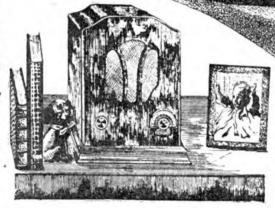
CATALOG NO14 WINTER 1932

of the Age
see page 4



YOUR PRICE S Z5 Complete

RADIDIUM CORR VESEY ST. NEW YORK

## WITH THIS ISSUE + + +

we present a new catalog which reflects our growth, due to your patronage, for which we are extremely

grateful.

The last few years have resulted in an increase in business necessitating a substantial increase in our force and quarters. We now occupy the entire sixtory building at 54-56 Vesey Street, a total floor area of 20,000 square feet, every bit of which is utilized. The basement of the building is used for stock. Our metropolitan sales division and offices are located on the street floor. Shipping and receiving departments occupy the next floor. These have been greatly enlarged to facilitate speedy handling of your orders. For the convenience of our large foreign trade, we have just organized a foreign department, where all export correspondence and orders are handled. Expert linguists will answer mail in any language, even Chinese. Executive and general offices are located on the sec-

ond floor. On this floor is also the art department together with the test laboratories. The third floor is occupied by machine shop, assembly department and service laboratory. Only the very latest and best test equipment is used. The next floor is the stock room, and the overflow from this is placed on the next floor, where are also located spraying and finishing departments.

We have added to our staff either in advisory, consulting or active capacities, men who are known over the entire world as authorities in radio and electrical engineering. We have in addition full access to the facilities of the research laboratory in one of the largest technical schools in the East. In this issue of our catalog we want to introduce you to some of our staff. We will let you meet more in future issues. Your suggestions and comments are invited. Please address "Catalog Editor."

## Let Us Introduce M. B. Sleeper

Well-known author, consultant and engineer. Mr. Sleeper was in radio 'way back when . . ." Radio editor of Everyday Engineering, Radio Mechanics, Radio Engineering, Radio Design; President and Chief Engineer of General Apparatus Corp. and the M. B. Sleeper Radio Corp.; Chief Research Engineer for Pilot Radio and Tube Corp. and now President of the Sleeper Research Corp.



Mr. Sleeper is well known as the author of innumerable text books and pamphlets on radio. Many a radio man still remembers some of the famous circuits designed by him. The "RX-1," the "X-11," the famous "Pilot Wasp" which he engineered in conjunction with R. S. Kruse, the "Air-Hound," the "Air Scout" and others

Mr. Sleeper is well versed in the needs and requirements of the serviceman and dealer. Wherever radio men congregate you will hear of "MB."

## Have You Met Bertram M. Freed?



Many years in the radio service field have gained for Bertram M. Freed an enviable, country-wide reputation as a service authority. Thousands of service men have read and are familiar with his "Operating Notes for Service Men" for several years, a leading contribution to "Radio Craft," the service man's magazine. For a long time Mr. Freed managed the repair department of one of the largest radio retail organizations in the East. At present he is as-

sociated with this same company in an important capacity, and one that enables Mr. Freed to keep in close contact with all that pertains to radio service and repair. In an effort to aid servicing, he has designed many tools and devices to assist in the test and repair of receivers. We have induced Mr. Freed to manage our service and test departments which are at your disposal for servicing, test and repair of your receivers at a nominal fee. All this work is under the personal supervision of Mr. Freed. Write our Service Department for fall details.

## Meet Alfred A. Ghirardi

Mr. Alfred A. Ghirardi is instructor in Radio and Electrical Engineering in one of the largest New York technical schools. He is author of the now famous "Radio Physics Course," a stanlard text in schools throughout the country. Mr. Ghirardi is now busily engaged in preparing a new and larger "Radio Physics Course" in response to many requests. He was formerly associate editor of "Radio Engineering," "Radio Mechanics" and "Radio Design." He was tech-



nical consultant for the Pilot Radio and Tube Corp. He is now the technical and chief engineer of the Radio Technical Service Bureau. Mr. Ghirardi can tell how a receiver or unit will operate and its characteristics, before it is even built. He is a member of the N. Y. Electrical Society. Mr. Ghirardi is that rare specimen, a practical research and development engineer. He is a frequent contributor to the pages of "Radio Engineering," "Radio Design" and "Radio News."

## Introducing Gerson Lewis

Gerson Lewis was formerly associate editor of "Radio Design" and was in charge of the Radio Design laboratory. He was also managing head of "Speed," the mail order division of Pilot Electric and Mfg. Corp.

Along with M. B. Sleeper he did radio work on the Pilot Airplane Radio Laboratory. Later he became engineer in charge of development at the Sleeper Research Labs., where remote control for radio was developed. He has been actively associated in radio



since his graduation from technical school in 10 contributes to "Radio Engineering," "Radio other radio and electrical magazines.

# There's AReason!

If you could walk into our place of business, we wouldn't have to write this. You would see a modern, efficient radio merchandising mart. As we took you through the various departments, over the floors occupying thousands of square feet, you would be thrilled at the size of this business machine and enthusiastic in voicing your admiration at the smooth-working efficiency of so vast an organization. But only a very few can call here, so in a few feeble words we try to tell you the story.

From our start in this business, we have had just one policy—VALUES AND SERVICE. Our entire organization, from the president down through the managers of departments to the errand boys, have this as their guiding beacon. "He profits most who serves best" is the best business motto. Modestly, yet with pardonable pride, we point to our present size and place in the radio industry as the best proof of it.

Located in New York, in the world's largest radio center, our experienced buyers are ever alert for quality merchandise at attractive prices. The main idea in this catalog is to offer all the wanted materials at the very lowest prices consistent with good quality and service. We will understate rather than overstate, and refrain from wild and extravagant claims which insult your common sense and intelligence.

As our experience grows, we are more and more convinced that you want honest, straightforward statements so you can pick the best value for the least money. We pledge an unbending adherence to these policies, which have been justified by the faith of the many customers whose satisfaction has caused the growth of this establishment to its present size.

#### TRANSPORTATION

TRANSPORTATION
Please indicate on your order as to how shipment is to be made. If order is to be forwarded parcel post, include enough to pay for postage. We may your parcel post insurance, when full remittance, including postage, accompanies your orders. Over remittances will be refunded. If not enough has been enclosed to pay for postage, we reserve right to ship C. O. D. or express collect for the balance. We reserve right to make shipment in manner we think best.

## 2% DISCOUNT

All prices quoted are net; a 2% cash discount has already been deducted.

#### HOW TO ORDER

We pay postage on our convenient order blanks. If you are all out of these blanks a post card will bring a sur y to you. Indicate catalog number, page number and full description of

## "SAME-DAY SHIPMENTS"

We can supply you with any item in radio, even though not listed in this cutalog. Tell us what you want, and we will forward our lowest net prices to

#### NO MAIL ORDERS ACCEPTED UNDER \$3.00

Mail orders for less than \$3.00 cannot be accepted. If we were to ship such small orders, it yould increase our operating exes and result in an increase rices.

## "If I Knew You and You Knew Me"

By W. E. COOPER

If I knew you and you knew me, 'Tis seldom we would disagree; But, never having yet clasped hand, Both often fail to understand That each intends to do what's right And treat each other "honor bright." How little to complain there'd be If I knew you and you knew me.

Whenever we ship you by mistake Or in your bill some error make, From irritation you'd be free If I knew you and you knew me. Or when some goods you "fire back,"
Or make a "kick" on this or that, We'll take it in good part you see, If I knew you and you knew me.

With customers ten thousand strong Occasionally things go wrong-Sometimes our fault, sometimes theirs-Forebearance would decrease all cares; Kind friend, how pleasant things would be; If I knew you and you knew me.

Then let no doubting thoughts abide Of firm good faith on either side; Confidence to each other give, Living ourselves, let others live; But any time you come this way, That you will call we hope and pray; Then face to face we each shall see And I'll know you and you'll know me.

#### RETURN MERCHANDISE

In returning merchandise, please ask for authorization. All merchandise must be returned via parcel post or express, all charges prepaid.

charges prepaid.

We number among our thousands of customers the U.S.
Bureau of Standards, Cornell University, Columbia College, Yale
University, Hebrew Technical
Institute, Tufts College, Sheffield
Labs, and hosts of others. As we
have satisfied these organizations, we feel confident we can
please you. Our terms are
strictly net cash. Remarkable
values and extreme discounts
given by us make it profitable
for you to buy for cash. All
goods are shipped F. O. B. New
York. We advise remittance with
order. By remitting with order
you save C. O. D. collection
charges made by the Post Office,
and express. This amounts to
quite a saving in most cases.

#### C. O. D. SHIPMENTS

All C. O. D. orders must be accompanied by at least 20% deposit. No C. O. D. shipments made to foreign countries. We will ship documents against sight draft on any New York

#### METHOD OF PAYMENT

Make remittances by cashiers' check, postal money order, cash, express order, or personal check. Personal checks, unless certified will be held until payment is made. U. S. Postage Stamps in any denominations, in good condition, accepted in payment. Cash should be sent by registered mail.



The smallest and most complete radio receiver ever manufactured. Complete in every sense, containing features of the most expensive midget set on the market and many of its own. Housed in a beautiful cabinet of selected woods, the Reliable Junior produces enormous volume with distortion-free tone.

#### Circuit Details

The circuit is newly developed and one of the most efficient ever designed, consisting of two tuned R.F. stages and two audio stages with Pentode output

## Special R.F. Circuit

The double tuning condenser, which permits high gain per stage without the usual interference between stages, and the radio frequency transformers were specially designed to secure utmost sensitivity and the sharpest selectivity.

## New Special Design Power Detector

The detector uses a 224 as a power detector in the latest detector circuit design. The Reliable Junior has a power detector that will handle enormous volume without distortion and yet is far more sensitive than the old grid leak and condenser method of detection.



## Audio Amplifiers

The audio amplifier consists of a twostage compensated amplifier. The first stage is resistance coupled while the output stage which uses a Pentode is special transformer coupled. This amplifier gives tremendous gain and power. A phonograph pickup can be used, if desired, something which is not possible with receivers with a single audio stage.

#### Full Range Dynamic

A dynamic speaker designed for use with a Pentode tube is the reproducer. It assures faithful, full-throated reproduction of all music and speech broadcasts.

#### Filter Circuit

The filter circuit contains 7 mfd. of high grade linen-paper condensers. And 8 mfd electrolytic in a brute force filter. The most efficient filter yet designed. Absolutely no hum.

#### Constant Voltages

The voltage divider system is so designed as to always furnish steady voltages to all tubes, due to the ingentous drop system employed.

#### Over-Size Power Transformer

The power transformer employed is of a generous oversize type which delivers the full specified volages to all tubes. Built to a standard, not to a price, it gives long, unfailing service.

#### Tuning Control

The tuning dial, of the latest type in design and artistic in appearance, is a full vision direct drive, with NO backlash or slip.

## Multi-Mu and Pentode Tubes Used

The use of a multi-mu tube increases the sensitivity and volume. Selectivity is brought up to a new degree by reducing cross talk modulation to a minimum. A Pentode tube in the output circuit handles the enormous power input and delivers it to the speaker in a new realism of tone.

## Handsomely Finished Cabinet

The cabinet is gracefully designed. It is made of h 1-rubbed satin-finished walnut, and measures 18"x10\%"x?". The on and off switch is combined with the full range smooth volume control.

#### Full Shielding

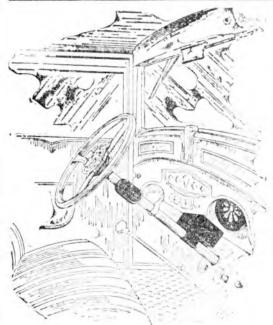
The chassis is cadmium plated and fully shielded. Every new feature is built into this receiver. Not a job lot, but a carefully designed, well-planned, capably-built receiver.

Cat. No. 3928

## YOUR PRICE \$16.75

Complete with Tubes Ready to Operate

When sets are ordered in lots of or more deduct 5% addition.



## La Salle Modern Pentode Auto Radio

The La Salle Auto Radio represents the newest developments in auto radio. Uses the new radio tubes, specially designed for automobile radio, a Utah selfbaffling dynamic speaker, easiest installation of any automotive set, high sensitivity, quality comparable to the home receiver, and the latest and most effi-cient control system yet devised. Battery drain is kept down to a minimum and assures long battery life.

## Uses Newly Developed Automotive Tubes

The La Salle uses six of the new automotive tubes. Three of the 236 screen grid type, two of the 237 general purpose type and a 238 Power Pentode output tube. This combination gives it stability, sensitivity and freedom from tube trouble and burnout. The automotive tubes are of the heater type, non-micro-

phonic, sturdy construction, and designed to operate over a filament range of from 6 volts to 7.5 volts. This insures equal reception when the car is at rest or when running and the generator charging the car battery, increases the potential across the battery by I to 116

Full Range Utah Dynamic

A special automobile dynamic speaker, manufactured by Utah is standard equipment with each set. It is a speaker worthy of the finest motor car. Has adjustable brackets that will allow easy installation in any car in any position. The Utah Auto Speaker is acoustically correct and will give quality comparable to the finest receivers in the home.

## The Utah Motor Car Control

The modern motor car radio deserves a remote control that is equal to the car and radio in mechanical perfection, appearance, and reliability. The control is at the fingertips of the driver and is not affected by road shock and requires no drilling or cutting to install. The Utah has no back lash, no lost motion, no clumsy rotating drive and does not require straight line installation. Cable up to 10 feet long will be supplied at no extra charge, when specified. If a longer drive is needed there will be an additional charge of 25c per foot.

Filtered Power Supply

"A" power is drawn from the car battery. "B" supply is taken from four large dry "B" batteries mounted in a steel case which fastens out of sight under the floor boards. This batteries mounted in a steel case which fastens out of sight under the floor boards. case is standard equipment included with the receiver. Voltages from the "B" batteries are divided within the set. Each lead is filtered to prevent interstage coupling.

## Easy Installation

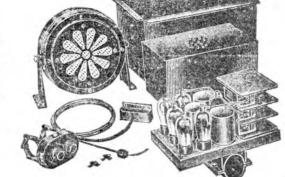
La Salle Pentode Auto Radio is the smallest ever designed for motor car use. It can be installed in a fraction of the time needed for other makes. A screw driver and pliers are the only tools necessary. No drilling, cutting or marring of the car necessary. A collar on the receiver provides for installation on steering column. Where installation against a flat surface is desired the collar can be removed. Complete receiver with Utah Auto Speaker, Utah Remote Control, Battery Box, Ignition Suppressors, (suppressors for six-cylinder cars), Generator

Cat. No. 3696

YOUR PRICE

Less Tubes and Batteries

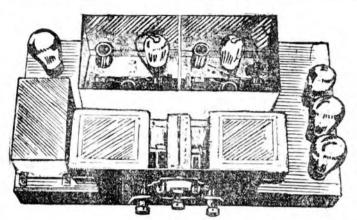
Extra Suppressors 45c each





## PILOT RADIO PRODUCTS





## Pilot Universal Super Wasp Receiver Latest Model

The most advanced receiver ever offered the radio listener. Covers in seven steps the wave length range of 15 to 650 meters. One switch, controlled from the front panel controls all wave-length changes. This is as important an improvement to radio as the self-starter to automobiles. There are seven available overlapping ranges 15 to 23 meters, 22 to 41, 40 to 75, 70 to 147, 146 to 270, 240 to 500, and 470 to 650. Any one range may be instantly selected, a scale on the front panel indicating the range which is active.

