

# HARRY ALTER'S RADIO BOOK

**VOL.9 DECEMBER 1928 NO.12**



## UTAH

Made in Salt Lake City  
Trade Mark Registered

### MODEL "No. 65" DYNAMIC SPEAKER

This clock shaped speaker possesses a certain charm by virtue of its simplicity of design, and when you listen to the sweet tone that emanates from this speaker, you will understand why it deserves the name of Utah. Made of genuine walnut plywood, finished in antique brown. Front and back have same grille and appearance. Ht., 11 1/2"; width, 13"; depth, 10". With 10 ft. power cord and switch.

No.		List	Each
98562	110-Volt A. C. Operation.....	\$49.50	\$23.70 Less 2%
98563	6-12-Volt Battery Operation.....	35.00	21.00 Less 2%
98564	110-200-Volt D. C. Operation.....	35.00	21.00 Less 2%

**BUY FROM A RELIABLE HOUSE  
OUR ASSETS ARE OVER \$1,000,000.00**

## TOBE A SUPPLY

**GUARANTEED FOR ONE YEAR**

The new Tobe "A" Supply will give a consistent, reliable performance because it is skilfully constructed of the finest materials obtainable and engineered with the greatest scientific exactness. Nothing that can possibly improve the efficiency of a power supply has been spared in giving the public a product of great quality. Absolutely fool-proof and fully guaranteed for one year.

No. 98464 List \$23.00  
Each \$21.00, Less 2%

**20<sup>58</sup>**



**The Harry Alter Co.** SUCCESSORS TO THE BETTER TUBE CO. 18th and Michigan  
*Caution: Keep These Wholesale Prices Confidential!* **CHICAGO**

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World Radio History



We know how important it is for you to get our goods promptly. For this reason we maintain a fast shipping service by our improved methods of handling. The American Railway Express Company maintains an office right in our building. Goods move every hour by out-

## MINUTE MAN SERVICE

THIS ENTIRE BUILDING, with 100,000 square feet of floor space, is occupied exclusively by Harry Alter Co. Everything in Tires, Tubes, Accessories, Radio and Electrical Supplies.

*"Service Doesn't Falter When It Comes From Harry Alter"*

## HARRY ALTER'S RADIO BOOK

A Periodical Publication Listing High Quality Radio Receivers, Kits and Accessories, for DEALERS ONLY

Published and Copyrighted by THE HARRY ALTER CO. Established 1919

Vol. 9 December, 1928 No. 12



### Play Up the Xmas Gift Idea

Any kind of radio merchandise has the Xmas gift appeal. Why not make the best of it. Whether it is batteries, tubes, parts or a new speaker, it's always an acceptable and at the same time a lasting and welcome gift. Make your plans now to give your store window a real Xmas appearance, convey in your newspaper advertising the thought of radio as yuletide merchandise. It will pay you well.

#### And Now a Heavy Vote of Thanks

This is the last issue of our monthly Radio catalog to reach you this year. I have tried my best to deserve your confidence and extend to all my customer friends many thanks and close with a

#### Merry Christmas to You All

P. S. - We suggest to order early, but last minute RUSH ORDERS will be taken care of promptly.

*Harry Alter*  
Pres.

## THINGS TO REMEMBER WHEN ORDERING

**PRICES:** All prices in this book are net, subject to our regular discount of 2% for either cash with order or C.O.D.

**TERMS:** Our terms are cash. Many of our customers are highly rated, but are willing to buy for cash because of the big saving when buying from us. Because of our low prices it is impossible for us to sell on open account. If you have never tried buying for cash, you will be agreeably surprised with the saving that you can make by sending your orders to us.

**SEND NO MONEY:** We will gladly ship your order C. O. D. if you wish, so you can examine the goods before you pay for them. We don't ask you to finance us. Keep your money working for you at home. C. O. D. collection charges are very small.

**SAFE DELIVERY GUARANTEED:** We positively guarantee safe delivery of all shipments and make good any damage or loss. If the shipment shows damage, have a notation of it made on the freight or express bill, for our mutual protection.

**STOCK NUMBERS:** Always use our stock numbers when ordering to avoid possibility of error. Also be sure you use current edition of our catalog when pricing your order. We protect you against price increases for the life of each catalog, and give you any reduction at once.

#### About Returning Goods

Before returning any piece of radio apparatus or receiving set, write explaining your difficulties. Our experts may be able to help you. If something is unquestionably defective, we will give you shipping directions. Send no goods back without first writing us for instructions.

# The Harry Alter Co.

Michigan  
and 18<sup>th</sup>  
CHICAGO.

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# TEMPLE SPEAKERS

In presenting this line of speakers and units, Temple, already enjoying a wide reputation as the embodiment of all that a loud speaker should be, surpasses its previous achievements in combining the highest quality construction and decorative beauty with minimum prices.

## Dynamic Speaker Model 50



Amazing for its true tonal beauty. Model 50 Temple Dynamic Speaker sets another standard of reproducer value. Developed and perfected by the renowned Temple engineering staff and made under the most stringent manufacturing supervision. It is not only a worthy addition to the Temple line, but an outstanding example of the highest type of reproducer that has ever been announced. Encased in the same frame as the Model 20 it has the same dimensions with the exception of being 1 1/2 inches deeper. Weight 25 1/2 lbs.

No. 97474  
List \$49.00. Each \$29.40  
Less 2% or.....

**\$28<sup>81</sup>**  
NET

## DYNAMIC CHASSIS

The Temple Dynamic Speaker can also be obtained in the chassis only, for use in a console. This feature is quite an attractive one as it enables one to give his radio receiver the best there is in reproduction, and yet stick to economy. Not the slightest particle is different. The same tone quality. The same volume. Everything in the mechanical construction is the same. 110 volt, 60 cycle.



No. 98560  
List \$35.00  
Each.....

**\$21<sup>00</sup>**  
Less 2%

## Air Chrome Speaker Model 20



The application of unequalled engineering and manufacturing experience to the construction of the Temple Air Chrome Speaker has made it an outstanding example of one of the finest speakers the world has ever seen. Its open radiator consists of two sections instead of one, driven by the Temple Double Action Unit, thus substantially increasing the volume and tonal range, and consequently producing a tone quality amazing in its clarity. Its genuine walnut frame coupled with the leather effect of the sides give it a beauty in harmony with its tone. The model 20 is 13 1/2" high, 11" wide and 5 1/2" deep. Weighs 8 lbs.

No. 97470  
List \$29.00  
DEALER'S PRICE.....

**\$17<sup>40</sup>**  
Less 2%

## Air Column Speaker Model 15

The Temple Air Column Speaker is another splendid example of the mathematical precision and mechanical construction which has made the name of Temple a byword in radio circles. Advanced manufacturing facilities have made possible a smaller and lighter speaker in which marvelous improvements in tonal beauty, handling capacity and response to all frequencies have been made. Resplendent in its artistic beauty, it is the last word in speaker construction. 60 inch center line air column. 12 1/2" high, 11 1/2" wide, 8 1/2" deep. Weight 12 1/2 lbs.



No. 97480  
List \$29.00  
Dealer's Price.....

**\$17<sup>40</sup>**  
Less 2%

## Air Column Speaker Model 11



The Temple Air Column Model 11 is a genuine exponential air column speaker which is undoubtedly the highest quality speaker to be had at its price today. Made under the same exacting specifications which have made Temple Speakers pre-eminent for faultless reproduction. It is consequently a speaker of marvelous tonal quality and tremendous volume. It is 12 1/2" high, 11 1/2" wide, 8 1/2" deep and weighs 12 1/2 lbs.

No. 97475  
List \$22.50  
Dealer's Price.....

**\$13<sup>50</sup>**  
Less 2%

## Air Chrome Console Speakers

This new development in speakers couples a wide experience in the construction of quality speakers with one of the most advanced principles of sound reproduction yet developed and at the same time carries more essentials required than any other speaker on the market. The Temple Air-Chrome Speaker has the open radiator and its diaphragm is so constructed as to insure the balanced tension principle, whereby the slightest impulse is carried from the driving unit to the diaphragm without any loss. These factors, strengthened with the performance of a specially developed powerful Double Action unit, accounts for its enormous volume and full response to all audible frequencies. Come in three different sizes which makes possible easy installation in any cabinet.



No.	Model	Size	Depth	Weight	List	Each
97471	Z	9 1/2 x 11"	5"	4 1/2 lbs.	\$20.00	\$12.00
97472	P	18 x 23"	8 1/2"	8 1/2 lbs.	23.00	13.80
97473	K	14 x 14"	8 1/2"	8 1/2 lbs.	20.00	12.00

## The Temple Comparator



This device is used to compare and analyze characteristics of every type of reproduction speakers, having a comparing capacity of two to five speakers. A slight turn of the knob switches from one speaker to another. May also be used as a selector for various speakers when they are located in different rooms.

No. 97479  
List \$3.50  
Dealer's Price.....

**\$2<sup>10</sup>**  
Less 2%

"Service doesn't falter, when it comes from Harry Alter"

**DE LUXE DYNAMIC CONE REPRODUCER**



This attractive portable reproducer is beautifully encased in a walnut cabinet with a satinwood front and can be obtained for battery or A. C. operation. A. C. Models are equipped with equalizer switch for controlling receptive quality.

**NEW LOW PRICES**

No.	Model	Operation	List	Each
97462	976	6 Volt Battery	\$37.00	\$34.20
97464	979	110 Volt A.C.	75.00	45.00

**NEWCOMBE HAWLEY DYNAMIC CHASSIS**



The Newcombe Hawley Dynamic Cone Reproducers can be had for both battery and light socket operation. Complete with step down input transformer, condition equalizer and audio-input cord.

**NEW LOW PRICES**

No. 97390	Model NH-6,	6 Volt Battery Operation.	List \$35.00.	Each.....	<b>\$21.00</b>
No. 97391	Model NH-9,	110 Volt A. C. Operation	List \$40.00.	Each.....	<b>\$24.00</b>



**TABLE AND CONSOLE MODEL DYNAMICS**

These attractively proportioned models, in beautiful burl walnut, combine fine furniture with a dynamic cone reproducer of unsurpassed tone quality. Table model compact but large enough to hold most table type receivers. Console model offered in large and small size to accommodate all size radio receivers.

**TABLE MODEL**

No.	Model	Operation	List	Each
97374	986	6-volt Battery	\$70.00	\$42.00
97375	989	110-volt A.C.	88.00	52.80

**CONSOLE MODEL For the Smaller Sets**

No.	Model	Operation	List	Each
97376	926	6-volt Battery	\$80.00	\$48.00
97377	929	110-volt A.C.	98.00	58.80

**For the Larger Sets**

97378	959	110-volt A.C.	\$110.00	\$66.00
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**MAGNETIC CONE TABLE SPEAKER**



This table is equipped with the Newcombe-Hawley magnetic and dynamic cone unit and is so constructed as to accommodate practically any radio receiver. The unit is hidden from view behind a cloth covered grill which in no way interferes with the transmission of sound impulses. Where lack of space does not permit the use of a console, the table speaker serves the double purpose of holding table and speaker. Made of walnut and artistically designed and finished, this speaker adds to the beauty of any set.

No.	Type	List	Each
97388	Magnetic Unit	\$40.00	\$24.00
96764	110 Volt A. C. Dynamic	75.00	45.00

**COMBINATION CONSOLE AND PHONOGRAPH**



A unique model in fine burl walnut, complete with a Newcombe-Hawley A. C. Dynamic Reproducer. By installing any A. C. set in the cabinet a splendid combination radio and phonograph console is obtained. Above the set is a phonograph turntable with electric motor and selector switch, with connection for radio receiver and phonograph pick-up. Also provided with compartment for phonograph records. For light socket operation only. Complete with electric pickup.

No. 97381	List \$237.50	<b>\$142.50</b>
Each.....		Less 20%

**SPEAKERS**

Newcombe-Hawley is a name that has always been associated with quality speakers. In keeping pace with radio progress they have eclipsed anything of the past applying their vast knowledge to the construction of this line of dynamic cone, magnetic cone and air column speakers.

**MAGNETIC CONE PORTABLE SPEAKER**



This attractive Portable Reproducer is equipped with the New Model 80 Magnetic cone Unit described below. Furnished in a beautiful burl walnut cabinet with a cloth grill. Extremely sensitive and capable of ample volume without distortion.

No. 97380	<b>\$16.80</b>
List, \$28.00.	
Each.....	

**MAGNETIC CONE CHASSIS MODEL 80**



Newcombe-Hawley Magnetic Cone speakers meet the demand for a high quality reproducer at moderate cost. A strong permanent magnet provides the field. Furnished in a plain wood baffle box. Diameter of cone 9".

No. 97379	<b>\$10.80</b>
List, \$18.00.	
Each.....	



**Table and Console Models with 72 in. Air Column**

An extremely popular table and console reproducer of wide tonal range and surprising volume. Equipped with Newcombe-Hawley Air Column Tone Chamber and Baldwin Unit. Beautiful walnut with gold cloth grill. Panel in console model can be cut to fit the popular sets.

No.	Model	List	Each
97383	Table No. 71	\$53.00	\$31.80
97384	Console No. 72	63.00	37.80
Also furnished in the 86-inch chassis model without cabinet No. 70.			
No. 97385	List \$25.00	Each \$15.00	



# Peerless

REPRODUCER



## Dynamic Chassis

The design of the Peerless Dynamic Chassis is determined by the radically new developments in dynamic speaker construction, first among these being the new type one turn Voice Coil made of a single ring of copper. The coil is fastened to a bakelite tube at the other end of which the cone is attached thereby utilizing all the available space in the magnet cap.

The unique design permits the use of an extraordinarily rugged suspension which is an integral of the coil itself and serves the double purpose of a flexible suspension and conductor. Resistance and losses are reduced to a minimum by use of the new Peerless input transformer which has a secondary of a single turn of heavy copper strip bolted direct to the voice coil suspension. Made in models to use any type of current. Height of chassis 9-13/16", depth 6-9/16", width 3 1/4". Diameter of cone 7".

No. 98182  
List \$35.00  
Each \$33.00 Less 2% or.....  
For 50 to 60 Cycle A. C. Light Socket

No. 98183  
List \$10.00  
Each \$24.00 Less 2% or.....  
For 6-8 1/2 Volt Storage Supply

**\$32<sup>34</sup>**  
NET

**\$23<sup>52</sup>**  
NET



## Gothic Magnetic Speaker

Reproduces all low notes of the scale—from below 100 cycle to a high of 4000 cycles. The unit is a double acting balanced armature having no polarity. The Peerless is a best seller in spite of its high price because on comparative tests it is better. The Gothic designed mahogany cabinet—the handsome grille, the fool-proof rugged construction are other big features. Try the Peerless reproducer.

No. 98886  
List \$30.00  
Less 40% \$18.00  
Less 2% or

**\$17<sup>64</sup>**  
NET

## PEERLESS DYNAMIC 19-A

With 9 Inch Cone

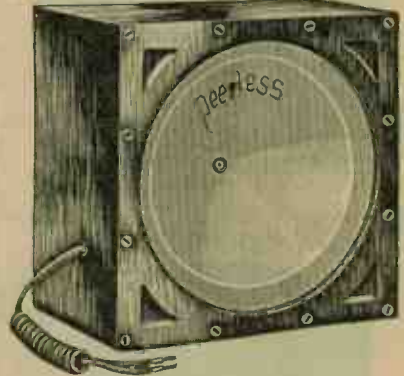
In the Peerless Dynamic Speaker, one can feel secure that he has the very finest in radio reproduction. Such life-like tone, such magnificent volume is beyond conception. Constructed in accordance with the plans of the best engineers in the business, and with utmost exactness. Equipped with the nine-inch Peerless Dynamic Cone. The cabinet is of selected walnut carved into a beautiful Gothic design. Height 16 5/16"

No. 98586 6 Volt  
List \$60.00. Ea. \$36.00 Less 2%  
No. 98587 110 Volt A. C.  
List \$75.00. Ea. \$45.00 Less 2%

## PEERLESS DYNAMIC 17-A

The same as the above listed speaker in every detail of construction, only that it has a 7-inch cone, instead of a 9-inch cone. Height 14".

No. 98184 110 Volt A. C.  
List \$65.00 Each \$39.00 Less 2%  
No. 98185 6 Volt  
List \$50.00 Each \$30.00 Less 2%



## PEERLESS BUILT-IN UNIT

This type is for use in console cabinets—otherwise it is exactly the same as the regular Peerless. The plain box is 9 1/4" wide, 9 1/4" high and 6 inches deep. Complete with 2 feet of cord. Hear that deep rich tone that only the Peerless has.

No. 97246  
List \$18.00 Less 40%  
Each \$10.80  
Less 2% or

**\$10<sup>58</sup>**  
Net



# PEERLESS TABLE

A delightfully simple yet artistic bit of furniture is this Peerless Table Speaker which serves the double purpose of beautifying the radio receiver and housing the speaker. The Peerless serves in both capacities, brilliantly. As it is equipped with either the Magnetic or Dynamic speaker, it is hardly necessary to mention that the tone of this table speaker leaves nothing to be desired in the way of reproduction. The cabinet is a beautifully carved affair, accentuating the trend of modern art. Made of selected walnut and finished in walnut veneer. Has baffle board for the Dynamic Speaker. Measures 30"x30"x14" deep.

No. 98588 Peerless Magnetic Speaker.  
List \$50.00.  
Each.....

**\$30<sup>00</sup>**  
Less 2%

No. 95890 110 Volt A. C. Dynamic Speaker  
(9" cone). List \$100.00.  
Each.....

**\$60<sup>00</sup>**  
Less 2%

"Service doesn't falter, when it comes from Harry Alter"

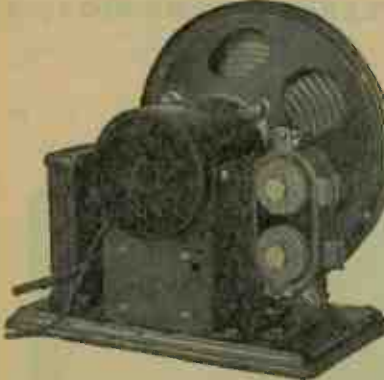
**UTAH DYNOLA SPEAKER**



A specially constructed cone assures quality reproduction in the Dynola, regardless of climatic conditions. This is quite an item in a moist atmosphere where an inferior speaker will produce a distorted reproduction. A beautiful cabinet made of 5 ply walnut with genuine Burl walnut front, finished in antique brown. Truly a work of art. The cabinet is of non-directional design having the same grill and appearance, both front and back. Dimensions 12" high, 16 1/2" wide and 12" deep.

No.	List	Each
98250 110 Volt A. C. Operation.....	\$65.00	\$39.00 Less 2%
98251 6-12 Volt Battery Operation.....	55.00	33.00 Less 2%
98252 110-220 Volt D. C. Operation.....	55.00	33.00 Less 2%

**UTAH Dynamic Chassis**



The Chassis of the above shown speaker can also be obtained without the cabinet for use in a console. Manufactured by the leaders in their field, it is a manifestation of their experiences and the practical knowledge of speaker construction.

No.	Size	List	Each
98253 110 Volt A. C. Operation.....	9 "x9 1/2" x7 1/2"	\$40.00	\$24.00 Less 2%
98254 6-12 Volt Battery Operation.....	8 1/4" x7 " x7 "	30.00	18.00 Less 2%
98355 110-220 Volt D. C. Operation.....	8 " x8 1/2" x7 "	30.00	18.00 Less 2%

**Utah "No. 65" Dynamic Speaker**



This clock shaped speaker possesses a certain charm by virtue of its simplicity of design, and when you listen to the sweet tone that emanates from this speaker, you will understand why it deserves the name of Utah. Made of genuine walnut plywood finished in antique brown. Front and back have same grille and appearance. Height 11 1/2" width 13" depth 10". Equipped with 10 ft. power cord and switch.

No.	List	Each
98582 110 Volt A. C. Operation.....	\$49.50	\$29.70 Less 2%
98583 6-12 Volt Battery Operation.....	35.00	21.00 Less 2%
98584 110-200 Volt D. C. Operation.....	35.00	21.00 Less 2%

**NEW UTAH Utah 8 3/4 In. Cone for Consoles**



You will say it is wonderful when you hear it. Something new and amazing because of its low price. The metal frame around the edge of the cone permits easy fastening in any console. This new Utah cone will take all the volume without a rattle. Just the speaker for the new powerful electric sets. And what a tone—mellow, clear, reproduces high and low notes with faithful life-like fidelity. Buy one and see for yourself. Contained in plain baffle board square box 9 1/2" x 9 1/2" x 5". Make mounting very easy and supplies needed baffle surface.

No. 97251	List \$16.00	<b>\$9.41</b>
	Less 40% \$9.60	
	Less 2% or.....	

**SAME AS ABOVE BUT WITHOUT CASE**  
The same speaker as illustrated above is also supplied without wooden case. Very compact—will fit any console.

	<b>\$8.23</b>
	Net

Wonderful tone quality.  
No. 97250 List \$14.00. Less 40% \$8.40  
Less 2% or.....



**UTAH X-30 MAGNETIC SPEAKER**

Here is more evidence of Utah's ability to put out a speaker that outshines the field in brilliancy of performance and dollar for dollar value. Equipped with a cone that has such exclusive features as a muffled voice motor and a special processing which eliminates adjusting, it is indeed a product which insures consistent, excellent reproduction. In a cabinet of genuine walnut plywood finished in antique brown, it is a treat for the eye with its subtle simplicity. Front and back are identically alike. Dimensions 11 1/2" high, 15" wide, 8 1/2" deep.

No. 98255	List \$30.00. Each.....	<b>\$18.00</b> Less 2%
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**UTAH X-20 MAGNETIC SPEAKER**



Another one of Utah's achievements is this beautiful, yet inexpensive reproducer. It is equipped with the Utah Power Motor (magnetic) speaker, a unit, which needs no introduction. Cabinet is made of genuine walnut plywood finished in antique brown. Dimensions 10 1/2" high, 12" wide, 7 1/2" deep.

No. 98561	List \$19.50.	<b>\$11.70</b>
	Each, Less 2%.....	

**UTAH UNITS**

Finished in nickel, furnished with or without stand to fit consoles. Beautiful, undistorted musical qualities.

No.	List	Each
92736 With Stand	\$8.00	\$4.80
92732 Threaded Unit	5.00	3.00
96077 De Luxe Unit	7.50	4.50
98449 Big Chief	3.50	2.10



"Service doesn't falter, when it comes from Harry Alter"



# Farrand

## DYNAMIC and MAGNETIC SPEAKERS



Farrand Speakers are designed to operate any make of set—Dynamic Speakers being used on sets using 171, 210, or 250 tubes. Sensationally new design and construction features not only add further laurels to Farrand tonal supremacy but also provide hitherto unattained degrees of volume acceptance.

### GOTHIC DYNAMIC

The outstanding value in Dynamic table speakers, combining the utmost in outward beauty with Farrand acoustical leadership. Beautiful, two-tone walnut cabinet of classic Gothic design. Produced in 6 Volt DC and 110 Volt AC Models.

No.	Model	} List \$55.00 Each.....	<b>\$33<sup>00</sup></b> Less 2%
97450	70— 6 Volt.....		
97451	70—110 Volt.....		

### FARRAND MAGNETIC GOthic

The Farrand Magnetic can also be had housed in the above Gothic standing speaker both as to reproductive performance and beauty.

No. 97452 Model 60 List \$30.00 Each.....



### Dynamic Chassis

Designed for all types radio consoles, cabinets or phonograph combinations. Tonal range and fidelity unmatched by any other reproducing unit in general use. Replace your old speaker and get new marvelous tone quality.

No.	Model	List	Each
97453	72—	\$35.00	\$21.00
	6 Volt DC		
97454	72—	\$45.00	<b>\$27<sup>00</sup></b>
	110 Volt AC		Less 2%



### Farrand Magnetic Table Speaker

An exceptionally graceful table of handsome two-tone walnut, designed to harmonize with the modern home furnishings. The built-in magnetic speaker affords all the volume demanded by the most powerful receiver. Height 30 in., Width 24 in., Depth 14 in.

No. 97461 Model 68 List \$45.00  
Each \$27.00 Less 2% or **\$26<sup>46</sup>**  
Net

### Farrand Tiffany Table Speaker

A typical Farrand value and artistic achievement of exceptional performance, housed in an exquisitely proportioned upright console of richly finished two-tone walnut. Height 36 in., width 16 in., Depth 10½ in.



No.	Model	List	} <b>\$45<sup>00</sup></b> Less 2%
97455	74— 6 Volt DC....	\$75.00	
97456	74—110 Volt AC....	Each	



### BOX CHASSIS

Same chassis as listed at the right, mounted and housed in a wood sounding chamber. Especially suitable for installation in consoles. Size 9¼ x 9¼ x 6½ inches.

No. 97457 List \$18.00  
Each \$10.80 Less 2% or  
**\$10<sup>58</sup>**  
Net



### CHASSIS

Unusually small-size cone reproducer of unlimited tonal capacity and volume. Blare-proof magnetization affords all the volume acceptance demanded by the most powerful power tubes.

No. 97458  
List \$15.00  
Each \$9.00 less 2% or  
**\$8<sup>82</sup>**  
Net



### PANEL CONE

An unusually attractive new model, fashioned in the manner of a fine portrait frame, with rich silk screen. Finely finished two-tone walnut with attractively carved corners. Height 12 in.

No. 97459  
List \$18.00  
Each \$10.80 Less 2% or  
**\$10<sup>58</sup>**  
Net



### Junior (Clock Type)

A new Farrand speaker that is fast becoming the most popular reproducer in America. True Farrand tone quality and a handsome bronze finish metal cabinet, at an extremely moderate price.

No. 97460  
List \$22.50  
Each \$13.50 Less 2% or  
**\$13<sup>23</sup>**  
Net

"Service doesn't falter, when it comes from Harry Alter"

**O'NEIL ILLUMINATED SHIP SPEAKER**



A beautiful speaker combining ornamental value with quality mechanical construction. Generous sized oval frame full rigged ship, illuminated by two concealed 25 watt red and blue intermediate lamps giving an exquisitely beautiful sunset and glow effect. Ship is constructed of cast aluminum and is finished in antique brown. Equipped with lamps, plug, lighting and phone cords. Stands 20 inches high.

No. 98547  
List \$25.00  
Each

**\$15<sup>00</sup>**  
Less 2%

**O'NEIL STANDARD CONE SPEAKER**



In this O'Neil cone model, we have an inexpensive yet a very beautiful speaker, and one of the finest quality. Constructed of the best material obtainable and in accordance with plans drawn up so as to give forth a tone, so smooth and so clear, that will earn your immediate endorsement. Its low price should make it a record seller this year. Finished in beautiful mahogany bronze, and the cone is tan with a mottled effect in green.

No. 98548 List \$14.75  
Each **\$8.85**

**THE AMSCO ORTHOPHONE**

The newest device to protect the speaker, where power tubes are used. It is placed between speaker and set by external connections. Increases volume, improves quality and protects the speaker from the intense direct plate current. 4 1/2" x 2 1/2" x 2 1/2". Essential for power tube.



No. 94759  
List, \$6.00.  
Each, \$3.60.  
Less 2% or.....

**\$3<sup>53</sup>**  
Net

**ANSONIA REPRODUCER**



An aristocrat in its Gothic design the Ansonia reproducer, in its physical structure reflects the spirit of the tone, that the finest engineering facilities have put into it. The cabinet is of genuine butt walnut. The newly developed driving motor is sturdily constructed and dust proof, with moving parts completely covered. Size 12" high, 12" wide, and 6" deep.

No. 98545  
List \$29.50  
Less 2% or.....

**\$15<sup>60</sup>**  
Net

**ANSONIA CHASSIS**

Here is the chassis of the above shown model which can be obtained for use in consoles. A smooth even tone quality, void of any distortion or disturbances. Ruggedly constructed of the highest grade materials. Dimensions, 9 1/4" x 9 1/4" x 5 1/4".

No. 98546  
List \$18.00  
Each \$9.72 Less 2% or

**\$9<sup>52</sup>**  
Net



**AIR COLUMN HORNS WITH UTAH UNITS**

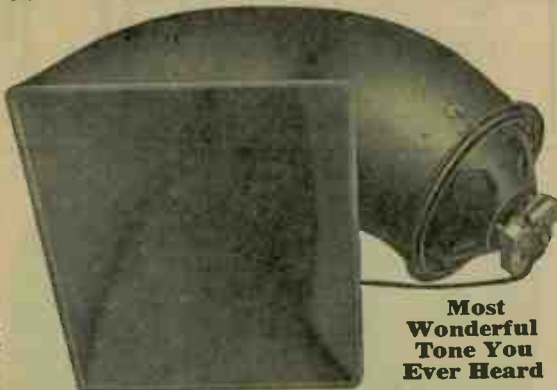
The popular long air-column speakers that reproduce the voice and song so faithfully. These excellent tone chambers come equipped with the famous UTAH UNIT.



Dealers put a few in stock as a demonstration will easily sell them. Sizes are given to show what space is required. Can be placed into consoles furniture, or built into the room of the home. Equipped with a long extension cord. Take advantage of these low prices now.

No.	Front Area	Depth	Air Column	List—Less	Each
96616	8 "x20"	12"	62"	\$11.50	\$6.21
96617	11 "x13"	13"	82"	14.00	7.56
96618	19 1/2 "x20"	10 1/2"	96"	16.00	8.64
96619	19 "x24"	11 1/2"	120"	18.00	9.72
Complete with UTAH UNIT—Less 2%.					
12 FT. TONE CHAMBER WITH A DELUXE UNIT					
96614	42"x26		144"	\$30.00	\$18.00

SEE TELEVISION APPARATUS, PAGE 42



**Most Wonderful Tone You Ever Heard**

**New Utah "Cone-Horn" Speaker**

You never heard anything like it before in your whole life. Every listener says only one word, "Wonderful." The new Utah Cone with a great big horn makes an acoustical combination that every one wants, built so as to go into large consoles. Just great for halls, outdoors or for store demonstrations. Comes in two sizes. Gives all best effects of both the cone and exponential horn type speaker.

**GIANT "CONE-HORN"**

Air column 41 in. 14 1/2" wide, 21 1/2" high, 24" deep (overall). Weight 26 lbs.

No. 97253  
List \$23.00  
Less 40%  
\$13.80  
Less 2%

**\$13<sup>52</sup>**  
Net

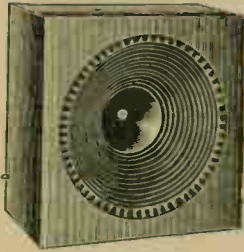
**STANDARD "CONE-HORN"**

34" air column. 14 1/2" wide, 19 1/2" high, 14 1/2" deep (overall). Weight 22 lbs.

No. 97252  
List \$22.00  
Less 40%  
\$13.20  
Less 2%

**\$12<sup>94</sup>**  
Net





**BETTERBILT  
MAGNETIC  
CHASSIS**

Ideal for use in consoles. Will take ample volume without a rattle. Constructed with the best of material obtainable. And its low price should make it a record seller.

No. 98549  
List \$18.00. Each  
\$6.00 Less 2% or... **\$5.88**  
Net

**Temple Air Columns  
For Console Cabinets**



In this Air Column Speaker we have something the dealer and set builder have always desired. A quality light weight speaker for console cabinets. This Temple product offers all the advantages of all previous models—the minute engineering, the quality of material—plus the advantage of being light in weight which will set a new standard in air column construction.

**MODEL 150**  
This is a correct mathematical exponential design making for maximum response and true brilliancy in the entire audible range. It is 11 1/2" in diameter, 7 1/2" deep and weighs but 6 3/4 lbs.

No. 97477.....List Price \$14.00 Dealer's Price \$8.40  
**MODEL 180**  
This model is similar in design and construction to Model 150 but quite a bit larger, having a diameter of 18", a depth of 11 1/2" and weighing 36 lbs.  
No. 97478.....List \$24.00 Dealer's Price \$14.40

**Temple Double  
Action Unit**

Specially designed to meet the requirements of the new A.C. sets which have such a tremendous power output that the ordinary unit will not handle the low notes satisfactorily. Because of its superior construction, scientific exactness, perfectly matched parts and most rigid testing, the Temple unit is equipped to overcome these difficulties.



No. 97475. List \$6.00. Each \$3.60 Less 2% or .....**\$3.53** Net  
**AIR CHROME TYPE**  
Specially designed for the Air Chrome type of speaker.  
No. 96093. List \$10.00. Each \$6.00 Less 2% or .....**\$5.88** Net

**NEW WEBSTER ELECTRIC PICK UP**

The Webster Electric Pick-Up can be attached to the phonograph and connected with the radio set in a few minutes. Will faithfully reproduce all frequencies now recorded on the best Orthophonic record. Remarkable clearness and volume. Consists of volume control base, cantilever supporting arm, and pick up head. Complete with adapters for both A. C. and D. C. sets and full instructions.



No. 98597 List \$17.50. Each **\$10.50**  
Less 2% or.....**\$10.29**  
Net

**PHONO LINK**

The Phono Link is the last word in the musical reproduction. By far the lightest pickup on the market reducing the wear of your records to a minimum. Instant change from phonograph to radio set can be made without changing tubes. Volume control insures perfect tone quality and is controlled at the pickup magnetically. Adapted to both AC and DC sets.



No. 96754 Complete, List, \$7.50; Each, \$4.50  
Less 2% or.....**\$4.41**  
Net

**NATHANIEL  
BALDWIN  
UNITS**



Rival Unit

Baldwin Units have acquired a reputation that has given them a commanding position in the eyes of the radio dealer as well as the public. Baldwin Units are recommended especially for the new orthophonic type speakers so much in vogue now. A Baldwin Unit will improve the tone quality. Are threaded and fit any standard console speaker.

No. 94933 Baldwin Concert Unit.....List \$10.00 Each \$6.00

**SPECIAL OFFER**

No. 94932 Baldwin Rival Unit, List \$7.00 Less 40 and 10% \$3.78 less 2% or.....**\$3.70** Net



**TOWER PHONES**

Extremely sensitive phones, but constructed very ruggedly. Light in weight with comfortable head-band.

**Very Special Price**

No. 93262 List \$2.95. **\$1.33**  
Less 50-10%  
or.....**Less 2%**

**SALT LAKE CONSOLE UNITS**



High grade replacement units with threaded end that fits all standard horn and console speakers. Every one is tested and will carry large output load.

No. 96118 High grade, dependable unit that fits all standard horns.....**\$2.06**  
Less 2%

**THE NEW DELUXE PACENT PHONOVOX**



The only pick-up device designed for use with the fibre needles without loss of volume. Permits changing from radio to phonograph without removing the detector tube. The COUNTER-BALANCED TONE ARM provides correct weight at the needle point for obtaining best reproduction. New design triangular needle holder takes either steel or fibre needle. Complete with Counter Balanced Tone Arm, adapters for both AC and DC Sets, and volume control.

No. 96713 Model 124 For use with AC or DC sets.  
With Tone Arm.  
List \$13.50. Each.....**\$8.10**

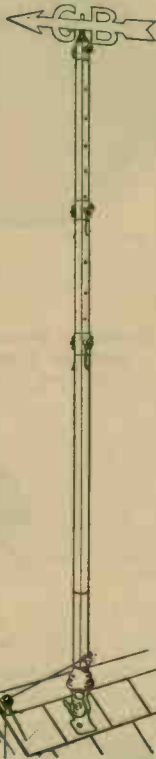
**ALSO FURNISHED WITHOUT TONE ARM**

The De Luxe Model No. 105A will meet all requirements for those who do not desire a tone arm. Reversible attachment permits left or right hand installation. One model for both AC or DC sets. **\$6.30**  
Less 2%

**PREMAX**

**The Super Mastenna**

The Super Mastenna is a new vertical outdoor aerial, employing the principle that, by its vertical position and resulting direct interception of radio waves, a greater volume can be obtained. Made of special grade high conductivity aluminum tubing, 1 inch square. Can be lengthened to desired height by a telescoping process. Has a bell insulator. Thoroughly insulated weather vane, which operates smoothly, makes the aerial an object of interest. Can be lengthened to 10½ feet. 4 ft. 4 in. collapsed.



No. 96734  
List \$12.50  
Each \$7.50  
Less 2% or  
**\$7<sup>35</sup>**  
Net

**PREMAX COLLAPSIBLE STEEL AERIAL MASTS**

Easily and safely erected—various sections telescope one within the other thus providing convenience in handling in stock. Clamp on side clamps mast at length desired. When using the Premax Umbrella Connector listed below a sturdy umbrella aerial can be erected. The Betterbilt or Super ball aerial can also be mounted on the Premax mast by using the Premax Ball Adapter. Premax masts are universal for all purposes.

