Electrician. Powerful motor. Cast aluminum body and handle. 3-jaw

and manufer covered to the trouble-free switch. 8 foot heavy duty robber covered cord with rubber ping. Weight only 6 pounds. For 100-120 volt. A.C. or D.C.

#### Steel Twist Drills with 1" Shank 5/16 to 1/2 Inch

Fine quality carbon steel twist drills with turned-down shank to fit  $\frac{M''}{M'}$  chuck. These sizes are a necessity for most auto radio installations. Very handy for drilling mounting holes in cabinets.

3D4620— A Inch 3D4621— Inch 3D4622— Inch

3D4623-16 Inch 3D4624-1/2 Inch

YOUR PRICE EACH ......85¢ 3D4625-Complete Set of 5 Drills ....\$3.95

#### HIGHEST QUALITY Alloy Steel Twist Drills

American Made

Made of alloy steel consisting in part of tungsten which makes these drills far superior to ordinary carbon drills. Straight shanks. Particularly intended

Straight shanks. Particularly intended for electric drills. Perfectly pointed, recision ground. Extra strong web prevents splitting of drill. Ocreetly tempered to insure long life. Quality considered, our prices represent extra-ordinary values.

3E4562—Seven drills Hardwood Box. Sizes 10. 12. 14. 15. 10. 12. and and

YOUR PRICE ..... 

3E4564-Eleven drills in Fibre Roll. Sizes

inch. \$1.27



Three taps and three drills, one each for 15th, \$20 and \$20 an

#### **Circle Cutters**

Adjustable from 1" to 4" 3E4673— YOUR PRICE ...... \$1.95 For cutting socket holes, meter holes, etc., in wood, bakeholes, etc., in wood, bake-lite, hard rubber, linoleum, brass, tin, sheet metal, etc. brass, tin, sheet metal, etc.

Does first class job and

makes clean cut. Drills

pilot hole, cuts out material and

puts bead or scroll around hole

all in one operation. Made of

best materials. Best high speed

steel cutting bits for use in breast

drill, hand brace or drill press.

3E4674—Same as above but without beading Cutter. PRICE ..... \$1.15 **Heavy Duty** For cutting the heaviest of materials. Will cut is " cold ROUND OR

materials. Will cut &" come rolled steel, &" aluminum. Dashboards SOUARE of ears, etc. 3E4670—S q u are Shank. SHANH Shank. \$1.95 3E4671-Round Shank. Your Price \$1.95

3E4672—Extra cutter for either of above. 25¢ YOUR PRICE .....

#### Adjustable Panel **Boring Tool**

Cuts circular holes in bakelite, aluminum, or hard rubber panels for meters, tube sackets, hezels, etc. Adjustable from % in. to 3 in. diam. Fits any carpenter's brace. Shop.

3E4675-YOUR PRICE 44¢

#### **Automatic Feed Bench Drills**

Needed in every Radio Shop.
Takes all round shank drills up to ¼". Has adjustable, automatic feed which lowers drill at rate determined by cutting speed. Machine cut gear pinions. Ball bearing. Finished in enamel—steed l

3E4550-YOUR PRICE .. \$1.85 Same as above, except larger. Overall helpht, 1314". Chuck fits round shank drills up to 3a". Shop wt., 11 lbs. 3E4551—

3E4551-YOUR PRICE .. \$3.65 3E4600-Code.

# **GOODELL-PRATT Drill** YOUR PRICE .... \$1.98 Two speed. Steel shank. Posi-tive gear shift. Isall thrust bearing. All-steel chuck has three hardened Jaws for holding straight shank drills 0-% inch. Crank and side handle of mahogany finished hard wood. Length 1636 inches.

#### G. P. Hand Drills

All-steel chuck has three hardened jaws for holding straight shank drills 0 to 4 inch in diameter. Gear teeth are machine cut. Hack enameled malleable iron frame. Length 11%."

YOUR PRICE .... \$1.20

3E4603—Code 4½. Similar to above. Has hollow handle which contains eight drill points, h to h in. List, \$2.70. YOUR PRICE. \$1.96

**Hand Drill Set** 



#### Radio Servicemen's Tool Boxes

are of heavy gauge cold rolled steel, baked-enamel green finish. Brass plated catches and k with one key. Paneled sides, ends, top and tom for rigidity and strength.



87¢ Handy size for Servicemen. Very strong and light 14" long, 6½" deep, 6" wide.

deep, 6" Removable loose tray with ad-justable parti-

#### Cantilever Tray **Tool Box**

Tray Raises as Lid Is Opened 4E10902 6x6lex YOUR

4F10903-

Size 6x6½x18". YOUR PRICE ... \$1.28

Tray is so fastened that as cover is raised tray is automatically lifted, permitting easy access to bottom compartment. Box has gold rule of full size scale on cover.



Closed

#### Radio Serviceman's Parts Box



4E10904-PRICE ... 59¢

Green enamel finish. Brass hardware. Strong and durable. Keeps your delicate parts together and insures them

against breakage. Handy size. Length 1276", depth 55%", width 616". Lock and key included. Rounded corners. Movable tray.



Portable Model

Opened

3E4580-YOUR PRICE .... bullt. accurately Sturdily

Machine cut steel
Polished jaws 1 %
Red japan body. Cont to carry in tool box. fitted. serew. wide. venient to carry in Shog. wt., 2 lbs.



Swivel Bench Model YOUR

3F4581-PRICE ... \$1.35

Positive locking swivel base; holds fast at any saigle. Double plunger rod guides. Machine cut steel screw, guides and handle, Knurled polished seel jaws. Serves to bench. Polished steel hash.

wide. Shpg. wt., 5 pounds and japan finish.

#### Journeyman's Swivel Bench Model 3E4575-



PRICE

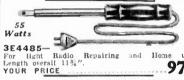
Replaceable hardened steel law faces, knurled sur-

knuried surfaces. Cold hold steel bar, screw and handle. Pipe jaws hold pipe ¼ to 1¼". Jaws open 3½" width 3". Swiysi base with improved lock, holds fast at any angle. Rugged anvil. The finest vise on the market for Rudio and electrical work.

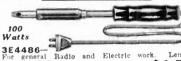
inch

#### SOLDER-MASTER Electric Soldering Irons

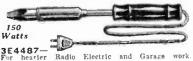
Solder Quicker, Better, at less cost.
For 105-120 volt A.C. or D.C.
Gire quick heat and long satisfactory service.
Quality and life are guaranteed. Any element that proves defective when properly used will be made good. Underwriters approved ashestos cords. Neat durable element holders. Cool, generous size handles. Renewable tips and heating elements.



1100 97¢



\$1.78 VALLE PRICE



For heavier Radio Electric and Garage work Length overall 134".

OUR	PR	ICE					<b>52.0</b>	5
Ext	ra	Tips	for	Solo	ler-	Master	Irons	

Extra	Tips	for	Solder-Master	· Iro	กร
Stock Num.			1ron ze	Your	Price Each
3E4488 3E4489 3E4490		100	Watts Watts Watts		15 c 22 c 45 c
Eleme	ents f	or	Solder-Master	Iron	S

For Iron Your Price Stock Num. Each 55 Watts 100 Watts 150 Watts 3E4491 3E4492 3E4493 \$0.35 1.50

#### SPECIAL QUALITY **Electric Soldering Iron** Popular Serviceman's Sizes



List, \$4.50.

3E4782 List YOUR PRICE.

\$2.58 Only ...

#### "ESICO" Constant Duty Soldering Irons



Used in the United States Navy and practically all the large radio and electrical factories throughout the country. Beautiful craftsman's tools. Perfect fitting hard drawn tinned copper tips. replaceable. One year gurantes. Grade A nickel chrome resistance wire wound on laws insulators encased in blue steel one-piece case. Long life. Quick heat. Maintains a constant even temperature. 6 foot heavy duty cord with anti-kink rubber cable shield. Handle never gets hot. For use on 105-125 volt current.

Stock Num.	Watts	Tip Diam.	Length Overall	List	Your
3C4785	65	3, "	101/2"	\$5,00	\$3.37
3C4786	100	%"	12%"	5.50	3.85
3C4787 3C4788	200 350	7/8 "	14"	8.75 10.25	5.91 6.95

#### Leader Electric Soldering Iron



3E4775—Single Tip.
YOUR PRICE, Each
Ten for ..... \$6.90 76¢ 3E4774 Two Tip. YOUR PRICE, Each Ten for 996

\$9.20 Ten for ... \$9.20

Well made. Very durable. 50 watt size. Quaranteed for 1000 hours; will last longer with proper use. Two solid copper Tips, one for very fine work, the other 16" diameter for larger work. 5½ foot heater cord with spring protection at handle.

#### ESICO "Midget" and "Junior"



One piece blued steel cases, Rich dark mahogany handles. Replaceable forged copper %" tips. Grade "A" nickel chrome elements wound on highest quality mica insulation.
3C4789—"Midget" 65 Watts.
Length 114"
\$1.29

3C4790-"Junior" 85 Watts. Length 1214" unior 85 Watts. \$1.89

"Blue-Comet-Balanced" Electric Soldering Irons Patented Balanced Design

When not in use the hot tip is automatically suspended at sufficient distance from bench or table to make burning impossible. Heating element wound on mica insulated steel core, fitted into rust proofed steel tube. Underwriters approved cord 6' long, spring protected. Air insulated handle. Finest quality. Guaranteed service.

Stock Num.	Watts	List	Your
3E4494	55	\$3.00	\$2.06
3E4495	75	4.00	2.74
3E4496	100	4 75	3.22

Extra Tips for "Blue—Comet—Balanced"

Electric Soldering Irons

Stock Num.	For Irqn	Your
3E4497 3E4498	55 Watts 75 Watts	17c 27c
3E4499	100 Watts	34 c

#### Soldering Iron Holder and Stand 3E4778 YOUR PRICE, 59¢

A practical stand on which to rest your hot irm while on a service call. A protection for you and your customer and when the job is finished, no need to hang around waiting for iron to cool. Justick hot iron into the holder, drop the outfit in your carrying case and go on your way. Saves time and time means money. Efficiently insulated. Takes all Servicemen's size irons. 6½" long.

#### Sal-Ammoniac Cake For Cleaning Solder Iron Tips

Rpeedily cleans and brightens the soldering copper, eausing solder to flow smoothly. In-sures good solid joints with minimum of resistance. Will last many months in continuous service, Most convenient to use. service, Most 3E4779-1b. Cake .... 29¢



#### Socket Wrench Set and **Screw Driver**

\$2,50 f

List Pi YOUR ... \$1.47 complete outvery

3E4680-



tension and 6" long offset handle enable you to reach any part of
any chassis. One each
3", 1,", 1,", 1,", 3,", 4,",
Also one internal knurled socket to fit any 1.2
point Double Hex, nut between sizes 1,0" and 3".
Knurled wooden handle with hexagonal shaft that
sertes also as a screwdriver. Metal parts hardened
steel cadmium plated. All packed in substantial
box World Padio Hist

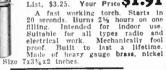
#### Radio Blotorches

#### Combination Alcohol Blotorch

304800 List \$5.00. Your Prico \$2.94

List \$5.00. Your Price \$2.04 the finest quality torch. Produces a powerful 2200 degree blast with attached burner. One turn of thumb screw releases needle point fiame. Cleaning pin ready for instant use. Made of extra heavy gauge brass nickel plates. Will last a lifetime. No adjustment necessary. Will past a lifetime. No adjustment necessary. Size 7x4\xx3 inches. Wind-proof. For indoors or outdoors. Burns 3\x1/2 hours on the filling.

#### Alcohol Blotorch 3C4801-List, \$3.25. Your Price \$1.91



#### **Duplex Alcohol Blotorch**



3C4802- \$1.18 A heavy duty torch with a Bunsen burner especially adapted for outdoor use and heavy soldering jobs. Bunsen solurner can be detached if needle flame is desired. Flame adjustable from 1200 to 2000 degrees. Size 6%2%x114.

to 2000 degrees. Size 6 % x2 % x1 % inches. When Bunsen burner starts generating, primary tube is used as a handle. Burns 40 minutes on one

#### Gasoline Blotorch



Your Price
Uses gasoline. Entirely automatic.
Quick priming. Perfect Bunsen flame
over 2000 degrees. No pumping, no
blowing. Burns two hours on one filing. Generates its own pressure. For
jobs requiring a melting, fusing,
brazing heat. Very durable. A wonderful value. Size 2½x7½ inches.
Nickel plated brass tank.

#### Kester Rosin Core Solder



Requires no flux as rosin has been moulded into the core of solder wire. Best for fine radio cunnections and electrical work. Makes strong, low resistance toint



3E4765—Per can. (3 to ounces). List, 25c. YOUR PRICE ..... 15

3E4766-1 lb. Coll. 56¢

3E4767—51b.Coil.\$2.75

# WIRE

Wire Solder 3E4768-1 lb. 59¢

A composition of tin and lead in proportions satisfactory for all Radio and Electrical soldering. Diameter about 1% inch. Very convenient for soldering in close quarters.

#### Kester Aluminum Solder

#### Flux Filled

Virgin metals properly alloyed. Hollow wire form with flux sealed within solder. Provides the fastest and most satisfactory method of soldering aluminum method of soldering aluminum in any form. In can is in-cluded cleaning materials and instructions.



3E4763-Per ean, List Price, 25c. YOUR PRICE, Each.....

17¢ Ten for . . . . . \$1.50

3E4764-Per Pound Spool.

#### Solder Paste

3C4770-2 oz. Can. 10¢

A non-corrosive soldering flux. Makes a mechanical and perfect electrical connection.

\$1.96





# 3C2373 YOUR PRICE .



Seven pieces, providing 12 distinct tools, in-geniously designed to telescope into each other, forming four separate tools when assembled. Al-tractive vest pocket carrying case included to conveniently hold all tools. Bodies are extra strong arm made of fine quality hard rubber, fiber and bakelte. Polished nickel brass fittings.

#### Separate Tools Provide

Alligator side wrench. 6" Insulated Screw Driver with metal ritb. Metal 4" nut wrench. Metal side wrench. 2½" Insulated screw driver with metal nib. 1½" hex. slotted insulated wreach. Metal screw driver. 4" hex. Insulated wreach. Metal screw driver. 4" hex. Insulated sut wrench. 5" Insulated screw driver with metal sib. 6" insulated screw driver.

**Detecto-Light** Neon Lamp Shows Live or Grounded Wires



For continuity and circuit tests in Radio

For continuity and circuit tests in Radio Sets and laboratory apparatus. Also for general electrical circuit testing.

Tests from 110 to 550 volts A.C. or D.C. Approximate voltage easily determined from relative intensity of neon lamp glow, and approximate cycles from frequency of flashes. On A.C. both electrodes glow: on D.C. only one glows which is the negative side. Moulded bakelite case protects neon lamp. Two heavily insulated leads 4" long with metal tips. Also usable as a pilot lamp on high or low amperage circuits. Convenient to carry in tool kit or pocket.

Short-O-Tester

Circuit and Continuity Tested Lamp 3C4520-List \$1.50.

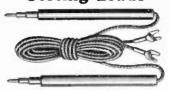


ndenser shorts. 3C4521—Extra Mazda bulb, Each ...9c 3C4522—Extra Battery, Each ....8c

Pen Flashlight With Dentist Magnifying Mirror UGHT RAYS REFLECT MAGNIFYING MIRROR 3G50 Your Price, Complete MIRROR CLIPS ON

Pen Flashlight Without Mirror But with Bulb and Battery

3051-YOUR PRICE COMPLETE ..... Ten for ..... \$2.48 **Testing Leads** 



With Heavy-Duty Laboratory Sharp Point Ends

3E4540-Spade Ends. 3E4541 -Alligator Spring Clip Ends. YOUR PRICE, Per Pair

Clip Ends.

Polished, lustrous high di-electric handles 6% long (overall), ½" diameter. One red, one black for polarity indicating. 60" long fexible cables in colors to match. Points project 1½" beyond handles and will easily piece heavy insulation as in auto

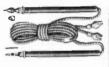
With Phone Tip Prods 3E4526-

ds. E4527-Per .. 27¢ Clip Ends Per .. 37¢

Polished lustrous high di-electric handles, 4" long (overall) %" diameter. One red, one black for polarity indicating. 50" long flexible cables in colors to match.

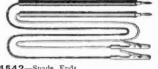
With Renewable Sharp Point Phono Needle Prods

3E4528-Spade 3E4533—Tip Ends 36¢ 3E4523—Alligator Spring Clip Ends. Per Pair .



Polished lustrous high di-electric handles, 4" long (overall) %" diam. One red, one black for poliarity indicating, 50" long flexible cables in color to match. Chucks hold needles which are easily renewable. Needle points enable accurate readings through insulation, and painted or rusty surfaces. With Slender Pencil Type

Sharp Point Prods



3E4542—Spade Ends. 3E4543—Tip Ends. PER PAIR

3E4544-Alligator Spring Clip Ends. PER PAIR ....

Long, thin polished lustrous high di-electric handles 7" long (overall); one red, one black for polarity indicating, 60" long fexible cables in colors to match. Best suited Prods for ohmmeter and exploring service. Reaches otherwise inaccessible points as between voice coils and speaker colors to match. Best suit and exploring service R cessible points as between frame, sub-assemblies, etc.

With Sharp Point Prods and Insulated Spring Ends



3C4531 Your Price, Pair

Handles 4" long, %" diam. Renewable sharp point needles. One red, one black wire each 42" long. Spring clips with rubber insulating covering. With Insulated Spring Clip on Both Ends

3C4532

One red, one black wire each 42" long. Powerful spring clips on each end make connection in a jiffy. Rubber coverings over clips prevent shorts and shocks.

**Shockproof Screwdriver** Insulated Blade and Handle

Tempered steel blade 4."x6½" long, protected its entire length with 1000 volt hard-rubber insulation. Tight-grip hard rubber handle. 3E4748-YOUR PRICE .....

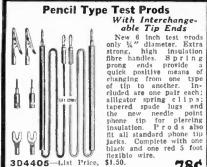
with Metal Nibs

3C45O5-

304506

Page 104

PRICE



3D4405—List Price, \$1.50.
YOUR PRICE. Per Set..... 78¢

#### Test Leads With Alligator Clips



Flexible wire test leads. Color codes rea cack for positive and negative identification. Color coded red and black for positive and negative identification. Alligator Test Clips at each end provide quick positive method of making connections. Alligator clips have extra narrow laws and very firm grip, Ideal for making contact in cramped, tight po-

32¢ 3D44[0-12 inch, Palr 3D44 [1-24 inch, Pair 3D44 12-36 inch, Pair

#### Alligator Test Clips



3E4407-YOUR PRICE, Each.... Per Dozen......35c

#### Rubber Insulators



For Alligator Test Clips 3E4408-9¢ EACH

Ten for 75 c Durable rubber collers to insulate alligator test clips. Only points of jaws are exposed. Permit of quick secure connections but eliminate danger of shock on 'hot' circuits.

#### Long Test-Prod Handle With Sharp Point Phone Tip End

Hollow high di-electric insulated handle, 5¼" long overall. ½" diameter. Sharp point phone tip teresinal. Will piece insulation, rust, pitch and paint. Fits standard phone tip jack. Completely solderless, merely unscrew phone tip and jack. and paint. Fits standard phone tip jack.

only pletely solderless, merely unscrew phone tip and insert wire. Brilliant lusterous color coded handles.

2520278. Green ) EACH.

3E8875—Red 3E8876—Black 3E8877—Blue —Red 3E8878—Green —Black 3E8879—Yellow —Blue 3E8880—Purple 15¢ Ten for. .....\$1.20

#### **Short Test-Prod Handle**

With Phone Tip End 💳 📆

Hollow high di-electric insulated handle long overall, %" diameter. Phone tip c any standard phone tip jack. Completely less. Merely unscrew phone tip and inse Brilliant lusterous color coded handles. end. tip and ed handle and insert wire

3E8881—Red 3E8882—Black 3E8885—Yellow 3E8883—Blue 3E8886—Purple 6¢ Ten for

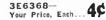




lusterous code colors. Hold phone tips straight and tight. Fits panels up to 1/2" wide. Fiber shoulder washer and metal lock nut included. Ten for.....4 ..480

3E8887—Red 3E8890—Green 3E8888—Black 3E8891—Yellow 3E8892—Purple

#### Solderless Tip Plug



Ten for 35c. Per hundred, \$3.25 hed to cord or wire without soldering or use ols. Positive connection. Fit above jack or tandard tip jack or jack assembly. Made of Attached to of tools. any standard tip j NOTE: See Page 94 for other Tip Jacks and Plugs.

#### **Test Prod Kit** With Interchangable Plug-in Tips



3E4415-List Price, \$2.00. PRICE ....

A complete set of 14 pieces insulated test prods of

long, short and medium lengths with interchange-able plug-in type tips.

Provides the serviceman with the most efficient tools available for making quick positive con-nections from his test equipment to the "job" under inspection. These handy prods will reach into the most confined, tight snots to save you time. The "missing link" between the set and your test instruments. into the most confine time. The 'missing your test instruments.

our test instruments.

Furnished with interchangeable tips consisting of a pair of insulated alligator clips with marrow tight gripping jaws; a pair of insulated needlepoint tips for piercing insulation, checking continuity and making positive contact on corroded terminals; a pair of insulated plugs with universal tapered lugs which fit sizes 4, 6, 8 and 10 screws. A pair of insulated jacks are supplied.

Handles of prods are made of high insulation material. Solderless screw connections safely insulated by sleeve caps which fit securely over set screws. Three pair of prod handles with prongends which may be instantly plugged into any of the interchangeable tips. Handle lengths are 4 inch. 2% inches and 1% inches overall. All pairs color coded red and black for polarity identification. Colors will not fade. Use flexible cable \$\$E2080, etc., listed below, for connections.

#### **Insulated Binding Posts**

With Jack for Banana Type Plug-in Prongs Built-in Head

New style for Analyzers, Ohmmeters, etc. Moulded, high dielectrie, knurled grip, non-removable top. Standard receptacle for Banana type plug-in prongs built into stem. A transverse hole into stem. A transverse hole provided under the screw top for wire and phone tip connections. Length 136" overall with top is up. Extends 6," above panel when top is screwed dwin. Fitted with \$2 screw \$3" long and two nuts. \$857. Red. \$3F8860. Yellow) FACTOR.

EACH

10¢

3E8857—Red 3E8860—Yellow 3E8858—Black 3E8861—Green 3E8862—Purple Ten for

#### Standard **Insulated Binding Posts** With Color Coded Tops

Attractive colored, high di-electric, insulated top-diameter \( \frac{1}{2}'' \). Mounted on 10/32 scree \( \frac{5}{2}'' \) long. Metal washer \( \frac{1}{2}'' \) diam., \( \frac{1}{2}'' \) thick.

3E8864—Black 3E8866—Green 3E8865—Blue 3E8868—Purple 48¢

Small

# **Insulated Binding Posts**

With Color Coded Tops

Same as above but smaller. Top 76" diam., 6 32 screw 58" long. Metal washer 58" diam.

TEN FOR 3E8869—Red 3E8872—Green 3E8870—Black 3E8873—Yellow 42¢

#### Flexible Cable For Test Leads

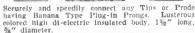
Flexible rubber covered stranded copper wire, equivalent to size 16. Conductor is covered with cotton serving over which is a live rubber covering sw thick. Over this is a lacquer saturated tight cotton braid. Will withstand highest voltages encountered in radio test work. Available in red and black covering for positive and negative.

3E2080—Red 3E2082—Green 3E2081—Black 3E2083—Vellow 3E2079—Blue 3E2084—Purple 37\$

100 Ft. for ... .....\$1.10

#### **Insulated Connectors**

For Banana Type Plug-in Tips and Prods



THE RADOLER COMDANY

3E8851—Red 3E8854—Green 3E8853—Blue 3E8856—Purple FACH 10¢ 

Long Test-Prod Handle With Banana Type Spring Contact Fits Plug-in Jacks

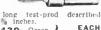
Hollow high di-electric insulated handle. Hollow high di-electric insulated nancie. % Inca diameter, 4 inches long overall. Solderleas serve terminal for wire lead completely insulated by cap. I'rong end provides quick positive means for plug-ging in any of the interchangeable terminals listed or into panel jacks. Brilliant lusterous color

3E4417—Red 3E4435—Green 3E4418—Black 3E4436—Yellow 3E4434—Blue 3E4437—Purple Ten for \$1.35

15¢ S1.35

#### Medium Test-Prod Handle

With Banana Type Spring Contact Fits Plug-in Jack



con truction Length overall 23 inches.

3E4419 R d 3E4439 Green 3E4420 Black 3E4440 Yellow 3E4438 Blue 3E4441 Purple Ten for \$1.08 \$1.08

**Prong End Adapters** 

For Test Prods with Banana Style Prongs 

Adapters with high di-olectric insulated handles. Connect securely. They give your test apparatus that extra degree of adaptability that enables many additional tests to be speedily made with minimum amount of connection changes. Every shop and laboratory needs several sets. One each—Sharp Point, Test Lug, Phone Tip and Alligator Clip included in set. Net Per Set of 4

3E8845—Red 3E8848—Green 3E8846—Black 3E8849—Yellow 3E8850—Purple

Ten Sets for ..... \$1.75

#### **Insulated Plug-in Tips**

With Banana Type Spring Contact Prongs

High di-electric insulated hol-low handle 7," long. Solder-less screw connection. Pro Provides for connecting test wires into plug-in tip jacks. EACH

.87 c Standard Plug-in Insulated Jacks

#### For Banana Type Spring

Contact Prods and Tips

Takes above three types, productips. Provides a secure low reds and resistance connection, ance connection, quick make and break. Fits panels up to 36" thick. Shoulder washer included for metal panels.



20¢

3E4429—Red 3E8830—Green 3E8829—Blue 3E8832—Purple Ten for .63c

Special Quality Plug-in Insulated Jacks

#### Take Banana

Style Spring Contact Prods and Tips



and tips
Better design and construction than above Standard Plug-in Jacks. Brilliant lusterous moulded Bidi-electric insulated tops. Intended for better grade of laboratory apparatus. Fit panels up to thick.
For Bakelite or Wood Panels

3E8833—Red 3E8836—Yellow 3E8834—Bluck 3E8837—Green 3E8838—Purple

Ten for 78c

For Metal Panels-Have Moulded Washers 3E8839 Red 3E8842 Yellow 3E8840 Black 3E8843 Green 3E8844 Purple Ten for ......88 FACH 10¢ .88 c

"Banana" Style Plug-in Spring Contact Prongs



Fit above two styles of jacks. Provide secure solid contacts. Easily attached to rods or sheet. Ef-ficiently provides for plugging-in many styles of special apparatus.
3E4512-With unthreaded Shank, 1%"

Ten for..... 3E4513-With threaded Shank and two nuts 1%" overall. Ten for.....

**Metal Jack** 

For Banana Type Plug-in Prongs

# Universal Microphones



#### New Model XX Two Button

Stretched Diaphragm Model "XX" confirms the reputation for qual ity and performance that characterizes all Univer-sal products. Every es-sential feature necessary

sai products. Every essential feature necessary to insure superior performance and iong, been incorporated in the design of this model. Only the non-essential "trimmings" have been eliminated to enable this popular price. Faithful, truly natural tone. Pure Gold Contacts. Duralumin stretched diaphragm. 200 ohns per button. Very low hiss level. Scientifically Dainped. Frequency range from 100 to 4500 cycles. Rugsedly built and finished in non-corrostve, polished chrome plate. Diameter, 2½ in. Overall thickness, I in. Made in three degrees of sensitivity: S. very sensitive; M. medium sensitive (standard) and D, highly damped. Specify type desired on your order.

3E2801—List Frice, \$10.00.

YOUR PRICE .....

#### Improved Model "KK"

Frame Turned from Solid Steel Bar Stretched Diaphragm

Stretched Diapuray...
A substantial, solid, two-button broadcast microphone, with a very minimum of hiss. Carefully constructed of the finest materials with a 24-Kt. pure gold spot center alloy diaphragm which

center alloy diaphragm which is held under tension. Diaphragm has a thickness of only 0.02 in. Frequency range of from 50 to well over 6,000 cycles. Buttons are 200 ohms resistance each. Entire microphone finished in 21-Kt. polished gold, 2½ in. diameter and 1½ in. thick. Made in three sensitivities: 8, very sensitive; M. medlum sensitive (Standard) and D. highly damped. Each unit is carefully laboratory tested before shipment. 3E2803—List Price, \$40.00.

YOUR PRICE

#### Lapel Microphone 2 Button Professional



Model Model
Thin, compact, light in weight, with minimum hiss, a laboratory designed, built and tested unit for Broadeast quality or reproduction. A full fledged 2 button, activities and the second of the natural toned precision instrument. The cord terminals are held terminals are held securely by screws to metal anchors in the polished Bakelite hous-

Resistance 200 ohms per button. Free from 40 to 5000 cycles. Diameter ness 3s". Weight 2 ounces. 805-11st Price, \$25.00. 3F2805-\$14.70 YOUR PRICE

#### Model "QRQ" Single Button



with 3-ft. phone tip cord.
3E2815-List Price, \$3.00. YOUR PRICE .....



#### Three Channel Microphone Mixer



nnei Wilcropnore: Wilcr A compact, portable, correctly en-gineered mixer. Will handle one, two or three 2 button carbon mi-cruphones, condenser microphones, low impedance phono pickups or standard telephone lines or any combination of them. Mixing and fading can be done smoothly and silently without affecting quality or with out unbalancing channels. with out unblaineding channels.

Constant impedance is maintained at all times throughout circuit by the use of constant impedance That impedance The Constant impedance The Country of the University of the University of the Country steel housing, engraved bakelite
panel. Size 4"x5½"x12". Net
linx Shipping weight 12 lbs.

List Price, \$36.00.

\$21.17 E2840

#### Model "BB" New Super Design



A superlative value for such a low price. Built to hair-line precision. An idea of the ruggedness can be obtained by the fact that Model "Bli" is 3 in. in thick. Designed especially for orice pick-up, public address work and for amateur broadcasters, experimenters, halls, ball rooms, speaker wagons, etc. Finished in beautiful, highly pollshed chrome plate. Extra heavy 24-Kt. Pure Gold Spot Center, Duralumin Dlaphragm and has a frequency range of from 70 to well over 4,500 cycles, 200 ohms per button. Owing to the large size and weight of model "Bli", it is recommended that Model "L" desk stand be used for mounting instead of Model "K", especially when covers are used. Made in three degrees of sensitivity: S, very sensitive; M, medium sensitive (Standard); and D, highly damped.

YOUR PRICE ...... \$14.50

#### Universal Model "Y"

Super-Sensitive Midget Microphone

smaller and Lighter more sensitive than Model "W". Front face microphone is the of microphone is the diaphragm proper. Ex-tremely sensitive. When placed in any hidden position it will pick up sounds and conversa-tions. Recommended for use where high sensi-tivity and extreme com-pactness are necessary



pactness are necessary. Should be placed in protected locations, behind screen or grill work. Suitable for use with earphones. Because of the exposed diaphragm, great care must be exercised Should be in handling.

3C2818-List Price, \$2.00. YOUR PRICE \$1.18

#### Universal Model "W"



Perfected Watch Model Microphone The smallest completely protected and single button microphone manufactured. Can be depended upon to give full quality performance. A favorite type for use in hidden positions such as a detectophone, or on the coat lapel. Highly sensitivity, light

compact. 200 ohms. Equipped with Pure Gold Spot Center Disahrragm. completely enclosed, protecting it against injury during handling and use. 176 in in diameter. 14 in, thick.

3C2819 List Price, \$3.00. YOUR PRICE \$1.76

#### Universal "Handi-Mike" Single-Button



Single-Button
Intended for voice only. Has maximum volume with clear and clean cut speech reproduction. Beautiful polished plate finish. Equipped with an "off" and "on" thumb switch and 15-ft. cord. Scientifically constructed with gold faced button. Mounted in sound damping, resillent felt. Overall length, 6 inches. Size of head, diameter, 2½ inches. Copy of booklet "Use and Care of Microphones," giving instructions and wiring hookup, accompanies each Handi-Mike. 3C2811-Model No. 200-Regular

YOUR PRICE .....

#### Double-Button

An exceptionally clear, highly damped hand microphone, designed particularly for uses where clarity of reproduction plus general adaptability and portability are important requisites. Especially recommended where microphone must be used in close proximity to loud speakers. Switch breaks the circuit in the center conductor. Rugged construction. No delicate parts. 200 ohms per button. Finished in beautifully polished chrome plate, equipped with a 6-ft. silk braid covered cable.

3C2813-List Price, \$15.00. \$8.82

#### Suspension Rings

5 Inch

For use especially with Models
"A" "X" "BB", "KK",
"LL" or Torpedo Models, etc.
For suspending microphones
from cellings or beams. Made
of solid brass. Beautifully finished in highly polished chrome
plate. S1ze 5 in. diameter
by ½ in. wide by ¾ in. thick
—8 suspension springs included.

3E2826-List Price, \$2.50. YOUR PRICE

61/2 Inch

Size 6½ in, dlameter by ½ in, wide by ½ in, thick. A larger ring for larger mikes, especially the extra heavy "BB", "A", "LL" or Torpedo Types—8 suspension springs included.
3C2827—List Price, \$4.00.

\$2.35

YOUR PRICE

#### **Desk Type Mountings** Model "K"

5 inches in diameter and is used for mounting Models "X", "A" or "KK" microphenes on 4 points of suspension, using 8 springs. Base is set in a moulded rubber ring forming a cushion against ribration and preventing damage to polished surfaces. Finished in highly polished chronne plate, Entire assembly 8% in, high. 8 suspension springs included. Removable Placard Holder. 3C2828—Without Covers.

\$4.00. YOUR PRICE \$2.35

3C2829—With Covers.
List Price, \$6.00.
YOUR PRICE ..... \$3.53 Model "L" Desk Stand

For larger microphones such as the "BB" and "KK". Ring Dia., 6½". Has two lengths of interchangeable tubing which allow for heighth of either 10½" or 16½" as desired. Base Dia. 5". Polished chrome finish. 8 suspension rings furnished.

3E2830-Without Covers List, \$6.00. YOUR PRICE .. \$3.53

3E2831-With Covers. List \$10.00. YOUR PRICE ...

#### Floor Stand

\$5.88

\$7.35



Top ring is 6½ in. In diameter, Heavily weighted 18 pound base 12 inches diameter. Total extended height 5½ ft. This stand is smooth in operation and is not easily tipped. The clamp lock is positive, yet is operated by the slightest pressure. Finished in highly polished chrome plate and equipped with blank call letter nameplate as shown. 8 suspension springs included. Net weight 19½ lbs.

3C2833 List Price, \$16.00. PRICE \$9.41

#### **Banquet Stand**

Same general construction as floor stand but 1 ig hter in weight. Adjustable from 18 in, to 68 in, high, Base 7 in, in diameter. Topring 616 in, in diameter. Topring 616 in, in diameter. Firshed in highly polished chrome plate. 8 suspension rings included. Net weight 11 lbs.

3E2832-List Price, \$12.50. YOUR PRICE ...

#### **New Universal** Floor Stand

Floor Stand
Double extension. Adjustable
from 28 to 66 inches. Base 7
inches diameter. Top ring 6½
inches, diameter. Elegant polished chromium plated finish.
Four point suspension. 8 microphone
springs included.
3C2834

PRICE ...

...\$5.88 Desk Stand

Desk Stand
One plece die-casting, beautiful chromium plate finish.
Ring 5 inches diameter. Overall height,
1% inches. Base 4
inches diameter with
soft rubber pad cover.
8 springs included.

3E2835 YOUR PRICE **\$2.05** 





# SHURE Microphones



Model 5B 2 Button Model 5B 2 Button mi-crophone. Large frame makes possible the use of regular size precision ad-justable buttons making tone quality superior to that of units with smaller frames which can accommo-date only the smaller but-tons. Diaphragm damped to

tons. Diaphragm damped to eliminate noisy vibration. Speaking voice clear and easy to understand. By the use of two buttons "push-puil" microphonic action is secured that eliminates "squawk" and harshness. Highly polished gold surfaced buttons. Screen in face of microphone eliminates need for covers on stand. Appearance enhanced by modernistic bevel edge. Highly polished and chromium plated.

plated.

Operates best at 6 to 8 M. A. per button.

Limit of guarantee 21 M. A. per button Total internal resistance: 400 ohns, or 200 ohns per button. Frequency response 40 to 4000 cycles.

Diameter of verall: 32 inches. Diameter of frames.

Inches. Thickness overall 1 m inches. Shipping weight, 1% pounds. Packed with wiring diaram and complete instructions. (Not recommended for

BE2940-Lis -List Price, \$10.00. \$5.88

# Shure Model 22B



2 Button Microphone Patents Pending

large size, high quality utton microphone for 2-button microphone for public address systems and

2-button microphone for public address systems and amateur broadcasting. New, glazed carbon button discs, adjustable buttons, cathodes sputtered gold-spot stretched dural diaphragm and elamped by a special process. "Quickway" hooks patents pending). Screen in the face of the microphone eliminates the need for covers on the stand. Modernistic, every elegic design.

Operates best at 6 to 8 M.A. per button. Limit of guarantee: 30 M.A. per button. Total internal resistance: 400 ohms, or 200 ohms per button. Frequency response 40 to 6,000 cycles. Diameter overall: 34". Diameter of frames, 3". Thickness overall: 1h". Shipping weight, 1½ lbs. Packed with wiring diagram, and complete instructions. Highly polished chromium finish.

3E2941—List Price, \$25.00.