The Universal uses a stage of tuned screen grid R. F. amplification, a screen grid detector using a new method of regeneration control which does not alter the tuning, an impedance coupled audio stage with 245 push-pull. Has provision for dynamic speaker field excitation, phonograph pickup and

earphone connections. A handsome walnut cabinet is supplied with all models. The receiver for A. C. uses two 224's, one 227, two 245's and a 280.

The Universal is also available in a battery operated model. The battery job uses two 236's, a 237 first audio and two 238 Pentodes. The receiver is identical in appearance with the A. C. model excepting that it has no provision for dynamic field.

Universal Kit for 110-115 volts, 60- cycle A C.

Your \$85.00

Cat. No. 8607

Price

Cat. No. 3609

Cat. No. 3610

Universal Kit for battery operation. Your \$79.00 Price

Universal for 110-115 volts, 60-cycle A C.

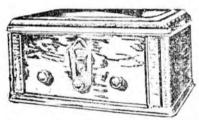
Factory assembled and wired.

Your \$99.50 Cat. No. 3608 Price

Universal Battery Operated. Factory assembled and wired

Your \$93.00

## Pilot Television Receiver



Television has emerged from the "lab" and is ready for the public. Television reception is breathlessly thrilling and offers the set owner a luge amount of enter-tainment. Television is transmitted between 100 and 150 meters. The main requirement is that main requirement is that the receiver be free of regeneration. This rules standard short out all

wave receivers depending on barbly regenerative detectors for their sensitivity. Pilot has brought out a special ket receiver for television work. It uses 2 stages of screen grid RF, with 551 variable mu tubes, a 254 detector, a 257 first audio and 247 power pentode output and a 280 rectifier. The audio amplifier is resistance coupled. The set times from 160 to 500 meters with two sets of plux-in coils. No power supply is furnished, the receiver being designed for the standard K-112 Power Pack Television ku with front panel, less tubes and power pack.

Nour Price.

We recommend the Reliable Televisor with the above receiver. The televisor will be found listed in this catalog.

\$34.50 \$19.50

## Variable Shielded Condensers



The new Pilot shielded variable condensers are the heaviest and most rigid condensers ever offered. Designed originally to meet the specifications of the Pilot DeLines Super-Hottrodyne receivers, they are built to very rigid standards. Made in single, double, triple and quadruple units, the maximum capacity per section being 000305 mfd, Minimum capacity is unusually low and permits full coverage of the broadcast band. Dimensions 412 by 33. "on end. Depth 116", 3", 415" and 6". Shaft 4.".

Your \$1.14 Cat. No. 3390. Single Section

Your \$2.19 Cat. No. 8600. Double Section

Your \$3.33 Cat. No. 8601. Triple Section

Your S4.47 Cat. No. 8602. Quadruple Section

### Midget Variable Condensers

Used for neutralizing R.F. amplifiers, antenna coupling, tuning verniers, regeneration control, short wave tuning, etc. Available in four capacities.

	tat. No.
	8603
	8604
	8605
1	8606

tat. No.	Max mta.	
8603	.000015.	50c
8604	.000025	50c
8605	.00005 .	50c
8606	.0001 .	60c

## I. F. Transformers



For the intermediate stages of the super-het. These are accurately matched. Packed three to a box. In strong aluminum cans arranged for ease of mounting. Can measure 2 13/16" in diameter and 234" in height.

Cut. No. 3931 List \$6.00

Your \$3.50 Per Kit of Three Per Kit

#### Super-Heterodyne Coils



This kit contains one bandpass coil, one oscillator coil and two special fixed condensers. Packed in one box. Designed for a circuit comprising a bandpass filter coupled to a screen grid R.F. stage ahead of first detector. Recommend the use of the Pilot Shielded Variable Condensers with this kit. Cat. No. 3935 List \$3.70

Complete Kit

#### COMPLETE LINE RAIDIO



#### Midget Super-Heterodyne Bellani

The new seven-tube Midget Super-Heterodyne has instantaneous eye and ear appeal. It is a small set, but a big performer! Its modified Gothic cabinet is most distinctive in shape and decoration, and presents a truly beautiful appearance because of its combination of diamond walnut veneer and maple grill and overlay. It stands 18½ inches high, 16½ inches wide and 9¾ inches deep.

This wonderful set has automatic volume control, full vision illuminated This wonderful set has nutomatic volume control, full vision inuminated station selector, tone control, phonograph connection and a full-voiced dynamic speaker. It uses the latest variable-mu and power Pentode tubes in a highly developed super-heterodyne circuit that gives clean-cut separation between stations, with clear rounded tones. The automatic volume control reduces fading, eliminates "blasting," and assures uniform signal strength. No other radio set at this price has this expensive feature.

The Midget Super-Heterodyne employs three 551 variable-mu tubes, two 227's, one 247 Pentode and one 280 rectifier. The circuit comprises one R.F. stage ahead of the first detector, local escillator, I.F. stage, second detector and output lator, I.

Cat. No. 3931.

YOUR PRICE

(Complete with Tubes)

110-volt D. C. Model available at same price. Models available for battery or 25-cycle operation.

## Pilot Standard Console Super-Heterodyne



The ten-tube Pilot Super-Heterodyne, Super-Heterodyne, in its full-size console, is both a technical achievement and an artistic accomplishment. The rigid chassis, solidly built for enducing performance and service, incorporates new und excusive fentures developed by the Pilot engineering developed by the Pilot engineering staff. A hitherto unrealized degra-of unrealized degree or annealized selectivity has been obtained with full recention An altogether new type of automatic valume control eliminates fading and prevents loud speaker when the set is tuned from one station to another. Other features are full-vision station selector, tone con-trol, phonograph connection, nine-inch dynamic speaker and vis

The two tone walnut cabinet,

rations, is a beautiful piece of furnisher that will glace any home. It stands illy litches high, 21ly inches wide and 15 inches deep, and is a fire example of the cabinet makers art.

The Standard Superinfeterolyne uses four 521 variable mu tubes, three 2279, two 2455 and one 230. The circuit is arranged with a pre-selector Stage ahead of the initial R.F. stage, the combination working into the first detector, and followed by two I.F. stages, second detector, and pushpull power audio.

Cat. No. 3932. For 110-voit 50-60 cycle A.C.

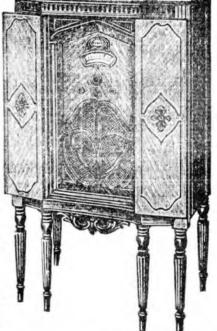
110-volt D.C. model available at same price. 25-cycle and battery models also available. (Complete with Tubes)

YOUR PRICE

## Pilot De Luxe Console Super-Heterodyne

The ten-tube De Luxe Sup Heterodyne is a set that lives up to its name. The walnut cabinet is magnificent in its well-proportioned contours, its fine matching of veneers, and its handsome finish. The truly magnificent sers, and its hand-some finish. The six fluted legs create a pleasing effect of beauty and dignity that will distinguish this set from a desenothers on a display from

dozen others
display floor.
The hinged doors
fitted with antique metal handles, harmonize
with the cabinet
broper, whether proper, whether they are open or closed. So many consules look awkward and unbalanced with the doors swung open, that this new design will be greeted with delight by mer-chants with a fas-



Chants with a fastidious clientele

The De Luae
console is fitted
with the same
ten-tube chassis
as the Standard
model, and like the latter, has a long length of baffle that
brings out the deepest notes and reproduces every instrument in the largest symphony orchestra. The visual
tuning meter shows when a station is fully tuned in, and is
a valuable aid in realizing the selectivity and high tone
quality of which the set is capable. Overall dimensions of
the cabinet are: 41% inches high, 34% inches wide, and
15 inches deep.
Ten tubes are required: Four \$51's, three \$37's, and two
245's and one \$80.

Cat. No. 3933. For 110-volt, 50-60 cycle.

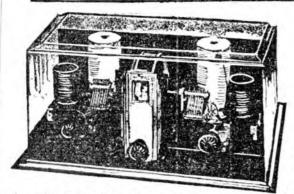
110-volt D.O. Model available at same price.

25-cycle and battery models also available.

(Complete with Tubes)

## C>RADIO NATION A LPRODUCTS C





## The New National Thrill Box Double Screen Grid

Using New Variable Mu Tubes

The new National 5-tube short wave "Thrill-Box" receiver was designed in response to a continuous demand for a highly sensitive yet easily tuned short wave receiver. It is capable of giving consistent loud speaker reception from the numerous foreign short wave broadcast stations, as well as meeting the strongest requirement of amateur and commercial operators.

## High Gain Circuit Employed

The circuit comprises a stage of tuned screen grid R.F. and a screen grid detector. Type 235 or 551 variable mu tubes are used in the R.F. and detector stages. The two stage audio amplifier uses 227 tubes in both stages to eliminate all hum. The output stage is push-pull. A jack is provided after the first stage for headphone reception, if desired. Four sets of R.F. coils are included. They cover from 15 to 115 meters. Special coils are available for other ranges and blank forms for experimental purposes.

"Wide Band Spread" Operation

The straight line frequency tuning condenser is of a special construction and may be easily adjusted to provide for the "wide band spread" required for special amateur and commercial work.

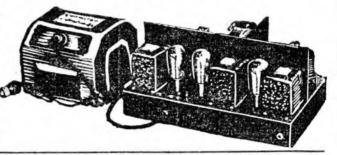
#### All-Electric Operation

The power pack is a separate unit thoroughly shielded and mounted in an attractive metal case. It supplies all necessary power to the "Thrill-Box" receiver. It uses a 280 tube and comes complete with cable and plug. Model ACS W6—for use on 110-120 volts 50-60 cycle A.C. In kit form (with colls for 16 to 116 meters) uses 2-285's, 8-227's.

YOUR \$46.75 Less PRICE \$46.75 Tubes Cat. No. 3886. Model DC SW5—For 2-volt battery operation (with coils for 15 to 115 meters). In kit form. Uses 2-232's, 2-230's, and 1-231 tube. This receiver may also be used with six-volt 

YOUR \$3.90 Cat. No. 3869.

We can furnish either DC SW5 or AC SW5 model wired and ready to operate at an additional cost of \$5.88.



## SPECIAL SHORT WAVE TUNING CONDENSERS

Type SE 100





The new National Type SE 100 Variable Condenser has been designed especially for short-wave work and is not of the "cut down" broadcast variety. Among the outstanding features is the use of the 270° rotation equicycle plates, insulated front bearing, constant impedance pigtall, single hole panel mounting, as well as provision for baseboard mounting, 13° shaft and R-39 low-loss insulation. Size 1½ "x1½" x2".

Rotor and stator plates readily removable to alter capacity

range to	meet special circuit requirements,	
Cat. No.	3870—Type S E 100—100 mmf. \$3.75. Your Price	\$2.21
Cat. No. List	3871—Type S E 50—50 mmf. \$3.50. Your Price	\$2.06
Type S rotation.	- 200 mame as above but equitare pint	a, 180°
Cat. No. List	3872—Type 8 T 100—100 mmf. \$3.75. Your Price	\$2.21
Cat. No. List	3873—Type S T 50—50 mmf. \$3.50. Your Price	\$2.06

## Special Short Wave Plugin Inductances

Type R-39

Moulded of R-39, the new low-loss coil form material developed by the Radio Frequency Laboratories for short-wave use. Forms available with UX four prong, use. Forms available with U UY five prong, or special six for use in standard sockets. six prong base,

The colls listed below are designed for use with the new National SW5 "Thrili-Box."



MOVIED AND AND AND AND AND AND AND AND AND AN									
To the second second	Cat.	Color	No.		R	ange		List	Pr
	3874	Brown	10	9	to	15	meters	\$2.75	\$1.6
ariable Condenser has ave work and is not of		Black	11	14.5	to	25	**	2.50	1.4
Among the outstanding ation equicycle plates,		Red	12	23	to	41	**	2.50	1.4
pedance pigtall, single ovision for baseboard		White	13	40	to	70		2.50	1.4
loss insulation. Size		Green	14	65	to	115		2.50	1.4
vable to alter capacity		Blue	15	116	to	200	*	2.75	1.6
mf. \$2.21		Orange	16	200	to	360		2.75	1.6
		Yellow	17	350	to	550	-	2.75 per	1.6
\$2.06		Special	18	FOR	MS	ON	LY	6.00 pair	3.5
equiate plates, 180	Fo	ur prong	UX,	five pr	on	UY	or six	prong Spe	eial
mf. \$2.21	Cat. I	Yo. 3975.	List	\$1.50.	Yo	ur P	rice		89
\$2.06		8	OCKE	T FOR	8 3	IX-P	RONG		95

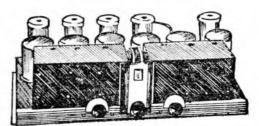
## - RADIO NAT A LPRODUCTS <

## Luxe National

The latest development of the National Laboratories, incorporating the latest developments of Glenn H Browning and James Millen. High selectivity, extreme sensitivity (approximately uniform sensitivity of one microvolt per meter over entire broadcast range). Four screen grid stages. Band pass stage. Totally shielded. Colored scale projection tuning dial. Absolute freedom from oscillation. Elimination of tube hiss and other background noises. Rugged construction. Thorough shielding. Easy to wire. Designed for people who want the best. Makes an ideal "ratio pick-upfor theatres, hotels and public address systems. Especially designed for use with the Velvetone amplifiers, but can be used with any amplifier. During tests on a production set near Boston, three Californian stations were received with good regularity on a 8-foot antenna.

MB-30 Complete est of parts for 8-tube screen grid tuner.
Cat. No. 3878. List Price \$85.00. YOUR PRICE

MB30 Tuner completely wired and ready to operate.
Cut. No. 3879. List Price \$95.00. YOUR PRICE \$55.86





## National Velvetone **Amplifier-Speaker**

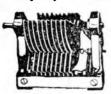
(Licensed Under R.C.A. Patenta)

This new Velvetone Amplifier Speaker unit is designed especially for use with the MB-30 tuner. A new type Jensen speaker is mounted on the amplifier chassis. Supplies plate and filament voltages for the tuner. It uses 1-227, 2-245's and a 280. Oversize power transformers and units insure long iminterrupted service. Comes completely wired and assembled with Jensen Speaker. List Price \$109.50 Cat, No. 3877

> Your Price

863.39

## National Equicycle Condenser



These condensers are of a straight line frequency type, 270° rotation, built more the National Girder frame. The spacing between plates has been doubled in the smaller sizes and a non-industry pixtail added to instre positive and silent operation without detuning effect.

Cat. No.	Type C	upacity 1	No. dates	List. Price	Your Price
3881	EC-15	.000015	3	\$4.00	\$2.35
3882	EC-50	.00005	b	4.25	\$2.50
3883	EC-75	.000075	11	4 45	\$2.50
3884	EC-100	.0001	15	4.50	\$2.65
3885	EC-125	.0001:15	19	4 50	\$2.65
388h	EC-150	.00015	A	4 00	\$2.35
3887	EC-250	.000%	17	4 50	\$2.65
3888	EC-350	.00035	23	4.75	\$2.80
3889	EC-500	.00∪3	31	5 00	\$2.94

## National Coupling Unit

This is a small insulated universal joint of the flexible disc type, for use in coupling the shafts of tuning condensers. Simplifies construction of single control receivers, prevents binding of shafts. For 14 shafts.

Cat. No. 3880 List Price 55c



Your 32c

### Laboratory Dials



The 4-inch solid German silver National Velvet Vernier Dial Typs N has been developed for use in radio equipment requiring the utmost precision of logging. It is equipped with a real Vernier, making accurate readings possible to 1/10 of a division. Uses the original and unexcelled National Velvet Vernier, Three-point mounting. mounting.