No.	Length	List	Each
98550	7 Foot	\$2.50	\$1.50
98551	10 Foot	3.50	2.10
<b>ACCESSORIES</b>			
98552	Umbrella Connector	.85	.51
98553	Ball Adapter	.25	.15

**KABINETTENNA**

In addition to being one of the most efficient inside aeri- als, Kabinettenna provides electric power for Dy- namic speakers and A. C. Radio Receivers. No more unsightly wiring, double plugs, cumbersome aeri- als. Requires no lightning ar- rester. Reduces static and local interference. A trial will prove its superiority.



No. 98595.  
List, \$4.50.  
Each \$2.70 Less 2% or..... **\$2<sup>65</sup>**  
Net

**BETTERBILT HOWL ARRESTER**

A simple means of stopping micro- phonic noises. Made of lead and fits over the top of the tube. Furnished for the large type tubes only.

No. 98596.  
List, 50c.  
Each, 11c. Lots of 10..... **9c**



*The Trav-Ler*

The Trav-Ler has founded a New Standard in Portable Receivers. It is now universally accepted by the trade as a most profitable item.

**Loud Volume Lovely Tone**

The ease of operation, wonderful tone, quality and volume, plus the feature of portability make the Trav-Ler a desired companion at home or when traveling.

**Weighs Only 23½ Lbs.**

Size 8½ x 10 x 12½ inches.

Weighs only 23½ pounds, completely equipped. Very easy to carry as a suitcase.



**Attractive Appearance**

Case is covered with genuine black moeotan. Attractive design in loop panel, embossed in gold. Fittings are gold plated throughout, incorporating beauty and richness.



**Specifications**

Has simple, single-dial control, equipped with spring base sockets, which absorb all shocks. Built-in speaker and aerial. Two stages Radio Frequency, one Detector, and two stages Audio. Phone Jack Jones Plug and cable. Set can be operated with Batteries or Eliminator. It comes equipped with binding posts for Antenna and Ground connections.

**Priced less Tubes and Batteries**

No. 96745 List \$57.50  
Each \$34.50 Less 2% or **\$33<sup>81</sup>**  
NET



**Accessories**

Complete accessories for the Trav-Ler consist of 5 CX299 tubes, 3 Bright Star A Batteries, 2 Bright Star B Batteries, and 1 Bright Star C Battery.

**12<sup>38</sup>**  
Each

No. 96746 List \$18.65

**BODINE DE LUXE LOOP**

The new BODINE De Luxe is a beautifully finished loop, that is both compact and efficient. The frame is selected solid walnut, hand rubbed. Winding covered with lustrous silk braid. Has special low capacity 3 contact jack, which permits loop to be rotated continuously.

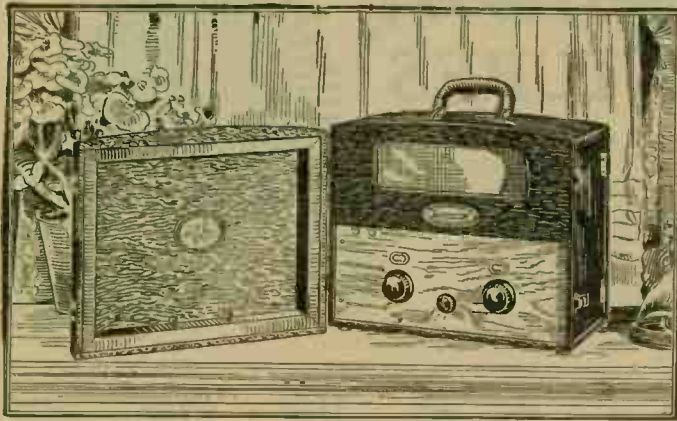
No. 93488—  
For .0005 Condenser  
No. 93489—  
For .00035 Condenser  
List \$12.00  
Each..... **\$7<sup>20</sup>**  
Less 2%





# Tyrman "50"

All Purpose Radio



The Tyrman "50" All Purpose Radio was designed to meet the demand for those who want a real radio for outing, camping and travel. It is distinctly different from any other portable you have ever known. An extra long air column tone chamber, fitted with a well known speaker unit, insures strong, clear, full, rich tonal qualities. The window dials set into a beautiful golden brown panel gives a most attractive appearance. The aerial is in the cover, hidden by an attractive walnut frame. Case is covered with a durable sharp grain leather-like material which matches the finest luggage. There are sales and profits waiting for you. Demonstrate the Tyrman "50" on your counter. Display it in your window.

No. 97430 Less tubes and batteries.  
List \$64.60 Each **\$38.70** less 2% of.....

**\$37.92**  
NET

## Attracts Attention Appeals to Everybody

The Shielded Grid Tube used in the Tyrman "50" is many times more powerful than the ordinary tube. That's the reason for its volume. Bear in mind that the Tyrman "50" is not a competitor of your regular radio line — its market is distinctly different. Every motor boat and yacht owner, camper, motorist and college student is a prospect.

### Accessories

Complete accessories required for the Tyrman "50" are 4 CX299 tubes, 1 CX322 Shielded Grid Tube, 2 45-volt Bright Star B Batteries, 1 Bright Star C Battery, 3 Bright Star A Batteries. Set completely equipped weighs only 26 pounds — well balanced — full grip handle — easy to carry as an overnight bag.



Complete Equipment for Tyrman "50"

No. 97431 List \$21.90. Each..... **\$14.95**

## B.M.S. HOME BROADCASTER



The New  
Idea for a  
Radio  
Party

The Home Broadcaster consists of a microphone, a long extension cord, and a tube socket adapter. Just slip the tube out of the detector socket, plug in the adapter and the Broadcaster is ready to do its work. By simply pressing the switch button on the microphone you cut off radio reception and speak through the loudspeaker. Fool your friends — make a station announcement from Paris, or make some intimate remark about your friends. Then release the button and let the program continue. It fools everybody. The Broadcaster can be left permanently connected to the receiver as it will not interfere with radio reception. The Broadcaster lends itself to many commercial uses such as entertainment announcements, classroom work, lectures, in fact anywhere where voice amplification is useful.

No. 96495 For D.C. Sets.  
No. 96487 For A.C. Sets.  
List \$7.50.

**\$4.41**  
NET

Each \$4.50 Less 2% or.....



## THE NEW TALKING TAPE

Improved talking tape is made in six attractive colors to harmonize with the home furnishings. Brown, Ivory, Purple, Green, Black, and Red. An indoor aerial easy to put up 50-ft. length furnished in golden color only.

No.	Length	List	Each
91597	100 ft.	\$1.00	<b>\$0.60</b>
91598	50 ft.	.60	<b>.36</b>

## RADIO LITE-TENNA



The Radio Lite-Tenna is the heart of radio reception. It is a combination reading light and aerial for the radio receiver. Just connect the Lite-Tenna into the nearest light socket and you are ready to tune your set with the most efficient aerial ever had. Cuts down local interference and gives you all around better radio reception. The Lite-Tenna is 10 inches high. Finished in old gold with beautiful shading. Amber shade and weighs 1 3/4 lbs.

No. 96369  
List \$7.50.  
Each.....

**\$4.50**  
Less 2%

## Birnback Tuner

In Attractive  
Duco Colors



Wound on genuine colored Bakelite. Does not warp or shrink. A marvel for performance. Very attractive. Tuning range 200 to over 550 meters.

### FOR .0005 CONDENSER

No.	Type	Color	Each
97069	60	RED, 3-Cir. Tuner.....	<b>\$1.20</b>
97070	61	RED, RF Coil.....	<b>.75</b>
97300	62	GREEN, 3-Cir. Tuner.....	<b>1.20</b>
97301	63	GREEN, RF Coil.....	<b>.75</b>

### FOR .00035 CONDENSER

No.	Type	Color	Each
97183	635	RED, 3-Cir. Tuner.....	<b>\$1.20</b>
97184	636	RED, RF Coil.....	<b>.75</b>
97302	637	GREEN, 3-Cir. Tuner.....	<b>1.20</b>
97303	638	GREEN, RF Coil.....	<b>.75</b>

# Cunningham RADIO TUBES

Why Not Use the  
-BEST-



We Give You Benefit of  
All Reductions in Price

WE are direct distributors of CUNNINGHAM Tubes and carry a large stock at all times. We can serve you promptly on all your requirements.

CUNNINGHAM Tubes without a question have created in the field of radio a degree of Satisfaction and Good Will second to none. There are actually millions of users and this universal acceptance offers you dealers a minimum of sales resistance. The effective national and local advertising by CUNNINGHAM is a real and decisive sales help in the merchandising of these standard tubes.

No.	Type	Volt	Amp.	List	Each	Less 2% or Net
91616	CX301-A	5.	.25	\$1.50	\$0.98	\$0.96
91620	CX300-A	5.	.25	4.00	2.60	2.55
91607	C11	1.1	.25	2.50	1.63	1.60
91618	CX12	1.1	.25	2.50	1.63	1.60
91609	C299	3.	.06	2.25	1.46	1.43
91619	CX299	3.	.06	2.25	1.46	1.43
91634	CX340 (Hi-Mu)	5.	.25	2.00	1.30	1.28

## QUALITY OUTPUT TUBES

For Use Only in the Last Stage of Audio Frequency

**CX220** Dry Battery Amplifier Tube, plate voltage, 135 volts. ("C" battery voltage of 22.5 volts required. Filament operated parallel with remaining tubes. Fits only CX sockets.

No.	Type	Volt	Amp.	List	Each
91612	CX220	3.0	0.125	\$2.50	\$1.63

**CX112A** For storage battery sets. Can be used with 90 volts, but 135 volts recommended with negative grid voltage of 9 volts. Especially recommended for TRF circuits.

No.	Type	Volt	Amp.	List	Each
91613	CX112A	5.0	.25	\$2.75	\$1.79

## NEW SHIELDED GRID TUBE

**CX322** New Screen Grid Radio Frequency Amplifier. Maximum Plate voltage 135 volt. For specially designed circuits only. Has extra connection through metal cap at top of glass bulb. Must have 15 ohm resistor (tapped), 3.0-3.3 volt filament, .132 amp.

No. 97171	Type CX322	List \$6.50	Each \$4.23
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## RECTIFYING TUBES

**CX380** New FULL WAVE Rectifier with a maximum output of 125 milliamperes. Has new, oxide-coated ribbon filament of great ruggedness.

No.	Type	Volt	Amp.	List	Each
94975	CX380	5.0	2.0	\$1.25	\$2.76

Type CX380 and CX381 are interchangeable for Type CX313 and CX116-B, but special units are required for delivery of increased output.

**CX381** New SINGLE WAVE Rectifier with a maximum D. C. output of 110 milliamperes. Increased output necessary for sets using greater power, such as CX371 and CX310.

No.	Type	Volt	Amp.	List	Each
94976	CX381	7.5	1.25	\$7.50	\$4.88

## NEW CUNNINGHAM A. C. TUBES

The new CX326 and C327 A. C. Tubes permit the use of unrectified alternating current supplied through a step-down transformer and dispense with customary filament current supply by batteries, rectifying devices and filter systems. Type CX326 is a 1½ volt raw A. C. filament tube drawing a current of 1.05 amp. and has standardized CX base. Type C327 is a so-called A. C. heater tube and primarily intended as detector tube, used with CX326. Requires 1.75 amp. at 2½ volt A. C. Type C327 employs a special 5-prong base.

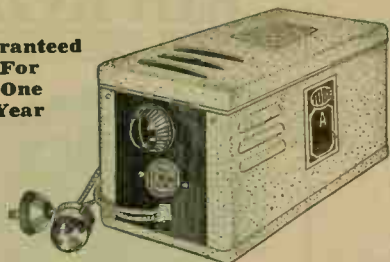
<b>CX-326</b>	New A. C. Tube	No. 94977	List \$2.25	Each....	<b>\$1.46</b>	<b>C-327</b>	A. C. Detector, 5-prong	No. 94978	List \$4.00	Each.....	<b>\$2.60</b>
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"Service doesn't falter, when it comes from Harry Alter"



**TOBE "A" SUPPLY**

**Guaranteed  
For  
One  
Year**



The new Tobe "A" Supply will give a consistent, flawless performance because it is durably constructed of the finest materials obtainable and engineered with the greatest scientific exactness. Nothing that can possibly improve the efficiency of a power supply has been spared in giving the public a product of great quality. Absolutely foolproof and fully guaranteed for one year.

No. 98464 List \$35.00. Each \$21.00, **\$20<sup>58</sup>**  
Less 2% or.....



Majestic Power Units have a nationwide reputation that has been gained through highest quality. Majestic Power units are built to give even greater efficiency, greater radio power and are sold at lowest prices. All Majestic Units are guaranteed for one year against electrical and mechanical defects.

**MAJESTIC  
SUPER  
"B" UNIT**

**Immediate Delivery**

The market standard in the "B" eliminator field. Will deliver current for loads up to 12 301A tubes or equivalent. Two variable output controls make a simple adjustment and insure tone quality. Four terminals. Dimensions, 10 1/4" x 5 1/2" x 9 1/4". Cabinet finished in rich black crystal enamel. Complete with extension cord. Output 50 Mills at 180 Volts.

No. 94979 Complete with Rectifier Tube. **\$17<sup>35</sup>**  
List \$29.50. Each \$17.70. **NET**  
Less 2% or.....

**POWERIZER "GENERAL  
MODEL"**

Converts any D. C. set or Radiola 20 into an A. C. set with 310 power tube amplification. Manufactured by pioneers in the radio field, the General Model Powerizer has the advantage of being a product of laboratory research, which has found it to possess great electrical and mechanical efficiency. Supplies A, B, C for A. C. tubes 326 and 327, and adds a 310 tube for power output. Uses 1 CX380 and 1 CX310 tubes. To be used with 60 cycle current. Size, 11 1/4" x 7 1/8" x 8 3/8".

No. 98565 **\$32<sup>40</sup>**  
List \$54.00 Less 2%  
Each (Tubes and Accessories Extra)



**POWERIZER P D 5**

Furnishes Complete A, B, C Supply for 210 power tube amplification for sets using 199 and 222 tubes. Particularly adapted for Radiola 20, Radiola Super Heterodyne, Radiola Super 8, Victor 7-3, 7-30, or Brunswick combinations. Requires no change in wiring. Uses 1 CX380 and 1 CX310 tubes. Works from 60 cycle current. Size, 19" x 5 1/4" x 6".

No. 98566 **\$48<sup>00</sup>**  
List \$80.00 Less 2%  
Each (Tube and Accessories Extra).....

**POWERIZER 25 OR 28 A C PACK**

Converts a Radiola 25 or 28 or Victor or Brunswick combination with Radiola 25 or 28 A. C. operation and adds 210 power tube amplification. Looks like the Powerizer P D 5, with the exception of being about 3 inches wider. Has excellent constructional properties which insure smooth even operation. Uses 1 CX380 and 1 CX310 tubes. Adapted to 60 cycle current. Size, 19" x 5 1/4" x 6".

No. 98567 List \$84.00 **\$50<sup>40</sup>**  
Each (Tubes and Accessories Extra)..... Less 2%

**POWERIZER JUNIOR**

Here is a splendid "ABC" supply power pack, which can convert any standard D. C. set for A. C. operation. Incorporates the ideas in power pack construction of the foremost radio engineers of the day. Manufactured with the greatest precision and with the highest type of production facilities. And at a price that drives home the necessity of electric operation. Uses a CX380 tube, adapted to 60 cycle current. Size, 10 1/4" x 5 1/8" x 7 1/8".

No. 98568 List \$35.00. **\$21<sup>00</sup>**  
Each (Tubes and Accessories Extra)..... Less 2%

**POWERIZER "A"**

A very economical "A" unit that supplies "A" and "C" current. When used with any "B" supply, converts any D. C. set for A. C. operation. Uses no tubes. Adapted for 60 cycle current. Size, 6 1/4" x 3 1/8" x 5 1/8".

No. 98569 List \$12.00. Each (Accessories Extra)..... **\$7.20** Less 2%

**POWERIZER ACCESSORIES**

	Price Each
Type F A Adapter—Converts a standard U X Socket to take 2 U Y—227 tube.....	\$0.65
SP-17—Sub-panel type adapter for Radiola 16 set.....	3.30
R-16 Volume Control—Controls input energy on Radiola 16.....	.98
VP-1 Volume Control—Controls input energy on most standard sets.....	.98
"A" type harnesses for Powerizer "A" or "Junior" @ \$0.65 per tube	
"BH" type harnesses for Powerizer, General Model @ \$0.65 per tube	



Powerizer Junior

# KUPROX

No Bulbs • No Liquids • No Noise



## KUPROX "A" POWER MODEL 302-A

Constructed the same as the "A" power unit used in A.C. sets, only in addition to having the usual step-down transformer, it has a rectifier and filter, delivering perfectly smooth uniform current. Contains no tubes, no acids and are dry of any liquids whatsoever. Tapped transformer and adjustable switch permits adjustment in output voltage to meet individual set and line conditions. Can be used in conjunction with any standard "B" eliminator, having a receptacle into which the "B" eliminator is plugged in and current is controlled by pendant switch of the "A" unit. Dimensions: 5 1/2" wide, 7" high, 12 1/2" long. Capacity 2 1/2 amps., operate 3 tube or smaller set. No. 96015 List \$35.00. Each ..... \$21.00 Less 2%

## MODEL 301-A

Designed for use with Radiola or other dry cell receivers. Being somewhat smaller than the 302-A, it fits comfortably in a Radiola Cabinet. Capacity 10 CX-199 or other .06 Amp. 3-4 Volt tubes. Dimensions: 5 1/2" wide, 4 3/4" high, 12 1/2" long. No. 96013 List \$32.50. Each ..... \$19.50 Less 2%

Pioneers in the experimentation of socket power units, Kuprox has forged to the top with their line of "A" and "B" eliminators.



## KUPROX "B" POWER UNITS

### MODEL 361-B

Operates all sets of six tubes and less with or without power tube. Adjusted to the individual output of the set at installation. Supplies "B" current only up to 55 M.A. at 45, 90 and 180 Volts. Dimensions: 4" wide, 7 1/4" high, 11" long. No. 96006 List \$26.50. Each..... \$15.90 CX 580 Rectifying Tube, extra

### MODEL 310-B C

For large sets equipped with CX 312 or 371 Power Tube. Has separate adjustment for detector voltage. Dimensions: 5 1/4" wide, 7" high, and 12 1/2" long. Supplies 22, 45, 67 1/2, 90 and 135 volts, together with 4 and 10 volts "C". No. 96007 List \$35.00. Each..... \$21.00 CX 580 Rectifying Tube Extra

### MODEL 316-B C

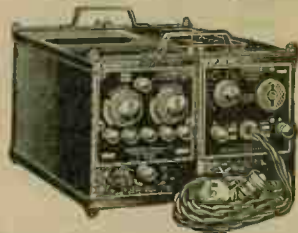
For large receiving sets with CX 371 Power tube. Supplies 22, 45, 67 1/2, 90, and 180 volts "B," together with 4 and 45 volts "C." Dimensions: 5 3/4" wide, 7" high, 12 1/2" long. No. 96019 List \$37.50. Each..... \$22.50 CX 580 Tube Extra

### MODEL 314-B C

Designed for use with Radiola, or other sets using 133 tube and equipped with special cable to facilitate connecting to the standard Radiola Terminal Board. Furnishes current for 45, 90, and 135 volts "B," together with 4 and 22 1/2 volts "C." Dimensions: 6" high, 5" wide, 12" long. No. 96014 List \$37.50. Each..... \$22.50 CX 580 Tube Extra

# KUPROX

No Bulbs • No Liquids • No Noise



## KUPROX "ABC" POWER UNITS

This "ABC" power unit, is the same used in A C receivers except that the "A" portion thereof, supplies smooth direct filament current instead of fluctuating alternator current. This permits the use of standard tubes, such as CX 301-A, CX 322, etc. This power unit can be sold separately, the "A" and "B" units, functioning independently of one another.

### MODEL 306 A B C

For operating all 8-tube and smaller sets. Merely a combination of Models 302-A and 310 B C as shown and listed in the first two columns. Dimensions 10 1/4" wide, 7" high, 12 1/2" deep. No. 96016 List \$45.00. Each... \$39.00 CX 380 Rectifying Tube, extra. List \$4.25. Each, \$2.78.

### MODEL 307 A B C

This is a combination of Models 302-A and 316 B C as shown in the first columns and each part works as described therein. Dimensions: 10 1/4" wide, 7" high, 12 1/2" deep. No. 96018 List \$47.50. Each... \$40.50 CX 380 Rectifying Tube, extra. List \$4.25. Each, \$2.76.

## KUPROX RECTIFIER REPLACEMENT UNITS



TYPE A-110

The Type A-110 is used for replacing the electrolytic rectifying jars on Balkite, Sillite and Vista trickle chargers. Absolutely dry, silent; requires no attention and lasts indefinitely. To install, simply disconnect electrolytic jar, set Kuprox A-110 in place of jar; then connect to trickle charger transformer and battery. Standard finish, cracked, olive green. No. 96000 List \$5.00. Each ..... \$3.00 Less 2%



TYPE A-R-3

Designed especially for replacing electrolytic rectifying jar in Philco socket power units. May also be used on other non-seal 5 amp., 6 volt-trickle chargers, such as Gould Unipower, Uniron, Eagle, G & G Johnson, Sillite, 75 amp., etc. Only two wires to connect. Standard finish, cracked olive green. No. 97169 List \$5.00. Each ..... \$3.00 Less 2%

Type 815 Resistor for 4 volt batteries or reducing normal charging rate developed. List 15c. Each..... 10c



TYPE G-R-1

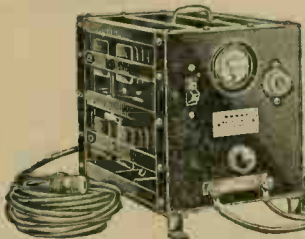
For replacing Tunstar 1-Ampere (Small) bulbs on Tunstar 1-Amp. Trickle charger, Philco Socket Powers (Bulb models), Willard Socket Powers (Bulb Models), Exide Socket Powers (Bulb Models). Develops a higher charging rate with less current consumption. Silent, and requiring little attention, it lasts indefinitely. Cannot be used for charging batteries larger than 6 volts. Standard finish, maroon. No. 97170 List \$5.00. Each. \$3.00 Less 2%

## KUPROX MULTI RATE RECTIFIER



The New Kuprox Multi-Rate Rectifier is something in a trickle charger, which will, in a short time pay for itself. Having a dial switch to control the amount of amperage of the individual battery. It supplies no more or no less current than is required, thus saving a tremendous amount of electricity. Contains no liquids or acids, no bulbs, vibrators or other frail mechanical parts. Can also be used to operate dynamic loud speakers, time clock and recording systems, telegraph sounders, or any other device requiring 1 ampere or less. Where the capacity of a circuit exceeds 6 volts, two or more Multi-rate Rectifier can be used. Dimensions: 8 1/2" wide, 6" high, 7" long. Standard finish, cracked olive green. No. 96002 List \$11.50. Each \$6.90 For 25-30-40 Cycle. No. 96012 List \$12.50. Each \$7.50

## Kuprox Heavy Duty Battery Charger Type TP 1



For simplicity, economy and speed in charging all radio or automobile batteries nothing can beat this charger. Charges two 6 volt batteries at a variable charging rate between two and ten amps, according to condition of battery. Will not charge 12 volt batteries. No. 96033 \$29.75 Each



**SPECIAL!**  
KUPROX MODEL 120 UNIT  
**A SPEGIAY BUY!** This Kuprox Model 120 unit, is offered to you at a special low price to reduce our inventory. This price will prevail ONLY while present stock lasts.  
A perfect combination B Eliminator and Power Amplifier for all sets. Adds one stage of power tube amplification to any set without change in wiring. Absolutely no hum, no acid. Supplies 45, 90, 180 volt "B" and 45 volt "C" current at output of 23 mills. Uses one CX 580 tube and one CX 371A tube. No. 96008 List \$45.00. Each ..... \$19.95 Less 2%





# Sterling

## DRY "A"

The STERLING 6 volt Socket Powers give ample current for sets from 3 to 8 tubes. It is meter equipped for exact current regulation. A simple, positive and dependable DRY "A" power supply for any set. It delivers 2 1/2 amps. at 6 volts. Has "B" receptacle. Size 4 in. x 10 1/2 in. x 7 in.

No. 96889 New Model complete with Rectifier.  
List \$37.50  
Each \$22.50  
Less 2% or **\$22.05** Net

### No. R-93 DRY "A" POWER UNIT

This unit has the same constructional qualities as the one listed above, excepting for a capacity for additional power. Delivers a regular 6 volt current at 3 amperes, for sets using from 5-10 tubes. The R-93 is designed for use with the full wave Tungar bulb, which delivers a silent filament current. Size 7 1/2 in. x 11 1/2 in. x 7 in. Complete with Tungar 3 amp. bulb

No. 98186 List, \$37.50.  
Each..... **\$22.50** Less 2%



### STERLING 'B-C-R-98

The Universal Model which will operate any radio set without hum. 180 volt maximum output. Supplies 40 volts C. Independent and variable voltage regulation is provided for both Detector and R. F. A primary voltage control inside the case regulates A. F. and Power voltages. Raytheon approved. Stands comparison with any eliminator. 4 1/2 in. x 11 1/2 in. x 6 in.  
No. 96841  
List \$33.50  
Less Tube  
Each \$20.10  
Less 2% or **19.70** Net

Raytheon "BH" Tube Extra No. 92441 List \$4.50 Each \$2.70

### STERLING RADIOLA TEAM

These two units are sold separate and constitute a complete A and B supply for sets using 3 volt tubes and up to 135 volt "B." The A side (R-93) uses 3 amp. Tungar bulb, the "B" side the new CX-380 tube. Both units have been used for a long time and are giving excellent satisfaction.

No.	Tube	List	Each
96892	R-93 "A" Side	\$28.00	\$16.80
94555	Tungar Bulb, 3 Amp.	4.00	3.00
96893	RT-41 "B" Side	22.00	13.20
94975	CX-380 Cunningham	4.25	2.76



### STERLING "B" R-81

For sets with 3 to 8 tubes. Will supply 40 bulbs at 100 volts. Both amplifier and detector voltages are variable and an additional primary control regulates all voltages proportionately. A Raytheon approved product, using the Type BH Tube. A very efficient "B" supply at a good competitive price. Size 7 1/2 in. x 4 1/2 in. x 5 1/2 in.

No. 96890 List \$24.00  
Less Tube  
Each \$14.40 Less 2% or  
Raytheon "BH" Tube Extra  
No. 92441 List \$4.50 Each \$2.70

### STERLING TUBE TESTER R-514



This is designed to check tubes for "shorts" between "fil grid," "plate grid," and "plate-fil." Checks AC, DC or Rectifier Tube. Will check shorts and omission on all 256, 227 AC and 199, 120 tubes. Tests 201A, 500A, 112, 1F1 and all types of rectifier tubes. Ruggedly constructed. Size 5 3/4" x 6". Includes adapter for 199, 120 tubes.

Finished in dark green with nickel trimmings.  
No. 98 87 List, \$15.50.  
Each..... **\$8.10** Less 2%

### A C AND D C TUBE TESTER

For use on counter or in service department. Gives a complete accurate check and re-activates all A C or D C tubes. Very easy to operate. Plugs into 110 Volt A C line.



Size 6 1/2 x 9 1/2 x 3 1/2.  
No. 98530 List \$35.00 Each..... **\$21.00** Less 2%



### Sterling Meters New AC Universal Tube and Circuit Tester

For complete AC testing; can be used in store or home service. Adapter plugs into sockets to test tubes or circuits; wiring in sockets; wiring or transformers. Should be in every shop for AC testing.  
No. 97261  
List, \$35.00.  
Each..... **\$21.00** Less 2%

### AC Voltmeter R-417

Tests any AC circuit up to 150 volts. Indispensable for AC set testing.  
No. 97034 List, \$7.50. Each..... **\$4.50**

### Sterling Voltage Stabilizer R-115

The line voltage problem which has so long plagued those with AC tube sets has finally been eliminated. With the Automatic Voltage Stabilizer one can control the AC line supply regardless of how high or low the voltage runs, or how it fluctuates. Absolutely unvarying current. It has removed the last obstacle in AC sets and performance. Very easily installed, and having no movable parts, resistors, liquid or dry rectifiers, it requires little or no attention.  
Size 7 1/2" x 11" x 5 1/2".



No. 98188 List, \$34.00.  
Each..... **\$14.40** Less 2%

### STERLING PRE-AMPLIFIER



The Pre-Amplifier, Sterling's new achievement, brings new performance to old radio sets. It can be connected to any 4- or 6-volt direct current set, without rebuilding, rewiring, or charging batteries or power packs. Reduces static, giving better tone, greater distance and selectivity. Uses one CX-522 screen grid tube. For use with any set using 201A, 299, C-11 or CX12 tubes.

No. 96834.  
List \$12.50.  
Each..... **\$7.50** Less 2%  
No. 97171 CX-322 Tube, \$4.23 Extra.

### STERLING AC TRI-POWER

The new and remarkable Sterling Tri-Power supplies "A," "B" and "C" voltages for A. C. Tubes to Radiola 16, Cradley Bandbox, Reed-Elmendorf, Kolster, Fada, Stewart-Warner, Beech, Sencra and practically any other 5 to 8 tube D. C. set. In 15 minutes you can convert these sets from D. C. to a full-divided A. C. set. This is all done without extra wiring, batteries, without mess, shift, guess work or after grief. A rugged, reliable and proven product. SPECIFY MODEL AND MAKE OF SET.

#### COMPLETE WITH CABLE AND ADAPTER

Comes complete, nothing else to buy. Full instruction with each set. Raytheon Rectifying Tube EXTRA LIST \$4.50. Each \$2.70.

No. 96896  
List \$38.00.  
Each \$22.80  
Less 2% or..... **\$22.34** NET



"Service doesn't falter, when it comes from Harry Alter"

# FAN STEEL BALKITE RADIO POWER UNITS

Balkite's new line of Radio Power units are the most advanced and reliable on the market. Require little or no attention and operate with a quietness heretofore unknown in radio.

## ABOX MODEL 66 A UNIT



We are listing the ABOX A UNIT with the Balkite line to take care of the demand for a separate A unit which Balkite is not including in their line of Power Units this year. Replaces batteries entirely and supplies "A" current direct from the light socket. The Ideal 6 volt "A" supply. For 110 volt, 60 Cycle current only.  
No. 98450 List \$35.00.  
Each \$21.00 Less 2% or

**\$20<sup>58</sup>**  
NET

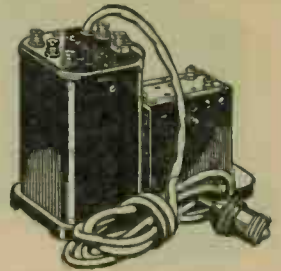
## MODEL N (ELECTROLYTIC) TRICKLE CHARGER



Standard type Balkite charger. Charging voltage 5 and .8 amperes for heavy or moderate service requirements. Operates from 110-120 A. C. 60 cycle current. Weight 6 1/2 lbs.

No. 98452 Complete. List \$9.50. **\$5<sup>59</sup>**  
Each \$5.70. NET  
Less 2% or.....

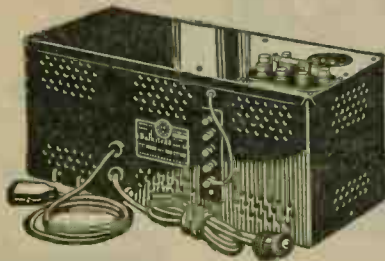
## MODEL F (DRY) TRICKLE CHARGER



Employs new Bakelite rectifier unit, and requires no attention. Bone dry—does not use a tube. Charging rate .5 and .8 amperes for moderate or heavy service requirements. Operates from 110-120 volt A. C. 60 cycle current. Weight 6 1/2 lbs.

No. 98453 List **\$6<sup>47</sup>**  
\$11.00. Each \$6.60 NET  
Less 2% or.....

## BALKITE A B COMBINATION MODEL G (DRY)



Replaces both "A" and "B" batteries. Contains no battery in any form and is absolutely dry. Complete in itself. Requires no attention or adjustment of any kind. Silent in operation. Also supplies power to 110 volt dynamic speakers. Dry "A" output 2 amps, at 6 volts. Dry "B" output 30 mills at 157.5 volts using CX380 rectifier. Operates from 110 volts A. C. 60 cycle current. Weighs 25 lbs.

No. 98451 Complete less CX380 tube. List \$69.50. **\$40<sup>86</sup>**  
Each \$41.70. Less 2% or NET

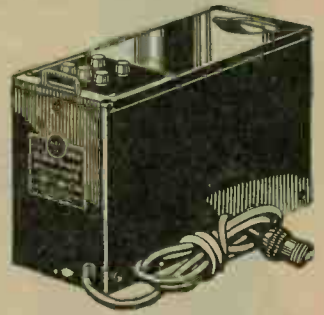
## BALKITE MODEL E (ELECTROLYTIC) "B" UNIT



Uses standard Balkite electrolytic rectifier and new Balkite filter condenser insuring smooth, hum-free operation. Very compact and requires no adjustment. Output 30 mills at 157 1/2 volts. Operates from 110 volt A. C. 60 cycle current. Weight 13 1/2 lbs.

No. 98454 List \$32.00. **\$18<sup>82</sup>**  
Each \$19.20 NET  
Less 2% or

## BALKITE MODEL T (DRY) "B" UNIT



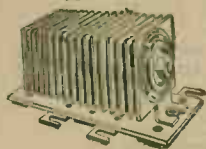
Uses CX 380 rectifier and new Balkite filter condenser. Designed to avoid overload in the power tube. Compact—requires no attention. Can also be used to operate 110 volt dynamic speakers. Output 30 mills at 157 1/2 volts.

No. 98455 Less CX380 Tube. List \$28.00. **\$16<sup>46</sup>**  
Each \$16.80 Less 2% or NET

## ELKON PRODUCTS

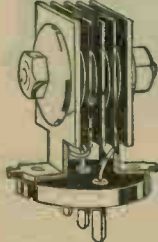
Elkon Dry Rectifiers are standard equipment on thousands of "A" eliminators and trickle chargers now in use. Keep Elkon Rectifier in stock this season. The replacement demand will be very large.

### Type M-16



The Elkon type M-16 Rectifier may be used in the following "A" eliminators: Majestic, Elkon, Philco, Webster, Knapp, Fada, Sentinal, Bernard, General Instrument, Metro, and Mayolian. A new rectifier makes the eliminator as good as new. Anyone can make the change.

No. 98456 **\$4<sup>20</sup>**  
List \$7.00 NET  
Each \$6.86 Less 2%



Thousands of trickle chargers using the Elkon Type V-4 Unit have stood their long service of 5,000 hours and will need new units this season. Three units in a set as there are three in each charger. No. 98457 Set of 3. List \$4.00 Each... **\$2.40**  
Less 2%

## TYPE BJ AND BNK



Elkon Replacement Units for Balkite Trickle chargers and Balkite type J chargers are the only ones authorized by Fansteel Products Co., for replacing the acid jars in their units. The Elkon also increases the efficiency. Charging rate of Model N is increased to 1 ampere, Model K to .8 ampere, and the type J 20% on all charging rates.

No. 98458 Type BNK Balkite N and K Charger. List \$5.00. Each **\$3.00**  
No. 98459 Type BJ Balkite J Charger. List \$7.50. Each... **\$4.50**

## TYPE EBH AND E 30

This new Elkon 7,000 Hour Dry "B" Rectifier replaces the BH or CX380 tubes in "B" eliminators and A. C. sets. Sturdy, solid, dry—none of the frailties of a tube—not affected by accidental overloads or line surges. The power is smoother and quieter.



No. 98460 For Type "B" Eliminators using B H Type Tubes. **\$3<sup>53</sup>**  
98461 For A. C. Sets or Eliminators using 380 Type Tubes. List \$6.00 Each \$3.60 Less 2% or..... NET





# AMPLUS WESTINGHOUSE

## "A" SOCKET POWER

An efficient 6 volt "A" Power supply contained in attractive metal case with splendid finish. The unit consists of a rugged Amplus 40 amp. battery with perforated rubber separator and wood insulation; a genuine WESTINGHOUSE RECTOX Disc Type charger, an automatic relay which controls the radio set and "B" supply and a "B" Receptacle. A most compact unit that will give absolute satisfaction. Has 5 amp. safety fuse. Toggle switch for intermittent or constant charging. Give this AMPLUS "A" Unit a trial and you will use it regularly.

No. 96901 List \$30.00.  
Each \$9.95. Less 2% or.....

**\$9.75**  
NET

# The GREENE LINE



**GREENE "B" 5-6-7**

Winning nation wide recognition as a sales leader. Hum free, dry and vibrationless, it is guaranteed to improve reception and supply ample current for any type of power tube on 3 to 7 D. C. tube. A single control provides for all power line variations. Compact and ruggedly constructed, it will last a life time. Dimensions 3 3/4" wide, 9 1/4" high, 9" long.

Complete with Rectifying Tube.