# SHURE Model 40C **Condenser Microphone**

A high quality instrument. Excellent frequency response from 40 to 10,000 cycles. Chromfrom 19 to 10,000 cycles. Chromium plated head, Baked black enameled finished case. Suspension adapter for suspending unit from above and a threaded fixture for attaching to the standard Shure Stands is supplied

Electrical Specifications

Electrical Specifications
Employs two type 30 tubes for use with dry cell "A" and "B" supply. "A" current is 6 v. "B" current 180 v. at 3 M.A. "A" plus grounded; may be connected in standard mixer circuits without any changes. Output level, minus 30 decibels which is higher than the average two-button carbon microphone, Connects easily on carbon microphone circuits by omitting center leg of the circuit. Special terminal strip provides either 200 or 50 ohm output impedance. A 12' shielded color coded cable is supplied. Dimensions: Transmitter head, 3" in dia. including flange 3%". Case 4%" wide, 7% high, 4%" deep. The back of the case is easily removed to get quick access to the tube chamber. Instructions and wiring diagram included. Guaranteed for one year. Shpg. wt. 8½ lbs.
3E2937—Model 40-C with cable but less tubes and stand. List Price, \$67.50.

\$39.69 YOUR PRICE

# SHURE Model 41-A Condenser Microphone **Power Supply**

Makes possible a completely

Makes possible a completely A.C. operated condenser microphone. Eliminates a 11 batterles. Especially for use with the Shure Condenser Microphone, but may be used with any condenser microphone with similar current requirements. Provides a perfectly filtered D.C. for both filament and plate circuits of the head amplifier. No audible hum. Cover chromium plated. Base double baked black Japan. Input: 103-125 v., 60 cycles A.C. Output: Filament: 6 v. at .06 amp. D.C. (two type '30 filaments in seriest). Plate: Adjustable, 200 v. maximum. 5 M A.D.C. A+ and B- grounded to case.

3D 2939—Complete with plug for attachment to microphone cable, 6 Ft. A.C. cord, and one type '80 tube. List Price, \$40.00.

10.00. \$23.52 PRICE YOUR PRICE .....



# **Home Broadcast MICROPHONES**

Radio's Biggest Selling Specialties

Connect to any Radio with Power Detector

# **Tell Your Customer-**These Wonderful Entertainers

About These Wonderful Entertainers
Glive your friends a thrill. Cut in on radie
programs with personal comments, jokes, and
"wanted by police" announcements. Mimic London announcers. There is no limit to the possibilities of your entertaining in this clever manner. Try out your guests as "Kroadcast" artists.
Enjoy their "mike" fright. Peps up dull partles.
Opens new fields of pleasure. Does not barm the
radio in any manner. May be left connected and

## Little Mike



3%" high. Metal case with push-button switch Shockproof case finished in antique bronze. Complete with instructions. List Price, 75c.

3D2981—Your Price 45¢

PER DOZEN ......\$5.10 PER DOZEN ......\$12.76

switched ดท

switched on at the microphone whenever pour want to interrupt program. Radio reproduction stops or becomes very soft while "Mike" is on. High internal resistance. No special transformer required. Derives current from place circuit. Furnished with long extension cord. Quality of reproduction with microphone held close to cheek compares favorably with ordinary radio announcements. Demonstrate on your regular service rails. lar service calls

# Studio Mike



3E2979—List Price, YOUR PRICE, EACH ..... \$1.18



# Desk "Mike" Stands

3D2993-6% inch ring. Overall height 84". Heavy cast iron base. For large microphones like models 90

PRICE ..... \$245



VALIE 

and 85 List Price \$6.00.

PRICE
Well balanced design. Hollow base with cord outlet rubber bushed. Hole for mounting 3C6335
switch (Page 95). Felted bottom prevents marring
or scratching. Rich black crystalline finish. Eight springs included

# Shure Micro-Stan

Automatic safety lock holds stand exactly at the height required without serews or nuts. Stand may be extended from 52 to 76 inches. Finished in rubber-tone black, double-baked Japan. Cable entrance in base. Microphone ring is of nickel-base chromium in standard 6 inch size. Fitted with 8 rust proof springs and convenient "Quickway" hooks. Stand resents a neat. bright appearance Fitted with 8 rust priors springs and convenient "Quickway" hooks. Stand presents a neat, bright appearance after the hardest wear. Shipping weight 25 lbs.
3E2874—List Price, \$22.50.
YOUR YOUR \$13.23

Any Shure stand can be furnished without ring for mounting conden-ser, velocity or crystal micro-phones. Deduct phones. Deduct \$2.05 from quot-ed price when ordering without

> Shure Collapsible Floor Stand For Portable Systems

For Portable Systems Gives firm, solld support. Tripod, when extended, has a leg spread from 23 to 33 inches; height may be adjusted from 43 to 105 in-ches; folds into a space 31": 21½" for easy transportation. Eguipped with standard 6 inch 2½" for easy trans; Equipped with standard chromium ring, 8 rustproof

3E2875—List Price,

Shure Adjustable Desk Stand Height can be adjusted from 13 to 18 Inches. Weighted base has hole and open bottom for easy wiring. Chromium finished ring, 6 Inches diameter, % Inch wide. 8 rust-proof springs included.





springs

PRICE .....\$10.88

3E2876-List Price, \$10.00. **\$5.**88

# **KELLOGG Hand Microphone**



3D2975-List Price, \$8.50. YOUR PRICE.....

\$ 1 25

# Telephone Type Desk Stands

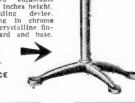


\$102994— List Price, \$8.00. YOUR PRICE......3 \*3 95

# Floor Stand

Broad tripod base permits comfortable close to mike speaking. Built for hard service. Will not tip over easily. Rigid seamless hard service. Will not tip over easily. Rigid seamless steel standard adjustable from 40 to 66 inches height. Positive holding device. 63 inch ring in chrome finish. Black crystalline fin-ish on standard and base.

302996 List Price, \$15.00 YOUR PRICE ·850





# PIEZO ASTATIC **Crystal Microphone**

No Background Noise No Batteries 3E2907-List Price, \$21.00. Price, \$1200

Your Price, EACH..... of microphone A new type of microphone great advance representing a great advance in the art of reproduction. Very rugged in construction. Can be moved about while in Bumps produce operation. practically no mechanical noise. Will operate equally

operation. Bumps produce practically no mechanical noise. Will operate equally well in any position. Practically indestructible. Abuse that would ruin any other type of microphone does not affect this unit. Frequency response is very uniform over the audible range. Resonant points which are bothersome in other types of microphones are absent in this unit. No button current, field current or polarizing voltage required. Will not pack nor blast. No hiss or other background noise present. Gives a naturalness to voice and music that noticeably surpasses performance of any other type of microphone.

Requires No Special Transformers

High impedance output enables direct connection to grid input when used within 10 feet of amplifer. Does not require special type of line matching transformer when used at a distance from amplifier. Ordinary single button carbon mike transformer can be used, using secondary as primary connection to mike and primary for 200 ohm line output. Output level is minus 60 D.B. Where sensitivity is not required a regular three stage amplifier gives sufficient gain to obtain full output. For maximum sensitivity four stages of amplification should be used.

Housed in strong chromium plated care 3" in diameter, 1" thick. Microphone can be mounted in regular microphone ring by means of four hook eyes furrished. Comes complete with 6 foot of shielded cable and instructions for use.

Stand Mountling Astatic Crystal microphone

**Stand Mounting Adapter** 

Adapter for mounting Astatic Crystal microphone on any Shure stand listed on page 107. 60¢ 3E2873-YOUR PRICE

# Ribbon Velocity Microphone Kit



An easy to assemble, high quality directional microphone kit. Latest design. Employs a special aluminum alloy ribbon 0.00065" thick, suspended from bakelite yokes, in an intense magnetic field. The slightest vibration of slightest vibration of this ribbon in the mag-netic field, ca uses a current to be induced in the ribbon. Normal fre-quency response, 30 to 12,000 cycles. Direc-tional effect is a great aid in reducing feed-back from speakers lo-cated close to the "mike". Because of the extremely low impedance

"mike". Because of the extremely low impedance of the ribbon, a special low to high impedance of the ribbon, a special low to high impedance microphone and amplifier. The Ribbon-Velocity microphone develops about the same signal strength as the condenser type microphone necessitating a preamplifier of at least two stages of resistance coupled triode tubes, before coupling to a standard two or three stage P. A. amplifier. Length assembled 64". Width overall 25". Depth 1". Complete instructions with circuits.

3D2970—Improved Ribbon Velocity Microphone Kit.

\$5.88 \$11.76 YOUR PRICE

Special Ribbon Velocity Microphone

Transformers
3D3940 Ribbon to grid circuit of amplifier.
List Price \$5.50. List Price \$5.50.
YOUR PRICE
3D394 I—Ribbon to 200 or 500 ohm line, 2 taps.
List Price \$5.50. YOUR PRICE \$5.50.



Houses above micropinous together with ribbon to line or ribbon to grid trans-former. Made of light, strong metal, alligatoroid black finish. Has threaded "a" pipe size hole in base for stand mounting.

# Stand Mounting Adapter

Adapter for mounting Bruno Ribbon Microphone with case on any Shure stand listed page 12. PRICE 60¢

# **Amperite Ribbon Velocity**

# MICROPHONE KIT

KIT ONLY WITH CASE BUT WITHOUT TRANSFORMER. 3E2850-

List, \$15.00.
YOUR PRICE... SEMBLED AND TESTED
WITH HOUSING AND RIB-SEMBLED AND TES WITH HOUSING AND BON TO 200 OR 500 LINE TRANSFORMER. List Price, \$25.00. YOUR \$14.70 PRICE .....



A high grade ribbon microphone that compares favorably in performance to high priced studio models. Considered superior to carbon micro-phones. No button current, field current or polarmodels. Considered superior to carbon microphones. No button current, field current or polkrizing voltage required. Absolutely free from hiss or other background noises. High fidelity of tone is obtained as frequency response is flat within one D.B. between 40 and 10,000 C.P.S. without production of resonant neaks. Directional characteristic makes it possible to reduce or entirely eliminate feedback. Undestrable outside noises are materially reduced. Output is -90 D.B. Two stage preampiliter should be used to bring level up to a point where microphone can be used with average public address amplifier. Ribbon is of specially treated aluminum alloy that is not affected by temperature or humidity. Housed in acoustically correct, sturdy bronze and steel case which provides complete shielding. Matching transformers listed below fit in base of mike case. Bottom of case has fitting, threaded ½" pipe size for mounting on stand. Complete instructions with diagram for two stage preampifier are included.

## New Model RAE Ribbon Mike

Similar in appearance and general characteristics to above microphone, but has wider frequency range and is therefore more suitable for studio work. Completely assembled with 200 ohm, out-

put transformer. 3E2860—List Price, \$35.00. \$20.58 YOUR PRICE ..

# Ribbon Microphone Transformers

Especially designed—high permeability transformers to match the Amperite Superior Microphones. Due to small energy pickup, properly matched and designed transformers are very necessary. These transformers exactly fit into base of microphone case.

plune case. \$E2854—Ribbon to Line \$E2856—Ribbon to Grid \$E2856—Line to Grid \$E2856—Plate to Line \$2.94

# Stand Mounting Adapter

Adapter for mounting Amperite Ribbon micro-phone on any Shure stand listed on page 107, 3E2871-60¢ YOUR PRICE.....

# Amperite Superior Condenser Microphone Kit

A truly professional micro-phone. Made with microm-eter accuracy and tested over the entire audible range. No hiss—no back-ground noise. Reproduction is life-like.

hlss—no back-ground noise. Reproduction is life-like. Excellent for public address, radio or recording.

Specially annealed duralum-inum diaphragm—stretched so that resonant point is far above audible range. Diaphragm comes mounted. Fully enclosed, protected against dust and climatic changes. Complete kit of parts with instructions for assembly of microphone and making of pre-amplifier. Shipping weight, 4 lbs.

phone and making of pre-ampli weight, 4 lbs. 3E2865—Kit Only. List, \$8.00. YOUR PRICE 3E2866-Condenser microphone, fabled and tested. List Price, \$10.00. \$5.88

# Universal Condenser Microphone

With A.C. Operated Pre-Amplifier 3E2810 List. \$84.00.



YOUR PRICE Less Tubes

**S8.82** 

ready as shown.

as shown. 2stage amplifler using 2 type 230 tubes. Plugs into 110 V.
A. C. 50-80 cycle socket. No hum or ripple. Frequency response from 70 to 7,000 cycles, audio output level—40 D. B., greater than from a carbon
microphone and can be fed into same transformer
or input. Brown Crackle finish, 25 ft. rubber
covered shielded cable furnished.

# Radolek Special

Two-Button Microphone

Value With Quality

SE2974- \$295 YOUR PRICE.

YOUR PRICE.

A fine quality double button microphone selected by us after exhaustive tests of this and other makes and offered to you as an unbeatable microphone value. Carefully constructed without frills that do not add to performance. Do not compare this with punch press microphones sold in this price class as this microphone is not a toy but a well made and carefully assembled instrument that gives long and trouble free service. Button contacts 24 Kt. gold. Frequency response 50 to 4,500 cycles. Button impedance 200 ohms total 400 ohms. Frame 2½" diameter and ½" thick. Finish is highly polished chromium plate. Will give fair results with music but for best musical reproduction we recommend Model 77 Electro Voice.

# Model "100" Series Electro-Voice Microphones

3E2900-A-Extra Sensitive for recording.

3E2901-D—Standard Medium Sensitive.

3E2902-B—Medium

3E2903-C-Heavily

3E2904-E-Special Reducing Feedback.

for Reducing Feedback.

List Price, \$10.00.

YOUR PRICE.

A rugged, double-button microphone that has proven itself thoroughly reliable and gives faithful reproduction under all conditions. An inherent quality of smoothness is made possible by precision methods of manufacturing. High sensitivity, resulting from scientific damping. Carbon granules are acid treated to reduce ash content and will stand higher current values without injury and have lower background noise. Excellent for voice and can be used satisfactorily for muste pick-up. Response 40 to 6,000 C.P.S. One picce buttons, pure 24 kt. gold contacts, protected diaphragm. Heavy chromium plate. A new development is offered in the Model 100E which is especially constructed to reduce acoustical feedback. Its curve extends from 40 cycles and has a very sharp cutoff at 3500 cycles. As most feedback frequencies are above this figure this microphune can be placed as close as 8 feet from speaker and give satisfactory results. This model is not recommended for music. Size 2½"x1". Weight 8 oz. Matches standard input transformer (200 ohms. Per Button.) 8 oz. Matches stan

# Model "77" Electro-Voice

3E2905-List Price, \$18.00.

PRICE .... \$10.59

Reproduces music with smoothness, depth and brilliance. The shadings and inflection of speech



smoothness, depth and brilliance. The shadings and inflection of speech are preserved together with clean-cut articulation. High quality double-button type, adaptable to broadcast remote, public address and amateur work. Diaphragm is heat-treated-duralumin, perfectly stretched and is protected by symetrical cast grill. The contacts are 24 Kt. gold applied through an exclusive patented process, quaranteed for life against "peeling" or imperfect contact. Contacts may be cleaned hundreds of times without injury. New type buttons are longer lived and reduce background noise. Damping plate is ground perfectly flat and lapped in by hand, insuring freedom from "peaks" in the response. Reaponse is substantially flat from 35 to 6,500 C.P.S. Size 234 "x1½". Extra heavy polished chromium finish. Weight 1 lb. Matches standard input transformer 200 ohms Per Button.)

# **Bruno Condenser Microphone Kit**



3E2998-Condenser micro-YOUR PRICE .. \$2.94 3E2999-Condenser micro-

phone assembled. \$5.88

Complete Easy-To-Assemble Kit. Heavy Cast Metal non-resonant shell. Special sensitive 0.0012" annealed aluminum alloy diaphragm. Bakelite Insulated, machined brass stator plate. All necessary mounting rings and insulation. Assembly stretches diaphragm taut. Frequency response up to 5,500 cycles. Excellent low note pick-up. Maximum diameter 3¼" Depth 1½". Assembly instructions included. Must be used with "head" amplifier within a few inches of microphone. Has many advantages over carbon "mike" in uniform pick-up and tone quality. Ne carbon "hiss."

# Thordarson Line Matching Transformer



T6048 Couples 500 Ohm Amplifier Output Line to Voice Coil of Dynamic Speaker Employs the Universal System of Ratio Matching of Impedances

3D4360 List Price \$3.00. YOUR \$1.76

PRICE

Permits use of from one to six speakers (using a transformer at each speaker) at full volume, or from two to 12 speakers (using a transformer for each 2 speakers) at half power.

The use of these transformers provides the only satisfactory method of coupling to a single amplifier, several dynamic speakers at widely distributed points. In addition the distribution of power may be adjusted (see diagram below) so as to reduce feedback difficulties.

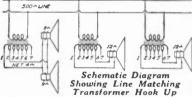
Specifications: High inductance primary; 7 tap secondary so arranged that speakers with voice coils having impedance values between 2 and 16 ohms can be balanced to the 500 ohm line with any combination of speakers—1 to 6 at full volume—2 to 12 at half volume. Transformer is 3" high; 2½" wide, 2¼" deep. 15 watt working capacity—25 watt peak. Complete instructions included.

# Thordarson T6125 Transformer

Thordarson T6125 Transformer
Universal Single Tube to 500 ohm Line
Matches above transformer in appearance. Has
primary terminals and six secondary ratio taps to
provide for coupling any of the following tubes to
a 500 ohm line: 2.85, 41, 42, 47, 89, 59, 48, 45,
50, or 2A3, class "A". 15 watt working capacity,
25 watt peak. Diagrams included.
3D4361. List Price \$3.00 YOUR PRICE .....

# Thordarson T6126 Transformer

Thordarson T6126 Transformer Universal Push Pull Tubes to 500 ohm Lina Matches above transformer in appearance. Has center-tapped primary and five secondary ratio taps to provide for coupling any of the following tubes in push-pull to a 500 ohm line: 2.45-41-42-89, 47, 59, 46, 45, or 50, Class "A", 15 watt working capacity, 25 watt peak. Diagrams included. 3D4362. List Price \$3.00 YOUR PRICE ...... \$1.76



Showing Line Matching Transformer Hook Up
The above diagram shows how to use the line matching transformer with two 8 ohm dynamic speakers operating at half power close to a microphone to greatly reduce possibility of microphone feedback. Diagram also shows how to connect in the same circuit, two 12 ohm dynamic speakers operating at full volume at distant points, employing two additional transformers. Taps permit matching of speakers with various voice coil impedances, and provide for balancing a number of speakers to a 500 ohm line. Many other combinations may be arranged to achieve distribution of power and volume. Complete instructions includest. power and volume. Complete instructions included



# Mixing and Line to Line Transformer

To be used in construction of To be used in construction or mixing panels used for public address, centralized radio, re-cording or broadcast equipment. Mounted in shielded case to pre-vent hum pickup. Frequency vent hum pickup. Free characteristic essentially from 50 to 10,000 cycles.

Stock	Primary	Secondary	List	Your
Number	Imped. Ohms	Imped. ohms	Price	Price
3E3856 3E3857 3E3858		200 or 50	4.00	52.35 2.35 2.35 1.76

# **Tube to Line Output Transformer**

For use particularly in matching output tube of microphone pre-amplifier to low impedance line. Two lead primary matches single tube such as 56 37, 27, 864, 30 etc. Mounted in shielded case to prevent hum pickup. Frequency characteristic essentially flat from 50 to 10,000 cycles.

3E 3869—To couple any one of above tubes to 200 or 50 ohm line.
3E 3860—For coupling to 500 or 125 ohm line.
List each \$3.00.

YOUR PRICE, EACH ..... \$1.76

# Microphone Transformers



# Thordarson

Single Button

For use from single button microphone to grid. Turn ratio is 1-64. Primary impedance 200 ohms; secondary impedance 100,000 ohms. Primary D.C. Primary D.t. Second-200 ohms; secondary impedance. 100,000 ohms. Primary 1.0. resistance is 1.9 ohms. Secondary in the secondary

# Double Button

Dauble button—from microphone to grid. Turn ratio is 1-22. Frequency curve is exceptionally flar from 30 to over 7000 cycles. Center tapped primary is 400 ohms impedance overall Secondary impedance is of the order of 200,000 ohms to match grid of practically any amplifier input tube. Matches impedance of all standard type, carbon, 2 button microphones. button microphones.

3C4346—Thordarson Type T-3020. List, \$5.00.

\$2.94 YOUR PRICE ......

# Broadcast Microphone Transformer Thordarson Type T-3180

Double button microphone to grid. Turn ratio is 1-27. Center tapped primary is 400 shms impedance overail. Secondary impedance is 300.000 ohms to match grid of practically any amplifier input tube. One of the finest microphone transformers ever built. Precision made-real Thordarson quality Matches impedance of all standard carbon type 2 button microphones. 3C4347—List, \$8.50.

YOUR PRICE \$5.00

Used by many of leading broadcasting stations. Primary and secondary wound in sections to reduce distributed capacity, and insure perfect balance between the halves of the windings.

# Radolek Double Button Microphone Transformer



Turn ratio 25 to 1. Impedance ratio 625 to 1. Frequency curve is exceptionally flat from 60 cycles to 5000 cycles. Primary is split 200 ohms each side and the secondary impedance is of the order of 250,000 ohms at the order of 291,000 ohms at 60 cycles and 3 volts A.C. Pri-mary D.C. resistance is 43.5 ohms. Secondary D.C. resistance is 6650 ohms. D.C. in primary balances out. Primary inductance

2.02 henries, secondary induc-tion 496 henries. Matches impedance of all standand type, carbon, 2 button microphones. Fully shielded in a black enameled steel case. Insulated color coded 6" leads out of bottom. Size: 28", high, 2" wide, 24" deep. Mounting hole centers color coded high, 2" w

303949-YOUR PRICE ..... \$1.19

# Line to Tube Universal Input Transformers

Used for coupling circuit to an Used for coupling circuit to an amplifier input using practically any type input tube. Also for directly coupling single button earbon microphone, low impedance radio output, or other low impedance radio output, or other low impedance line to the amplifier input. Mounted in shielded case to prevent hum pickup. Frequency characteristic essentially flat from 50 to 10,000 cycles.



Stock	Primary	Secondary		Your
Number	Imped. Ohms	Grld Ohms		Price
3E3862 3E3863	200 or 50 500 or 125 500 or 125 500 or 125 200, 400, 600 or 800 ohm	Sgl. 100,000 Sgl. 100,000 P.P. 200,000 Sgl. 100,000	\$3.00 4.00 4.00 4.00	2.35

# Ribbon Microphone Transformers

Practically flat frequency response from 40 to 10,000 C.P.S. Case fully shielded to prevent hum. Primary exactly matches output of ribbon mi-3E3865-Secondary impedance 200 or 50 ohins

for use when mike is operated at a distance from preamplifier. -Secondary impedance 100,000 ohms to 3F3866when microphone operated within 10 ft. of pre-amplifier. List Price Each \$3.00. YOUR PRICE. FACH S3.00. \$1.76



# Jefferson

Single Button

Turn ratio 1 to 64. Impedance ratio 1 to 4000. Windings completely shielded in black enameled pressed steel housing. Binding post connections. For 200 ohm single button microphones. Size 2% high, 2%" wide, mounting holes

2%" centers. 3C4290—Code List Price \$2.00. Code 467-261. YOUR PRICE

Double Button

A splendid fully shielded single or double button micro-phone transformer. Extra heavy insulation to prevent neary insulation to prevent capacity losses within wind-lines and to increase frequency response. Matches standard 2-button 200 ohm microphones or when using 15 the primary winding will match a single 200 ohm button. Size 2%"x 25%"x 25%" high. Mounting centers 2%". 3E4271-467-263.



PRICE ..... \$1.47

# Jefferson Phonograph Pick-Up Transformer



Designed for coupling low impedance phonograph pick-up (on order of 700 ohms @ 1000 cycles) to grid of amplifier. Turn ratio 1 to 30. Windings completely shielded in black enameled pressed steel case. Binding post connections. Size 2 % high, 2 ½ wide. Mounting hole centers 2 % ". Code 467-181.

3C4292-Code List Price \$2.00. YOUR PRICE

**S1.18** 

# Microphone Input Transformers

A fine quality microphone transformer. Proper design transformer. Proper design and proper ratio. The same model extensively used by manufacturers of P. A. systems. Core size \$\frac{3}{2}\text{N} \text{ Werrall size } 2\frac{8}{2}\text{" high, } 1\frac{7}{8}\text{" wide, mounting holes } 2\frac{3}{8}\text{"} wide, mounting holes 238" centers. Japanned steel frame centers. Japanned steel frame around core. Solder lug con-nections. For use with stand-ard 200 ohm per button microphones.



3C4220-For single button "Mike." YOUR PRICE .....

3C4221-For two-button "Mike." YOUR PRICE .....

# **Three Contact Sockets** and Plugs

3C2945-Plug with Porcelain Base PER SET ..... 89¢

3C2844-Microphone Cable Po-



# Microphone Plug

prong polarized. Bakelite cap. 3C2947-List Price 65c. YOUR PRICE





# Microphone Receptacle

Receptable for three prong polarized microphone plug. Fits standard switch box. Plate is brown bakelite, sizo 2%"x4%". No plug included.

3C2946-List Price \$2.00, \$1.18 PRICE

# Microphone Plug and Jack



Especially designed 3 contact telephone type plug and jack for use with double button carbon microphone. Very handy for use in construction of mixing panels due to compactness. 3E2845-3 conductor plug only, List 75e.

YOUR 3E2846-3 conductor jack only, List 50c,

PRICE .....

DARATRE COMPANY



Recreates the latest transcriptions with the full depth and broad ranke of the orixinal orchestration. Is extremely sensitive and has unusual uniform response over the entire scale of mustcal frequencies. Instrumental and vocal recordings are faithfully reproduced with a minimum of mechanical and background noise. Reproduces all standard records with perfect fidelity and is especially designed to respond without mechanical or electrical lag for the new 33½ R.P.M. slow-special long playing records. Richly finished in beautifully soft golden bronze. Equipped with a 17½% Cobalt magnet, cold rolled steel pole pleces and "A" metal stylus. Sultable for playing all 10" and 12" records.

Less Volume Control Less Volume Control
3D2951. Model 15A. Standard High Impedance Type. 17,000 ohms at 1000 cycles. For use with a 70,000 ohm volume control for uniform response. For accentuation of base response and the suppression of highs, a 10,000 ohm control may be employed. List,\$10.50. may be employed. List,\$10.50. YOUR PRICE \$4.65

With Volume Control 3D2950. Model 15A. Standard High Impedance, 17,000 ohms at 1000 cycles. With a 50,000 ohm volume control built in the base.
List Price \$11.00. YOUR PRICE .....

Low Impedance Model 302952. Impedance 200 ohms at 1000 cycles. Less volume control. List, \$11.50. \$4.87

3D2953. Impedance 200 ohms at 1000 cycles. With volume control built in the base. YOUR PRICE \$5.40

# Model 17A High Output Pickup

Model 17A High Output Pickup
Designed for radio receivers and amplifiers having
low gain. This pick-up gives an average output
of 4 voits so that supple volume may be secured for
record reproduction.
Equipped with a 35% Cobalt magnet, "A"
metal stylus and "A" metal pole pieces. Size
and appearance same as above model.
3D2954. Model 17A. Standard High Impedance Model. 17,000 ohms at 1000 cycles.
With Built-In Volume Control. List \$14.50.

3D2955. Model 17A. Low impedance Model, 200 ohms at 1800 cycles with built-in volume centrol. List, \$16.50.

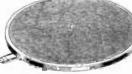
# Counterbalance

For above Webster pickups. Correct pressure for perfect reproduction of the new 33\% R.P.M. records 3D2956-1.1st Price, \$2.00. pressure for \$1.05 YOUR PRICE .....

# **Diskadapt Turntable Dual Speed Adapter**

For Any Phono-Motor Two Speed -33 1/3 and 78 RPM

Shift



12" Turntable

This new device fits any phonograph or phonomotor and adapts it for playing both the new slow-speed and standard records. Consists of a 12 inch turntable and concealed speed reducing mechanism. Mechanism is simple, foolproof and durable. Installation is practically instantaneous merely remove the old turntable and drop the Diskadapt in its place. Two screws secure the lever guide plate. guide plate.

14010870. List Price \$6.00. \$3.53

# Improved Automatic Record Changer

Plays and Changes Automatically Eight 10-Inch or Seven 12-Inch Records

Dual Speed 33 % or 78 R. P. M.

This is the lowest priced high grade dependable Record Changer ever offered. Plays and changes a stack of eight 10" records automatically. Just start the motor and you a stack of eight 19" or a stack of seven 12" rec-ords automatically. Just start the motor and you have practically continuous reproduction of from 30 to 69 minutes duration. Will not get out of have practically continuous reproduction of from 30 to 60 minutes duration. Will not get out of order and will give years of trouble-free service. Will not miss records. So reliable that it is suit-able for highest grade combination Radio-Phono-graph or Automatic coin operated machines. So compact it is suitable for portable systems. Minimum overall space needed, length 11", width 15", height above plate 5", depth below plate 3%". Improved 2 Speed Inductive Type Motor

Improved 2 Speed Inductive Type Motor Plays 78 or 33¼ R.P.M. records. Lever shifts from one to other, simply and instantaneously. Any record may be repeated for encore. Any record each be rejected. Repeats last record until switched off. No changes required for playing manually. Simply change for 19" or 12" records. Speelally designed pick-up damped for best quality reproduction. Finished in lacquered statuary branze. Volume Control and on-off switch included. Shipping weight 26 lbs.

Automatic Stop
Automatic Stop
Automatic Stop Switch can be supplied for \$3.00
net extra. Other voltages and frequencies supplied
to order at slightly higher prices.



14E10868 -For 1'0 volt 60 cycle List Price \$52.50. \$30.87 YOUR PRICE .....

Same as above but plays and changes eight 10" records automatically and 12" records manually. 14E10869-\$2646 List Price \$45 YOUR PRICE

The illustration shows sug-gested method of mounting either of the above changers. This type of This mounting



# Webster New Model 10B Reproduces Standard and Slow-Speed "Long Play-

Reproduces Standard and Slow-Speed "Long Playing" Records
An ingenious arrangement has been built into the base of this new pickup to provide equally good reproduction of standard 78 R.P.M. and "long playing" 33% R.P.M. records, Equipped with a knoh in the base which ad-"long playing" 33% R.P.M. records. Equipped with a knob in the base which adjusts the needle weight from 5 ounces for standard records to less than 3 ounces for the "Long Playing" records. Marvelous fidelity of tone

velous lidelity of tone
—flat response curve
from the lowest to
the bighest musical
frequencies. Extremely sensitive. Equipped with
17½, Cobalt magnet, cold rolled steel pole pieces
and "A" metal stylus. Lustrous bronze finish,
Sultable for playing all 10 and 12" records. Suppilled without volume control.
3D2957—Model 10B. High Impedance 17,000
ohms at 1000 cycles. List, \$16.75.
\$8.95

\$8.95 YOUR PRICE

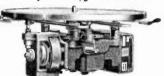
3D2958 Model 10B. Low Im ohms at 1000 eycles. List, \$17.50. Impedance. 200 \$9.45 YOUR PRICE ......

# Model 4DB 16" Pickup

Provides a tone arm of proper length with which to play records of 16" diameter.
302959. High Impedance Model. 13,000 ohms 302959. at 1000 cycles. List Price, \$24.50. \$13.22

3D2960. Low Impedance Model. 200 ohms at 1000 cycles. List Price, \$24.50. \$13.22

# New Green Flyer **Governor Controlled Induction Phono Motor** Dual Speed 331/3 - 78 R.P.M.



For "Long-Play" and Standard Records For "Long-Play" and Standard Records
New Induction type electric phonograph motor
which will play both the new type slow speed and
the standard high speed records. Instantly shifts
from low speed 3318 R.P.M. to 78 R.P.M. by
simply moving lever. Centrifugal type governor
speed control with wide range provides a positive
means of accurate speed adjustment and maintenance of uniform speed on supply line with fluctuorling values.

tenance of uniform speed on supply line with fluctuating voltage.

INDUCTION MOTOR—No brushes or commutator—silent operation, absolutely no radio interference. Ruggedly built, heavy east frame, oversize self-jubricating bearings, silent running machined sears sealed in oil. Floats freely on rubber suspended mounting bracket to dampen any trace of vibration. Runs cool in operation and will not overheat in enclosed eabinet. Equipped with automatic stop switch, dial, escutcheon and pointers flushed in statuary brouze. All mounting bardware included. Mounts in \$3\frac{1}{2}\trace{1}\trace{1}

14E10863—Complete with regular 12 inch turn table. List Price, \$16.50. \$960 YOUR PRICE .....

# Piezo ASTATIC Crystal Phonograph Pickup



3E2965-8" tone arm for playing 10" and 12" records. List Price \$15.00. YOUR PRICE \$15.00.

This type of pickup is considered superior to the magnetic type because of better fidelity and more even frequency response. Frequency response is essentially flat from 30 to 8000 cycles without resonant peaks. Needle scratch and surface noises are at a minimum. Two volt output is higher than obtained with most pickups. Will operate practically any two stage amplifier at full power output. High impedance output connects direct to grid input of any amplifier. For central of volume a 5 meg control is necessary. True accentuation of low or high frequencies can be accomplished by connection of resistors in parallel or series. Due to exceptionally light weight of pickup and pressure of only two ounces at head this unit is suitable for reproduction of 33% or 78 R.P.M. records without adjustment or weights.

# With New Type Weighted Turntable

and Automatic-Stop Switch

14E10865 Complete with new type special
weighted 12" turnable which is absolutely essential to good reproduction with the slow speed
records.
Automatic-stop switch included.

For 6 Volt Operation
operation on 6 volt storage battery or any
old circet current source. Especially suitable
and address service. Has same 6 volt cirect current source. Especially suitable for portable public address service. Has same mechanical and operating characteristics as motor described above Current drain 2.8 amps.

14E10864—Complete with regular 12" turntable. List Price, \$25.00.
YOUR PRICE

table. List Price, \$25.00.

YOUR PRICE

14E10866 With weighted turntable and auto-\$14.10

witch. \$15.95 YOUR PRICE .....

# Green Flyer - 78 R.P.M. Single Speed-Governor Controlled

Induction Phono Motor

Same construction as above. Furnished with 10" turntable and complete mounting hardware. No automatic stop included. Motor is rubber suspended from mounting plate. Mounts in cut out 64,"x44,". Motor dimensions 64,"x316,"—suspends 3" below baseboard. Mounting plate 65,6"x54,". Mounting hole centers 3"x44,". For 105-120 voit 60 cycle A.C. 14D10867—List Price, \$13.00. Induction Phono Motor

YOUR PRICE .....

# **SHURE Condenser** Microphone

Bullet Type with Pre-Amplifier



Condenser Microphone, with Two Stage Pre-am-plifier, two type '30 tubes, all enclosed in Bullet type case. 12 foot cable and suspension adapter. 3E2878-List. \$60.00.

YOUR PRICE

Use In ast Stud-ound Rec-Broadcast ios, Scording Stand Public Studios and Public Ad-dress Installa-

and Public Address Installations. Free from hiss or other background noises which are present in carbon button microphones. Frequency response is exceptionally good from 35 to 10.000 cycles. Sensitivity is such that distant sounds which do not affect other type of microphones can be picked up with ease. Output level of Pre-amplifier above that of carbon mike. Sensitivity and frequency response remains constant over wide variation of atmospheric conditions. Condenser head is on swivel when allows 90 degree turn, permitting use of mike directly overhead if desired. Hook is provided for overhead suspension. Threaded base allows mounting on any Shure microphone stand listed on page 107.

Current requirements 6V at 60 Ma.; 180V at 3 Ma., which can be supplied from power supply listed on page 107. Head is finished in chromium plate and suspended from baked rubber black linished case. Head 3" dia., case 3%" dia.

Overall height 11%", shipping weight 6% lbs. Output impedance 200 or 50 ohms, please specify which is desited.

# Microphone Springs

Loop ends. Tempered spring steel.
Heavy cadmium plated finish to prevent rusting. 3C2949—Eight for .... 22¢

# Pregrooved Aluminum Discs



For Home Recording

Universal pregrooved, aluminum discs assure a greater volume, brilliancy

greater volume, brilliancy double facet, permitting recording on both sides. Available in four sizes—6 in., 8 in., 10 in. and 12 in. diameter. Records may be made with ordinary blunt home-recording needle and play back with stock.

3E2861	12 in.	1.00	59 c
3C2864	10 in.	.75	44c
302863	8 in.	.50	30 c
302862	6 in.	\$0.30	18c
Number	Size	Price	Price
Stock		List	Your

# **Blank Aluminum Discs**

No grooves. Can only be used with recording heads that cut their own grooves.

Stock Number	Diam.	Playing Time	List Price	Your Price
302886	6	11/2 min.	25c	17 c
3C2887	7	2 min.	35c	23 c
3C2888	10	3 min.	50c	33 c
302889	12	41/2 min.	75c	50c

# Victor Home Recording

	IV OCCI O	Diaiii		
302890- 6"	record		kg. of	4-68c
3C2891-8"	record		kg. of	2-68c
3C2892-12"			kg. of	1-62 c
3C2893-Nee	dies per	pkg. of	8	-25c

Cellulose Coated Aluminum Disc 3E2883-12" Aluminum base record. Cellulose coated both sides. Not pregrooved. Not pregrooved. 48¢ YOUR PRICE, EACH

# Blank Celluloid Discs

252005	10//		and E	a a la	280
362004			Lots.		
252994	-8"	POCC	rd Es	ch	9 с

In 100 Lots, Each 24e



Microphone Stand

Microphone Stand
Amazing Value! All Metal
5% Microphone Bling Stand
for Deak Use. For Single or
Double Button Suspension Type
Microphones. 8" high. Fine
appearance. Fibre snap switch
in base economizes on microphone current and stops unwanted conversation pickup between numbers or announcements. Very light weight.
base. Has 8 suspension springs.

YOUR PRICE, Only ...... 79¢

D ...

117



A Practical Recording Device for recogning for Programs, Musical accompaniments, Home Movie Sects, Transcription Programs, Advertising Talks, Practical Recording Device for Recording Favorite Radio Campaign

Speeches, transcription Programs, Advertising Talks, Campaign Speeches, etc.