Cat. No. 2899, 100-0 scale. Cat. No. 2891, 150-0 scale. Cat. No. 2892, 200-0 scale. List Price \$6.50.

Your \$3.82

#### New National Auto Receiver

National Engineers have for the past year from engaged in designing a real automobile set, designed to overcome the faults and shortcomings of all preceding sets. Final actuals have not been released as we go to press, but we will be pleased to mail descriptive matter about this receiver to any-body asking for same. The highest design in automobile and radio eigeneeting has been incorporated in this latest release from the National Laboratories. incorporated in this latest release National Laboratories.

## Service Dent.

Our service department is now available for service and repair of your receivers and powerpacks. It is under the direction and personal supervision of Bertram M. Freed, assuring you of service that is right in all respects. Write for prices and details. Address "Service Department."

#### Velvet Vernier Dials



Velvet Vernier dials are synonymous wi the airlest quality and precision operati of tuning dial. Fig. 1—The original. Type A—No backlash exists—none can with operation

		deve	lop.	
Cat.	Type		List	Your
3893	0=100,	180*	8-1 50	Price
3894	100-100.	180*	2.50	\$1.47
3895	200-0.	360*	2.50	3141
3893	150-0.	070*	2.50	OT.T.
Fig. !	-Variable V	ernier	ratio of 6-	1 to 20-1.
Cat.				Your
No	Type			Price
3897	200-0	360*	\$2.50	ON AFT
3898	0.200	360*	2.50	\$1.47
3899	0-100-0	180.	2.501	OT.I.
Dial	Illuminator	and	Bracket	Estra, 30c
				with a dis-

Cat. No. Type List 3900 0-100-1 \$2.75 escutcheon. Your Price 3900 3901

3001 20040 2.75 1.82

Bial Huminator Extra. 30c

Fig. 4—The new National drum dial. Automate spring take up. Modern escutcheon. cat. No. 3002 List \$1.50 Your Price \$2.35

Type 28. Huminator extra. 30c

Fig. 5—The latest projection television type dial. Choose your station by rainbow color. A beautiful and novel dial.

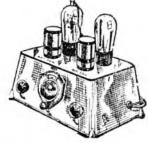
Your Price

Liet
Drum Dial, \$5.50
Diec Dial, 3.75. Cat. No. 3903 3904 \$3.23 2.21

## BUD EQUIPMENT—EVERYTHING IN RADIO

## Bud Super Short Wave Converter

A New Thrill in Radio With the Turn of a Knob



Makes Your Present Set a Short and Long Wave Receiver

The Bud Super short wave converter is a fully A.C. operated screen grid converter with self-contained filament supply and an adapter whereby plate current is taken from the broadcast receiver. Housed in a compact Die-Cast Aluminum case and finished in a beautiful crystaline brown. When operated in combination with any standard broadcast receiver either superheterodyne or tuned radio frequency type, the Bud super short wave converter will give loud speaker volume of short wave and broadcast programs of all the American and foreign short wave stations. A very sensitive and easy-to-operate unit, using one 224 and one 227 tubes. A new sensation to get radio messages from ocean liners, aeroplanes, direct without depending on rebroadcasting from local stations. Complete with 5 pairs of coils. Shpg. wt. 5 lbs.

Cat. No. 3568

Your Price Less Tubes

#### BUD AERIAL FILTER



very attractive compact unit that really enables you to cut out interfering etations and bring in the station you desire.

Cat. No. 3587

Lint \$1.50

Your Price 88c

## COIL FORMS

(Not wound)



Ideal for short wave converters and timers. Constructed of high grade low loss insulating ma-

Cat, No. 3590 Coll form

5 prong coll form Cat, No. 3591 List 35c

Your 21c Price

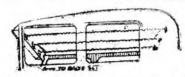
#### ANTENNA ELIMINATOR

A device that can be fastened into cabinet of set and takes place of an outside aerial.

Cat. No. 3597



#### BUD AUTO RADIO AERIAL



Eacily Installed and very practical Placed where the shielding effect of your car has least effect. Consists of these Phosphor Erones Colled Springs.

LIST \$2 50

## **AUTO RADIO SILENCER** KITS

The ideal kit for auto-radio installations, duaranteed to give perfect satisfaction. Consisting of specially constructed spark plus suppressors, distributor spark suppressor, and a generator silencer of the finest type, with bracket stiached for mounting on generator. Complete in attractive carton.



Cat. No. 3592. 4-cyl. Cars. List Price \$1.50

Your \$2.65

Cat. No. 3593. O-cyl. Cars. List Price \$5.80

Your \$3.41

Cat. No. 3594. 8-cyl. Cars. List Price \$7.10

Your \$4.18

Cat. No. 3595. Md. A Fords, List Price \$3.10

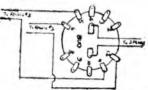
Your \$2.99

#### Constant Impedence Volume Control



Your \$1.47

## 5-POINT DOUBLE POLE SELECTOR SWITCH



A sturdy, compact selector switch that is ideal for use in installations, where one instrument as receiver, speaker or meters can be connected up to five circuits by merely turning the switch. Has no peer for set analyzer construction. List \$1.50

Your 88c

## PHONE TIPS



Your Price

Per Dozen

Per Gross

KNOWN THE WORLD OVER



**PRECISION** RELIABILITY

## HAWK"-A Two-Tube Short Wave Receiver



Remarkable 2-tube distance getter. Consists of regenerative detector and one stage of audio. Designed for use with new 2-volt tubes. Designed for two type 230 tubes, but can be used with any tubes. For years, this standard reliable circuit has given consistent reception from all parts of the world. Designed for phone, but extra stage of amplifier can be added for loud speaker reception. Covers from 14 to 110 meters or a frequency range of about 20.000 KC, to 27.000 KC. A kit quickly and easily assembled. Uses parts of the highest quality. Comes complete with panel, baseboard, instructions, necessary bardware and plug-in colls.

Cat. No. 3830.

## Your Price \$21.17

### Short Wave Condensers



Double spaced brass plates. Parmica insulation, smooth and easy tuning, double wiping contact, midline shaped plates, full floating rotor, shaft is removable. Panel or baseboard mounting. Tested at 1,000 volta.

Cat.	No				Ca	pacity	Your
3831					150	million	104
3833			ú			min1.	0.0
3833					100	mmf.	\$2
3834					000	mmf.	<b>U</b>

r Price 2.94

## Midline Condensers

The improved Midline Condenser utilizes the newly perfected Parmica low loss insulation. Four years of leadership attest to the remarkable engineering and leadership of Hammarlund Midlines. Special shaped brass plates, full floating rofer, removable shaft, ball and come bearings bronze pigtail; rib reinforced aluminum alloy frame, 1,000 volta AC.



Capa	city	Your Price
.0005	mfd.	\$3.24
.00085	mtd.	\$3.09
.00095	mfd.	\$2.94
	Cape 2000.	Capacity .0005 mfd00085 mfd00085 mfd.

## Short Wave Plug-ins



Built around the famous Hammarlund self-Built around the famous Hammarland self-supporting space-wound core material develop-ed over five years ago, and still acknowledged as standard for low impedance at the high frequencies. New and greatly improved. For use with 125 mm, condensers. Set consists of base with a variable antenna coll and 20, 30, 40, 80 mater hand plug-in colls.

Your \$7.35

Additional coll for 105 to 205 meters.

Cat. No. 8838. Your Price \$1.77

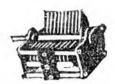
## New Midget Short Wave Condensers



Soldered non - corrusive brass plates, sturdy frame and accurately fitted bearings. Parmica insulation. Four - point bronze wiping contact. No pigtail. Adjustment locking serew works in a groove. Cannot burn the shaft.

Cat, No.	Plates	Min. Cap.	Max. Cap.	Price
3810	43	12 mmf.	300 mmf.	\$2.06
3841	34	10 mmf.	260 mmf.	1.77
3842	27	10 mmf.	200 mmf.	1.65
3843	19	7 mmf.	140 mmf.	1.47
3844	14	e nnt.	100 mmf.	1.35
3845	11	6 mmf.	80 mmf.	1.18
3846	7	5 mmf.	to mmf.	1.06
3347	8	4 mmf.	35 mmf.	.88
3848	8	a mmf.	90 mmf.	.88

#### Transmitting Condensers



The extremely low losses and high quality of Hammarlund Transmitting Condensers makes them ideal for high powered transmitters. Spacing between plates is .983". Breakdown voltage is 3500 volts at 500 K.C. using 500 cycle alternator.

Cat.	Capacity	Your Price
3849	106 mmfd	\$.353
3850	200 mmf	4.12
3851	890 mmf	5.88

## Short Wave Plug-in Inductors



Constructed like the regular plug-in coils, but without the tickler or valuable primary. Designed for use in a receiver using a timed radio frequency stage, using standard or secon grid tibes. Set consists of base and coils for 20, 30, 40, 80 meters. Cat. No. 3852

Your \$4.41

105 to 205 meter plug-in coils.

Your \$1.18

#### R.F. Choke Coils Polarized Type



The coil unit is thoroughly similar in an aluminum shell. This construction results in a minimum external field and permits close compact receiver design. High impedance, low distributed capacity. The polarity is indicated. Cat. No. 3854

Your 88c

## High Impedance Type

Encased in bakelite, Ideally suited for use in detector plate circuits. "B" plus and grid re turn leads of R.F. tubes or wherever R.F. filtering is required. Both types will carry 60 m.s.



85 Millihenry inductance. Capacity, 8 mmf. D.C. resistance, 215 ohms. Cat. No. 3855

YOUR \$1.18

250 Millihenry inductance. Capacity, 2 mmf. D.C. resistance, 420 ohms. Cat, No. 8856 FOUR \$1.32

## MINDGE'E SE'ES FOR ALL PUREPOSES

## THE ". C. A." ENVOY RECEI



Proving itself to be a most remarkable and powerful receiver, the Envoy is taking its place as the leading and best designed midget that has ever been released. Radio's latest developments have been so incorporated into the Envoy as to produce tremendous volume and selectivity WITHOUT DISTORTION. The introduction of the VARIABLE-MU SCREEN GRID IVIES absolutely prevents cross talk and interference between stations. A PENTODE FOWER OUTPUT TUBE resistance coupled to the screen grid POWER DETECTOR assures life-like reproduction and outstanding tone quality. Equipped with famous "I. C. A." tone centrol, phenograph jack and sturdy, powerful hum-free dynamic speaker. WAVE-length range of 200-600 meters but MODILLS ARIC AVAILABLE RANGING FROM 200-2,000 METERS. Five tubes—two 551 variable-mu tubes, one 224, one Pentode and one 280 tube. Cabinet of dark American walnut, plano finish. Net wt. 28 lbs. Shpg. wt. 32 lbs.

Net wt. 28 lbs. Shpg. wt. 32 lbs.

Cat. No. 3308, 110 Volt A.C. or D.C. Models. \$29.50

Cat. No. 3309, 220 Volt A.C. or D.C. Models. \$29.50 List \$65,00. Your Price ....

Cat. No. 3310. Long Wave Model, 200-2,000 \$29.50 Meters. List \$72.00. Your Price....

Above Receiver \$22.75



#### La Salle ··CHICO"

## A Double Pentode and Variable Mu Midget of Superlative and Outstanding Merit



Tubes required for A C. models, 2-235, 2-247, 1-224, 1-280
FOR 110-VOLT
110-VOLT C, C, \$22.50

Your price 110-volt 60 eyels A.C. Your Price

\$22.50 \$25.20

Outstanding Merit

Employing in a new and highly improved circuit, two new type 235 variablem with the provided circuit, two new type 235 variablem with the provided circuit, two new type 235 variablem with the power products one 224 screen grid power of extended the power products and a 280 receifier, PRODUCTING SCH TREMENDOUTS OUTSTORTHONLESS VOLLIME AND AMAZING SELECTIVITY AND SENSIBLE WITH ANY OTHER COMBINATION OF TUBES THE United of Rola dynamic speaker designed particularly for this set, rashy handles the volume with sweeting particularly to this set, rashy handles the volume with sweeting particularly to this set, rashy handles the volume with sweeting of tone and without a trace of hum, illuminated full vision diad and per manual power of the world and the post of the product of amountain with the post of the will be surgoundings. It was a beautiful cabinet of Amountain wallust, tastellish finished will fit into the most of the will be surgounded to the product of the produ

HALSON RECEIVERS



A.C. MODELS Cat. No. 3312. List \$00.00

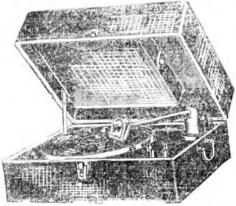
Your \$23.75

D.C. MODELS Cut. No. 8318. List \$62.50

Your \$24.50

#### Webster Pickup Bodrola Allen-Hough

A handsome and serviceable combination for reproducing phonograph records with minimum effort and maximum efficlency. Self-contained in a strong, attractive leatherette carrying case with the famous Hough electric motor. The Web-ster pickup, one of the most popular models, equipped with volume control is responsible for the excellent reproduction of which the outfit is capable. Extreme volume with minimum needle-scratch is made possible by the carefully engineered phono pickup. Two attractive leads emerge from one side of



the case, one connects to the A.C. and the other to the ampliher or radio set by means of adapter supplied. Comes equipped with record case which is out of way, needle cups, adapter and turn table which fits any size record. Strong artistic carrying handles. An Shpg. wt. 23 lbs.

Cat. No. 3314. List \$42.50.

Your Price

## Midgets in Size-Giants in Performance

## THE UNIVERSAL COMPANION



Uses 1-236 and 6-237's

Uses 1-236 and 6-237's

A self-contained portable all-electric receiver with built-in speaker. So versaule that it may be plugged into any A.C. or D.C. socket or operated from a 6-voil storage battery and 135 voits of "B" battery. Single dial tuning inlicing a most modern circuit. One stage of tuned screen grid R.F. using a 236 screen grid a screen grid gower defector, employing a 237, a power output stage using two 237's in push pull. Rectiner is a 237. Plenty of Volume Selectivity, and Sensitivity. Built in a handsome leatherette traveling case, measuring 11 % "x11'%" x8%" and weighing only 14 1bs.

Cat. No. 3676 Cat. No. 3676 Your Price List \$39.50

## MUSIC MASTER



The Smallest, 17"x13 x732" The Lightest, 1849 lbs. Shpg. wt. 23 lbs.

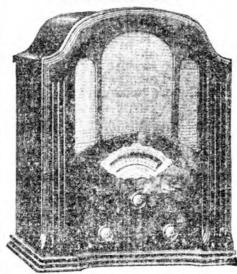
## Mighty in Performance

A nationally-famous Midget Strong com-pact construction careful design. Loring-White simplification uses 3-224 sorten glid 1-245 power and 1-250 type tubes files trofitte condensers. Jensen of Magnatod speaker, beautiful modernists walnut ve-meer catinet. Find for yourself the un-usual value offered in these splendid sets

Cat Nu 3674 List Price \$49 50, Less tubes Your Price

Complete With Tubes

## AUDIOLA MONARCH



RCA, GE, Westinghouse Licensed

#### Multi-Mu-Pentode

Offering more advanced features in midget receiver design than any other midget on the market today. Three sharply tuned stages using 2-235, 1-224, 1-227, 1-247, and 1-280 tubes. Jensen dynamic speaker, designed for Peniode, Spotlight tilling, smooth voltime control, 2 Mershon electrolytic condensers, 8 mfd cach. A perfect tone control that does not affect volume. Oversize power transformer, cadmiumplated fully shielded chassis. Housed in a graceful tastefully finished cabinet of line woods. Shipped from our Chi ago, Ill., factory,

List Price \$79.50 Your Price

## THE ELGIN PENTODE 5-TUBE RECEIVER

A fine, outstanding receiver constructed of well-known standard parts of the highest quality. A handsome adjunct to any home. Cabinet of fine grain selected woods housing a study compact cadminm plated chassis. I see 2.235 Variable Mn. 1.724, 1.247 Power Pentode and 1.280 tubes Jensen high impedance dynamic to match. Pentode tube full vision Dial. Local Distance switch. 1.5 mid Electrolytic condensers An Island compleheator. Resulting in a powerful selective sweet mellow tone tocelver of high remain cabinet.