No. 98196 List, \$27.50. **\$16.50** Less 2%  
Each.....



**GREENE "A"**

Really the last word in "A" socket power units. Vibrationless, hum-proof, adjustable, requiring no water or acid, it furnishes unfailing A. C. light socket "A" power for all sets using up to 10 D. C. tubes. Maximum output 2 1/2 amp. at 6 volts which is ample for all tubes including power tubes. Beautifully finished in an enameled rose-leaf green case. Dimensions 3 3/4" wide, 9 1/4" high, 9" long. Complete.

No. 98195 List, \$37.50. **\$22.50** Less 2%  
Each.....



**GREENE "B" HI POWER**

This "B" power is constructed for heavy duty purposes, furnishing power for all high voltage sets up to 10 DC. tubes. Delivers full strength current, insuring constant controlled reception. No variable adjustment to confuse an unskilled operator. Similar in size and design to "B" 5-6-7 unit. Complete with Rectifying Tube

No. 98197 List, \$30.00. **\$18.00** Less 2%  
Each.....

**Greene "B" Super Power**

The "B" Super power unit is practically the same as the "B" HI-Power, except for the fact that there is a variable switch on the Super which can adapt itself to high and low voltages. Furnishes a smooth, silent current to all sets up to 12 tubes. Complete with Rectifying Tube

No. 98198 List, \$21.50. **\$20.10** Less 2%  
Each.....

**"Unfailing Power for Each Program Hour"**

## RECTOX Trickle Charger



Designed to meet the popular demand for a trickle charger. Will charge 6 volt storage batteries at two rates, namely .4 amp. and 1/2 amp. Adapted to use with control switches. Has standard maroon enamel case. Contains no bulbs, chemical or liquids or vibrating points. New copper oxide principle of rectification introduced by WESTINGHOUSE. Nothing to give trouble. Economical in operation. **NEW TYPE WITH DOUBLE CHARGING RATE.**  
No. 96862 List \$11.50

Each... **\$8.05**      3 Lots... **\$7.65**

## TUNGAR BULBS



We carry both the old and new type G-E Tungar Bulbs. In the new type both contacts are made in the base, distinct from the old type which has external connection.

No.	List	Each
94558	2 Amp. New Type..... \$4.00	\$3.00
94556	5 Amp. New Type..... 8.00	6.00
94555	For Trickle Charger..... 4.00	3.00
94559	2 Amp. Old Type..... 4.00	3.00

## HANDY Metallic Rectifier Tube



Can be used with all makes of chargers, to replace Tungar bulb. Contains solid metallic discs and is absolutely noiseless. Will deliver truly rectified current of 2 to 2 1/2 amp. for 6 or 4 volt type. Two types: Furnished with heavily nickeled case or open type without case. Has standard screw base.

WITH NICKELED CASE

No. 97237  
List \$4.00  
Each \$2.40 Less 2% or..... **\$2.35** Net

## MUZZLE CAP—Stops the Howl



This all-metal cap stops all howls on detector and audio tubes. Also stops vibration of filament. Two types.

No.	Type Tube	List	Each	5 Lots
94680	300A, 301A, 112, 371..	\$0.25	\$0.16	\$0.15
94681	299, 220.....	.25	.16	.15

**PHILCO**



**PHILCOTRON CELLS FOR REPLACEMENT**

No. K463  
For 6-Volt "A" Units. List \$4.00

**\$2.60**

Packed 4 to box  
Less 2%

No. K458  
For 4-Volt "A" Units. List \$3.00

**\$1.95**

Packed 4 to box.  
Less 2%

No. K457  
For "B" Units. List \$1.00

**65c**

Packed 4 to box.  
Less 2%

**ALA RADIO**

Hydrom-  
eter for  
"A" and  
"B"  
Batteries



Made from highest grade Corning Glass. Acid-resisting rubber insures long life. Every float guaranteed accurate.

No. 91684	Each	10 Lots	Per 100
	26c	24c	\$23.50

**Break-Not Hydrometer**



Break-Not Hydrometers, are nationally known and advertised. Lower part of hydrometer made of unbreakable rubber. Glass is eliminated to a great extent.  
No. 91686 List \$1  
Each 67c; 10 Lots 63c.



**"BOSS" HYDROMETER**

An accurate instrument with clear scale.  
Each 10 Lots  
No. 91687 List \$0.75... **43c 40c**

**BETTERBILT GLASS CASE**

Trickle Charge Batteries



Betterbilt Glass Case Trickle Charge Batteries are made by one of the best known battery manufacturers in the country. These batteries will keep dry and clean permanently. Float balls show the state of charge at all times. Highly recommended.

No. Voltage	Size	List	Each
96100	4 7"x2 1/4"x6 1/4"	\$ 7.50	\$4.50

For Sets using 6 tubes or less  
96101 6 10 1/2"x3 1/2"x5 1/2" .. 12.50 7.50

For Sets using 6 tubes or more  
96102 6 10 1/2"x3 1/2"x7 1/4" .. 13.90 8.34

**SPECIAL RUBBER CASE BATTERIES**  
We can also furnish 40 amp. capacity batteries in rubber case for Trickle Charge use. Sturdily built. Size 5 1/2 in. long, 3 1/4 in. wide, 7 1/4 in. high.

No. Volt		<b>\$2.70</b>	Each
96122	4.....		
96123	6.....		

**MASTER VOLTAGE CONTROL**



New principle for reducing excess line voltage. All that is necessary to do is to ascertain your maximum line voltage from the power company and plug the A C set into

the corresponding outlet of the Master Voltage Control. No voltmeter, or tools required to install. Has no moving parts therefore nothing to get out of order. The most dependable low priced voltage regulator on the market.

No. 98139  
List \$2.50  
Each \$1.50. Less 2% or **\$1.47** Net

**KATO "A" ELIMINATOR FOR 32 VOLT DIRECT CURRENT**



Dealers: Here is something that will bring you new sales. An "A" eliminator for 32 volt lighting plants. Does away with storage battery or tapping on 3 cells. Connects directly to a lamp socket or a 32 volt farm lighting plant. Has patented safety protective coil, which prevents too high "A" voltage on radio set. Contained in steel cabinet 9 1/2x5x7 1/2. 8 ft. of cord. Fully guaranteed for one year

No.	Radio Tubes	List	Each
97350 Kato 32 Volt "A".....	3 Volt	\$20.00	<b>\$12.00</b>
97351 Kato 32 Volt "A".....	5 Volt	20.00	<b>12.00</b>

**KATO 32 VOLT CHARGER**

Used for charging radio and auto storage batteries in connection with 32 volt farm lighting plants. Charges at rate of 3 to 5 amp. rate. Complete with ammeter.

No. 97352 32 Volt Charger. List \$10.00 Each..... **\$6.00**

**Wirt AC Voltage Regulator**



Protects your A C tubes from line surges and makes them last longer. Very small, easy to use, and inexpensive. It is installed between the house current convenience outlet, and the plug from the receiving set. Dealers can afford to give one away with the sale of a set to prevent service calls. Place your order today.

No. 96463  
List \$2.25  
Each..... **\$1.35**

**BALKITE ACID**

We can furnish electrolyte for Balkite Power Units in pint and quart bottles. An item every dealer should carry on his shelf.

		List	Each
91747	6 Oz.	\$0.75	\$0.45
91748	1 Qt.	1.00	.60

**Marathon Rectifier Type C-10**



Fitted with a standard screw base and is suitable for use in place of all 2-amp. bulb type charging devices, using a transformer with a secondary voltage of from 15-18 volts under load. Has clip connection on top, which is used in the same manner as tube external connection. Furnishes single wave rectification at 2 amp. charge.

No. 97073  
Each \$2.40 ... Less 2% or **\$2.35** NET



**THE NEW IMPROVED SUB-ANTENNA**



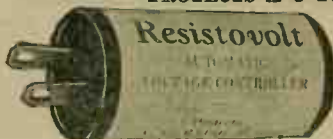
This amazing device has proved its overwhelming superiority in contrast with noisy outside antennas wherever introduced. Positively nothing else like it, despite claims made by imitators. Works on any type of set—in any soil—never fails—fully guaranteed.

**POSITIVELY Brings "Distance" in Loud and Clear When Outside Antenna and Loop Fail.**

Test it—prove it yourself. Switch from old style aerial to SUB-ANTENNA on a "staticky" summer night. DX will come in loud and clear above the static. Makes most sets work as good in summer as in winter. Improves tone, increases volume. Stock SUB-ANTENNA—display it—sales come quick—and profits are generous.

No.	Model	List
96795	K3 specially designed for Atwater Kent sets	\$7.50
96796	K4 specially designed for Majestic sets	Each \$4.50
96797	K5 specially designed for R. C. A. sets	Less 2% or
96798	K6 specially designed for Zenith sets	<b>\$4.41</b>
96799	K7 specially designed for Crosley sets	
97084	Standard model for all sets not listed above	<b>NET</b>

**RESISTORVOLT AUTOMATIC VOLTAGE REGULATOR PROTECTS A C TUBES**



A small device which checks excess voltage before it can damage A C tubes. Has a special constructed coil of an imported material which does not decrease when voltage is below 110 Volts. Also holds back line noises caused by turning light switches off or on. Equip your set with a Resistovolt and end your tube trouble.

No.	Type	List	Each
96733	1 to 7 Tube Set	\$1.50	\$0.90
96734	1 to 10 Tube Set	1.50	.90

Less 2% or... **88c** Net

**DE LUXE RESISTOR-VOLT**



The De Luxe model is identical in purpose with the original Resistovolt except that it is made of nickel plate brass, and encased in a perforated tube which gives it the air cooling features. For all model sets.

No. 98598	List \$1.75	Each
	\$1.05	Less 2% or...

**\$1.03** Net

**X-L LINK**

The only unit that completely links the radio receiver to the light socket. The X-L Link supplies the following features to any radio receiver: Antenna and ground from two terminals on unit which increases selectivity and reduces interference. Double socket outlet for Dynamic speakers and power units. A positive line voltage regulator which gives absolute protection against excessive voltage and thus prolongs the life of all tubes attached to the receiver in less than a minute.



No. 98599	List \$5.75
	Each \$3.45
	Less 2% or...

**\$3.38** Net

**RELIABLE AUTOMATIC RELAYS**



The Utility Type is unsurpassed for efficiency on sets using 4-7 tubes and its neat appearance and small size has made it a favorite everywhere. Two models.

No.	Model	Volt	List	Each
94640	13	6	\$2.00	\$1.20
96088	14	3	2.00	1.20

**RELIABLE CONVENIENCE TYPE**

The new 1927-28 Convenience Type Model with extra fine electrical and mechanical characteristics. Voltage drop of this relay is .1 volt per ampere used. Low resistance assure proper relay operation at all times.

No.	Model	Volt	List	Each
96089	23 SA	6	\$3.50	\$2.10
96090	24 SA	3	3.50	2.10

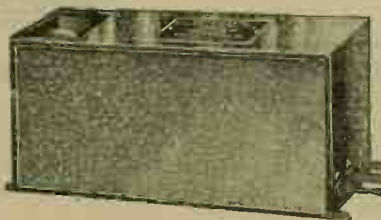
**YAXLEY FULL AUTOMATIC CONTROL No. 440**

The new full-automatic Yaxley control for charger and "B" eliminator. Has arrangement to cut charger when battery is fully charged. No danger of overcharging battery.

No. 97257	List \$7.50
	Each \$4.50

Less 2% or ... **\$4.41** Net

**MUTER A C POWER UNIT**



The ideal type of unit for construction of an A C set in view of the compact size, handsome appearance and uniform long life output. Supplies A, B, and C Power for any set up to 7 tubes with a power tube in connection with A C Tubes. Size, 12"x3 1/4"x5 1/2". Black crystalline finish.

No. 96732	Less Tube	List \$30.00	Each \$18.00
No. 94975	CX 380 Tube for above		3.15

**BLITZ COMMERCIAL CHARGER**

With the Blitz you can charge 6 to 15 six-volt batteries at one time. Also charges at the same time up to 12 "B" Batteries of either 24 or 48 volt strength. A very good charger for quick, dependable work. Can be used for bringing up sulphated batteries. Three types complete with rectifying bulb.

94630	110 Volt, 60 Cycle, A.C.	<b>\$59.50</b>
94631	110 Volt, 25 Cycle, A.C.	
94632	110 Volt, D.C. \$42.50	

Less 2%

**BLITZ 5 BATTERY CHARGER**

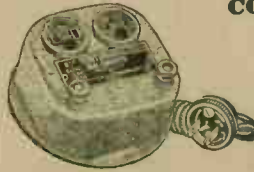
Designed for small battery stations and radio dealers. For 110 Volt A.C., 60 Cycle. Very economical and a necessity for every store.

No. 92678	Each	\$39.50	Less 2%
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Complete with one bulb.

**CONTINENTAL RELAY**

The Continental Uni-Switch can be used with both "B" eliminator and Trickle Charger or Trickle Charger alone. Automatic in operation. A very fine, compact relay unit, 4 1/2" in diameter.



No. 94742	List \$3.00	<b>\$1.80</b>
	Less 40%	

Less 2%

# JEWELL METERS

## JEWELL AC-DC SET ANALYZER



A radio set analyzer which is the most useful and reliable service instrument ever produced. Every test which will give information of the workings of a radio set and its accessories have been provided for. It tests A and C and D C tubes, A and B Eliminators, batteries, circuits, plate milliamperes, chargers, line voltage, etc. Complete with instructions.

No. 97173  
Pattern No. 199  
List \$97.50  
Each **\$73<sup>12</sup>** Less 2%

## JEWELL RADIO TEST BENCH



Designed for servicing radio sets on the dealers premises. Working surface 18 3/8" high, size of surface 24" x 42". Testing panel is steel black enameled with all markings engraved directly in steel and filled with white. Panel carries seven meters as follows: 0-7.5 volts DC; 0-75 Volts DC; 0-150-300-750 volts DC; 0-15-150 DC Milliamperes; 0-4-8-16 Volts AC; 0-150-750 Volts AC; and 0-1.5-15 Microfarads. All meters can be used individually. Complete with plug and cord like the No. 199, and instructions.

No. 98300 Complete as shown.....List \$278.50 Each \$208.87  
98301 Panel Less Bench.....List \$112.00 Each \$85.00

## JEWELL TUBE CHECKERS

### No. 150 A. C. CHECKER



Tests all makes of tubes without resorting to batteries of any kind, by merely plugging into a 110 volt, 60 cycle outlet. Comes complete with 5 prong socket, 4 prong adapter, compound filament rheostat, 0-4-8 volt A C meter, and 0-15 millimeter. Just the thing for counter checking.

No. 98302 Model 150.....List \$38.00 Each \$28.50

### No. 110. A Tube Checker

Does all that the No. 150 A C checker will do except it uses batteries in place of the 110 volt line current.  
No. 98303 Model 110A.....List \$45.00 Each \$33.75

## BEEDE SOCKET TEST METERS



Designed for making various set tests by removing tube from socket and inserting meter base in its place.

No.	Type	List	Each
97367	0-7 1/2 A. C. Voltmeter	2.50	\$1.50
97368	0-300 D. C. Voltmeter	3.00	1.80
98462	0-600 D. C. Voltmeter	4.50	2.70
98463	0-50 D. C. Voltmeter	3.00	1.80
98474	Adapter for 97367 Meter	.90	.54

## NO. 40 BEEDE PORTABLE TESTER

Scale reads 0-300 Volts, 2-in. Dial, 16-in. rubber covered leads with phone tips. Just the meter for testing B eliminators and B Batteries.

No. 97369 List 3.00.  
Each \$1.50 less 2% or.....

**\$1<sup>77</sup>** Net



## WESTON MODEL 537 AC AND DC SET TESTER

This Weston Model 537 AC-DC radio set Tester is a complete outfit, most ingeniously designed and fully adaptable to the testing requirements of every set made whether operated by direct current from batteries or battery substitutes, or by alternating current from socket power. Complete with sockets, adapters and instruction book.

No. 97254...List \$100.00

**\$75<sup>00</sup>** Each



"28 YEARS MAKING GOOD INSTRUMENTS"  
Jewell Instruments are known for their precision manufacture and accurate performance. We carry the complete line and can give you immediate delivery. Dealers Service your sets with Jewell Instruments.

## TABLE VOLTMETERS

Useful for laboratory work and general testing.

### NO. 116 B-ELIMINATOR TESTER

A high resistance voltmeter that shows the true voltage which cannot be obtained from an ordinary voltmeter.

No.	Volts	List	Each
94672	0-50-250	\$25.00	\$18.75
98304	0-250-500	32.00	24.00



### NO. 139 B-ELIMINATOR TESTER

For use by the individual in checking and adjusting B Eliminator voltage.

No.	Volts	List	Each
No. 96413	0-300 Volts	..List \$12.00	Each \$7.80
No. 97188	0-500 Volts	..List 16.50	Each 10.73

### NO. 77 A. C. VOLTMETER

Moderate in price but very effective for making the various alternating current tests. The range is ample to check all voltage likely to be encountered.

No. 98305 0-3-15-150 A C Volts.....List \$15.00 Each \$11.25

## PANEL METERS

### PATTERN NO. 135—D. C. METERS

The well known 2" panel mounting D C instruments.

No.	Rating	List	Each
94836	0-5 Volts	\$7.00	\$4.55
94837	0-8 Volts	7.00	4.55
96411	0-150 Volts	7.50	4.87
96412	0-7.5-150	9.00	5.85



### PATTERN NO. 54—D. C. METERS

These instruments are 3 1/2" in diameter. Made in a variety of ranges. Very popular with amateur and short wave work.

No.	Rating	List	Each
98306	0-8 Volts	}.....\$7.50	\$5.63
98307	0-10 Volts		
98308	0-150 Volts	}.....9.50	7.13
98309	0-50 Milliamperes		
98310	0-100 Milliamperes	}.....7.50	5.63
98311	0-500 Milliamperes		
98312	0-1000 Milliamperes		
98313	50-0-50 Galvanometer	9.00	6.75

### PATTERN NO. 190 A. C. METERS

A 2" flush type A C meter for checking alternating current filament control and line voltage.

No.	Rating	List	Each
98314	0-3 A C Volts	}.....\$7.50	\$5.63
98315	0-5 A C Volts		
98316	0-8 A C Volts	}.....9.00	6.75
98317	0-150 A C Volts		



### PATTERN NO. 74—A. C. METERS

A 3" flush type A C meter. Ideal for test panel work.

No.	Rating	List	Each
98329	0-15 A. C. Volts	\$7.50	\$ 5.63
98318	0-150 A. C. Volts	9.50	7.13
98319	0-500 A. V. Volts	12.00	9.00
98320	0-3-15-150 A. C. Volts	13.50	10.13

## WESTON COUNTER TUBE CHECKER



A new distinctive counter tube checker for checking tubes at the time of sale. Operates directly from the regular A. C. 60 cycle lighting current. It will check all type A. C. or D. C. including rectifier tubes. Very simple to operate. An item every dealer should own.

No. 98591 Model 533  
List \$67.50  
Each.....

**\$40<sup>50</sup>** Net

## WESTON COUNTER 528 AC PORTABLE INSTRUMENTS



Model 528 Voltmeters have been developed especially for testing A. C. operated radio sets. Scales are silver gray with black markings. Pair of 30" cables supplied with each voltmeter.

No.	Range	List	Each
98592	150-15 Volts	..\$13.50	\$10.13
98593	150-8-4 Volts	..16.50	12.38



**READRITE STORAGE BATTERY CHARGE TESTER**

A new meter that tells instantly when your "A" Battery needs charging and when charging should be discontinued. Furnished in pocket type with flexible cord. Cleanest and most convenient way of testing "A" Batteries. Nickel finish.

No. 94600 . . . List \$1.00 Each **55c**



**READRITE POCKET METERS**

Exceedingly efficient pocket instruments with silvered metal dials and nickel-plated cases. Voltmeters are of a very high resistance and give accurate readings without draining "B" Batteries. Absolutely guaranteed.

No.	Range	List	Each
94601	Voltmeter . . . . . 0-50	\$1.00	\$0.55
94602	Ammeter . . . . . 0-40	1.00	.42
94603	Combination Volt and Ammeter Both . . . . .	1.50	.75



**READRITE PANEL TYPE METERS**

Voltmeters have high compensated resistance—from 17 to 100 ohms per volt, yet are priced low. Very accurately built and can be kept in circuit continuously. Narrow flange—Rear clamp-on style.

No.	Range	List	Each
96240	Voltmeter 310 . . . . . 0-10 Volt	\$0.55	.68
96241	Voltmeter 339 . . . . . 0-100 Volt	.95	.68
96242	Voltmeter 340 . . . . . 0-8—0-100 Volt	.95	.68
96243	Voltmeter 342 . . . . . 0-150 Volt	.81	.68
96244	Milliammeter 311 . . . . . 0-10 M. A.	.95	.68
96245	Milliammeter 350 . . . . . 0-50 M. A.	.55	.68
96246	Milliammeter 300 . . . . . 0-300 M. A.	.55	.68
96865	Milliammeter 369 . . . . . 0-300 M. A.	.55	.68
96866	Milliammeter 394 . . . . . 0-400 M. A.	.55	.68
96867	AC Panel Voltmeter 351 . . . . . 0-15 Volts AC	1.80	.68
96868	AC Panel Voltmeter 352 . . . . . 0-10 Volts AC	1.80	.68
96869	AC Panel Voltmeter 353 . . . . . 0-6 Volts AC	1.80	.68



**READRITE No. 9 TUBE AND SET ANALYZER**

Tests any type of tube either A C or D C and will do anything any other set analyzer will do. Contains nine interchangeable meters. A 36" cord containing four and five prong adapters enables you to plug into any type of set. Contains a power rheostat and the following meters:

- 0-10 Milliammeter, 0-6 A C Volts, 0-8 D C Volts
- 0-100 Milliammeter, 0-15 A C Volts, 0-50 D C Volts
- 0-300 Milliammeter, 0-150 A C Line Voltmeter, 0-500 B

Elim. Tester  
No. 97318  
List, \$35.00; Each, \$21.00  
Less 2% or . . . . .



**\$20<sup>58</sup>**

**READRITE PORTABLE Voltmeter, for "B" Eliminator Testing**

This high resistance voltmeter is used to check voltage of "B" Eliminator and "B" battery circuits. Specially built for this work. Accurately shows voltages for detector, ampl. and power tubes. Supplied with 2 cords 30" long, one black and one red to show polarity. Tips are heavily insulated.



No.	Volts	List	Each
94696	0-300 . . . . .	\$5.00	\$3.00
96870	0-500 . . . . .	6.00	3.60
96871	0-150 AC . . . . .	5.00	3.00

**BEEDE TEST KIT**

Complete with three socket test meters, line tester, and adapter for converting from four to five prongs. Dealers and repair men will find this kit extremely useful and adaptable to every necessary test on a radio set. Contains the following meters:

- 1 No. 60 0-7½ volts
- 1 No. 50 0-300 volts
- 1 No. 55 0-50 volts
- 1 No. 75 0-150 line tester

No. 96832 List \$15.00. Each \$9.00 less 2% or **\$8<sup>82</sup>** Net



**READRITE NO. 210**

**TUBE CHECKER**

Low cost of this efficient tube checker enables every dealer and set owner to make tests rapidly, match tubes and weed out weak tubes. Voltmeter and 10 milliamper scale. Switch for neg. or pos. filament.



No. 94697	Set . . . . .	List \$7.50	Each \$4.50
No. 94698	30" Cord and Plug . . . . .	List 1.00	Each .60
No. 94699	Adapter for 299 . . . . .	List .60	Each .36

**READRITE No. 12 TUBE TESTER**

For testing A C or D C tubes. Contains 0-8 high resistance voltmeter and double range 0-20-100 milliammeter with switch, complete with four and five prong adapters. Just the thing for the dealer shelf and is connected to batteries.

No.	List	Each
97391	Tube Tester . . . . .	\$10.00 \$6.00
97392	Cord for Adapting to D C Set . . . . .	1.50 .90

**READRITE No. 215 TUBE TESTER**

For testing A C or D C tubes. Contains 0-8 high resistance voltmeter with rheostat controlling the A supply, double range 0-20-100 milliammeter adapters. Tester can be plugged directly into the A C or D C set. Ideal for the service man.

No. 97390 Tube Tester . . . . . List \$12.50 Each \$7.50

**READRITE SOCKET TESTERS**

Readrite socket testers give actual working voltage by inserting the meter in the tube socket in place of radio tube.



No.	No.	List	Each
97466	146 0-300 Voltmeter	\$3.00	\$1.50
97467	150 0-50 Voltmeter	3.00	1.80
97468	152 0-10 Acvoltmeter	2.50	1.50
97469	148 0-150 AC for plugging into AC line socket	3.00	1.80

**READRITE A C VOLTAGE REGULATOR**

Needed on every set using A C tubes to protect them against short life when subjected to excessive line voltage. Equipped with A C voltmeter and giant rheostat. Very simple to use and is an investment you can't afford to be without. Complete with cord and plug.



No. 97465 List \$6.50 Each \$3.90

**HOYT A. C. POCKET VOLTMETER**

A compact, sensitive Voltmeter for measuring voltage on A. C. sets. The three scales cover all filament voltages applied to the popular A. C. tubes, and provides a means of checking line voltage as well. A resistance of more than 20 ohms per volt insures reliability supplied with special leads and packed in a durable leather carrying case.

No. 97366 List \$16.00 Each \$12.00



**HOYT NO. 550 LINE VOLTAGE TESTER**

Hoyt No. 550 Pocket A. C. Voltmeter is a special instrument for testing the line voltage in the electric-lighting system. Just about the size of a watch case. Comes complete with leads. Range 0-150 volts.



No. 98447  
List \$3.75.  
Each . . . . .

**\$2<sup>25</sup>**

**HOYT ROTARY METER**

The Hoyt Rotary Meter is a precision 2½" moving coil volt-ammeter of unique and exclusive design. Combines all ranges necessary for testing radio set, tubes, batteries, and battery chargers. Scale of each meter calibrated by hand. The meter itself turns to five different positions thus giving the different ranges. Dimensions are 4½ x 3¼ x 2¾".



No. 98448  
List \$24.00  
Each \$18.00  
Less 2% or

**\$17<sup>64</sup>** NET

**BELDENAMEL AERIAL WIRE**



Beldenamel Wire is the accepted standard. Each individual strand is enameled separately and is impervious to weather, fumes or smoke. The enamel forms

a permanent coating which prevents corroding. Packed in individual cartons.

No.	Size	Length	List	Each
97481	Stranded 7x22	75 Ft.	\$0.85	\$0.51
94500	Stranded 7x22	100 Ft.	1.15	.69
94501	Stranded 7x22	1000 Ft.	11.00	6.60
94502	Braded 16x23	100 Ft.	1.10	.66
94503	Solid 12	100 Ft.	1.35	.81
94504	Solid 14	100 Ft.	.90	.54

**BELDEN BARE COPPER WIRE**

97482	Stranded 7x22	75 Ft.	\$0.55	\$0.33
94505	Stranded 7x22	100 Ft.	.70	.42
97104	Stranded 7x22	1000 Ft.	7.00	4.20

**INDOOR AERIAL AND LOOP WIRE**

A flexible covered wire designed for indoor aeriels and winding radio loops. Does not stretch or sag. Overall covering is cotton or silk. Metal spools in individual cartons.

No.	Cotton	Length	List	Each
97483	Cotton	125 Ft.	\$1.00	\$0.60
94513	Silk	125 Ft.	1.75	1.05
97484	Silk	1000 Ft.	18.00	7.80

**BELDEN LEAD-IN AND GROUND WIRE**

Good rubber insulation which is readily removed and the tinned copper is easily soldered. 250 ft. coils are wound on spools.

No.	Size	Length	List	Each
94512	Solid 18	50 Ft.	\$0.70	\$0.32
97485	Solid 16	250 Ft.	3.25	1.95
94516	Stranded 7x22	50 Ft.	1.00	.60
97486	Stranded 7x22	250 Ft.	4.75	2.85



**BELDEN BATTERY CABLE**

A 5, 7, or 9 Conductor Cable which serves the same purpose as the Belden Battery Cord except that it is supplied in 100 ft. Coils.

No.	Conductor	Length	List	Each
94526	5-Conductor	100 Ft.	\$8.00	\$4.80
94527	7-Conductor	100 Ft.	11.00	6.60
97487	9-Conductor	100 Ft.	15.00	9.00

**BELDEN FLAT FLOOR CORD**



Is rubber insulated extension cord which lies flat under the rug. Makes ideal connection for floor lamps, radio power units, electric phonographs, heaters, etc. 4 ft. cord to outfit.

No.	Length	List	Each
97040	15 Ft.	\$3.00	\$2.00
97077	12 Ft.	2.75	1.81
97078	9 Ft.	2.50	1.68

**BELDEN**

**Colorubber AC Wire Kits**



This handy kit contains Colorubber Insulated Hookup Wire as follows: BLACK - 12 ft. No. 14 twisted pair; YELLOW, 6 ft. No. 18 twisted pair; RED, 6 ft. No. 18 twisted pair, for filament circuits, and GREEN, 25 ft. No. 18 hookup wire for all other circuits.

No. 96790  
List \$1.75 Each \$1.05

**Belden Indoor Aerial Kit**



This handy kit contains a 70 ft. spool of Belden Indoor Aerial Wire, a 25 ft. coil of Belden Colorubber Ground Wire, and a ground clamp. Can be set up in 5 minutes.

No. 96791  
List \$1.35 Each \$1.81

**Belden Aerial Leadin Strip**



The flat copper tinned conductor of this rubber-insulated aerial lead-in strip is moisture and weatherproof. Fahnestock clips on both ends.

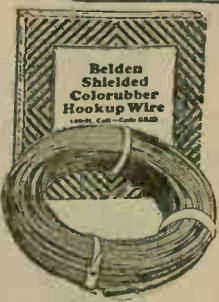
No. 96792  
List \$0.25 Each \$0.15

**BELDEN BATTERY CORD**



Colorubber insulated conductors with soldered ends to form terminals suitable for any binding post. Overall braid made of brown cotton. Length 54 inches.

No.	Conductor	List	Each
94524	5-Conductor	\$0.45	\$0.37
96106	7-Conductor	.60	.36
97188	9-Conductor	.90	.54



**Shielded Colorubber Flexible; Tinned Hookup Wire**

A special shielded hookup wire for use on shielded grid tubes. Made up of Belden colorubber Hookup wire with tinned copper braid. 100 ft. in a carton.

No. 97495.....List \$3.50 Each \$2.10

**BELDEN SPEAKER EXTENSION CORD**



The new extension cords now come in 10, 20 and 40 ft. lengths. Complete with a handy bakelite connector. Colorubber insulation prevents leakage.

No.	Length	List	Each
97489	10 ft.	\$0.80	\$0.48
97490	20 ft.	1.00	.60
97491	40 ft.	1.85	1.11
96794	Connector only	.35	.21

**Belden Replacement Cord**

5 ft. speaker and headset cords. Conductors are 14x34 tinned stranded copper. Attractive individual cartons.

No.	Pin Tips	List	Each
94529	Pin Tips	\$0.60	\$0.36
96110	Spade and Pin	.60	.36

**SPEAKER CORDS**

97492	Pin Tips	\$0.35	\$0.21
97493	Spade and Pin	.35	.21

**BELDEN AERIAL KITS**



Belden now supplies 3 distinct Aerial Kits every one of which is unique in its class. Dealers stock these kits. There is a big demand for every kind offered by Belden. Each kit contains the very best of parts.

No.	Kit	List	Each
96111	Beldenamel Kit	\$1.90	\$2.34
96112	Beldenamel Jr. Kit	2.65	1.59
96113	Bare Copper Kit	2.40	1.44

**Belden Flat Speaker Cord**



A flat 12 foot rubber insulated loud speaker extension cord equipped with a bakelite connector at one end and a 5 ft. flexible brown cord at the other. Lies flat under the rug and out of sight. Easily installed without use of tools.

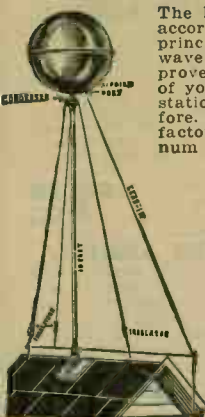
No. 97104.....List \$2.75 Each \$1.65

**CATALOGUE SHEETS OF THE COMPLETE BELDEN LINE SENT UPON REQUEST**

"Service doesn't falter, when it comes from Harry Alter"



**SUPER BALL Antenna**

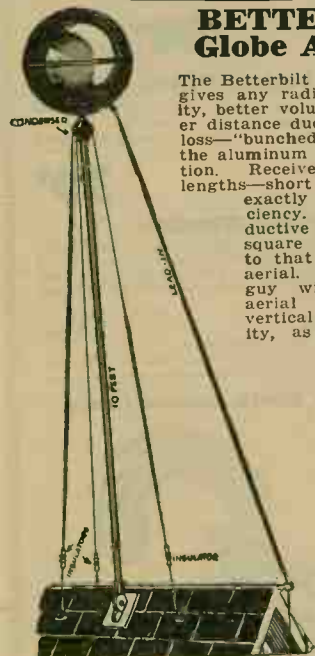


The latest type of Aerial built according to the most advanced principles for receiving all wave length. Will greatly improve selectivity and distance of your set. Will help you get stations you never heard before. Gives permanent satisfactory reception as the aluminum alloy will not rust or corrode. No wires to break or tangle on the top of apartment buildings. Equal to 85 ft. of ordinary aerial wire. The two plate ball condenser inside tends to neutralize the impedance to high frequency circuits.

**New Low Prices**  
No. 92564 Super Ball Alone. List \$7.50. Each \$4.50 Less 2% or

**\$4.41**  
Net

**BETTERBILT Globe Antenna**



The Betterbilt Globe Antenna gives any radio set selectivity, better volume, and greater distance due to low power loss—"bunched capacity," and the aluminum alloy construction. Receives all wave lengths—short or long—with exactly the same efficiency. Has a conductive surface of 346 square inches—equal to that of 75 ft. wire aerial. Three 12 ft. guy wires give this aerial an additional vertical pickup capacity, as illustrated in the diagram. The condenser built inside acts as a neutralizer for the entire antenna system and clarifies the tone. Fully guaranteed and sold at a remarkable low price.

No. 97414 Each \$2.80 Less 2% or

**\$2.74**  
Net

BASE and PIPE for Super Ball and Betterbilt Globe Antenna.

No.	Base and guy wire collar	List	Each
92565	Base and guy wire collar	\$0.50	\$0.30
92558	1/2" Pipe, 10 Foot	1.00	.60

**BIRNBACH A-C FLEXIBLE HOOK-UP WIRE**

Made up of fine strands of copper twisted together and covered with colored rubber insulation. Will stand high voltage.

No. 97416	25 ft. Coil Red Wire.	List \$0.80	48c
No. 97415	25 ft. Coil Black Wire.	List \$0.80.	48c

**Birnbach Cord Tips and Cable Lugs**



Nickle plated tips and lugs for replacing old terminals and cable ends.



No. 97417	4 Pin Tips in Envelope.	Per Envelope	\$0.03
No. 97418	10 Lugs in Envelope.	Per Envelope	\$0.06

**NEW BIRNBACH MOISTURE PROOF CORDS**



Insulated with rubber to protect the copper strands from moisture. Covered with beautiful brown mercerized braid. High grade. Packed in individual cartons.

**LOUD SPEAKER EXTENSION CORD**

No.	With Connector	Length	List	Each
96151	With Connector	10 Ft.	\$0.75	\$0.45
96152	With Connector	20 Ft.	1.00	.60
96153	With Connector	30 Ft.	1.40	.84
96154	With Connector	50 Ft.	2.20	1.32
96155	With Connector	100 Ft.	4.20	2.52
96156	Connector only	20 Ft.	.30	.18
97306	Without Connector	100 Ft.	.65	.39

**BIRNBACH SILK CORD IN BEAUTIFUL COLORS**

Now you can select a BIRNBACH CORD to harmonize with the color scheme of your home. Made in OLD GOLD, MAROON and WHITE. A color to satisfy every possible taste.

No.	Type	Length	Color Silk	List	Each
97307	620	20 Ft.	White	\$1.50	\$0.90
97308	621	20 Ft.	Old Gold		
97309	622	20 Ft.	Maroon		
97310	630	30 Ft.	White	1.90	1.14
97311	631	30 Ft.	Old Gold		
97312	632	30 Ft.	Maroon		
97313	650	50 Ft.	White	2.75	1.65
97314	651	50 Ft.	Old Gold		
97315	652	50 Ft.	Maroon		

**NEW BIRNBACH DYNAMIC CORD**

Now you can demonstrate the new Majestic, Crosly, or any other 100 Volt D C Dynamic speaker having four pin tips at the end of the cord with Birnbach's New Dynamic Extension cord. Comes complete with cord and two connectors.