It must be used in conjunction with a microphone and amplifier. Record is made on a specially prepared disc revolved by any ordinary phonograph motor, and can be replayed on any standard phonograph.

Easy to Install and Operate

One single %' hole is all that is necessary to mount it. In recording, it is only necessary to move the sym to the center of the record and throw the lifting lever to the down position. This starts the recording which evenly grooves the record.

96 grooves per inch are cut which allows as long a playing time as standard phonograph records. The recorder may be operated at either 78 or 334 R.P.M.

Recorder makes records that are outstanding in quality and are comparable to standard transcription records. Becords are practically free from background noise and needle scratch. For best results use our stock number 14D10660 amplifier.

listed on page 11 denser Microphone.

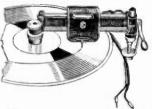


Consisting of: Center spindle; cutting head threader; hardware; swivel arm. No needle in

**Complete Cutting Outfit** 

Stock of Cutter 3E2830 3E2831 3E2882 15 ohms 500 ohms

YOUR



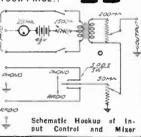
# Input Control and Mixer

For P. A. Amplifiers
Handles Microphone, Phonograph and Radio Inputs

Handles Microphone, Phonograph and radio, mixer and fader, in a neat, fully enclosed and shielded impressive appearing black enameled metal case. For coupling any portion of microphone, phonograph or radio signals to any Public Address Annilifer using a high impedance input. Contains: (1) double outten microphone transformer: (2) 4½ volt microphone battery; (3) indicating milliameter with switching a rangement to indicate current on each button of merophone; (4) microphone current control; (6) microphone volume, fader and mixer control; (6) microphone volume, fader and mixer control; (7) quick change switch for shifting from radio to phonograph or radio-volume, fader and mixer control; (7) quick change switch for shifting from radio be smoothly mixed or faded into microphone signal by proper easy handling of the two volume controls. Perfect fading from full volume to zero on microphone while fading simultaneously from zero to full volume on phono or radio can be accomplished. Mixing of the microphone input using volce into a musical background from phonograph or radio can be accomplished mixing volume level desired. One or two single button microphones may be substituted for the double button microphone, thus permitting two separate single button microphones to be operated from two different points, as in debate work or for soloist with orchestra at a distance.

Careful, accurate engineering together with the use of properly designed component parts make this a highly effected in the provided. If a shielded microphone cable is also grounded to case, any translend currents that may be picked up by a long microphone cable can be eliminated. Case size 8x10x3 in ches. All connections and controls plainly marked. Mounting

4D10700— List Price, \$30,00\$ **1 1 65** YOUR PRICE..



**Duralumin Diaphragms** 

For replacement in any make, stretched diaphragm type microphone. 24 karat cathode sputtered pure sold spot center on each side. 0.018 bitck. Heat treated. No harmonic distortion. Size 4 inches dia. Can be trimmed to fit. 3C2933—List Price, \$5.00.

\$1.50

3C2934-.001 Duralumin Diaphragm. Without gold spots. Size 4x4" for condenser microphone. List \$1.00. YOUR PRICE .....

Gold Spotted Buttons

For replacement in any make microphone. Pure 24 karat gold spotted. Standard size ¾ inch diameter. Fitted with %2 screws. 3C2935—List Price \$1.25. eter. Fitte YOUR PRICE

# Carbon Granules



Carefully selected and highly polished. Acid treated to reduce ash con-tent. Will stand higher cur-

tent. Will stand higner to.
Vial contains sufficient
two double-button carbon without burning. V microphones.

Size No. 100. Higher sensitivity and kground noise. Provides best quality 3D2930background reproduction but packs quite easily.

3D2931—Size No. 80. Best general purpose granules. Lower hiss, good quality reproduction and granules. Lower hiss, does not pack easily.

3D2932—Size No. 60. Best for sound trucks and hard usage. Low hiss, more freedom from packing, fair quality reproduction.
List Price Per Vial \$1.00.  **Universal Recording Lead Screws** 



Exact, accurately machined lead acrew. Used with properly weighted pickup and diamond or sapphire recording needle. Cuts and records simultaneously. Spaces 80 lines per inch. Only one hole required for mounting. Complete with guide, shoe and outform outside to imide.

3E2836—List Price, \$10.00.

\$8.82 YOUR PRICE .....

# **Recording Needles**

Genuine Sapphire points. For use with above 3E2894—For cutting and recording on ungrooved

aluminum record blanks.
YOUR PRICE 3E2895 For recording and reproducing on pregrooved YOUR

\$2.06 3E2896-For cutting and recording on ungrooved blanks.

\$2.82 relluloid blank 3E2897—Fibre needles for playback of aluminum and all other records. YOUR PRICE Per Page. of 100 ......

# RACON HORNS and UNITS



14D10225—Regular: Equipped with motal beaded edge, metal ferrule and suspension ring. Adapted for %"-18 inch threaded unit. For indoor use only. Weight, 6½ lbs. List, \$22.00.

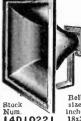
\$12.94 YOUR PRICE

14D10226—Deluxe: Equipped with metal beaded edge, cast aluminum ferrule and suspension ring. For indoor or temporary outdoor use. Weight, 7 lbs. List, \$27.50. \$16.15

YOUR PRICE \$16.15

14D10227—Stormproof: Equipped with metal beaded edge, metal ferrule and suspension ring. Guaranteed for one year. For outdoor use in all climates and all weathers. Weight, 9½ lbs.

YOUR PRICE \$25.88



# **Dynamic Baffles**

Combination baffle and exponential air column for dynamic speakers. Increases volume and improves tone. Made in four sizes; all available for any size dynamic speaker. In ordering state diameter of speaker.

Your Price \$ 7.76 19.40 25.87 28.11



# **Dynamic Baffle** for Cone Unit

Correct acoustical design for use with cone dynamic units such as listed below. Projects sound over greater discussed than conventions type of baffle. Gives effective baffle area equivalent to 16 souare feet. Reproduces low frequents.

dlameter 22 inches overall length including box 24 inches, box houses 6 inch cone.

Regular: For indoor installations or for tem-porary use out of doors.

Stormproof: For indoor or permanent outdoor installation. 14E10713-List Price, \$18.00. 

Note: We supply any type Racon Horn at dis-count of 40-2% from list price. Send us your order for any horn not listed.

# Public Address Cone Unit For Use With Above Trumpet



6" Cone Diameter Has the power handling capacity of the dynamic unit yet retains the full rich tone of a cone speaker. Adapted for use with directional baffle in installation where

sound must be trans-tance. Oversize field coil and correct spacing of voice coil with reference to field make this unit exceptionally sensitive giving a high ratio of acoustic output to electrical input. Cone is made of an especially tough paper that will handle enormous especially tough paper that will handle enormous volume without breaking down. Extremely flexible spider allows full movement of cone yet keeps it perfectly centered at all times. Will handle 15 watts continuously and 30 watts peak. Voice coll impedance 6 ohms. V. C. diam. 1½". Overall size 6½" dia. by 5½" deep. Shipping weight, 10 lbs. 14E10716—With 1000 ohm fleld dissipating 10 watts in field. Can obtain field supply from Radolek 6, 15 or 30 watt A.C. Amplifers.

14E10717—For 6-8 Volt field excitation for use with Radolek Battery Amplifier. Draws 1½ amperes at 6 volts.

List Price Each, \$25.00. YOUR PRICE, EACH \$11.85

# Electro-Dynamic Horn Units For Use on Trumpets or Theatre Reproducers

Super-Giant

Type B Diaphragm 1000 chm field for 110 V. D.C. excitation. 15 ohm voice coll impedance at 1,000 cycles. Continuous operating capacity 25 watts. Peak load capacity 5 0 watts. Particularly a-50 watts. Particularly adapted for theatre and auditorium use where the finest quality reproduction is required. Weight 20 pounds. 14D10235—List Price, \$66.00.

# Master

1000 ohm field for 110 V. D.C. excitation. 15 chm voice coil impedance at 1,000 cycles. Continuous operating capacity 20 watts. Peak load capacity 50 watts. Lightweight hi-powered unit especially suitable for portable systems and permanent installations where heavier units are not required. The perfect reproducer. Weight 13½ pounds. 4D10237—List Price, \$44.00.

## **Junior**

1000 ohm field for 110 V. D.C. excitation. 15 ohm voice coll impedance at 1,000 cycles. Continuous operating capacity, 15 to 20 watts. Peak load capacity, 50 Watts. Weight 11 pounds.

4D10238-List Price, \$35.75. PRICE .....\$21.00



Type A
Baby Unit

excitation. 15 ohm voice coil impedance at 1,000 cycles. Continuous operating capacity 5 watts. Peak load capacity 18 watts. Weight 6½ pounds.

4D10239-List Price, \$24.75. YOUR

PRICE ......\$14.55

# **High Frequency Tweeter**

Built to meet the latest requirements for wide range reproduction. Covers frequency band from 3000 to 10,000 cycles. When used in conjunction with dynamic speaker giving good speaker giving good



speaker giving good low frequency response high fidelity reproduction is obtained over the entire audio band. Field resistance 1000 ohms for 110 volt D.C. operation. Voice coil impedance 15 ohms and will handle 5 watts continuously with 7 watts peak. Size 6%" long overall. Horn bell 2" did. dia \$16.17

4E10714-List Price, \$27.50. YOUR PRICE Path Filter Network

ror coupling above speaker and low frequency dynamic speaker to 500 ohm output of amplifier. One path cuts off sharply at 3000 cycles for low frequencies. The other path is from 3000 cycles up for high frequencies. Shipping weight 3 lbs.

4E 107 15—List Price, \$20.00.

4E10715—List Price, \$20.00. \$11.76

All of the above horn units can obtain field supply direct from the Radolek 6, 15 or 30 watt A.C. All of the above for little that the state of the direct from the Raddlek 6, 15 or 30 watt A.C. Amplifiers. 6 volt fields for obtaining field current from storage battery can be supplied at no extra cost. Specify field desired when orderlng.

# Magnetic Speaker Chassis

8 3/8" Diameter 4D10450-\$189

PRICE The unit is of the bal-anced armature type and is magnetically and meis magnetically and me-chanically centered. Will stand 0.7 watt power in-put without rattling. An ideal speaker for original installation in battery set



ideal speaker for original installation in battery set or for use as an extra extension speaker, with a sets using dynamic speaker. An excellent speaker. An excellent speaker or for use in public address systems in schools and hotels or for call systems. Makes an ideal magnetic unit to use in the wainut cabinet shown on page 41. Perforated rigid steel frame with mounting holes in outer diameter. Excellent tone quality with true fidelty. D. C. resistance of speaker winding 1000 ohms. Diameter 8%". Depth 4%". No cord included.

# **Outdoor Speaker Housing** Weatherproof Spun Copper

14D10720 List Price \$7.50. Your S441 A spun A s p u n copper out-door speaker housing with built-in baf-fle. Designed to fit all dy-

me. Designed to fit all dynamic and magnetic cupying a space not over 11" diameter and not over 5½" depth. The most suitable speakers octover 5½" depth. The most suitable speaker housing on the market for any outdoor use, as in parks, skating rinks, dance parilions, beer gardens, and "over the sidewalk" store advertising. Special oiled Masonite Presswood baftle with copper mesh "bug" screen over speaker opening. Arranged with special quick mounting slots for "locking" speaker into place. Weather-proof vert hole at top of housing for speaker leads and air circulation. No "boom" or resonant distortion. Four rigid eyelets for use with wire suspension. Effective baftle area equal to 30 square inches. Operates best when used 12 to 15 feet above ground level. Overall diameter 10%". Body diameter 11" tapering to 8". Height overall, 7%".

# W att Electrodynamic Unit

A departure in power unit design which em-bodies the most valubodies the most valuable characteristics of flat and cone shaped diaphragms. Extraordinary flat response over the entire range of speech and musical frequencies. Quality is according to the control of unusually natural and brilliant. New one piece diaphragm of special light alloy is



piece diaphragm of special light alloy is shaped to form its own core for the voice coil. Voice coil and diaphragm located for maximum sensitivity and assembled as an integral unit. Capacity 25 watts input not to exceed 15 voits A. C. at 2 amps. Voice coil impedance—16 ohms. Field requires 1.5 amps at 6-8 voits. Powerful—exceptionally high ratio of energy Transformation. Precisely built. Pot has durable baked crackio finish. Outer pole face plate brightly chronium plated. Wt. 15 ibs. i 4D10240—Without Coupling Transformer. List \$49.25.

YOUR PRICE ..... **6 Foot Aluminum Trumpet** Single or Double Throat 30 in. Bell

Demountable into four sections with felt washers between equipped with east aluminum tre-inforced 30" bell rim. Proper acoustic designs to reproduce the full wide range response. Brilliant tone. Strong, light and weatherproof 14D10219—Single Throat Horn for One Unit. List Price, \$55.00.

List Price, \$55.00.

14D10220-Double Throat Horn for Two Units. List Price, \$65.00. YOUR PRICE ......\$38.22

# Victor and Columbia **Double Faced Records** Electrically Cut

Many Popular Current Recordings

4E10736 YOUR

PRICE .... \$2,55 Sold only in assortments of 25 records each. All records are genuine Victor and Columbia products. Not seconds. No factory rejects are included. Perfect record.

ter and Columbia products. Not seconds. No factory rejects are included. Perfect recordings by famous Columbia and Victor artists. Foxtrots, Waltzes, Vocals, Tangoes, Bands, Marches by Paul Whiteman, Ted Weens, Nat Shilkret, Victor Salon Orchestra, George Olsen, Jesse Crawford, Gene Austin, Fannie Brice, Duke Ellington, and others too numerous to mention. We ship these records to you in the exact assurtments we receive from the factory. It will not be possible for us to state at any time exactly what numbers are included in each assortment.

ment.

Use for Public Address Applications
Although these records are not last minute releases there will be many current popular numbers.
Especially suitable for sound truck work and automatic phonograph service.

# Jensen Electro Dynamic **New Auditorium Speakers**

Baffle Opening 12"-Cone Size Overall 13 18"



These fine reproducers are 400% more efficient than conventional types. Adding one of them to an amplifying system is the equivalent of using type 50 tubes instead of 45's, or using 845's in the place of 50's. They provide the most economical means of greatly increasing the power output of the system without adding to the cost of the amplifier Itself. Capable of carrying 15 watts, continuously (30 watts peak load) with perfect fidelity at any volume level. Voice Coil impedance 8 ohms or 200 ohms at 400 cycles. Diam. of voice coil 2½''.
Ship. Wt. 57 lbs. for A.C models and 48 lbs for D.C. models Power dissipation of field 33 watts; yolce coil 15 watts. Ht. overall 13-22/32, depth 8%". These fine reproducers are 400% more efficient

## Three Exactly Engineered Models

Series M designed for general use.
Uniform response characteristic from
30 cycles up. Particularly recommended where the reproduction of
music is the chief requirement.

V intended chiefly for Voice series V intended chiefly for Voice reproduction most efficient in the upper frequencies and somewhat less efficient in the low frequencies. Very destraile for theatre and public address systems.

# "D.C." Type,—For field excita-tion from 6 volt battery.

8 ohm Voice	Coll 200	ohm Voice Coll
Number	Series	Number
14E10300 14E10301 14E10302	V M L	14E10303 14E10304

Less output transformer. List, \$48.50.

YOUR PRICE ...... \$33.27

"A.C." Type

Field excitation from rectified 105-120 volt 60 cycle A.C. supply. Rectifier unit with type 82 tube included.

8 ohm	Voice	Coll	200	ohm	Voice	Col
Numb	er	Se	ries	T	Num	ber

Less output transformer.

\$73.50

List, \$73.50.
YOUR PRICE ......\$50.43 YOUR PRICE .......\$176

Series L used mainly in conjunction with "Tweeter" speaker for "wide range" sound reproduction. Best ef-ficiency in the lower frequencies and somewhat less efficient in the higher frequencies.

All types available for use with any output tube combination or any line impedance—Be sure to specify tubes used and how they are connected, when ordering.

"D.C." Type-For field rD.t. Type—For field excitation from Amplifer. Supplied with 3,000 ohm resistance field—the correct re-sistance for Radolek 15 and 30 watt A.C. Amplifiers. Other field resis-tances can be supplied to your speci-fications. No input transformers inexcitation cluded.

Number	Series	Number
14E10312 14E10313 14E10314	V M L	14E10315 14E10316

# Output Transformer

Output transformer to match 8 ohm voice coil speakers listed.

4E10318-List Price, \$3.00.

# New Jensen Ortho-Dynamic Series



The Speaker without Transient Distortion-25% More Efficient

Distortion—25% More Efficient than Ordinary Speakers

An exceptionally fine reproducer for either public address or radio uses. Response curve unusually flat from 30 to 5500 C.P.S. 12 watts input continuously, 18 watts peak. Field 15 watts average. Minimum 12 watts. Voice coll diameter 2". Voice Coll innedance 8 ohms or 200 ohms at 400 cycles. 200 ohm voice coll connection can be used with amplifiers having 200 ohm output tup when speaker is located at a distance of over 50 feet from amplifier. No intermediate transformer is necessary. Ship. wt., A.C. Model 34 lbs., D.C. Models 27 lbs., Cone diameter 12". Overall height 12%", depth 7%".

# "D.C." Types

For field excitation from Amplifier. Supplied with 1500 ohm resistance field—the correct resistance for Radolek 15 and 30 watt A.C. Amplifiers. Other field resistances can be supplied to your specifications. No input transformers included.

8 ohm Voice	e Coll 200 ohm	Voice Coil	
Number	Series	Number	
14E10320 14E10321 14E10322	V M L	14E10323 14E10324	

Less output transformer. List Price, \$34.50.

\$23.67 YOUR PRICE ......

For field excitation from 6 volt battery.

8 ohm Voice	Coil 200 of	m Volce Coll
Number	Series	Number
14E10326 14E10327 14E10328	V M L	14E10329 14E10330

Less output transformer. \$34.50. List Price, \$34.50. \$23.67

"A.C." Type Field excitation from rectified 105-120 volt 60 cycle A.C. power supply. Rectifier unit with type 82 tube included.

Stock Number				
14E10332	V	14E10335		
14E10333	M	14E10336		

Less output transformer. List Price, \$51.50.

\$34.35 YOUR PRICE

Available for use with any output tube combination or line impedance. Be sure to specify tubes used and how they are connected when order-

Input Transformer Input Transformer to match 8 ohm voice coil speakers listed.
4E10338—List Price, \$2.00. ... \$1.37 YOUR PRICE

NOTE: The Three Series listed correspond to those described above, under the New Auditorium Model. The Three Series listed cor-

# **OXFORD AUDITORIUM** Super Dynamic Speakers



Particularly designed for Public Address use where a large amount of power output must where a large amount of power output must be handled to produce best quality reproduc-tion of both voice and music. New one piece cone with special resilient micarta spider maintains the voice coil in perfect alignment regardless of expansion or contraction of cone diaparagm with temperature changes. Voice coil impedance 8 ohms. Exceptionally wide frequency response especially when wide frequency response especially when mounted on large buffle. Speaker voice soils can be connected direct to output transformer of amplifier when used not over fifty feet away. When used at greater distances it is advisable to use 500 Ohn line matching transformer 3E4360—Listed on page 40 to couple sleaker to 500 ohm output tap on amplifler.

## Concert Auditorium

These models have a plensing depth and brilliance of tone which is only possible because of the intense mag-netic flux provided by the extra large

Voice coil handles 15 watts continuously with 24 watt mesk. Voice coil impedance 8 ohms. Field should have 15 watts for best Sizes

12½" Concert—Height 12%" depth 1½", baffle opening 11". Wt. 14% lbs. 14" Concert—Height 14", De pth 10½", baffle opening 12½". Net

14" Concert—Height 14". Depth 10½", baffle opening 123%". Net weight 16¼ lbs. Ship. wt. 19 lbs. Prices D. C. Types

For field excitation from amplifier. Concert Models supplied with 1500 ohm resistance field. Junor Models supplied with 1000 ohm resistance field. Junor Models supplied with 1000 ohm resistance field to your specifications. No output transformers included. transformers included.

Stock Number	Model		You:
14E10630 14E10631 14E10632 14E10633	12 '5' Junior 14' Concert		\$8.50 5.85 9.85 6.95
-		_	_

**Output Transformer** 

Output transformer to match voice coil of A.C. or D.C. Oxford speakers to or A.C. or D.C. Oxford speakers to any output tube combination or line impedance. Be sure to specify tubes used and how they are connected. 4E10645—List, \$2.00. YOUR PRICE .....

# **Junior Auditorium**

Same construction as Concert Speaker, but uses a smaller field and is therefore not quite as sensitive as the Concert model. Recommended for installations where several speakers are to be used to divide power from amplifier. Voice coil handles 10 watts continuously and 15 watts peak. Voice coil impedance 8 ohms. Field should dissipate 10 watts for best operation.

Sizes 12½" Junior—Height 12%", depth 8", baffle opening 11", net weight, 9¾ lbs. Shipping weight, 13 lbs. 14" Junior—Height 14", depth 9", baffle opening 12", net weight, 11", lbs. Shipping weight, 14 lbs.

Prices D. C. Types

For field excitation from 6 volt battery. Stock Price Price Number Model 14E10635 12½ Concert 14E10636 12½ Junior 14E10637 14 Goncert 14E10638 14 Junior \$8.50 5.85 9.85 6.95

Prices A. C. Types
Fleld excitation from rectified 105-120
volt 60 cycle A.C. power supply. Rectifier unit with type 80 tube, in-

Stock Number	Model	List Price	Your
14E10640 14E10641 14E10642 14E10643	12 12 Junior 14 Concert		\$13.05 11.25 15.75 12.85

# **ROLA Permanent Magnet** Dynamic Speaker



Requires no field current. Especially designed for use in public address installations where it is impractical to supply energy for the field coil. Sensitivity and tone fidelity are comparable to that of the finest dynamic speakers. Vital parts shielded against the entrance of metallic particles and dust. An entirely new construction of the magnetic core gives greatly increased flux density and greater power handling capacity. Welded construction which is used throughout. Connections can be made direct to voice coil or if used on 500 ohm line use matching transformers listed on page is used throughout. Connections can be made direct to voice coil or if used on 500 ohm line use matching transformers listed on page 109.

Model PM6

Model PM6

Voice coil impedance 3 ohms, power handling capacity 5 watts continuous. Overall depth 3 % in. Baffle hole projects % in. from edge of cone. Overall depth 3 % in. Baffle hole should be 5½ in. diam. Shipping weight, 8 lbs. Less transformer. 4E10620—List Price, \$10.00. YOUR

..... \$5.75 YOUR PRICE PRICE

Model PM8

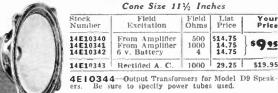
Model PM8

Voice coll impedance 2 ohms, power handling capacity 6 watts continuous. Overall cone diam. 8\(\frac{1}{2}\) in. Magnet projects \(\frac{1}{2}\) in. from edge of cone. Overall depth 4\(\frac{1}{2}\) in. Baffle hole should be 6\(\frac{1}{2}\) in. Baffle hole should be 6\(\frac{1}{2}\) in. Alam. Shipping weight, 11 lbs. Less transformer. 4E10621—List Price, \$12.00. YOUR

\$6.75

# Jensen Concert Model D9 Speaker

Voice coil dia. 1", impedance 9.4 tion for best operation. Size 11%" ohms. Capable of carrying 5 watts high. 11%" wide, 5%" deep, repower continuously 69 watts peak load). Field coil necessitates 5 wants minimum and 10 watts maximum dissipa-included. No output transformer included.



List Price, 75c. YOUR PRICE .....

THE DARKE COMPARY Page 113

# BUILD Your Own P.A.



# Easy to Assemble and Wire

Point to Point wiring, color coded Resistors, plainly marked Condensers and a convenient roomy chassis to work in.

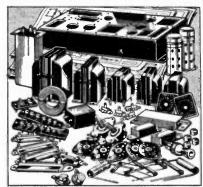
# Educational—Profitable

Building an amplifier: Testing it with your own voice, adding the little touches that distinguish customs-built products, proudly showing it to your customers—it's the most fascinating experience in the radio business.

the radio business.
Following the design as you solder each wire in place, you see the reason for its position, the part it plays in the finished circuit. You learn more about an amplifier by building one than all the text books on the subject could teach you.
Make a Triole Profit: On every Radolek P.A. system you build, you profit by your mark up on labor, the resale of the parts at list price and the sale of accessories which should accompany every installation. Our low prices provide you with ample margin for profit and at the same time permit you to bid competitively for amplifier business. ness.

## Big Market For P. A.

Build Radolek P.A. Amplifiers in your spare time. Turn out these time professional appearing amplifiers and add \$20 to \$50 a week to your income. Every merchant, every place of entertainment, ball-parks, races, political gatherings, schools and churches need public address amplifiers. Are you ready to supply their needs? Many men are renting amplifiers and including their own services for every big gathering. You too can be on the 'sidelines' at the big football games, the interesting sports events, at all the big banquets when you rent your Radolek Custom Built P.A. system and personally operate it.



# **Every Part You Need**

Plus a generous supply of hardware and wire. You need only a screw driver, pliers and soldering iron to build these kits.

# 6 Watt Battery **Amplifier Kit**

For 6 Volt Battery operation with either Genemoter or "B" batteries. Plenty of output for sound trucks. For location where commercial power supply is not available. Push-Pull 42 tubes. Two or three 6 volt field speakers are recommended.

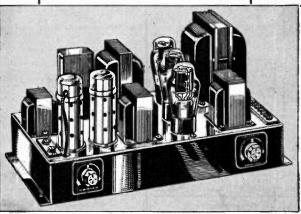
speakers are recommended.

Input to the 6 wait battery operated amplifier is of the high impedance type exactly like that shown for the 15 and 30 watt amplifiers. Employs tone and volume controls. Requires 1-39, 1-37, and 2-42 tubes.

Complete technical details of this amplifier as a finished manufactured unit is given on page 120. Kit is supplied with instructions for building, 14E10694—Complete kit less Tubes.

YOUR PRICE .....\$14.50

114E10695—Same with Ray-theon Tubes. \$17.45



# Push-Pull2A3-15Watt A. C. Power Amplifier

A. C. Power Amplifier
For 115 Volt, 60 Cycle A.C.
This owerful amplifier, capable of
delivering 15 watts of audio power
to a battery of dynamic speakers is
the most popular type kit Radolek
offers. It is easy to assemble and
smooth in operation. Independant of
its filter circuit, it supplies 30 watts
of D.C. for dynamic speaker fields.
Completely described on page 117
as an assembled unit.
Kits contain every part for the
amplifier proper—speakers, microphones, input mixers and wire should
be selected elsewhere in this catalog.
Requires 1-57, 1-56, 1-5Z3, and
2-2A3 tubes.

14E10697—Complete without Tubes. YOUR PRICE .... \$24.50

14E10698-Complete with

matched Raytheon \$28.90



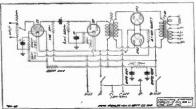
# 15 Watt Battery Kit

For your sound truck! A powerful amplifier For your sound truck! A powerful amplifier kit for use with a Genemotor "B" supply and 6 volt storage battery. Excellent for all mobile installations where regular A.C. suppy is not available. Amplifier requires 1-39, 1-37 and 2-2A3 tubes. 72 D.B. gain, 15 watts output. For complete technical description, see page 120 where the same amplifier in finished tested form is listed. Kit includes amplifier essentials only.

14E10696—List Price, \$32.50. Amplifier Kit.

YOUR

14E10691—Complete Kit Parts for 15 Watt Battery Amplifier with Four Matched Raytheon \$20.10 Tubes YOUR PRICE .....



Schematic 15 Watt Battery Amplifier

# FEATURES of Radolek P. A. Amplifier Kits

- Heavy steel chassis base, drilled to exactly fit each art supplied with the kit. Finished in tough baked on black enamel.
- black enamel.

  Smooth tone and volume control on each amplifier.

  Best quality filter condensers and power transformers.

  Oversize choke inductances.

  Practically uniform audio output over the widest frequency range of any similar type amplifier.

  Lowest hum level of any commercial type power am-

- plifier. Complies with all fire and underwriters requirements.

  Etched metal indicating plates for the volume, and
- tone controls.

- tone, controls.

  Ample provision for ventilation.

  Simplified circuit for external connections.

  Complete plans with values of all parts supplied.

  Matched parts, designed to work together with the greatest possible efficiency.

  Each kit supplied complete with every item just as if we ourselves intended to build it.

# 5 Watt 2B6 Amplifier Kit

With Arcturus Tubes and 8½" Matched Speaker 114E10693—List, 335.25. \$13.80

More than twice the power and volume of radio receivers using push-pull 45 tubes! You must hear this amplifier to appreciate its amazing performance. You must build it yourself to get the real thrill out of using it. When you sell it, you make the regular manufacturer's profit along with the normal markup on the parts and accessories. Centertapped transformer for singe or double button microphone mounted on deck of chassis, Complete technical details of the finished amplifier appear on page 122.

Any four to six watt. 2,500 ohm field dynamic speaker with a 286 matching transformer is suitable for this amplifier. For operating several magnetic speakers on a 500 ohm line, we recommend use of a 3:1 step-down output transformer.



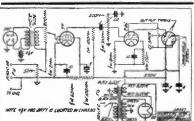
# Parallel P. P. 30 Watt 2A3 Kit

The Biggest and Best Amplifier Kit you can build! See Page 119 for technical details of assembled amplifier. Circuit diagram supplied in large blueprint form with tions for building. Requires 1-57, 1-58, 1-523, and 4-2A3 tubes. For 115 V. 60 Cycles A. 14E10683—Complete Par. P. P. 2A3 Kit less tubes and shield.

tubes and shield.
YOUR PRICE \$33.50

114E10684—Same with seven matched Raytheon Tubes

YOUR PRICE ..... \$40.00



# Highest Efficiency at Lowest Cost 6 WATT A. C. "P. A." AMPLIFIER

- Two Stages
- Push Pull 2A5'S
- Improved Class "A"
- Tone Control
- Five Out-Put Taps
- Master Volume Control
- 10 Watt Speaker Field Supply

# Finest Quality At Low Cost

At Low Cost

This amplifier is very similar in design to the 15 watt job shown on the opposite page. Quality of reproduction is in every way equal to the 15 watt, the big difference being in output capacity. At maximum power, amplifier will cover indoor audiences of 600 people or about 3000 square feet outdoors. These figures are conservative and are based on tests made with high noise backgrounds. Under ordinary noise conditions about twice this coverage can be expected. Amplifier will operate one single large dynamic speaker or two or three smaller ones, or one dynamic horn unit; or 12 magnetic speakers; or 100 headphones; or any proportionate combination of them. When using one dynamic speaker, it can be placed in front of the audience; or three dynamic speakers can be appead back to heak the head the return of the sudience; or three dynamic speakers can be appead back to heak the head the sector of or three dynamic speakers can be placed back to back in the center of audience, to give a more even distri-bution of sound.

# **Carrying Case** For 15 Watt Amplifier

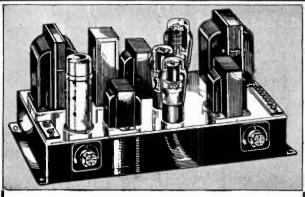


14E 10673 List Price. \$12.50 YOUR PRICE

\$5.75

Holds amplifier with or with-

out shield.
Amplifier can
be bolted permanently to bottom
tray or left loose as desired. Extra
room for carrying control unit and
microphone in addition to amplifier.
Strongly reinforced, rigid laminated
ply-wood construction. Handsome black leatherette covering.



Amplifler Characteristics

Amplifier Characteristics

1.—6 Watts undistorted Power Output to speaker voice coils:—2.—Supplies 10 watts for thousand ohm field coils (enough for one large dynamic with 1000 ohm field or two smaler ones in parallel with 2,000 ohm fields):—3.— Two Stages with four tubes, 1.—56 transformer coupled to 2-2A3/s in push-pull. Type 80 Rectifier:—4.—60 D. B. Gain at 1000 cycles:—5.—Practically Flat Frequency Characteristic Curve within 3 D. B. Fuss in power supply required 105-120 volts, 50-60 cycle A.—6.—Input impedance 200,000 ohms:—7.—Master volume Control with etched metal indicating plate:—8.—Combined To ne Control and On-off Switch:—9.—Output Impedance Tapped at 3, 6, 9, 15 and 500 ohms. Connections brought

# For Microphone or Phonograph

Por Microphone or Fhonograph
Amplification
Phono-pickup, of high Impedance type,
may be connected directly to amplifier
input. When using microphone it is
necessary to use a rontrol unit like
stock number 4£10700 described on
page (11) or suitable microphone
transformer. Control unit can also
be used for mixing or fading phonograph with microphone.

Master Volume Control Gives complete control over all inputs. Tone control and On-off switch com-bined, is mounted on amplifier chassis.

# For Recording

Extremely low hum level and straight line fidelity characteristics make this amplifier particularly desirable for recording Programs, Sound effects for Broadcasting purposes, home talkies, advertising talks, political speeches, etc. Fine results can be obtained if balance of equipment used is of good quality.

# Heavy Duty Chokes

are built into amplifier. D.C. dynamic speaker field coils are not a part of the filter system in this amplifier Beautifully etched control plates are nounted under both volume control and Tone control on-off switch.

14E10660--Factory wired, laboratory tested without tubes. List Price, \$45.00.

YOUR PRICE \$2150

14E10661—With four Raytheon matched Tubes. 1-'56; 2-2A5's; 1-'80. List Price, \$50.00. \$2400 YOUR PRICE .....

For installation in recording studios, clubrooms, small auditoriums, small call systems, lodge halls, De Luxe phonograph installations, school rooms,

Layout and schematic diagrams giv-ing all essential specifications and in-formation are included.

Carefully Designed
Highest efficiency is engineered into every minute detail. Ample ventilation keeps operating temperature at lowest point. All transformers, chokes, main filter condensers and voltage amplifier tubes are fully shielded. The skillful engineering and careful design have reduced hum so low that hum noise is practically inaudible even within a few inches of speaker with volume control inches of speaker with volume control full on but with no input connected. All wiring and parts easily accessible. Layout diagram, showing exact position of each wire and part, together with schematic hookup, are furnished. All parts used are standard. Diagram gives all essential specifications of each part, eliminating guess work in replacement and making repairing quick and easy. In addition to the diagrams a comprehensive instruction sheet for the assembly of a high quality sound system is included with each amplifier.

# Installation Shield For 6-Watt Amplifier

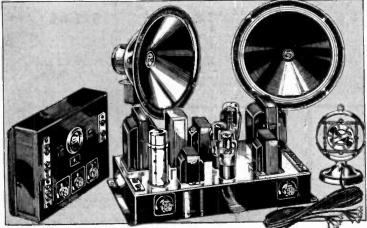
14E10672-List Price, \$8.00. YOUR PRICE

\$4.60

Heavy sheet me-

Heavy sheet me-tal perforated shield. Should be purchased with each amplifier or complete system. Prevents tampering with unit or theft and accidental breakage of tubes. Enhances appear-ance and adds greatly to value of amplifler

# Components for Complete 6 Watt "P. A." System



## Equipment Included

watt Amplifier, described above:-Four Raytheon List Price, \$90.00. 6 watt Amplifier, described above:—Four Raytheon Tubes, 1-'56, 2-2A5, 1-'80:—Input Control Panel (fully described on page 111):—Two 11 inch dynamic cone speakers:—Ten foot 2 conductor shielded microphone cable:—Ten feet single conductor shielde

114E10662-Complete Outfit

For 105-120 Volt 50-60 Cycle

A.C. Current Supply
For store advertising, call systems, inter-office communication, vaudeville acts, restaurant order systems, churches, ludge halls, etc. Especially adapted for average sized automobile or truck sound installations. Volume and quality of reproduction are such that voice and music will attract attention and be distinctly understood for a city block in residential districts. The 100 watt Powerack converter listed on page 124, obtaining power from car motor can be used as amplifier power source—System at maximum output has sufficient volume to cover an indoor audience of 900 people or an quidoor area of about 4000 square feet. May be installed wherever 105-120 volt 60 cycle A.C. is available. Microphone or phonograph can be amplified through this system. Master volume control is mounted on chassis, giving control over all inputs.

Mixer Unit Gives Perfect Control

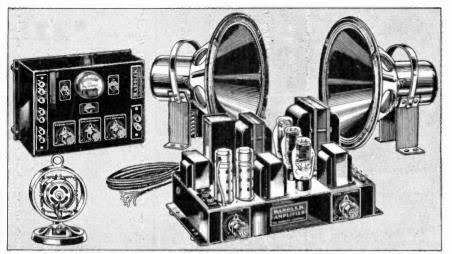
Mixer Unit Gives Perfect Control

Mixer Unit Gives Perfect Control

Input control unit is supplied for connection of above
sound sources to amplifier. Meter and switching system
is incorporated in soput unit for reading current on either
or both buttons of microphone. Controls on unit enable
mixing or fading from microphone to phonograph.
A pleasing and novel effect can be obtained by providing
a musical background for voice. This feature is a splendid
advantage for home entertainment or advertising stunts.
Output is tapped for various connection combinations to
speaker voice coils or 500 ohm line. Two 500 ohm field
dynamic speakers are supplied obtaining their field supply direct from amplifier. Two additional dynamic speakers
may be used and placed back to back with speakers in
system to give a more thorough coverage of the area to be
supplied with sound. They must obtain their field supply
from an outside source such as A.C. line or 6 volt storage
battery. Heavy duty chokes are built into amplifier, hence
D.C. dynamic speaker fields are not a part of filter system.
This makes it possible to substitute up to 12 magnetic
speakers or 100 headphones in place of dynamic speakers.
Without connection of external resistors or chokes, magmetics or headphones can also be used in conjunction with
dynamic speakers in any proportionate combination. Speakers may be operated at any distance from amplifier, the
only limiting factor being the resistance drop in the conmeeting wires used and the resultant power loss.