Cat No 3677

Your Price

Complete With Tubes

## Elgin 7-Tube Pentode Multi-Mu Receivers



A new and different compact radio set featuring a High Gain "Super-Mu" hum-less circuit, embodying four variable-mu tubes, 1-224 and Pentode output 280 rectifier, 7 tubes in all.

Every New Feature

- Every New Feature

  1. Four gang condenset,

  2. Hair breath selectivity,

  3. Weird sensitivity,

  4. Full-vision illuminated field,

  5. Four tuned stages,

  6. Complete shielding,

  7. Three Electrolytic condensers,

  8. Oversize Power Transformer,

  9. Cadmium-plated heavy gauge base,

  10. Powerful Dynamic Speaker,

  Beautiful hand-rubbed walnut cabinet of exclusive design,

  Cat. No. 3673

  List Price \$59.50, with tubes

Your \$34.95

110 Volt A.C. or D.C. Model Complete with Triad-R.C.A. Licensed tubes

Elgin Chassis and Speaker Only List Price \$48.50

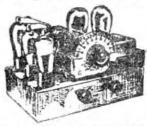
Cut, No. 3675

Your \$29.50 Less Price \$29.50

Complete with set of Trisd-R.C.A.
Licensed tubes
List Price Your \$34.95

List Price

## Reliable Pentode Multi-Mu Chassis Triple Screen Grid

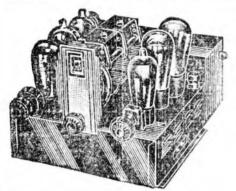


All the new features in Radio are part of this fevelver. Variable Mu tubes. Pentode Power tube, two Electrolytic condensers Full-Visioned Bul Sharply Tuned Stages Power betection, Standard Parte Here is an opportunity to cash in on one of the most wonderful midget of its size and accomplishments ever produced. So designed and continued as to fit into any sigle cabinet with little trouble and less effort. A heavy sauge, cadmium-plated chassis is the foundation for this remark able value. Uses 2 285, 1-224, 1-247, and 1,280.

Cat. No. 8678

Your \$26.75 Complete With Tubes and Dynamic Speaker

## Portables - The Companion - Battery Receivers



## National NJ-30 Compact Electric Receiver

A truly remarkable receiver. Small but powerful enough to compete with the larger sets. Made with precision by National parts. Compact, measuring only 12 inches long by 10 inches high and 10 inches wide. Modern in design. Equipped with phonograph plug-in jack. three screen grid tubes, one 227, one 245 and one 280 tubes. Can be operated with dynamic or magnetic type reproducer. Superb tonal quality. A special offer. Shipping weight 15 lbs.

Cat. No. 3477

List \$77.50

## Portable Radio Receivers

## Vagabond Battery-Operated Portable

A single dial portable receiver with remarkable efficiency, tone quality and power. A large purchase enables us to offer this quality and power, bargain to you.

EQUIPMENT NEEDED

Five UX199 tubes, 2.45 V.
"B" batteries (Borgess 5308 or similar), one 4% voit "C" battery (Borgess 5360 or similar), and 3 dry cell "A" batteries.

Cat. No. 3178

Your \$22.50

Less Equipment

## TOM THUMB PORTABLES

New Model B Screen Grid For Battery Operation The use of two serven grid 222 tubes plus the single drum dial and the beautiful lightweight cabinet make up a portable receiver that amazes all who hear its sensitivity, selectivity and clarity. Station after station come in. hear its sensitivity, selectivity Real shock-proof construction.

#### NECESSARY EQUIPMENT

Two UX222 tubes and three UX199 tubes, two Burge's 5308 (or similar) 'B" batteries, one 4 % Burgess 5360 (or similar) "C" battery and three dry cells. Cat. No. 3179

Your \$26.50

Less Equipment



## Model Battery Receivers

#### ONE-TUBE RECEIVER



Extremely sensitive using full 360° tuning condenser: small yet complete in every detail, Shpg. wt. 2 lbs.

Cat. No. 3480

Your \$3.25

#### TWO-TUBE RECEIVER



Single dial control: individual filament control. Very sensitive and can be used to operate a loud speaker on powerful stations. Shpg. wt. 4 lbs.

Cat. No. 3481

Your \$3.75

### THREE-TUBE RECEIVER

Will ment control.

Will operate a
loud speaker.

Reflex type circuit gives it
greater sensitivity and selectivity. Shpg. wt. 6

Cat, No. 3482

Your \$4.25

## EVERYONE'S COMPANION-

## All Electric Receiver



For Traveling Men, Hospital Patients and Shut-In Individuals

Wherever there is electric current, this self contained electric receiver is a fit companion for the radio enthusiast. No batteries are required, it being only necessary to ping into the 110 volt light live. The high gain of the receiver permits the lies of almost any sort of autema or ground. Any automa will be found satisfactory. Single dial control for tuning, another control acting as combined volume and sensitivity control. Uses two 227 type tubes in A.C. model and in D.C. model one 112A is uses, insuring quiet operation. Everyone's Companion will furnish head-phone reception that is both pleasant and entertaining. Range comparable to that of the average loud speaker set. Pair head phones included. Shop, wt. 12 lbs. Wherever there is electric current, this

Cat. No. 3484. D.C. Model for 110 volts. \$14.50 Your Price ......

Cat. No. 3483. 110 V. 60 cycle \$14.50

## Automatic Radio Shut-off

This is a device which must really be used to be appreciated. When the receiver is lifted off the hook, the shutoff acts and quiets the radio. When you hang the receiver up, the radio is automatically turned on. No need waiting for the tubes to heat. The Shut-Off merely shuts down the speaker and not the radio. The program is on but you do



not hear it because it shuts off the speaker. Made in two styles, for desk phones or French phones. Shpg. wt, 3 lbs. Cat. No. 3947

Your \$1.56



## ALL TYPES ALWAYS IN STOCK

## Reliable Guaranteed Tubes

5% Discount on Orders for 50 or More Assorted Tubes

UA201A	30c
LX226 UY227 LX215 CX280 UY221	35c
UXI71A	45c
217 Pentode UN236 UN281, UN237 UN250, UN238 UN249 UN251 Variable Me.	95c

UV199 UX199 UX120 UX200A UX112A	1																-	,					500
WD11 WD12 UX230 UX231	,	*					 				-	,	4	*	2								650
UX232									i				,						,		. ,	,	750

GUARANTEE! All Reliable tubes are tested on a Jewell Standard tube tester before shipment. Any tubes found defective will he replaced in 15 days.



Arcturus Radio Tubes are noted for long life, and quick heating. Humless reception assured. Pul a set in use now!

Leduct 5% discount on orders for 50 or more assorted tubes.

## AC Type Tubes

			ire sho	I uoca		
	Туре	Lint	Price	Туре	List	Your Price
124 551 126	Detector-Amplifier Screen Grid Variable Mu Amplifier Power Amplifier	2 00 2 70 1 75	1 18 1 59 1 03	PZ Pentode 150 Power Amphilier 150 Full Wave Rectifier 151 Half Wave Rectifier 0/14 Power Amphilier	6 00 1 40 5 00 2 25	3 53 83 2 94 1 33
	with the second second			15 Volt A	C Iu	Des

DC Type T	ules		15-Volt	AC Tubes	Your Price
099 UX Detector Amplifier 099 UV Detector Amplifier 101A Detector Amplifier 012A Detector Amplifier	List 82 60 2 15 1 25 2 25	Your Price \$1.47 1.62 -74 1.13	26 Detector 28 Amplifier 48 Amplifier 50 Power Amplifier 40 Power Amplifier	3 00 3 00 3 00 3 00 3 00 3 00 3 00	\$2.35 1 77 1 77 1 77 1 77
122 Screen Grid Amphier,	4.50	2.65	32 High Mu 22 Normen Lind	7.50	4.41

## Tungar Type Replacement Bulbs



## R.C.A. UV877 PRO-

22 Serien Lind,

May be used on set analyzors, conset analyzers, con-tibility lests, in-continuity lests, fluids increase training from the Battery in case of short circuit. Standard double rentact automobile light base. In Cat. No. 1969

Your 29c

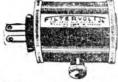
## Television Tube and Photo Electric Cells

A helevishin tube with a UX four-prong bakelite base. Striking voltage 100; minimum catient, 5 mils, maximum, 80 mils; n.ternal resistance, 1 000 ohms; plate area. 1 ½ m. sc No. 1896.

Your Price \$5.88 List, \$10,00. No. 1897. Photo-Electric cell, 1% in, bulb diameter, List, \$20,00, Your Price \$11.76 No. 1898. Photo-Electric cell. 3 in, bulb

diameter, List \$37.50. Your Price \$22.05

## FILTERVOLT



Elininates line noises from vacuum cleaners, sewing machines, electric fans, toasters, etc. Installed by plugging the unit into the wall socket between socket and receiver. Shpg. wt. 1

Cat. No. 730 List \$3.00 Your \$1.71

#### Reliable Voltage Regulator



An air couled voltage regulator. Provents line voltage rising above 11h volts as is required for best operation and longest tube life. Ballasting type of resistor. Necessary for every A.C. receiver.

Cat. No. 3281 List \$1.25

Your Price 45c Lots of 6, \$2.55

#### Universal Resistovolt



Prevents tubes from blowing out due to excessive of tubes and power packs. Heat automatically dissi-pated. Shpg. wt. 1 lb.

Cat. No. 723 List \$2.00

Your \$1. Price

## Type Rectifier Tube



125 mils Replacement tibs for all type "B" eliminators using Ray-theon or gas filled tubes. Cat. No. 3280

Your \$1.19 Lots of 6, \$6.90

#### Guaranteed B-H | Radiotron UX867 Photo Electric



The UX 867 is a highly senhighly sen-sitive gas-filled pho-to electric cell, Anoda s u p p l y voltag e, 300 volts, Anode cur-rent 20 mic roam

peres. Sensitivity is from 25 amperes lumen. Standard IX base. Cat. No. 3279. List \$35.00

\$17.50 Price

## Short Wave Receivers, Converters, Parts

#### Short Wave Coils



Bakelite moulded TX (4-prone, socket bases. Range of 15::10 meters with a 0001 variable condenser. Shpg. Wt. 1 lb. No. 130. Set of 4 Colls. Tast \$3.75

### hort Wave Condenser

.ow loss variable tuning condenser.
Single hole
mount. Modifled straigue line frequency Recommended for use with the type 130 or 131 short



hort was wave coils. Cat. No. 3089. List YOUR 85C

#### Vernier Dial



R. E. L. Type No back-lash, fric-No back ...
Thanslucent number plate. Easily installed. 4" diameter. Shpg. wt., 1 lb.
No. 176

YOUR 40c

#### Centralab Regeneration Controls

C.R.L. regenera-tion controls al-low the detector to slide in and out of oscillation easily and easily and snoothly, Available in 20,000 ohm



Cat. No. 3090. List \$2.50 YOUR

PRICE

#### Head Phones



he DX and short-Unusually sensitive, signed with alumi-Ideal for the DX wave fan, carefully d num shells ears wave fan. Unusually sensitive, carefully designed with aluminum shells and genuine moulded ears. Music and voice are reproduced with remarkable fidelity of tone and absolute clarity. Fit very comfortably, 2000 chins, resist. Ships. wt. 2 lbs. No. 912

YOUR \$1.28

PRICE \$1.28

## Shielded R. F. Choke

Universal choke for all radio frequency cur-enits. Mounted in a copper shield can, with tinned terminals for soldering.



Oat. No. 3091. List YOUR 45c List \$1.25

#### I.C.A. "CONQUEROR" SHORT WAVE 5-TUBE SET



For either AC or DC operation, DC requiring 1-222, 1-201A, 2-112A, 1-111A tubes). DO BOOSTER REQUIRED: USES ON F. SCREEN GRID R. F. STAGE plus regenerative

receiver with case. WAVE LENGTH RANGE

Eight PLUG-IN coils (same type as used on all commercial equipment) are included—cover range of 14 to 157 meters. Additional plug-in coils, covering 140 to 600 meters, are obtainable, permitting use of this receiver on regular BROADCAST wave-lengths, thereby making the "CONQUEROR" truly UNIVERSAL.

Battery model requires 180 volts "B," 40 volts "C," 6 volt storage battery. AC model requires special power pack listed below. Shpg. wt., 25 lbs.

No.	1076-17.	AU m	odel, les	pack	and tub	es. List	C2C 15
	NET						\$36.95
No.	1077-48.	BATT	ERY mod	lel, less	tubes.		

	NET				DACH	\$31.25
No.	1078.	I. C. A.	AO	POWER	PACK.	\$18.25
						318.73

NET... No. 1079. & BROAD-CAST PLUG-IN COILS. 104-600 meters. \$9.95

No. 1080. 8 PLUG-IN S. W. COILS. 14 to 175 meters

\$11.25

#### SUPERHETERODYNE SHORT WAVE CONVERTER



This unit makes a short wave super-heterodyne out of any receiver. Uses three 227 tubes and covers from 20 to 115 meters. No plug-in coils. Switch is used 50 cover all wave lengths. Built-in filament transformer. All that is necessary is to obtain a positive B potential from your receiver of from 45 to 180 volts. This voltage is not critical. Regular receiver is operated as usual when not receiving short wave signals. Shipping weight, 10 lbs.

Cat. No. 3096, List \$25.00

Your \$12.95

## The Flewelling-Dayton Short Wave Adapter

Detector tube is removed from your regular receiver and is placed in the right-hand upper socket of the Adapter. The cable plus of the Adapter is then placed in this empty detector socket of the reeripty detector socket of the receiver. No rewfring of sour present
set. Range 18 to 78 meters. European short wave reception highly
possible! Encased in a handsome
mahogany wood case. Measures
74% by 514% by 344%. Measures
weight 5 lbs.

No. 726, For D.C. Sets. YOUR \$4.95



YOUR \$4.95

## George W. Walker Flexi-Unit



Walker Flexi-Unit
The unit of a dozen uses at the price
of one. It can be used as a short wave
receiver, short wave adapter, regular
broadcast receiver radio, "experimental"
unit, oscillation, extra stage of R.F., a
ore-amplifier, a crystal receiver, and a
wave meter, and numerous other uses
which will suggest themselves to you.
Will use any type of tube, battery or
electric. Small in size, measuring 5%
by 8%," by 3". List, \$16.00.
Cut, No. 3948
FORCE 40.35
All types Adapters, \$1.39

All types Adapters, \$1.89

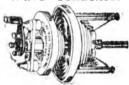
PRECISION SHORT WAVE PLUG-IN KIT Squirrel cage type air-space wound coils. Note variable primary Tuned with a .00014 condenser, covers 15 to 130 meters. Shpg. wt. 2 lbs.

No. 131. (OMPLETE SET.