No.	Type	Length	List	Each
97436	710	20 ft.	\$2.00	\$1.20
97437	711	30 ft.	2.80	1.68
97438	712	50 ft.	4.40	2.64

**REPLACEMENT CORDS**

No.	Type	List	Each
97432	6 ft. Brown Silk for Radiola Speakers	\$0.60	\$0.36
97433	6 ft. Brown for Atwater Kent Speaker	.45	.27
97434	Brown Cord for Crosley Speaker	.45	.27
97435	9 ft. Brown Cord for Atwater Kent speaker	.60	.36

**LOUD Speaker Cord, 5 Ft. Long**

No.	Type	List	Each
96157	Pin Tips, both ends	35c	21c
96158	Spade and Pin Tips	35c	21c
97316	Pin and Eye Tips	35c	21c

**Headset Cords, 5 Ft. Long**

96159	Pin Tips, both ends	50c	30c
96160	Spade and Pin Tips	50c	30c
97317	Pin and Eye Tips	50c	30c

**BIRNBACH ACID-PROOF BATTERY CABLE**



Colored Rubber. Made of flexible stranded conductors. Soldered lug terminals. Each conductor separate solid color. Packed individual cartons. 54 inch and 10 feet long. For use in connecting A, B and C batteries or eliminator to set.

No.	Length	Each	No.	Length	Each	
5 Conductor	96161	54 In.	30c	96167	10 Ft.	\$0.75
6 Conductor	96162	54 In.	36c	96168	10 Ft.	.93
7 Conductor	96163	54 In.	42c	96169	10 Ft.	1.11
8 Conductor	96164	54 In.	51c	96170	10 Ft.	1.29
9 Conductor	96165	54 In.	60c	96171	10 Ft.	1.47
10 Conductor	96166	54 In.	69c	96172	10 Ft.	1.65

**BIRNBACH RIGA BATTERY CABLE**



Made of flexible stranded wires, and insulated with Colored Rubber. A Battery leads are made of heavier gauge conductors and assembled with storage Battery Clips. Other wires furnished with lugs. A Heavy Duty cable.

No.	Length	Each	No.	Length	Each	
5 Conductor	97439	54 in.	\$0.54	97445	10 ft.	\$0.96
6 Conductor	97440	54 in.	.63	97446	10 ft.	1.08
7 Conductor	97441	54 in.	.72	97447	10 ft.	1.35
8 Conductor	97442	54 in.	.84	97448	10 ft.	1.53
9 Conductor	97443	54 in.	.93	97449	10 ft.	1.71
10 Conductor	97444	54 in.	1.02	97449	10 ft.	1.89

**RADIO BATTERY CONNECTOR**

Made of flexible stranded wire with soldered lug terminals for connecting Dry Cell Batteries. Carton of 25.

No.	Length	Each	Per 25
96173	3 In.	3c	60c
96174	6 In.	4c	75c
96175	12 In.	5c	93c

"Service doesn't falter, when it comes from Harry Alter"

# Raytheon

LONG LIFE RECTIFYING TUBE



As distributors of RAYTHEON Products we can give you first-class service and prompt delivery. Our adequate stocks permit immediate shipment. NOTICE NEW REDUCED PRICE. Highest grade quality of proven merit.

No.	Type	Output	List	Each
92441	BH	125 Mils.	\$4.50	<b>\$2.70</b>
95008	BA	350 Mils.	7.50	<b>4.50</b>
95009	2 1/2 Amp. Cartridge		4.50	<b>2.70</b>

## CARTER "TU-WAY" PLUG



Takes two phone sets at one time. Fits all jacks. Well made.  
No. 92457—List 60c. Each.....**36c**



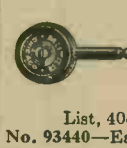
**CARTER No. 2 FLAT PLUG**  
Smallest and neatest plug made. Cord tips held by screws. Molded Bakelite.  
No. 96114  
List 50c Each 30c



**FLAT PLUG**  
Cords hang from bottom of handle instead of projecting. Uses no triggers, push buttons; cord tips completely concealed.  
No. 92470 List, \$0.75. Each.....\$0.45



**HACO PLUG**  
An exceedingly well built automatic plug that holds tips firmly.  
No. 93099  
Each.....**13c**  
10 Lots.....**12c**



**MUTER PLUG (Shock Proof)**  
A black moulded plug, 2 3/4 inches long, with highly nicked brass parts.  
List, 40c  
No. 93440—Each.....**24c**

## TOBE 4 PURPOSE LIGHT SOCKET AERIAL



Saves cost and bother of aerial, ground or lightning arrester, and does not interfere with the ordinary use of the outlet. Prevents excessive pickup of static and greatly increases the selectivity of your set. Plugs into the base-board or wall flush receptacle. Fully guaranteed for two years.  
No. 97499 List, \$2.00. Each, \$1.20 Less 2% or.....**\$1.18 Net**

## DUBILIER LIGHT SOCKET AERIAL



Does away with aerials and improves the reception of any set. Moulded bakelite, well constructed. Plugs into any lighting current. Sells consistently well and carries the usual Dubilier Guarantee.  
No. 91640  
List, \$1.50. Each, \$0.90 Less 2% or

**88c Net**

## MUTER AERIAL PLUG



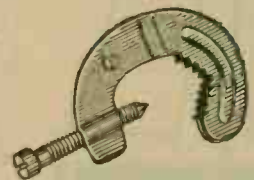
Replaces outside aerial, giving you noiseless and improved reception by screwing it into light socket. Made of highly polished black moulded bakelite.  
No. 93424 List, 75c. Each.....**30c**

## BINDING POST STRIPS

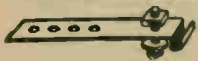


We have a large stock of drilled and engraved binding post strips that we can supply with binding posts and soldering lugs or without binding posts.  
No. 94598 Marked Strips Only..... Each 10 Lots 7c 6 1/2c  
No. 94599 With Binding Posts and Soldering Lugs..... 19c 15c

## New Morris Ground Clamp



Inexpensive; grips tight, cutting into pipe, giving sure ground. Made of steel, fully guaranteed.  
No. 97243  
25 Lots \$0.08. Each.....**9c**



**NEW CODE GROUND CLAMP**  
Made of heavy copper, fully approved. Two sizes.  
No. 90246  
3/8 in. to 1 in.  
Each, **4c** Per 100, **\$3.20**  
No. 90247  
3/4 in. to 2 in.  
Each, **6c** Per 100, **\$4.95**



**EKKO GROUND CLAMP**  
Makes perfect ground connection on any pipe up to 1 1/2".  
No. 92599  
List, \$0.25  
Each

**15c**



**Spring Aerial**  
Spring aerials are in big demand. This one is made of a fine quality of brass and stretches to nearly 100 feet in length.  
No. 91599  
Each.....**39c**  
10 Lots.....**36c**

## HEADSET AND EXTENSION CORDS



High grade black mercerized cotton tinsel cords with soldered terminals and tips.

No.	Type	Length	Each
92536	Head Set	5 ft.	12c
92537	Loud Speaker	5 ft.	15c
92538	Extension	20 ft.	23c
92543	Extension	50 ft	62c
96951	Connector Only		9c



**HACO GLASS INSULATORS**



Haco insulators insure minimum energy losses. Sturdy, well-built 3 1/2 inches long. Packed two in a carton. All guaranteed first.

No. 98552 Per Pair, List 25c, Each **11c** 10 Lots **10c** Each

**GLASS INSULATORS**

Glass insulators insure perfect insulation and minimum energy losses. Its smooth surface prevents accumulation of dust. A very popular seller. Eyelet on each end for fastening wire.



**3 1/2" GLASS INSULATOR**  
No. 91632 Each 6c 10 Lots 5c 100 Lots \$4.65  
**4 1/2" GLASS INSULATOR**  
No. 96199 Each 8c 10 Lots 7c 100 Lots \$6.60



**APPROVED LIGHTNING ARRESTER**

For Outdoor and Indoor use. 3 1/4" long. Air-gap type is positive in action. Brown.

No. 91783..... List \$0.35 Each \$0.21

**GUARDIAN APPROVED LIGHTNING ARRESTER**

Waterproof barrel construction with cleanable carbon brushes. Brown porcelain shell 4 1/2" long. The ultimate in quality. No. 91784..... List, \$0.75 Each, \$0.45



**Belden LIGHTNING ARRESTER**

Air gap type. Thoroughly sturdy and reliable for installation either inside or out-of-doors. Approved by Underwriters. No. 96124..... List 70c Each, 42c

**BELDEN GLASS INSULATORS**



A Sturdy glass insulator 3 inches long. Packed two in a carton.

No. 97496 Per Pair. \$0.25 Each \$0.15

**PORCELAIN INSULATORS**

Porcelain is and always will be the ideal insulator. Our stock of these insulators is large. Send us your orders.



No. 91625  
No. 91630  
No. Length Each 10 Lots Per Per  
91625 2 1/2" \$0.02 1/4 \$0.02 1/2 \$2.35 \$2.10  
91630 3" .05 .04 3/2 3.85 .....

**JEWELL LIGHTNING ARRESTER**



Glazed porcelain case for indoor or outdoor use. Easily mounted. Approved by Underwriters.

No. 94673 List, \$0.75 Each, \$0.48

**IMPROVED LIGHTNING ARRESTER**



An indoor or outdoor arrester of the air-gap type. Sealed up in porcelain case. Easily installed and affords complete protection. Approved by underwriters. List price 50c. No. 91672 Each, \$0.11 10 Lots, \$0.10

**PORCELAIN RADIO KNOBS**



Sturdy, well-built Porcelain Knobs, which are mounted on heavy galvanized screws. Strong and of lasting quality.

No. Porcelain Screw Each Per 100  
90171 Small 1 1/2 in. \$0.03 \$2.75  
90174 Small 6 in. .04 3/2 3.95

**FEDERAL PORCELAIN NAIL KNOBS**



These knobs are exceptionally sturdy and tough; made of high grade glazed porcelain.

Used to run the lead in from the aerial.

No. Each Per C Per M  
90101 Nail Knob..... \$0.01 1/2 \$1.22 \$10.75  
90106 Solid..... .01 .85 7.65

We can supply porcelain tubes and clats at low prices. Write us for prices.

**UNIVERSAL Battery and Radio Clips**



Universal clips come in handy for testing, for service work and on installations. Be safe always—have an assortment on hand. Dealers can't get along without them. Our low prices on these high-grade "Universal" clips are hard to beat. We carry a complete assortment.

No.	NICKEL PLATED—FEE WEE SIZE		Each	10 Lots	100 Lost
	Jaw Spread	Length			
91861	3/8"	1 1/8"	4 c	3 1/2 c	3 c
NICKEL PLATED—LARGE SIZE					
91862	1/2"	2 1/4"	9 1/2 c	8 3/4 c	7 1/2 c
LEAD PLATED—SMALL SIZE					
91868	3/8"	1 1/4"	5 c	4 1/2 c	3 1/2 c
LEAD PLATED—LARGE SIZE					
91863	1"	2 1/2"	8 c	7 c	6 c
LEAD COATED—GIANT SIZE					
91860	1 1/2"	3 3/8"	16 c	14 c	12 c

JUST THE THING FOR THE SERVICE MAN



**DOUBLE THROW SWITCHES**



Black moulded bakelite base. Highly nickel-plated brass contacts with insulated handles. Length 2 1/4 in. Packed in individual boxes.

No.	Pole	Throw	List	Each
93441	Single	Double.....	\$0.60	\$0.36
93442	Double	Double.....	.85	.48
93443	Triple	Double.....	1.25	.75
93444	Five	Double.....	2.00	1.20

**MUTER BABY KNIFE THROW SWITCHES**

Ideal for base or panel mounting. Black bakelite base. Highly nickel-plated brass contacts with insulated handles.



No.	Pole	Throw	List	Each
98179	Single	Single	\$0.15	\$0.09
98180	Single	Double	.25	.15
98181	Double	Double	.40	.24

"Service doesn't falter, when it comes from Harry Alter"

# AERIAL KITS



The finest aerial kit you can buy. Contains everything necessary to put up a real aerial.

No. 91796

**\$1<sup>57</sup>** Each | **\$1<sup>47</sup>** <sup>10</sup> Lots

### STANDARD KIT

- 1 No. 1581 7-22 Stranded No. 27 —100 Ft. Coil
- 1 No. 1874 14 R. C. Solid No Braid 50 Ft. Coil
- 1 No. 3135 15" Muter Window Lead-In
- 1 No. 1784 Muter Guardian Lightning Arrester
- 1 No. 7243 Morris Ground Clamp
- 2 No. 1632 3" Glass Insulators
- 3 No. 101 Porcelain Nail Knobs
- 2 No. 6 Screw Eyes
- 20 No. 948 Staples



### HACO SPECIAL KIT

Same as our Regulation Kit, but without lightning arrester. A splendid value.

No. 91797

**77<sup>c</sup>** | **75<sup>c</sup>** <sup>10</sup> Lots

### REGULATION KIT

A most popular kit that represents an exceptional value. High-grade material throughout.

- 1 No. 1583 7 Stranded 100 Ft. Coil
- 1 No. 1874 14 R. C. Solid No Braid 50 Ft. Coil
- 1 No. 1870 14 Special Window Lead-In
- 1 No. 1672 Improved Lightning Arrester
- 2 No. 1625 2 1/2" Porcelain Insulator
- 2 No. 101 Glazed Porcelain Nail Knobs
- 1 No. 7243 Morris Ground Clamp

No. 91795

Each | **89<sup>c</sup>** <sup>10</sup> Lots

## AERIAL WIRE

At Amazingly Low Prices

100 Foot Coils



Full Length Guarantee

Quantity buying of wire enables us to quote lowest prices to radio dealers on high class Aerial wire. Full 100 ft. coils. Immediate shipment. Guaranteed full 100 ft. coils, also full strands of wire as specified. **WE DO NOT SUBSTITUTE.**

### BARE COPPER AERIAL WIRE

No.	Per Coil	10 Coil Lots
91582 7-24 Stranded	<b>27c</b>	<b>25 1/2<sup>c</sup></b>
91581 7-22 Stranded	<b>39c</b>	<b>37c</b>
91580 Solid No. 14	<b>33c</b>	<b>31c</b>

### STRANDED ENAMEL AERIAL WIRE

No.	Per Coil	10 Coil Lots
91575 7-24 Stranded	<b>35c</b>	<b>33c</b>
91577 7-22 Stranded	<b>50c</b>	<b>48c</b>

### INSULATED LEAD-IN WIRE

Rubber Covered Without Braid

No.	Size	Type	50 FT. COILS		1,000 Ft. Spools
			Each 10 Lots	Spools	
91566	18	1-64 Stranded	22c	21c	\$3.85
91567	16	1-32 Stranded	30c	29c	5.15
91874	14	1-32 Solid	30c	27c	

Genuine New Code No. 14 R. C. With Braid

91873	14	1-32 Solid	36c	34c	
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## HIGH GRADE BELL WIRE



With double wrapping of cotton wound in opposite direction on solid No. 18 wire. Colors do not fade. A handy article for all-purpose wiring.

No.	Per 100 Pkg.	Pkg. Lots
90947 1/2-lb. single	19c	18c
90948 1 lb. single	37c	35c

### INSULATED STAPLES

Recognized as the finest staples on the market.

No.	Blake No.	Size	Per 100	Per 1000
95330	1	1/4 in.	<b>12c</b>	<b>\$1.05</b>
95331	3	3/8 in.		

### PORCELAIN BATTERY SWITCH



No.	Pole	Throw	Each	10 Lots
90926	Single	Single	\$0.10	\$0.08
90927	Single	Double	.15	.13
90928	Double	Single	.19	.17
90929	Double	Double	.23	.22

## RADIO MAST FIXTURES



Sold complete or in four separate parts, viz.: The pipe which is a 10-foot length of 1/2-inch standard size. The Mast Pipe Pulley Cap, which fits top of pipe and has four holes for guy wires. The Guy Wire Collar used in middle of pipe for fastening guy wires. The Universal Mast Head which is adjustable and fits either a gable or flat type roof. Makes a permanent and substantial aerial support. Heavy malleable iron.

### 1/2 INCH MAST

No.	Complete Outfit	Each
92579	Complete Outfit 1/2"	<b>\$1.08</b>
92570	Pulley Cap, Collar and Base	<b>.58</b>
92558	1/2" Pipe 10 ft.	<b>.60</b>
92569	1/2" Pulley Cap only	<b>.21</b>
92568	1/2" Collar only	<b>.09</b>
92567	1/2" Base only	<b>.30</b>

## WINDOW LEAD-INS



Special Window Lead-In Insulated lead-in with Fahnestock type clips; 14" long and 1/2" wide.

No.	Each	10 Lots	Per 100
91870	\$0.05	<b>\$0.4 1/2</b>	<b>\$4.25</b>

### MUTER WINDOW LEAD-INS

Flexible waterproof lead-in 12" in length. Fahnestock clips on both ends.

No. 93434. List \$0.25. Each **14c**. 10 Lots **13c**

Muter impregnated lead-in 15" long. Made according to R. M. A. standards.

No. 93435. List \$0.20. Each **12c**. 10 Lots **11 1/2c**



## BETTERBILT BALL AERIAL KIT



A New Idea in Ball Type Aerial for improving reception. Much easier to install than a wire aerial and is less subject to atmospheric disturbances. The polished aluminum surface stays bright under all weather conditions. Ball 10" in diameter. Comes complete with all necessary parts, including roof bracket. Very easy to install.

No. 98531 List \$5.00

Each \$2.20  
Less \$1.00  
or.....

**\$2<sup>15</sup>** NET

"Service doesn't falter, when it comes from Harry Alter"



# CASWELL RUNYAN



CONSOLE No. 25

When speaking of quality radio furniture, the name of Caswell-Runyan commands immediate respect and attention. Ever since radio stepped out of the cat's whisker stage, they have been creating beautiful cabinets to house receivers. And as radio has progressed in attaining its smooth perfection of today, so have Caswell-Runyan cabinets. Today Caswell-Runyan cabinets are not merely beautiful pieces of wood—they are an expression. They embody the beautiful essence of radio.

## CONSOLE No. 25

This console is really the last word in wood-work design. Delicately carved curves and grooves, it reaches the apex of harmony. Not only does it possess rare beauty, but utility as well. It is also a writing desk and is worth the price in that capacity alone, so consider what a selling point its economy would be. Undoubtedly, it would add personality to any room or receiver.

Made of selected walnut, quarter sawed figured Red-Gum, and five-ply figured Rotary Veneer with Overlays of 1/4" five-ply Diamond Matched Oriental Walnut on Doors and drawer front. Installation panels furnished for any standard makes of sets. Dimensions: 52 1/2" high, 33" wide, 20" deep. Set Compartment dimensions: 28" long, 9 1/4" high, 14 1/2" deep.

No. 96690 Cabinet Without Speaker. Each, **\$67<sup>20</sup>** Less 2%

- No. 96691 With Peerless Magnetic Speaker. Each **\$79.20** Less 2%
- No. 96692 With Utah Magnetic Speaker. Each **76.80** Less 2%
- No. 96693 With Farrand Magnetic Speaker. Each **74.50** Less 2%
- No. 96694 With Farrand Dynamic Speaker. Each **89.50** Less 2%

## CONSOLE No. 35

Another sample of Caswell-Runyan's advanced ideas in cabinet construction. Designed specially for the discriminating buyer, who can recognize value. The top is of five-ply four-way matched Butt Walnut Veneer. The ends are of five-ply figured Rotary Walnut Veneer, the panels having overlays of 1/4" five-ply Diamond matched Satinwood Veneer. Top doors slide back. Finished with three coats of Lacquer rubbed. Dimensions, 33" wide, 9 1/4" high, 13 3/4" deep. Accommodate any standard make of set.



CONSOLE NO. 35

- No. 96695 Cabinet Without Speaker. **\$43<sup>20</sup>** Less 2%
- No. 96696 With Peerless Magnetic Speaker. **\$55.20** Less 2%
- No. 96697 With Utah Magnetic Speaker. **52.80** Less 2%
- No. 96698 With Farrand Magnetic Speaker. **50.50** Less 2%
- No. 96699 With Farrand Dynamic Speaker. **65.50** Less 2%

"Service doesn't falter, when it comes from Harry Alter"

# Ramco Radio Furniture

## MODEL 1

A simple, yet appealing console at a price so attractive that one cannot resist the temptation to dress up his receiver. Made of selected American walnut with imported overlays. Dimensions: 21 3/4" wide, 37" high and 15" deep. Set compartment dimensions: 19" wide, 7 3/4" high, and 11 1/4" deep. Equipped with Utah Power Motor (Magnetic) speaker.

No. 98020  
List \$36.50  
Each \$21.90  
Less 2% or  
**\$21<sup>46</sup>**  
Net

Utah Dynola (Dynamic) Speaker.....  
\$18.00 Additional



MODEL 1



Model 81

A delightful bit of furniture combining a holding table and speaker, so artistically carved as to suggest period. Made of selected American walnut, figured walnut and pencil stripe mahogany. Finished with hand highlighting and shading. Dimensions 30 in. high, 30 in. wide, 15 in. deep. Equipped with Utah Motor (magnetic) Speaker.

No. 98081 List 32.50  
Each \$19.50  
Less 2% or.....  
**\$19<sup>11</sup>**  
Net



MODEL 37

## MODEL 27

Here we have something in a table speaker that will blend with the furnishings of any room and the tone quality of the receiver. Many of these speakers are in use today and are selling rapidly. Made of selected walnut and American gumwood. Equipped with Utah Dynola (Dynamic) 110 volt A. C. type speaker. Size of top, 30" by 16", 30" high.



MODEL 27

No. 98023 \$42<sup>00</sup>  
List \$70.00  
Each Less 2%

## MODEL 54

What charm this Spinet Desk type speaker could lend to a receiver with its delicate, refined beauty! Made of the finest walnut trimmed with rosewood, burl walnut and satinwood with sides of figured mahogany, it is a work of art. Dimensions: 32 1/2" wide, 40" high, 16 1/2" deep. Size of set compartment: 29 3/4" wide, 9 3/4" high, 13 1/4" deep. Equipped with Utah power motor (Magnetic) speaker.



MODEL 54

No. 98025 \$38<sup>40</sup>  
List \$64.00  
Each Less 2%

## MODEL 37

How's this for utility? A speaker, holding table and book rack. Just the thing for the well-furnished room. Conservatively, yet beautifully designed and constructed. Are going over big this season. Made of selected walnut and American gumwood. Size 30" wide, 30" high, 16" deep. Equipped with Utah Dynola (Dynamic) 110 volt A. C. type speaker.

No. 98024  
List \$75.00.  
Each.....

**\$45<sup>00</sup>**  
Less 2%

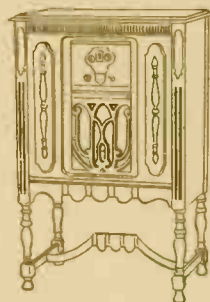


# CONSOLES



## RAMCO Model 24

The model shown here is a very beautiful, well constructed piece of furniture, which has no equal at the price we are listing. Handsomely carved throughout, it is a console worthy of the highest type receiver and fit to grace the beauty of the best furnished room. It is manufactured by Ramco, well known as designers and makers of quality radio furniture, who take unusual pride in placing this console before the public.



Open View

The Model 24 is made up of selected American walnut, trimmed with burl and striped walnut for effective high-lighting and embellished in Carpathian elm and burl mahogany. The doors are of the sliding type which are a distinct advantage where space is at a premium. The console is equipped with either a Utah Magnetic or dynamic speaker—a brand of speaker that brings out the full quality of a set. Outside dimensions, 25 $\frac{3}{4}$ " wide, 16 $\frac{3}{4}$ " deep, 40" high. Set Compartment dimensions, 23" wide, 12 $\frac{5}{8}$ " deep, 9 $\frac{3}{4}$ " high.

- No. 98022 With Utah Magnetic Speaker.  
List \$59.50. Each \$35.70. Less 2% or.....
- No. 98067 With Utah Dynamic Speaker.  
List \$89.50. Each \$53.70. Less 2% or.....

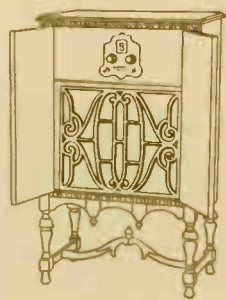
**\$34<sup>99</sup>**  
Net

**\$52<sup>63</sup>**  
Net



## RAMCO Model 44

A glance at the gracefully carved lines and curves and the harmonious combine of selected woods and finishes, of this console, immediately suggests French nobility in the early eighteenth century. Just picture this console in the living room of your home. Imagine what an atmosphere of refinement and beauty it would give. The desire for the home beautiful, will make this a great seller this year. The woods used in the Model 44 are American walnut with burl and satinwood trimmings, embellished in Queensland figured walnut. Comes equipped with either a Utah magnetic or dynamic speaker.



Open View

Outside dimensions, 25 $\frac{3}{4}$ " wide, 45" high, 16 $\frac{3}{4}$ " deep. Set compartment dimensions, 23" wide, 9 $\frac{3}{4}$ " high, 13 $\frac{1}{4}$ " deep.

- No. 98021 With Utah Magnetic Speaker.  
List \$69.00. Each \$41.40.  
Less 2% or.....
- No. 98068 With Utah Dynamic Speaker.  
List \$99.00. Each \$59.40.  
Less 2% or.....

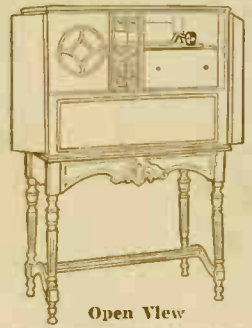
**\$40<sup>57</sup>**  
Net

**\$58<sup>21</sup>**  
Net



## The "Seville" Combination Radio and Phonograph Console

Here is a sterling value in a console with an electric phonograph motor and pick up all ready to play, at a price that one would have to pay for an ordinarily good radio console. As a piece of furniture, it ranks high by virtue of its sturdy construction and artistic design. Its dignified beauty suggests a Spanish grandeur of another century. Truly, a bit of artistry that would make a splendid addition to the beauty of any living room. The doors are of matched burl walnut with imported overlays, offsetting beautiful brass ornaments. The legs are tastefully carved and finished and are braced by a matched stretcher. Furnished with either a Utah Dynamic or Utah Magnetic Speaker. A Johnson Induction electric motor and pick up, off and on switch, and two beautifully bound record albums. Measures 50"x30½"x16½" deep.



Open View

This shows the Seville open, ready for action. An attractive and symmetrical layout that is a pleasure for the eye to behold. Set compartments measures 28½"x9"x11" deep.

- No. 98030 With Utah Magnetic Speaker.  
List \$131.00. Each.....**\$78.60** Less 2%
- No. 98031 With Utah Dynamic Speaker.  
List \$155.00. Each.....**\$93.00** Less 2%

## "The Deauville"

An exquisitely beautiful console of marked French design, that will lend a touch of artistry to any surroundings. And as a housing chamber for a radio receiver, nothing could be more appropriate. Furnished with either the Utah Dynamic or Utah Magnetic Speaker, which is, needless to say, one of the finest line of reproducers made, a tone of remarkable clarity, is certain. The console is made of selected 5 ply walnut, with doors of burl walnut and maple overlays. Beautifully carved embellishments blend harmoniously with background. Measures 50"x27"x16½" deep.

- No. 98032 With Utah Magnetic Speaker. List \$94.00.  
Each.....
- No. 98033 With Utah Dynamic Speaker. List \$118.00.  
Each.....

**\$56<sup>40</sup>**  
Less 2%

**\$70<sup>80</sup>**  
Less 2%



Open View

Revealing the Lyre stained speaker grille, in an otherwise, plain panel. Speaker chamber is 24" long, 10½" high and 13" deep. Set compartment is 24" long, 9" high and 13" deep.



## "The Lyric"

A handsomely designed, open front console that would make a magnificent setting for any receiver at a price that would appeal to any purse. The cabinet has walnut top, front and ends, and legs are of selected gunwood, artistically finished and decorated. The front panel is made of a newly discovered African wood, Avodire, which adds spark to the console. The panel, except for the appropriately carved speaker grille, is plain and has a highly decorative border. Furnished with either a magnetic, air column, or Temple Dynamic Speaker, each one with a "rep" for faithful reproduction. Outside dimensions are 44½" high, 24" wide, and 15" deep. Speaker chamber is 19½"x11"x10½" deep. Set compartment measures 19½"x10½"x10½".

- No. 98034 With Magnetic Speaker.  
List \$55.00.  
Each \$32.50.  
Less 2% or.....
- No. 98036 With Temple Dynamic Speaker.  
List \$70.00 Each \$42.00.  
Less 2% or.....

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

**\$41<sup>16</sup>**  
NET



# ADLER-ROYAL Model 207 Console WITH BUILT IN SPEAKER



The world has gone modernistic, and demands of every object d'art to express itself in cubes, squares and angles. Simple—yes, but quite beautiful and expressive in its conservativeness, and still at the same time smart—a product of the times.

The Adler-Royal console shown here was designed with this motif in mind. Note the simplicity of construction. Everywhere, angles and straight lines, boxes and triangles—no curves. That's modernism for you. The doors are beautifully finished with Satinwood veneers, the rest is of selected walnut veneers. Equipped with either the Utah magnetic or dynamic speaker, in built, assuring an unsurpassed excellency of tone. Will accommodate most of the standard sets. Dimensions of console are 43 $\frac{3}{4}$ " high, and 25 $\frac{5}{8}$ " wide and 16 $\frac{1}{2}$ " deep.



An open view of the console revealing the beautiful speaker grille and decorations of white maple, sharply set off by the black lacquered panel. The set compartment dimensions are, 9 $\frac{1}{2}$ " high, 20" wide, and 13 $\frac{1}{4}$ " deep.

- |   |   |
|---|---|
| <p>No. 08045 Model 207 With Utah Magnetic Speaker.<br/>List \$82.00. Each <b>\$49.20</b>. Less 2% or.....</p> | <p><b>\$48<sup>22</sup></b><br/>Net</p> |
| <p>No. 08046 Model 207 With Utah Dynamic Speaker.<br/>List \$106.00. Each <b>\$66.33</b>. Less 2% or.....</p> | <p><b>\$63<sup>60</sup></b><br/>Net</p> |

# CASWELL RUNYON

## Consollette No. 15

Here is a genuine Caswell Runyon Console that eliminates expense—ness as an object to giving the radio receiver a proper housing chamber. Beautifully designed and constructed of the finest materials obtainable, by the best in the business, it is hardly believable that it is sold for the price we are listing it. There is a great opportunity to reap a huge profit by pushing this console, at this price. Get busy now, by calling on prospects you sold receivers without a console.

Made of the finest four way butt walnut, finished in burl and constructed proportionately, it is a roomy, balanced piece of furniture that will add beauty to any room. Equipped with either a Utah Magnetic or Dynamic speaker, so you can be certain that you will enjoy the finest reproduction possible. Measures 45" high by 25" wide by 15" deep. Will accommodate any set with up to an 8 $\frac{1}{2}$ "x21" panel.

- |   |   |
|---|---|
| <p>No. 08047 With Utah Magnetic Speaker.<br/>List \$50.00. Each <b>\$27.50</b>.<br/>Less 2% or.....</p> | <p><b>\$26<sup>95</sup></b><br/>Net</p> |
| <p>No. 08048 With Utah Dynamic Speaker.<br/>List \$75.00. Each <b>\$39.50</b>.<br/>Less 2% or.....</p>  | <p><b>\$38<sup>71</sup></b><br/>Net</p> |



"Service doesn't falter, when it comes from Harry Alter"

# THE ASTON CONSOLE

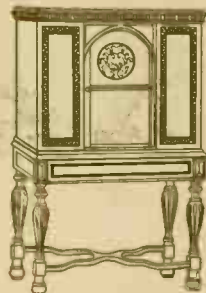


There are countless sets made by amateurs, that are mechanically perfect and have a tonal quality that would delight the ear of the most critical connoisseur, but to look at them they are an eye-sore. This robs a radio of its charm. The console pictured here could add beauty to any receiver and brighten up any room. The entire front is of 5 ply—100% butt burl walnut, with a satin-wood overlay on the doors. There is a beautifully carved border around the side panels giving it a highly artistic effect. The legs are also delicately carved, braced by a curved stretcher, adding strength to the console. The doors slide back, revealing a 12½ in. opening for dials and a speaker grille finished in French Polychrome. The entire console is a durable, artistic affair, worthy of the highest type receiver. Will accommodate any standard set, including an R. C. A.

**DIMENSIONS:**

Cabinet Size:  
55" high, 35" wide, 18¾" deep  
Set Compartment:  
11" high, 31" wide, 13 " deep  
Mounting Panel:  
11" high, 12" wide  
Speaker Compartment:  
14" high, 31" wide, 8½" deep  
Aston Console with Utah Magnetic  
Speaker. List \$140.00.  
Each, **\$84.00.**  
Less 2%, or..... **\$82<sup>32</sup>**  
Net

Aston Console with Utah Dynamic  
Speaker. List, \$160.00.  
Each, **\$96.00.**  
Less 2%, or..... **\$94<sup>08</sup>**  
Net



Open View

# Wasmouth-Goodrich Radio Furniture



Equipped with  
RCA 100-A  
SPEAKER

**THE SEVILLE**

This highly decorative walnut Radio Chest is attractively overlaid in rippled maple. The fluted corner posts, the fluted legs, the turned stretchers, and the graceful brackets at the top give this very practical Radio Chest the unmistakable character of the English cabinet work of the James II period. Equipped with RCA 100-A speaker. Accommodates any make of radio receiver. Height 42", Width 32", Depth 16".

No. 96601  
List \$84.50  
Each **\$50.70.** Less 2% or.....

**\$49<sup>69</sup>**  
Net

Made by masters of the woodworking craft who KNOW 1928-29 requirements. This magnificent furniture is so carefully detailed that the effect is one of perfect grace to harmonize with the modern surroundings.

**THE MADRID TABLE**

Made in a beautiful walnut finish. The gracefully arched brace between the inclined legs is an arrangement characteristically Spanish. Contains RCA 100-A Speaker. Accommodates any type radio receiver. Height 29", Width 30", Depth 14".



Equipped with  
RCA 100-A  
SPEAKER

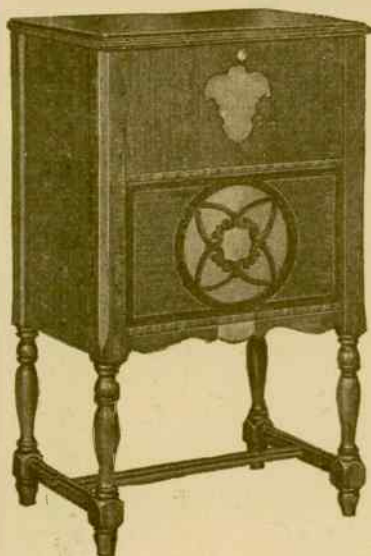
No. 96600  
List \$45.00  
Each **\$27.00.** Less 2% or.....

**\$26<sup>46</sup>**  
Net

Furniture  
of the  
Highest  
Type

"Service doesn't falter, when it comes from Harry Alter"





## THE EMPIRE CONSOLE

There has always been an existing demand to give a radio receiver a setting, befitting its position as a piece of artistry. The objection was always the high prices, that were asked for consoles. Inasmuch, as they weren't an absolute necessity, the desire was suppressed. In the Empire console, shown here, we have overcome that objection. We are listing a beautiful piece of furniture equipped with a Farrand magnetic speaker at a price that would have to be paid for a fairly decent speaker alone. The console is made up of 5 ply, walnut veneered top and sides, with beautiful carved, gumwood legs, and equipped with baffle board. Measures 36½" high, 21½" wide and 15" deep. Accommodates any size panel up to 19¼" wide by 11" high by 14" deep, but is shipped for 7x18 panel unless otherwise specified.

No. 96607  
List \$42.00  
EACH  
**\$21<sup>50</sup>**  
LESS 2%

## THE REGAL TABLE

An unusually attractive table speaker, at a price that belies the marvellous quality of tone and decoration. But here are the facts. The speaker is of the power magnetic type, which reproduces with exceptional naturalness and clarity. This, of course, accounts for the tonal value of the Regal.

This appealing bit of radio furniture is made up of 5 ply top and sides, finished in walnut. The legs are of selected gumwood, very artistically carved and finished. The front panel, sets off an attractive silk grille, and also acts as a wonderful baffle for the Temple Dynamic speaker, which can also be furnished with this table. Measures 30" high, 30½" wide, and 14" deep.