# How to Plan A Complete 15 WATT "P. A." SYSTEM

For 105-120 Volt 60 Cycle A.C. Supply



## Make BIG PROFITS. Sell and Rent P. A. Systems for DANCE HALLS

ATHLETIC FIELDS AUDITORIUMS

**CHURCHES** 

SOUND TRUCKS • SCHOOLS • HOTELS

Sell a complete amplifier! Your customer will want more than just an amplifier—results are what will bring you quick payment and profits. "COMPLETE, ready to use" should be your sales slogan. Essential parts of the Hado-lek 15 Watt system are listed on this page. In addition you will need wire, additional mirophones on large installations, phono pickups, phono-record turn tables, remote monitor speakers. "T" pad attenuators where speaker control is desired. Everything you may need is listed in this catalog. Allow yourself a generous profit on every item you sell. Your market includes Auditoriums, Parks, Churches, Schools, Refectories, Balirooms, Theaters, Hotels, and Dance Orchestras. Prove that P.A. increases a clients business.

Profit from Rental. Many Radio Servicemen through fental of P.A. equipment increase their profits. Excellent markets for rental service are County Pairs, Political Meetings, Real Estate Sales Promotion. Football Games, Pep Meetings and special advertising projects for retail merchants. \$10 to \$25 per day is the usual charge for use of a Two speaker 15 watt job with attendant.

Mobils Advertising. Sound truck advertising has become one of the best types of promotion publicity available. A panel truck with space for advertising banners and the Radolek 15 watt amplifier can be rented for \$25 to \$100 a day. Excellent for parades, political promotion, merchandise advertising and plente entertainment.

# Complete Ready to Operate

powerful public address system particularly suited for installation in auditoriums, automobiles, and trucks, lodge halls, churches, large store advertising systems, theatres, etc. An Ideal system for sound truck installation. Sound can be heard clearly and call systems, athletic fields, large distinctly understood for up to about two city blocks under favorable noise conditions. When used for auto installations, fan beit driven 150 to 175 watt Auto Fan Belt generator is used for 110 volt A.C. power supply. At for 110 volt A.C. power supply. At maximum power, system will give volume to cover indoor audiences of 2500 people or about 10,000 square feet outdoors. These figures are conservative and based on tests made with high noise backgrounds. Under ordinary noise conditions, about twice this covnoise conditions, about erage can be expected.

For Microphone or Phonograph Microphone and phonograph inputs can be amplified through this system. High impedance phonograph pickup can

be connected directly to amplifier. When using microphone, an impedance matching device is necessary. Input control unit is supplied with system for this purpose and is arranged for for this purpose and is arranged for the most convenient connection of all inputs to amplifier. Meter and switches are incorporated in input unit for reading current on either or both buttons of microphone Variable resistor regulates microphone current. In addition current control is mounted on microphone stand for easy regulation of current. Prevents damage to microphone and assists in controlling feedback.

Tone control mounted on amplifier allows complete variation of tone. Also assists in reducing feedback and com-pensating for room acoustics.

PRICE

# Complete Control Over-all Inputs

Two volume controls on the Control unit are inter-connected to enable mixing or fading from microphone to phonograph. A pleasing and novel unit are inter-connected to enable mixing or fading from microphone to bhonograph. A pleasing and novel effect can be obtained by providing a musical background for voice. This feature is a splendid advantage for home entertainment or advertising stunts. Two auditorium D.C. dynamic speakers are used for sound output. They obtain their field supply from amplifier. Heavy duty chokes are built into amplifier, hence dynamic speaker Eelds are not used as part of filter system. This makes it possible to substitute up to 130 magnetic conespeakers or 200 headsets in place of dynamic speakers, without connection of external resistors or chokes. Magnetic cones or headphones can also be used in conjunction with dynamic speakers in any proportionate combination.

# Portable P. A. Speaker Housing



PRICE
Case is divided diagonally and
will house two speakers
When put together case is
only slightly larger than ease
necessary for only one speaker.
When set on flour speaker,
throw sound unward and out
into the room. Speakers may be hung from celling and pointed down. Two holes in side of case prevent formation of air

14E10486\$1050

case prevent formation or air custion which interferes with cone action. When case is closed speaker cones face fabrikoid covered baffle area giving maximum protection giving maximum cracettion can readily the store of solid parts of the control of the store of solid parts of the control of the store of solid parts of the control of the store of solid parts of the control of the store of solid parts of the store of solid parts of the store of the store of solid parts of the store o against speaker damage. against speaker damage. Battle is singed so that each section can readily be spened and inner space used for storage of cables, microphomes, etc. Baffle opening is 12%; case will accommodate speakers with cone diameter up to 13%. Case is rigidly constructed of laminated plywood cevered overall with durable and beautiful black fabrikoid. Reinforced with metal corner guards. Carrying handle will not pull out. Overall size 19%" high x 15%" wide x 153%" deep; net weight, 33 lbs.

# 175 Watt Generator For Auto Public Address Installations



Supplies 175 watts of 110 volt 60 cycle A.C. Operates off Fan belt. Provides very satisfactory current supply for above system. See page 124 for comabove system. So nlete description.

4E10803-\$38.22 YOUR PRICE ......

# USING

- Three Stage 15-Watt Amplifier
- Five Raytheon Tubes
- Input Control Panel
- Two DC Auditorium Dynamic Speakers
- 50 Ft. Shielded Micro-
- phone Cable Shielded Input Cable
- Double Button Carbon Microphone
- Microphone Stand **All These Component Parts**

# ONLY!

Equipment listed above. 14E10674-List Price, \$139.00. YOUR PRICE,

Amplifier used is completely described on page 117.

Speaker and microphone cables are listed on page 97.

500 ohm line to speaker voice coil transformers listed on page 109.

# Optional Equipment



Installation Shield

recommended for use with complete system. It adds to appear-ance of installa-tion and gives

extra protection. Allows plenty of ventilation to amplifier. Listed and described on opposite page.

Mike and Stand
The above system will
give excellent results in
practically all cases, but
where better reproduction
is required we recommend
the use of a higher quality microphone. The balance of the equipment is
suitable for the very best
systems. Mike and Stand systems. Shure Model 22B Mi-

snure Model 228 Microphone and floor stand instead of mike and stand listed above.
3E2942—List Price, \$35.00.
Yaur Price, \$12.65

Available at this price only when purchased with above system. Add \$12.65 to the total purchase price \$69.50 specified



Amplifier Carrying Case Amplifier Carrying Case
For use in transporting amplifier from
one installation to another. Bottom
tray is so constructed that amplifier
may be attached permanently. All
controls and connections are readily
available. Will fit 30, 15, or 6 watt
amplifier with or without installation
shield. With amplifier in case there
is enough additional room for carrying control unit and microphone.
Beautiful black fabrikoid covering.
Solid Laminated plywood construction
throughout, strongly reinforced corners
and handle. Positive hinge fasteners;
Size 21%" long, 11%" wide, 12%"
high.

14E10673-List Price, \$12,50. YOUR PRICE ..... \$5.75

# 15 WATT "P. A." AMPLIFIER The General Purpose Model Best for 80% of Your Jobs

For 105-120 Volt, 50-60 cycle A. C. Operation

Three Stages

Push-Pull 2A3's

Five Tap Output TONE CONTROL

Hum Free Operation

Master Volume Control Improved Class "A" Prime

30 Watt Speaker Field Supply

14E10670-Factory wired. Laboratory Tested, without Tubes.

YOUR PRICE .......\$2

14E10671-With five Raytheon matched Tubes 1-57, 1-56, 2-2A3, 1-5Z3. List Price. \$68.85. YOUR PRICE

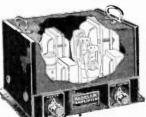
# For Every Type Installation

Ample volume for 2500 people: Will provide good sound coverage for conventions, school auditoriums, large refectories, county fairs, ball-rooms, athletic fields, and other locations where plenty of volume with good clarity is required. Economical and efclarity is required. Economical and efficient. Easy to install permanently or for part time use. Excellent for use with hotel installations having a speaker in each room. Extensively used in schools and colleges for 'pep' meetings and experimental work. The splendid tone characteristic colleges for 'pep' meetings and experimental work. The splendid tone characteristic of this amplifier adapts it for "sound" movie installations and for sound recording studios. Uses the new 2A3 tubes, (superior to old type '50 tubes). Improved class "A" prime, giving the high efficiency of class "B" with the beautiful tone quality of class "A". Over 75 DB gain. Only .015 volt input required for maximum outers. Schedid for required for maximum output. Splendid for use in sound truck employing 175 watt fan-belt driven generator described elsewhere.

## Handles 8 Dynamic Speakers

Provides 15 watts of power for speaker voice coils. This output can be used to operate 3 large dynamic speakers or 8 smaller ones or 3 dynamic horns or 30 magnetic cones or 200 headsets or any proportionate combination of them. When using 3 large dynamic speakers they can be placed in front of the audience. 8 smaller dynamic speakers can be placed back to back in the center of the same size audience to give a more even distribution of sound. At maximum power, amplifier will give volume to cover indoor audiences of 2500 people or about 10,000 square feet outdoors. These figures are only approximate as definite information cannot be given due to varying conditions under which equipment is used. Where prevailing noise levels are low a larger coverage can be expected.

# Installation Shield

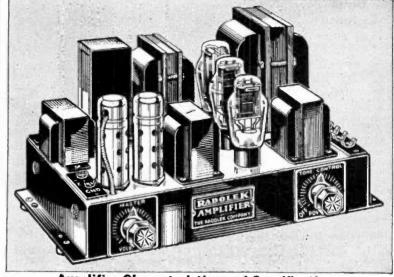


14E10672-List. \$8.00. Your Price

\$4.60

Heavy sheet metal perforated shield. Provides perfect mechanical protection. More shleld mechanical protection. More than enough ventilation to keep amplifier at proper operating temperature. Fits amplifier snugly. Baked-on black enamel finsh. Adds a professional appearance to any installation that will easily bring you \$\$.00, additional.

You should sell this shield with every Amplifier. It is well worth the additional investment to your customer.



**Amplifier Characteristics and Specifications** 

15 Watts undistorted Power Output to speaker

voice colls.
(2) Supplies 30 watts for 1000 ohm field colls (enough for three large dynamics). Connections provided for one, two or three separate speaker

provided for one, two or three separate speaker fields.

(3) Three Stages with five tubes, '57 resistance coupled, to '56 transformer coupled, to two '2A3's in push pull. 523 Rectifier.

(4) 77 D.B. Gain at 1000 cycles.

(5) Fractically Flat Frequency Characteristic Curve within 2 D.B. from 59 to 8,000 cycles.

(6) Input impedance 200,000 ohms.

(7) Master Volume Control with etched metal indication late.

(7) Master Volume Control.
Indicating plate
(8) Tone Control and On-Off Switch Combined
(9) Output Impedance Tapped at 3, 6, 9, 15, and
500 ohms. Connections brought out to bakelite

(10) Only .015 volts input signal required to obtain maximum output.

obtain maximum output.

(fi) Hum level lover than encountered in average good quality A.C. Radlo (this is the lowest of any amplifier we have ever observed).

(12) Power consumption 150 watts.

(13) Power Supply required, 105-120 volts, 50-60 male A.1.

(13) Power Supply required, 105-120 volts, 50-60 cycle A.C.
(14) Six foot super service power connection cord with unbreakable rubber attaching plur.
(15) Renewable Glass Fuse in power supply.

(16) Bottom protecting plate with four rubber feet entirely encloses base.

(17) Ample provision for ventilation.
(18) Rich Baked-on Black Enameled finish.

(19) Overall height 8"; Base width 9"; Length 16"; Height 23,".

(20) Net weight, 25 lbs., Shipping weight, 40 lbs.

# For Microphone or Phonograph Amplification

Phonograph may be connected directly to amplifier input. When using microphone it is necessary to may a control unit like stock number 4E10700 described on page 11, or suitable microphone Transformer, Microphone transformer, is not mounted on chassis because this is primarily bad engineering and should be avoided wherever possible. The hum level in our amplifiers is so low that it is barely audible within a foot from speaker with full output. This low hum level can be maintained only when fipput transformer is mounted at least a foot

output. This low hum level can be maintained only when input transformer is mounted at least a foot away from chassis and out of power transformer field. Construction of amplifier makes it much more convenient for the hookup of multi-mixer circuits. Master volume control gives control over all inputs-Combination tone control and on-off switch mounted on amplifiary charges. Connections for out-mixed or provided the control of the control Combination tone control and on-off switch mounted on amplifier chassis. Connections for out-puts of 3, 6, 9 or 15 ohm impedance, permitting the proper connection of dynamic speaker or speakers of any voice coil impedance—Separate winding of 500 ohms impedance provides connections for one or more headphones or magnetic speakers, or for Dynamic speakers when used at a distance. 500 ohm Speaker Line Matching Transformers for use with a number of dynamic speakers on the 500 ohm line output listed en page 109.

Built for Heavy Service Finest Quality-Carefully Engineered Power input line is fused with standard tubular glass fuse-All parts

mounted on strong, rigid non-rusting alloy metal. Entire unit finished in rith baked-on black enamel; layout of component parts insures high-ef-ficiency Ample ventilation keeps



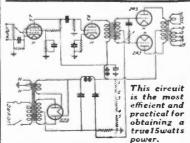
component parts insures high-efficiency—Ample ventiliation keeps operating temperature at low est point. All transformers, chokes, main fifter condensers and voltage amplifier tubes are fully and separately shielded. We do not attempt to lower the quality and save a few certs by placing all parts under a single shield which would make the unit susceptible to overheating, mechanical vibration, hum and electrical feed-back, (Motorbacting). All wiring and parts easily accessible. Layout diagram, showing exact position of each wire and part, together with schematic bookup, are furnished—All parts used are standard—Diagram gives all essential specifications of each part, making repair work quick and easy. and east.

Wide Range Frequency Response: Cathode Ray Oseiliograph tests proved that the output of this amplifier was linear over practically the entire audio range and free from distortion harmonics within the rated output.

# Simple Efficient Circuit

The outstanding feature of the circuit of this Amplifier is the unique method of securing bias voitage for the Push-Pull 2A3 power tubes. This is accomplished through a \$10 olm section of the bleeder resistance; the bias resistance carrying a constant current of 100 MA in addition to the 53 MA for the 2A3's. A pecularity of the 2A3 tubes is the increase in plate current with strong, signal inputs. The design of the Radolek amplifier bias circuit makes an increase in power tube plate current such a small portion of the total current flowing through the bias resistor as to not appreciably reduce the effective power output.

Field current supply is 300 voits at 100 Ma. or 30 watts across 3000 ohms resistance. Three tabs are incorporated one at each 1000 ohms. The combinations of power for speaker fields are many. The fields of as many as ten dynamic speakers of the smaller type can be handled efficiently.



# STADIUM "P. A." SYSTEM 30 Watts—For Maximum Coverage

# Made Up of Radolek Standard P. A. Units

# Units Included

Chree stage 30 watt am-lifier (See opposite rage).

matched Seven Ravheon tubes 1-57, 1-56, -2A3's, 1-5Z3. heon

Input control panel See page 111.)

Two 141/2" auditorium See page 113.) lynamic cone

High quality \$25.00 ist double button carbon nicrophone.

Microphone floor stand with eight mounting prings.

Ten foot shielded microshone cable.

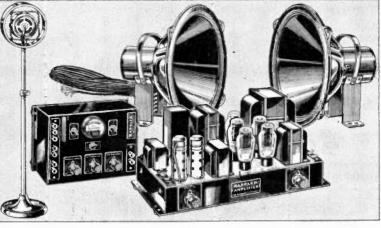
urrent supply from amplifier.

Ten foot shielded consecting cable.

**Auditorium Dynamic Speakers** 

Additorium Dynamic Speakers
The two speakers turnished are of the highest
quality. See page 113 for complete description.
Vill handle the tremendous output of the ampliler with a full natural tone. Use of extra heavy
leid coils in speaker construction together with
lever engineering design makes these speakers
anny times as sensitive as the average unit. Speakers
ann be used up to 1000 feet away from amplifier,
f 500 ohm line connection on amplifier is used.
-00 ohm line matching transformers are mt furnshed with system. See page 109 stock number
E4360 for suitable transformer. When using
peakers within seventy-five feet of amplifier con-

of one the latering carry of the stock number 184360 for suitable transformer. When using peakers within seventy-five feet of amplifier concertions can be made from amplifier direct to voice oils. Speaker fields are 1500 ohms and obtain



# PRICE

30 Watt Stadium P. A. System As Illustrated and Including Units as
Specified Above
System as described.

14E10688-List Price, \$199.00. YOUR PRICE

For Portable Installations

Use 14E10485 speaker housing listed on page 116. When system is used in a permanent installation use as large a speaker baffle as is practical. To obtain the best volume and quality of reproduction from this system do not use as baffle which has an effective area of less than nine course feet. which has square feet.

# Used

for

Stadiums

Conventions

Race Tracks

Dance Halls

Dinner Clubs

Large Churches

Athletic Fields

Political Rallies

Large Auditoriums Store Call Systems

Large Sound Trucks

For 105-120 60 Cycle A.C. Supply

## **Our Finest and Most Powerful Public Address System**

Particularly suited for large installations requiring Particularly sulted for large installations requiring a great amount of power with highest quality tone. Prequency response of system is exceptionally flat. Dance Halis and Auditoriums will find this system well sulted for permanent installations. Ideal for use in DeLuxe sound truck installations. Sound can be heard clearly and distinctly understood for about six city blocks under favorable noise conditions. At maximum output using the two glant dynamic speakers included, the system will cover indoor audiences of up to 8000 people, or an outiloor area of about 25000 square feet. All connections are plainly marked making it easy to correctly and quickly assemble system.

# 3 Channel "P.A." Rack and Panel

For Centralized Installations in Schools, Hotels, Clubs, Etc.

Schools, Hotels, Clubs, Etc.

A complete assembly of all parts on a neat and convenient rack for permanent installation. Equipment included consists of 6 tube radio tunes, two speed phonograph motor and pickup, two microphone mixer, 30 watt power amplifier, speaker switching panel and monitor speaker. All units are interconnected for the most flexible and efficient operation of all or each part. 

The Radio Receiver is a 6 tube dual wave superheterodyne. Complete description of set sent on request.

Built-in Phono-Motor and Pickup plays both 33 ¼ and 78 R.P.M. records. Specially weighted 22" turntable gives smooth operation on allow speed records. High quality pickup perfectly balanced gives best results on either speed record. Automatic stop and switch also included.

Three Channel Mixing Panel provides two charges for miterophones.

thannels for microbiones and one for phono-graph or radio. Complete description is given in next column.

30 Watt Power Amplifier is three stage modified class "A" prime unit. Complete technical descrip-tion of amplifier is given on age 119.
20 Speaker Switching Panel for page

remote control of all or any one speaker. We connect this panel to sult your particular installation. When placing your order be sure to state the quantity of each type of speaker you wish to use.

type of speaker you wish to use.

Master Volume Control provides volume adjustment over all three channels.

Master Tone Control controls tone from bass to treble for all three channels.

Complete as described with set of matched Raytheon tubes: 2-58's, 1-246, 1-247.

1-2A5, 1-56, 1-80, 1-57, 4-2A3's, 1-5Z3.

14E10690-List Price, \$390.00.

YOUR PRICE ... \$19500

We are prepared to supply complete Public Address Rack and Panel equipment to meet any requirements. Send us the specifications on your next job. Our engineering department will be glad to give you quotations and all assistance necessary. Our efficient laboratory and manufacturing facilities assure you of quality merchand so and we assure you of a price on which you can make a handsome profit.

# 3 Channel Input Control & Mixer For Public Address and Broadcast Work

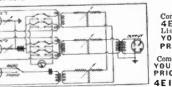


Mixer and Fader

A high quality unit for mixing and fading the outputs from two microphones and phonograph or radio. Connects directly to grid of first input tube on amplifier. Three distinct input channels are provided. Two channels are for carbon microphone or low impedance phonograph pickup or for condenser, velocity or crystal microphones when used with preamplifier. The third channel is for connection of high impedance phono pickup and The third channel is for connection of high impedance phono pickup and radio with switch for changing from phono to radio. The three channels can be faded from one to the other or mixed to any desired degree. Separate transformer and T pad volume control is provided for each input channel. A fourth transformer ties the input channels into one output channel of high impedance to mater grid of input tube on any amplifier. Microphone Current Control.

separate microphone current control provided for the two microphone in-

put channels. 0-25 milliammeter in conjunction with four toggle switches indicate the current on each microphone button. Switches can also be thrown so as to read current drain for both buttons at once. Switching arrangement is very simple and gives absolutely accurate readings. 2-4½ you! "C" batterles are mounted inside case and furnish microphone button current. All connections to unit are made through extra strong moulded bakelite sockets. Metal case provides perfect shielding. All parts are grounded so that 0-25 milliammeter in put channels. ing. All parts are grounded so that there is no hum pickup from this unit. To prevent hum, shielded cable unit. To prevent hum, shielded cable should be used for connecting to amplifier input and for conceting high impedance inputs to control panel. Case is of 16 gauge steel finished in durable baked black enamel. Beautifully etched metal indicating plates are mounted under each control. Case size 7½" deep. 6" high. 17½" wide. Shipping weight 16 lbs.



Prices

Complete with Trip. 4E10701— List Price, \$43.90. with Triplett meter. YOUR \$21.95

Complete with Readrite meter. 4E10702-

Copyright 1934 by W. C. Braun

# 30 WATT "P. A." AMPLIFIER Tremendous Power with Flawless Tone

For 105-120 Volts 50-60 cycle A. C. operation

- Three Stages
- Tone Control
- 5 Tap Output
- Master Volume Control
- Parallel Push Pull 2A3's
- Improved Class "A" Prime
- 30 Watts Speaker Field Supply

**Prices** 

14E10685-Factory wired; Laboratory tested;

List Price \$75.00.

YOUR PRICE ..... 14E10686-With

Seven Raytheon Matched 56, 4-2A3, 1-5Z3,

tubes, 1-'57, 1-'56 List Price \$88.35. YOUR PRICE \$44.00 Layout and schematic diagrams giving all essential specifications and information are included.

## For Microphone and Phonograph Amplification

High impedance phonograph pickup may be connected directly to amplifier. Microphone connections are made through suitable matching transformer. The above connections can be made and controlled through input control units described on pages 111 through input control units described on pages 111 and 118. Master volume control and etched metal indicating plate are mounted on amplifier. Control gives complete volume variation for all input signals. Combination tone control and on-off switch with etched metal indicating plate are also mounted om amplifier. Tone control allows accentuation or attenuation of lows and highs. This feature is useful in assisting to eliminate acoustic feedback or to compensate for poor room acoustics.

## For All Large Installations

For All Large Installations.

Adapted for very large installations, such as athletic fields, auditoriums, conventions, avlation fields, large deluxe call systems, large hotel installations, political gatherings, etc. A very powerful sound truck installation can be made with this amplifier, using the 180 watt Fan Beit driven Automobile Generator. Systems for large theater installations can also be very satisfactorily and economically built up around this unit. At maximum power this amplifier will give sufficient volume to cover indoor audiences of 8000 people or about 25,000 square feet outdoors. These figures are conservative and based on tests made with high noise backgrounds. Provides 30 watts for speaker voice coils. This output can be used to operate 5 large dynamic speakers or 12 small dynamic or Kinematic units or 5 dynamic horns or 30 magnetic cones or 400 headsets or any proportionate speakers they can be placed in front of the audience or up to 12 dynamic speakers can be placed back to back in the center of the same stzed audience to give a more even distribution of sound. sound.

## For Greater Output

Two or three of these amplifiers can be connected in parallel to obtain 60 or 90 watts total output at a much lower total cost than a single amplifier of such output using \$45\structure{5}\sigma\$ or similar tubes. Coverage at 60 watts would be 16,000 people indoors and \$60.000 except feet outdoors. 60,000 square feet outdoors.

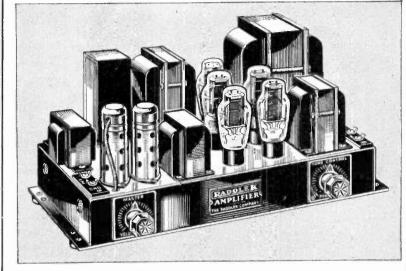
# **Amplifier Installation Shield** For 30 Watt Amplifier



14E10687-List Price \$10.00.

\$475 YOUR PRICE .....

Heavy sheet metal perforated shield provides per-Heavy sheet metal perforated shield provides per-fect mechanical protection and allows ample ven-tilation for amplifiers. Fits amplifier perfectly, Baked-on black enamel finish. You should sell this shield with every amplifier. It is well worth the additional investment to your customer.



Amplifier Characteristics and Specifications

30 watts undistorted power output to speaker voice colls. Supplies 30 watts for 1000 ohm field colls

Supplies 30 watts for 1000 ohm field colls gh for three large dynamics).

Three stages with seven tubes, '57 resistance coupled to '56 transformer couplet, to four 2.42's in parallel push-pull. 57.23 rectifier.

4. 82 D.B. Gain at 1000 cycles.

5. Practically Flat Frequency Curve within 2 D.B. from 50 to 8,000 cycles.

trum 30 to 8,000

6. Input impedance, 200,000 ohms.

7. MASTER VOLUME CONTROL
with etched metal indicating plate.

8. TONE CONTROL and on-off switch combined, with etched metal indicating plate.

9. Output impedance tapped at 3, 6, 9, 15 and 500 ohms. Connections brought out to bakelite strip with values engraved at each binding post.

10. Only 01 voits input signal required to obtain maximum output.

Tremendous Power.

tain maximum output.

Tremendous Power with Finest Tone Quality
This amplifier gives more undistorted power than has ever previously been obtained from an equivalent combination of tubes. The added power, frequency response, and ability to operate at very low volume without distortion more than outwelghs any advantage that class "B" or full class "A" prime operation may have. Glives the same sweet and pure reproduction that could formerly be obtained only by the use of four 250 tubes, in straight class "A" combination. The characteristics of the amplifier are such that it will falthfully reproduce all voice and music, including that of the new wide range sound-films. wide range sound-films.

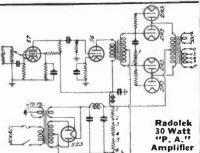
# Amplifier Carrying Case For 30 Watt Amplifier



Laminated plywood covered with koid. ed with durable Fabri-koid. Completely describ-ed on page 116.

14E10673-List Price \$12.50.

\$575 YOUR PRICE ....



11. Hum level lower than encountered in average good quality A.C. Radio. (This is the lowest hum level of any amplither we have ever observed.)
12. Power consumption, 180 watts.
13. Power supply required, 105-120 volts, 50-60

A.C. Six foot super service connection cord with unbreakable rub-

ber attaching plug.
15. Renewable Glass Fuse in power

15. Remewable Glass Fuse in power supply.
16. Bottom protecting plate with four rubber feet entirely encloses base.
17. Ample provision for ventilation.
18. Rich Baked-on Black Enameled finish.
19. Overall height 8½"; base width 9", length 20", height 23".
20. Net weight, 32 lbs., shipping weight, 50 lbs.

lbs.

# Very Finest Construction

Very Finest Construction

Very Finest Construction

dynamic speaker field colls are not a part of the
filter system in this amplifier. While this type
of construction adds considerably to the cost, very
best filtering aefion is provided for any make D.C.
speaker and in addition no external chokes are ever
required, as are necessary on most other amplifiers,
when they are seed with A.C. type dynamic speakers, magnetic speakers, dynamic speaker units or
head sets.

All parts mounted on strong, rigid, nonrusting
alloy metal chassis. Layout of component parts insures highest efficiency. Ample ventilation keeps
operating temperature at lowest point. All transformers, chokes, main filter condenser and voltage
amplifier tubes are fully shelded. Skillful engineering and design have reduced hum so low
that hum is practically inaudible even within a
few Inches of speaker with volume control full on
but with no input connected. Layout diagram,
showing exact position of cach were and part to nemes or speaker with volume control full but with no input connected. Layout diag: showing exact position of each wire and part, gether with schematic hookup, are furnished. parts used are standard. Layout diagram, ire and part, to-e furnished. All

# Portable P. A. Speaker Housing



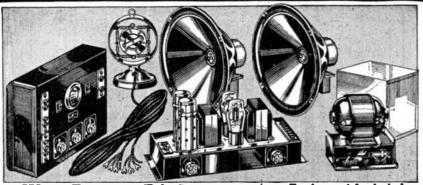
Will House 8" to 14" Cone Speaker 14E10485-List Price \$7.00.

YOUR PRICE

Durable Fabrikoid covered case with metal corner guards. metal corner guards.
Designed for use with
all types of indoor
and outdoor public
address equipment.
Ample baffle surface

Ample baffle surface for excellent tone reproduction. For mounting all standard sizes of dynamic and magnetic speakers between 8" and 14" diameter. Copper screen protects one from bugs and dirt. Button Fabrikold flap over speaker opening for protection of cone against weather. Extra strong wood frame. Thoroughly impregnated to resist moisture. Specify size of speaker opening desired when ordering. Dimensions, 15"x15"x11". Refer to page 116 for listing of two speaker carrying case.

# BATTERY "P. A." SYSTEMS Equal A.-C. Outfits in Power, Tone & Economy



# Watt Battery PA Systems Used Where Power A. C. is not Available

tems, political Eutherings, auditoriums, store advertising system, window display demonstrations, etc. This is the ideal system for a low cost efficient Automobile Sound Installation where coverage of an average city block in residential districts is all that is needed.

At maximum eutput has suffeiers power to cover an indoor audience of 600 reople or an outdoor area of 3000 square feet. These figures are conservative, and based on tests made with high noise backgrounds. Under ordinary noise conditions about twice this coverage can be ex-

ordinary noise conditions about twice this coverage can be expected. Can be completely operated by one 6 wilt storage battery when used with our public address "B" power supply, stock number 4£10196 on page 125. The tube filaments, of course, obtain their voltage diment from storage battery. If a battery. from storage battery. If a supply generator is not de-6-45 volt "B" batteries sired. may be used.

Especially suited for call sys | Microphone and phonograph can tems, political gutherings, sudi-toriums, store advertising sys Master volume control is mounted Master volume control is on amplifier chassis giving con-trol over all inputs. Input con-trol unit (completely described on trol unit (completely described on page 111) is supplied for connection and control of above sound sources to amplifier. Controls on unit enable mixing or fading from microphone to phonograph. A pleasing and novel effect can be obtained by providing a musical background for voice.

The two speakers furnished with the system will handle the full output. Additional speakers may be used for giving a non-directional coverage. Speakers used obtain field supply (11/2 amperes each) from 6 volt storage battery, and may be operated at any dis-tance from amplifier, the only limiting factor being the resist-ance drop in the lines and the resultant power loss,

# Equipment Included

G Watt. 3 stage Class "A" Battery Operated, Push Pull Amplifier; High Quality Double Button Carbon Microphone with eight springs and stand; Two 11 inch Dynamic Speakers; Input control unit (completely described on page 111); 10 foot 3 conductor shielded microphone cable; set four matched Raytheon tubes; 1-39, 1-37, 2-42.

14010655—Complete system as specified above with "B" Supply generator to operate from 6 volt storage battery. \$6600 List Price \$136.00. YOUR PRICE

14D10656—Complete system as speci-fied above with 6-45 volt "B" Batteries. in place of generator.

List Price \$108.00. YOUR PRICE ..... \*495°

6 Watt Battery Amplifier Only 14D10657—Without tubes. List Price \$27.50. List Price \$27.50. YOUR PRICE ......\$16.50

14D10658—Complete with four Ray-theon Tubes: 1-39, 1-37, 2-42. List Price, \$33.40. \$19.45 YOUR PRICE ...

# 6 Watt Battery Operated Amplifier Specifications Class "A" Output

i. 6 Watts undistorted Power Output to speaker voice coils:—2. Three Stages with four tubes, '39 tube resistance coupled to '37 resistance coupled to 30 time resistance coupled to 31 transformer coupled to two 42's in push pull:

-3. 72 D. B. Gain at 1000 cycles:

-4. Practically Flat Frequency Characteristic Curve within 3 D. B. from 50 to 8000 cycles:

-5. Input impedance 200,000 ohms:

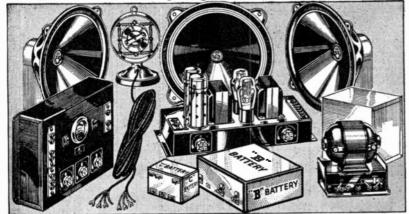
-6. Master Volume Control with etched metal redicaling pulse;

-7. Combination Tage Carl Master volume Control with eiched metal indicating plate:—7. Combination Tone Control and on-off switch:—8. Output impedance Tapped at 3, 6, 9, 15 and 500 ohms. Connections brought out to bakelite strip with values engraved at each binding post:—9. Only ovelts input signal required to obtain maximum output:—10. Power consumption 2 smperes for filament, 87 MA, for plate:—11. Power Sup-ply, 6 volts for filament, 270 volts for plate: -12. Bottom protecting plate with four rubfou. -13. Riv. Over--12. Bottom protecting plate with four ruber feet entirely encloses base:-13. Rich Baked-on Black Enameled finish:-14. Overall height 7½", base width 6", length 14", height 1½":-15. Net weight, 9 lbs. Shipping weight 16 lbs.

All parts mounted on strong, rigid, nonrusting steel chassis. Layout of component
parts insures highest efficiency. Transformers
and voltage amplifier tubes are fully shielded,
doing away with any residual hum. All wiring and parts easily accessible. Layout diagram, showing exact position of each wire
and part, together with schematic hookup
are furnished. All parts used are standard.
Diagram gives all essential specifications of
each part, climinating guesswork in replacement and making repairing quick and easy.



# 15 Watt Battery Operated PA Systems



For Microphone and Phonograph

Master volume control is mounted on amplifier chassis giving control over all inputs. Input control unit connects sound sources to amplifier. Meter and switching system are incorporated in input unit for reading current on either or both buttons of microphone. Controls on unit enable mixing or fading from microphone to phonograph. A pleasing and novel effect can be obtained by providing a musical background for voice. This feature is a splendid advantage for home entertainment or advertising sunts. advertising stunts.

This system is particularly well adapted for sound truck installations. May also be used for athletic fields, fairs, outdoor gatherings of all kinds, large store advertising systems, large call systems, etc. At maximum output, system has sufficient power to cover an indoor audience of 2.500 people or an outdoor area of 10,000 square feet. These figures are conservative and based on tests made with high noise background. Under ordinary noise conditions, about twice this coverage can be expected.

# **Equipment Included**

Used Where Power A.C. is not Available
15 watt 3 stage Class "A" Battery Operated
Push Pull Amplifier: High Quality Double Button Carbon Microphone with eight springs and
stand; three 11½ inch Dynamic Speakers; Input
Control Unit (completely described on page 115;
10 foot 3 conductor shielded microphone cable;
Set four Matched Raytheon Tubes; 1-39, 1-37,
2-2A3; 1-45 volt "C" battery; 1-22½ volt "C"

Prices Complete Outfits

14010677—Complete system as specified above with "B" Supply Generator to operate from 6 volt storage battery.

List Price \$165.00.
YOUR PRICE
14D10678—Complete system as specified above with six 45 volt "B" Batteries in place of with six 45 volt "B" Batteries in place of generator. List Price, \$137.00. \$71.50

# Amplifier Specifications Class "A" Output

Class "A" Output

1. 15 Watts undistorted power output to Speaker voice coils:—2. Three Stages with four tubes, "3s resistance coupled to "37 transformer coupled to two 2A3's in push pull:—3. 77 D. B. Gain at 1000 cycles:—4. Practically Flat Frequency Characteristle Curve within 3 D.B. from 50 to 8,000 cycles:—5. In pu t impedance 200,000 ohms:—6. Master Volume Control with etched metal indicating plate:—7. Combination Tone Control and on-off switch:—8. Output impedance Tapped at 3, 6, 9, 15 and 500 ohms. Connections brought out to bakelite strip with values engraved at each binding post:—9. Only .015 Voits input signal required to obtain maximum output:—10. Power supply required, 6 voits for flaments, 300 voits for plate, 62 voits: "C" blass:—11. Power consumption, 5.6 amperes for filament, 50 to 100 MA, for plate, no drain on "C" blattery:—12. Bottom protecting plate with four rubber feet, entirely encloses base:—13. Ample provision for ventilation:—14. Rich Baked-On Black Enameled finish:—15. Oversil height, 7", base width 7", length 14", height 2\%":—16. Net wt., 9 lbs. Ship. wt. 18 lbs.

Output is direct to voice colls of speakers or 500 ohm line. Speakers used obtain field supply from 6 volt storage battery and take 1½ amperes

# **Price Amplifier Only**

15 Watt Battery Operated
14D10675—Factory wired, laboratory tested, without tubes. List Price \$32.50.

| 14D| 0675—Factory wire d, laboratory tested, without tubes. List Price \$32.50. \$19.50 |
| 4D| 0676—Complete with 4 Matched Raytheon tubes, 1-39, 1-37, 2-2A3. List Price \$43.20. List Price \$43 YOUR PRICE



# Moderate Power with High Quality RADOLEK "PONY" "P. A." AMPLIFIERS

# 31/2 Watts Output 2A5 Power Tube

14E10650 Factory wired Laboratory tested amplifier, Less tubes.

List Price, \$20.00. YOUR PRICE.....