List, \$12.50

YOUR \$5.10

#### Furnell 360° Short Wave Condenser



Ideal for short waves, 300 rotation assures wide spread over entire band, Special construction insures low minimum capacity. Pigtail leals give quiet operation. Available in .00015 mfd. or .00035 mfd. capacity. Oat. No. 3092. .00015 mfd. 101 R 127
PRICE 125
Cet No. 3092. .00025 mfd.

Cat. No. 3093. .00035 mfd. YOUR \$1.15

#### Short Wave R. F. Choke



Ideal choke for 8 hort Wave receivers. Low distributed capacity. This pacity. This choke allows the detector to oscillate easily over entire band. No dead spots. 3094

Cat. No. 3094 YOUR 45c

#### Remler 360° Drum Dial

This drum dial is ideally suited for use with the Furnell Conden-Furnell Conden-sers. Smooth vernler operation. Complete with escutcheon plate, lamp and holder.



Cat. No. 3095, List Price \$3.50 YOUR 95c

### Manhattan Reliable Telegraph Key



This Standard Telegraph Key is This Standard Telegraph admirably adapted to work. Adjustable arm ment with a Western type knob insures easy tion. Mounted on a hard wood base and supplied with mounting serews. Ships. wt., 2 lbs.

(at. No. 2083
YOUR PRICE

## Short Wave Transmitters and Equipment

## Filament Transformers



10.000 volt in gulation. Mounted in metal case insulators

Type 866, 12 amps at 214 V. for 2-866's. Cat. No. 3232 YOUR PRICE \$3.50

Type 872. 30 amps at 5 V, for 2-872's YOUR List \$13.50 PRICE \$6.00

Type 250. 6 amps at 7 ½ V. for 2-250's, 281's, 210's. YOU'R \$3.50 3231 Cat. No. 323 List \$10.50

Type 852, 7 ½ an Cat. No. 3235 amps at 10 V. for 203A's, 35 YOUR \$4.00 at. No. 323 List 812.00

Type 2250, 2 714 V. windings C.T. at 4 amps each.

Cat. No. 3236 YOUR \$4.00

## Puradyne Power Transformer



Metal cased, equipped with stand-off insulators. Type PF-50 delivers 3000 volt high secondary at 300 m. a. This winding is conter tapped. Rated at 500 watts.

Cat. No. 3237 List \$35.00

Your \$16.00

TYPE PF-250 delivers 1300 volt high secondary. This winding is center tapped. Also has 2 7th volt winding. Rated 200 watts. Cat. No. 3238. List \$12.00

Your \$4.50

#### High Frequency Buzzer



This type huzzer is the same as used on our wire-less practice set. It is adjustable. Has standard resistance of 2 chms. Black crystalized lacquer finish. Shipping weight 8 ozs.

No. 380-R. List \$1.25 Your 75C Price

## Puradyne Plate Blocking Condenser



Rated at 6000 volts. Equipped with stand-off insulators. Cat. No. 3239. .002 mfd.

Your Price 95c

Oat. No. 8240. .006 mfd.

Your Price 950

#### Ohmite Transmitting Grid Leaks



Unmounted, high current rating, Wattage capacity 50 watts. Available in 5000, 10,000, 11,000 and 16,000 and 17,000 ohms.

(at. No. 3246

Your Price 75c

## Tuned Grid, Tuned Plate Circuit Transmitter



This fransmitter employs a UN-210 Tube as Oscillator. The Output with normal plate voltage is 8 to 10 watts. Transmitters of this type are in common use amongst numerous amateurs and many of them have been heard around the world. This Unit can be used in conjunction with udditional equipment for Radio Telephone Work. It is completely wirel and tested and ready to hook up to antenns and power supply. Coils for 40 meters (the most common C.W. hand) are supplied. A plate milliameter of 0 to 200 is also included. The Power Unit uses 2 281 Tubes in the rectifier. Supplies 550 Volts D.C. and filament current for the 210 and 281 tube.

Complete with power unit ready to operate but less tubes, Cat. No. 3258. List \$150.00

Your \$77.35

## Ferranti 3-Stage, 250 Push Pull Power **Amplifier**



amplifiera are supreme Perrantt Porran realism of repliem of reproduction. The input stage is a 227 which operates into 226 pushpull which fewls into 250 pushpull. Full wave rectification is obtained by use of 2-281's. Output and input leads are shielded. Wiring in the amplifier is in lead cable. wherever necessary. The amplifier is portable manufacturing 24"x12"x81, and is a h | e. measuring 24"x12"x81, and is equipped with a full range gain control. The entire amplifier is in a metal case with only the tube sockets showing. The for pickup or radio use. Microphone input at slight extra cost.

CAT, NO. 3241. LIST PRICE \$450.00 Your \$80.00

Ferranti Amplifier with Microphone Input

CAT. NO. 3242. LIST PRICE \$525.00

Your \$94.85 Limited Quantity! Order Now!

## Puradyne 1000-Volt Condenser Block



Ideal for all 250 push-pull packs and amplifiers. Has 4, 4, 4, 2 mfd. sections, all 1000 volt working. Cat. No. 3245 List Price \$13.50

Your \$5.00

# TRANSMITTING PRODUCTS

#### Transmitting Condensers

metal cans with stand-off insulators All condensers rated at continuous working voltage.

Cat. No. 8247

Capacity 1000 Volta 1500 Volts 2000 Volts

\$1.40 \$2.25 \$3.50 1 mfd... \$5.50 \$2.40 \$3.25 2 mfd ---\$3.75 \$2.90 \$6.75 3 mfd ... \$3.75 \$9.50 \$5.75

Transmitting Chokes

Stand off insulators. Insulated for 8000 volts 20 henry, 110 ohma D.C. resistance, 250 mll, Cat. No. 3248

YOUR \$4.00

#### General Electric Double Filter Chokes



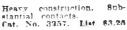
D.C. resistance 500 ohms per choke, 50 henry at 80 milliamperes. Made by General Electric.

Cat. No. 3255
Unshielded

Your \$1.95 Price \$1.95

Your \$2.25

## 150-Watt Transmitting Socket







#### Puradyne Transmitting Grid Leaks



200 watt, center tapped. Metal cased with stand \$1.75 8249 8.000 8250 10,000 . . . 3251 15,000 . . .

\$2.75 3252 20,000... 3254 \$3.00 \$4.0030.000 50,000

## PURADYNE 866's, 872's



Guaranteed Half Wave mercury vapor rectifier tubes. Used in most aniateur and low power broadcast

aniateur and ion stations (866. Half Wave Mercury Vapor Rectifier. Max. peak inverse volts 5000; max. peak plate current .6 anipere. Tube voltage drop 15. Filament terminal voltage 2.5 volts of K anipere. Cat. No. 3243

## YOUR \$6.00

872. Max. Peak Inverse Volta 5000, max. peak plate current 2.5 amperes. Tube voltage drop 15. Filament terminal voltage 5 volts at 10 amperes.

Cat. No. 3244

YOUR \$6.00

## PUBLIC ADDRESS SYSTEMS and ACCESSORIES

## DYNAMIC HORN UNITS



This unit is engable of handling any power outhert of 10 to 20 wants and is unit bleft sundy is 1.1 amps at 6 volts D.C. This may be supplied from a storage batter, or from the exciter listed on this page. Voice coil impedance is 10 others at 50 cycles. Measures 5½ "55½" x5½" and weighs 21 lbs.

Cat. No. 3194. List Price \$120.00. YOUR \$52.50

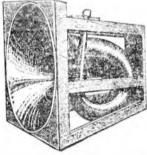
### **GUTPUT** TRANSFORMERS

Designed for use with units here listed for 250 amplifiers. Shipping weight, 4 lbs (at. No. 3195. List \$22.50

PRICE \$9.75

Output transferance. For 171, 210, and 245 Amplifiers.
Cat. No. 3196. List \$15.00
YOUR \$5.95

## EXPONENTIAL HORN For Outdoor and Indoor Use



meribed above for use with this

Cat. No. 3197. List \$80.00 YOUR \$39.50

Waterproof and Heatproof Model for October Use Cat. No. 3498. Tist \$100.00 YOSE \$47.50

#### TRUMPETS

For all public address work, Usualic used in clusters, 20½ foot trumpel, Length 42%, Bell 22%, Your Price

\$10.25 3501 \$20.00 .... Heat and Waterproof Model for Outdoor Use

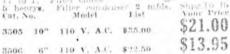
\$12.95 3509 \$25.00. 60" Exponential Trumpet, Bell is 32"

\$22.50 3503 \$50.00. Heat and Waterproof Model for Outdoor Use

\$33.75 3504 \$62.00

### Dynamic Cone Speakers for Public Address Systems

The ideal speaker for public address work.
Faithful reproduction is assured particularly when used with the buffles described below.
Lorge size have 10° comes. Small size have 4° comes. Field current 17.0. Volue result impositive. 12° colons Impositive 12° colons



\$14.95 3507 109 D.C. 827.50 \$7.95

D.C. \$15.00 2508 Exciter for Horn Units

For use with all horn units or any 6 volt D.C. dynamic. Operates from 110-115 volt. 60 cycle A.C. line Will sunply from one to three units. Special type rectifier and filter insures a quiet hum-free supply. Ships, wt. 10 lbs.

at. No. Cat. \$30.00

YOUR \$16.95

## Microphone Accessories Cable and Springs

Microphone Suspension Springs Nun-runting and stainless. Supplied in sets of 8 springs only.

Ont. No. 8513. List 75c YOUR 35c Per Set of 8 Springs

Shielded Microphone Cable Three Conductor

TOUR PRICE 90

PER FIG.

Condition waterprojed calif for YOUR PRICE 7C In conduct week.

## Dynamic Hern Units Intermediate Size

Designed especially for theatres. parks, and Public Address Installation-. Indians and outdoors. The diaphragm-the heart of the unit -is al solutely unbreakable. (Patont Pending), a feature found only in these up s. ship, wt., 15 lbs.



Intermediate Dynamic Horn Unit Field consultation is I map at 6 volts. Will handle up to a watts undistorted output.

Cat. No. 3514 List Price \$50.00

YOUR \$27.50

Junior Dynamic Horn Unit
Field consumption is amplied 6 volts. Will handle
up to 3 week and soft distribute.
Cal. No. 3515
VOLTE \$19.75

#### Exponential Horns



Ten-foot Giant Square Exponential Hour Bell size 42" x 122 Overall 50"x 105 x52", Prices in-clude Frame Work.

Cat. No. 3516 List \$125.00 YOUR \$67.50

Heat and Waterproof Model for Outdoor Use

Cat. No. 3517 List \$155.00 YOUR \$78.50

## **CURVED** TRUMPET



Curved trumpets are recommended for use where space is limited. They give faithful reproduction of all frequencies. Five foot curved trumpet. Bell measures 22". Shipping weight. 5 lbs.

Cat. No. 3518. List \$35.00

YOUR \$17.95

Heat and Wat proof Model for Outdoor Use (at. No. 3519. List \$48.00 YOUR PRICE \$23.75

### Two-Way Horn Adapter

Makes it possible to use two units on I flore or Trumpet, Increases volume materially without required to additional space. Shipping weight when

Cat. No. 3520. Fist \$17.50

PRICE \$9.75

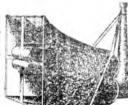


#### REFLEX HORN

Newest type of exponential horn Suitable for any unit. Last word in acoustical air columns. Saven space as overall size is 16"x13"x

Cat. No. 3199. List Price \$10.00 PRICE \$22.50

Heat and Waterproof for Outdoor Cat. No. 3500. List Price \$50.00 VOLR \$27.95



Acoustical Baffles for Cone Speakers Will change the fone of any dynamic to exponential quality. Square Buillie with equate bell, Size 19"x31"x10". Cone opening 7 or 10". Shipping weekshi, b lbs. Cat. No. List

\$12.00

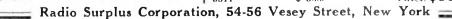
PRICE \$6.95

Square Baffle with Round Bell Bell 20". Longth 10". Come opening 7" or 10" VOUR \$8.65

Square Baffle with Round Bell Bell 32". Length 25". Cone opening 7" or 10"

8 3.00 PRICE \$16.95

8511





## Microphone and Public Address Systems and Equipment

#### Portable Address System



For use in autos, trucks, motorboate. motorboats, air-planes, halls or wherever com-pactness is a fac-tor. Uses two 245's and two 201's, Batteries 245's and two 201's Butteries used are six heavy duly "B" batteries and three 22's volt "C" batteries The panel is equipped with all equipped with all necessary controls. Measures 31" x 14" x 14". The microphone can be placed in the hattery compartment when List \$145.00 Less Accessories

Cat. No. 3116

Your \$95.00 Price

## Junior Portable Public Address System

nee where extreme volume is a necessity. not a r List \$60.00 Less Accessories

Your \$45.00

Adjustable Floor Stand

For Two Microphones Microphones
Extends from 45"
to 72". Modernistic.
Finished in satin silver. This is the
regular studio type
stand Shpz. wt.
20 lbs.
Cat. No. 3118
List Price. \$10.50

Your Price

\$22.95





\$5.75



Single Button Hand Microphone

Suitable for use in arr-plane broadcasting or home broadcasting. Made with the same precision as the other microphones usted here.

Cat. No. 3122 with switch

Your \$17.75

Cat. No. 3133

Your **\$14.50** 

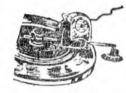
In addition to the equipment listed here, we can meet any requirements for special apparatus. We can supply racks and panels with or without control equipment for any purpose. Write us for prices giving all specifications for talkie equipment, double channel amplifiers, remote control for amplifiers, etc. We also can supply C. W. code transmitters, airplane transmitters, erystal controlled transmitters, oscillating crystals with thermostatic heat control and ground to any specified frequency. We can furnish Ultra Short Wave Oscillators for special Physiological Research Work. These can be supplied in two models. The first has a rance of from 1 to 5 maters with 20 wait output. The other is for general physicians and hospital use and operates at 5 meters with 150 wait output. Write for prices, giving all specifications. all specifications.

#### RELIABLE RECORDER HEAD

Enables you to make records of anything you would like to hear over the radio or direct recording. Can be used with any amplifier and microphone. Complete with instructions but less microphone. We recommend the Amplion Hand Mike,

Cat. No. 3218 List \$33.50

Your \$16.95



## Two-Button Microphone



Special alloy diaphragm of the stretched type enables this nicrophone to reproduce all frequencies between 30 and 7,500 cycles with practically flat amplification over this range. The buttons are carefully matched and balanced. Operates on 8 to 15 mils per button. 100 ohns resistance per button. Ships. wt. 5 lbs.

Cat. No. 3119 List Price, \$50.00

Your \$28.50

Single Button Microphone

Resistance, 100 dhms. Requires up to 6 volts at 8-10 mills for operation. Special allow diaphraem and unique construction of this microphone is responsible for its performance from 50 to 3.500 cycles with excellent volume. Shpg wt. 2 lbs.

List Price, \$15.00

Your \$8.25



## Broadcast Concert Model Two-Button Microphone



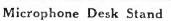
The leader of these microphones. Standard broadcast model. Extra fine carbon polished special granules used. Uniform frequency response from 30 to 8,500 cycles. An instrument of highest precision within ,001 of an inch in accuracy. Finished in combination eather, runnicial or rold. Uses 5 to 8 mils at 3 volts, 8-15 mils at 6 volts, Balanced most accurately on both sides. Shing. Wt., 5 lbs. List Price, \$75.00 Your CAA FO.