No. 98570 With Power Magnetic Speaker. Each \$10.75. Less 2% or..... **\$10<sup>53</sup>** NET

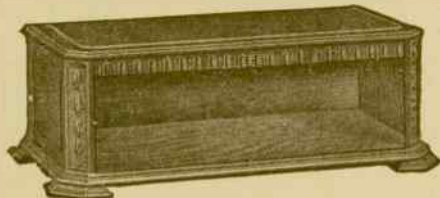
No. 98571 With Temple 110 Volt A. C. Dynamic Speaker. Each \$24.00. Less 2% or..... **\$23<sup>52</sup>** NET



With the Temple 110 Volt A. C. Dynamic Speaker

**\$23<sup>52</sup>** NET

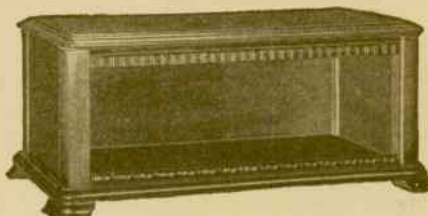
## FRITTS SUPER CABINETS



THIS is a high-grade solid walnut cabinet, very artistically finished. The decorations are polychrome and the top and sides are slightly raised for panel effects. Nickel piano hinge and a substantial lid top. Decorative strip along top of panel. All cabinets are 12" deep from panel to back.

No.	Size	Depth	List	Less 40%-10%	Each
94950	7"x18"	12"	\$21.50		\$11.61
94951	7"x21"	12"	22.00		11.88
94952	7"x24"	12"	22.50		12.15
94953	7"x26"	12"	23.00		12.42
94954	7"x28"	12"	24.00		12.96
94955	7"x30"	12"	25.50		13.77

## WAINRITE CABINETS



Wainrite cabinets are well made employing the very best of material. Made of poplar finished with walnut. Has full piano hinge and lid stay. Decorative strips along top

and sides of panel. 7x14 size popular for short wave kits. Quality cabinets at popular prices. Depth 12 inches.

No.	Size	List	Each
98012	7x14	\$10.00	\$5.80
98013	7x18	12.00	6.05
98014	7x21	13.00	6.38
98015	7x24	14.00	6.75
98016	7x26	15.00	7.50
98017	7x28	16.00	7.88
98018	7x30	17.00	8.63

"Service doesn't falter, when it comes from Harry Alter"

# FEDERAL ORTHO-SONIC\* RADIO

Reg. U. S. Pat. Off.

Licensed under patents owned and/or controlled by the Radio Corporation of America.

\*Federal's fundamental exclusive development, making possible Ortho-sonic reproduction, is patented under U. S. Patents Patent 1,532,470.

## BATTERY OPERATED SETS

America's finest radio is now offered you in the BATTERY OPERATED type at a new attractive price. Each set in the Federal line faithfully reflects the most worthy characteristics of period design. Console tables, with space for all batteries or current supply equipment are furnished to match table models. The patented ortho-sonic circuit of 5, 6 or 7 tube design assures the utmost in selectivity and maximum receiving range.



### TABLE MODEL D-10

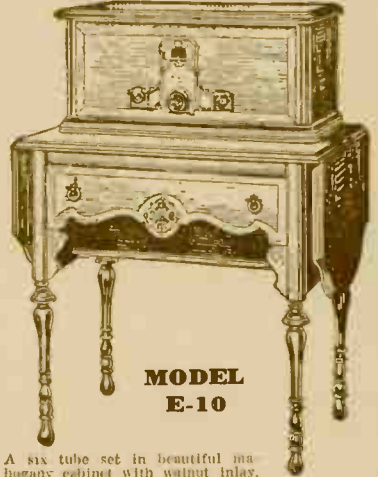
A 5-tube set with balanced circuit and centralized control. Very selective. Contained in genuine mahogany cabinet, which is finished in rich brown. Uses 5-CX301A Cunningham tubes. If power tube is desired, it requires 4-CX301A and 1-CX371A. The

cabinet is 11 1/4" high, 12 3/4" deep and 24" long. An outstanding achievement. Priced for quick disposal.

No. 98050  
\$75.00 Value  
Each.....

**\$22<sup>50</sup>**

Less 2%



### MODEL E-10

A six tube set in beautiful mahogany cabinet with walnut inlay. Single dial control. Illuminated.

\*Federal's exclusive patented balanced T. R. F. circuit. Unequalled selectivity. Full ortho-sonic tone. For battery or eliminator operation only. Requires 5-CX301A and 1-CX371A. Length 27 1/2", Depth 13 1/2", Height 11 3/4".  
No. 98052 Cabinet with set, \$95.00. Less 50% or..... \$47.50  
No. 98053 Model E-10 Table, \$10.00. Less 50% or..... 20.00



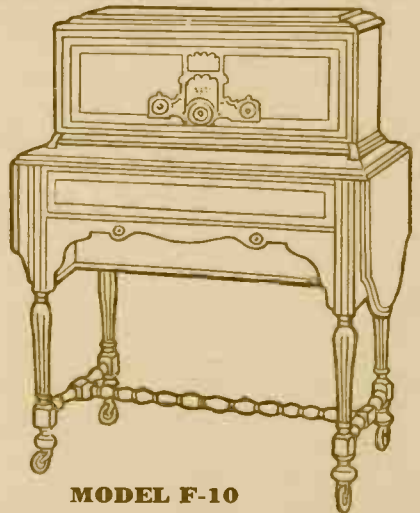
### MODEL F-40

This cabinet is made of genuine walnut with vermilion inlay and hand carving. Single dial control, illuminated. Unequalled selectivity with unusual sensitivity to distant stations. All-metal chassis with mechanism totally shielded. Operates from loop in door. Federal's exclusive patented, balanced tuned radio frequency circuit. Built-in speaker. Requires 6-CX301A and 1-CX371A Cunningham tubes. Height 52 3/4", Width 34", Depth 19 1/4". For battery or eliminator operation only.

No. 98051  
List \$295.00  
Less 50% or.....

**\$147<sup>50</sup>**

Less 2%



### MODEL F-10

This is the famous Federal set using 7 tubes and operating exclusively with loop. Extreme selectivity and wonderful tone quality makes it the outstanding set in performance. Federal's patented balanced T. R. F. circuit. One dial control. Full ortho-sonic tone. Matched loop included. For battery or eliminator operation only. Requires 6-CX301A and 1-CX371A Cunningham tubes. Height 15 1/2", Depth 14", Length 31".  
No. 98054 Table Model Only. List \$170.00. Less 50% or.....  
No. 98055 Table only as ill. List \$50.00. Less 50% or.....

**\$85<sup>00</sup>**

### TABLE ONLY MODEL F-5

No. 98055 Table only as ill. List \$50.00. Less 50% or..... \$25.00



# WE PAY THE FREIGHT

## ON ALL ORDERS FOR \$50.00 OR MORE



With few exceptions we pay all the freight on RADIO orders for \$50 or over—a new, big saving that practically makes our catalog prices F. O. B. your station.

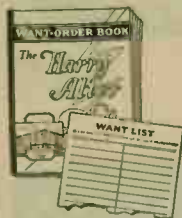
*If You Want Your Orders Shipped by Express or Parcel Post, We Allow You What THE FREIGHT WOULD BE*

WE PAY ALL THE FREIGHT in all states except the few distant ones listed below. WE PAY HALF FREIGHT in the following states, on order for \$50 or over. After your shipment arrives, return your freight bill to us and we will refund you half the amount of the bill.

*New Mexico, Colorado, Wyoming, Montana, Arizona, Utah, Idaho, Oregon, California, Florida, Washington, Maryland and all New England States.*

EXCEPTIONS TO THIS BIG OFFER.—Our freight offer does not cover orders made up entirely of A batteries; or B batteries in lots of more than 10; or wire and insulators in large quantities.

## FREE ORDER BOOK



Ask to have one included in your next order. It provides a carbon copy of all you order—a permanent record. Has 24 order blanks and 24 "Want List" blanks to note the things you want to order next. A business-like way to keep track of your stock. Ask for it! No charge!



We are members of the MIDWEST RADIO TRADE ASSOCIATION, which in turn is affiliated with the Federated Radio Trade Association. These Associations are doing splendid work in familiarizing the public with radio. In fostering a close relationship between radio merchants and improving conditions generally in the trade. We urge you to take active part in this creative movement by becoming a member. We will be glad to send you further information regarding the work, aims and accomplishments of this organization.

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"Service doesn't falter, when it comes from Harry Alter"

# Brunelli-Jones BATTERIES



## UPRIGHT TYPE 45 VOLT "B" BATTERY

Here is a large size B Battery, that will outlive any other "B" Battery on the market because of the fact that it has an apportioned cell space. Very sturdily constructed of materials which assures greater power output. Equipped with Fahnestock clips. Most up-to-date engineering facilities, result in a battery of the highest electrical and mechanical efficiency. Line up with Brunelli Jones—the grand combine of quality merchandise and low cost will make for quick turnover.

No. 94654 45 Volt. Each \$1.52  
 Less 2% or \$1.49 Net Size 7 1/4" x 7" x 3" ..... **\$1.45**  
 5 Lots Each..... **NET**



## "A" BATTERY

This is an "A" battery which will undoubtedly appeal to the set owner as an efficient, convenient "A" cell. As for performance and longevity there is nothing manufactured that will compare with it. Its shelf life is of extraordinary length. Every battery goes through a thorough test before leaving the factory.

No. 94650 Each 27c  
 10 Lots ..... Each **26c**

## EXTRA HEAVY DUTY "B" BATTERY

This super-giant size battery has more than twice the capacity of any ordinary sized battery. The multi-tube sets of today require an extra sturdy oversize battery which is really the more economical in the long run. Will last over a great period of time and produce a greater rate of electrical efficiency. Profit by selling this oversize battery.



No. 94655 \$2.02  
 Less 2% \$1.98 Net Size 7 1/4" x 6 3/4" x 4 1/4" ..... **\$1.89**  
 5 Lots \$1.93 Less 2% or Each..... **Net**

## "C" BATTERY

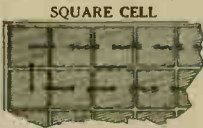


A great little "C" battery that is sure to keep its strength for a great length of time. Constructed of materials that produce a greater output of power, and thoroughly tested against any defect. They will undoubtedly move fast this season.

No. 94656 4 1/2 Volt. Each 25c.  
 5 Lots..... Each **23c**

## BRUNELLI-JONES SQUARE-CELL "B" BATTERY

In this "B" Battery Brunelli-Jones employ the latest construction idea in having the "B" battery contain square cells in place of cylindrical cells. This utilizes (see diagram) all available space, allowing room for more current generating materials per cubic inch than in any other B battery ever produced. This, of course, means longer life, greater efficiency, and consequently customer's satisfaction and more sales.



No. 94694 Size 8 1/4" x 7 1/4" x 4 1/4"  
 Each \$2.90 ..... **\$2.84**  
 Less 2% or..... **Net**



## FLEWELLING SHORT WAVE ADAPTOR



This device is constructed for the purpose of adapting any receiver to short waves, which assures reception of DX. This contrivance has been publicly tested and has decisively proven its ability to adapt any receiver to be able to pick up DX, clearly. The Flewelling short wave adaptor makes this possible. It is very easy to install. Change tube from first R. F. socket and aerial to adaptor and you are ready to tune. A 20 to 30 meter coil, a 30 to 40, and a 40 to 70, supplied with adaptor.

No. Type  
 96830 For D. C. Sets  
 98379 For A. C. Sets  
 List \$22.50. Each \$13.50 Less 2% or.....

**\$13.23**  
**Net**

"Service doesn't falter, when it comes from Harry Alter"



# BRIGHT STAR

Radio Batteries & Flashlights

Supreme DRY CELLS In Every Test

Bright Star Batteries are without a doubt the finest batteries made. Full of power and active material—high in voltage, giving long, dependable service. Our stock is always fresh and complete for immediate shipment. Always in demand—more Profit.

I am urging you to push Bright Star Batteries because I KNOW them to be superfine in quality, besides giving you a bigger profit. Before I decided to sell Bright Star Batteries exclusively, I made sure the product was right. You can't buy a better battery anywhere. That's why I am safe in urging you to carry them.

*Harry Alter*  
Prop.

## BRIGHT STAR HEAVY DUTY "B"



We recommend Heavy Duty Batteries because they are of a quality second to none. This battery contains extra large cells and more active material, which provides the extra power and long life necessary for the economical operation of receiving sets. Lasts much longer and costs much less per operating hour than smaller "B" and ordinary batteries.

No.	Std. Pkg.	Type	Volts
30-60	6	Vertical	45

List	Each
\$1.75	\$2.60

STD. PKG.  
**\$2<sup>40</sup>**  
Each

## BRIGHT STAR 45 VOLT "B"



Built on the hand-made Bag Type principle, using the best of chemicals and material, with constant care and supervision. Tapped at 22½ volts, and provided with three brass screw terminals.

No.	Std. Pkg.	Type	Volts	List	Each	Std. Pkg.
30-95	6	Vertical	45	\$2.75	\$1.94	\$1.80
30-05	5	Horizontal	45	2.75	1.94	1.80
30-03	5	Portable	45	2.75	1.72	1.60



## BRIGHT STAR 22½ VOLT "B"

Bright Star 22½-volt batteries are made in several different sizes, suitable for both standard and portable sets. Small size may also be used as a 22½-volt C battery.

		LARGE SIZE		SMALL SIZE		
No.	Std. Pkg.	Type	Volts	List	Each	Std. Pkg.
15-90	10	Vertical	22½	\$2.00	\$1.12	\$1.04
15-95	10	Horizontal	22½	2.00	1.12	1.04
15-50	5	Horizontal	22½	\$1.50	\$0.85	\$0.71
15-03	5	Horizontal	22½	1.75	1.01	.97

## BRIGHT STAR DRY CELL



Recommended for use on the Radio "A" current as well as being admirably adapted for ignition and all other purposes for which Dry Cells are used. The Bag Type construction employed is greatly superior to the construction ordinarily used. Longer life and greater recuperative power.

No. 96468  
List \$0.50  
Each \$0.31  
**Case Lots of 50 29<sup>c</sup>**

## BRIGHT STAR "C"



Prolongs the life of the "B" Battery—and improves the quality and volume of reception. Has three terminals giving voltage of 1½, 3 or 4½ volts.

No.	List	Each	Pkg.
71-71	\$0.60	\$0.34	\$0.31
Std. Pkg. of 5—4½ Volts			
15-03	1.75	1.01	.91
Std. Pkg. of 5—2½ Volts			

PORTABLE SIZE 4½ VOLT  
7103 ..... 40c 28c 26c

## NEW BRIGHT STAR AMPLIPOWER "B" BATTERY



For the first time a definite guarantee of service capacity. Guaranteed to give satisfactory service for one year from date of purchase. A positive assurance of more than twice the service ever before obtained from any Heavy Duty B Battery. Packed three to a standard package. Weight 62 Lbs.

No. 96469 List \$6.00.  
Each, \$4.10.  
Std. Pkg.

**\$3<sup>95</sup>**

## REESONATOR



The Reesonator is an instrument designed for the purpose of balancing the aerial to the set. At least 75% of the receivers on the market today are not balanced or in resonance with the aerial on all broadcast wave lengths. The Reesonator makes it possible to put your set and antenna in exact resonance with each other at all wavelengths, thereby giving you maximum sensitivity and volume. Takes but a minute to install. A trial will convince you.

No. 97148 List \$4.75. Each, \$2.85.  
Less 2% discount or.....

**\$2<sup>79</sup>**  
Net

# PAL PORTABLE PHONOGRAPHS



The finest line of portables ever made. Easy to take anywhere—touring, boating, camping, etc. Fine for the home. Real tone quality of the modern type. Superior in any way. Incorporate features usually only found on full-built cabinet phonographs.

## PAL SUPREME

The latest improved model that gives you the genuine orthophonic type reproduction—plenty of volume. A real achievement in the portable phonograph industry. Marvelous tone equal to expensive cabinet phonograph. Covered with short grain, Du Pont Fabricoid. Equipped with heavy duty, double spring. Plays 3 records with one winding. Has latest type S shaped tone arm and comes equipped with nationally known symphonic reproducer. Built-in wooden case holds 15 records. New type amplifying sound chamber. 12 1/2 x 16 1/4 x 7 7/8 inches. Weight 18 lbs. Furnished in BLUE, BLACK or BROWN.  
No. 91976. List \$30.00. Each \$17.30.  
Less 2% or.....

**\$16.95 Net**

## PAL STANDARD—\$25.00 Retail

Equipped with a heavy duty double spring motor which plays three records with one winding. Carries latest type of tone-arm and metal shielded reproducer. Equipped with large built-in record album. Covered with genuine Du Pont Fabricoid with embossed border. Weight 16 lbs. Supplied in black, blue, brown finishes. Size 15 1/2 inches long, 12 inches wide, 7 3/4 inches high.  
No. 91981. Each \$12.70.  
Less 2% or.....

**\$12.44 Net**

## PAL JUNIOR—\$15.00 Retail

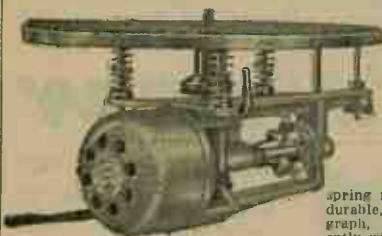
Equipped with a new type metal shielded reproducer and a large built-in record album. Plays two records with one winding. Covered in genuine Du Pont Fabricoid. Weight 11 1/2 lbs. In black, blue, brown finishes. Size 13 1/2 inches long, 11 1/2 inches wide, 7 1/4 inches high.  
No. 91980. Each \$8.45.  
Less 2% or.....

**\$8.28 Net**

## VERIBEST NEEDLES FOR PHONOGRAPHS

No. 91978. Per Box of 50.....4 1/2c  
Specify Medium, Loud, Extra Loud.

## PACENT PHONOMOTOR



The Pacent Phonomotor is an electric phonograph motor which can easily be installed under any motor-board to permit electric rotation of the turn-table. This eliminates all the numerous troubles attendant with the delicate mechanism of the spring motor, and assures a durable, foot-proof phonograph, performing consistently with a steady, unvarying speed. Consumes an

extremely low amount of power, operating with 110 Volts A. C. and 60 cycles frequency. The motor itself is very simply constructed, and yet with the greatest precision. All bearings are oversized, and are well-burnished, giving minimum friction and long life. Has a special compensating device for eliminating noise transmission. Very easily oiled. Its low cost, along with the ever-increasing desire for electrical efficiency will make this a great seller this season. Weighs 16 1/4 lbs.

No. 96204 List \$35.00  
Each \$21.00  
Less 2% or.....

**\$20.58**  
NET

## PACENT ELECTROVOX



The Pacent Electrovox is a complete electrically-operated phonograph when plugged into any radio set and connected to the electric light socket. It plays records with all the beauty and tone quality of an expensive electric phonograph. Just wait until you hear this wonderful modern music reproducer; it will be a revelation. This instrument is encased in a handsome walnut cabinet. The Pacent phonomotor used is of the induction type and consumes about 20 Watts at 110 Volts. The celebrated Pacent De Luxe tone arm is mounted on the right-hand side of the motorboard with the cord concealed. The volume control, needle cups, radio to record switch, tone arm rest and special

adaptor are just a few of the items that make the Electrovox so complete. The Electrovox at present can only be used for A. C. sets. D. C. model will be available shortly.

No. 96205 List \$75.00  
Each \$45.00  
Less 2% or.....

**\$44.10**  
NET

## "The ROTOR" Phonograph Motor



Here is another electric motor combining simplicity of construction, durability and low price. As you can see in the illustration it is all very compact, containing only one moving part supported on a ball bearing and running in a hard bronze guide. It is tuned electrically, magnetically and mechanically assuring absolute noiselessness, constant speed and permanency. Consumes a minimum of power, the cost of operating for fifteen hours being one cent. Its installation is a matter of greatest ease, being a matter of minutes to make complete installation. To be used with 110 volt A. C. 60 cycle current only. Its low cost will pave the way for a great amount of sales.

No. 96788 List \$25.00  
Each \$15.00  
Less 2% or.....

**\$14.70**  
Net

## ROTROLA

The Rotrola is a portable electric phonograph when plugged into your radio set and connected with the electric light current.

A quality product throughout that is really the last word in compactness. Equipped with the "Rotor" electric motor and the phono Link pickup. The turntable is nickel plated covered with velvet and is mounted on a fabricoid portable case. The record album fitted in the cover can be removed thus allowing the cover to be closed while record is playing. Very artistically finished in gold base metal, and is rich appearing open as closed. Outside dimensions are 11 1/2 x 13 1/2 x 5.



No. 96789 List Price, \$40.00.  
Dealer's Price, \$24.00  
Less 2% or.....

**\$23.52**  
Net

"Service doesn't falter, when it comes from Harry Alter"



# THORDARSON

ELECTRIC MFG. CO.

Thordarson Transformers are unconditionally guaranteed. They are built with one aim—perfect reproduction.

## AUDIO TRANSFORMERS

The regular audio transformers have terminals on top and are made in three ratios.

No.	Ratio	List	Each
93385	3 1/2 to 1	\$4.00	\$2.40
93386	6 to 1	4.50	2.70
93387	2 to 1	5.00	3.00

## New-300 Amplifying Transformer

A "laboratory model" transformer, fully enclosed in beautiful finished case. Provides unusually smooth amplification curve. No. 93389 Type R-300. . . . . List \$8.00 Each \$4.80

## THORDARSON POWER TRANSFORMER

These two transformers (input and output) are the correct type to use with the popular 310 Power Tube with its high voltage requirement. The quality of these transformers is reflected in improved tone quality.

No.	Type	List	Each
96700	Input No. T-2408	\$8.00	\$4.80
96701	Output No. T-2420	8.00	4.80

## SPEAKER COUPLING TRANSFORMER

Designed as output transformer to protect speaker from high voltage used with 371 and 310 tube. No. 96702 Type R-76. . . . . List, \$6.00 Each, \$3.60

## THORDARSON AUTOFORMER

An impedance coupled transformer giving unusual clarity and good volume. It is an all-frequency amplifier and should not be confused with transformer coupled amplification. No. 93388 Type 190. . . . . List \$5.00 Each \$3.00

## THORDARSON FILAMENT HEATER TRANSFORMER

Type T-2445 is used to supply proper voltages to the new AC tubes such as CX326, X327, UX126, and U127. Built with the customary Thordarson precision.

No.	Type	List	Each
96703	Type T-2445	\$10.00	\$6.00



## SPEAKER COUPLING TRANSFORMER

Speaker Coupler transformers to connect power tubes to Dynamic and cone speakers.

T2901—To couple one CX371A or CX350 to high impedance speaker: No. 97423. . . . . List \$12.00 Each \$7.20

T2902—To couple one CX350 to Dynamic Speaker: No. 97424. . . . . List \$12.00 Each \$7.20

T2876—To couple one CX310 to high impedance speaker: No. 97425. . . . . List \$10.00 Each \$6.00

T2903—To couple two CX350 tubes into a Dynamic: No. 97427. . . . . List \$12.00 Each \$7.20

T2829—To couple two CX310 Tubes into a Dynamic: No. 96788. . . . . List \$10.00 Each \$6.00



## THORDARSON Z-COUPLER

Thordarson Z-Coupler is a special coupling device designed for use with the screen grid tubes. Designed as a replacement item for receivers employing weaker forms of audio amplification. Will improve any receiver in selectivity, sensitivity, and volume.

No. 97426	List \$12.00	Each \$7.20
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Write for descriptive literature and prices on Thordarson's complete line of Power Amplifiers.

# THORDARSON

ELECTRIC MFG. CO.

## POWER COMPACT R171 & R210

Thordarson Power Compacts have greatly simplified the building of "B" supplies and power amplifiers. It is a complete foundation unit that has high efficiency and is silent in operation. Complete kit listed below.

Thordarson Power Compact R-171. A complete unit for Raytheon BH or QRS tube. No. 93470, R-171, List \$15.00. Each . . . . . \$9.00

Thordarson Power Compact R-210. For use with CX 381 and 310 Power Tube. No. 93469, R-210, List \$20.00. Each . . . . . \$12.00

Thordarson Power Compact R-280. For use with CX 380 tube. No. 93449 R 280, List \$17.00. Each . . . . . \$10.20

## POWER SUPPLY TRANSFORMERS

Full information on the use of the following Thordarson will be mailed on request. Their use is necessary whenever more than 1 power tube (371 or 310) or 1 rectifying (381) is used.

T2098—For 2 CX310 or CX381 Tubes: No. 96704. . . . . List \$20.00 Each \$12.00

T2900—For single CX350 Tube Amplifier: No. 97428. . . . . List \$20.00 Each \$12.00

T2950—For CX350 Push-Pull Amplifier: No. 97429. . . . . List \$29.50 Each \$17.70

### DOUBLE FILTER CHOKE

T2099—Used with the above Power Supply Transformers: No. 96705. . . . . List \$14.00 Each \$8.40

R-196-30 HENRY CHOKE COIL for use in filter circuits with "B" Eliminators and power amplifiers. No. 93394. . . . . List \$5.00 Each \$3.00

## THORDARSON Output Resistors

These two special voltage divider resistors and kit are designed especially for the use with the R-171 and 210 Power Compact.



No.	Type	For Use with	List	Each
96709	R-508 1	R-171	\$2.15	\$1.29
96710	R-508 3445	R-210	4.90	2.94
96749	R2098 210 and 250		9.75	5.85

## POWER INPUT PLUG R-172

This plug makes a convenient method of connecting the power amplifier to the receiver. 3 ft. cord.



No. 96711	Type R-172	List, \$1.00	Each, 60c
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## POWER PACK R-171

All parts used in this Kit are official and approved by Thordarson. Uses 371 Power Tube and Raytheon BH Tube.

- 1 Thordarson Power Compact R-171
- 1 Thordarson Output Choke R-196
- 1 Thordarson Resistance Unit R-508-1
- 1 "B" Condenser Block (Tube or Potter)
- 1 2 Mfd. Condenser (Tube or Potter)
- 2 Benjamin CX Sockets
- 1 Thordarson Input Plug R-172
- 5 Eby Blinding Posts

No. 95049 Complete with book of instructions. List, \$39.15 Each, \$23.44 **\$22.97** Net  
Less 2% or . . . . .

## METAL BASEBOARD ASSEMBLY NEW POWER PACK 210

New official THORDARSON Metal Baseboard Assembly makes it easy to construct this efficient Power Unit.

Complete Parts	List	Each
1 Thordarson Compact R210	\$20.00	\$12.00
1 Thordarson Steel Chassis R211	5.00	3.00
1 Thordarson Resistance Kit R-508-3445	4.90	2.94
1 Thordarson Coupling Transformer R76	6.00	3.60
1 Thordarson Power Input Plug R172	1.00	.60
1 Tube 210 Condenser Block	18.00	10.80

No. 97205 Complete Kit. . . . . \$32.94  
Less 2% or \$32.29 NET

"Service doesn't falter, when it comes from Harry Alter"

# TELEVISION APPARATUS

We are offering this page of apparatus to meet the demand for EXCEPTIONAL TELEVISION EQUIPMENT. New items will be added from time to time just as they are announced by the manufacturer. This merchandise is not subject to return for credit or replacement.

## DAVEN TELEVISION AMPLIFIERS



A resistance coupled unit — the last word in faithful television reproduction. All clips and binding posts are heavily nickeled. Comes completely wired, nothing else to buy.

- No. 98290 3 Stage .....List \$12.50 Each.... **\$8.12**
- No. 98480 4 Stage .....List \$17.50 Each.... **11.38**

## DAVEN AMPLIFIER TUBES FOR TELEVISION

Designed and built for Television and are considered by leading engineers to be the best for the purpose intended. They should not be confused with the ordinary "all purpose" tube.

**TYPE MU-20.** Amplifier tube for detector and stages preceding output tube.  
No. 98293.....List \$2.25 Each **\$1.69**

**TYPE AC-71.** Output tube in series with Television Lamp, 20 mls.  
No. 98291.....List \$3.50 Each **\$2.62**

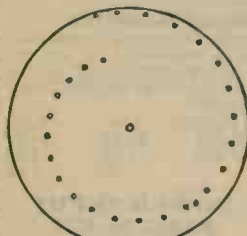
**TYPE MU-6.** Output tube in series with Television Lamp, 10-14 mls.  
No. 98481.....List \$3.50 Each **\$2.62**

**TELEVISION LAMP.** 20 to 80 milliamperes, striking voltage 160. Picture appears on a plate in the center of the tube, size 1 1/2" x 1 1/2".  
No. 98292.....List \$12.50 Each **\$9.37**

All Daven tubes have a four-prong bakelite base which fits any standard socket.



## DAVEN SCANNING DISC



Daven Scanning Discs are accurately laid out so as to prevent distortion. Furnished in the following sizes:

**TYPE T-24,** with 24 apertures.  
No. 98294 .....List \$5.00 **\$3.25**

**TYPE T-45,** with 45 apertures.  
98296 .....List \$10.00 **\$6.50**

**TYPE T-48,** with 48 apertures.  
98297 .....List \$10.00 **\$6.50**

**TYPE T468** Combination Disc for receiving 24, 36, and 48 line pictures.  
No. 98482.....List \$15.00 Each **\$9.75**

## DAVEN BUSHINGS

Bushings to fit 1/4", 5/16" or 3/8" motor shaft. State size.  
No. 98299.....List \$1.00 Each **65¢**

## TELEVISION RECEIVER



The Daven Television Receiver has been designed to assist the dealer in the sale of Daven Television Apparatus. It is a complete receiver, wired ready to receive pictures. Comes complete with neon Lamp, Motor, Bushing, Rheostat, cables, T4 amplifier, and either a 24, 36, 45 or 48 hole scanning disc. Be sure to state size of disc when ordering.

**\$81.25** Less 2%  
Each

No. 98483 Complete less Amplifier Tubes, List \$125.00. ....

## Daven Television Essential Kits

Furnished with either T-24, T-36, T-45, or T-48 scanning disc, motor bushing, rheostat, neon lamp, three complete stages of amplification, and full instructions for building.  
No. 98298.....List \$60.00 Each **\$39.00** less 2%  
No. 98484 Same kit with Daven T468 Combination Scanning Disc.  
List \$65.00. Each .....**\$42.25**

## RAYTHEON KINO-LAMP



The Raytheon Kino-Lamp is simple in construction and operation. The clear glass bulb contains two flat metal plates placed parallel and quite close together in an atmosphere of neon. Plates measure 1 1/2" square. If a voltage greater than 220 is impressed on the plate, the negative one glows with a vivid salmon pink light. This light increases or decreases in intensity due to amplified signals. It is the varying light, in conjunction with the holes in the revolving scanning disc of the television apparatus which weaves the pattern of light dots into a living image on the plate. Requires a working voltage of about 235 volts. Complete instructions with each tube.

No. 98277  
List \$7.50  
Each.....

**\$4.50** Less 2%

## Baldor Television Motor



The ideal television motor. Silent in operation and free from hum. The speed may easily be changed to meet constant with the speed of the motor at the transmitting end. Built with very rigid specifications in order that satisfactory results are obtained. 110 volt, 60 cycle. Shipping weight, 35 lbs.

No. 98529 Each \$24.00.  
Less 2% or.....**\$23.52**

## Television Type Clarostat

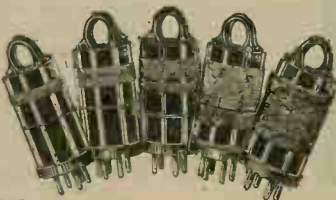
A low range Clarostat of the power type, ranging from 25 to 500 ohms, for controlling television motors. Sturdily built—even, velvety control. One-hole mounting.  
No. 98288 .....List \$3.50 Each **\$2.28**

## National Scanning Disc

Accurately machined from 1/16" aluminum sheet with square light openings counterbored on one side to increase illumination. 1/2" shaft. Furnished in 24 and 48-hole type.

No. 98194 48 Hole .....List \$15.00 Each **\$9.75**

## Twin Coupler Short Wave Kit



Twin Coupler Coils plug into an ordinary 6-prong socket and make perfect contact. Dimensions are small, 1 1/2" in diameter and 2 1/2" high; losses have been kept down by winding on a ribbed form of genuine bakelite. Each coil is fitted with a different colored pull-out ring which makes quick and easy identification of the different wave lengths. Range from 17 to 500 meters.

No. 98278  
List \$3.50  
Each **\$4.50** Less 2% or.....

**\$4.41** NET

"Service doesn't falter, when it comes from Harry Alter"



**X-L NEUTRALIZING CONDENSER**



For use in Neurodyne, Browning-Drake, Roberts' McMurdo Silver's Knockout and any circuit where balance is required. Extreme micrometer adjustment.

No. 93290 Model N. List \$1.00.  
Each .....60c

**X-L VARIABLE GRID CONDENSER**



Designed to insure correct and permanent value for any tube or circuit within its range.

Used in Super-Het, replacing fixed condensers. Complete with grid lead clips.

No.	Capacity	List	Each
93288	.00002 to .0001	} \$1.50	90c
93289	.0003 to .001		
93291	.0001 to .0005		

**WIRT STATIC FILTER**

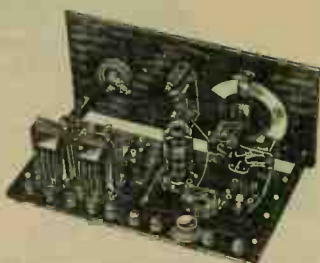


Why put up with static-distorted reception when this inexpensive little item will absolutely eliminate static and give you clear, life-like reception? Easily installed in 2 or 3 minutes and simple to operate. Very compact and foolproof.

No. 98584 List \$2.25. **\$1.35** Each

**Wasp Short Wave Set**

The Wasp Short Wave Set is very easy to build and a wonderful performer. Can be used for wireless as well as broadcast reception on short wave. Uses the well known Twin Coupler Plug in Coils. Great distance in the short wave band can be had with this kit. Here's the season's biggest seller. No. 98489 Completely packed at the factory. List \$33.50. Each \$20.10 Less 2% or .....



**\$19.70**  
NET

**SHIELD GRID TUBE KIT NO. 222**



Twin coupler Tuned Radio Frequency Impedance Units are of the Plug in type, easiest to wire. Completely shielded in aluminum containers, beautifully finished in dull black lacquer. These coils can be built into either A. C. or Battery Operated Sets.

No. 98497 List \$12.50. Each \$7.50  
Less 2% or..... **\$7.35** Net

**TELEVISION SPEED CONTROL CLAROSTAT**



Stepless, positive foolproof speed control for scanning disk motor. Controls universal or condenser motors up to 1/4 horsepower. Also push button control. Dissipates 80 watts.

No. 98543 For A.C. or D.C. List \$5.00. Each..... **\$3.00** Less 2%

**CITIZEN'S RADIO CALL BOOK**



Just off the press—the December issue. Contains a complete up-to-date list of all broadcasting stations. New constructional articles on the season's most popular circuits beautifully illustrated.

No. 98557 List 50c.  
Each 10 Lots

**31c** | **30c**

**AT LAST! A REAL RADIO Trouble Shooting Book**

By E. R. HAAN



Contains 328 pages, over 300 illustrations—printed on fine paper with a flexible binding. Size 6 x 9. Covers the whole field of trouble shooting from a practical angle. Your service men should be compelled to study this book. Exceptional chapters on interference, eliminators, loud speakers and tubes.

Buy this book and your service will improve.

No. 97245 List \$3.00 Each \$2.23  
Less 2% or **\$2.19** NET

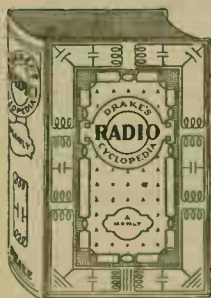
A BOOK YOU SHOULD OWN!

**LATEST RADIO STATION FINDER and LOG**



The most up-to-date and complete RADIO LOG ever presented to the public. We ship latest edition with all corrections as announced by the Federal Radio Commission. Stations are listed alphabetically by call letter. Gives kilocycles, city and owner, power and meters. Shows all hours station is on air on each day of the week. Contains map with all stations and gives distance. Helps any fan to get more stations than ever before. You will find a ready sale for them.

No. 97242 List 25c Each 16c 6 Lots 15c



**Drake Cyclopedia**  
A most comprehensive book relating to all phases of radio. Profusely illustrated.  
No. 97068 List \$6.00  
Each \$4.50



**BOOKS ON RADIO**  
**RADIO ENCYCLOPEDIA** by S. Gernsbach. A very comprehensive treatise on all radio subjects.  
No. 95042 List, \$2.00 Each, \$1.50

## AERO COIL

### SUPER-SENSITIVE UNIVERSAL BROADCAST COILS



Kit consists of four Universal Coils suitable for both antenna couplers and interstage R. F. couplers. Suitable for all type of tubes both A. C. and D. C. For use with .00035 condenser.