14E10651—With three Matched Ray-theon tubes 1-57, 1-2A5, 1.80. List Price, \$23.95. YOUR PRICE...............................\$11.65

Particularly suited for use as a phonograph amplifier, telephone booster, inter-communicating or small P.A. Systems. Has gain of 8 D. B. more than 2B6 amplifier but does not have as great a power output—nor as broad a frequency response. Has Many Uses

Both models are adupted for installations such as window display demonstrations, store advertising call systems, inter-office communications, telephone booster, school classrooms, restaurant installations, small dances, social gatherlings, racing returns, etc. At maximum power, 5 watt 2B6 amplifier will cover indoor audiences of 200 people or about 2000 square feet outdoors. At maximum power 3½ watt 2.45 amplifier. At maximum power 3½ watt 2A5 amplifier will cover indoor audiences of 150 people or about 1500 square feet outdoors. These figures are conservative and are based on tests made with high noise backgrounds. Under graftlary page conditions. oused on tests made with high noise back-grounds. Under ordinary noise conditions about twice this coverage can be expected. Provides 3½ or 5 watts output to voice coil. This output can be used to operate one D.C. wpeaker and one A.C. dynamic speaker or 10 magnetic speakers dynamic speaker of 10 magnetic speakers or 40 headsets or any proportionate combination of any of them. Field current supply 3 watts through 2500 ohm resistance. Speaker field is used as part of filter system in amplifier.

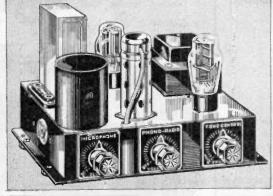
Mixer and Fader

speaker held is used as part of intersystem in amplifier.

Mixer and Fader

Three controls are mounted on amplifier, one of which is used to control microphone input volume, one for controlling volume of phonograph or other high impedance input and one for combination tone control and on-off switch. Beautifully etched control plates are mounted beneath each control. This combination allows operating either input at any volume desired, either alone or in conjunction with one another. The voice with a muiscal background can be used for many novel effects, for home entertainment or for special advertising features. Fading from one input to the other is also accomplished quite easily.

For 105-120 Volts 50-60 Cycles A.C.



- Microphone Input
- Phonograph Input
- Tone Control
- · Speaker Field Supply
- Mixer and Fader
- · Two Stages

# Characteristics and Specifications Of 31/2 Watt 2A5 and 5 Watt 2B6 Amplifiers

- Power Output to Speaker Voice Colls: 3½ watts for 2A5 Model. 5 watts for 2B6 Model. Supply field current for one 2500 ohm field speaker. Two stages with three tubes. 52 D. B. gain at 1000 cycles with 2B6 Model; 60 D. B. gain with 2A5. Practically Flat Frequency Characterists Corrections
- gain with 2A5.

  Practically Flat Frequency Characteristic Curve within 3 D. B. from 50 to 8000 cycles.

  Inout impedance 400 ohms center tapped for microphone. 50,000 obms for phono pickup and other inputs.

  Deal Volume Controls and Miker, etched metal plate. Combination Tone Control and on-off switch.

  Output impedances 5000 obms from plate of 2B6 tube; or 7000 obms from plate of 2B6.

- 10.
- only I volts input signal required for maximum output. Hum level lower than in average good quality A.C. Radio. Power Consumption 45 watts.

  Power Supply required, 105-120 volts, 50-60 cycles A.C. Six foot super service power connection cord with unpreakable
- rubber attaching plug.
- Bottom protecting plate with four rubber feet entirely en-closes base. Rich haked-on black enameled finish. Overal height 6%"; base, width 7", length 11", height

# 5 Watts Output 2B6 Power Tube

14E10680 Factory wired laboratory tested amplifier. Less tubes.

List Price, \$25.00. YOUR PRICE .....

14E | 068 | With three Matched Arcturus tubes; 1-57, 1-2B6, 1-80.
List Price, \$29.85. YOUR PRICE...... \$12.10

Conservatively rated at 5 watts, actually as high as seven watts can be obtained with only slight distortion which is not objectionable. Triede Type of tube construction is responsible for wider frequency response than is obtainable from the pentode 2.45. These features with greater power output greatly offset the slightly higher gain that is obtained from 2.45 tubes. 2A5 tubes.

Universal Input

Universal Input

Microphone Input is through transformer mounted on amplifier chassis. Transformer is of special construction so as to reduce residual hum to a minimum. Current for either single or double button interophone is supplied by 4½ volt "C" battery mounted inside amplifier. This battery will last about 3 months operating an average of 5 hours per day. Phonograph and additional high impedance inputs are direct to grid of 57 tubes with volume control connected across input. Input and output connections are conveniently made to plug-in seekets and jack. Output is direct from power tube and proper matching transformer must be used externally with speaker. Jack for plug-in of additional magnetic speaker is also provided.

Finest Construction

All parts mounted on strong, rigid, non-resting allow metal chassis.

Finest Construction
All parts mounted on strong, rigid, nonrusting alloy metal chassis—Entire unit
finished in rich baked black ename! Layout of component parts insures highest
efficiency—Ampie ventilation keeps operating temperature at lowest point—Transformers, main filter condenser and voltage
amplifter tubes are fully shelded—Skillful
engineering and design have reduced hum
to a very low point—All wiring and parts
easily accessible—Layout diagram, showing exact position of each wire and part,
together with schematic hookup, are furnfashed—All parts used are standard—Diaggram gives all essential specifications of
each part, eliminating guess work in replacement and making repairing quick and
easy.



This equipment includes a complete speech and phonograph Amilifier with Speaker mounted in a portable Carrying Case. For operation on 105-120 volt 50/60 cycle A.C. Can also be used very effectively in small automobile installations using the 50 watt fan belt driven 110 volt A.C. generator, stock number 4E 10801 described on page 121 Portable P. A. System complete with 3½ watt 2A5 amplifier described above and Raytheen tubes 1-57, 1-2B6, 1-80.

14E10652—
List Price, \$61.25.

Portable P. A. System complete with 5 watt 2B6 amplifier described above and Arcturus tubes 1-57, 1-2B6, 1-80.

14E10682—
List Price, \$61.75.

S29.955

VOUR PRICE.

S29.955

Vour PRICE.

Vo

# Portable 'P.A.' System For Small Indoor and Outdoor Audiences

For store advertising systems, home movies, political gatherings, parties and similar small audiences, this type of sound equipment is ideal. For window demonstration work this system affords immeasurable advantages over the old method of using printed cards for delivering the advertiser's message.

Equipment Included with 31/2 and 5 Watt Portable P.A.

System

Amplifier-2A5 two stage class Ampliner—2A) two stage class "A" watt system, 2B6 two stage class "A" amplifier is included with 35 watt system. Both amplifiers are fully described at top of page.

Microphone included with both systems.

tems is a fine quality single button Kellogg hand microphone. A high grade \$12.00 list two button microphone with desk stand can be supplied instead of hand mike if de-Allow \$6.95 extra when placsired.

Tremendous Volume

Tremendous Volume

5 watt system has enough volume to
cover an Indoor audience of 200
people or an outdoor area of 2000
square feet. 334 watt system will
cover an indoor audience of 150
square feet. These figures are conservative and under favorable conditions greater coverage can be expected. An additional dynamic
speaker may be operated to give
more thorough coverage. This speaker must obtain field excitation from er must obtain field excitation from external power source. Amplifier furnishes field current for one 2500 chm D.C. dynamic speaker. Excelothm D.C. dynamic speaker. Excel-lent baffling is provided for speaker by case. Sufficient cable is furn-ished with system so that speaker can be moved and used up to 20 can be moved and used up to 20 feet away from amplifier. Speaker can be used up to 50 feet away if desired by adding additional cable. Input connections are for microphone and phonograph or other high impedance input. Microphone leads may be run up to 75 feet away from amplifier. High impedance and phonograph input leads should not be over 15 feet long. Microphone transformer is mounted directly on amplifier. Microphone current is supplied by 4½ volt "C" battery mounted in amplifier for single or double button microphone. See description above for further details.

# Quality, Compactness are Featured in This 6-WATT PORTABLE "P. A." SYSTEM

For 105-120 Volt 50-60 Cycle A. C.

# Highest Quality - Newest Design **Unequalled Value**

- 3 Stage Push-Pull
- 5 Newest Type Tubes
- Completely Self Contained
- Variable Tone Control
- Complete Mixer and Fader
- Microphone Transformer
- Microphone Current Supply
- 20 Watt Speaker Field Supply Microphone and Phonograph Input
- Separate Volume Control for Mike and Phono

# Equipment Included

Completely enclosed and shielded 3 stage 5 tube Push-Pull 6 Watt Amplifier with built-in Controls, Fader and Mixer: Twelve linch Dynamic Speaker with fifty feet super service 3 conductor rubber covered connecting cable: Fine quality Two Button Carbon Microphone with eight springs and Stand, also 10 feet shielded microphone cable (Two button Hand Microphone of same quality may be substituted if preferred). All enclosed and mounted in strong, durable, Fabrikold covered separable, two section carrying case 184% wide, 164% high, 124% deep; 5 Raytheon Matched Tubes, 2-56, 2-2A5, 1-5Z3.

Meets Every Requirement

For all types of public gatherings—club meetings, funeral services, entertainment, announcing athletic events, large store advertising, etc. Provides sufficient volume for indoor audiences up to 600 people or coverage of outdoor area of about 3000 square feet.

## In-Built Control Panel



The outstanding features of the six watt amplifier are the inbuilt Tone Control, Microphone Current Control, Microphone Volume Control and Phonograph-Radio Volume Control. The volume controls are interconnected so that input signals may be faded or mixed into each other in any desired ratio, giving announcements a professional smoothness by eliminating abrupt breaks in background music. abrupt breaks in background music.

Mixing and fading system is very complete and simple in operation.



Mixing
complete and simple in open.

The range of response provided by this amplifier is so wide that a Tone is not essential, but one is notes may be Control is not essential, but one is furnished so that low notes may be accentuated when desired. Also it may be employed in some instances to reduce or eliminate "feed-back," and to compensate for acoustical defects of a room.



Microphone current is read on an 0-25 milliammeter mounted on panel, and controlled by 1500 ohm rheostat. Two switches are mounted on side of amplifier for use, with meters, in measuring current on each microphone button. For further convenience, an additional microphone current control is mounted on the base of the microphone. In addition to adjusting current properly, these rheostats can be used to a limited extent for eliminating acoustical "feed-back". Microphone current is read on an

# Extra Speakers May Be Added

Mounted speaker has 50 foot cord attached and, if desired may be operated even further from the amplifier. When Mounted speaker has 50 foot cord attached and, if deaired may be operated even further from the amplifier. When an additional speaker is necessary for more complete coverage, or for reproduction in an addining room, it is simply plugged into the amplifier. This convenient feature, exclusive with Radolek, is arranged by mounting two speaker output sockets, ready for instant use, on the amplifier. When only one speaker is in operation, a dummy plug is used in the second speaker. The speaker furnished with the system is so wired that it can be used alone or with a second speaker without change in wiring of either amplifier or speaker. The speaker listed below is wired for use with this amplifier as a second speaker.

speaker.

This is positively the best engineered, best built, most complete, best performing P.A. system of this type ever offered. Careful planning and long experience in manufacturing have held the price down so that this system is by far the most desirable outfit on the market at anywhere near its price. You can depend on this equipment for completely satisfactory performance.

Ready to operate. System can be set up and placed in operation in three minutes. No tools, no "fiddling" around. Just insert plugs, turn on current and the System is ready for work. Very convenient for use in automobiles equipped with fan belt driven A.C. generator.

14F10665-Radolek 6 Watt. Amplifier. Complete as described with Raytheon Matched Tubes. List.



6 Watt Portable Amplifier Characteristics

6 Watts Undistorted Power Output to speaker

voice coils.
2. Supplies 20 Watts for 2500 ohm field coils (enough for two dynamics). Either one or two speakers can be plugged in without changing

speakers can be plugged in without changed, wirling,

3. Three Stages with five tubes, '56 resistance coupled to '56 transformer coupled to two 2A5's in push pull. 523 rectifier.

4. 72 D.B. Gain at 1000 cycles.

5. Practically Flat Frequency Characteristic Curve within 3 D.B. from 50 to 8,000 cycles.

6. Input impetance 400 ohms center tapped for double button microphone and 50,000 ohms for phonograph or radio.

phonograph or radio.



Carrying Case is very strong and durable. Attrac-tive Black leather grained Fabricoid covering. Two sec-tions held together securely with four clasps. Metal protected corners. Leather carrying handle. Speaker opening is covopening ered with wir Overall size

Weather - p flap folds back when outfit is in use. Overal 124" deep, 184" wide, 164" high.

7. Microphone Volume Control and Phonograph or Radio Volume Control interconnected to allow mixing or fading of input.

to allow inixing or fading of input.

8. Microphone current control and meter with two switches for reading current on either or both microphone buttons.

Variable tone control (a distinctive

Etched metal indicating plates under .0.

10. Etched metal indicating plates under all centrols and switches.
11. Output impedance 500 ohms.
12. Only .07 volts input signal required to obtain maximum output.
13. Hum level lower than encountered in average good quality A.C. radio (this is the lowest of any amplifier we have ever observed).
14. Plug in recentacles for all connections.
Bakelite plugs included.
15. I'ower consumption 92 watts:—Power supply required. 105-120 volts, 50-60 cycle

sumption 92 watts:-Power 105-120 volts, 50-60 cycle supply required. A.C. 16.

16. Six foot super service power connection cord with unbreakable rubber attaching plus.

17. Renewable Glass Fuse in power supply.

17. Renewable Glass Fuse in power supply.

18. Back protecting plate entirely encloses rear of amplifier.

19. Ample provision for ventilation.

20. Rich Baked-on Black Enameled Finish.

21. Overall height (without tubes), 8¼", depth 4%", 16" long.

22. Net weight, 24 lbs., shipping weight,

Portable Electric Duar

Phono Motor

With Electric Pickup

A high quality unit designed to match the above 6 Watt Portable P.A. System. Can be quickly changed from 33½ to 78 R.P.M. with simple transmission gear lever. Powerful induction motor with manually compensated governor for exact speed adjustment on any voltage between 105 and 120, 60 cycle

A.C. Extra heavy 12" weighted turntable for constant speed regulations—acts as a fly-wheel on the motor. Automatic stop. New model Electric pickup with built-in volume control. High impedance type. Light, strong, metal bound, black fabrikoid covered carrying case. 17½" wide by 14½" deep. Height with top closed 7". Furnished complete, ready to operate with 6 ff. A.C. cord and 6 ft, phono coupling cord. Works with all models of Radolek Amplifiers and other makes having over 35 D.B. gain with high impedance input circuits.

14E10710—Complete Portable A.C. Electric Dual-Speed Phono Motor.

2550

24 Speaker for 6 Watt Portable

Size 1578/15"/x11".

34th the above song



Portable P.A. Speaker for 6 Watt Portable

durable Fabrikoid cowred carrying case. size 15"x15"x11".

Particularly designed for use as second Speaker with the above
6-Watt System. Speaker cone size 12½". Field resistance, 2500
ohms; will dissipate up to 10 watts. Voice coil, 8 ohms; handles
10 watts without overloading. Input Transformer matches output
of above Portable Amplifier when used with speaker furnished
in System. 50 ft. rubber covered super-service cord with polarized
plug for quick connection to Amplifier supplied. Speaker Plug
replaces dummy plug furnished with Amplifier. Impossible to connect incorrectly. No changes in wiring necessary. Case equipped
with metal corner guards, leather handle, copper screen to protect
Speaker, and button Fabrikoid flup cover opening for protection against weather.

14E 10667—List, \$25.00.

\$14.75

Copyright 1934 by W. C. Braun

THE RADOLEK COMPANY



Prices For 105-120 Volts 50-60 Cycle A.C.

For 105-120 Volts 50-60 Cycle A.C. Operation

15 watt portable P. A. System complete as described including:—Four stage 8 tube Amplifier with tubes and earrying case; 2-Astatic Crystal microphones with stands and connecting cables; 2-12% inch Auditorium Dynamic Speakers in separable case, with connecting cords; wiring diagram and instructions.

14E10679-List Price. \$275.00. YOUR PRICE .....

Individual Volume Control

Individual Volume Control
The volume on each microphone can be individually adjusted by the director to the proper level
to obtain the desired results.
depending upon "rags" and "patter" for the
effectiveness of their act should use this portable
system. It will enable them to reach everyone
in the largest audiences without straining their
rolices. Public speakers and political campaigners
will find their work made easier. They can address very large audiences and obtain the same
effect as if they addressed the same audience
in smaller groups.

in smaller groups.

Easy to Install and Operate

Anyone who can operate an ordinary house radio can set up and operate this system. No tools nor technical knowledge is needed. Entire system can be set up or taken down in three minutes time. All connections are by plugs, and sockets and are so arranged that it is impossible to put any plug into a wrong socket. All that is necessary is to place microphone and speakers, plug them into designated sockets, plug power rord into 105-129 voit 50-60 cycle A.C. socket, turn on the power switch and you are all set to broadcast. Either one or both microphones can be used as desired and individual volume controls give control over each microphone. cropnones can be used as desired and individual volume controls give control over each microphone. Either one or both speakers can be used as desired without any change in wiring. used as

Equipment Included

Power Amplifier. Four stages, using 8 tubes;—
2.58's in first stage resistance coupled to 2.56's resistance coupled to 1.56' transformer coupled to 1.56' transformer coupled to 2.26's push pull, 5Z3 rectifier. New and original design eliminates motor boating (prevalers in high gain amplifiers) and hum. Three charunel input is for two crystal mikes, and crystal phono pickup or other high impedance input. Connections are through 3 polarized sockuts and also binding post strip. Separate volume controls are incorporated for each channel. Intersonnecting of controls allows mixing or fading input channels into each other. No additional input control samel or other input device necessary. Two controls supply perfect tono regulation for both high and low frequencies. Etched metal indicating plates are mounted under each control. Speaker field supply is for 4-1000 ohm fields at 10 watts in each field. Connections are brought out to 8 terminal binding post strip. Output and field connections for three speakers are brought out to 8 terminal binding post strip. Output and field connections for three speakers are brought out to 1 three receptacle sockets mounted on side of amplifier. Sockets are so wired that one, two or three speakers can be used as desired without change of internal wiring of amplifier. When only one speaker is used dummy plug is inserted in other sockets instead of speaker plug. Output connections are also brought out to 9 terminal binding post strip and tapped to give practically any impedance between 1 and 18 chms and In addition 250, 500 and 1000 ohm taps are supplied. Output level indicating meter 17 yee, built to early enormous volume. Described on page 113 under stock number 14E10630. They are mounted in convenient separable carrying case, each section of which provides excellent baffling for speaker. Fifty feet of heavy duty rubber covered ord with unbreakable rubber plug is included with each speaker.

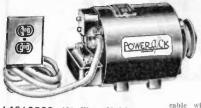
baffling for speaker. Fifty feet of heavy duty rubber eovered cord with unbreakable rubber plug is included with each speaker.

Two Crystal Microphones with Floor Stands Included. Stands are adjustable in height up to 5½ feet. Base is 12" in diameter and weights 18 lbs., giving a good solid foundation which makes stand difficult to knock over. Complete stand is finished in highly polished heavily plated chrome. The Piezo Astatic crystal microphones supplied are ideal for portable use. They give quiet reproduction over a wide range of frequencies and are very rugged in construction. Will stand up under abuse that would ruin other mikes. Each microphone is equipped with 30 feet of shielded rubber covered cable and unbreakable rubber plug. The complete system with exception of mike stands is completely assembled into two cases for easy transportation. Cases are risidly constructed of wood with reinforced corners and carrying handles. Covered with beautiful black grain Fabricold. Will stand years of hard usage. Speaker Carrying case. Size closed 15%" wide. 15%" deep, 15%" deep, 15%" high. Net weight with speakers 33 lbs. Amplifier Carrying Case. Size closed 22" wide 12" deep 13" high. Net weight with amplifier approximately 60 lbs.

THE RADOLEK COMPANY

# POWERACK-110 Volts A.C. In Any Car

Runs on the Fan Belt



14E10802-100 Watt Model. YOUR PRICE ..... \$26.46

14E10803-175 Watt Model YOUR PRICE ...... \$38.22

14E10805—Special Mounting Bracket and other for V-8 Fords. List, \$8.00. \$4.70 regulation, are availal

A complete power plant that runs directly on the motor fan belt. Generates 95-125 volt 50/180 ey. A. C. for the operation of A. C. Radio Sets, P. A. Ampliffers. cy. A. C. for the operation of A. C. Radio Sets, P. A. Amplifiers, upholstery vacuum cleaners, portable fans, neon signs, camp lighting, etc. within its power rating. Especially suitable for sound trucks and motor boats. Postively no drain on battery. No commutator or silp rings. Ball-bearing rotor. Very ruggedly constructed. Easy to install. Comes complete with forged brackets for mounting on engine block, double outlet box, if it armored cable, shielded field with rheostat and switch, and full directions for line.

cable with rheostat and switen, and the distalling.
NOTE: These are the new Model Poweracks deriving their field excitation current from both the output of the charging generator and the third brush. Much better voltage regulation than previous, cheaper models which are suitable only for the operation of neon-signs. For those who require Powerack for neon-advertising and other uses not demanding good voltage regulation, the less-expensive Powerack models available.

# Autonator 110 Volt A.C. Generator Runs on Fan Belt of Any



Car, Truck, or Motorboat
Produces 100 to 120 volts
alternating current from alternating current from fan helt of any gasoline or Diesel motor. Field current taken from gencurrent taken from generator or storage battery of car. Uses speed modulator geared drive wheel for crui ling speeds as low a 5 m.p.h. Used for operating P.A. Ampliflers, radios, or any electrical appliance within the rated watt output of Automator A.C. Generator.

Comes complete with 7½ ft. bielded double cable with double outlet switch receptacle, plug, mounting brackets and full instructions. (R.P.M. approx.)

with double outlet switch receptacle, plug, mounting brackets and full instructions. (R.P.M. approx. 3 times (rankshuft speed.)



Stock Number	Watts	Min. Load	Max.	Inist Price	YOUR
14E10830	50	10	60	\$32.50	\$23.88
14E10831	100	60	120	57.50	27.56
14E10832	150	120	170	17.50	34.91
14E10833	250	170	275	80.00	58.80
14E10834	350	275	400	99.50	72.95
14E10835	450	100	600	125.00	91.87

Speed Modulator 14E10836-List Price, \$35.00. \$25.72

# Knapp Auto or Radio **Battery Charger** 4E10857 YOUR \$4.95

Made for Badolek by Mallory, Keeps storage battery any car full charged. The in in charged. The in-crea ed demand upon the car battery by new electrical

upon the ear battery by new electrical devices such as fan driven heaters, auto radio, cigar lighters, spot lights and sleet shieki often tax the generator beyond its normal capacity. Takes just a few minutes to hook it up to any car. No holes to drill. Attach the clamp-on receptacle to the dash and connect one lead to the ammeter and the other one to ground. Hang up the charger in the garage and plug it into the dash receptacle at night. Will boost up the battery overnight. No more hard starting in cold weather, Start off in a flash every morning. Charges radio batteries teo. For 105-120 volt 50-50 cycle A. C.

Mallory Elkon 5½ Amp. Charger For Auto Batteries

Tapers from 51/2 to 31/2 A. as battery becomes fully charged. Input 115 V. 50/60 Polarized clamp-on recep-tacle for dash. tacle for users. Elkon dry-disc dash.



4E10858-List. \$11.50. YOUR PRICE Complete,

\$6.75

# **Janette Rotary** Converters

Compact, dynamically bal-Compact, dynamically bal-aneed rotary converters which change direct cur-rent to 110 volt, 60 cycle A.C. for the operation of A.C. radio sets and ap-pliances within the power rance of the converter. Laminated steel pole pieces and steel frames. Double wound armature.

Perfect Radio Reception

These converters are equipped with a special filter which prevents converter interference from reaching the radio. If converter is not for use with radio, deduct \$7.00 if filter is not wanted.

32 V. I	D.C. to	110 V	. 60 C	ycle A	I.C.
Stock 1	Afgrs.	Output	Input	List	Your
Number	Type	Watts	Amps	Price	Price
14E10815 C.	A-25-F	80	5.4 \$	38.50	\$ 26.41
14E10816 C	A-20-F	110	6.5	41.50	28.47
14E10817 C.	A-18-F	150	8.5	46.00	31.56
14E10818 C	13-F	300	15.0	64.50	44.25
14E10819 (	B-12-F	400	19.0	99.00	67.91
14E10820 C	E-12-F	600	240	133.00	91.24

110-115	V. D.C.	to 110	V. 60	Cyc	le A.C
Stock	Mfgrs.	Output	Input	List	Your
Number	Type	Watts	Amps	Price	Price
14E10821	CA-25-F	80	1.3 \$	38.50	\$ 26.41
14E10822		110	1.9		28.47
14E10823	CA-18-F	150	2.4	46.00	31.50
14E10824	C-13-F	300	4.0	64.50	44.2
14E10825	CB-12-F	500	6.4	93.50	64.1

# Carter Genemotor "B" Supply For 32 Volt and 6 Volt Input.



Model 32A for 32 Volt For 32 input

4E10139-Model 6A For 6 Volt input.

List. \$22.50 YOUR PRICE \$13.23 Either Model

Small precision built Motor-generators which operate from 6 V. or 22 V. input to furnish "B" supply for battery operated Radio Receivers, Consume very little power, only about 15 watts. Both models have taps at 22, 45, 67, 90, 135, and 180 voits. Special ball-hearings require no offing. Will last for rears. Built-in filter system. No trouble to connect.

# Ward-Leonard Automatic Battery Charge Regulator 3E8570



YOUR PRICE .... \$2.05 YOUR PRICE .... Your linerases the charging rate of the car generator by cutting out a resistance in series with the 3rd brush each time the radio is turned on. This system avoids overcharking the battery with the generator set high as is the case in the majority of car radio installations. Regulator connects to the radio side of the resistance relay closes a switch shunting the resistor in series with the third brush of the generator. All necessary hardware for installation and complete instructions.

# **Exact Replacement IBRATOR UNITS**

For Automobile Radios

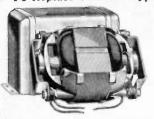


RCA-Vietor MAJESTIC PHILCO RCA-Victor MAJESTIC PHILCO
General Elec. 66 6F, 9F, 10, 5T
While these Vibrators are the exact replacements
physically, for the Sets listed, they are big improvements prer the originals electrically and will

er the original		ally an	d will
Model	Stock Number	List Price	Your Price
424,534 <b>6</b> 66	3E8530 3E8545	\$5.50 3.75	3.23 2.20
345 346 347	3E8546 3E8547 3E8548	4.85 3.75 4.85	2.85 2.20 2.85
10A,15,20A, 20B,25,30A 35,45	3E8531 3E8549	3.50 3.75	2.06
660 660 670	3E8533° 3E8531 3E8545	9.00 3.50 3.75	5.29 2.06 2.20
45.79 140,150	3E8545 3E8534	3.75 5.50	2.20 3.23
1 Unit Non Sync, 2 Unit Non Sync 1 Unit Sync, 2 Unit Sync	3E8531 3E8536	3.50 5.25	2.06
100	3E8531	3.50	2.06
1 Unit Non Sync 2 Unit Non Sync 1 Unit Sync 2 Unit Sync 2 Unit Sync	3E8531 3E8536	3.50 5.25	2.06 3.09
150,164	3E8545	3.75	2.20
99,102,103	3E8538	5.75	3.38
667,965	3E8560		2.85
602 5500	3E8539 3E8561	3.75	2.79
101,102,104B	3E8531	3.50	2.06
Vibrator Vibrator 1933 1934	3E8545 3E8545 3E8531 3E8545	9.00 3.75 3.50 3.75	5.29 2.20 2.06 2.20
K34, M40, M41	3E8541	5.50	3.23
61R	3E8531	3.50	2.06
V6Z2,Z6Z1	3E8531	3.50	2.06
\$50HD,650HE 660TD,661TE	3E8531	3.50	2.06
66 66 116,116A	3E8533° 3E8531 3E8531	9.00 3.50 3.50	5.29 2.06 2.06
34 44,66,77 Twin 6.	3E8562 3E8534	3.75 5.50	2.20 3.23 2.20
			2.20
			3.23
		1	2.06
1121,1122		4.50	2.65 2.79 2.06
50	3E8539	4.75	2.79
Z6Z1	3E8531	3.50	2.06
4036,2035 4037,4038	3E8531 3E8536	3.50 5.25	2.06
Z6W1 26U1 V6Z2,Z6Z1 Series 6U	3E8542 3E8563 3E8531 3E8564	5.00 4.85 3.50 3.75	2.94 2.85 2.06 2.20
4B6	3E8545	3.75	2.20
460	3E8545	3.75	2.20
7,460,462 th transformer	and cond	3.50 lenser.	2.06
	Model  424,534 666 345 346 346 347 10A,15,20A, 30B,25,30A 35,45 660 660 670 45,79 140,150 1 Unit Non Sync, 2 Unit Sync 1 Unit Sync 2 Unit Sync 1 Unit Sync 2 Unit Sync 1 Unit Sync 1 Unit Sync 1 Unit Sync 2 Unit Sync 1 Unit Sync 1 Unit Sync 2 Unit Sync 1 Unit Sync 1 Unit Sync 2 Unit Sync 1 Unit Sync 1 Unit Sync 2 Unit Sync 1 Unit Sync 1 Unit Sync 2 Unit Sync 1 Unit Sync 2 Unit Sync 1 Unit Sync 1 Unit Sync 2 Unit Sync 2 Unit Sync 2 Unit Sync 3 Unit Sync 3 Unit Sync 4 Unit Sync 3 Unit Sync 4 Unit Sync 4 Unit Sync 5 Unit Sync 6 Unit	Model	Model   Number   Price

# Pioneer Gen-E-Motor Compact Units

To Replace Vibrator Type Auto Radio "B" Units Operates from 6 Volt Battery
Guaranteed for One Year



Replaces Vibrator Units in Following Auto Sets

General Electric Airline Arcadla Malestic 116-66 Motorola 88-61 Audiola RCA Belmont Bosch 150-160 Solar Travalon Cadlilac True Tone Ford 114 Gutbranson Welts-Gardner

Fits in Chassis Housing Auto Sets
Install one of these rotary Units in the place of a faulty or inoperative vibrator type "B" supply and note the improvement in the operation of the Auto Radio. Provides a uniform voltage and will eliminate noisy and weak reception prevalent in the Auto Receivers. and weak reception prevaient ...
most vibrator type Auto Receivers.
No circuit changes necessary to in-No circuit changes necessary to install. Extremely commact—only 44" high, 54" wide, 2%" deep. Requires no adjustment, no attention no ciling, and no servicing. Uses original filter system of vibrator Unit which it replaces. In shielded metal case. Complete instructions for installing furnished.

4E10198—Model JW-25, delivers 225 volts at 50 M.A. Battery drain 3.8 Amps. List, \$13.00. \$7.64

Noise-free in Operation
Extremely Easy to Install
Fits in Chassis Housing of Most

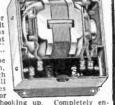
4E10199-Model JW-50, delivers 250 volts at 50 M.A. Battery drain 250 volts at 50 M.A. Ba 4.2 Amps. List, \$13.00. YOUR

\$7.64 PRICE

# Pioneer Auto "B" Supply Motor Generator-Dynamotor

Motor Generator—Dynamotor

New compact dynamotor type Auto "B" power supply. Motor generates from the 6 volt car battery and generates smooth filtered humless D. C. current. High voltage and constant current output operates the radio with plenty of "punch" and power. Reduced in size the new "Ploneer" will fit under the seat of most cars. May be mounted in any position. Size overail 2½" high, 5½" wide 5½" long. Weighs only 10 lbs High voltage output—200 volts at 40 milltamperes will operate the largest auto sets. New type brushes and ball bearings never require adjustment or ofling. Terininal strip provides easy means of hooking up. cased and shielded by formed steel heusing.



Inter. Tap. Output Amos Number 4D10190 4D10191 None None 1.95 amps 2.75 amps \$18.00 \$1058 180 30 40 180 135 1.95 amps 1.42 amps

For 32 Volt Farm Plant 10194—135 volts at 30 M.A.; ped at 67½ volts. 4D 10 194 135 tapped at 67 ½ v List Price, \$23.00.

4D10193

YOUR PRICE ..... \$13.52

4D10195—180 volts. at 30 M.A.; tapped 22½, 45, 67½, 90, 135 volts. List Price, \$25.00. \$14.70

Special for Sound Trucks
Standard 6 volt Input. 12 or 32 volt
supplied to order.
4D10196—265 volts at 75 M.A.;
tapped at 75 V. List, \$31.00.

tapped YOUR \$18.23 PRICE

4D 10197—300 volts at 100 M.A.; tapped at 100 volts. YOUR PRICE ......\$19.99

# New MALLORY Elkon Auto "B"



New simplified design—uses no tubes
—Eliminates "B" Batteries entirely:
—Delivers 200 voits at 40 to 50 M.A.
Highest electrical efficiency
—Only 2 amp. battery drain (Approx.)
A power supply for any auto radio.
Furnishes constant voltage and current.

Superior filter eliminates feed-back and interference. New type self-rec-tifying Elkonode used employs an entifying Elkonode used employs an entirely new application of vibrator principle which creates the A.C. and rectifies it all in one unit. Simplified construction eliminates servicing. Has built-in relay. New small size, only 2%x6%x7%". Mounts in any position. Comes complete with all cables, ready to install.

	Specifications Mallory Elkon "B" Units							
Stock Number	Туре	Maximum Output in M. A. at 200 Volts	Make and Model Set (And others requiring same voltage)					
4E10105	10	40 to 45	Motorola 6 tube (1930); Model 38 (7 tube 1931); Model 47A (7 tube 1932)					
4E10108	11	35 to 40	Roamio Model 92 (1931) Majestic 110 (1931)					
4E10112	11P	35 to 40	Philco 41 (7 tube 1932)					
4E10113	11PC	35 to 40	Bosch 9-20 (1931)					
AF10116	12P	30 to 35	Phileo 38 (7 tube 1932)					

List Price, \$17.50. Complete-including cable. \$10.29 List Price, \$17.50. Complete—including cable.

90UR PRICE (Any Type)
When ordering for Sets other than those specified above, give make of Set with number and type of tubes used, also "B" voltage.

| Mailory Replacement Elkonedes
| Self-healing Rectifying Elkonedes for all Elkon Eliminators.

4E | 0 | 20 — For all Type 10s 4E | 0 | 23 — For all Type 13s 4E | 0 | 21 — For all Type 11s 4E | 0 | 22 — For all Type 12s List (any Type) \$7.00.

\$4.12

\$4.12 PRICE

**New Carter Super Genemotor** 



With Built-In Filter-New Compact Size New Compact Size
Smallest Auto "B" Eliminator made.
New reflex filter system and motor
design-motor field colls used for
chokes. All filter condensers are located in motor housing. No outside
filter needed. Ideal for replacing unsatisfactory "B" Eliminators and "B"
batteries. Easy to install, nothing
to take apart and put together. Will
run in any postition. Gives the old
Set more pep. Operates on 6 volt
car battery. New silent ball-bearings
never need oiling. Size 2%" high,
4" wide, 5" long. Fully guaranteed.

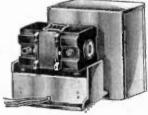
4EIOI4O—Model 1580A List 4EIOI4I—Model 1585A \$ \$16.50 YOUR PRICE, EITHER MODEL

tock	Model	Input	Output	Output	Inter.	Drain on
umber	Number	Volts		M. A.	Tap	Battery
E10140	1580A	6.3	180-200	30-50	90	2.2 Amp.
E10141	1535A	6.3	135-150	20-40	67 14	1.7 Amp.

# **Carter Sound Truck** Genemotor

For 6 Volt and 12 Volt Input

reliable and The most reliable and economical power supply for operating Class "A" amplifiers. Motor designed especially for high voltage output. No input filter choke is furnished as none is required unless a radio is operated from same battery. Ball-bearing motor and output filter in one case 4½ "x6" x6" x6" in ight leads for connecting and full directions furnished. most economical



For 6 Volt Input

Į	Stock Number	Model Number	Output Volts	Output M. A.	Battery Drain	List Price	YOUR PRICE Ea.
	4E10130 4E10131	3500 3100	350 300	100 100	10 Amp. 9 Amp.	\$35.00 } 35.00 }	\$2058
	4E10132 4E10133	5075 2565	265 225	75 65	5.5 Amp. 4.5 Amp.	32.50 }	\$1909
3			F	r 12 Vo	It Input		

Stock Number	Model Number	Output Volts	Output M. A.	Battery Drain	List Price	YOUR PRICE Ea.
4E10134 4E10135	3500-B 3100-B	350 300	100 100	5.5 Amp. 4.5 Amp.	\$37.50 }	\$2205
4E10136	2565-B	225	75	2.5 Amp.	32.50	\$19.33

# Multi-Tap Auto "B" Supply

Up to 250 Volts 50 M.A. "B"

Power from 6 Volt Car Battery
An improved full-ware vibrator Type "B"
Power Unit for Auto Radies that supplies
90 v., 135 v., 180 v., or 250 v. at various taps—suitable voltages for servicing
over 90% of all Auto Sets now in use.
Vibrator has over-size contacts for long
life. Floated in sponge rubber to insure
quiet operation. Free from hum and R.F.
disturbances. Electrostatically shielded
transformer. All ch-kes and condensers
of floats results. quiet operation. Free from num and K.F. disturbances. Electrostatically shielded transformer. All chokes and condensers of finest quality. Housed in steel cabinet 7 km x km x 2 km. Supplied in two types complete with connecting cables and instructions ready for quick, easy installation.



4E10125-Tube Rectifier Type. Complete with type 84 Tube. \$8.82 List, \$15.00. YOUR PRICE .....



# RADIART Auto "B" Supply

Provides constant, quiet, dependable "B" current for any Auto Set from the 6 volt storage battery. Efficiency amazingly high, delivers a maximum output of 180 volts at 45 M.A. Draws approximately 2.2 amps, from battery. Voltage is always peak and well filtered. Entirely automatic. No rotary parts. Requires no attention. Vibrator sealed in vacuum. Non-polarized full-wave output. Housed in cadmium plated steel case size 7x3x1½ inches. Easy to install. Complete with tube.