\$42.50 Your

Two-Button Microphone

Special alloy stretched diaphragm. Unique assembly and high quality of materials used enables this microphone to reproduce evenly all frequencies between 50 and 5,000 cycles. Shng. wt. 4 lbs. Cat, No. 3123

List Price, \$25.00 Your \$13.95



Price

Modernistic type finished in satin silver. 10" high, 8" base, 6" ring with suspension books. Shpg. wt., 8 lbs. Cat. No. 3125 List Price, \$15.00

Your \$7.95

### Amplion Transverse Current Microphone



An ideal microphone to use for making records, home etc. The patented enables it possible to 69 miles through the microphones metal disphrasm, no metal levers, or moving parts. Carbon hiss is entirely chiminated and stey cannot pack.

Cat. No. 3121 | List Price, \$15.00

Your \$5.75



## Adjustable Floor Stand

Modernistic finish of mat-in silver; extends from 45" to 72". Base is 10" square. Shps. wt.

Cat No. 3128 List Price, \$30.00

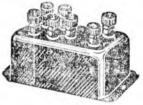
Your \$15.65

## Microphone Suspension Ring

6" inside diameter by A.". Four microphone suspension hooks with two outside suspension hooks. Satin silver finish. Sain silver finish.
Shpg. wt., 2 lbs
List Price, \$7.50
Cat. No. 3127
Your \$3.75



## Variable Input Microphone Transformer



Two input transformers in o case. Will mutch any standa one or two-button type microphor Tapped for 100 and 200 ohms. y standard microphone. Cat. No. 3128 List Price, \$15.00

Your \$7.95

Single button microphone transformer

Cat. No. 3129 List Price, \$7.50

Your \$2.95

Double button microphone transformer

Cat. No. 3130 List Price, \$14.50 Your \$3.95 Price

## Amplifiers, Power Packs, Eliminators, Television, Amplifiers

Microphone Pre Amplifier | A. C. Operated



Absolutely new. The first all A.C. electric operated microphone pre-amplifier. Absolutely self contained. Uses 5:227 tubes, one as a rectifier and the other as the audio amplifier etage. Sultable for microphone or phonograph plokup pre-amplification. Ideal for use with sets which have only one audio stage, and are normally incapable of operating with a phonograph picking. All hatteries are eliminated excepting the microphone battery. A smooth gain control and input matching transformer are built into units of the amplifier. first Absolutely new

List Price \$15.00 Your \$22.50 Less Tubes

## Reliable Audio Oscillator



Audio Oscillator
A u dio oscillators of
the better type have up
till now been offered
only at very high
prices. We now offer
through a special arrangenient with a
manufacturing
laboratory a n
improved osciltor at a very
low figure. Numerous ties is
and measurement's sam be
made with the
use of the aminful for issum figure.

oscillator. Useful for resum for limits of audio circuits, gain and frequency response of amplifiers. Used as an audio source of capacity, resistance, and all high frequency measurements. Uses one tube of any general purpose type as a 2014, 199-230, etc., and from 45 to 90 volts of "B" battery. List \$12.00

Your \$5.50 Your

Less tube and hatterless

### ACME "B" & "C" ELIMINATOR



Supplies pure fil-tered hum free current. Has C minus 40 V. R. ntinus, R plus 45, 90, 180, Will 45, 90, 180, Will operate a nine tuhe met using 171'4 in push-pull. Unv 280 foil ware rectipull. Un full wave r

Cat. No. 3286 Idst Price, \$35.00

Your \$6.65

### PENTODE ADAPTER



The Pentode, the new power output tube con nower cutput tube can now be used in place of the 24% by use of the Adapter. No rewinne necessary. Just plus the Adapter into the 245 socket and the Peniodo tube into the adapter to get the full benefit of the peniodo tube. Gires greater volume and more power.

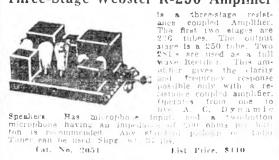
Oak No. R288 7411 Price. #2 50

Your \$1.20

## ANDRIBERS Designed and Built

We are special-To order or specifications. ists in this field and can build or design amplifiers for any use. We can supply panel jobs, rack units up to any capacity and for any purpose. Specialists in the design of special amplifier equipment for mobile advertising purposes, and airplane All amplifiers constructed by us to specifications carry a full guarantee. order to enable us to give correct quotation, we must have all necessary details. Our amplifier experts will be glad to aid you in every way in solving your amplifier prob-lems. All inquiries should be addressed to "Public Address System Department."

## Three-Stage Webster R-250 Amplifier



List Price, \$110

Your \$29.50

## KATO KONVERTERS



Kato converters are designed to allow operation of standard A. C. receivers from the 110 or 32 volt D. C. supply. Each unit comes complete with a filter size-tem which successfully channates all interference which may originate at the converter. Machinis are quite running in every respect, and the bearings are of the situaling type requiring only occasional attention. For special models not listed, write, giving full specifications. full specifications.

110-Volt D.C. to 110-Volt A.C. Output 117 watts, R. F. M. 3,600. Cnt. No. 3 Cat. No. 3287

Ontput 850 waits, R. P. M. 3,600. Cat. No. 3288 Your \$75.00

Ontput 187 watte, R. P. M. 3,600 Cat. No. 3289

Your \$56.00 Price \$56.00 (Add \$50 extra for condult fiftings)

#### 32-Volt D.C. to 110-Volt A.C.

Output 117 watts, R. F. M. 3,600. (at No. 3290 Your \$37.50

Output 187 watts, B F M 8,600 Cat. No. 3291 Your \$52.50

Oat. No. 3298

Output 80 watte, R. F. M. 3,600 Your \$79.00 Output 80 watte, R. P. M. 1,800 Cat. No. 3294

Reliable Supply Field Unit for D. C. Speakers



This unit will supply pure, humless, perfectly filtered field current for any high resistance D.C. field speaker requiring anywhere from 100 to 170 volts for energization. Uses two 280 tubes and supplies 170 volts of pure hum-free current at 110 milliamperes. Self-contained in a black metal crystalline finished box.

Cat. No. 3397

List Price \$12.00

Your \$5.50 Less Price \$5.50 Tubes

#### WESTINGHOUSE REXTOX ONE-AMP. TRICKLE CHARGER



known Nationally nationally known charger famous for its long life, careful construction and rehiability. Used for tricible charging batteries, Variable charging rate 1/2 to 1 amp. Can also be used to excite 6 volt D. C. dynamic

Manufacturers' type. Rat-115 volt. 60 cycle; D. C. ing A. C. 115 volt. 60 output. 6 volts, 1 amp.

Cat. No. 3295 List Price, \$12.50

Your \$3.95

#### BRACH CONTROLIT



Connected with the trickle charger and B eliminator, makes the set completely light socket operated. Set switch and served operated. Set switch controls everything. The Brach Controlit automatically turns B' climinator and on and off.

trickle charges Cat. No. 3298

List Price, \$2,78

Your 60c

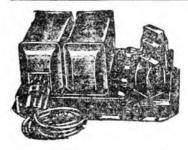
#### **TELEVISION AMPLIFIER**



amplifier specially designed for tele coupling condensers and resistors but less tubes. Gives a clear undistorted

Liet Price. 817 80

#### Custom-Built Amplifiers, Eliminators Reliable



## SAMSON PUSH-PULL 210 AMPLIFIER

pull with a 226 first stage audio. A 281 is used as rectifier. Equipped with the Samson variable line voltage plug. Employs Samson Audio Trans- to give long service, high quality of reproduction formers, famous for their quality. Supplies its own A.B.C. power. Input designed for use with tuner, phonograph or can be adapted to microphone pickup. Will operate two dynamic speakers or 8 magnetic speakers. Each amplifier comes Cat. No. 3585 complete with fuse, 8 ft, high, quality rubber covered cable, attachment plug and the exclusive Samson line voltage compensating plug. This plug

The famous Samson Pam Amplifier, Uses 210 push permits the operation of this amplifier on line voltages carrying from 100 volts to 130 volts. The amplifier is rigidly constructed, is designed and a minimum of trouble. Never before have Samson "Pams" been offered at these prices.

QUANTITY LIMITED

List \$137.50

Your \$25.75

#### DOUBLE PENTODE RELIABLE DUO SCREEN GRID AMPLIFIER

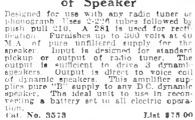
Cat. No. 3570. List \$65.00



Your \$37.50

Webster 3-Stage Push-Pull Power Amplifier

With Supply for Field of Speaker



Your **\$29.50** 

## Sterling 180-Volt B Eliminator



Type R-81 Operates 3. to 8-tube sets including 8-ts 18-sing 171A power tubes. Supplies b pais 45, 67, 90, 135, 180. All voltages are variable from zero to maximum value, giving perfect, power regulation. For this reason it is the ideal power unit to television work. Uses a BH Raytheon recipier, operates from 110-120 volt, 60 cycle A.C. power.

Cat. No. 3572 List\$28.50

Your \$6.95 Less Tubes

B. H. Tube for Above Eliminator, \$1.10

## Universal Power Packs

These packs will enable you to convert your battery sets at a minimum cost. This complete unit furnish is filament plate, and grid voltages for all tubes. All connections brought out to a convenient terminal strip. Requires 1-280 tube.

Tubes, 1-227, and 1-171A. VOLR \$5.75
PRICE \$5.75

Model 215. Supplies power for 4 to 5-227's or 221's, 2-245's. YOUR #0.05 PRICE #0.75 Out, No. 3576

Model PZ47. Supplies power for 4 to 5 227's or 224's, and for 5-217 periode tubes.

PRICE \$9.25
Cat. No. 3576

Two leads are brought out to supply dynamic speaker field.

## Puradyne Line Noise Filter



Suppresses disturbing noises caused by various motor and electrical devires. Installed in a moment. Use at source of interference or at receiver. For all electric sets.

List \$5.00

Cat. No. 8577 Your \$2.70

#### Reliable "A" Condenser

2000 mfd unct 2000 mfd unrf for use in any credits not exceeding 12 volts D.C. Used in "A" eliminators or speakers to eliminate hum. Replace-ment for El-kon condenfor El-

Cat. No. 3578

\$1.85

#### Filtervolt Line Noise Filter

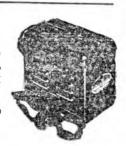
#### Heavy Duty Model

Heavy chokes, resistors and condensers are arranged in a special designed filter eir-cuit to suppress and smooth out line surges and smooth out current so that noise free power is delivered to the re-every. For all electrical power operated

Cat. No. 8579

List \$15.00

Your Price \$7.95



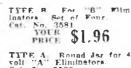
#### New Type XB-16 Elkon Dry Disc Rectifier REPLACEMENT FOR



No. 3580 Your \$4.25

### Replacement Jars for Philco and Balkite Eliminators

Guaranteed to give perfect, service in units designed for their use.



TITE A. Round day for 4-volt "A" Eliminatora. Cat. No. 3552 YOUR £1,47 PRICE £1,47

TITE AA Sugare Jar for Strolt "A" Fliminatora.
Cat. No. 3583
VOUR \$1.96



#### Westinghouse Rectox Unit



Cet. No. 8384

Your \$2.25 T,104 85 50

## Power Amplifiers—Loftin—White Type—Pentode Amplifiers

## R. C. A. Victor 2 Stage Push Pull Amplifier

A product of R. C. A.-Victor, this amplifier is the same as used in Victor models R-32, R-42, RE-45, and RE-75. Uses a 226 in the first audio stage, with 245 in push-pull in the output. Provided with phonograph pickup transformer, hum adjuster and tone control. The amplifier in addition to supplying its own A. B. C. voltages, also supplies 1½ and 2½ volts for the filaments of the tuner and B voltages for the detector and R. F. tubes. Also supplies field supply for any D.C. dynamic. The output is designed to operate into the voice coil of the dynamic speaker. This is just the amplifier around which to



The P.C.A.-Victor Amplifier uses 1-226, 2-245, and 1-280 tubes.

build a new receiver or to use for phonograph or P. A. work. Shipping weight, 17 lbs.

Cat. No. 3521 YOUR PRICE

SPECIAL! Famous R.C.A.-Victor Speaker

Matched for use with above \$2.35

## Kolster 245 Push-Pull Amplifier and Matched Dynamic Speaker



Furnishes field supply for D. C. speaker.

The ideal amplifier for radio, phonograph, public addites systems, and small auditoriums. Reproduces with marvelous tone dicelity. User a 227 in the first stage, followed by push-pull 245. Undistorted output is 4.8 w a 1 t s. Oversize power pack assures long continued service without power pack failure. Shipping weight, 12 lbs.

Your \$15.00

#### Matched Dynamic Speaker

Matched speaker specially designed to operate with above amplifier. Has a free suspension type moving cell giving it great sensitivity. Can handle tremembers volume. Field is energized direct from Kolster Amplifier. Complete with output transformer. Shipping weight, 4 lbs. Cat. No.

Your \$4.95
When Sold With Above Amplifier Speaker Separately, \$5.95

PENTODE AMPLIFIER

Loftin-White Licensed



3522

Utilizing the new Pentode tube, these amplifiers give ereater volume and better tone than the 245 amplifier. Uses 1-224, 1-247 and a 280. Input is direct to grid and cathode of 224. Output is direct from plate of 247. Undistorted computes 6.5 watts. Shipping weight, 12 lbs.

Cat. No. 3260. List \$37.50

Your \$17.95

## Acme Single Stage Power Amplifier A Power Amplifier for Any Set

Mo matter what set you have, its volume can be made greater and its quality better just by adding on Acme Power Amplifier with a power tube (171-A or 871-A). The amplifier consists of a stage of resistance coupled amplification with impedance leak, automatic "C" supply and a transformer to supply the power tube. All you have to do is connect the amplifier to the set, and your B supply, connect your speaker and you get radio as you have never yet heard it. Shipping weight, & lbs.

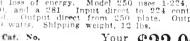
Cat. No. 8524. List \$12.80



Your Price \$

## Loftin-White Amplifiers LICENSED

Direct coupled Amplifiers of the latest design, these embody all features that will be asked for. A phonograph pickup tuner or microphone can be gonnected directly into the input without loss of energy. Model 250 uses 1-224, 1-250, and a 281. Input direct to 224 control grid. Output direct from 250 plate. Output 7.9 watts. Shipping weight, 12 lbs.



Your \$22.00

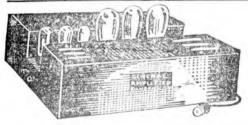
Model 245 uses 1-224, 1-245 and a 280. Input direct to 224 control grad. Output direct from 245 plate. Output 4.8 watts. Shipping weight, 12 lbs.

Cat. No.

Your P19 OF



Your \$13.95



## Three Stage Power Amplifier 250 Push-Pull

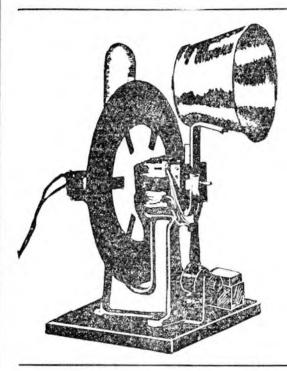
A Product of General Amplifier Corp. of Cambridge, Mass.

The ideal amplifier for Public Address systems. Uses a 227 first stage operating into 226 push-pull. Output stage is 250 push-pull. Two 281's are used in a full wave rectifying circuit. A line switch and a low-high voltage control switch to compensate for variations in line voltage is built in. The input circuit is adaptable for microphone, phonograph, or radio. The output will feed from 2 to 5 dynamic speakers. All parts are enclosed in a black finished metal case, with ample provision for ventilation. The amplifier is complete, supplying its own A. B. C. power. Ample oversize transformer and condenser bank. All parts are heavy duty. Will give long, satisfactory service. A typical General Amplifier product and one of the finest amplifiers ever offered at any price. Shipping weight 30 lbs.