No. Type List Each  
98380 U-233 \$15.00 \$9.00

**KIT NO. U-230**  
The same kit for use with .0005 condenser.  
No. 98381 Type U-230 List \$15.00 Each \$9.00

**KIT NO. U-163**  
Similar to above kits except cannot be used with Shield Grid Tube and is equipped with a variable primary in antenna coil. For use with .00035 condenser.  
No. 96802 Type U-163 List \$15.00 Each \$9.00

**KIT NO. U-16**  
The same kit for use with .0005 condenser.  
No. 98600 Type U-16 List \$15.00 Each \$9.00



This kit consists of three Universal Coils suitable for either interstage or antenna couplers. For use with all type tubes both D. C. and A. C. For use with .00035 condenser.

No. Type List Each  
98382 U-203 \$12.00 \$7.20

**KIT NO. U-200**  
The same kit for use with .0005 condensers.  
No. 98383 Type U-200 List \$12.00 Each \$7.20

**KIT NO. U-1203**  
Similar to above kits except can not be used with Shield Grid Tubes and is equipped with a variable primary in antenna coil. For use with .00035 condenser.  
No. 98384 Type U-1203 List \$12.00 Each \$7.20

**KIT NO. U-120**  
Same kit for use with .0005 condenser.  
No. 98385 Type U-120 List \$12.00 Each \$7.20

### TWO COIL KITS

Kit contains two inductance units especially designed for one Shield Grid Tube to be used in connection with a regenerative detector. For use with .00035 condenser.

No. Type List Each  
98386 U-263 \$8.00 \$4.80

**KIT NO. U-260**  
Same kit for use with .0005 condensers.

No. Type List Each  
98387 U-260 \$8.00 \$4.80

**KIT NO. U-273**  
Designed for use with all tubes except Shield Grid Tube. The most efficient kit ever sold for this type circuit. For use with .00035 condenser.  
No. 98389 Type U-270 List \$10.00 Each \$6.00

**KIT NO. U-270**  
Same kit for use with .0005 condenser.

### REGENERATIVE COILS

No.	Type	Condenser	No.	Type	Condenser
96811	U-43	.00035	98392	U-63	.00035
96810	U-4	.0005	98393	U-5	.0005
98390	U-53	.00035	96809	U-963	.00035
98391	U-5	.0005	96808	U-96	.0005

List \$1.00 ..... Each \$2.40

### AERO CHOKE COILS



Designed to have a uniform choking action over a wide range of wave lengths. Used in all modern circuits.

No.	Type	List	Each
96812	60	\$1.50	\$0.90
96811	248	1.50	.90
98395	AA-17	1.75	1.05

### AERO SHORT WAVE CONVERTER



A single-tube converter using the new Aero "International" short wave coils. Single dial control. Easy to build. Uses 299 or 301A type tube. Complete less cabinet.

No. Kit No. List Each  
98339 12 \$32.00 \$19.20

Kit No. 14 Same as converter No. 12 except that a 327 tube is utilized. An A. C. model.

No. Kit No. List Each  
98340 14 \$32.00 \$19.20

## AERO COIL

### SUPER-SENSITIVE AERO SHORT WAVE KITS

Aero has been a pioneer in the manufacture of short wave and transmitting coils and thousands of users attest to their reliability.



**LWT 125 TURNER KIT**  
Range 15 to 125 Meters, completely interchangeable. Includes 3 coils and base mounting. Uses .00014 condenser on secondary and .00025 on feed-back control.  
No. 96817 Type LWT 125 List \$12.50 Each \$7.50

**INTERCHANGEABLE COILS**  
Increase the range of your short wave tuner by securing these coils. Use same base supplied with short wave kit.

No.	Type	Range	List	Each
96818	4	125 to 250 Meters	\$4.00	\$2.40
96819	5	250 to 550 Meters		
96820	INT-0	13 to 29.4 Meters		

### BROKEN KIT PARTS

No.	Coil	Range	List	Each
98396	INT-1	15 to 33.5 Meters	\$4.00	\$2.40
98397	INT-2	31.5 to 63 Meters	4.00	2.40
98398	INT-3	57 to 130 Meters	4.00	2.40
98399	LWT	Mounting Base with Primary	3.00	1.80

### "AERO INTERNATIONAL" SHORT WAVE RECEIVING COILS



The new International Aero Coils follow the same general type of construction as the famous LWT-125, but are constructed of slightly heavier wire and the diameter of the coil has been

altered to 2". Base dimensions are the same and coils may be substituted in the LWT-125 kit. Coil Kit No. LWT-12 Contains a plug in mounting base with variable space wound primary and three plug-in coils of the new type. Range 16.4 to 89.5 meters.  
No. 98330 Type LWT-12 List \$12.50 Each \$7.50  
Coil Kit No. LWT-11. Same kit without variable primary. For use after a Shield Grid Tube.  
No. 98331 Type LWT-11 List \$11.50 Each \$6.90  
Coil Kit No. LWT-10. Same coils as in LWT-11 kit, but are used for replacing LWT-125 coils.  
No. 98332 Type LWT-10 List \$10.50 Each \$6.30

## AERO KITS



Full detail on all these kits, with complete circuit information and blue prints will be mailed upon request. We can furnish anything and everything in the Aero Line, and are ready to serve you.

### "AERO" SHORT WAVE RECEIVER D. C. MODEL

A simple three-tube short wave receiver of the standard type which has given such good results in the past. Uses New International coils. Size of panel, 7x14. Complete, less cabinet.

No. 98348 Type No. 11 List \$49.95 Each \$29.97

**A. C. MODEL**  
Same as Kit No. 11, except two 326 and one 371 A power tube are employed.  
No. 98349 Type No. 10 List \$49.95 Each \$29.97

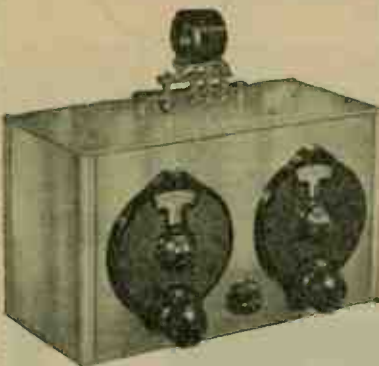
### INTERNATIONAL S. W. BROADCAST RECEIVER SHIELD GRID MODEL

The Aero "International" employing one stage of Shield Grid is the first receiver designed exclusively for short wave broadcast reception. Only one tuning control. Extremely simple to operate, and very easy to build. The finest short wave receiver obtainable at any price. Foundation unit does not include cabinet, but employs 7x14 drilled Micarta front panel, and all other parts necessary to assemble.

No. 98321 Type No. 8 List \$55.30 Each \$33.18



**THE F-K SCREEN GRID FOUR SHORT WAVE RECEIVER**



The F-K Screen Grid Four is a complete four tube short wave receiver covering a wave length range of 18 to 120 meters with the three coils supplied. It has in the most difficult locations out-performed every short wave set with which it has been compared. The circuit is the most efficient known, — an aperiodic screen grid R.F. stage, a regenerative detector and two variable radio vernier

dials, one for tuning and one for regeneration control. A detector rheostat, with switch turns the set on and off and regulates the smoothness of operation Extra coils may be obtained to increase the wave length range from 13 to 650 meters. Contained in a beautiful satin finish aluminum cabinet only 10 1/2" long, 6" high and 3" deep, with rubber feet. Batteries only are recommended for best operation but good power units may be used if desired. The tubes required are 1-UX222; 2-201A and 1-112A.

No. 98608 F-K Screen Grid Four, complete less tubes. List \$56.00. Each \$33.60. Less 2% or.....\$32.93 Net

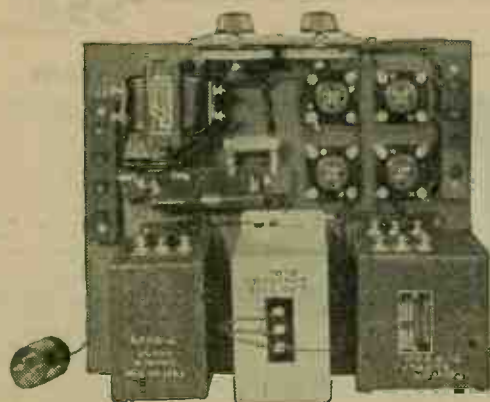
**TWO TUBE CONVERTER**

The 2-tube converter, for use with any broadcast receiver, is the same as above except that it does not contain the two audio stages. It may be plugged into the detector socket of any broadcast receiver converting it to a very efficient short wave receiver. Uses 1-CX322 and 1-CX301A tubes.

No. 98609 F-K Screen Grid 2-Tube Converter. List \$49.00. Each \$29.40. Less 2% or.....\$28.81 Net

**EXTRA COILS**

No.	Extra Coil No.	Range	List	Less 2 Pct.
No. 98610	Extra Coil No. 1319,	13 to 19 meters.	\$2.75	\$1.65
No. 98611	Extra Coil No. 12090,	120 to 200 meters.	\$2.75	\$1.65
No. 98612	Extra Coil No. 18055,	180 to 360 meters.	\$2.75	\$1.65
No. 98613	Extra Coil No. 35060,	350 to 400 meters.	\$3.00	\$1.80



**THORDARSON 250 2 STAGE POWER AMPLIFIER AND "B" SUPPLY**

A self-operated amplifier which also furnishes "B" current for any receiver. May be used with either a radio receiver, or electrical pick up for phonograph reproduction. To be used with a dynamic speaker. Uses the following tubes: 1-CX350, 1-CX374, 2-CX381, and 1-C327.

No. 98558 List \$142.00. Each \$61.20. **\$59.98** Net less tubes



**TRANSFORMERS**



Type 223 111 Ma Audio Transformer for use between first stage Shield Grid Tube and any standard power tube.

No. 98440	Type 223	List \$9.00	Each \$5.40
<b>TYPE 225 and 226 First and Second Stage Audio Transformer for use between any standard detector and first and second audio stage.</b>			
No. 98441	Type 225	List \$9.00	Each \$5.40
No. 98442	Type 226	List 9.00	Each 5.40
<b>TYPE 251 Output Transformer or Impedance, adjusted to match any standard power tube.</b>			
No. 98443	Type 251	List \$6.00	Each \$3.60
<b>TYPE 255 and 256 First and Second Stage Audio Transformer used between detector and first and second audio stage. Ratio 4.2 to 1.</b>			
No. 98444	Type 255	List \$6.00	Each \$3.60
No. 98445	Type 256	List 6.00	Each 3.60

**220 AUDIO TRANSFORMER**



An all stage transformer. Ratio 3 to 1. Largest selling high grade transformer ever made.

No. 93373 List \$8.00 Each \$4.80

TYPE 221 Output Transformer, used between speaker and power tube, prevents blasting and damage to speaker.

No. 93374 List \$7.50 Each \$4.50

TYPE 222 Output Transformer, same as 221 except equipped with four tip jacks and 5-foot cord.

93397 Type 222 List \$8.00 \$4.80

TYPE 230 and 231 Push Pull Input Transformer for use in high grade push pull amplifier or as audio transformer with ratio of 3 to 1 or 6 to 1.

No. 93490 Type 230 Input List \$10.00 Each \$6.00

No. 93491 Type 231 Output List 10.00 Each 6.00

TYPE 328 Power Transformer; a heavy duty transformer for full wave 381 rectifiers.

No. 97016 Type 328 List \$20.00 Each \$12.00

TYPE 329A Power Transformer, for gaseous or filament type rectifiers. Has 2 275 volts, 125 M. A.; 1 6 volt, 1 amp; 1 1 1/2 volt, 6 amp; and 1 2 1/2 volt 6 amp. Complete with cord and plug.

No. 97344 Type 329A List \$9.00 Each \$5.40

TYPE 331 Unichoke, 2 winding, high inductance filter choke. Rating 125 M. A.

No. 93391 Type 331 List \$9.00 Each \$5.40

TYPE 325 Filament Transformer, supplying 1 1/2 volts at 12 amps., and 5 volts at 1 amp.

No. 96200 Type 325 List \$12.50 Each \$7.50

**R. F. CHOKES**

Keep currents from going astray. Polished moulded bakelite case.

No. 97333 Type 276 List \$1.00 54c

TYPE 276, same as 275, for use above 600 meters. Each 60c

96201 Type 275 List \$0.90 60c

TYPE 277, designed for use below 200 meters.

No. 98146 Type 277 List \$1.50 Each 90c

**INTERCHANGEABLE COILS**

Rubber moulded bakelite form, spaced windings and low losses make them the most efficient coil made today for use with .00035 condensers.

No.	Type	Meters	List	Each
93378	111A	190-350	\$2.50	\$1.50
93379	111B	70-200		
93380	111C	30-75		
97328	1118G	250-500	\$2.50	\$1.50
97329	1118A	250-500		
97330	1118A	250-500		
98435	118A	250-500		

**SHORT WAVE TYPE**

For use with .00014 condenser.

No.	Type	Meters	List	Each
98136	117-M	87-150	\$2.50	\$1.50
98437	117-N	51-90		
98438	117-O	30-53		
98439	117-P	18-32	\$2.50	\$1.50
93384	Socket for above coils.			

**S-M 510 SUB-PANEL BRACKETS**

Nickel-plated steel mounting brackets (one pair), size 6x1 1/4 x 1/4 inches with hardware.

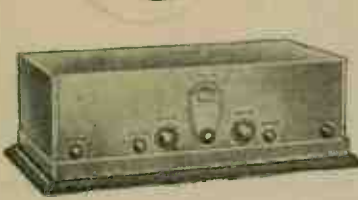
No. 97334 List \$0.90 Pr. Each \$0.54

SM

710 SARGENT RAYMENT SEVEN

SM

A Station In Every 10 Kilocycles



In performance, as in unique appearance, it is a precision laboratory type of instrument, and has been designed throughout as such. Electrically, the receiver consists of five sharply tuned circuits in a four stage screen grid R.F. amplifier, all tuned by a single illuminated drum, and provided with individual verniers. One knob turns the set on and off, and adjusts battery voltage; a second controls volume from zero to maximum; a third regulates antenna selectivity. All are symmetrically placed. There are no other controls. Following the R.F. amplifier are the detector and the A. F. amplifiers, using the famous S-M220 audio transformers which provide unequalled tone quality and high volume. CX-371 power tube can be used, or with S-M 675 ABC power supply, a CX-310 or CX-350 is used in the last audiotage. Light socket operation is had with standard A and B power units, or batteries may be used. Each circuit is individually shielded and isolated from all others. The set goes together simply and positively, with clear direct wiring. Tubes required are 4 CX-322, 2 CX-112A, and 1 CX-311A.

No. 98400 Sargent-Rayment Seven Kit, factory packed with Cabinet, less tubes. List, \$130.00. Model 710. Each..... **\$78.00** Less 2%

CABINET ONLY

No. 98409-705 Aluminum Knock-Down Shielding Cabinet, especially designed for the Sargent-Rayment Seven. Size 27 1/2 x 12 x 3 3/4, included in S-M 710 Kit, but sold separately if desired. List \$27.00. Each..... **\$16.20** Less 2%

720 SCREEN GRID SIX

So selective is this receiver that, operated in the heart of Chicago, within only one to three miles of powerful local stations, it brings in out-of-town stations only one dial division (10 K. C.) away from locals! The tone quality of this receiver with the famous S-M 255 and 256 transformers is truly remarkable. Every musical note and inflection is brought out with full volume and fidelity of tone, and in its beautiful new S-M 700 metal cabinet, finished in two-tone moire brown, the 720 is a joy to the eye as well as to the ear. The 720 receiver consists of three stages of radio frequency amplification, using screen-grid tubes, followed by a super-sensitive detector and two stages of Clough high gain audio frequency amplification, with power output tube, 112, 171, 210 or 250 tube being optional. The R. F. stages are controlled by two vernier drum dials operating one single condenser and one "three gang" die-cast bowl-type condenser of unusual accuracy and rigidity. Ganging troubles are forever eliminated. The new S-M 130 Universal coil is used in the antenna stage providing greater antenna selectivity. A small condenser in this circuit provides variable selectivity from a minimum to maximum.



No. 98401 Type 720 Screen Grid Six Kit, Less Tubes and cabinet. List, \$72.50. Each..... **\$43.50**  
 No. 98410 Type 720, same as above, complete wired, contained in Metal Cabinet. List \$102.00. Each..... **\$61.20**  
 No. 98411 Type 700, Shielding Cabinet Only. Size, 21 1/2" long, 10" wide, 7 1/4" high. List, \$9.25. Each..... **5.55**

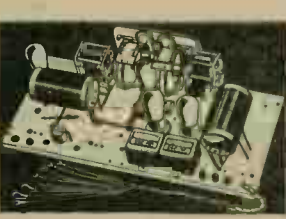
THE 1929 SCREEN GRID LABORATORY MODEL SUPER-HETERODYNE



This receiver is a nine tube superheterodyne having only two tuning controls for a total of five stages of R.F. amplification! It is an ultra sensitive superheterodyne giving post-10 K.C. selectivity, 2,000 to 3,000 mile regular reception range and marvelous tone. The circuit employs one untuned stage of short wave R.F. amplification, followed by three stages of tuned R.F. amplification, all three tuned by a super-accurate three gang condenser controlled by one vernier drum dial. This amplifier is followed by a screen grid first detector tube, an oscillator, tuned by the second vernier drum dial and a single condenser, two stages of sharply tuned 65 K.C. intermediate amplification, a second detector, and one audio stage using the new Clough audio system. The tuned R.F. oscillator, both detectors and I.F. amplifier stages are shielded in individual copper cans which are assembled upon the S-M 701 Universal steel chassis, and the whole set is doubly shielded by the S-M 700 Cabinet when used. The appearance of the set, with its attractive antique brass panel excelsion, and when housed in the S-M 700 cabinet, is distinguished in the extreme, and while the whole set is but 21 1/2" long, 10" deep and 7 1/4" high, it has the compactness and efficiency of the thoroughly engineered precision radio receiver that it is. The set has but one stage of audio, and requires six CX-322, two CX-301-A, and one CX-312-A tubes. The combined power amplifier and "B" units recommended are the S-M 681-250 Unipac or the 681-210 push-pull Unipac, both single stage amplifiers for CX-310 or CX-350 super-

power tubes. List \$95.20 Each \$57.12 Less 2% or..... **\$55.98** NET Less Tubes  
 No. 98402 List \$95.20 Each \$57.12 Less 2% or.....  
 No. 98488 Motor Cabinet for above set. List.....\$9.25 Each.....\$5.55

740 COAST TO COAST SCREEN GRID FOUR



The new Silver-Marshall Coast to Coast Four offers the finest performance yet attained with this remarkable circuit. A screen grid R.F. amplifier stage, immeasurably finer coils than ever before, the new Clough high gain audio system with S-M 255 and 256 transformer—and metal chassis, and antique brass control escutcheon, like the finest of ready-made sets, make the "740" the biggest \$50.00 worth of radio set you've ever seen or listened to. Its story is told in its name—the Coast-

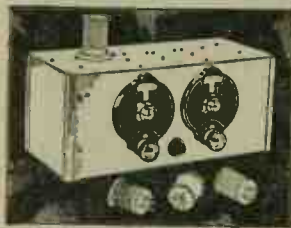
to Coast Four. In summer time tests, through Chicago static and heat, it plays New York, Florida, Texas and California stations on the loudspeaker, cutting through interference to distant programs only 10 and 15 or 20 K.C. away from "locals" with distinctness and ease. Its tone quality is such as only the new S-M 255 and 256 transformers can provide. The "eye-value" of the "740" is on a par with the best of ready-made sets when it is housed in the new Silver-Marshall type 700 metal shielding cabinet finished in a rich and beautiful two-tone crystalline brown which harmonizes with any home furnishings. Battery or light socket operation is optional. Requires 1 CX-322, 2 CX-301-A, or CX-321-A detector and first stage amplifier and 1 CX-371-A power tube, CX-310 or CX-350 power can be used with S-M 675 ABC power unit.

No. 98403 List \$51.00. Each..... **\$30.60** Less cabinet and tubes.

740 AC COAST TO COAST KIT

For use with Ceco or other independent A C Screen Grid Tubes, and S-M 670 ABC or 675 ABC power units.  
 No. 98404 List \$53.00. Each... **\$31.80** Less cabinet and tubes

730 ROUND THE WORLD FOUR



S-M "Round the World" short wave receiver kits build up into such neat, trim, snappy short wave sets that you just can't help getting the thrill of your life as you tune one. And—they have all the advantages of screen grid R.F. amplification, and one dial tuning, new Clough high gain audio amplification with S-M 255 and 256 audios, and complete shielding cabinets! Choose any one of the three kits you prefer, and step out into the "thrill band" for exciting long-distance reception!

730 "Round the World" is a complete four tube non-radiating short wave receiver kit with its aluminum shielding cabinet. It has one screen grid R.F. stage, a general purpose non-radiating detector and two high gain Clough audio stages. It tunes from 17.4 to 204 meters with four 131-type in coils and will bring in five continents in an evening's tuning. The 731 "Round the World Adapter" is the two-tube R.F. amplifier and detector less the two stage A.F. amplifier of the above set. With an adapter plug, it converts any set at all to long-distance short wave reception, and it is ideal for television reception.

732 "Round the World" essential kit contains the new tuning and tickler condensers, four plug-in coils for 17.4 to 204 meters, a coil socket, and three R.F. chokes, with full instructions for building a one, two, three or four tube short wave set.

No.	Model	List	Each
98406	730-Round the World Four Kit	\$51.00	<b>\$30.00</b>
98486	730-Round the World Wired Set	66.00	<b>39.00</b>
98407	731-Round the World Adapter Kit	36.00	<b>21.60</b>
98487	731-Round the World Wired Adapter	46.00	<b>27.40</b>
98408	732-Round the World Essential Kit	16.50	<b>9.90</b>



**SM**

**S-M UNIPACS  
680 SERIES**

The S-M Unipac, a series of universal light socket power amplifiers, have steadily gained in popularity. Today the S-M Unipac line embraces power amplifiers and light socket power supplies suited to every possible need, for home use, dance halls, theaters and stadiums. Furnished in a crystalline brown steel case. Size 1 9/16 x 7 1/2 x 5 3/8 inches. Write for complete circular.

681-210 UNIPAC consists of a push-pull power amplifier using 2 CX310, 2 CX381 and 1 CX374 tube.

- |  |                    |      |                |
|--|--------------------|------|----------------|
| No. 96842 UNWIRED KIT  | .....List \$ 87.00 | Each | <b>\$52.20</b> |
| No. 96843 WIRED UNIPAC   | .....List 102.00   | Each | <b>61.20</b>   |
| 682-210 UNIPAC. Exactly the same as the 681-210 except that it includes a first audio stage which uses one CX326 tube. |                    |      |                |
| No. 97336 UNWIRED KIT  | .....List \$102.00 | Each | <b>\$61.20</b> |
| No. 97337 WIRED UNIPAC   | .....List 117.00   | Each | <b>70.20</b>   |
| 681-250 UNIPAC is exactly the same as the 681-210 Unipac, without push pull, using 1 CX350 in audio stage.             |                    |      |                |
| No. 97346 UNWIRED KIT  | .....List \$81.50  | Each | <b>\$48.90</b> |
| No. 97347 WIRED UNIPAC   | .....List 96.50    | Each | <b>57.90</b>   |
| 682-250 UNIPAC is the same as 682-210, but without the push-pull, using 1 CX350 in audio stage.                        |                    |      |                |
| No. 97348 UNWIRED KIT  | .....List \$ 96.50 | Each | <b>\$57.90</b> |
| No. 97349 WIRED UNIPAC   | .....List 111.50   | Each | <b>66.90</b>   |

**670 B AND ABC POWER SUPPLIES**



The new S-M 670 B and ABC Power Supply Units are unquestionably the highest grade B and ABC units in the radio field employing the 2N0 type full wave rectifier and filter system, which gives freedom from hum. The 670 B supplies fixed voltages of 22, 90, 135 and 180 Volts, and a variable voltage of 22 to 90 volts calibrated at 22, 45, 67 and 90 volts. A total of 60 m.a. may be drawn. The 670 ABC eliminator supplies the same B voltages as 670 B and in addition provides 1 1/2 volts at 4 amperes, 2 1/2 volts at 3.5 amperes and 5 volts at 1/2 ampere. It is a complete ABC power supply for any AC set of six or seven tubes. Both models are supplied in either kit or wired form, with a beautiful crackle brown steel cabinet, 13" long, 5 1/2" high, 3 5/16" wide.

- |       |                            |              |                |      |
|-------|----------------------------|--------------|----------------|------|
| No.   | Type                       | List         | (Less Tubes)   | Each |
| 97353 | 670 B                      | .....\$40.50 | <b>\$24.30</b> |      |
| 97354 | 670 B wired power supply   | .....43.50   | <b>26.10</b>   |      |
| 98416 | 670 ABC                    | .....43.00   | <b>25.80</b>   |      |
| 98417 | 670 ABC wired power supply | .....46.00   | <b>27.60</b>   |      |

**JEWELERS TIME SIGNAL AMPLIFIER**

**440 SG**  
(For Standard Tubes)

A three-stage long-wave amplifier laboratory tuned to 112 K.C., the wave length of N.A.A. (Arlington), uses 4 CX301A tubes in 3 stages of T.R.F. amplifier and detector. Sealed in beautiful copper and brass catacomb. Size 15x15x3 in.

No. 96846 List \$35.00 Each **\$21.00**



**440**  
(For Screen-Grid Tubes)

A 3-stage long-wave amplifier operating on 112 K. C. and incorporating 3 CX322 screen-grid tubes, giving an amplification of 40 per stage—greater than any other long-wave amplifier. Each stage individually shielded and laboratory tuned to 112 K. C. Beautiful copper and brass catacomb with removable cover. Size 15x15x5 1/2 inches.

No. 97264 List \$40.00 Each **\$24.00**

**New S-M Midget Plug-In Coils**



New and highly efficient mounded bakelite coilforms which plug into any 5-prong tube socket—economical, efficient, compact and above all, uniform. Winding space 1 1/2" long by 1 1/2" diameter with 1/16" slot at bottom.

- |       |       |                  |        |            |
|-------|-------|------------------|--------|------------|
| No.   | Coil  | Form Only        | List   | Each       |
| 98420 | 130-P | Unwound, Smooth. | .85c   | <b>39c</b> |
| 98421 | 130-T | Unwound,         |        |            |
|       |       | Threaded 98 1/2  | ...65c | <b>39c</b> |

**WOUND COILS**

- |       |       |           |        |        |        |
|-------|-------|-----------|--------|--------|--------|
| No.   | Coil  | Range     | ser    | List   | Each   |
| 98422 | 131-T | 17.4-32.1 | .00014 | \$1.25 | \$0.75 |
| 98423 | 131-U | 31-58     | .00014 | 1.25   | .75    |
| 98424 | 131-V | 57-110    | .00014 | 1.25   | .75    |
| 98425 | 131-W | 104-204   | .00035 | 1.25   | .75    |
| 98426 | 132-A | 190-550   | .00035 | 1.25   | .75    |

**320-R Universal Condenser**



A single .00035 mfd. variable condenser, truly Universal, with full floating removable shaft. Mounts on either side, bottom or either end for left or right hand drive. Double-spaced modified SLF SLW plates. Size 2 1/2 by 4 1/2 by 4 inches.

321 Condenser—Same as 320-R except capacity is .00014 mfd.

323 Three Gang Condenser. A three-unit gang condenser, the most accurate ever made, in rugged die-cast frame for either side, end or bottom mounting. Each unit is equipped with an individual compensator and shielded from other units. Capacity each unit .00035 mfd., all units guaranteed matched to within 1% over upper half of scale, or 1 mfd. over lower half of scale.

- |       |       |        |               |
|-------|-------|--------|---------------|
| No.   | Type  | List   | Each          |
| 98431 | 320-R | \$4.00 | <b>\$2.40</b> |
| 98432 | 321   | 4.00   | <b>2.40</b>   |
| 98433 | 323   | 13.50  | <b>8.10</b>   |

**S-M Midget Condensers**



Capacity .000003 to .000025 mfd. Designed for compensating, balancing, antenna coupling, etc. Complete with control knob. 73360 List \$1.50. Each **90c**

S-M 342 CONDENSER. Capacity .000004 to .000007 mfd. Suitable for all purposes where a larger midget condenser is called for than the S-M 340 described above. No. 97352 List \$1.75 Each **\$1.05**

**638 Stage Shield**



A small copper shield 4 1/2" long, by 5 1/2" high, and 2 1/2" wide, with pierced bottom and removable sides and top. Accommodates any kind of tubes with any S-M plug-in coils, plug resistors and by-pass condensers.

No. 98428 List \$1.50. Each **90c**

**685 PUBLIC ADDRESS UNIPAC AMPLIFIER**



For coverage of crowds of 1,000 to 10,000 people, indoors or outdoors, with one to twelve loud-speakers, the 685 Public Address Unipac is the only light socket amplifier now available. It uses one C 327 one CX 326, one CX 350 and two CX381 rectifiers in a three stage light socket amplifier for microphone, radio or record pick-up amplification. Size: 13 1/2" long, 10 1/2" high, 9 3/4" wide.

- |   |                |      |                |
|---|----------------|------|----------------|
| No. 98412 685 Unipac kit, less tubes.   | List \$125.00. | Each | <b>\$75.00</b> |
| No. 98413 685 Wired Unipac, less tubes. | List \$160.00. | Each | <b>96.00</b>   |

**678P PHONOGRAPH AMPLIFIER**



The new S-M 678P Phonograph Amplifier employs a new unit of greatly improved performance, for use with a magnetic phonograph pick-up only and when so used it will provide the finest reproduction of records obtainable. The unit consists of a two stage power amplifier with self contained power supply, using 326 and 310 or 350 type tube in conjunction with the new S-M 255 and 256 audio transformers. With these new transformers every note is brought out with full volume and true tone quality. The 678P Unipac employs one CX-326, one CX-310, or CX-350, and one CX-381 tubes and is complete in itself for operation upon addition of record pickup, loud speaker and tubes.

No. 98415 678PD Unipac phonograph amplifier for dynamic speakers having own field excitation. List \$73.00. Each **\$43.80** Less Tubes

**676 DYNAMIC SPEAKER AMPLIFIER**

The S-M 676 Amplifier is a single stage power amplifier designed especially for use as a third stage after any set, to boost volume and tone and to give maximum results with standard dynamic loud speakers. It uses one CX-381 rectifier tube and one CX-350 super-power amplifier tube and provides field current for the 90 to 110 volt DC dynamic speaker fields. Contained in metal cabinet same as the 675.

- |  |               |      |                           |
|--|---------------|------|---------------------------|
| No. 98418 676 Dynamic Speaker amplifier Kit.   | List \$49.00. | Each | <b>\$29.40</b> Less Tubes |
| No. 98419 676 Wired Dynamic Speaker Amplifier. | List \$55.00. | Each | <b>\$33.00</b> Less Tubes |

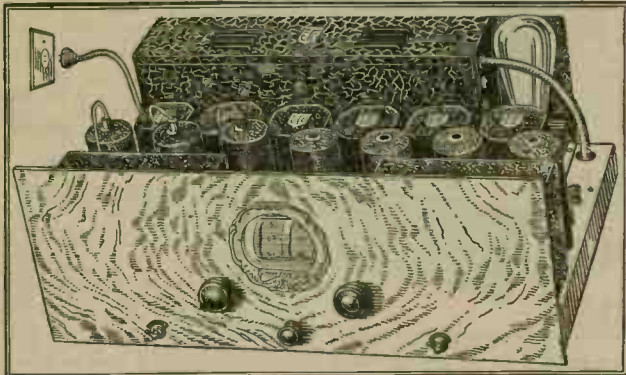
**675 HI-VOLT POWER SUPPLY**

The 675 Hi-volt power supply allows the use of a 310 or 350 super power tube in the last stage of any receiver, adding greatly to its tone quality and power handling capacity. Uses one CX-381 rectifier and supplies 22, variable 45 to 90, 90, 135 and 425 volts B and 1 1/2, 2 1/2, and 7 1/2 volts A C for power-tube filaments. Thirty-five volts "C" for the 210 or 84 volts for a 250 is supplied automatically by an internal resistor. Size: 17" long, 5 1/2" high and 3 5/16" wide.

- |   |               |      |                           |
|---|---------------|------|---------------------------|
| No. 98429 675 Hi-volt Power Supply Kit.   | List \$54.00. | Each | <b>\$32.40</b> Less Tubes |
| No. 98430 675 Wired Hi-volt Power Supply. | List \$58.00. | Each | <b>\$34.80</b> Less Tubes |

# Tyrman Imperial "80"

## Custom-Bilt Shielded Grid



The Tyrman Imperial "80" is definitely designed for those who are satisfied only with the finest in radio. It is especially designed for A-C Socket operation using A-C Shield Grid Tubes. The Duo System of Amplification, a recent Tyrman achievement gives full advantage of the tremendous amplification of A-C Shield Grid Tubes.

Unsurpassed tone quality, through the use of the Tyrman Audio Amplifier and the CX 350 power tube for second audio stage, which also assures distortionless output of tremendously amplified signals.

The actual performance of the Imperial "80" is defined by a ten K.C. Selectivity and Sensitivity over entire wave band obtainable only with Shield Grid Tubes as used in the Tyrman circuit. Three knob control. Beautiful



Shield Grid  
Tube Used  
in  
Tyrman "80"

front panel of solid butt walnut on steel, exclusively Tyrman. Power pack mounted on chassis with other units. Every part precision made, matched and tested. By special method assembling of chassis is greatly simplified and can be easily accomplished in a fraction of an hour. Prices less tubes.

No. 98465 Factory packed, complete with Power Pack.

List \$199.50. Each \$119.50 Less 2% or.....

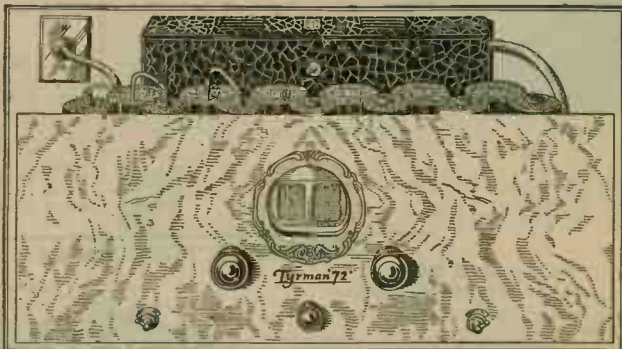
**\$117<sup>11</sup>**  
NET

Uses the following tubes: 3 A. C. Shield Grid tubes, 4 C327, 1 CX350, 2 CX381. Takes a 7x21x11½ Deep Cabinet—Power Pack Comes Separate

# Tyrman "72"

## Custom-Bilt Shielded Grid

The Tyrman "72" is designed for either battery, or complete A-C socket operation using A-C Shield Grid Tubes. This feature is desirable for more than one reason. Even, if assembled as battery operated it is a simple matter to later convert the set readily to COMPLETE A-C SOCKET operation, merely by following a different wiring scheme and changing socket from A-C tubes. Power Pack is especially designed for Tyrman "72," mounted with other units on same platform. Tyrman Audio gives full rich tonal quality. Uses 171 power tube and when assembled for A-C socket operation. Front panel, metal, lithographed, walnut finish, equipped with Tyrman Worm Drive Drum. Only three control knobs. The Duo System of amplification as adapted to the Tyrman "72" assures Selectivity, Sensitivity and Stability, comparable only to other Tyrman Shield Grid Receivers. Without oscillation, brings in distant stations with full local volume. Quickly and simply assembled.



No. 98467 (Battery operated all parts factory packed).....List \$98.50. Each \$59.10 Less 2% or **\$57.92** Net

Uses the following tubes: 3 CX322, 1 CX371A, 3 CX301A.....List \$153.50. Each \$92.50 Less 2% or **\$90.65** Net

No. 98468 Complete Electric A.C. socket operation with power supply, factory packed.....List \$153.50. Each \$92.50 Less 2% or **\$90.65** Net

Uses the following tubes: 3 A.C. Shield Grid tubes, 3 C327, 1 CX371A, and 1 CX380.....List \$10.00. Each \$6.00 Less 2% or **\$5.88** Net

No. 98466 Complete set of 4 short wave Coils.....List \$10.00. Each \$6.00 Less 2% or **\$5.88** Net

Tyrman "72" takes a 7x21x11½ Deep Cabinet—Power Pack Comes Separate



This receiver is designed for battery or eliminator operation as an outcome of the laboratory experience gathered with its famous precedent, the Tyrman "70." The experiments were made with the ultimate goal to present a receiver matching the super efficiency of the Tyrman "70," with only six tubes and thus obtain further economy in operation. Never before has any six tube receiver approached the possibilities of this set. With one double purpose tube the sensitivity of the receiver is many times greater than its designers originally expected and all this was achieved in a physical size of only 7x18".

# Tyrman "60"

## Custom-Bilt Shielded Grid

Efficient use is made of the enormous amplification of the shielded grid tubes and also their stability. The circuit is of the impedance coupled type. Tyrman Audio Transformers, famous in the past for their super quality of tone, are incorporated. Tyrman one dial vernier drum system makes the operating extremely simple. This is truly a receiver for the home and within the pocket book of any one. Tyrman ingenuity has made it possible to combine quality, first class performance and elegant layout with the lowest price a super-heterodyne kit was ever offered to the public.