Emerson Auto "B" Supply Completely enclosed in dust-proof steel case. Full size filter in base. Motor-Generator mounted to base through rubber shocknown bushings. Delivers up to 180 volts at 40 M. A. Drain on storage battery only 2 Amps. Has low voltage taps at 67½ and 90 V. Overall size, 7%" long, 4%" wide, 6%" high. Electrical efficiency about 60%.

\$11.46 YOUR

YOUR PRICE EACH

# Radio Batteries High Grade-Full Voltage



These wonderful. size, long life batteries are made by the makers of one of the finest and best known hrands. Buy this private label battery of us and get exactly the same quality that is offered in a well known advertised battery, but at our bargain price a real saving for you. Actual usage will more than prove our claims.

Every battery is full voltage, positively fresh stock and will give extraordinary long service. They are ruggedly built and thoroughly tested. Each cell is sealed individually before being pitched, giving full insulation against short circuits. Compact, space-saving and hum-free a line that we are proud to recommend and that you will be pleased to handle.

Standard 45 Volt "B" 3D | 2-List \$2.25,

Six for .... \$4.95

exceptionally fine quality and ful 45 volt "B" battery. A big. powerful 45 volt "B" battery. A big, burly battery which is sold under an advertised brand at a much higher price. While low in price, do not con-fuse this battery with many inferior batteries selling elsewhere at the same or even higher prices. These are quality batteries. Size: Ht., 7", Wd., 8", Depth, 3". Shipping weight, 11 lbs.

# Giant 45 Volt "B"

3D11-List, \$3.75. YOUR PRICE, Each.... Six for .... \$7.18

A giant in power. Almost twice the capacity of the standard 45-volt size. Especially made for the multi-tube sets that draw more current and require an extra heavy, oversize battery. You and your customers will find them most economical in the long run. Extra profits for you. Upright only. Size: Ht. 7", Wd. 8", Dpth. 4". Shipping weight, 14 lbs.

41/2-Volt "C"



One of the finest "C" bat-teries made. High-test, Long-life. Will maintain their rated voltage for long con-tinuous use. New stock. Size tinuous use. New stock. Size

2C15-List, 50c. EACH ..... 19¢ Ten for ..... \$1.79

221/2-Volt "B" & "C"



A quality battery that wingire long, uniform current flow. Heavily insulated cells. New stock. Epright only. Size, Ht. 3". Wdt. 4%", Dpth. 2%".

2014-List, \$1.75. YOUR PRICE, Each. 74¢ Five for .... \$3.50

No. 6 Dry Cells



These Dry Cells are made under the most rigid specifications. built up with the highest grade materials. High amperage, 1½ volts. They have remarkable

strength and lasting qualities. Meets every radio need. Wt., 3 lbs.

2013-No. 6, List, 60c.

Ten for ..... \$1.98

# 2-Volt Radio Storage Battery



3E16-List Price, \$6.55. YOUR \$295

A 2-volt 19 plate storage battery. Gives 300 operating hours at ½ ampere on a single charge. Very steady steady Volt-

charge. Very steady uniform voltage. Voltage can never become high enough to blow the tubes or shorten their life. Designed for service. Cost per hour of operation extremely low. Uses standard storage battery plates &" tilck. Shipped ready to use. Hard rubber case with rubber nut and bolt terminals. Size 7%x13x91%"

# Elkon 5,000 Hour

"B" Rectifier

Used to Replace Tubes

Replaces rectifier tube in "B" Eliminator. Dry, solid, rugged, self-healing.
Just replace the fragile 1,000 hour tube with this stury 5,000 hour rectifier.
3E85—For "B" Eliminators using Illi type tubes.
YOUR
PRICE

# Eveready Air Cell "A" Battery



For "Air Cell" Receivers

An air depolarized, constant voltage, non-rechargeable primary battery, especially designed and guaranteed ONLY for use as the "A" Battery for Air Cell Receivers. High capacity of 600 ampere-hours is sufficient for at least 1,000 hours operation. At an average use of 3 hours daily, it will take a whole year to use up the 1,000 hours battery life. Uses a liquid electrolyte, but is shipped dry. Can be activated for service by filling with water at time after manufacture and still deliver its full quota of ampere-hours. Length 13½ inches; width, 6¾ inches; height overall, 10 inches; weight, dry, 25 pounds; filled with water, 37 pounds.

# **Electronic Converters**

32 Volt D.C. to 110 Volt A.C.

Will Operate A.C Radio from 32 Volt D.C. Farm Light Systems Capacity

Generates 110 volts 60 cycle volts 60 cycle
A.C. from power
derived from 32
volt farm light systems. 100 watts capacity, sufficient to op-



sufficient to operate practically a n v A.C. or A.C. or A.C.-D.C. Set using up to 10 tubes. Draws 5 Amps at full load. Employs tuned interrupter and heavy duty power transformer. Fully filtered for quiet operation on Radio. Will also operate small A.C. household appliances such as induction fans, drink mixers, etc., though not recommended for heating appliances or electric clocks. Only one moving part. Requires no oiling. No polarity to observe. Has receptacle for Radio plug. Off-On toggle switch and variable input adjustment to compensate line drop. Compact case, 7% long, 6" wide 3%" high. 4E10845—List, \$25.00.

4E10845--List, \$25.00.

\$14.70

# 32 Volt "A" Eliminator

For Farm Lighting

or F...

Plan...

3E4456—For 2 voit ('30, 31, '32, '33) tubes.

3E4457—For 6 and ('36, '37, '38, '43) tubes. volt ('36, '37, '11, '42, '43) tu List Price \$6,50.

PRICE .. \$3.82 Connects to 32 volt line. Will reduce cur-rent to proper voltage

tubes. For any set using not over 5 amperes "A" current (not over 12 tubes of '36 series, any number of '30 series). Serves also to regulate line voltage. Meter indicates voltage to set. Adjustable resistance. Switch to turn current on and off. 6 feet cord with attaching plug. Connections for Gene-



# "A" Eliminator for 32 Volt Farm Plants

When plugged in 32 volt socket will de-liver 6 volts D.C. Eliminates storage bat-tery and charger. Specify number of tubes used and type. When pilot light is used consider it as one 201a tube. Nothing to wear out or replace.

Amp. 3E4450 1½ for 5-201a or equivalent 3E4451 1½ for 6-201a or equivalent 3E4452 1¾ for 7-201a or equivalent 3E4453 2 for 8-201a or equivalent equivalent List Price, \$2.00. YOUR PRICE

# **Ward Leonard Battery Charger** For 32 Volt Farm Plants

Charges 6 V. Storage Batteries
Vitrohm Resistors with standard Edison strew base for use in sertles with radio and other type storage batteries while being charged from 32 volt farm lighting plants. One resistor required for each 3-rell battery under charge. Has many advantages over lamp-banks because it is especially designed for the service and has a permanent othmic value, 6.4 ohms, 140 watts. 5 Amperes. List, \$2.25. 3E4455-

Readrite Battery Tester

Nickel plated brass cases, with glass face. Long insulated cords, with contact prod on each end.



3E2695—Storage Battery Tester, Indicates condition of battery and when to charge.

\$1.32

3E2696—0-50 volts "B" Battery Test Meter. **54¢** 

3E2697-0-50 volts; 0-40 amperes. Combination "B" amperes. Combination and "A" battery tester.

EACH ...... 82¢

THE RADOLEK COMPANY

World Radio History

# BURGESS BATTERIES

New Reduced Prices! Our Large Stock and Volume Sales Insure Your Getting New Fresh Stock Always.



Super "B"

No. 22308-45 Volts

\$1.48 YOUR PRICE, Single Lots..... IN SIX LOTS. Height 8'C. Wid Each LOTS, Each
, Width 84", Depth 33". Weight 10 pounds, and 445 volts. Shelf life well over one year. Terminals

"B" for Oscillators, Ohmmeter, V.T. Voltmeters and Portable Sets

No. 5308 45 Volts 3E32—Retail Price, \$1.15.

YOUR PRICE Single Lots

86¢

IN LOTS OF FIVE. Each

5308 is standard equipment in hundreds of test instruments. It matches in height and depth the standard No. 6A battery—and is about twice as wide as one 6A. Tapped at 22½ and 45. Weight 3½ lbs. Shelf-life. over 8 months. Size 6¾ "x4¼ "x2½".

"C" for Test Equipment No. 5156 221/2 Volts 3E30-Retail Price. 85c. YOUR PRICE





Tapped at —3, —4½, —16½, —22½. Excellent for Ohnmeters, small service oscillators, as well as for "B" replacement in portable receivers, noise locators, etc. Used extensively as "C" battery for 120, 31, 71A tubes on 135 volts. Shelf life over 8 months. Size 2% "x4½ "x2½".

Midget "C" for Oscillators



No. 221/2

3E27-Retail Price, 80c. Price, 80c. 61¢ YOUR PRICE. Single Lucy OF TEN, Each

The smallest of the 22½ Volt "C" batterles for use with one or two tube test oscillators or in portable two tube short-wave receivers. 3%"("2" "x2" | " high. Six month shelf life.

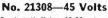
"C" Bias No. 5540-71/2 Volts

3E29 Retail Price. 55c. YOUR PRICE Single Lots

41¢

IN LOTS OF TEN, Each, 37c

For 71/2 volt ohmmeters and as a selective source of "C" Bias. Choice of 1½, 3, 1½, 6, and 7½ volts. Brass posts and one flexible terminal, 2¼"x



3C20 Retail Price \$2.50. \$1.89

IN FIVE LOTS, Each......\$1.71 Height 8", Width 8\%", Depth 4\%", Weight 15\% pounds. Terminals 

3021-Retail Price \$1.95.

Standard "C"

No. 2370-41/2 Volts 3E28—Retail Price. 35c. YOUR PRICE Single Lots 26¢

IN LOTS OF TEN. Each 24c The longest life "C" bias battery made—service of two years not unusual with this sturdy little power unit. Used in many test oscillators as the source of filament current, but should not be expected to supply more than one 60 M.A. Tube on internittan service. These batterles are produced with remarkable uniformity and are excellent in test equipment. Four brass terminals, for Pos., Neg. 1½, 3, 4½ volts. Size 3"x4"x1%".

Ohmmeter "C"

No. 5360 41/2 Volts

3E33—Retail Fig. Your Price 26¢ Single Lots ..... Z

# **Test Set and** Flashlight Batteries

FLAT 532-41/2 Volts Same Size as Eveready 703



3C36-3 cell. Size 2%x
2%xif linches. Brass contact springs on top. Retail Price 30c.
FLAT 432 Same Size
as Eveready 751
3C37-3 cell. Size 244 vol. Description

3C37-3 cell. Size 214x211. Brass ontact springs on top. Retail Price YOUR PRICE

In Single Lots ..... 20¢

# Uni-Cells

For Flashlights or Test Instruments

For two three or For two, three or five cell tubular disshilghts and various types of test instruments. About 1½ volts per cell. Our great volume sales mean new, fresh stock—always.

3C38—Standard No. 2
Tubular Type, Size 1½ x25 inches.
Retail Price, Each 10c.

YOUR PRICE. TEN FOR. 65¢

3C39—Baby No. 1 Tubular Type. Size 1x17k inches. Retail Price 10c. YOUR PRICE TEN FOR ......

# Standard "B" **Batteries**



No. 10308-45 Volts

3C22 Retail Price, \$1.90 YOUR PRICE, 

# No. 2308-45 Volts

3C23-Retail Price, \$1.50. Single Lots
IN LOTS OF FIVE, Each 6 C
Height, 8", Width 8\%", Depth
3\%", Weight, 9 pounds. Terminals
to give +22\% and +45 voits. Occupies minimum table space. Recommended for sets drawing 10 milliamperes or more. Shelf life over one Single Lots



No. 2156-221/2 Volts

3C26 -Retail Price, 90c. 

NOTE:-Dimensions are given on all batteries in the following order:—height, width, depth. Dimensions are overall and in-clude terminals on top of bat-

No. 1040 3 Volt "A" Battery Pack

S VUIT "A" Battery Pack
For use with 2 volt radio receivers.
Requires no recharging; no servieng;
no filling with water; nothing to pulli
no creeping or dangerous liquids. Will
give 400 hours of service at 3 hours
per day on ½ ampere load. Has remarkable recuperative powers. Easy to
earry. Weight 15 pounds. Size 12 & "x
1½ "X0 # Ha."

3E40 Retail Price, \$3.20. YOUR PRICE \$2.32 IN LOTS OF FOUR, Each .. \$2.11

**Auto Radio** 45 Volt "B"



No. 2305 3034

Retail Price \$1.95

YOUR PRICE, \$1.48 Single Lots .....

eight months. No. 21305-45 Volts

Police Radio Type
3C35—Retail Price \$3.35. \$2.54
YOUR PRICE, Single Lots IN LOTS OF SIX, Each...\$2.30
Height 8"; Width 84"; Depth
4½". Weight 15 pounds. Terminals with 223b and 445 voits. For extra
long life. Shelf life over one year.

A Battery-6A

Dry Cell
Standard 1 ½ Volt
3C31—Retail Price 40c.
YOUR PRICE,
Single Lots ... 30¢
IN LOTS OF 25

Its construction specially adapts it for use on the filament circuit of a Radio using dry cell tubes. Recovers rapidly during a short period of rest. covers rapidly during a short period of rest. Size 212x6 inches. Weight, 2 lb., 2 oz.



# Burgess Ben Hur Batteries

Built by Burgess—A fine precisely constructed full voltage battery. Con-tains the famous Burgess long life mix. Finest grade insulation provides full protection against internal shorts. Ideal for service replacements. Each battery carries the Burgess name.

# No.281Standard 45volt"B"

Upright type with 22½ and 45 volt tap. Height 8", width 8%", depth 3% weight 9 lbs.
3E43-YOUR PRICE in unit

OF 6, 76¢ 

# No. 1081 Heavy Duty 45 Volt "B"

Upright type with 22½ and 45 voterminals. Height 8", width 8½ depth 434". Weight 12 lb., 2 oz. 3E44—YOUR PRICE in unit PKG. OF SIX. \$1.01

Single Lots .....\$1.11 No. 11 Unit Cell

Fits all "baby tubular" flas Size 1" diam., x 1%" long. flashlights. Size 1" 3E45-YOUR PRICE, 10 for ......



No. 21 Unit Cell

Fits standard and tubular flashlights. Size 1%" diam. x 2%" long. 3E46—

YOUR PRICE. IO for

4½ Volt "C" Battery
Heisht 2#", width 2%" depth 1%"
3E47—YOUR PRICE in unit
Pkg. of Ten,
EACH Single Lots ......20c

No. 6 Dry Cell

General purpose ignition, telephone and "A" battery Ht. 6 A", Wt. 2 1/4 18 ACH SEASON STATES IN Unit PRICE In unit Page 18 ACH 18 18¢ Single Lots .....20c

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THE RADOLEK COMPANY

Page 127

# Elkon Replacement Rectifier



The official replacement unit for Majestic "A" eliminators. May also be used on following eliminators: Mayolian, Elkon, Phileo, lian, Elkon, Pinteo, Webster, Knapp Gen-eral Inst., Metro, Fada, Bernard, Sentinel, and Briggs & Stratton. 3 Briggs &

Amp. charger, Shpg. wt., 3½ lbs. 3C70—Type XB16. List, \$7.00. YOUR PRICE

\$3.73



# Manufacturers' Type Rectifying Unit

The "B" B-L full wave rectifying elements a reparticularly suited to the

use of manufacturers of requiring rectified currents, are full wave. Made for such devices as dytic speakers, "A" powers, battery chargers, namic railroad signals, etc.

\$2.65 Type "B"-16 is for Greene-Brown type D. Norden Hauck No. 3A, Tobe Deutchman, Webster, Valley type, DMA, etc. Output 2 amp. at 6 V.; 1 amp. at 8 volts.

3C61-Type B-16.
List. \$5.00. YOUR PRICE......\$2.94



# Elkon 5,000 Hour "B" Rectifier

Replaces rectifier tube in "B" Eliminator. Dry, solid, rugged, self healing. Just replace the fragile 1,000 hour tube with this sturdy 5,000 hour Elkon EBH and the change is made. Not affected by accidental surges or overloads. 2C85—For "B" Eliminators using Raytheon BH Tube.

Raytheon 1: List. \$6.00 79¢ YOUR SPECIAL PRICE ...

# Radio Battery Cables



Stranded ductors, rubber insulated and covered with fabric. R. M. A. color coded. 5 ft. length,

302318 302319 302320 302321 302322	6 7 8 9	.60 .70 .85 1.00 1.10	29 c 32 c 40 c 45 c 50 c
Stock Num. 3C2317	Conduc- tors 5	List \$0.50	Your Price 25 c

# 31/2 Foot 4 Conductor Cable

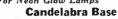
Stranded size 18 rubber covered con-ductors, cabled to-gether with a cotton braid overall. Standard battery clips are attached on two ends. 3D2330

000



14¢ YOUR SPECIAL PRICE ......

# Porcelain Sockets For Neon Glow Lamps



YOUR PRICE, EACH ..... 28¢ 3E7116-

Quality porcelain sub-panel socket for candelabra base neon glow lamps. Top of socket mounts flush with panel. Screw terminals. Used in short checkers, continuity testers and other test apparatus.

## **Edison Medium Screw Base** Sub-panel Mounting

3F7 117-YOUR PRICE, EACH ...... 16¢

Porcelain sub-panel socket for standard Edison base neon glow lamps. Same style and mounting as socket listed above. Screw terminals for making connections.



# Cleat Mounting 3E7118-YOUR PRICE, EACH .. 10¢

Cleat mounting Edison base por-celain socket. May be mounted on baseboard for experimental work. Screw terminals allow easy changing of hook-ups.

# Tungar Type Rectifier



0.6 amps., 7.5 D.C. volts. Used il chargers for trickle charging 6 Used 3E865-A. chiefly in small chargers for volt batteries. Fil. 1.8V.-6A. \$175 List Price \$4.00.

YOUR PRICE ..... 3E866—B. 2 amps., 75 D.C. volts. Has 3 connection screw base, is used in small home chargers. Fil. 2V-12A. List Price \$4.00. \$1.90



# Neon Glow Lamps

Genuine G.E. neon gas lamps that glow with a brilliant orange-red radiance. Both electrodes glow on A.C. One remains dark on D.C. Onerate on extremely minute current. Used in tube checkers for intersistance tests. Used as pilot or signal lamp on all types of electrical circuits. Check ignition leakage in auto-radio noise climination work Voltages listed are minimum striking voltage; minimum operating voltage may be approximately 50 volts lower for A.C. or 10 volts lower for D.C. 307/119—Midgot 1/4 watt. Candelabra Base

3D7 | 19 — Midget 1/4 Watt. Candelabra Base Pear Shape Clear Bulb. 1/5" diameter. Replacement for Weston and other tube testers employing neon short tests. For 105-125 volts, A.C. or D.C.

PRICE, Each S3.25

3F6912—Medium ½ watt. Standard Edison medium screw base. Clear Globular Buib. 1% diameter. Electrodes shaped like half cylinders. Approximately 5/100 candle power. For 105-125

Approximately 5/100 candle yould A.C. only.
YOUR PRICE, EACH
TEN FOR \$3,25

3E7120—Medium ½ Watt. Same as above but with skirted candelabra base.
YOUR PRICE, EACH.
TEN FOR \$3,65

TEN FOR \$3,65

Standard Edison.

3E69 | I - Medium | watt. Standard Edison medium screw base. Clear Globular Bulb. 11½" diameter. Approximately 5/100 candie power. Central cylindrical electrode surrounded by wire spiral electrode. For 105-125 volts A.C. or D.C. YOUR PRICE,

TEN FOR \$3.25

3E7 | 22—Same as above with skirted candelabra base. A.C. or D.C. 105-125 volts.

416 ....\$3.25

TEN FOR ....\$3.25

3E6910-2 Watt Standard Edison medium serew base. Clear pear Shaued Bulb. Diameter 134". Electrodes in shape of split disc. Approx. ½ candle-power. For 105-125 volts A.C. or D.C. Most popular size for night-light, advertising, exit indicator, stroboscope, and signal

49¢

# Replacement Cells

for Wet "B" Eliminators

FOR USE WITH PHILCO-WILLARD-USL-VESTA and EXIDE ELIMINATORS



# Wet Cells for "A" Eliminators

CORRECT TYPE FOR PHILCO SOCKET POWERS



YOUR PRICE ..... 3C67-Type A. 8" high by 4" diameter. Small jar for 4-volt units. For all 4-volt Phileo Elimjar for Inators. List, \$3.00. YOUR PRICE....... \$1.39



# **Battery Terminal Connectors**

3C2449 YOUR PRICE, Each. 18¢

storage battery to adapt it for use with radio set. Has birding serew for connecting lead wire. Perfect contact always.

# Universal Battery and Radio Clips





No. 45—Pee Wee Clip. For Radio Test Work. Teeth on both jaws which mesh. Jaw spread %". Length 1,26". Cadmium plated. With screw.

3D2448-Each, 4c. TEN FOR .....

No. 48B—A small clip for "B" radio batteries and general use. Teeth on both jaws which mesh. 10 lb. spring. Jaw spread, is in. Cadmium plated, 1% inches long. 3C2440 -Positive (+).

3C2441—Negative (-). Each 5c .....Per Box of 10, 33¢

Type 24A-25 ann. Capacity. For radio storage "A" batteries. Teeth on one jaw and noteh on the other; fits round battery post. 17 lb. spring. Jaw spread, 1 in. Lead carted. 3% in. long. 3C2442-Positive (+).

3C2443-Negative (-). Each 8c .....Per box of 10, 65¢

Type 21A-50 amp. 33 lb. spring protected by copper shunt, Jaw spread, 1½ in. Lead coated, % in. long.

3C2444 Positive (+) 3C2445 Negative (-). Each | 6c ..... Per box of 10, \$1.35

Type 11A-100 amp. Capacity, 38 lb. spr Jaw spread, 1% in. Lead coated, 5% in. long.

3C2446—Positive (+). 3C2447—Negative (-).

# **Rubber Insulators**

For Use with Universal Battery Clips



Furnished half Protect against electric shock. Fured, half black to indicate polarity. 3D2424-For 45 -- 10 for ......

362420-For 48B-10 for	5
-----------------------	---

# **Auto Radio Running Board Aerial**

YOUR

PRICE



New weatherproof aerial designed to mount under the running board of any car. Aerial wire is molded inside of flexible, weatherproof rubber strips 3%" wide. Two strips are mounted parallel on rustproof supporting plates. Overall width 8 andware included. A heavy inches, length 2 feet 7 inches. An additional 6 inch portion of each strip extends to a point just Flexible—will not crush.

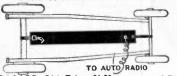
# Auto Axie-to-Axie Antenna



Spring Tension--Waterproof Rubber

Casing mounting position provides great capacity ef-Low mounting position provides great capacity effect to ground, Gives utmost sensitivity, with clear signals with a minimum of interference. Electrostatic shielding effect of car frame and body tends to reduce disturbance caused by passing cars. Consists of closely woren wire webbing moulded in tough waterproof (lexible rubber 6 ft. long x 4 inches wide. Two strong web fabric straps with self-grip buckles for attaching. A strong spring takes up any slack. 33 inch rubber covered lead-in. 4Ei0180-List, \$2.25. 4E 10180-List. \$2.25. YOUR PRICE ...... \$1.33

# Axle to Axle Moto-Aerial



4D10182-List Price, \$1.25. YOUR PRICE ......

Metallic conductor, enclosed in 53 inch long waterproof fabric envelope with a 36 inch web strap or chain on both ends.

## Lynch Noise Free Auto TO ANTENNA POSE Antenna Systems KIT 3E8526-List. \$9,50.

List. \$9. YOUR PRICE \$470 An auto antenna system for All Conditions. Eli Elim-

An auto antenna system for All Conditions. Eliminates interference and increases volume. Can be quickly attached to chassis of any car. Illustration shows assembly installed. Complete kit consists of: 1-Antenna impedance matching transformer, 1-receiver impedance matching transformer, 10 ft. "Notatt" shielded transmission-line. 25 ft. "Hi-Mho" auto antenna wire. 2 rear axie insulator assemblies, 1-fly-wheel housing insulator assembly, with tension adjustor. 10 feet lead-in wire. Neceseary hardware for connecting included.

# Lynch Kit A-2

Includes the antenna and receiver impedance matching transformers and 10 feet of Nostat shielded transmission-line. Hardware for connecting. Will reduce interference and raise the volume if installed on any aerial installation already in car.

3E8527—List Price, \$5.00.

\$2.94

ice, \$5.00. \$2.94 YOUR PRICE

# Copper Wire Screen For Auto Roof Aerials



Pure copper wire screen "cloth." Makes efficient most aerial for auto installed on top of or under roof. For care-

ful high-grade jobs. 

# Hang Down Auto Aerial



4010183 List, \$2.00. YOUR PRICE

Attached to rear of car. Metallic conductor en-closed inside of waterproof fabric. Web straps for attaching. 10-foot rubber covered lead-in.

# Spark Plug and Distributor Suppressors

For Auto Radio Motor Interference
For stiencing engine noises due to spark radiation in Auto Radio installations. Resistance element enclosed in waterproof tube. Cannot short
or jar loose. Strong and durable.
The two types listed below are the most popular
and commonly used units. Used on practically all
makes and models of cars wherever the available
space allows except the new Ford Model V-8
which requires a special type suppressor.

Elbow Resistor 3E1987-Meets the demand for unit that can be outckly and easily installed. Re-

3E1988-Thi 10 the one in general use. Fi most Fits all cars requiring standard Very rug-Suppressor. quires very little space gedly constructed. Cable Resistor

Spark Plug Type

Distributor Resistor

for mounting.

3E1989-Standard dis-3E1986-Inserts

tributor type, designed to maintain a good, tight connection

ignition cable. Used on cars where spark plugs are not accessible. (Bulcks etc.)

# Ford Model V-8 Suppressor



3E1985—Special type resistor for use in all auto radio installations in late model Ford cars. A distributor suppressor cannot be used on the Ford V-8 and additional resistance is therefore necessary at the Spark Plug. Supplied with a special resistance of 50,000 ohms.

YOUR PRICE EACH For Any of the Above Types

TEN POR \$1.39 FIFTY FOR \$6.47

Type

Type

# **New Inductive Wire Wound** Spark Suppressors

Resistance 12000 ohms. Resistance will not vary Tough bakelite case—will withstand wibration, head and abuse without injury. Affects engine start-ing, speed or gas consumption only a small frac-tion as much as the straight resistance type-



YOUR PRICE, EACH ... Ten for \$1.95

# New Ward Leonard Inductive Suppressors

A new type low resistance Automobile ignition noise suppressor, Inductive type. Presents very high imped-ance to the continua-



List Price, 60c. YOUR PRICE ...... 32¢

# **Auto Generator and Ignition** Filter Units and Suppressors

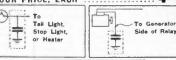
Single Capacitors For use on interruptor and bat-tery sides of ignition coil, tail light, windshield wiper, cigar-ette lighter, motor driven heat-ers and other electrical acces-sories on the car. All of the Single Capacitors have the same applications; the greater the capacity the greater the fitering value

TYPE AG-1. Capacity .25 Mfd.

Size 'axl'a.". 3E5175—List, 80c. 17¢ YOUR PRICE. EACH

TYPE AG-2. Capacity .5 Mfd. Size 34x1 14. 3E5 176-List, 95c. YOUR PRICE, EACH TYPE AG-3a. Capacity 1.0 Mfd. Size 1x2% 3E5177 List, \$1.25. YOUR PRICE. EACH

TYPE AG-4b. Capacity 1.5 Mfd. Size 1 2x2 3E5178-List, \$1.75. YOUR PRICE, EACH



Dual Capacitor and Inductive

TYPE AG-7. Consists of two .5

Mid. capacitors and a choke in one can. Size 175x2%". For filtering, storage battery supply to Radio. Unbalanced cundition of electrical auto system caused by various rates of charge and discharge of battery makes this unit indispensible in all installations. Diagram for 3E5179—List, \$1.75.

Units

3E5179-List, \$1.75. 3E5179—List, \$1.75. YOUR PRICE TYPE AG-8. Two .5 Mfd. capacitors properly grounded in one can size 1%x2%" for filtering

TYPE AG-8. Two .5 Mfd. capac grounded in one can size 11%x25%" nenerator cut-out.
3E5180—List, \$1.50.

YOUR PRICE, EACH To Ammeter



For Stubborn

B

Special Dome Light Filter

TYPE AG-6. Consists of one .5 Mfd. capacitor and an efficient choke in one fibre tube size 1x3". Has three

flexible leads for easy connections to circuit. connections to circuit. Recommended for use on any lighting, electric accessory or ignition circuit where interference proves to be particularly stub-

3E5181-List, \$1.50. YOUR PRICE .....



# Inductance Capacity Filter



For Dome Lights, Stop Lights, Electric Motor-Windshield Wipers and A.C. Filter circuits. Consists of a ½ mfd. 200 v. con-

wound with No. 14 wire. Meal flange on shell server of the server of the



List. \$2.00. YOUR 7 4E10186-4E10184 Easily installed

in any car with-out injury to volume. 1644" upholstery. Will deliver good volume. 1644" wide, 28" long. 6 feet insulated lead-in. Nicely finished to harmonize with the finest car interiors.

# Rider's Trouble Shooter's Manual Volume III



3E5902-YOUR PRICE

1185 pages of fresh material which is not dup-licated in previ-ous issues. Point to Point resistance data checked by actual

checked by actual tests and Manufacturers specifications. Contains a chronological catalog and index of nationally known Receivers made since 1921. Also a cumulative index covering. Volumes I and II. Loose-leaf binder permits you to remove, add or change any of the pages instantly. Page sizes same as those of Volumes I and II—a new arrangement may be made grouping all models of each make of Receivers together.

of each make of Receivers together.

Contains service data covering new Universal A.C.-D.C. Sets, Auto Sets, Short-wave Sets and combination Receivers. Public Address systems, Photophone Ampliflers, Power Units and Eliminators for Auto Sets are also convered. In addition a complete treatise on Test Equipment and much aluable information for the practical Radio Serviceman is included. An exclusive compilation of tube values showing electrical characteristics and constants for all tubes employed in Radio Receivers and Amplifiers since 1921. If you have Volume I and II you will appreciate the value of Volume III.

# Rider's Trouble Shooter's Manual Volume II

3F5901-YOUR PRICE

circuit and serv-icing data on all Receivers manufactured after the factured after the issue of Volume III. Very accurate and complete.

Point-to-Point Resistance Data

Includes a complete treatise on all values for point-to-point resistance measurement tests for the quickest accurate means of trouble shooting. 750 pages. Profusely Illustrated. No duplication of material in Volume I but is of the same size and binding.

# Rider's Manual Volume I



3F5900-YOUR PRICE

manual

plete in its treatment of older Receivers and should not be confused with the new Volumes II, III and IV which 11. III and IV which do not contain any of the material covered in Volume I. For practi-cally all early models of factory-built Sets. Sup-plies vital data con-cerning these alresite. cerning these circuits.

# Servicing Superhets



John F. Rider

Third Edition re-vised to date with important information on electron coupled superhets, electron AVC systems, Dual I.F. bands, Align-ment of oscillators

and many other valuable items of importance in the servicing and repairing of these complex modern radio

3E5905-

# RIDER'S MANUALS



The Radelek Company Chicago, III. Gentlemen:

Att'n: Mr. W. C. Braun.

I am particularly pleased to have your firm distribute publications bearing my name due to the enlanded type of Servicemen your catalog reaches.

It is my earnest hope that your customers will be thoroughly satisfied with my publications and with the delivery you are in a position to nive their orders.

Assuring you of every effort to further this market. I am

Photo By Blackstone Studios, N.Y.

Sincerely yours, (Signed) J. F. Rider.

- The Most Complete Directory of Radio Circuits Available
- Contains Vols. I, II, and III in One Cover
- Has Cumulative Index covering All 3 Manuals
- Loose-leaf Bound in Patented "Herculox" Mechanism Binder
- Available with or Without Carrying Handles



# New Complete Trouble Shooter's Manual-Volumes I, II, and III

Handiest to use. Less Chance of loss. Resistance values have been filled in to assist Point-to-Point analysis, on diagrams which were not marked previously.

Over 2,500 Pages of the Most Important Fundamental Data Required in the Radio Service Profession

Rider's New Complete Trouble Shoot-er's Manual has been adopted as the er's Manual has been adopted as the official and most authentic source of service reference data available, by RCA-Cunningham, National Union Radile Corp., and is recommended by Weston, Hicock, Supreme and Readrite.

The clear diagrams and plainly marked resistance, capacity and 1F marked resistance, capacity and IF frequency values make your work easier and your service better.

The complete tube reference chart supplied with Volume III is also in-cluded in the combined edition. This includes all standard types as well as the special types.

Contains an index of all nationally known Receivers manufactured in the United States since January 1921 and specifies the number and types of tubes they use.

# Trade In Your Old Manuals

Get this complete up-to-date "3-in1" edition in one big handy volume. You may trade in Volumes I. II. and III of either Rider's Trouble Shooter's or any other official radio service manual; we allow \$1.50 each on these old manuals if complete and sent prepald to the Radolek Co. Chicago. Not more than three manuals accepted on any one purchase of the New Complete Trouble Shooters Manual. Manual

3E5903—Combined "3-in-1" Manual without Carrying Handles. YOUR YOUR **\$21.07** 

3E5904—Combined "3-in-1" Manual with Carrying Handles. YOUR PRICE ..... \$24.50

The Superheterodyne

# Servicing Receivers by Means of



Resistance Measurement

By J. F. Rider

This book explains the usual resist-ance network which reduces all types of Sets and Amplifiers to a common level.

Special circuits are no problem when you use this new test procedure. You can test all types of Sets without wiring diagrams. Tells how to get wiring diagrams. the resistance between points in any circuit by working thru the socket contacts. Cloth bound, 203 pages.

# Book by Clyde Fitch Contains



complete information as to how they work, how they work, how to build them, and how to service them. Clearly ex-plains the principles underlying the construction of super-heterodynes. Following 1 s a

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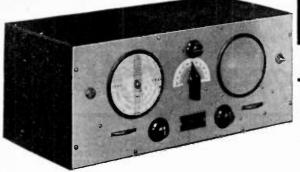
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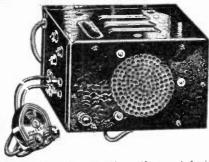
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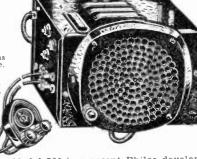
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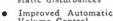
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Improved A.V.C.

4-Step Tone Control. Class "B" Amplification.

5-Watts Output. Built-In "B" Eliminator.

Built-In Filter.

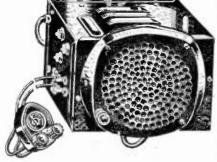
Airplane Dial.

Indirectly illuminated. Over-size Type "K".

Dynamic Speaker.

The finest automobile Radio ever built by the world's greate t manufacturer of automobile radios. With it you can dominate the quality Auto Radio business of your locality. Get behind this model and push it.

The Model 800 is a super-performing 7-Tube Superheteredyne which provides reception actually equal to the best home operated Re-ceivers. It contains every practical development ever made for use in Auth Sets and its tremendous 5-watt class "B" nuptut provides sufficient volume for all driving conditions. Drive as fast or as slow as you like, the brotliant performance of this fine Set will never



The perfectly balanced superheterodyne circuit of the Model 800 provides unsurpassed Selectivity and Sensitivity. Like other Philico Models it is easily installed underneath the cowl of any car; requires only 3 holes. The case which contains Speaker, Chassis, and "B" Supply measures 103," wide, 63," high, 8" deep. Comes complete with 6-8-park Plug Suppressors, 1-Distributor Suppressor, 2-Pilter Condensers and 7-Philico Tubes; (2-44s, 1-6A7 1-75, 1-37, 1-79, 1-84).

14E10163 Phileo Model 800 complete as described. List, \$75.00. Dealer's Price \$40.50, described, Lit, \$75. Less 2% for CASH. PRICE .....

500 for \$1.95; 1000 for \$3.90



# **Boost Your Auto Radio Sales**

Practically every family owns an automobile....
And practically every family is a prospect for a new Auto Radio. Prospects everywhere have an overwhelming preference for PHILCO. Therefore there is bigger business ahead for live-wire Philco Representatives. Go after this business with advertising... Use these promotion pieces which have been tested and proven.

DOOR HANDLE CARD

The door handle card, shown at the left, has always been a popular promotion item. Place them on the handles of parked cars or on the door knobs of homes. Prices quoted cover cost of cards im-printed with your name and ad-dress, FOB Rocnester, N. Y.

3E3270—500 for ...... \$3.75

1000 for......\$5.85

SECRET INK LETTER

SECRET INK LETTER
The newest filing in letters for circularizing your customer list. Illustration at right shews the letter before and after dipping in water. The curlestry of your prospect is immediately aroused upon receiving the letter and of course he follow: instructions and dibs it in water. The "secret ink" then appears and he reads the entire stage you are putting over. Your address is also "secret ink". Prices FOP Worthington, Ind.

printed 3E3271-100 for ....

250 for \$7.00: 500 for \$10.00; 1000 for \$15.00

**POSTCARDS** 

The most committed way for reaching old customers and new prospect. Use this series of 5 posteards to get the business. If possible obtain a list of automobile owners in your section and send them all a card each week for I weeks. Prices imprinted FOB Roclester, N. Y.

Rochester. N. Y. 3E3272— 250 each of \$3.20 3 cards ... \$3.20



500 each of 3 cards . . . \$4.90

## BASEBALL SCHEDULE

The baseball schedule is sure of being preserved and referred to often. Space to stamp your name or you may drider them imprinted with your same and address. Practically all big league games are now on the air and every baseball fan is a good propert for a PHILCO Auto Set. Priced uningrinted. Imprinting 1,000 or less \$1.00 extra. FOR Chesco. \$1.00



# Asks No Odds in Performance!

| 4E|0150-Radolek 6-Tuhe Auto Radio complete with RCA Tuhes, Spark Plug Suppressors and Condensers for 6 cylinder ears. List, \$42.50.