Cat. No. 3525. List \$145.00

YOUR PRICE

## NEWEST TELEVISION APPARATUS



## RELIABLE TELEVISOR

With Television making such vast strides, it will only be a shootime before Television equipment and receivers will be sough after and much in demand. Likewise, those who know Television and its apparatus will be much in demand. With this in mind, or engineering staff, after long months of experimentation and trial lave constructed a Televisor of remarkable and praiseworths efficiency. All parts and materials of which the Television is constructed have been carefully designed and are of the highest grade

Special Newly Developed Motor

The Reliable Televisor is equipped with a Synchronous and Edd Current Motor procuring steady and constant rotation of the 60 hole Scanning Disc, so essential in the recption of Television signals and pictures. A speed control enables the operator to compensate for the slight voltage variations in different localities

Special Filter

To filter out injurious line disturbances a highly improved filter system is used. The supporting bracket is made of strong but light cast aluminum. A sturdy socket and shield with  $\frac{12}{3}$  x  $\frac{12}{3}$  aper ture for the Neon tube is provided. Also equipped with a shadow hox and magnifying lens to greatly enlarge the image and permit recently by more than one person. reception by more than one person,

Accurate Square Hole Disc

The 60-hole scanning disc is made of aluminum and accurately punched with square holes .003" in size to permit the entrance of more light than the usual round hole. With the increasing use of the 60-hole disc by the leading Television broadcasting systems, this size was made standard with our equipment. Finished in beautiful oxidized bronze and complete with directions and prints

Cat. No. 3634

In Kit Form

List Price, \$35.00

## Four Price \$17.15

We recommend the use of the Pilot Television receiver in conjunction with our Televisor for best results. Receiver described elsewhere in our catalog.

## I.C.A. Complete Essential Television Kit

#### Model 52

television essential kit comprising—1 bakelite seaming disc. 48 ples: Universal motor, speed control; notor chuck; telescope with lenses; serews and lense bracket; bakelite sub-base for motor; recentable cord and plus; sub-base with socket for television lamp; picture frame shield; bakelite cillars; four stage television amplifier tubes are not included.

No. 1890. List. \$52.50. \$30.87 Your Price

No. 1891. Same as Model 52, but includes television title List \$65 00. \$38.22 Your Price

Model B-1

92. Special television kit, but without amplifier or List \$45.00. \$26.46 Your Price

### Scanning Discs and Essentials

The I.C. A. bakelite scanning discs have been designed and constructed in accordance with Bell Laboratory specifications. The holes are all out mathematically correct to avoid distortion. For 115 "x114" pictures.



No. 1893, 24 aperture disc. List \$10.00. Your Price \$5.68

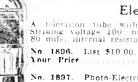
No. 1894, 48 aperture disc. List \$10.00. Your Price \$5.68

No. 1895. Universal disc of aluminum. Combination 24, 36, and 48 lines. List \$15,00.

Your

\$8.82

No. 3635. 60 hole diec. \$8.50 Your Price



## Television Tube and Photo Electric Cells

A television tube with a UX tour-prong bal, he has Striking voltage 100; minimum current, 5 mils, maximum 80 mils, internal resistance, 100 ohms; plate area 1½ % sq.

Your Price No. 1897. Photo-Electric cell, 1%" bulb di-ameter. List \$20,00. Your Price No. 1897.

\$11.76 No. 1898. Photo-Electric cell, 3" bulb diameter. List, \$37.50. Your Price

\$22.05

\$5.88

## I.C.A. Universal Television Motors

Universal motor (A.C. or D.C.). Easily controlled by rheostat. With 34" ehaft. No. 7161. Lier \$29 50.

No. 1809. Special single Phase 1/15 HP. 110 volts. 60 cycle motor. Resistance controlled—1800 R.P.M. Will operate 12" to 24" scanning discs. 14 shaft. List \$35.00. \$20.58 Your Price

No. 1900. Chuck to fit %" motor shaft. \$2.94 Lat \$5.00. Your Price ......

#### Speed Control

For synchronization of picture and signals. No. 1921. List \$3.00. \$1.89 Your Price



#### Television Amplifier

The ICA four-stage amplifier, complete with all resistors and coupling considerates. Any power tube will serve, although two 245 or 250 in the output are recommended. Tubes not included.

No. 1901. List. \$17.50. Your Price

\$10.29

Television has this year taken fix greatest forward stride since the inception of the art. Columbia and National Broadcast Corporations are daily transmitting television programs. Television today is even further advanced than radio was in 1921. Every experimenter and radio fan is delving into it. At the present stage it is possible for everyone to contribute improvements to the art. Be the first in your neighborhood to show television. We list television apparatus of nationally known, reputable manufacturers, and advocate its use for experimental purposes. Television material is all of experimental nature and not subject to refund or exchange. In the event of damage to shipment we advise purchaser to file claim with carrier.

GET INTO TELEVISION NOW!

## Best B.B.L. DeLuxe Home and Theatre Pickup



The largest, heaviest and most powerful pickup on the market. Yet so delicately counterbalanced that it lies like a feather on the
record. Double tone arm with unique hinge
for raising and lowering head, makes needle
changing more convenient than ever. Volume
control is a built-in feature of the pick-up
conveniently located on the base. Shpg. wt.
7 lbs.

Your \$11.76

List \$20.00

## Webster Phonograph Pickup



The Webster Electric Pick-up will faithfully reproduce all frequencies. Remarkable clearness and volume and freedom from any objectionable noises when playing any type record are features that prove scientifically correct design of this Webster Pick-up. A volume control is built into the base of the pick-up allowing a full range of volume control. Finished in antique bronze. Shpg. wt. 4 lbs. complete. wt. 4 lbs. complete. Cat. No. 3135.

Your \$5.95 Price \$5.95

## The New "Upco" Chromatic

Professional Pick-up with Built-in Volume Control As Used in Theatres and Public Address Systems



UPCO Engineers, backed by limitiess skill and experience, have evolved this truly actentific, sensitive instrument capable of reproducing finest muse with full justice to the consummate art of its creators. A good value at full list price of \$17.50.

Cat. No. \$136.

Your \$7.95

## Multiple Speaker Extension Cord

or Speaker Output Adapter



Complete with Cord Connector

For sets using push-pull audio This device enables one to connect additional speakers to any radio set, without rewiring or soldered connections. Simply place the adapter under the power tube or tubes and connect the additional speakers with the connect to turnished.

(at. No. 3142.

Your Price,

## Clarostat Tone Control



Time control is the kernote of 1931 radio. All the better types of sets are provided with sets are provided with tone control. A radio set is obsolete without tone control. Table model beauti-fully finished in black and gold; felted base; long connecting cord and handy disc con-nectors.

Cat. No. 3137 List Price \$2.35

Your \$1.25 Price \$1.25

## Panel Mounting Type

Cat. No. 8188 List Price \$1.80

Your Price

\$1.03



## Columbia Presto Pickup

A Sure-Fire Combination



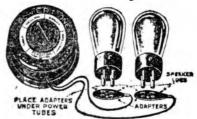
The deservedly popular "Columbia" Pick-up with the "Presto" base—an n. Will take records of any combination ideal combination. Will take records of any marketed size. Take advantage of this un-

usual value. Cat. No. 3130 List \$35.00

Without Volume Control

Your \$5.95 Price \$5.95 Volume Control \$1.45 Extra

## Power Tone Regulator



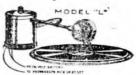
Not just another tone control but embodies features of design that make it a real control. Control is actuated on the grids of the power tubes instead of on the plates, giving a larger degree of tone regulation. Provision is made to allow the connection of extra speakers. This is a real convenience and a distinct Powertone feature. Available in table and panel mounting styles, and for push-pull output and single power stage.

Cat. No. 8143. FOR TABLE TYPE.

Your \$1.75 Price \$1.75

Oat. No. 8141. FOR PANEL MOUNTED. Your \$1.35 Price \$1.35

## Bristophone Phono Pickup



possible acnsi-tivity. Propossible aensitivity. Produces enormous volume perfectly clear and free from distortion. Shpg. wt. 8

Handsomely finished in gold. Cat. No. 3145. List \$17.50.

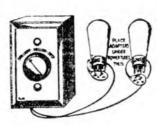
Your \$4.75

## Bristophone Phono Pickup

Model M
Employs carbon microphone principle,
Cat. No. 3154. List \$12.50.

Your \$2.75

## **Bud Tone Control**



Brilliant, bright, mellow or deep tone is at your command. Very easily allached to the radio set. Place the adapters which are suspended from the bakelite box, under the two power tubes in your set. Should your set have only one power tube, place one adapter under the power tube and cut the adapter under the paragree. adapter under the power tube and cut the adapter off of the other wire and attach the wire to the ground post of the radio 8hpg. wt. 2 lbs.

set. 45 hr 2 %" by 2 %". Cat. No. 3110.

Your Price \$2.25

#### Grebe Tone Control



One of the first and finest of all tone controls. Permits 6 degrees of tone color from low Bass to high Treble. Complete with bakelite knob and escutch eon plate. Cat. No. 3773

Your 85c

## Kolster Electric Pickup

#### For Home and Theatre Use



Automatic Type L

The Kolster Pick-up is hermetically scaled—thereby preventing attraction of foreign particles. In the Kolster Pick-up you will find nothing but the best Cobalt steel magnets, which assures the user of permanent satisfactory operation under any conditions. Nowhere and at no time has there ever been offered a more sensational value in radio electric pick-ups.

Your \$3.75 Price \$3.75

## Electric Phonograph Turntables





## ELECTRIC MOTORS

With 12" Turntables Manufactured by General Electric NEW MODEL

View with mounting board

Not to be confused with the older model. Available for A. C. or D. C. These new phonograph motors come to you fully assembled and mounted on  $\frac{1}{2}$ " warpproof veneer panels measuring 15"x15" ready to install into your own cabinet.

These motors are absolutely noiseless and humless. Built as only motor manufacturers of long experience could know how, they are an epitome of phonograph manufacture. The ideal motors to use for recording. They have ample power to operate any recorder head. Completely equipped with speed regulator, cord and attachment plug and a 12" turn-table to take any size records. Measures over all 16"x16"x10 1/2". Shpg. wt., 25 lbs.

Specify whether A. C. or D. C. model is wanted. A. C. motor will be shipped unless otherwise specified.

Cat. No. 3371 Your A. C. or D. C. Price



THE ALLEN A.C. MOTOR For 110 Volt 50-60 Cycle A. C.



One of the most efficient and aimplest phonograph motors ever designed. Silent synchronous type motor, it starts and stops at the flick of a finger. Regardless of voltage fluctuations, they revolve

at exactly 80 revolutions per minute, eliminating the need of a speed control. Measures only 1%," in depth, it is a marvel of compact and efficient design. Easy to mount. Complete with all hardware and a beautiful felt covered turntable.

Cat. No. 3769 List \$35.00

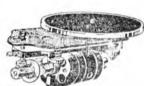
Your \$3.25 Price

## THE PRIME GREEN GIANT MOTOR For 110 Volts 50-60 Cycle A. C.

A sturdy powerful compact heavy duty motor of the self-starting induction type. Will not set up disturbing noises in any receiver. Equipped with large bearing surfaces to provide adequate support and to insure long life. Quick starting, full speed is attained instantly. Comes ready to mount with turntable, mounting plate, another switch and speed converted.

on-off switch and speed control.

Cat. No. 3770



## THE BLUE FLYER ELECTRIC PHONO MOTOR AND TURNTABLE

For 100 Volt 50-60 Cycle A. C.

A self-starting induction mo-tor of the better type. They have earned wide-spread have earned wide-spread praise and approval because of their perfect and uninterrupted service and uniform speed under severe voltage variations. Open type construction allowing complete ventilation. No heat or hum. Silent special-cut bakelite fabric gears. Long oversize sleeve bearings. Comes complete with mounting plate, turntable and speed regulator.

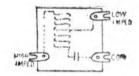
Oat. No. 8768



Your

SCRATCH FILTER





A necessity for all phonograph pickups. The noise made by the heedle as it rides in the record groove is amplified and appears in the speaker as a background scratch. This the filter eliminates. Mounted in a metal case \(\frac{3}{4}\)" square by 1\(\frac{4}{4}\)" high. Tapped to match the impedance of different pickups. Connects directly across pickup.

Cat. No. 3722

Your 35c

## THE RELIABLE HOME RECORDER

Senior Model

Enables you to record broadcasts over the radio, your own voice, that of your friends, etc. Uses the same pick-up for recording and playback by means of an ingenious switching ar-rangement. No extra weights neces-sary. Also enables you to home broadsary. Also enables you to home broadcast using the same amplifier as is in your set. The home recorder is complete excepting for batteries, needles and records. The use of pregrooved records such as the Victor, is recommended. The batteries required are a No. 6 Dry cell and a three terminal C battery. The entire unit is housed in a beautiful walnut wood carrying case equipped with a snap lock. Comes complete with the necessary plckup, recorder, microphone, selector awtich and volume control. Eatteries are housed in the carrying case. Full instructions enclosed. The Recorder can be used with any receiver or amplifier using 171, 245, 247, 210, or 250 output. Shpg. wt., 20 lbs.

Cat. No. 3766,



A dual electrical intended

RELIABLE DUAL TURNTABLE

turntable for blending one record into another without lapse between. Uses two self - starting, speed regulating induction motors and two high grade pickups.

A specially calibrated fader control permits blending from one turntable to the other without change of volume. Comes mounted on a tastefully finished panel standing 6" high. Will accomodate large size records. Each motor is equipped with its own line switch. Measures 28"x14"x6". Shpg. wt., 50 lbs.

Cat. No. 3767

Your \$27.75

Radio Surplus Corporation, 54-56 Vesey Street, New York

Your **\$33.85** 

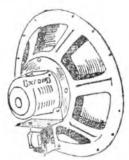
THE FINEST AND **GREATEST RADIO SPEAKER** 

## DEFORD SPEAKERS

THE MOST COMPLETE LINE Electro-Dynamic Speakers in the World

There Is an Oxford for Every Radio. Public Address and Theatre Purpose

## Midget Type Speakers



These are designed to be energized by the power pack of the radio set or amplifier to which they are connected. Ideal for midget sets. Available in 814", 10" or 1012" size. Cat No.

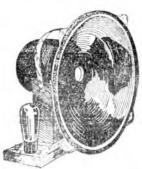
3658...814"...2500 ohm fleld \$3.45

8659...10 "...2500 ohm field \$3.95

3660...1014"...1000 ohm flebt \$4.95

3661..10%\*..2500 ohm field \$4.95

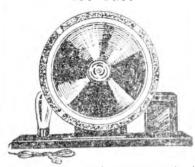
## Oxford A. C. Speakers with 280 Tube



These dynamics are of the three point auspension balanced spring. They use a 280 tube as a full wave rectifier to supply the field; gives more powerful field with less hum than the usual A C speaker. Complete with output transformers.

Cat. No.		Your Price
366210"	cone	\$8.25
366812"	con•	\$8.95
988414"	cone	\$12.95

## Auditorium Speaker For 110-Volt A.C. with 280 Tube



The greatest speaker ever made by Oxford. 14" cone, Utilizes the patented Oxford suspension principle. Takes a baffle with a 12" opening. They have oversize frames with extra large wire in the field coll. This gives a higher field strength and permits greater energization. The use of the 280 rectifier tube to supply the field assures a powerful hum-free supply.