No. 98469 Complete with parts. Less Tubes, List **\$40<sup>87</sup>**  
\$69.50. Each \$41.70 Less 2% or.....

Uses the following tubes: 3 CX322, 2 CX301A, 1 CX371A. Cabinet size, 7"x18"x9½" deep.



**ELECTRAD ROYALTY**  
Non-Inductive  
HIGH RESISTANCES

The accepted standard for volume control. Non-inductive, non-hydroscopic. Unusually high current carrying capacity. Wire wound on genuine bakelite base. Resistance remains constant at every point.



No.	Type	List	Each		
97000	"A" Variable Gridleak 1/10-7 meg.	\$1.50			
<b>VARIABLE HIGH RESISTANCE</b>					
97001	"B" 1500-100,000 ohms	<b>90c</b>	}		
97002	"C" 500-50,000 ohms				
97004	"F" 0-2000 ohms				
97005	"K" 0-5000 ohms				
97006	"G" 0-10,000 ohms				
97007	"H" 0-25,000 ohms				
97008	"J" 0-200,000 ohms				
97009	"L" 0-500,000 ohms				
97010	"E" Compensator, 500,000 Potentiometer.			List \$2.00	Each \$1.20

**PHASATROL ELECTRAD**

PHASATROLS are particularly recommended for a simple and effective way of balancing out and controlling radio frequency oscillation. Easily installed in new or old sets. Suited for any circuit having radio frequency amplification—whether tuned, untuned or reflex. One PHASATROL is used for each stage. A true balancing device. Absolutely eliminates any tendency to R. F. oscillation or distortion.

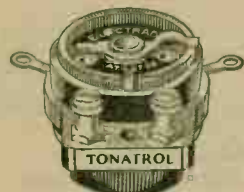


No.	List	Each
94549	\$2.75	\$1.65

**TONATROL Electrad**

Tonatrols are variable volume controls for radio sets. Especially designed with the requirements of volume and sensitivity control of different circuits in mind.

For A. C. Sets



No.	Type	List	Each
96381	R R F Secondary	\$1.50	\$0.90
96382	S R F Primary	1.50	.90
96388	P A F Secondary	1.50	.90
96389	A Ant Potentiometer	2.00	1.20

**Electrad TRUVOLT**

The Electrad TRUVOLT is a voltage control for "B" eliminators. A variable power resistor. No iron to rust, no zinc to oxidize. Resistance element is copper-nickel alloy. Smooth, quiet operation. Made of heat-proof material. Wonderfully efficient. All rated at 25 watt.



No.	Resistance In Ohms	No.	Resistance In Ohms
98100	200	98106	3000
98101	300	98384	5000
98102	400	98385	10000
98103	500	98107	20000
98104	750	96386	25000
98105	1000	96387	50000
96383	2000		
List.....	\$3.50	Each.....	\$2.10

**TRUVOLT WIRE GRID RESISTANCE**



Completely covered by varnished cambric, can be bent in any desired shape. Furnished in the following sizes:

No.	Ohm	No.	Ohm	Each
98500	75	98508	500	<b>15c</b>
98501	100	98509	900	
98502	200	98510	1000	
98503	300			
98504	400			<b>24c</b>
98505	500	98511	2000	
98506	600	98512	3000	
98507	700	98513	5000	

**ELECTRAD TRUVOLT DIVIDER**

The Truvolt Divider will deliver proper plate and grid voltage to any receiver of present or future design, by simply connecting to the output terminal of the B Eliminator. B voltage taps may be varied at least 15 volts above or below the mean voltage. A resistance unit never before attained.



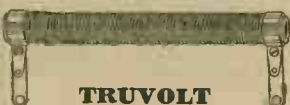
No. 98118.....	List \$12.50	Each \$7.50
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**TYPE V CENTER TAP RESISTORS**

Designed for use across filament of A C tubes. Electrical center for grid return leads provided by the center tap. Very accurate and furnished in the following sizes.

No.	Total Resistance	List	Each
98110	10 Ohms	<b>\$0.75</b>	<b>45c</b>
98111	20 Ohms		
98112	30 Ohms		
98113	50 Ohms		
98114	80 Ohms		
98115	100 Ohms		
98116	150 Ohms		
98117	200 Ohms		



**TRUVOLT WIRE FIXED RESISTORS**

25 Watt—2" Long

7 1/2 Watt—6" Long

No.	Resistance in Ohms	Each	No.	Resistance in Ohms	Each
B2	200	<b>51c</b>	D2	200	<b>\$1.11</b>
B3	500		D3	300	
B4	400		D4	400	
B5	500		D5	500	
B7.5	750		D7.5	750	
B8	800		D8	800	
B10	1000		D10	1000	
B15	1500		D15	1500	
B20	2000		D20	2000	
B30	3000		D30	2000	
B40	4000	D40	4000	<b>EACH</b>	
B50	5000	D50	5000		
B60	6000	D70	7000		\$1.17
B75	7500	D80	8000		1.20
B80	8000	D100	10000		1.35
B100	10000	D200	20000		1.59
B150	15000	D500	50000		1.65
B200	20000	D800	80000		1.74
B300	30000	D1000	100000		1.80
B500	50000				

**CLAROSTAT UNIVERSAL RESISTOR**



A resistor that is specified in the majority of the new power packs, "B" eliminators and for purposes of volume control. Sturdily built, carries 20 watts indefinitely. Very even, velvety control. One hole mounting. Guaranteed to give complete satisfaction. Minimum resistance 200 ohms, maximum 5,000,000 ohms. No. 93474 List, \$2.25 **\$1.35** Each.....

**Power Type Clarostat**

Will carry 40 watts, safely. Universal range 200-100,000 ohm. Has many uses, permits fine adjustment. No. 93497 List, \$3.50 **Each, \$2.10**

**TABLE TYPE CLAROSTAT**

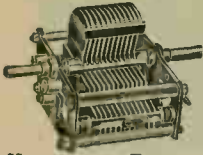
A convenient tone control beautifully finished in bronze and nickel with bakelite knob. Complete with double cord and handy connector.

No. 97274.....	List \$2.50	Each \$1.50
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**Amsco Condensers**

AMSCO is a line of condensers that is specified in a great many circuits. They have been tested and approved by the best radio authorities.

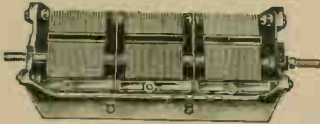
**AMSCO DUOSPACE CONDENSERS**



Designed to meet the stringent requirements of modern receivers. Spacing between the rotor and stator plates twenty thousandths of an inch greater than that of standard types. Compensators are provided on all gang capacitors. All Duo-Space Condensers may be mounted for drum or dial control. Furnished in the following sizes:

No.	Type	Capacity	List	Each
98260	Single	.00014	\$4.00	\$2.40
98261	Single	.00025	4.25	2.55
98262	Single	.00035	4.50	2.70
98263	Single	.0005	5.50	3.30
98264	Double	.00025	8.00	4.80
98265	Double	.00035	9.00	5.40
98266	Double	.0005	11.00	6.60

**Triple and Quadruple Unit**



Truly the finest condensers made. Used in all the popular kits such as Silver-Marshall, Aero, etc.

No. 98267	Triple	.0035	List \$13.50	Each \$8.10
No. 98268	Quadruple	.0035	List 18.00	Each 10.80

**AMSCO STRAIGHT FREQUENCY LINE**



So designed that the resonant or tuned frequency of the circuit is raised or lowered the same amount for each dial division. No crowding. Rotor shaft of chromium nickel needle steel. Highly efficient.

No.	Type	Capacity	List	Each
96328	Single	.00035	\$3.00	\$1.80
96329	Single	.0005	3.50	2.10
96330	Double	.00035	6.00	3.60
96331	Double	.0005	7.00	4.20

**SPECIAL SHORT WAVE CONDENSER**

96363	Single	.00014	3.50	2.10
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**STRAIGHT TUNING LINE**

A modified frequency line which allocates stations on the dial in equal wave length divisions. Perfect bearings. Single hole mounting. Triple type make single control practical. Has variable compensating condenser for balancing.

No.	Type	Capacity	List	Each
96320	Single	.00025	\$ 3.00	\$1.80
96321	Single	.00035	3.25	1.95
96322	Single	.0005	3.75	2.25
96324	Double	.00035	6.50	3.90
96325	Double	.0005	7.50	4.50
96326	Triple	.00035	9.75	5.95
96327	Triple	.0005	11.25	6.75

**AMSCO UNI-COUPLE**



A simple coupling unit for mechanically linking two or more variable condensers. Insulated collars.

No. 98269	List 35c	Each 21c
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**AMSCO TOM THUMB CONDENSERS**



A midjet condenser incorporating all the refinements generally associated only with the larger units. Employed as a neutralizing condenser, also has many other uses. Low minimum capacity. Single hole mount.

No.	Capacity	Plates	List	Each
98270	.00001	3	\$0.90	\$0.54
98271	.000025	7	1.00	.60
98272	.00005	13	1.25	.75
98273	.0001	23	1.50	.90
98274	.00014	35	2.00	1.20

**PUSH-PULL SWITCH**

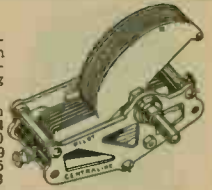


Outside part polished nickel finish. Fits any thickness panel.

No. 92163	Each	11c
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**PILOT CONDENSERS**

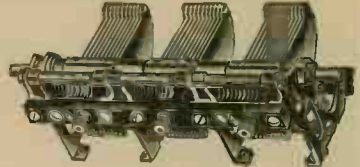
Last word in condenser design. Removable shaft, single hole mounting on both sides, and sub panel mounting. Separate condensers can be ganged by using coupler No. 12.



No.	Plates	Cap.	List	Each
95057	8	.00017	\$1.90	\$1.14
95058	13	.0002	2.00	1.20
95059	17	.00025	2.15	1.29
95060	23	.0005	2.25	1.35
98475	No. 12 Cond. coupler		.45	.18

**PILOT 2 AND 3 GANG**

Easy to mount—rigid construction. This condenser should be used in all high grade receivers.



No.	Type	Cap.	List	Each
98476	2 Gang	.00035	\$4.00	\$2.40
98471	3 Gang	.00035	6.00	3.60
98539	1 Gang	.00035	2.15	1.29

**ALL AMERICAN AUDIO TRANSFORMERS RAULAND LYRIC**



Designed for those desiring the utmost in natural reproduction of sound. Uniformly good reproduction is obtained over entire musical range. Installation of these transformers in any radio receiver will make a decisive step toward perfect reproduction.

No. 98540	List \$9.00	Each \$5.40
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**ALL AMERICAN STANDARD AUDIOS (New Style)**



These new type Standard Audio transformers offer all the mechanical and electrical advantages of years of manufacturing experience. Heavy steel shell shields transformer completely. Entire unit sealed against climatic conditions preventing electrolysis and assuring long life.

No. 91511	Radio 3 to 1.
No. 91521	Radio 5 to 1.
List	\$4.50 Each \$2.70.
Less 2% or	

**\$2.65**  
NET

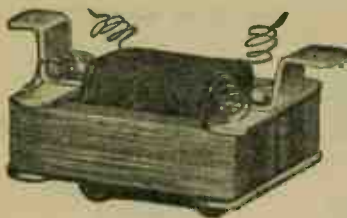
**NEW PILOT BAKELITE SHELL TRANSFORMERS**



Very latest development in audio transformers and chokes. Large coil windings and heavy laminations enclosed in a beautiful bakelite shell. Absolutely moisture-proof. Especially designed for the high voltages used with modern power tubes. All units uniform in appearance and size.

No.	Type	List	Each
98490	2 to 1 Audio	\$2.75	\$1.65
98491	3 1/2 to 1 Audio	2.75	1.65
98492	1 to 1 Output Trans.	2.50	1.50
98493	Output Filter	3.25	1.95
98494	B Eliminator Choke	2.75	1.65
98495	Input Push-Pull	3.00	1.80
98496	Output Push-Pull	3.00	1.80





**JEFFERSON**

No. 370  
Makes ideal replacement job. Can be used for practically any set. Unmounted, but has 2 brackets for 3" center. 2 1/2" x 2 1/2" x 1 1/2". Bracket on 3" center.

No. 96941  
List .....\$2.25  
Each .....**\$1.35**  
10 Lots..... **1.20**



**Jefferson Transformers**  
**CONCERTONE**



This new audio gives equal amplification from 30 to 10,000 cycles. All vocal and instrumental notes are reproduced with natural tone. Especially adapted for use with new power tubes. Sealed in metal case.

List ..... Each  
No. 93495.....\$6.00 **\$3.60**



**"STAR" SEALED AUDIO**

Come sealed in a case to prevent open circuits from moisture. Low priced yet a high quality product.

No.	Ratio	List	Each
93252	3 to 1	\$2.75	<b>\$1.65</b>
93253	5 to 1	2.75	

**TYRMAN AUDIO COUPLERS**

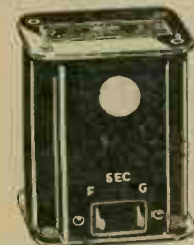
Tyrman Audio Couplers are your assurance of faithful reproduction. Never has the full value of orchestra reproduction been more appreciated than in receivers which have adapted Tyrman Audio Couplers. Specially designed for invisible sub panel wiring.

No.	Type	List	Each
98498	Audio Coupler.....	\$8.00	\$4.80
98499	Audio Output Coupler.	8.00	4.80



**SANGAMO TRANSFORMERS**

Sangamo Transformers are backed by 30 years experience in precision manufacturing. A line of transformers which MATCH the new tubes and speakers. Transformers designated by color spot as shown above.



No.	Type	List	Each
98514	A Audio Yellow Spot.....	\$10.00	\$6.00
98515	B Push Pull Input Blue Spot....	12.00	7.20
98516	CX-171 Push Pull Output Green Spot	12.00	7.20
98517	D-210 Push Pull Output Blue Spot	12.00	7.20
98518	F Output Impedance Orange Spot.....	15.00	3.00

**SANGAMO "X" LINE**

Perfect audio transformers at popular prices. Designed to reproduce the low and high notes with remarkable trueness.

No.	Type	List	Each
98519	AX Audio .....	\$6.00	\$3.60
98520	BX Push Pull Input.....	6.50	3.90
98521	CX-171 Push Pull Output.....	6.50	3.90
98522	DX 210 Push Pull Output.....	6.50	3.90
98523	GX 210 Output for Dynamic.....	6.50	3.90
98524	HX 171 Output for Dynamic.....	6.50	3.90
98525	E Output Impedance.....	5.00	3.00
98526	F Plate Impedance .....	5.00	3.00

**PREMIER Quality Radio Parts**

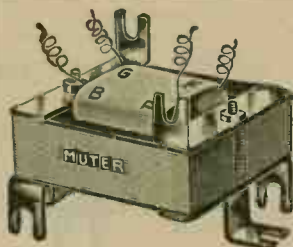


**PREMIER HEGEHOG**

This famous little transformer is about the size of an English walnut. 100 per cent shielded. Mounts anywhere, saves space in assembly.

No.	Ratio	List	Each	10 Lots
92045	1 to 3.....	\$3.50	\$2.10	\$1.89
92046	1 to 4.....	3.50	2.10	1.89
92047	1 to 5.....	3.50	2.10	1.89
92048	1 to 10.....	4.50	2.70	2.43

**MUTER REPLACEMENT TRANSFORMER**

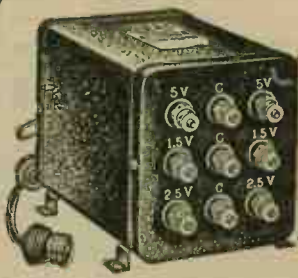


A compact dependable universal replacement transformer designed especially for service work but also excellent for new circuits. Size 2 1/4 x 2 1/4 x 1 1/2", with brackets that permit mounting in almost any position, either above or below sub panel, thus making it adaptable for use with practically all sets. High grade silicon steel core giving full amplification without distortion. Universal Ratio.

No. 98192  
List \$2.00 Each **\$1.20**  
Less 2% or.....

**\$1.18**  
Net

**NEW KARAS A. C. FORMER FILAMENT SUPPLY**



Type 12  
Supplies filament potential or 12 tubes, 8 1 1/2-volt for 328, 2 2 1/2-volt for 327 and 2 5-volt for 371.

No. 97185  
List \$8.75 Each. **\$5.25**

Type 13  
Supplies filament potential for 12 tubes, 8 type 327, 2 type 326, 2 type 371 or 210.  
No. 97186  
List \$10.50 Each. **\$8.10**

**MUTER SUPREME A F TRANSFORMER**



Supreme in range and tone—specially designed vacuum impregnated coil assembled in the highest grade silicon steel cone. Doubly sealed against atmospheric conditions with moisture proof compound.

No.	Ratio	List	Each
98176	First Stage .....	\$7.00	\$4.20
98177	Second Stage .....	7.00	4.20

**MUTER AUDIO FREQUENCY TRANSFORMER**



A popular priced audio transformer of exceptional good quality. Highest grade silicon steel core. Black enamel and nicked finish.

No.	Ratio	List	Each	10 Lots
93447	3 1/2 to 1.....	\$2.00	\$1.20	\$1.10
93448	6 to 1.....	2.25	1.35	1.22

**MUTER TONE FILTER AND CLARIFIER**



The Muter Clarifier will improve the tone quality of your speaker. Constructed with a special dual choke coil and large capacity filter condenser. Easily attached without disturbing the set. Also protects speaker from high "B" voltage.

No. 96098  
List \$5.00  
Each \$3.00



**NA-ALD**

**UNIVERSAL SPRING SOCKET**

Tube prongs are gripped firmly. Supplied with or without spring suspension.

No. 93361	Without Spring Cushion.....	List \$0.35	Each \$0.22
93362	With Spring Cushion.....	.65	.39

**NA-ALD ADAPTERS**

The line of Na-ald Adapters is complete. It permits the interchange of new tubes without changing sockets.



No. 93354

No.	For Tube	Into Socket	List	Each
93354	CX220 or CX220	Standard	\$0.35	\$0.22
93355	Any CX	WD11	.75	.40
93356	Any CX	C299	1.00	.65

**NA-ALD 945 AND 954 ADAPTERS**

Test Adapters for converting from five to four and four to five prong tubes. Used in A. C. and D. C. testers.

No.	From Tube	Into Socket	List	Each
98478	Four Prong	Five Prong	\$1.00	\$0.60
98479	Five Prong	Four Prong	1.00	.60



**DE JUR SOCKETS**

Made of Bakelite. Fits into small space and heavily nickel-plated phosphor springs. A real value.

No. 96311	List \$0.25	Each 15c
10 Lots.....		<b>14c</b>



**DE JUR CUSHION SOCKETS**

Same as above but equipped with sponge rubber cushion.

No. 96312	List \$0.35	Each \$0.22
10 Lots.....		<b>21c</b>

**PILOT SOCKETS**

Genuine bakelite for sub panel use. Will take UV, UX, or UY tubes.

No.	Type	List	Each
96497	214 4 Prong	\$0.30	\$0.12
98258	215 5 Prong	.25	.15



Genuine bakelite for use on bakelite or metal panel. Wiring can be done above or below panel. Will take UV, UX or UY tubes.

No.	Type	List	Each
96498	216 4 Prong	\$0.35	\$0.21
98259	217 5 Prong	.40	.24

**SILVER-MARSHALL CX SOCKET**

Made of moulded bakelite with the best grade of phosphor bronze springs. The Silver-Marshall Socket has a single mounting screw. Plainly marked and of the usual high S-M quality.

No. 93368	List \$0.50	Each.....	<b>30c</b>
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**NEW 5-PRONG SOCKET**

Type 512

For new HC Detector tube. No. 96209...List \$0.50 Each \$0.30



**AMSCO SOCKETS**

**FLOATING SOCKET**

A rugged socket, yet delicately balanced, positively isolated from mechanical shock. Eliminates microphonics. A real super-efficient de luxe socket that will result in improved reception.

No. 96361.....	List \$0.65	Each \$0.39
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**AMSCO UNIVERSAL SOCKET**

A socket of real merit. Prongs are of best grade phosphor bronze and provide bulldog grip.

No. 96362	List \$0.35.	Each.....	<b>21c</b>
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**NATIONAL VELVET VERNIER DRUM DIAL**

Type F

The National Drum Dial is designed to add beauty to the receiver. Easily attached to the 1/4" shaft of any condenser. A 6 volt lamp can be furnished to brilliantly light up the dial. Beautiful mottled dull silver finish. Comes with black or walnut finished knob.

No.	Knob	List	Each
97355	Black .....	\$4.00	\$2.40
97356	Walnut .....	4.00	2.40



**BENJAMIN Push Type Socket**

This new socket embodies all the shock-absorbing features of the Clear-Tone and is designed for the new CX and UX tubes. No. 2730 and No. 2721 are without lower mounting base and intended for direct panel mounting. Drilling template and four machine screws included.

No.	List	Each
92720 With Mounting Base.....	\$0.75	\$0.45
92730 Without Mounting Base.....	.50	.30
(for 3/16" panel).....	.50	.30



No.	Type	List	Each
96126	With Base .....	9036 \$1.00	\$0.60
96127	Sub-Panel Mounting .....	9037 .75	.45

**NATIONAL TYPE E VERNIER DIAL**

This dial embodies a mechanism similar to our Type B, but is designed for those who desire to drive the condenser in a plane perpendicular to front panel.

No.	Knob	List	Each
97357	Black .....	\$2.75	\$1.65
97358	Walnut .....	2.75	1.65
97360	Illuminator for B F Dial .....		.30



**TYRMAN SHIELDED SOCKET**

Automatically grounded—Shields are drawn of heavy aluminum stock. All insulating parts are molded of genuine bakelite. Tyrman shielded sockets give each tube the chance of proper functioning in any hookup.

No. 96365	List \$1.25.	Each.....	<b>75c</b>
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**DIALS TYPE C**

Fits any standard condenser with a 1/4 in. shaft. Have changeable ratio from 6-1 to 20-1. Type C is the illuminated dial which lights up the dial. Complete with bulb.

No.	List	Each
97050	Clockwise (200-0).....	\$3.00 \$1.80
97051	Counter Cl. (0-200) .....	3.00 1.80
97052	Dual Range (0-100-0) .....	3.00 1.80





**Sterling R250 Power Amplifier**

The Sterling R 250 Power Amplifier is designed to operate on either A. C. or D. C. sets. It is equipped with its own rectifier and uses the 280 or 281 tube in addition to the 250 tube. Very simple to install. Plug into the electric light socket and also plug the amplifier into the last audio frequency stage of your radio receiver. Brings your present set up to date. Gives it the power to operate a dynamic speaker and obtain those low, full, round notes that cannot be obtained from either the 171 or 172 tube. Amplifier operates from 110 volt A. C. 60 cycle current. Priced less tubes.



No. 98554 List \$38.00.  
Each \$22.80.  
Less 2% or.....

**\$22.34**  
Net

**SAMSON**

**PHONOGRAPH AMPLIFIER**



Built of Samson units and all wired up by factory and sealed. Samson guarantee applies on all units. Amplifier will work satisfactorily out of detector tube of radio set and by means of telephone type D. T. D. P. switch can be switched from radio set to phonograph pick-up. Amplifier will handle up to 20 reproducers for large hall. Volume control enables cutting down to mere whisper. Complete A. C. operation.

**TYPE PAM-16**

Uses 1 C327, 2 CX310, gives undistorted power output of approximately 7 watts.  
No. 97240.....List \$125.00 Each...\$75.00

**TYPE PAM-17**

Same as above but is provided with 2 extra binding posts to take care of current necessary for field coil of dynamic type speaker.  
No. 97241.....List \$125.00 Each...\$75.00

**YAXLEY**  
APPROVED RADIO PRODUCTS

**Automatic Power Control**

For switching "B" Eliminator and Trickle Charger and makes your receiver a power operated set. Pure silver contacts with a wiping action assure perfect electrical connections. Thoroughly dependable.  
No. 96091 Series Type No. 444. Voltage drop less than .2 volts.  
List \$5.00 Each \$3.00  
No. 96092 Multiple Type No. 445. No voltage drop, best for all sets.  
List \$6.00 Each \$3.60

**CARTER No. 322 TUBE SHIELD**

For use with the new type 222 shield grid tube. Shield completely covers the tube, including the base. The top of tube shield is removable to facilitate placing the connector on the grid terminal of the tube. The wire leading from the connector is shielded. Carter Adapter Ring is used in connection with sockets, such as Benjamin, to hold Tube Shield in place.



Connector

No.	Description	List	Each
97400	No. 322 Tube Shield.....	\$1.50	\$0.90
97401	No. 332 Adapter Ring.....	.35	.21
97402	No. 342 Connector only.....	.25	.15
97403	No. 352 Connector with Shield Wire.....	.50	.30

**ACME PARVOLT CONDENSERS**

Acme condensers are wound from paper and foils of the finest quality, specially treated for the purpose and housed in compact metal containers.



**BY PASS CONDENSERS**

No.	M. F. D.	Series	List	Each
98515	0.1	200	\$0.85	\$0.51
98516	0.25	200	.95	.67
98617	0.5	200	1.00	.70
98618	1.0	200	1.25	.75
98619	2.0	200	2.25	1.35

**FILTER CONDENSERS**



No.	M. F. D.	Series	List	Each
98620	1	200	\$1.25	\$0.75
98621	2	200	2.25	1.35
98622	4	200	4.00	2.40
98623	1/2	400	2.00	1.20
98624	1	400	2.50	1.50
98625	2	400	3.50	2.10
98626	4	400	6.00	3.60

**ACME PARVOLT HOUSED CONDENSERS**

For Power Supply and Power Amplifiers

Specially constructed to save space, reduce number of connections, save labor and time in assembly.

No.	Type	List	Each
98627	R171	\$14.00	\$ 8.40
98628	R210	17.50	10.50
98629	R250	17.50	10.50

**PILOT KILOGRAD**

A new and improved vernier dial (ratio 10 to 1), which indicates both degrees and kilocycles. 4 inch black bakelite dial.



No. 93499  
List...\$1.00 Each... **60c**



**PILOT ART DIAL**

A De Luxe Model, that will dress up any set. Will easily carry gang condensers. Can be used clock or counter-clockwise.  
No. 96499 Each.....52c

**PILOT DRUM DIALS**



The finest knob controlled drum dial ever offered. Smooth, velvety and positive in action. The illuminated scale is of polished bakelite very attractive in appearance. Control knob walnut bakelite. Adapted to most all popular makes of condensers.

No. 98534	Single Drum .....	List \$3.25	Each \$1.95
No. 98535	Double Drum .....	List 5.75	Each 3.45

**TYRMAN ILLUMINATED DRUM DIAL**

Tyrman Illuminated Drum Dials Distinctive and individual in appearance. Worm gear permits velvet-smooth, positive operation. Fits all condensers—rigid construction. Compact in design giving a strikingly beautiful effect. Calibration strip is metal with black numerals on gold bronze. Easy to read.



No. 98532	Single Drum .....	List \$ 8.00	Each \$4.80
No. 98533	Double Drum .....	List 12.00	Each 7.20



**POTTER BY PASS CONDENSER**

Potter Condensers are well made, the tissues being of all linen or flax stock. Hermetically sealed. Full rated capacity. 200 volt D. C. tested.

No.	Cap. MFD.	List	Each
96210	.1	60c	36c
96211	.25	70c	42c
96212	.5	75c	45c
96213	1.	90c	54c
96214	2.	\$1.50	90c



**POTTER FILTER CONDENSERS**

Medium Duty 750 Volt D. C. Tested, 400 Volt D. C. Working Voltage

No.	Cap. MFD.	List	Each
96215	.1	\$0.85	\$0.51
96216	.25	1.00	.60
96217	.5	1.25	.75
96218	1.	1.50	.90
96219	2.	3.00	1.80
96220	3.	4.50	2.70
96221	4.	6.00	3.60

**HEAVY DUTY FILTER CONDENSERS**

For Amateur Transmitter Filters—Blocking DC current of 1000 volts or over.

No.	Cap.	Working Voltage	List	Each
96234	.1	1000	\$1.25	\$0.75
96235	.25	1000	1.50	0.90
96236	.5	1000	1.75	1.05
96237	1.	1000	2.50	1.50
96238	2.	1000	5.00	3.00



**SPECIAL A-B-C ELIMINATOR FILTERS**

Condenser blocks made expressly for the present day tubes such as CX371, 310, 350, etc. Blocks not listed can be furnished upon request.

No.	Type	Tapped Capacity	List	Each
96226	R171	2, 2, 8, 1, 1/2 MFD.	\$12.75	\$7.65
96227	R210	2, 2, 2, 1, 1	12.00	7.20
98130	T2900	Single 250	20.00	12.00
98131	T2950	Push Pull 250	22.50	13.50

**MUTER RESISTANCE AMPLIFIER**



Muter Resistance Coupled Amplifiers are in strong demand because of their dependable quality. Fully equipped with heavy duty resistors and condensers.

completely wired and ready for installation. Specially designed for CX 340 tubes with provision for proper C Batteries and power tubes.  
No. 98190 3 Stages ..... List \$8.00 Each \$4.80



**Muter Interference Eliminator and Static Reducer**

Designed to meet the popular demand for an eliminator which secures results. Greatly assists in tuning out near by powerful stations. Easily and quickly attached to any receiving set without use of tools.

No. 98191 Complete with Instructions..... List \$2.50 Each \$1.50

**Tobe "A" Filter and Trans-a-former**

The Trans-a-former fits neatly on top of the A Filter and the two units combined make a complete A Eliminator. Trans-a-former in itself makes a good 2 1/2 amp charger, while the A Filter is ideal for replacing acid jars in such chargers as Philco, Balkitt, Westinghouse, etc. Both units sold separately.

No.	List	Each
No. 97497 A Filter	\$18.00	\$10.80
No. 96831 Trans-a-Former	15.00	9.00



**TINYTOBE CONDENSERS**

The established quality of TINYTOBE Condensers is recognized by set builders and manufacturers. TINYTOBE condensers are made for constant operating voltages up to 500 volts D. C. Extremely simple to install. Light and of small size.

No.	Cap.	List	Each
94856	.0001	\$0.35	\$0.21
94857	.00025		
94858	.0005		
94859	.0015	\$0.40	\$0.24
94860	.001		
94861	.002		
94862	.003		
94863	.004	\$0.45	\$0.27
94864	.005		
94865	.006		
94866	.0075		
94867	.01		
94868	.02	\$0.55	\$0.33
		.60	.36

SPECIAL TYPE .00007 Each 24c



**BYPASS AND FILTER CONDENSERS**



TOBE in their silvered metal cases, are standard for all bypass and filter circuit use.

Noiseless and unchangeable. Are used and recommended for all circuits and Raytheon "B" hookups. The 4.0 mfd. is especially suitable for use in output devices required with CX371 and similar power tubes.

No.	Tobe Type	Sizes	List	Each
94850	310	.1 mfg.	\$0.70	\$0.42
94851	325	.25	.75	.45
94852	350 Molded	.5	.90	.54
94853	301 Molded	1.0	1.25	.75
94854	302	2.0	1.75	1.05
94855	304	4.0	3.50	2.10
96471	311 Buffer		1.50	.90



**400 LINE CONDENSERS**

For use with Raytheon BH Tube and all other B supplies furnishing 180-250 volts. "Short Path" type giving greatest efficiency in operation.

No.	Tobe Type	Capacity	List	Each
96472	401	1 Mfd.	\$2.00	\$1.20
96473	402	2 Mfd.	2.75	1.65
96474	404	4 Mfd.	4.50	2.70
96475	411	2 x 0.1 Buffer	2.00	1.20

**TOBE 600 LINE POWER PACK CONDENSERS**

Extremely rugged, will operate continuously on D. C. voltages from 600 to 1,000 volts. Containers finished in the familiar TOBE silvered finish.

No.	Tobe Type	Capacity	List	Each
94844	650	0.5 Mfd.	\$2.00	\$1.20
94845	601	1.0 Mfd.	2.50	1.50
94846	602	2.0 Mfd.	3.50	2.10
94847	604	4.0 Mfd.	6.00	3.60

**Tobe 1300 Line Surgproof Condensers**

A new type condenser guaranteed to operate at 1300 volts D. C. No better condenser available at any price for this work. For use with two CX310 Tubes in push, pull or the new CX350 power tubes.

No.	Capacity	List	Each
No. 98527	2 Mfd.	\$5.00	\$3.00
No. 98528	4 Mfd.	\$9.00	\$5.40

**SPECIAL TOBE B BLOCKS**

Compact, cased groups of Condensers, with conveniently arranged terminals. Tobe "B" Blocks are specified for the following purposes.

No.	Model	List	Each
94848	R-171	\$15.00	\$9.00
94849	R-210	18.00	10.80
97498	R-250	26.00	15.60

**Tobe Interference Filter**

Reduces radio interference from oil burners, refrigerators, sewing machines, motors, etc. Provided with 5 leads.

No.	Type	List	Each
96480	1	\$10.00	\$6.00
97012	2 (Up to 5 H. P.)	15.00	9.00





**DUBILIER**

**By-Pass Condensers**

Type 907-908

These are Paper dielectric condensers designed for "By-Pass" work. Have special mounting feet. Solder lug terminals are provided. Occupies small space.



Type 907 160 Volts				Type 908 400 Volts			
No.	Cap.	List	Each	No.	Cap.	List	Each
92015	0.1 Mfd.	\$0.85	\$0.51	96914	0.1 Mfd.	\$1.00	\$0.60
92016	0.25 Mfd.	.95	.57	96915	0.25 Mfd.	1.10	.66
92017	0.5 Mfd.	1.00	.60	96916	0.5 Mfd.	1.25	.75
92018	1.0 Mfd.	1.25	.75	96917	1.0 Mfd.	2.00	1.20
92019	2.0 Mfd.	2.00	1.20				

**DUBILIER GRID LEAK RESISTOR**



Dubilier Metaleak is an accurate and noiseless resistance. Glass is coated with extremely thin layer of specially prepared metal.

No.	Resistance	List	Each
96918	25,000 ohm		
96919	50,000 ohm		
96920	75,000 ohm		.65c
96921	100,000 ohm		39c
93020	1/2 Megohm	List 40c	
93021	3/4 Megohm		
93022	1 Megohm	Each 24c	
93023	1 1/2 Megohm		
93024	2 Megohm		
93025	2 1/2 Megohm		
93026	3 Megohm		
93027	4 Megohm		
93028	5 Megohm		



**SMALL MICADON CONDENSERS**

Type	No.	Capacity	List	Each
Type 601	91820	.0001		
	91821	.00025	\$0.20	12c
	91822	.0005		
	91823	.001		
	91824	.002	.25	.15
	91825	.0025	.30	.18
	91841	.003	.30	.18
	91842	.004	.30	.18
	91843	.005	.40	.24
	91844	.006	.40	.24
Type 602	93012	.15		.60
	93013	.02		.60



**With Grid Leak Mounting**

No.	Capacity	List	Each
91836	.0001	List 25c	15c
91837	.00025		

**Dubilier Interference Eliminators**

Designed to completely eliminate industrial interference and noise from radio receiving sets. Made in three types of Interference Eliminators.

No.	Type	List	Each
98136	No. 1	\$5.00	\$3.00
98137	No. 2	7.50	4.50
98138	No. 3	15.00	9.00

**DUBILIER METALLIZED RESISTORS**

A high-resistance element scientifically perfected to resist all moisture and atmospheric changes. Noiseless. A grid-resistor of permanent and accurate resistance value.

No.	Range	List	Each
94874	100,000 ohms	75c	45c
94875	.25 megohm		
94876	.5 megohm	\$0.50	30c
94877	.75 megohm		
94878	1 megohm		
94879	2 megohm		
94880	3 megohm		
94881	4 megohm		
94882	5 megohm		
94869	8 megohm		
94870	10 megohm		

**AMSCO METALLIZED RESISTORS**



AmSCO Resistors and Grid Gates are permanent and accurate. Type 115, 2 watt.

No.	Ohms	Each	No.	Meg.	Each
96340	2500	Each, 45c	96347	1/2	Each, 30c
96341	5000				
96342	8000	Each, 30c	96349	1	Each, 30c
96343	10000				
96344	12000		96350	2	
96345	50000		96351	3	
96346	100000		96352	4	
			96353	5	



**AMSCO Resistor Couplers**

For use in resistance coupled audio amplifiers for Hi Mu Tubes. Furnished without resistors or grid gate.

No. 96360 Type RC 2 List \$1.25 Each 75c  
No. 96364 Type RC 1 List 1.25 Each 75c

**SANGAMO MICA CONDENSERS**

An accurate mica insulated condenser moulded in bakelite. Specified in many kits and are always in demand.