This new Radolek 6-Tube Superheterodyne is the most compact Auto Radio on the market. case which contains Chassis, namic Speaker and "B" Eli The Dynamic Speaker and "B" Elimininator measures only 8%" wide, 6" high, 6¼" deep. Copper plating inside prevents rust and increases its shielding properties.

The Circuit

The Circuit

Advanced engineering plus a well planned layout, plus the best materials obtainable have resulted in the best possible performance as well as compactness. A 3-gang Tuning Condenser with tandem-offset venice drive which prevents creeping is one of the main features. The following latest type Tubes are used: A type 78 in the first R.F. stage followed by a 6A7 Mixer-Oscillator. A stage of double tuned 1.F. employs another type 78 which in turn is coupled through a single tuned I.F. transformer to the diode plate of a type 75 second Detector. second Detector.

Automatic Volume Control The type 75 Tube pravides AVC for both the R.F. and I.F. Tubes. The Hi-Mu triode portion of the 75 is resistance coupled to a type 41 Power Pentode which drives a very powerful, high-grade Dynamic Speaker.

Full-Wave Power Pack

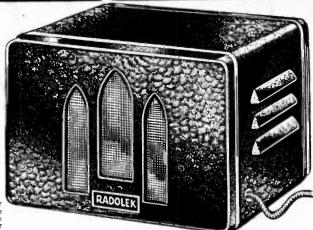
The Power-Pack uses a full-wave Vibrator and a type 84 Tube for full-wave rectification. This assembly is mounted on the chastis deck where it is easily accessible for adjustment.

Airplane Dial

An Illuminated Airplace Dial of new design is accurately calibrated in kilo-cycles with large white figures on a black background. Very easy to read day or night.

Easy to Install

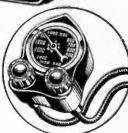
This new Radolek Auto Set is the easiest to install—only one hole to drill and only two connections to make: Ammeter and Antenna. Feature this Set for full Profits for yourself.



- Complete in ONE Unit
- Superheterodyne Circuit
- Automatic Volume Control Dynamic Speaker
- · Illuminated Airplane Dial Vernier Drive

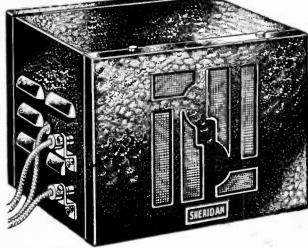
Kilocycle Calibration

- · Combination Volume Control and Locking Device
- Fits All Type Cars
- · Easiest Auto Radio to Install Single Hole Mounting Only Two Connections



Airplane Dial

# Every Sale a Satisfied Customer!





Airplane Dial

· New Type Tubes:

1-6D6, 1-6A7, 1-75, 1-41, 1-84 Superheterodyne Circuit

Automatic Volume Control

Airplane Dial

Dynamic Speaker One-Unit Construction

Easy to Install

Works with Any Type Aerial

Marvelous Sensitivity

Ample Selectivity Plenty of Power

Furnished Complete Ready to install

14E10151—Sheridan 5-Tube Superhet Auto Set complete with 5 Sylvania Tubes and Spark Plug and Generator Suppressors for 6-cylinder Cars. List, \$37.50. YOUR SPECIAL PRICE

The SHERIDAN 5-Tube Superis the lowest-priced, satishet. factory Auto Radio we know of. It is a good leader for you and will be very popular among those of your customers who do not care to invest in a six or seven Tube Set.

Tube Set.

6 Tube Performance
in performance the SHERIDAN is
equal to older 6 and 7 Tube Auto Sets.
This is due to the use of the new
multi-purpose Tubes which are actually
two Tubes in one envelope. Excellent
Selectivity and Benstivity have been
secured through the employment of
serientifically engineered ultra-high gain
cuits and the use of five tuned circuits. A type 41 Pentode Power Tube
delivers 1.2 watts to the Dynamic
Speaker and provides enough volume for
all ordinary requirements. all ordinary requirements.

all ordinary requirements.

Automatic Volume Control
The New 6A7 and 75 combination
Tubes provide Automatic Volume Control action which tends to maintain
the volume at a constant level regardless of signal strength; also to
counteract fading.

The Chassis, Dynamic Speaker and "B" Supply Unit (Full-Wave, Tube Rectifier Type: are contained in a substantial crackle-finished steel case size T½" deep, 9¼" wide, x 7½" high. This case mounts underneath the could by drilling only one hole. The Remote Control mounts on either side of the steering column and contains an attractive Vernium Driven Aimplane Dial, and Combination of from switch and tractive vermer Driven Airplane Diar, and Combination off-on switch and Volume Control. The Volume Control Knob has a key base and is removable, acting as a protecting lock against unauthorized use of the Receiver. and Combinatio Volume Control. Knob has a ker able. ceiver.

Easy to Install

The SHERIDAN is very easy to install and can be successfully placed in operation in any car within a few moments. This simplicity of installation enables you to sell the Receiver "Installed" without sacrificing your profits. No aggressive Radio Dealer or Serviceman can afford to neglect the market which already exists for a thoroughly good Auto Radio at a low price and there is a Set with which you can dominate this rich market. Order one of these Sets TODAY and begin NOW to cash-in on this big field.



Latest Circuit-New Type Tubes

Illuminated Vernier Drive Dial Accurate Kilocycle Calibrations Smooth Full-Range Tone Control

Finest Quality Dynamic Speaker

Sturdy: Built to Last a Lifetime

Modernistic Cabinet

75-555

New Low Priced Set That's in Step with the Times

Here is a vastly improved 4-Tube Receiver that will make a timely sales leader for you. Order in a few, place them on display and see how quickly they will sell themselves.

The Radolek 4-Tube Dual-Wave Retrade because of its many points of supremacy over other Sets of this type. It actually doubles the short-wave entertainment by tuning all the way down to 75 meters instead of only to 175 meters, the customary limit for 4-Tube Sets. Sets.

# Many Exclusive Refinements

The Radolek 4-Tube Dual-Wave has refinements rarely found in Receivers of this type: Illuminated Vernier Drive Dial accurately calibrated in kilocycles, Full-Range Tone Control.

The Cabinet is handsomely designed

along modernistic lines and is made of veneers, durably and beautifully select select veneers, durably and beautifully finished. Front panel and center of top and sides are of natural finish bird's-eye maple; edgings and top overlay of contrasting darker finish. Overall size, 9½ inches wide, 9 inches deep, 12 inches high.

An Outstanding Value

If you will compare this New Radolek 4-Tube Dual-Wave Receiver, feature for feature, with others selling at the same price you are sure to agree that in Radio Sets (as in other Radio Merchandise) Radolek offers you a little more for a little less money.

14E 10962—Radolek 4.Tube Dual-Wave Receiver for 105-120 Volt 50/60 cycle A.C. Complete with RCA Tubes (1-42, 1-77, 1-78, and 1-80).

List Price, \$24.50. YOUR PRICE.....

We've found what Features Radio Buyers look for in a Low Priced Receiver . . . . and here they all are:

• Full Superheterodyne Circuit

Latest High Efficiency Tubes

Full Automatic Volume Control Smooth, Stepless Tone Control

· Illuminated Vernier Drive Dial

Accurate Kilocycle Calibration

Noise Blocking AC Line Filter

Finest Quality Dynamic Speaker

Electric Phonograph Connection

· Beautiful Modernistic Cabinet

WITH TUBES

Coast to coast reception as consistently possible with this Receiver in all localities of ordinary favorability for DX. Designed to take full advantage of the latest type Migh-Gain Tubes, it develops amazing Sensitivity and Selectivity over its entire range of 75 to 555 Waters.

This five-Tube Midget leads all others in all-round sales appeal. It has all of the strating to your trade because it has so above enumerated, modern features—those qualities which today's Set Buyers want illuminated Vernier Drive Dial accurately and are willing to buy; and it also has eye appeal combined with outstanding performance;

Coast to coast reception is consistently prossible with this Receiver in all localities the prossible with this Receiver in all localities the blasting and reduces fading. An of ordinary favorability for DX. Designed to take full advantage of the latest type High-Gain Tubes, it develops amazing Sensitivity and Selectivity over its entire disconnection make complete its refinements. finements.

Sensitivity and Selectivity over its entire finements.

Big-Set Volume and Tone

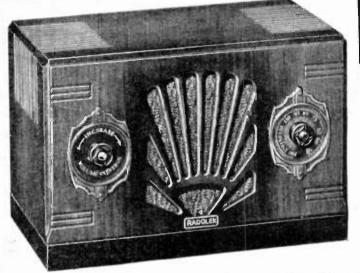
Far better Tone Quality than is ordinarily acceptance we have selected a Calinet of experienced from small Sets distinguishes on the Radolek 5-Tube Dual-Wave Superher from all the rest. A good Dynamic Speaker, sufficiently large to easily handle the full power of its peniode output results in reproduction of bell-clear quality, deep, 12% inches high, World Radio History



14E10963-Radolek 5-Tube Dual-Wave Superheterodyne to: 105-120 von 50/60 cycle A.C. Complete with 5 RCA Tubes (1-6A7, 1-42, 1-75, 1-78, 1-80).

List Price, \$33.00 YOUR

PRICE
25 cycle available for \$1.00 extra.



# 180 - 550 - METER

# Compares Favorably with Most Six Tube Receivers

t4E10966—Radolek Compact 5-Tube Receiver for 105/120 Volt, 50/60 cycle A.C., complete with 5 Triad Tubes. List. YOUR PRICE .....

- TRF Circuit-Latest Type Tubes
- Illuminated Dial-Kilocycle Calibration
- Full-flux Dynamic Speaker-Ample Power
- Tunes 180 to 550 Meters-Police Calls
- Excellent Sensitivity and Selectivity
- Very Compact, Completely Portable

How is competition for the Set business in your locality. . . . . Is it very keen? If your locality. . . . . Is it very keen? If it is, here is an A.C. Receiver that should interest you as a Dealer:

This New Radolek 5-Tube A.C. Compact is just the type of Set many people are looking for—It is small . . . light . . . performs well, and is very attractive in appearance. Yet the price is amazingly LOW.

It is very Sensitive and Selective, and while At is very sensitive and Selective, and waite not intended for use as a distance-Receiver, you will be amazed at how easily and clearly it brings in stations which are beyond the reach of other less modern 5-Tube Sets.

Performance comparable with 6 or 7 tube Sets which were considered "modern" only a few months ago has been accomplished by the use of the New multi-purpose Tubes which do double duty and are really two Tubes in one envelope.

More than ample volume is secured by the use of the powerful type 42 Pentode Output Tube feeding a Dynamic Speaker of excep-

tional efficiency.

The Gear-driven Vernier Dial is illuminated and is calibrated in kilocycles for convenience in selecting and identifying stations. The combination Volume Control-Power Switch Escutcheon matches the Dial in appearance.

The Cabinet of this Receiver is far more im-The Cabinet of this Receiver is far more impressive in design and finish than you would expect to find on a Receiver at our extremely Low Price. Front panel of select walnut veneer, top and sides of solid gum wood. Neatly carved on all three exposed sides. Rubbed, American Walnut finish. Overall size, 11½" long, 6½" deep, 7½ inches high. An ideal size for one's "personal" Receiver. Easy to carry about. Just the thing for office. Sun Porch, Den, Bedroom. Nursery or kitchen. Many dealers and Servicemen are also using this type for rental. Tubes used and furnished with Receiver: 2-6D6s, 1-6C6, 1-80 and 1-42 (Triad).

# TUBE AC.DC uperhet

# 75 TO 555 METERS

- The Smallest Superheterodyne Made.
- Uses Latest Type High-gain Tutes.
- Vernier Tuning, Kilocycle Calibration
- Built-in Antenna for Local Programs.

Five Tubes are necessary for satisfactory results if the A.C.-D.C. Net your Customer selects 1 expected to reach out beyond the "locals"; and nothing but a Superheterodyne will provide sufficient selectivity to enable him to take full advantage of all available Radio entertainment. This New Radolek 5-Tube A.C.-D.C. Superhet fulfills both requirements completely In addition its extended tuning range of 75 to 555 Meters spins up swenues to many thrilling features which are unattainable with the ordinary broad-ast

Rerei This

anie stare his Dual-Wave Feature This Dual-wave Feature alone will close many sales for you because here at last, is a small Set that actually provides satisfactory operation on the short-wave channels. Latest Type Tubes in an improved circuit results in remarkable power.

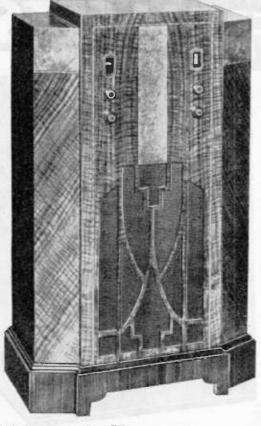
Its beautiful bronze Dial with Vernier Tuning and Kilocycle Calibration are also big selling features. They add attractioness and convenience by enabling the user to select stations by their published transmitting frequency, or identify unknown ones from the dial setting. A separate Short-Wave Switch on the rear side of the chassis silipped to change from broadcast to the lower wave lengths. Switch is so conveniently situated that user may reach benind Receiver and change from one wave band to the other without moving the set.

The Cabinet is a handsome design with two-tone walnut and bird's eye maple veneers. Very substantially made; durably and artistically inshed. Its combact size—only 9% inche wide, 4% inches deep by 6% inche high.



14E10967—Radolek 5-Tube A.C.-D.C. Superhet for operation on any 25, 40 or 60 sycle 110 yolt A.C. or D.C. complete with 5 RCA Tubes (1-2525, 1-43, 1-44, 1-77 and 1-78). List Price, \$28.50. YOUR PRICE, ONLY

# Your Customers want to hear





# Tunes 12.5 to 550 Meters and has These Features

- Improved Superheterodyne -Gear-driven Vernier Dial Circuit
- Latest Type High-gain Tubes
- -Silent Meter Tuning
- Stepless Tone Control
  - Three-gang Tuning Con-
- -Automatic Volume Control -Electro-Dynamic Speaker
  - -Accurate Kilocycle Calibra tion
  - -Finest Performance on broad cast
  - -European Reception
  - -Phonograph Connections

Thrill your clients with Old World programs. In any location where you can receive 1500 mlle broadcast programs at night, this powerful receiver will pick up. European. Short Wave Signals under rea onable atmospheric conditions, in full Daylight. Thousands of foreign born Americans delight in hear fatherkand, they thrill to the native music they left behind. With celver you can gratify them—at a nice profit. hearing

14E10981—Radolek 'TRAVE-LOG" Console Model for 105-120 rolt 50/90 cycle A. C., coablete with six RCA Tubes. List, \$79.50

# The CONSOLE MODEL

A distinctively modern design of beautiful, carefully selected and matched walnut veneers. The hamdrubbed finish equals that of the most expensive of furniture. The wonderful performance of the chassis, both on short-wave and broadcast bands, combined with this beautiful console Cabinet, make this an ideal Receiver beautifficonsole Cabinet, make this an ideal Receiver for discriminating Radio buyers. Only the most expensive Sets incorporate all of its features All-Wave Tuning Range (12.5 to 555 meters). Superheterodyne Circuit. Meter Tuning, Tone Control, Three-gang Tuning Condenser, Dynamic Speaker, and the Latest Type Tubes. Console Size, 38 inches high, 12 inches deep, 24 inches wide. 

Recent developments in Radio Receivers, bined with improved broadcasting facilities, made the reception of foreign stations possible. Your eustomers are intense'y interested in tuning Your customers are intensely interested in tuning in foreign short wave stations, as well as those on the domestic broadcast band. The RADOLEK TRAVELOG has been developed to give the ultimate purchaser the ability to tune in all of these. Everyone enjoys a thrill and this extension of the field of possible Radio entertainment has business booming for Radio Dealers who are featuring Receivers capable of bringing in foreign stations. tions

# **Demonstrations Make Sales Easy**

The RADOLEK "TRAVELOG" will really sell itself upon demonstration. Its marvelous performance on all bands will give your customers an even greater thrill than was theirs at hearing their first Radio. In addition, it has every modern re-finement your trade can demand—all at a very reasonable price.

# Covered By Regular R. M. A. Guarantee

FOUR TUNING BANDS The Radelek 'TRA-VELOG' covers all were lengths from 12.5 to 555 Meters. The selector switch automatically exposes the proper tuning seale (graduated in kilocycles and megacycles) for each frequency band. Banges: 535 to 1500 kilocycles Broad-east, 1.5 to 4 megacycles for police call, 4 to 10 megacycles and 10 to 24 megacycles for Furman broadeast. Europan broadcast.

EFFICIENT ON ALL RANGES—Use of an independent Oscillator circuit in this Receiver eliminates the "birdles" and cross-talk esamon in most Sets not expressly designed for high frequency reception.

METER TUNING—Pluminated Shadowgraph Tuning Indicator permits tuning in signals that the ear would miss by conventional "ear" tuning. It also provides means for more perfect resonance adjustments and reception of all stations.

AUTOMATIC VOLUME CONTROL-Counte acts feding ami tends to maintain an ev-volume level irrespective of signal strengt THREE-GANG TUNING CONDENSER as as sherply tuned circuits provide knife-ed. Selectivity and render all available Rad entertainment usable.

7 MICROVOLT SENSITIVITY provides fareaching governor on all wave lengths.

LATEST TYPE TUBES give 8 Tube poformance The six tubes used are: 1-2A
1-2A6, 1-2A7, 2-38s, 1-80.

PHONOGRAPH CONNECTIONS provide f the addition of electric pick-up and turi table for the reproduction of ultra-fine mus from phorograph records.

TONE CONTROL for the adjustment of ba and tralle to suit the individual taste ar for the suppression of statle.

Uses the same marvelous Chassis as that of the Console Model. Tunes in foreign stations, police calls, airplane signals, as regular broadcast band, with better tone and greater volume than is attainable on most larger, more expensive models. Recommend this model to those customers who want a Table Model Receiver of exceptionally fine performance. It has every modern improvement necessary for real radio reception and will prove its worth as a really efficient, dependable performer. The cabinet is of beautiful walnut veneers and handrubbed finish. Distinctively modern in design. Will harmonize with the furnishings of any home. Overall size, 15 inches high, 13 inches wide, 7½ inches deep.

14E10980—Raidek Table Model "TRAVELOG" for 105-120 volt 50/60 cycle A.C., complete with 6 RCA Tubes. List Price, \$59.50.

YOUR ally fine performance. It has every modern



# **JUAL WAVE**

15 to 550 METERS

Two Up-to-date Sets for Rural Use with as much Quality and Performance as Similar A.C. Sets

# **8 GREAT FEATURES**

- (1) Superheterodyne Circuit-Very Sensitive
- (2) Dual-Wave Tuning-540-4000 Kilocycles
- (3) Automatic Volume Control-Very quiet
- (4) Full-Range Tone Control-Reduces Static
- (5) Illuminated Vernier Dial-KC Calibration
- (6) Fine Quality Dynamic Speaker-Good Tone
- (7) New High-Amplification, Low Drain Tubes
- (8) Beautiful Modernistic Cabinet

Either of these two great new Radolek Superheterodynes (2-volt Battery operated or 32-volt all-electric) is available in this attractive Modernistic Table Model Cabinet. This

is a Cabinet of outstanding beauty and is right up-to-the-minute in design.

# 32 VOLT ALL ELECTRIC

Operates on Any 32-Volt Farm Light Plant

A new 5-Tube Superheterodyne which plugs directly into the socket of a 32 volt light plant outlet. All electric in operation—derives all B, and C current from an efficient built-in all-wave Vibrator—no batteries needed. "A" current taken directly, from the 32 volt storage batteries. Very economical to operate; draws only 3 Amps. total.

total.
Your customers who have Delco or other 32 volt
systems will be delighted with the performance of
this new Receiver. It offers a greater range and
finer Selectivity. Being a Superheterodyne, it is
very sensitive. Brings in distant stations like
"locals" and cuts out over-lapping signals.
Automatic Volume Control maintains even volume

Automatic Volume Control maintains even volume levels. Biasting while tuning is eliminated and fading is greatly reduced. A Full-range Tone Control provides controlled frequency discrimination to sult the individual taste and effectively reduces static disturbance.

Dynamic Speaker of finest quality. Produces does not be presented by the prost best heretologies.

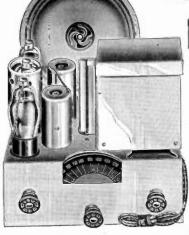
Dynamic Speaker of finest quality. Produces a deep, rich tone that heretofore was possible only with A-C Sets. The Speaker is operated without excess battery drain.

RANGE 75 TO 555 METERS

RANGE 75 TO 555 METERS
This Receiver brings in Police Calls, Airplane Contacts and Ships at sea on the short waves; and stations near and far on the regular broadcast band. The Dial is vernier driven and accurately calibrated in kilocycles for quick and easy tuning. Five New Type Low-drain Tubes are used: 1-6A7, 1-78 and 1-84. The Beautiful Cabinet used is shown above. Made of the choicest wainut veneers with contrasting overlays. Hand-rubbed American wainut finish. Overall size 9H" wide, 6\frac{1}{2}" deep, 14\frac{1}{2}" high.

14E10968—Radolek 5-Tube Superheterodyne for 32-volt D.C. operation, complete with five RCA Tubes.

List Price, \$45.50.



# CHASSIS TUBES AND SPEAKER PRICES

These two Chassis offer you a wonderful opportunity for modernizing obsolete battery-operated Receivers. You only need to demonstrate the improved performance of either of these Chassis, to interest anyone who is now getting along with one of the "old-timers".

14E10995—Radolek 5-Tube Dual-Weve Chassis for 32-velt D.C. operation, 8½" matched Dynamic Speaker and 5-RCA Tubes. (1-6A; 1-42, 1-73, 1-78, 1-84) Chassis size: 8%" wide, 6" deep, 8½" high. List Price, \$39.50. 

14E10996—Radolek 5-Tube Dual-Wave Chassis for 2-voit Battery operation, 6" Bast Kinematic Speaker, 5 RCA Tubes. (1-146, 1-19, 1-30, 1-32, 1-34) Chassis size: 81½" wide, 6" deep, 5½" high. List Price, \$27.00. List Price, \$27.00. YOUR PRICE .....

# **2 VOLT BATTERY OPERATED**

# Battery Lasts Full Year

Battery Lasts Full Year
This New Radolek E-Tube 2-Volt Superhet uses
the latest type Everendy 2-Volt Air Cell that
requires no attention... Hook it us and forget
it. With an average of 2 to 3 hours use daily
the battery will give a full year's efficient service.
You'll marvel at the Selectivity, Sewedivity, sand
Tone of this battery operated Superhet. It is
truly as modern in performance and appearances
as the latest A.C. Sets. The same modern features which distinguish the Radolek A-Tube 32volt Receiver described at the left are to be found
also in this model. also in this model.

also in this model.

CLASS "B" AMPLIFICATION

Type 19 push-pull power output tube transformer coupled to a type 30 driver tube fed through a resistance-capacity coupling from a type 32 ereen-grid Detector. This tube also provides Automatic Volume Control current for the type 34 intermediate frequency tube. A 1A6 sets as the mixton-coeffider tube.

internediate frequency tube. A 1.85 sets as the mixer-oscillater tube. Six-tuned circuits profide ample Selectivity on both broadcast and short-wave bands.

A New Type Best Kinematle Power Speaker capacity of handling the entire output of the Set provides smeoth, distortionless reproduction at all volume levels. Himminated Vernier Dist graduated in kilocycles. New type Low-drain Tubes draw only ½ Ams. of "A" current and 20 ms. of "B". The Attractive Cabims supplied is illustrated above. Modernistic in design. Made of finest walnut vencers with hand-rubbed American walnut trenests with hand-rubbed American walnut infish. Size 9A" wide, 6½" deep, 15½" bigh

14E10969—Redolek 5-Tube Dual-Wave Super-het (75-550 Meters) for 2-volt Battery operation, complete with RCA Tubes; less "A" and "B" batteries

1.1st. \$33.00. YOUR PRICE .....

3E17—Special Set of 3-45 volt heavy-duty "B" batteries and 1 Eveready Air Cell.

\$8.10 PRICE .....



- ◆ Superhet Circuit—New Type High-Efficiency Tubes
- Push-Pull Type 42 Power Tubes-Six Watts Output
- Automatic Volume Control for Smoother Operation
- Smooth Full-Range Tone Control and Static Reducer
- ◆ Vernier Dial Accurately Calibrated in Kilocycles
- Color of Dial Light Changes with Each Wave Band
- High Grade Eight-Inch, Full-Flux Dynamic Speaker
- Modernistic Cabinet Finished in American Walnut

# Tuning Ranges

Only \$54.50 List (Your Price \$31.95) for Modern 8-Tube Superheterodyne that covers the entire a MOUGHTH O-14DE Superneterodyne that covers the entire range of frequencies used in practical Radio communication. Band No. 1: 13-41 Meters; Band No. 2: 25-82 Meters; Band No. 3: 68-201 Meters; Band No. 4: 200-550 Meters and Band No. 5: 790-2540 Meters.

This is the first successful 5-Band Receiver ever This is the first successful 5-Band Receiver ever offered at a popular price. Everything on the air is within its range: American and Foreign Broadcast, Amateur Calls, Police Calls, Airplane Communications, Weather Forecasts, Time Signals and many other interesting features which are not attainable with the ordinary single or dual-band Receiver.

dual-band Receiver.

Coverage of the entire spectrum of frequencies now in practical use is accomplished without the use of troublesome plus-in colis. Tuning on any wave length is accomplished by simply selecting the desired band by turning a knob on the front panel of the Set, and then tuning to the desired signal by means of the vernier driven Tuning Dial. For easy identification of each of the five bands covered, the color of the dial switched into the circuit.

## Stable in Operation

Improvements in coll and circuit design have resulted in amazing efficiency over the full range of the Receiver. The Set is outstandingly stable in operation and provides consistent and dependable performance on any wave lengths.

ent and dependance performance on any wave lengths.

Many Refinements

The Radolek 8-Tube All Wave Superheterodyne incorporates every practical refinement known to Radio: Its improved Automatic Volume Control. Its Vernier Driven Dial is accurately callibrated in kilocycles and has a separate circle of readings for each wave bond.

Eight inch Dynamic Speaker, a size rarely found in a Receiver of this type, is used in the Radolek All-Wave Superheterodyne. "The better the Rado" and our Engineers have selected a Speaker which does justice to the fine performance of the chassis.

Full-Range, Stepless Tone Control enables the owner of this Set to adjust to that frequency response which brings in the various types of programs to their best advantage. The Tone Control is also very effective in reducing static Control is also very effective in reducing static nolses.

New Type Tubes; 1-37, 3-78s, 1-85, 1-'80 and 2.42s in push-pull output are used in a circuit designed to realize from these new type tubes their full efficiency

# Phonograph Connections

Instructions are furnished for the installation of an electric pick-up for the reproduction of ultra-fine entertainment from phonograph records. In our Public Address section, you will find suitable electrically driven turn-tables and pick-ups with which you can transform this Receiver into a combination instrument of the finest custive. finest quality.

# A Beautiful Cabinet

A Beautiful Cabinet
The Cabinet of the Radolek All-Wave Superhet is certainly one of distinction. Burl wathut veneer center panel is flanked on each side by panels of select crotch grain light American Walnut veneer. The paneling effect is applied to the sides as well as the front, a feature not found on any but the most expensive pablinets. The top is also finished as beautifully as the front; A center panel of grooved hardwood in contrasting finish emphasizing the mosternistic lines of the Cabinet. Overall size, 13% inches wide, 8½ inches deep, 16½ inches high.

# A Very Popular Receiver

The Radolek 8-Tube All-Wave Superheterodyne will be one of the most popular Sets you have ever handled if you will place one on demonstration where your customers can see for themselves what a remarkable value it is—How wonderfully it performs on all wave lengths; what wonderfull Tone it has, how keenly sansitive, and how acutely selective it is. This Recuiver offers the most available in the way of variety and quality of entertainment for the money.

# Modernize Old Sets

Modernize Uld Sets
Or perhaps you know of several people who have obsolete Receivers in fine Cabinets which could be economically modernized by the installation of a new Chassis. For such jobs, the Radolek All-Wave Chassis and matched Dynamic Speaker offers an ideal solution. The Chassis measures 8 inches deep, 13 inches long and 7 inches high, overall. It employs all modern refinements: new glove-fitting tube shields, ball bearing Tuning Condensers, Over-capacity Power Transformer, Condensers and Resistors and a very sturdy chassis base.

# **Price List**

RCA Tubes for

14E10970 Set Complete with 8 105-120 Volt 50'60 Cycle A.C. List Price, \$54.50. YOUR

25 cycle available for \$1.50 extra



Prices Chassis-Tubes-Speaker

14E10973—Chansis, 8 RCA Tubes and Matched \$" Dynamic Speaker. For 105-120 Volt 50/60 Cycle A.C. List Price, \$48.50. \$28<sup>50</sup> YOUR

PRICE 14E 10974—As Above for 105/120 Volt 25 Cycle A C. List Price, \$51.00.

PRICE .....

WE DARATED CAM

# MERSHON

Electrolytic Condensers Triple 8 8-8-8 Total 24 Mfd.

3E5887-YOUR \$ 12 PRICE

These are genuine Mershon Condensers. you at Real Bargain Prices. Guaranteed. Peak voltage ounting brackets and ven ffered to Quality Guaranteed 430. Mounting br covers not included.

Upright Mounting

Stock Number	Mid.	Price	Price
3E5885	8-18	\$4.50	\$0.75
3E5887	8-8-8	6.00	1.12
3E5888	9-9-18	6.00	1.45
3E5889	8-8-8-8	7.50	1.95
3E5890	8-8-18-18	7.50	1.95

Stuc	l Mounti	ng Typ	е
3E5891 3E5892	6	1.25	.42
3E5893 3E5894	10	1.70	.50

# **Grid Resistances**

All wire-grid resistances covered with varnished cambric can be bent any shape. Small—compact—length 2½ to 12 inches. Pigtail leads.

Stock	Resist.	Stock	Resist
Number	Ohms	Number	Ohms
3E285	25	3E312	1,600
3E287	75	3E314	1,700
3E288	100	3E316	1,800
3E290	200	3E317	2,000
3E293	300	3E318	2,250
3E294	350	3E319	2,500
3E297	450	3E320	2,600
3E298	500	3E322	2,800
3E300	600	3E323	3,000
3E301	650	3E324	3,500
3E302	700	3E325	4,000
3E305	900	3E326	5,000
3E306	1000	3E327	6,000
3E308	1200	3E341	7,000
3E309	1300	3E342	8,000
3E310	1400	3E343	9,000
3E311	1500	3E344	10,000
YOUR PRICE,	EACH.		10¢

# 10 for 85c Indoor Aerial Wire



For A.C., D.C. Sets SE2074—60' coil. Zipper Type YOUR PRICE Stock | For Sets NOT flexible. Extremely Extremely flexible. A well insulated stranded conductor is covered with a brown cotton braid.

POLYMET



Electrolytic Condensers

Triple 8 Total 24 Mid.
Peak Voltage 430
3E5487
YOUR

PRICE .... 89¢
Size 31/2" high,
4" wide.

Single 4 Mfd. Peak Voltage 430 3E5488-29¢ YOUR PRICE. Diameter Size 412" high. Diameter 13k". Stud mounting Con-denser is negative.



Mounting Clamps and Covers For use with multiple type condensers

sitive connection at each

Clamps	Covers	Diameter	Your Price
3E5872	3E5875	2 1/2 in.	5c
3E5873	3E5876	3 in.	
3E5874	3E5877	3 1/4 in.	

# Midget Carrying Case Extra



suedette material. Strong and durable. Securely attached attached handles. Dark brown finish. 4 brass studs are attached to a heavy re-

Stock	For Sets NOT	YOUR
Number	Larger Than	Price
4E10765	9' x6' x5'	\$1.42
4E10766	11'4'x8'4'x5'4'	1.59
4E10767	12'2'x8'4'x5'4'	1.65

# WHITE-CROSS Electric Food Mixer

The White-Cross Food Mixer and Julee Extractor will take care of practically mixing, beating and mixing, beating and Mixer and Julee Extractor will take care of practically all mixing, beating and whipping purposes. For mixing batter for waffles, pancakes, cookies, for mixing ingredients for all kinds of cakes, muffins, nop-overs, sandwich fillings, etc., for mashing and whipping potatoes, turnips or squash and for whipping creams and leings and mixing drinks it has no equal. Julees are quickly and thoroughly extracted from oranges, lemons, limes and grapefruit. Mayonnaise may be thoroughly mixed with ease and comfort. A kitchen aid that will save time and effort and do a better job. Always ready for instant use.



14D11080-List, \$18.75. YOUR PRICE .....

\$10.78

Complete with one large and one small mixing bowl, one pulse extractor, one judee extractor reasmer, individually removable self-cleaning beaters, ball bearing self-revolving bowl platform, sturdy and silent three-speed portable powerful motor.

# PHILCO Replacement Power Transformers

Centine Philos replacement transformers made by Jefferson. These transformers are built for continuous operation without excessive heat and are approved by the Underwriters Laboratories. All windings are dipped in insulating varnish and baked. Heavy impreparated insulating material between the windings insures further protection. Extremely rigid construction gives complete freedom from mechanical hum; and the drawn steel housings protect windings and improve appearance. Diagrams giving complete specifications and hook-up included with each transformer.

For PHILCO 511

Part Num. 3073 replacement in For replacement Phileo 511 or o seven tube radio

seven tube radio using 4-26, 1 1-7.1A and 1-80, 1 mary 105-125 vo cycles A. C. Secondarles 375 Y. @ 1.9 amps., 5 V. C.T. amp., 5 V. @ 4.3 am 2.2 amp., 5 V. @ 2.3 amps. 60 cycles A. C.T. @ 37

3E4250→ List Price, \$7.00. YOUR PRICE..... \$1.65

# For PHILCO 91-121

Part Num. 6554 For replacement in Philo model 91-121 other radio sets ng 2-44, 1-36, 3-2-41, 1-80 or of other using 2-44, 1-3 or equivalent tubes. Primary 105-125 volts, 60 cycles A.C. Sectors 67 V. C.T. equivalent tuoes. Primary 105-125 volts, 60 cycles A.C. Secondaries 670 V. C.T. (20 130 Ma., 6.3 V. C.T. (2) 3,5 amps., 5 volts (2) 2 amps.

3E4252-

\$1.95 YOUR PRICE.....

See Page 16 Radolek has made available to you at an unheard of low price a Genuine NoTE—Can Be Used On 110 V., 60 Cycle Receivers.

## For PHILCO 21 Part Num. 4813



3E4251— Price, \$6.00. YOUR PRICE ...

\$1.80 For Philco 70A, 270A, 370A

For Philco 70A, 270A, Part Num. 5118
For replacement of 25
cy c1e power transformers in Philco co models 70A. 270A.
370A and other sets using 4-21's or 458's. 1-27 or 1-56, 147 or 1-45, and 1-80.
Primary 105-120 volts,
25 cycles A C. Secendarles 665 V. CT. @ 95 amps. 2.5 V.
1.5 amps. 5 V. @ 2 amps.
3E4253
List Price, \$8.00.
YOUR PRICE.

C.T.

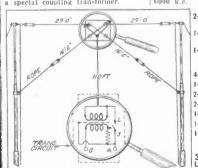
\$1.95

# RCA"WorldWide"AntennaSystem

Model 9500. This system makes available to every owner of a short-wave. It is a short-wave and the short-wave and the short-wave range and cross-connected to proceed the advantages of a scientifically-correct antenna. Through its installation are overcome the two major faults common to any antenna for the conventional type: (1) Lack are not "inleked-up" by the transmission of the conventional type: (1) Lack are not "inleked-up" by the transmission line interference produced at the higher frequencies by electrical appliances, power lines, street cars, the street of the convention of the efficient doublances, and the convented to the antenna and the convention of the efficient doublances, and the convented for use in the street antennas of the efficient doublances, over lines, a twisted-pair lead-in and a special coupling transformer.

The two antennas are tuned respectively to opposite ends of the short-wave range and cross-connected to prove range and eros-connected to prove the short-wave range and eros-connected to prove range and eros Model 9500. This system makes avail-

The two antennas are tuned respect-



Contents of Kit 51/2' coils Antenna 451½' Wire

-110' coil Transmission

-Receiver Coupling Trans-former with Wave Length Change Switch

-Strain Insulators I-Cross-over Insluators 2-Nall-Knobs

2-Pleces Cambric Tubing I-Tube Insulator

-Cleat -Ground Clamp Installation Instructions and Certificate

3E8528— List Price, \$7.00 \$353 YOUR PRICE...