No.	Capacity	No.	Capacity
98350	.00004	98358	.00025
98351	.00005	98359	.0003
98352	.00006	98360	.00035
98353	.00007	98361	.0004
98354	.00008	98362	.0005
98355	.0001	98363	.0006
98356	.00015	98364	.0007
98357	.0002	98365	.0008

List 40c Each **24c** Less 2%

No.	Capacity	List	Each
98366	.001	\$0.50	30c
98367	.0015		
98368	.002		
98369	.0025		
98370	.003	.60	36c
98371	.0035		
98372	.004		
98373	.005		.70
98374	.006		.85
98375	.007		.90
98376	.0075		.95
98377	.008		1.00
98378	.01		1.15

**MUTER GRID LEAK**



A permanent resistance element hermetically sealed in a substantial glass tube. Will fit all standing mountings. Guaranteed accurate.

No.	Ohm	No.	Meg	List
98170	50,000	93427	3	25c
98171	100,000	93428	4	Each 12c
98172	125,000	93429	5	10 Lots
98173	250,000	93430	6	
98174	500,000	93431	7	
93425	1	93432	10	11c
93426	2			

**Muter Bakelite Grid Leak Mounting**

Moulded black bakelite base 2 1/2" long. Center hole for mounting. Nickel plated brass clips.



No.	Type	Each	10 Lots
98175	825	12c	11c

**MUTER GRID LEAKS AND RESISTANCE MOUNTING**

Black bakelite base, 1 1/2" long with 1/8" mounting hole. Nickel plated brass clips with knurled terminals and lock nuts. Well constructed.

No.	Type	Each	10 Lots
93438	For one Grid Leak	10c	9c
93439	For two Grid Leaks	23c	21c



Yaxley Approved Radio Products are made to give reliable and lasting service and are fully guaranteed.



**CABLE CONNECTOR Plug Type**



Complete as illustrated with 5 foot cord and cable markers. Mounting plate can be mounted on base panel by means of bracket or bracket may be removed and plate fastened to sub or back panel. 7 conductor.

No. 96256	Type 660	.....List \$3.00	Each \$1.80
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Type 612 Cable Connector Plug is the same as No. 660 excepting 12 conductors in place of 7, two pair being twisted for A C leads.

No. 98139	Complete	.....List \$5.00	Each \$3.00
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Extra parts may be furnished separately.

No.	Type	Plug and cable only	.....List \$2.25	Each \$1.35
96257	650	Mounting Plate only	..... .75	.45
96258	680	Receptacle Plug	..... 1.00	.60
96259	645	Pin Plug	..... 1.00	.60

**CONVENIENCE OUTLETS**



**Type 135** Yaxley plates fit the standard switch box. These outlets are the proper way of house and apartment installation. Yaxleys are in big demand—stock these items.

**Type 135** is for loud speaker connection. A very popular outlet.

No. 96264	List \$1.00.	Each.....\$0.60
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**Type 136** is for aerial and ground, uses phone tip lugs which are furnished with the plate. No. 14 solid wire can also be used.

No. 96265	List \$1.00.	Each.....\$0.60
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**Type 137** is for battery connections and is provided with 7 conductors.

No. 96262	List \$2.50.	Each.....\$1.50
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**Type 241** is for aerial and ground and A. C. connections.

No. 96254	List \$2.00.	Each.....\$1.20
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The above outlets can also be furnished in bakelite at 15c net extra.

**GANG PLATES**

The above outlets are also furnished in combinations.

Type	List	Each
96266 235	2 Loud speaker connections..... \$2.00	1.20
96267 238	Loud speaker, aerial and ground... 2.00	1.20
96268 239	Aerial, ground and battery conn... 3.50	2.10
96269 350	Loud speaker, aerial, ground and battery connections..... 4.50	2.70

**YAXLEY JUNIOR JACKS**

A small, compact, well built Jack that extends only 1 1/4 inch behind panel. Same characteristics as standard Jacks. For standard radio plug.

No.	Type	List	Each
96270	701 Open Circuit.....	.40c	24c
96271	702 Circuit Closing.....	.55c	33c
96272	7 2A Two Circuit.....	.55c	33c
96273	703 Fil. Control.....	.65c	39c
96274	703C Double Circuit.....	.65c	39c
96275	704 Interstage.....	.75c	45c

**Battery Switch**  
Phosphor bronze springs and pure silver contacts. Quick make and break. Thoroughly dependable.

No. 96295	Complete.	.....List 50c	Each 30c
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**Junior Jack Switches**  
For use in sets where space is at a premium. Bakelite insulation.

No.	List	Each
96290	Battery Switch.....	\$0.70 42c
96291	Two Circuit.....	.85 51c
96292	Double Circuit.....	.55 57c
96293	Five Spring.....	1.10 66c
96294	2 way, 2 circuit.....	1.20 72c

**PUP JACK and PUP PLUG**



Pup Jack is easy to mount on front, sub or rear panels. Ideal for loudspeaker, battery, ground and antenna connections.

No. 96296	PUP JACK.	Per Pair.....15c
No. 96297	PUP PLUG.	Each.....6c



**RHEOSTATS AND POTENTIOMETERS**

The original air-cooled rheostat with a velvet smooth action and fine adjustment. Base is bakelite. Very close adjustment. Single hole mounting. Complete with bakelite knob.

No.	Type	Ohm	No.	Type	Ohm
96278	102K	2	96282	120K	20
96279	103K	3	96283	125K	25
96280	106K	6	96284	130 K	30
96281	110K	10	96285	199K	100

List \$1.35. Each.....81c

**AIR COOLED POTENTIOMETERS**

No. 96286 200 Ohm } List \$1.75. Each.....**\$1.05**  
No. 96297 400 Ohm }

**Junior Rheostats and Potentiometers**  
Junior rheostat or potentiometer to meet the requirement for a small variable resistor. Mount in a single 1/8" hole complete with bakelite knob.



**RHEOSTATS**

No.	Ohm	No.	Ohm
98120	2	98124	25
98121	3	98125	30
98122	6	98126	30
98123	10	98127	100

List, \$0.75. Each.....45c

Special Switches can be obtained to fit any Junior Rheostat. No tools required to attach.

No. 98119	.....List \$0.40	Each \$0.24
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**POTENTIOMETERS**

No.	Ohm	Each	No.	Ohm	Each
98128	200	.....\$0.60	98601	2000	.....\$0.75
98129	400	......75	98602	3000	......75
98600	1000	......75	98603	5000	.....1.05

**INDUCTANCE SWITCHES**



Answer every requirement for a dependable top switch. Perfect contact assurance. Size 1 1/2 in. Complete with Bakelite knob.

No.	Type	List	Each
98604	4 Point	.....\$0.75	\$0.45
98605	7 Point	..... .80	.48
98606	9 Point	..... .90	.54

**PILOT LIGHT BRACKET**

Can be easily attached to any set. Takes one No. 95067—6 volt Mazda lamp. A popular item. Red Jewel.

No. 96277	.....List 50c	Each 30c
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**Cable Markers**



Easily read markers, convenient to attach. Marker hugs the wire and can be drawn through small hole. Each box contains 16 markers.

No. 96298	Per Box of 16.....List 25c
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Each **15c**

**Yaxley Grid Resistances**

Dependable wire wound resistors for the grid line. Mount directly to socket. Furnished in the following sizes:

No.	Ohm	Each	No.	Ohm	Each
98150	100	.....EACH	98156	700	.....EACH
98151	200	..... <b>15c</b>	98157	800	..... <b>21c</b>
98152	300	.....	98158	1000	.....
98153	400	.....	98159	1500	.....
98154	500	.....	98160	2000	.....
98155	600	.....21c	98161	3000	.....

**Yaxley Wire Wound Resistors**

Space wound resistance units true to rating. Provided with convenient screw eye and soldering lug.

<b>RESISTANCE CAPACITY</b>			<b>RESISTANCE CAPACITY</b>		
No.	In Ohms	In Amps	No.	In Ohms	In Amps
801	1	.1	809	9	.4
802	2	.1	810	10	.4
803	3	.75	815	15	.35
804	4	.6	820	20	.3
805	5	.6	830	30	.275
806	6	.6	840	40	.275
807	7	.4	850	50	.150
808	8	.4	860	60	.150

List, \$0.15. Each.....9c

**YAXLEY JACK TIPS**



A new tip jack with distinctive colored caps, red for positive side of loud speaker, black for negative. Cap is of bakelite. Take standard phone tips.

No. 98607	No. 422	Per pair, List 25c
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Each.....**15c**





You can always depend upon Carter Products. They are made right, priced right and properly do all the things they are intended to do.



CARTER MIDGET RHEOSTATS



Smallest made—only 1 1/2" in diameter. Projects back of panel only 1/4". The all metal frame dissipates heat quickly. A very popular seller.

No. 96131	2 Ohm	} List \$0.50 Each \$0.30
No. 93400	3 Ohm	
No. 93404	6 Ohm	
No. 93401	10 Ohm	
No. 93402	20 Ohm	
No. 93403	30 Ohm	
No. 93405	50 Ohm	

New Carter "Hi-Ohm" Volume Control



A non-inductive, wire protected, high resistance volume control. With carbonized resistance element. Complete with Bakelite arrow pointer knob.

No. 93406	.....	500,000	} List, \$2.00 Each \$1.20
No. 93418	.....	200,000	
No. 93419	.....	100,000	
No. 93407	.....	50,000	
No. 93413	.....	25,000	

HEAVY DUTY "MIDGET" RHEOSTATS



Provided with a resistance strip 3/4" wide which affords more radiating surface. Thoroughly reliable. Contact arm of new and unique design with smooth action, Code MW.

No. 96132	Ohm 1 1/2	No. 96135	Ohm 6
96133	3	98201	10
96134	2	96136	20
98200	3	96137	30

List \$0.75  
Each 45c Less 2%

New Carter "Hi-Pot" Potentiometer type with three terminals. Insures accurate and dependable control.

No. 93408	500,000 Ohm	} .....List \$2.25	Each \$1.35
No. 98220	25,000 Ohm		
No. 98221	19,000 Ohm		

CARTER PORTABLE VOLUME CONTROLS



Case of black bakelite highly finished. Made in two types. One for volume control on Radio Set, also ideal for phonograph pick-up combination. The other for use with the new A.C. sets. Works equally well on other type receivers.

No. 98222	Speaker and Pick-up	List \$2.50	Each \$1.50
No. 98223	Aerial and Ground A.C. Sets	..... 2.00	1.20

NEW CARTER WIRE WOUND TAPERED VOLUME CONTROL



Designed especially for use in the new A.C. circuits, to be placed across Aerial and Ground for sensitive volume control. Ideal for circuits where the useful range of adjustment is crowded into a small arc or portion of the knobs rotation. Dissipates 5 Watts.

No. 98202	Ohm 400	} .....List \$1.25	Each \$0.75
98203	750		
98204	1000		
98205	3000		
98206	5000		
98207	6000		
98208	10000	..... 1.50	.90
		..... 1.75	1.05
		..... 2.25	1.35

CARTER TAPERED POTENTIOMETERS

No. 98209	Ohm 400	} .....List \$1.50	Each \$0.90
98210	750		
98211	1000		
98212	3000		
98213	5000		
98214	6000		
98215	10000		
		..... 2.50	1.50

CARTER "IMP" RHEOSTAT



All-metal frame and self cooling. The last word in a high-grade small-frame design. One of the most popular types. Project back of panel less than 3/8" and is only 1 3/8" in diameter.

No. 96130	.....	2	} List, \$1.00 Each, 60c
No. 92414	.....	3	
No. 93411	.....	6	
No. 92415	.....	10	
No. 92416	.....	20	
No. 92417	.....	30	
No. 93412	.....	50	

CARTER "IMP" RHEOSTAT With Filament Switch

Standard Imp Rheostat with a built in Filament Switch. A most convenient device, eliminating filament switch knob from front panel.

No. 98216	Ohm 2	} List \$1.50 Each 90c Less 2%
98217	3	
98218	6	
98219	10	

CARTER "IMP" POTENTIOMETER



Same design as Carter Imp Rheostat. Small and rugged. Fitted with binding post terminals.

No. 92418	200 Ohm	} .....List \$1.25	Each \$0.75
No. 92419	400 Ohm		



CARTER RESISTORS

CARTERS are very popular resistors and are used to reduce 6 volt current to 5 volts as required for different tube combinations. Also resistors for the 299 Tube.

FOR 301A TUBES		FOR 299 TUBES	
No.	Res.	No.	Res.
95091	1 4 ohm.	96145	1 40 ohm.
95092	2 2 ohm.	96146	2 25 ohm.
95093	3 1-1/3 ohm.	96147	3 15 ohm.
95094	4 1 ohm.	96148	4 10 ohm.
95095	5 4-5 ohm.	96149	5 8 ohm.
95096	6 2-3 ohm.	96150	6 6 ohm.

GRID RESISTORS

No. 98224	Ohm 100	No. 98226	Ohm 500	} List 30c Each 18c
98225	200	98227	750	
97193	300	97192	1000	



Center Tapped Resistors

Carter Center Tapped Resistors are used for A. C. filament circuits. They are small and convenient to mount. Furnished as follows:

No. 97408	.....	6 Ohm	No. 97411	.....	20 Ohm
No. 97409	.....	10 Ohm	No. 97412	.....	40 Ohm
No. 97410	.....	15 Ohm	No. 97413	.....	60 Ohm
List	.....	25c	Each	.....	15c



CARTER Upright Resistors

Designed for upright mounting. Requires very little space. Furnished in the same sizes as the flat resistors.

FOR 299 TUBES		FOR 301A TUBES	
No.	Res.	No.	Res.
98234	1 40 Ohm	98228	1 4 Ohm
98235	2 25 Ohm	98229	2 2 Ohm
98236	3 15 Ohm	98230	3 1-1/3 Ohm
98237	4 10 Ohm	98231	4 1 Ohm
98238	5 8 Ohm	98232	5 4/5 Ohm
98239	6 6 Ohm	98233	6 2/3 Ohm



Upright Center-Tapped Resistors

Same construction as the above, except it is center tapped. Particularly designed for A.C. Filament Circuits.

No. 98240	Ohms 6	No. 98245	Ohms 60
98241	10	98246	100
98242	15	98247	200
98243	20	98248	400
98244	40		

# Carter

## RECEPTABLES

Many buildings are now being wired for radio. All plates are standard and can be mounted on standard outlet boxes or directly on wall or baseboard. Screws for both types of mounting are supplied.

No. 93421 For loud speaker. This outlet takes any standard plug such as Carter No. 2 List 80c. Each ..... **48c**



CARTER

No. 93422 For Loud speaker. This outlet takes tips on speaker cord without use of the customary plug. List 60c. Each..... **36c**

No. 98279 For aerial and ground. Also equipped with a standard A. C. outlet. Ideal for A. C. set installation. List \$1.00. Each ..... **60c**

## CARTER "IMP" CORD TIP JACK AND PLUG



Replaces binding post for phone cord. Nickel-plated. Phosphor-bronze spring. Mounts in 3/8" hole. 1 1/2 in. long. Plug can be attached to wire without soldering.

No. 92472 "Imp" Jack. List.....\$0.30 Each....\$0.18  
No. 92471 "Imp" Plug. List..... .15 Each..... .09

## CARTER CORD TIP JACK



A simple, reliable cord tip jack with nickel plated mounting thimble. 1/4" hole. Minimum space required.

No. 93420 List.....\$0.10 Each.....\$0.06

## CARTER "SHORT" JACKS



This Jack makes good contact with any plug. Heavy Bakelite insulators. Solder lugs are widely spaced to facilitate soldering. 1 inch back of panel.

No.		List	Each
93409	Open Circuit.....	.25c	15c
93410	Closed Circuit.....	.30c	18c

## Carter Radio-Phonograph Switch



Used in radio receivers to switch from "Radio" to "Phonograph." No more taking out and putting back of radio tubes. Makes three contacts to left and two to right.

No. 98249.....List \$1.25 Each 75c

## CARTER IMP BATTERY SWITCH



Quarter turn snap switch makes positive contact. "On and off" name plate with pointer. One hole mounting. Complete

No. 92464 List \$0.65 Each \$0.39

## CARTER IMP POWER SWITCH



For use in 110 volt circuits. Compact, rugged construction. One of the smallest switches on the market. Mounts in 3/8" hole.

No. 97225 Type 110 List 75c Each 45c

Type 112 Power Switch same as above except single pole double throw.  
No. 96833 Type 112 List 75c Each 45c

## CARTER ADJUSTABLE RESISTORS



The ideal A.C. hum adjuster. Similar in design to rheostat and potentiometer except with shorter shaft and provided screw slot for adjustment.

<b>"A" Rheostat Type</b>			<b>"AP" Potentiometer Type</b>		
No.	Ohms	No. Ohms	No.	Ohms	No. Ohms
98280	3	98282	6	98284	6
98281	2	98283	10	98285	10
				98286	15
				98287	20

List 50c. Each.. **30c** List 75c. Each.. **45c**

# BELDEN COLORUBBER FLEXIBLE HOOK-UP WIRE



The ideal wire for set hook-ups. Flexible and easy to use. Different colors facilitate making the connections. Soft tinned copper wire solders easily. Put up in cartons. 25 ft. coils.

No.	Color	List	Each
94534	Natural.....	40c	24c
94535	Green.....	40c	24c
94536	Blue.....	40c	24c
94537	Red.....	40c	24c
96417	Brown.....	40c	24c
96418	Yellow.....	40c	24c

No. 97100 RIO NATURAL 1000 ft. coil Each \$7.50  
No. 18 (16x30) STRANDED TINNED COPPER WIRE 1-32 Inch Colorubber Insulation

No. 96419 Black..... List, 50c Each, 30c  
No. 96420 Red..... List, 50c Each, 30c

## BELDEN TINNED HOOK-UP WIRE



No. 14 bare tinned hook-up wire in 2 ft. lengths, both round and square. There are approximately 32 pieces per lb.

No.	Type	Per Lb.	25-Lb. Lots
94538	No. 14 Square.....	50c	\$0.47
94539	No. 14 Round.....	47c	.44

# CELATSITE



CELATSITE is made in two types. The flexible, stranded wire and trimmed, copper bus bar wire. Both have a non-inflammable "spaghetti" covering that will not ignite from hot soldering iron. Strips easily and does not dry out.

## Acme Flexible Celatsite

Put up in individual boxes containing 25 ft. coils. 16 strands of No. 18. A color for each circuit.

No.	Color	Length	List	Each
94921	Black	25 Ft.	.....\$0.80	\$0.45
94922	Yellow	25 Ft.		
94923	Green	25 Ft.		
94924	Red	25 Ft.		
94925	Brown	25 Ft.		
94708	White	25 Ft.		

## Acme Twisted A.C. Celatsite Hook-up Wire

For A. C. filament hookup. One strand of Red and one of Black twisted together. Packed 25 ft. coil in individual carton.

No. 94757 Per 25 Ft.....List \$1.75 Each \$1.05

## Solid Celatsite



Makes a very neat job. No. 14 wire with non-inflammable covering. Can be bent and rebent without cracking. 30" lengths.

No.	Color	Length	Per Length	Per 100 Ft.
94926	Black	25 Ft.	.....\$0.05	\$1.80
94927	Yellow	25 Ft.		
94928	Green	25 Ft.		
94929	Red	25 Ft.		
94930	Brown	25 Ft.		
94709	White	25 Ft.		

## Acme Spaghetti Tubing

High dielectric strength. Perfect insulation, glossy finish. SPECIFY COLOR. 30 inch lengths.

No. 94931 Specify Color. Per Length.....\$0.05 Per 100 Ft. ....1.80

# CORWICO BRAIDITE



Braidite is a hook-up wire made from either solid or stranded tinned copper wire covered with a cotton braid. The braid is pushed back when soldering is done and then replaced thus forming the neatest possible connection. Furnished in the following colors: Red, green, yellow, brown and black. Specify color when ordering.

No.	Length	List	Each
98555	Solid .....25 ft.	\$0.30	<b>18c</b>
98556	Stranded .....25 ft.	.35	<b>21c</b>





**AMPERITE**  
REG. U. S. PAT. OFF.  
The "SELF-ADJUSTING" Rheostat

An automatic filament control which eliminates all forms of hand rheostats from every circuit of audio and radio frequency amplification. Permits the use of any type of tube. Approved by every prominent laboratory in the country. Complete with mounting.

No.	Type	Tube	Volts	List	Each
91890	1-A	201A or 301A	6	<b>\$1.10</b>	<b>66c</b>
91892	6-V	UV199, CX299	6		
91895	112	CX112 & CX371	6		
91896	220	CX220	3		
91769	3-A	3/4 Amp.			
91877	4-A	1 Amp.			
91770	5-A	1 1/4 Amp.			
97232	622	Shielded Grid			
97272	226	UX226 or CX326			
97273	227	U227 or CX327			

**NEW DOUBLE AMPERITE MOUNTING**  
No. 97011 List 70c.....Each 42c

**MUTER FIXED RHEOSTAT**



Protect and Lengthen Tube Life

Has permanent resistance wire hermetically sealed in glass tube. Black Bakelite base. Recommended only for audio or radio amplifying tubes. List 50c.

No.	Type	Amp.	Each
95068	For 1 301-A	.25	<b>32c</b>
95069	For 2 301-A	.50	
95070	For 3 301-A	.75	<b>10 Lots</b>
95071	For 4 301-A	1.00	
95072	For 1 299-6V.	.06	<b>30c</b>
95073	For CX-112	.50	
95074	For CX-220	.125	

**BETTER BILT JACKS**



Have solid brass, heavily nickeled frame, and high tempered nickel-plated Spring Blades, with pure silver contacts. Insulation spacers are of Bakelite. The fantail construction of contact lugs makes soldering easy.

No. 91675	Open Circuit.	Each.....	<b>12c</b>
No. 91676	Closed Circuit.	Each.....	

**PUSH-PULL SWITCH**



Outside part polished nickel finish. Fits any thickness panel.

No. 92163	Each.....	<b>11c</b>
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**STAR-RITE Soldering Iron**



A high-grade product that you can sell at an attractive price.  
No. 94350.....List 83c 6 Lots 79c

**"American Beauty" SOLDERING IRON**

"American Beauty" soldering irons do the work easier, quicker and better. A very popular electric tool.

No.	Tip	Weight	List	Each	Net
92804	3/8"	18 oz.	\$ 8.00		\$ 5.33
92855	26 oz.		9.25		6.20
92856	42 oz.		11.50		7.67

**NEW Hotpoint SOLDERING IRON**



The new type is furnished with two detachable tips.

No.	Size	Watt	List	Each	3 Lots
94234	3/8"	55	\$2.75	\$1.78	\$1.73
94235	1/2"	95	3.25	2.28	2.10
94236	3/4"	Extra Tip	.10	.07	
94237	1"	Extra Tip	.10	.07	

**TOOLS**

**RADIO HAND DRILL**



Capacity is 0 to 1/4 inch. Heavy nickeled frame, highly polished.  
No. 83501 Each .....\$1.34



**DUTCH BRAND FRICTION TAPE**

The nationally advertised Dutch Brand is an easy tape to handle and economical to use. Very strong with a lasting adhesive.

No.	Size	Each
3879	..... 8 oz.	18c
3880	..... 4 oz.	10c
3881	..... 2 oz.	05c

**HAN-D HAMMER**



Combination tool. Hammer is 1 1/2 in. long. Screw Drivers, one 5 1/2 in., 2 1/2 in. and 1 1/4 in. long.  
No. 50910 Each.....79c

**LONG NOSE PLIERS**

Side Cutting



A tool that every radio mechanic wants.

Stock No. 51700

**37c** Each

5 1/2 Inch

**RADIO SCREW DRIVERS**



A useful size for radio work. Large handle furnishes better grip. Blade is stronger yet small enough at point for this type of work. Sells rapidly wherever put on display. Length over all 3 3/4", 4 1/4", 5 1/4", contains three of each size.

No. 97363

Complete Display.....

**65c**

**THE RADIO SENIOR**

Blade is oil tempered and nickel plated. Just the thing for radio work. Width of blade, 3/16 inches. Furnished in the following sizes:

No.	Blade Size	Each	Lots of 6 Each
97420	4x3/16	12c	11c
97421	5x3/16	13c	12c
97422	6x3/16	14c	13c

**SCREW ASSORTMENT**

A handy assortment of nickeled screws, lugs, nuts and washers commonly used in set building. 100 pieces to a box. List 50c.

No. 92573 Each, \$0.32 10 Boxes, \$2.75



**GALENA AND PYRITE CRYSTALS**

Good quality tested crystals, put up in small wood pill boxes.

No.	Crystal	Each	10 Lots	Per 100
91692	Pyrite.....	\$0.08	\$0.70	\$6.00
91693	Galena.....	.06	.50	4.50

**SOCKET WRENCH SET**



A set of 7 tools combined into one compact combined into one convenient and practical tool. Consists of six hex sockets, screw driver bit and nickel plated handle.

No. 98558 List \$1.00 Each..... **60c**



**EBYP**  
PATENTED

EBY BINDING Posts are always in season—they are advertised, packaged and are always ready turn-over. Each post equipped with nut and soldering lug.

**ABLANK EBYP POSTS**

No.	Furnished in two sizes	List	Each
92837	Standard Size, 1/2" x 3/4"	15c	10c
92838	Commander, 3/4" x 1"	20c	12c

**ENGRAVED EBYP POSTS**

No.	Ant.	List	No.	C Plus	List
92840	Gnd.	15c	92850	C Plus	15c
92841	A Batt. Plus	Each	92851	C	10c
92842	A Batt.	10c	92821	Loop	15c
92843	A Batt.	Per 100	92854	135 V. Plus.	Each
92844	B Batt. Plus	Assorted	96421	67 V. Plus.	10c
92845	B Batt.	\$9.00	98245	A Plus B	Per 100
92846	2 1/2 V. Plus.		96422	150 V. Plus.	Assorted
92847	45 V. Plus.		96425	Speaker Plus.	\$9.00
92849	90 V. Plus.		96426	Speaker	
			96423	C Power	
			96425	C Power 3	

**KESTER SOLDER**

KESTER Solder is self-fluxing from tiny pockets inside strip. Ideal for all uses.

**ACID CORE SOLDER**

No.	Spool	Per Lb.
91031	1 Lb.	\$.63c
91032	5 Lbs.	\$.58c
91033	10 Lbs.	\$.57 1/2c

**STRIPS**

Contains about 150 strips, 18 in. long. Resin Core.

No.	5 Lb. Pack	\$.285
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**HOUSEHOLD PACKAGE**

1/2 Lb. Coils in Display Carton. 10 per Carton.

No.	Each Cart.	
91037	Resin	\$0.17 \$1.67



**RESIN CORE**

No.	Spool	Per Lb.
91044	1 Lb.	\$.63c
91045	5 Lbs.	\$.58c
91046	10 Lbs.	\$.57 1/2c

**X-L BINDING POSTS**

The X-L "Push-Post" has many superior features. No screwing—no shearing of wires—no jarring loose. Easy to enter wires. Furnished with attractively plated markings. Excels in looks, action, service and convenience.



No.	Marking	No.	Marking	List
96390	Aerial	96397	B 2 1/2	15c
96391	Ground	96398	B 45	Each
96392	Loudspeaker	96399	B 90	10c
96393	A—	96400	B Ampl.	Per 100
96394	A plus	96401	C—	\$9.00
96395	B—	96402	C Plus	
96396	B plus	96403	Loop	



**X-L Binding Post Strip**

Handsome polished panel with seven mounted push-posts engraved A minus, A plus, B minus, B Det., B Ampl., Ground and Aerial.

No.	96404	List, \$1.50	Each, 90c
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**Jones MULTIPLE-PLUG**  
THE STANDARD SET CONNECTOR

Eliminates all messy wiring from set to batteries. New 1929 Line

**COMPLETE FOR SUB-PANEL MOUNTING—TYPE PM**

No.	Contact	List	Each	No.	Contact	List	Each
96955	5	\$1.50	\$0.90	96959	8	\$2.00	\$1.20
96956	7	2.25	1.35	96960	10	2.50	1.50
96957	10	3.40	1.80	96961	12	4.25	2.55
96958	12	4.00	2.40	96962	15	5.50	3.30

**COMPLETE FOR BASE MOUNTING—TYPE BM**

No.	Contact	List	Each	No.	Contact	List	Each
96963	5	\$1.75	\$1.05	96967	8	\$2.25	\$1.50
96964	7	2.50	1.50	96968	10	2.75	1.65
96965	10	3.25	1.95	96969	12	4.50	2.70
96966	12	4.25	2.55	96970	15	5.75	3.45

**"ACE" HARD RUBBER PANELS**



ACE Quality Panels made of special hard rubber compound are easy to drill, assure good insulation and are very durable. Finished in black; 1/16 thickness.

No.	Size	List	Each
96038	7x9	\$0.70	\$0.29
91660	7x12	.95	.57
91661	7x14	1.10	.66
91662	7x18	1.40	.84
91663	7x21	1.62	.97
91664	7x24	1.85	1.11
91665	7x26	2.00	1.20
91666	7x30	2.30	1.38

**VERY SPECIAL PRICES MAHOGANITE OR BLACK**

Size	Each
7 x 9	\$0.29



**Best Quality Magnet Wire**

Furnished on handy wooden spools in the following sizes:

**DOUBLE COTTON**

1/2-Lb. Spools	Size	Each
92364	18	\$0.29
92365	20	.32
92366	22	.34
92367	24	.37
92368	26	.64

**1/4-Lb. Spools**

Size	Each
92385	\$0.19
92386	.20
92387	.22
92388	.25
92389	.31

**SINGLE COTTON**

No.	Size	Lb.	Each
92361	26	1/2	\$0.42
92362	28	1/2	.48
92363	28	1/4	.30
92384	30	1/4	.34

**FORMICA PANELS**

**BLACK**

No.	Size	Each
94779	7x18 1/2	\$1.29
94780	7x18 3/8	1.92
94781	7x21 3/8	2.24
94782	7x24 3/8	2.55
94783	7x26 3/8	2.77
94784	7x28 3/8	2.98
94785	7x30 3/8	3.20

**WALNUT**

No.	Size	Each
94786	7x18 1/2	\$1.35
94787	7x18 3/8	2.02
94788	7x21 3/8	2.35
94789	7x24 3/8	2.68
94790	7x26 3/8	2.91
94791	7x28 3/8	3.13
94792	7x30 3/8	3.36

Odd size panels can be furnished in either black or walnut finish at 1 1/2c net per square inch in 1/8-in. thickness, and 1 1/2c per square inch in 3/16-in. thickness.



**SOLDER LUG FOR RADIO**

Plain tinned lugs, which are very reliable in making connections. Strong and well built. Package contains 24 lugs.

No.	Size	Per Pkg.	10 Pkg. Lots
93873	Long	\$0.05	\$0.04 1/2
93874	Stubby	.05	.04 1/2

**KELLOG LUGS**

Fine lugs for quick and permanent soldering

No.	Size	Per 250	Per 500	Per 1000
96428	3/8" Long for No. 6 Screw	42c	\$0.82	\$1.60
96429	7/8" Long for No. 8 Screw	60c	1.15	2.20



**TAP-OFF PLUGS**

Efficient Double and Triple Plug for making connections to standard receptacles. Neat and compact.

No.	Each	10 Lots
90767 Triple	9c	7 1/2c



# Brunelli-Jones RADIO "B" BATTERY

Positively the Best Battery at Lowest Prices

## BRUNELLI - JONES

"A", "B" and "C" batteries are built to most exacting specifications, which result in long life, exceptional strength and vitality. Only the highest grade chemicals are used and the cells are built extra strong. Equipped with Fahnestock clips. Use Brunelli-Jones batteries for a leader—they satisfy.

### Brunelli - Jones "A"

This is an "A" battery that appeals to the purchaser both from the standpoint of appearance and performance. Exceptional shelf-life. Every battery tested up to standard.



Each No. 94650 10 Lots  
**25c 24c**

### Brunelli Jones "C" Battery

A good, serviceable "C" battery that keeps up its strength for extra long time.



Each No. 94656—4 1/2 Volt 5 Lots  
**25c 23c**

Remember to Deduct 2% Discount

### Brunelli-Jones SQUARE CELL "B" Battery

The new construction ideas incorporated in SQUARE CELL Batteries means greater satisfaction and longer life. Contains SQUARE CELLS.

No. 96489  
Each \$2.90,  
Less 2% or  
**2 84**  
NET



Guaranteed Full Weight and Full Rating

## HIGHEST QUALITY MATERIALS

Nothing but the best is used in Betterbilt Batteries. Thick sulphate resisting plates; rigid lead grids; finest selected oxides; genuine Port Oxford cedar insulators; and the famous Ahbell solid rubber case. Do not confuse with cheap batteries. Every one is a high-grade, full weight, **GUARANTEED BATTERY.**

### Special 100 Amp. 11 Plate Battery

Use the Hundred-Amp-Special if you need a radio battery to meet price competition. It's a mighty good one for the money. Thinner plates and a cheaper case than our regular Betterbilt, but designed to give satisfactory service. Better, in fact than many so-called heavy duty batteries. 6 volt 11 plates.

No. 92714  
PRICE \$6.66  
Less 2% .13  
**\$6 53**  
NET

## UPRIGHT TYPE 45-Volt



This is a large size battery that is a favorite on account of its shape. Cell space is apportioned to give longest life.

No. 94654  
45 Volt

5 LOTS EACH  
\$1.48 LESS 2%  
**\$1 45**  
NET  
EACH \$1.52  
LESS 2% **1 49**  
NET

## SUPER-GIANT SIZE

More than twice the capacity of the ordinary size. The multi-tube sets of today require an extra sturdy, oversize battery, which is the most economical in the long run. Profit by selling this oversize battery.

EXTRA GOOD QUALITY

No. 94685  
5 LOTS EACH  
\$1.93 LESS 2%  
**\$1 89**  
NET  
EACH \$ 2 02  
LESS 2% **1 98**  
NET

## Betterbilt Batteries

### Extra Thick Plates for Uniform Current

The plates in Betterbilt Radio Batteries are extra thick, insuring the even, smooth flow of current so necessary for good radio reception. The case is the genuine all rubber Ahbell container—absolutely leak-proof; clean and safe for handling in the home.

Every Betterbilt is guaranteed for full two years, and with reasonable care will far outlast that period. Each battery is thoroughly inspected before shipment and fully charged, ready for immediate use. Our special "house-box" packing insures safe delivery—no chance for damage or spilling.

GUARANTEED FOR TWO YEARS

No. 92770  
100 AMP. 11 PLATE  
PRICE 7.21  
Less 2% .14

**7 07**  
NET

NO. 92771  
120 AMP. 13 PLATE  
PRICE 8.40  
LESS 2% .17

**8 23**  
NET

NO. 92772  
140 AMP. 15 PLATE  
PRICE 10.25  
LESS 2% .21

**10 04**  
NET

NO. 92784  
180 AMP. 17 PLATE  
PRICE 11.42  
LESS 2% .23

**11 19**  
NET

# Christmas Specials

## Radio Lite-Tenna

The Lite-Tenna is so far the best form of aerial you could possibly choose for your wireless, with the exception of the use of a lightning arrester, with extra rods, lightning rods, etc. and down lead reception. The great distinctive value is in the beauty of the set. 30 tubes high.



No. 98389  
List \$7.58  
Each

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Requires only 10 tubes. MODEL "C" DRY BATTERY and is completely self-contained. No external antenna or ground required. Also includes a 100-watt 250 volt output speaker. Price \$20.00. List \$27.50. No. 98441 - Complete set. List \$27.50. Less 2% or \$26.75



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An electrically operated phonograph that possesses all the best features of an expensive electric phonograph. Attached to any radio set, it is capable of playing out the full quality of any record. It is equipped with a Phono, Phonometer and Patent De Luxe tone-arm enclosed in a handsome walnut cabinet. Can be operated from A. C. current only.



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## Sterling A. C. Universal Set and Tube Tester

For complete A. C. testing can be used in store or home service. Adapter plugs this works in two tubes or six tubes. Complete in portable wiring of transformer. Should be in every store for A. C. testing.

No. 97281.  
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## Flewelling Short Wave Adaptor

This device is constructed for the purpose of adapting any receiver to short waves, which assure reception of 200-1000 cycles per second. It is easily installed by changing tube from one 31/2" socket and wiring in adaptor and you are ready to tune. A 20 to 30 meter set. A 20 to 30 amp 50 to 100, supplied with adaptor.

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## De Luxe (Air Cooled) Resistovolt



Every air-cooled resistor is susceptible to the blowing of A. C. lines. The De Luxe Resistovolt prevents the voltage and protects the tubes and prolongs the value and life of the radio. It is a 100 ohm resistor. A 100 ohm resistor. A 100 ohm resistor. A 100 ohm resistor.

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By E. R. HARR  
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