# G.E Auto Set

Nationally Advertised; Nationally Known

All Electric, Single Unit Construction

Compact Designs; Easy to Install



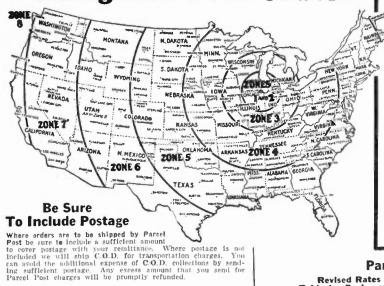


G. E. Model 40-B

14E10152-Complete with Tubes and

List Price, \$39.50. YOUR PRICE

One of the most widely advertised auto sets on the market, the GE-RCA Model One of the most widely advertised auto sets on the market, the GE-RCA Model 40-B offers you an opportunity to eash in on its tremendous popularity. The single unit ease houses chassis and speaker. Full automatic volume control, tone control, key lork with volume control, and illuminated remote control are features which help to make this set outstanding in performance. Size only 8½x8½x7" deep. Supplied complete including 1-78, 1-6A7, 1-6B7 and 1-89 tubes. It's Easy to Figure Delivery **Charges on Your Order** 



# Table of Approximate Rates

Per 100 lbs. for Express and Freight

From Chicago to	res	Pounds	st Clas	100 Lbs.	From Chicago to	ě.	per 100 Pounds	Clas	100 L
Alabama		75	\$2		Nebraska		90		25
Arizona	7		4	12	Nevada	9			. 75
Arkansas		. 59		60			.00		49
California.		05		75			. 75		43
Colorado		15		65					35
Connecticut		85		49	New York		35		18
Delaware .		70		42	No. Carolina.		75		
Florida.	5	05	2	20	No. Dakota	4	50		
Georgia		50		32	Ohio	2	15		. 80
Idaho	7	.90		. 50	Oklahoma		.85		14
Illinois	1			. 75	Oregon	9			10
Indiana	1			. 70	Pennsylvania.		. 75	1	40
Iowa		57		.98			00		49
Kansas	3			04			10		29
Kentucky.	2	20		.98	South Dakota.	4	35		65
Louisiana	4			06	Tennessee		.30		75
Maine	4	50	1	49	Texas		15		37
Maryland.	3	45	1	25	Utah	6	90		13
Massachusetts.		00	1	49	Vermont	3	95	1	60
Michigan	3	95		09		3	60		39
Minnesota	3	60	1	49	Washington	9	45		10
Mississippi	3	75	1	80	West Virginia	2	95	1	03
Missouri	2	62	1	35	Wisconsin	2	65		60
Montana	5	35	3	75	Wyoming	5	50	3	50

# **How to Order**

Send your orders on our convenient Purchase Order forms, or in any other manner con-venient to you. Be sure to specify Stock Number and Price of each item. Print your Name and Address plaily. Name and

name and Address plainty.

We will ship C.O.D. Most of our customers prefer to send cash with order to avoid extra collection costs. All orders for heavy merchandles to be shipped to distant points should be accompanied by a 25% deposit.

# Wholesale Only

We solicit orders only from those actively and commercially engaged in the radio industry. Radio Develores, Radio Servicemen—Industrial and Institutional Laboratories, Public Utilities, Schools, Colleges, Engineers and those recognized as engaged in developing the Art of Radio. We will also accept orders from the United States Government, Federal Institutions, State, County, Municipal and other governmental bodies and institutions.

# **Payment Terms**

Our terms are cash with order or C.O.D. Catalog prices are Net—F.O.B. Chicago or factory. All Trade and Cash Discounts have been deducted. While we do not impose minimum order restrictions on our old customers, it will profit you to make up at least \$5.00 orders to avoid additional exchange charges. We will be obliged to pass on to you the exchange charge, made by the Banks, on all personal checks for less than \$5.00. C.O.D. orders from new customers should be accompanied by a \$25\pi\$ deposit.

# **Parcel Post Rates**

Revised Rates Effective since October 1, 1932.

Table for Packages Weighing ½ pound to 20 pounds

	Zones 1&2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8
Weight In Pounds	Up to 150 miles from Chicago	150 to 300 miles from Chicage	300 to 600 miles from Chicago	600 to 1,000 miles from Chicago	1,000 to 1,400 miles from Chicago	1,400 to 1,800 miles from Chicago	Over 1,800 miles from Chicago
1 2 3 4 5	\$0.08 .10 .11 .12 .13	\$0.09 .11 .13 .15	\$0.10 .14 .17 .21 .24	\$0.11 .17 .22 .27 .33	\$0.12 .19 .26 .33 .40	\$0.14 .23 .32 .41 .50	\$0.15 .26 .37 .48
6 7 8 9	.14 .15 .16 .17	.19 .21 .23 .25	.28 .31 .35 .38 .42	.38 .43 .49 .54 .59	.47 .54 .61 .68	.59 .68 .77 .86 .95	.70 .81 .92 1.03
11 12 13 14 15	.19 .21 .22 .23 .24	.29 .31 .33 .35	.45 .49 .52 .56 .59	.64 .70 .75 .80 .86	.82 .89 .96 1.03 1.10	1.04 1.13 1.22 1.31 1.40	1.25 1.36 1.47 1.58
16 17 18 19 20	.25 .26 .27 .28 .29	.39 .41 .43 .45 .47	.63 .66 .70 .73	.91 .96 1.02 1.07 1.12	1.17 1.24 1.31 1.38 1.45	1.49 1.58 1.67 1.76 1.85	1.80 1.91 2.02 2.13 2.24

If the weight of your package exceeds 20 pounds, add 1 le for each additional pound or fraction of a pound if you live in the 1st and 2nd zones, 2c extra if you live in the 3rd zone, 3c extra if you live in the 4th zone, 5c extra if you live in the 5th zone, 7c extra if you live in the 6th zone, 9c extra if you live in the 6th zone, 9c extra if you live in the 7th zone, and 1 le extra if you live in the 8th zone.

NOTE:—Packages weighing over ½ lb. (8 ozs.) and not more than 1 lb. take

1 lb. rate.

1 lb. rate.

Packages weighing over 1 lb. and less than 2 lbs. take the 2 lb. rate. Always use the next higher pound rate for pounds and fractional pounds.

FOR EXAMPLE:

-1% lbs. requires 2 lb. rate. 2 % lbs. requires 3 lbs. rate.

**How to Figure Express Charges** 

(1) Total weights of items ordered, as shown on Order Blank. (2) Refer to table above for approximate Express Rates per hundred pounds to your state. (3) Then refer to left hand column of table below and find weight which corresponds with weight of goods you are ordering. (4) Follow to the right, line opposite the weight of goods on your order, through the columns to the column headed by the rate per 100 lbs. to your state. The amount in this Column will be the approximate Express charges on your goods.

Table of Express Charges Based Upon Rate per 100 Pounds

		-		_		•						
If Rate per 100 Pounds is	51.25	\$1.45	52.15	\$2.65	52.95	\$3.45	53.75	\$4.00	\$4.25	\$4.50	\$5.00	\$6.90
Package not over 1 Pound 2 Pounds 3 Pounds 4 Pounds 5 Pounds	\$ .36 .37 .38 .38 .39	5 .36 .37 .38 .39 .40	5 .37 .39 .40 .42 .44	\$ .37 .40 .42 .44	5 .38 .40 .43 .45	5 .38 .41 .43 .47	\$ .38 .42 .45 .49 .52	\$ .39 .42 .46 .50 .53	\$ .39 .43 .47 .51	5 .39 .43 .47 .52 .56	\$ .40 .45 .50 .56	\$ .42 .48 .55 61 .68
10 Pounds	.44	.46	.53	.58	.61	.66	.69	.71	.74	.76	.86	1.00
15 Pounds		.51	.62	.69	.74	.81	.86	.90	.93	.97	1.12	1.33
20 Pounds		.57	.71	.81	.87	.97	1.03	1.08	1.13	1.18	1.38	1.66
25 Pounds	.57	.62	.80	.92	1.00	1.12	1.20	1.26	1.32	1.39	1.64	1.99
30 Pounds	.62	.68	.89	1.04	1.13	1.28	1.37	1.44	1.52	1.59	1.89	2.31
35 Pounds	.66	.73	.98	1.15	1.26	1.43	1.54	1.63	1.71	1.80	2.15	2.64
40 Pounds	.71	.79	1.07	1.27	1.39	1.59	1.71	1.81	1.91	2.01	2.41	2.97
45 Pounds	.75	.84	1.16	1.38	1.52	1.74	1.88	1.99	2.10	2.22	2.57	3.30
50 Pounds	.80	.90	1.25	1.50	1.65	1.90	2.05	2.17	2.30	2.42	2.92	3.62

# This INDEX WANTS QUICKLY WANTS QUICKLY OF ORDER BLANKS ON REQUEST

A "A" Batteries126, 127	Bases, Tube 18	Mallory Elkon 75	Dual Speed Turntable110	Hammerlund Coil Forms, 84
A "A" Eliminator 32	Beede Meters 26, 27, 35	Mershon 142	Dynamic Baffles112	Hammarlund Condensers 82
VOI1	Bell Wire 90	Mlca	Dynamic Cone Assemblies 43 Dynamic Fleid Coils 42	Hammarlund IF Trans- formers
A.C. Generator	Beits, Dial Drive 91 Bench Drill	Mica	Dynamic Speakers	Hammerlund IF Chokes 87
Adapters Tube20, 21	Ben Hur Batteries127		40, 41, 42, 112, 113	Hammers101
Adapters, Electric 90	Best Kinematic 42		Dynamic Speakers, P.A	Hand Drills
Adapter Forms, Blank 20	Bill Heads	Paper-Foil Type 74	Dynamic Units112, 113	Hardware
Adapters, Phonograph 19 Adjustable Resistors56, 60	Blades, Hack Saw101	Potter	Dynamotors124, 125	Headphones 38
Advertising Material 8. 9	Blank Records	Replacement Sections	DX Aerial 98	Headphone Cords 38
Advertising Sign16, 70	Blow Torches	Sangamo	E Edison Base128	Heater Elements 90 Heavy Duty Resistors 56, 61
Aerials, Auto Radio129 Aerial Equipment 96, 98.	Books	Specials   142   Sprague   81   Trimmer   78   82   Tubular   74   to 81   142   143   143   144   145   1		Hold E Zee Screw
	Boxes Tool	Sprague	Electrad Tonatrols 66 Electrad Volume Controls	Driver
Aerovox Condensers ou		Tubular 74 to 81		Home Microphone107 Home Recording Blanks .111
Air Cell Battery126 Airplane Dials91	Braid, Copper Sleeving 97 Breast Drill	variable	Electric Adapters, Plugs . 90	Hook-up Wire96, 97
All More Auriol Kill	Brung Microphone108	Voltage Doubling 76	Electric Appliance142 Electric Clock21	Horn 38
	Buffing Wheels101	Condenser Box 21 Condenser-Coll Kits 86	Electric Drill102	Horns, Trumpet112 Housing, Speaker112
All Wave Coll Kits84, 85 All Wave Kits 88	Bulbs Dial Light 91 Bulb, Electric Greenback . 90	Condenser Color Code 79	Electric Embossing Pencil 101	How To Order
All Wave Receivers	Ruild Your Own Amplifiers	Condenser Coupling,	Electric Food Mixer142 Electric Heater Elements. 90	Hoyt Foundation Meter 37
		Flexible	Electric Phono Pickups, 110	I.C.A. All Wave
All Wave Test Oscillator22, 23, 24, 27, 31, 33	Bumpers, Rubber 92 Burgess Batteries127	Condenser Microphone	Electrical Specialties 90	Kits 88
Allening Tools104	Bus Rar Wire 97		Electrolytic Condensers74, 75, 76, 77, 80, 81	Ignition Cable 97 Ignition Filters59, 129
Allgaing Tools104 Alligator Test Clips105	Buttons, Microphone111 By-Pass Condensers74 to 81	Condenser Sealing Compound 92	Electrolytic Rectifier Cells	Ignition Suppressors
Aluminum Panels 89	By-Pass Condensers74 to 81	Condenser Shields 89		
Aluminum Records111 Aluminum Shields 89	Cabinets, Speaker 41	Condenser Test Box 21	Elements, Flat Iron Replace-	Illuminators, Dial 91
Aluminum Solder 103	Cable, Analyzer 97	Condenser Tester15, 21, 81 Cones, Speaker	ment 90 Elements, Heater 90	Illuminator, Panel 35 Indicator, Resistance
Aluminum Solder 103 Ammeters 25, 26, 27, 29		Replacement 43	Eliminator, 32 v. A126	
Amperite Ballast Tubes 55 Amperite Microphone108	Cable, Dial91, 92	Confidence Tube Tester 12, 32	Eliminator, Auto B125	Input Control, P.A., 111, 118
Amplifier Carrying Case	Cable, Ignition 97 Cable, Lead Sheathed 97	Confidence Wheatstone	Eliminator Replacement Cells	Instrument Cases34, 35, 37 Instrument Fuses 34
116, 119	Cable, Microphone 34	Bridge	Elimostat Aerial System	Instrument Panels 37
Amplifier Kits114 Amplifiers, Portable 121 to 123	Cable, Multi Conductor 97 Cable, Radio Battery 97, 128	Constant Impedance "L" and "T" Pads65, 67 Connectors, Cord90, 94		Instrument Pointer Knobs. 31
Amplifiers, Pertable 121 to 123 Amplifiers Public Address	Cable Shielded 91	and "T" Pads65, 67	Elkon BH Rectifier17, 126 Equalizing Condenser	Insulated Flexible Coup-
	Cable, Weatherproof 94	Connectors, Cord90, 94 Connectors, Fahnstock 94	Equalizing Condenser	Insulated Screw Driver
Analyzer Adapters 19	Cable Connector Plugs 19 Calibrated Meter Scales . 36	Continental Igrad	Escutcheons, Dial 91	
Analyzer Cables 97 Analyzer Cases34, 35	Callbroad Resistance	Condensers 80	Escutcheon Screws 92 Eveready Air Cell126	Insulated Sleeving 96
Analyzer Kit 35	Indicators 56, 58, 61	Continenal Resistors 59 Convenience Outlets 90	Express Rates143	Insulated Staples 90 Insulating Cement 96
Analyzer Plugs 19	Candelabra Base	Converter 32V to AC 124, 126	Extension Connectors 94	Insulating Spaghetti 96
Analyzer Sockets 18	Candohm Resistors 61	Converers D.C. to A.C124	Extension Cords 97	Insulating Washers 92, 94
Analyzers, Test22 to 33 Angle Brackets 92	Capacity Meter 28 Capacity Tester15, 21, 81	Copper Braid Sleeving 97	Faders64, 67	Insulators, Aerial98, 99 Interference Filters 55
Antenna Coupler 99	Carbon Granules	Copper Vaide Rectifiers 34	Fahnestock Connectors 94	Intermediate Frequency
Antenna Equipment96.	Carbon Resistors57, 59 Carter Genemotor125	Copper Screening129	Farm Plant Radio140 Fibre Washers92, 94	Replacement Coils 85
Antenna Trimmer 84	Carteldes Condensers	Cord Connectors90, 94	Field Coils 12	Intermediate Frequency
Arcturus Tubes 5		Cord, Lamp 97 Cord Tips	Filament Meters 25	Transformers 85. 87 I.R.C. Resistors 58 Irons, Soldering 103
Arrestors, Lightning 98, 99	Cartridge Fuses 34 Case, Amplifier115, 116, 119	Cords Extension 97	Filament Transformers	trons, Soldering103
Attenuators65, 67	Cases Instrument34, 35, 37	Cords, Headphone 38	Ellter Chokes	
Audio Chokes	Cases, Meter 25	Cords, Speaker 97 Corner Posts 89		Isolantite Coll Forms 81
Audio Transformers47.	Case. Midget Set142	Countersinks101	Filter Condensers74 to 81 Filterizer, Tobe 99	Jacks 94 Jacks, Circuit Open-
Auto Battery Chargers124	Cases, Speaker 118, 119 Cement, Repair 42, 96	Coupling, Flexible 82	Filters, A.C. Line 55	ing
Auto Radios134 to	Centralab Volume Controls	Couplings 92 Crystal Microphone108	Filters, Auto Radio 59. 129	Jacks, Microphone109
136, 142	62 to 73	Crystal Pickup110	Filters, Interference 55 Fixed Condensers 76 to 81	Jack Plugs 94 Jack Switches 94
Auto Radio Aerials99, 129 Auto Radio "B" Elimina-	Chargers, Auto124 Chargers, 32 volt126	Cub Condensers 78	What Hatteries	Jacks, Tip
ters125	Charge Indicator126	Cutting Head, Phono111 Cunningham Tube	1	Innette Converters124
Auto Radio Condensers	Charge Indicator126 Charge Regulator124	Consignment Plan8, 9	Flashlight Lamps104 Flashlight, Pen104	Jefferson Transformers 54 Jensen Speakers113
	Charger Rectifiers128 Charts, Tube12 to 17	Cushions, Earphone 38	Flashlight Screw Driver 100	Jewel Pilot Light 37
Auto Radio Service	Chassis Bases86, 89	Data, Tube	Flat Plug 94	Wellogn Microphone 107
Manual	Checkers, Tube12, 13	D Data, Tube12, 13, 14, 15, 16, 17	Flechthelm Condensers 79	Kellogg Tubes 17
Auto Radio Shielded Lead-in 97	16, 24, 26, 28, 30, 31, 32 Chokes, Audio52, 54	Dayrad Performance Meter 14 Dealer Repair Service146	Flexible Coupling 82 Flexible Resistors142	Kellogg Tube Adapter 21
Auto Radio Speakers 42	Chokes, Filter46,	Desk Stands, Microphone	Flexible Sleeving.	Kester Solder
Auto Radio Suppressors	Chokes, Filter46.		Insulated 96 Flexible Sleeving,	
Auto Radio Vibrators124	Choke, Multi Tapped 48	Detecto-Light Tester104	Shielded 97	Kinematic Speakers 42
Automatic Record Changer	Chokes, Output52, 54 Chokes, R. F 87	Diagram, All Wave Oscillator	Floor Stands, Micro-	Kits, Adapter19, 20 Kits, Aerial98, 99, 142
110	Circle Cutter 102 Class "B" Transformers . 54 Clips, Alligator 105	Diagrams, Amplifiers. 117, 119	phone	Kits All Wave 88
Autonator124	Class "B" Transformers . 54	Diagram Condenser Tester	Food Mixer, Electric142	Kit, Analyzer 35 Kits, Analyzer Plugs
B "B" Batterles 126, 127	Cline Rattery 178	Diagrams, Fader64, 65	Forms, Coll 81	and Adapters 19
Auto125	Clips, Fahnestock 94	Diagram. Foundation	Forms, Tube Adapters 20 Foundation Meters	Kits. Coil85. 86
"B" Eliminator 32 volt	Gilps, Resistor or	Meter		Kits. I.C.A 88
Baffles, Dynamic112	Clips, Shield Grid 93 Clips, Spring105	Diagrams, Meter	Freight Allowance 4 Freight Rates143	Kits, P.A. Ampliflers114 Kits, Resistor57, 58
Bakelite Knobs34, 91	Clock, Electric Battery 21	Conversion 36	Frietion Tape90	Kit Speaker Field
Bakelite Panels37, 93	Clough Brengle Oscillator, 33	Diagrams, Microphone109	Fuses, Electric 90	Supply 34
Bakelite Rods 93 Bakelite Shafting 92	Coll Forms 84 Coll Kits 84, 86	Diagrams, Microphone 109 Diagrams "T" Pad 65 Diagrams, Tube Adapter . 21	Fuses, Electric 90 Fuses, Meter 31	Supply
Bakelite Tubing 93	Coll Selector, Shortwave, 84	Diagrams, Tube Short	Fuses. Radio	Amp 49
Balancing Adapters 20	Coll Shields	Checker	Fuse Mountings 34	Kit, Tube Short
Balancing Condensers 78 Balancing Tools104	Coll Winder 96 Colls 84, 85, 86, 87	Diagram, Volt-Ohmmeter . 27 Diagrams, Volume Control	G G. E. Auto Radio	Checker
Baldwin Phones—Units 38	U0118. F1010 42		G. E. Reference Chart 66	Knife Switches 95
Ballasts, Line	Coils, Plug-In 84 Coils, Shortwave84, 85	Diagrams, Volume Control	Gain Controls 64	Knobs 91
"Banana" Plugs105	Coils, Shortwave84, 85 Compensating Condensers	Tapers 63 Diagram, Wheatstone	Galvanometer	Knobs, Bar 34
Bar Knobs, 34 Battery Cables97, 128		Bridge 34	Genemotors, Carter124, 125	"L" Pad65. 67
Batteries "A"126, 127	Condensers,	Dials, Tuning 91 Dial Cables 91, 92	Generator, Filter59, 81	Lamp, Bulb 90 Lamp Cord 97
Battery Cables	Aerovox	Dial Cables91, 92 Dial Escutcheon 91	Generators, A.C	Lamp Cord
Batteries "B"126, 127 Battery Amplifiers120	Auto Radio59, 81, 129 Bakelite Molded 79	Dial Lamps 91	Giant Foundation Meter 27 Glow Lamps, Neon128	Lamps, Neon
Battery Amplifier Kits114	By-Pass 74 to 81	Dial Lamp Sockets 91	Gold Seal Tubes10. 11	Lamps, Pilot Light 91
Battery Chargers124	Cartridge to 81	Dial Scales, Meter 36	Graybar-RCA Reference	Lamp Socket
Battery Chargers, 32 volt.126 Battery Clips128	Continental Igrad 80 Cub 78	Diaphragms, Microphone111 Die and Tap Set102	Chart	
Battery Receiver140	Cub	Distributor Suppressors	Grid Leaks	Lead-in, Shielded 96, 97
Battery Storage126 Battery Terminals128	Equalizing		Grid Resistors142	Lead-in Strips 99 Lead-in Wire 96
Battery Terminals128	Exact Duplicate74, 75 Filter74 to 81, 142	Dome Light Filters59, 129 Drills	Grommets, Rubber 92	Lightning Arrestors . 98, 99
Battery Tester126 Battery P. A. Systems120	Fixed	Drill Sets 102	Ground Clamps 98 Ground Wire 96	Line Ballasts 55
Base, Candelabra128	Flechteim 79	Drum Dials 91 Dry Cells126, 127	Hack Saws and	Line Booster 55
Base, Lamp	Generator59, 81, 129 Keystone76, 77, 78	Dry Cells126, 127 Dry Disc Rectifiers128	Blades 101	Line Cord Resistors 61 Line Filters 55
Bases, Chassis86, 89	ALUJSTONE	and area recentles 150		

Line Matching Trans-	Outlets, Radio Con-	R F Colls85, 86, 87	Short Wave Manual131	Intermediate Frequency
formers40, 109 Line to Line Trans- formers109	venience 90 Outlet Receptacles 90 Output Chokes52, 54	Rack & Panel Amplifier118 Racon Sound Equipment112 Radio, Auto 134, 135, 136, 142	Short Wave Radios133, 137 to 140, 147	Line Booster 55
Line Voltage Regulators 55 Littelfuses	Output Transformers	Radio Receivers. 2, 133 to 147 Radio Receivers, 32 voit 140	Short Wave Switch.26, 35, 95 Shunts, Meter37, 60 Shure Microphones 107, 111	Line to Line 109 Line Matching40, 109 Microphone49, 54, 108, 109
Litz Wire 96 Lock Washers 93	Oscillator Coils85, 87 Oscillators, Test22 to 33	Radio Tubes 5 to 17	Signal Generator 27, 31, 32 Sign, Electric 70	Output 47 49 40 54
Lock Switch 95 Loud Speakers 39 to 42, 113	Oxford Speakers113  Padding Condensers, 82	Radio Tube Data12 to 17 Radio Tube Manual 9	Sign. Neon 16	Phonograph Pickup 109 Power 44 to 54, 142
Loud Speaker Gones 43 Loud Speaker Horns112	Panel Boring Tools102 Panel Light35	Radolek Foundation Meter. 37 Radolek Resistance Indicator	Snips	Tube to Line 100
Lug Assemblies 90 Lugs, Soldering 93	Panel Meters22, 25, 26, 29, 37	Radelek Volume Controls	Socket Lamp	Transformer Brackets . 92 Transformer Housing . 89 Transformer Repair Service 52
Lynch Antenna Kits 99	Panels, Aluminum 89 Panels, Bakelite 93	Rates, Transportations143	Sockets, Microphone 109 Sockets, Pilot Light 91 Sockets, Tube 18	Communed Sealing
Machine Screws 92, 93 Macklyn Test Instru-	Panels, Instrument 37 Parcel Post Rates 143	Raytheon Rectifiers 17 Raytheon Tubes 6, 7	Socket Wrenches100, 103 Solder103	Trimmer Shields 89
ments 26 Magic Electric Pencil101	Pen Flashlight	Readrite Meters 25 Readrite Test Equipment	Solder Lugs	Trio-Tap
Magnet Wire 96	Pen Screw Driver100 Pencil Prods104, 105	Reamers 24, 25	Soldering Irons 103 Soldering Iron Special 16	*** pietr instruments
38 to 42, 112, 113 Mallory "B" Supply125	Permanent Magnet Speakers 38, 39, 112, 113	Receptacles	Soldering Iron Tips 103 Sound Truck Genemotors 125	Trumpact III Choke 87
Mailory Elkon Condensers, 75 Manganin Resistance	Phileo Auto Radio 134, 135 Phileo Power Trans-	Record Changer110 Recording Head111	Spaghetti Tubing 96 Spark Plug Suppressors	Tubes, Radio
Wire	Philico Replacement	Recording Needles111 Records, Blank Recording 111	Sparton Transformers 48	Transposition Dist. 20. 21
Manual, Tube 9 Mazda Lamp, Miniature	Transformers 49 Phileo Signal Gen-	Records, Phono112 Rectifier B H17, 126, 128	Speaker Cable 97	Tube Bases 18 Triumph Occiliator 27
Megohm Indicator 56	Phileo Tubes 5	Rectifier, Disk	Speaker Carrying Case	Tube Charis12, 13, 14,
Mershon Condensers142 Metallized Resistors 58	Phileo Volume Controls	Rectifier Tubes	Speaker Field Colls 42 Speaker Field Power	Tube Shields
Meter Cases 25 Meter Circuit Diagrams	Phones	Repair Service, Meter 21 Replacement Field Coils . 42	Supply Kit 34 Speaker Horns 38, 113	Tube Sockets 18 Tube Stickers 18 Tube Tresters 18
Meter Dials	Phone Cushions 38 Phone Jacks 94	Replacement Speaker Cones 43	Speaker Housing112, 116 Speaker Plugs19, 90	Tube Tester Adont 12 to 32
Meter Flange 25 Meter Rectifiers 34	Phone Plugs 94 Phonograph Adapters 19	Replacement Vibrators124 Resistance Handbooks 58	Speaker Replacement Cones 43 Speaker Cone Rings 42	Tester Transformer
Meter Repair Service 21 Meter Resistor Kit 36	Phonograph Cutting Head	Resistance Indicators	Speaker Tester 17 Speaker Test Cord-Plug set 19	Tubing Rakelita
Meter Resistors, Multiply- ing35, 60	Phonograph Fader64, 67 Phonograph Mixing	Resistance, Line Cord 61 Resistance, Variable 56	Speaker Trumpets	Tubing Florida Shielded, 97
Meters, 22, 25, 26, 27, 29, 35, 37 Meter Shunts37, 60	Stage	Resistant Wire37, 90 Resistors56 to 61, 142	Speakers, 38 to 42, 112, 113 Speakers, Public Address	Tungar Type Pasting 10 81
Meters, Tuning 26	Phonograph Needles111 Phonograph Pick-up	Resistor Clips56, 57	Spinite Wrenches	Tuning Motors 91
Mica Condensers 79 Microameters 25, 27, 29 Microphones	Transformers109 Phonograph Records112	Carbon	Sprague Condensers 81 Spring, Aerial Tightener . 99	Twin Jacks
.46, 106, 107, 108, 111 116 Microphone	Phono Motors, Portable122 Phono Pickups110	Flexible	Spring Clips	Units, Baldwin 38 Units, Dynamic 112
Adapters	Phono Recording Blanks111 Phono Record Changer110	Meter Multiplying 35, 60	Suspension111 Stancor Transformers	Universal Audio Transformers48 to 54
Cable	Phono Turntable Speed	Precision35, 60 Spark Plug58, 59, 129	44, 45, 46, 47, 53 Stand Solder Iron103	Transformers 40
Circuit Diagrams109 Control Unit106, 111	Pickups—Phonograph27, 110 Pigtail Wire 97	Truvolt	Standoff Insulators 98 Stands, Microphone	Transformers 50
Diaphragms111 Input Control111	Pilot Light Bulbs 91 Pilot Light, Jewelled 37	Variable	Staples, Insulated 90	Utah Speakers 39 Utah Units 38
Jack109	Pioneer Audio Transformers 53 Pioneer Power Transformers 51	Wire Wound56, 60, 61 Resonance Meters 26	Stationary	Vacuum Tube Voltmeter
106, 111, 118 Plugs109	Pliers	Rewind Transformer Service 52 R.F. Chokes 87	Storage Battery126 Strain Insulators 98	Van Shunts
Rings	Plug-In Prongs105 Plugs, Analyzer19	R.F. Colls84, 85, 86, 87 Rheostats	Sub Panel Brackets 92 Superhet Coils & Kits 86, 87	Variable Resistors 60 Velocity Microphone 108
Sockets	Plugs, Appliance 90 Plugs, Banana105	Ribbon Aerial	Superheterodyne Condensers	Vibrator Units
Transformers	Plugs, Cable	Ribbon Microphone Trans- formers	Suppressors, Auto Radio	
Midget Carrying Case142	Plug Fuses 90 Plugs, Microphone 109 Plugs, Phone 94	Rider's Manuals130 Rings, Microphone106	Suppressors, Grid142 Supreme Instruments31, 30	Vises
Midget Condensers	Plugs. Speaker 19. 90	Rings, Speaker Cone 42 Rivets92, 93	Suspension Rings, Microphone	Volt Ohmeter Kits 28, 29, 58
Midget Phono Motor Pickup Set 27	Plugs, Test19, 105 Plugs Tip94, 105	Rods, Bakelite 93 Rola Speakers 113	Switch Levers 95 Switches 26, 35, 92, 94, 95 Switches, Jack 94	Voltage Doubling 56, 60, 61
Midget Potentiometers 35 Midget Radios 2, 118, 138	Politer Knobs 34, 91 Police Call Alarm 35	Rosin Core Solder 103 Rotary Converters 124, 126		Voltage Regulators 55
Midget Set Replacement Condensers74, 75	Polishing Head101 Portable Amplifier Case116	Rotary Switches 26, 35, 95 Rubber Feet 92	Taps and Dies102 Tap Plug-Trio90 Tap Switch95	Volume Controls 69 to 72
Milliammeters25, 26, 27, 29, 37	Portable Instrument Cases. 37 Portable P. A. Amplifier	Rubber Grommets 92 Rubber Panels 93	Tap Wrench	63, 64, 65, 66, 67, 68, 69,
Millivoltmeters	Portable Phono Motor122	Rule, Flexible Spring101 Running Board Aerials129	Test Adapters 20 Test Analyzers22 to 34	Volume Control Hook-ups . 68
Mixer, Electric Food142 Mixing Panel, Public Address106, 111, 118	Portable Speaker Case 116, 119 Posts, Binding	Saw Blades101	Test Clips	Volume Control Strips 62
Mixing Transformer109 Modulator, Microphone111	Posts, Corner 89 Potentiometers35, 62 to 73	Saw, Circular	Test Equipment12 to17, 21 to 35 Test Leads104, 105	Curves
Motors, Phone110, 122 Moulded Bakelite Con-	Potter Condensers78, 79 Powerack116, 124	Saw Table	Test Light, Neon 104 Test Oscillators 22 to 33	Volume Controls, Yaxley . 35
densers	Power Supply, Auto Radio 125 Power Supply, Speaker	Screen Grid Clips 93 Screen Mesh, Auto Aerial 129	Test Prods104, 105 Test Set Cases34, 35, 37	Wall Insulators 98 Washers 92, 93, 94
Multiple Condensers82. 83	Power Transformers	Screw Drivers 100, 104   Screw Driver Special 16   Screws	Testing Tools104, 105 Terminal Strips90	Weatherproof Lead-in Wire 96
Multi-Adapter, Tube 20 Multi-Cable Connectors 19	Power Tube Specials17	Screws	Terminals Battery128 Theatre Horns112 Thordarson Transformers	Weatherproof Speaker Housing
Multi Range Voltmeter	Precision Resistors35, 60	Service Books130, 132	Tip Jacks94, 109	Weston Meters
Multi Tap Transformers 52	Prods, Test104, 105 Public Address Amplifiers	Service Forms8. 9 Service Manuals130, 131	Tips, Phone 94 Tin Snips	Wheatstone Bridge32, 34 Westinghouse RCA
Nail Knobs 98 Needle, Phono111 Needle Point Prods	Public Address Book132	Service Sign16, 70 Set Analyzers22 to 34 Shaft Countings and	Tips, Soldering Iron103 Tobe Filterettes55	Reference Chart 66 Wire, Aerial96 to 99, 142
Neon Condenser Test	Public Address Equipment	Shaft Couplings and Fittings	Toggle Switches 95 Tobe Filterizer Aerials 99	Wire, Bell 90 Wire, Litz 96
Neon Glow Lamps128	Public Address Speakers	Shields	Tone Controls62 to 73	Wire Ignition 97
Neon Short Testers	Public Address Speaker	Shield Copper Foil 89 Shield Braided Sleeving . 97	Tool Boxes	Wire, Magnet         96           Wire, Manganin         37           Wire, Microphone         97
Neon Leakage Tester 35 Neutralizing Condensers	Housing112, 116, 119 Push Back Wire 96 Push Button Switch. 92, 94, 95	Shield Grid Clips 93 Shielded Aerial 99	Tool Rivet 92	Wire, Hookup 97 Wire, Nichrome 90
Neutralizing Tools104		Shielded Aerial Wire 96, 97 Shielded Cables 97	Thols, Testing104, 105 "T" Pads65, 67 Transformers	Wire, Shielded96, 97 Wire Shielding97 Wire, Test Leads105
Nichrome Wire 90 Nippers	R C A Midget Phono Motor	Shielded Microphone Cable 97	Aerial	Wire. Wound Resistors
Nuts 93	Pickup Set 27	Short Checker Kit 13 Short O Tester13. 35	Exact Dublicate Power	Wire, Bus Bar 97
Ohmita Resistors 61	R C A Reference Chart 66	Short Wave Aerials		
Ohmmeters26, 27 Outlet Plugs90	Controls	Short Wave Converter 5 Short Wave Kits 88	Filament34, 52, 54	Yaxley Switches 95 Yaxley Potentiometers 35
		UT DARGE BY GOVER		Page 1

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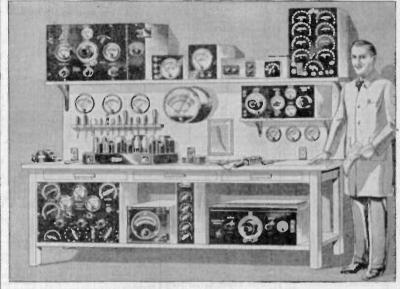
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inating entineering obstacles as well as concentrating development and manufacturing expenses on essentials.

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As you examine this New Radolek Model you are sure to be impressed by the masterful workmanship evident in every detail of its design and construction. Only the finest materials are used and each commonent matches with laboratory precision the requirements of its position in the circuit. You will notice its busky power transformer—oversize to insure coal operation over long periods. You will also motive that Resistors and Condenses are not only the best known makes, but also liberally selected as to their current and vidiage carrying capacities.

The Circuit

Belag a Superheterodyne, this Receiver is very sensitive. It seven tuned circuits also develop excellent selectivity. Equally good performance on both bands is accomplished through the suppression of image frequencies by using a three-gang tuning Condenser and by placing a stage of TRD amplification ahead of the first Detective which operates on both hands and provides a very high signal to image ratio. The very latest type Tubes are used: 2-6106, 1-6A7, 1-75, 1-76, 1-41 and 1-80. The circuit is designed to realize the full advantage of their improved performance characterities and provides more than ample Power with smooth, distortionless reproduction. A Jensen Dynamic Speaker cap ble of landling the entire output of the Set I employed. The AVC is unusually efficient and maintains a uniform volume level for various signal strengths. A Continuous Tone Control permits frequency discrimination to suit the individual taste of the listener.

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"Let's Look at the Records"

Let's Look at the Records"

It is easy to write a glowing description of Radio performance but it's quite another matter to build the Radio that measures up to elains made for it. You know this and so do we. Therefore we prefer to simply give you the following record of this Set's reception during a single afternoon here in Chieago, and let the facts speak for themselves:

DJCZeezen, Germany
W3XAUPhiladelphia, Pa.
CP5 La Pas, Bolivia
HJIABBBarrangullla, Columbia
EAQ Madrid, Spain
GSC Daventry, England
YV3BCCaracas, Venezuela
OXY Skanileback, Denmark
12RORome, Italy

All of these stations were received with sufficient volume to be easily identified and the majority came in clearly enough to be considered acceptable entertainment. While we freely admit that time, weather conditions, location and the skill of the operator play a large part in the successful reception of short waves, we do believe that here, at last, is a Receiver which you can legitimately sell and represent to your customers as one from which direct reception from Europe and other foreign countries can be expected.

# New Airplane Dial

New Airplane Dial

The 3% inch Airplane Dial of this Set is unique in design and construction. The upper half is graduated in megacyles for the shortwave band and the lower half. In kilogycles for the standard broadcast band. When the band-selector switch is adjusted for shortwave memption only the upper half of the Dial is illuminated and the drive is vernier; when the standard broadcast band is switched in, the lower half is illuminated and the drive becomes normal, or direct.



# A CHOICE OF TWO MODELS

The Console Model

The "Trans-Oceanic" is available in one of the most distinctive of Consoles. It is modern without being bizarre; massive but not ponderous. It is eminently in good taste and will harmonize well with any interior. The upper front of Collingia Research It is eminently in good taste and will harmonize well with any interior. The upper from panel and center of top are of California Burl walnut in contrasting shades. Sides, base and fluted corners of select straight grain walnut Beautifully finished throughout. Knobs to match. Overall size 10 % inches deep, 2031 inches wide, 36 inches high.

14E10984—Radolek "Trans-Oceanie" Console Model for 105-120 volt 50.60 cycle A.C. Complete with 7 RCA Tubes.

List Price, \$74.50. YOUR PRICE .....

The Table Model

For those who prefer the "Trans-Oceanie" Chassis and Speaker may be had in the beautiful Table Model Console shown at the right. This console matches the beauty and quality of This console matches the beauty and quarty of the one above and is of sufficient proportions to provide adequate haffle area for its husky Jensen Dynamic Speaker. Overall size 13½ inches wide, 95½ inches deep, 17¾ inches high.

14E10985—Hadulek "Trans-Oceanie" Table Model for 105-120 volt 50/60 cycle A.C.

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