Cat. No. 3665

Your \$12.95

## **OXFORD**

Personifying the utmost in dy-namic reproducer design, lecog-ulzed by the entire radio public as the greatest musical instru-ment in radio. Oxford speakers as the greatest musical instru-ment in radio. Oxford speakers are built to give the most per-fect recreation of sound possi-ble, the finest radio music and voice reproduction known. Cost was no consideration in the manufacture and construction of these instruments, but only "Perfection in Performance." The most advanced dynamic de-sign is incorporated into these units.

Three Point Suspension Balanced Spring Permanentized Controlled Diaphragm Moisture-Proof Coil Mountings Inertia Counteracted Construction

A Speaker for Every Purpose

## D. C. AUDITORIUM SPEAKER

4000 Ohm Field

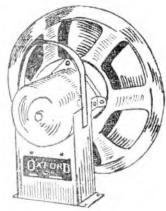


The ideal speaker to use for public address exitems where a DC evstems where a 100 speaker field supply is speaker field supply is noverall height, and takes a baffle opening of 1213". These speakers will handle the output of any amplifier without rattle, distortion or blast. All coll mountings are moisture-proof, enabling the speaker to be used outdoors.

Cat. No. 3066

Your

## Oxford D. C. Speakers



rione speakers are all designed for extensive heavy duty work, and have nowerful field cotls. They cover the field ringe of low, intermediate and hich notes with practically no attenuation at any end of the scale. They lost oversize field housing and the fields are wound with extra large wire in the field coil. This gives higher field strength and permits greater milli-ampere energization. milli-ampere energization.

Cat. No.

8667...10"...3500 ohm field \$4.45

3663...12"...4000 ohm field \$4.95

3069...14°...4000 ohm field \$9.95

## Jensen Jr. Auditorium Speaker Uses 280 Rectifier Tube



Improved model D7 AC. Junior Auditorium Speaker. Uses a 280 rectifying tube. These speakers have push-pull transformers and reproduce with magnificent volume from any set or amplifier. An ideal speaker for all purposes. pases. Cat. No. 8670 List 856.59

10" Size

## Electro Dynamic and Magnetic Speakers

## JENSEN "CONCERT" D.C. Electro-Dynamic Speakers

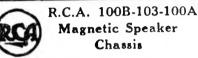
Model D-7 DC 10" Diameter



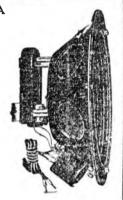
Model D-7 DC 10 Diameter 2500 ohm Field, 8 ohm voice coil. These units contain suitable push-pull output transformers and are absolutely hum-free. Connect directly to the set—no outside wires. As most standard manufactured AC sets are engineered for DC speakers of this ohmage, the possibilities for replacement with this really good speaker are practically unlimited. The wise merchant or requirman will take advantage of this real "buy." Never before offered at a cut price. The quantity available at this price is limited. Act quickly, Original factory packing of 2 in a carton. Shipping weight, 10 lbs.

Your \$9.50 Price

Cat. No. 8468



This chassis is the identical one used in the B.C.A. Model 100A and 100B Speakers, WHICH LIST FOR A6 HIGH A9 \$35.00. Note built-in OUTPUT TRANSFORMER—permits use of 450 voits, without distortion, ratiling or blasting. GENEROUS OVERSIZED MAGNETS. The thick armature is ACCURATELY CENTERED. The STURDY METAL FRAME IS LINED WITH A SPECIAL SELF-BAFFLING FABRIC, greatly improving acoustic properties of this seensational speaker! NOTE THE CORRUGATED SURFACE OF THE CONE, AN EXCLISIVE FEATURE—ENHANCES PERFECT TONAL REPRODUCTION QUALITIES CONSIDERABLY: MOST COMPACTLY MADE: 9 inches OUTSIDE DIAM ETER, 4 1/2 INCHES DEEP OVER ALL. Shipping weight, 4 lbs.



Your \$3.25

## R.C.A. 106 D.C. CHASSIS

This is the same encaker chasels as used in the 106 Console model job. It can be used as a replacement speaker wherever DC field supply is available. Field resistance is high enough to enable it to be used in place of both choices in the filter cir-cuit. Free suspension cone in-sures perfect tonal quality. perfect fect tonal quality, with output transomplete

Shog, wt. 12 lbs.

Cat. No. 3565

Your **\$6.50** 



## Type F—ROLA DYNAMICS—Type K

Equipped with output transformer. Standard field coil resistance 2.500 ohms. Excited by 40 to 80 milliamperes of direct current at 75 to 150 volts.

Voice coil impedance is one ohm.

Type K-9 Size 11" by 534"

Your \$5.75

Price

Type K-7 Size 934" by 51/2" Cat. No. 3168
Your \$5.15

Type K-6 Size 81/2" by 51/2" Cat. No. 3169 Your \$4.75

Type DC Fleld wound for 6 volt DC Cat. No. 3470
Your \$5.75
Price \$5.75

Type K for use with 245 Tubes Type F for use with Pentode Tubes



The Farrand inductor dynamic speaker unit is one of the most recent types developed. The Unit uses two powerful U-shaped permanent magnetic field. The Inductor Dynamic is very sensitive and yet will handle over 12 wasts without distortion or rattle. The armature noves over 1,8 when reproducing low notes. The action of the speaker is similar to an AC induction motor where a motor revolves under the influence of a changing magnetic field. The best speaker developed for auto or boat radio. State type power tube used when ordering. Ships. wt. 5 lbi-

Cat. No. 8466 9" Diameter.

Your \$6.95

Cat. No. 8471 12" Dlameter, Your \$7.95 Price \$7.95

Farrand

INDUCTOR DYNAMIC

### CROSLEY DYNACONE TYPE F

Automobile Speaker Stre

Will operate with any sot, easily installed in any car. The most powerful unit for its size. Oat. No. 8472

Your \$2.95



to enable use of the above speaker with any radio. Complete instructions enclosed.

Cat. No. 3173



Your 35c

## UTAH 12-IN. STADIUM DYNAMIC CHASSIS

Model 66-B

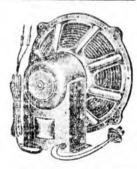
110 Volt 60 Cycle AC

A superior heavy duty unit for home, theatre, large hall or outdoor use.

Uses 110 volt 60 cycle AC current light socket supply for field excitation. Individually packed. Shpg. wt. 24 lbs.

Cat. No. 3474

Your **\$12.20** 



### R.C.A. PHOTOPHONE DYNAMIC SPEAKER

1,000 ohms, DO

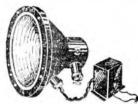
DIAMETER OF DIAPHRAGM, 13 in. Overall diameter, 15 in. Wt. 40 lbs. Here is the genuine R.C.A. Photophone Dynamic Speaker chassis with output transformer used with Western Electric Sound Systems in theatres. Suitable for public address installations in dance halls, auditoriums, churches, schools, etc. Rim of speaker has holes for easy mounting to baffleboard.

1,000 Ohm DC Field. Cat. No. 3475

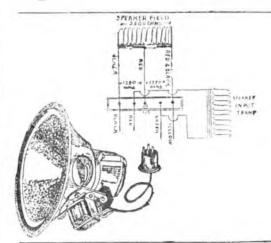
Your **\$14.00** 

110-120 V. 50-60 Cycle AC. Uses Cat. No. 3176

Your \$21.00



## Speakers For Quality Reproduction



## Utah Little Giant Speaker

The Utah Little Giant is an extremely sensitive general purpose model with 8" diaphragm and can be used for single and push-pull as well as pentode audio stages. The field can be connected for 2,500 ohms resistance, 1,250 ohm field or a 625 ohm field. It can be used as the filter chokes of any circuit. When so used it provides two chokes of 1.250 ohms each. All terminals are brought out to a terminal strip and from there, they are cabled into a standard UX 4-prong plug. Using a special type of cone suspension, it is able to handle great volume without rattle, blast or distrotion. Easy mounting. Ideal for midget sets or for use as a general purpose speaker. Cat. No. 3731

YOUR PRICE

\$5.50

## UTAH 33A SPEAKER

For 110-Volt A C



A 9" dynamic speaker. Toos a Westing house Becton rectifler. Special wrru-במומל מתח שנותו etremeth and reliability under all conditions. Makes an ideal speaker for any set er amplifer.

Cat. No. 8133

T.fat #50,00

Your \$6.75

#### BALDWIN D.C. SPEAKER

Replacement for all Baidwin re-Lone known for their famous ouslity and performance Complete with nathat menetoim



\$5.95 Your Price



### **MUTER DYNAMIC SPEAKER**

Yolume without distortion or blasting. May be maiched with any nower amplifier. Hum the operation, 280 tube restification.

List \$88.50 Oat. No. 8799

Your \$6.35 Complete With Tube

#### SPEAKER GRILL CLOTH

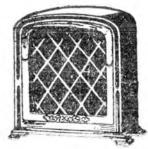
A beautiful ailk cloth that can be used to enhance the appearance of any speaker box. Finished in a soft brown and harmonizes with every wood.



Cat. No. 8728

Your \$1.00 Per Price \$1.00

## Kolster Magnetic Speaker



No effort was speaker to make this an SZ regational speaker. No blasting, no distortion excellent reproduction of the tuil musical register. 19 mich 12 wide, 7 deer Shot tiell mijares register in the List. \$35.00

2031

Your \$4.65

#### BALDWIN RIVAL UNIT

Ideal for portable sets Terr sensitive and renable of re-producing all frequencies to natural tone. This is the last jot of them. Send in your order at once.

Cat. No. 3727

Your 40c Each



### Transformer Corp. of America Dynamic Speaker

This speaker has a 2500 ohm field with huilt-in output transformer for single or pigh pull output.

Cet. No. 3734

Your \$6.50



#### FAIRFAX MAGNETIC **SPEAKER**



Housed in a beautiful clock model wooden cabinet. selfhaffled. Handles great a volume without distortion.

Cat. No. 3732

Your Price Do.40

## R.C.A. Speaker Model 103



A ter in outlie MAGNETIC SPEAKER Frame is hand-carred oak effect and to at-tractively offeet by the tasteful medallion tapeatry cloth envering 18" high, 1314 wide, 6 4 deep, Shor wt. R lbe.

Cat. No. 9936

Edet. #22.50

Yeur \$3.95

## NATHANIEL BALDWIN DYNAMIC SPEAKER

9500 Ohm Field Dynamie Speaker Chesals

Every andible frequenor is perfectly reproduced at any volume with brilliance and fl. delite.

2500 obm Dr. feld without output trans-

Cat. No. 3730



List \$15.00

Special \$4.75

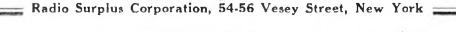
#### REPLACEMENT CONES AND CONE PAPER

Replacement cone for any speaker chassis. Choice of 9" or 12" size. Complete with apex and size. Complet hardware Cat. No. 8725

Your 85c Each Your

Peerless and Symington Cone Papers

Cone papers for Peerless and Symington Pand 10" dynamic speakers.
Cat. No. 3726



#### Readrite and Flechtheim Accurate Meters

## PANEL MOUNT METERS

Require 2-5/64" hole for mounting. Highly nickeled with silver face dials. Shpg. wt., 1 lb.



## D. C. **AMMETERS**

16.	× .511	1	0	٠	*			-	· O	1)	O				++0-10
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		N	0			1	1	)_	1	0	1				. 1-0-1
No.	220-30	3	ì								,			,	3-0-3
No.	221-60	6													6-0-6
	222-11	0													10-0-10
No.	223-22	0		,				,		,		,	,		20-0-20

List \$1.00 Your 59c each

A. C., 1	D. C	. V	oltn	neters
No. 301-31				
No. 302-35	3			0-6
No. 303-35	2			0-10
No. 804-35	1			0-15
List 2.50. Your Price.				\$1.47
No. 805-348; List \$4.00.	0-150.		Price	\$2.36
No. 306-217; List \$6.00.			Price	\$3.53
No. 307-358; List \$1.00.	0-10-14	Vonr	Price	\$2.36



## Readrite Pocket Meters AMMETER

No.	119.1	Test	= 0.10	anina
	cells	T.Ist	75c.	12.
Tour	Frice			43c
701	TMETI	ERS		

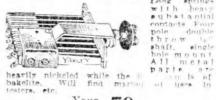
List \$1 00 Your Frice	121.50.	0.50 Tolta	58c
No.	122.42	0.150 rolls	

	Price				73c
List	No.	123.41.	0.8	0.180	\$1.16
Tone	Trice				\$1.10

Empla.
77
73c
n amos
07
87c
rage halters

determines when to charge and stop charge same. List \$1.00 58c

Yaxley 4 Pole D.P.D T Switch



Long springs with heavy substantial contacts Four pole double three with the substantial contacts and the substantial contacts are substantial contacts.

Your 79c

## Single Pole Double Throw Toggle



Togglo switch, will break 126 volts at 3 amperes. Heavy construction. For use in testers, phono switch, etc.

Cat. No. 3637 Your Price 22c



Furnished in highly nickled finish meter cases, equipped with flexible cords having well-insulated metal tips, with which to make connections. Uses only 5 mils, currentresistance, 200 ohms per volt. 2%" diameter. Shpg. wt., 3 lbs.

No. 132 AV 300, 0.300 Volts Dr. List \$6.00 Your \$2.05

No. 143 BV 500, 0 500 Volte D C. List \$8.80 Your \$3.15

So 131 CV 600 0 600 Volta D. | List \$12.50 Your \$3.45



## No. 229-394 ......0-400. List \$1.00.

D. C.

Milliammeters

No. 225-325 ....0-25.

226-350 .... 0-50.

No. 227-390 ....0-100. No. 228-399 .....

No.

Your Price, each. No. 224-311; 0-10 MA. List \$1.75. Your Price \$1.02 No. 300-395; 0-20 MA. Your Price \$1.02

0-300

## D. C. Voltmeters

No. 309-330
No. 310-310
No. 311-316
No. 312-333
No. 313-337
List, \$1.00. Your Price, Each
No. 315-839-0-100 velts
Your Price 74c
No. 517-842-0-150 volts
List \$1.50 Your Price 88c
Tour Time Valley
No. 319-340-0-8. 0-100 volts (approximate

List \$1.75 Your Price \$1.02 No. 320-341 -0 8, 0.150 volts (approximate la 40 ohms per volt resistance. \$1.18 \$1.18

Your Price No. 321 316 P 0 300 colts List \$3.00 \$1.77 Tour Price No. 322 347 F 0 500 volts

List \$1.00 \$2.36

No. 373 216 P 0.80 300 co List \$1.00 Your Price \$2.36



#### Yaxley Phono Radio Switch

A single pole double throw entip emitch for phono radio changover Complete with

Cat No Frice 43c

#### Toggle Switch

Approved toggle switch. Has leads. Oxidized finish.





A Cutler Hammer switch. Long neck mounts on panels up to 14" thick. Approved ispe switch.

Your Price 24c 3616

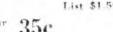
## CUTLER-HAMMER 3-POINT SWITCH

A double pole single throw switch with a neutral position. Positive Ideal for action makes and break. testers and general use Positive type contacts to carry high currents.

Cat. No. 3643

List \$1.50

Your 35c



### H. & H. Two-Circuit | Switch



thrult closing type switch For Phono Radio and public address erstems. Used in cathode offcuit of radio for closing phone graph pick up circuit

Cat. No. 3611 Price 32c

## G.E. Rotary Switch

Rotary switch for 110 volt lines. Will break 3 amps.

Your Price 20c Cat. No. 361:

Long Shaft Rotary Switch Cat. No. 3642L. Your Price 35c

## C. H. Lock Switch



This switch is turned on and off by a ker. Positive in locks the receiver. For auto use, etc. Conies complete with I kers.

Cat. No.

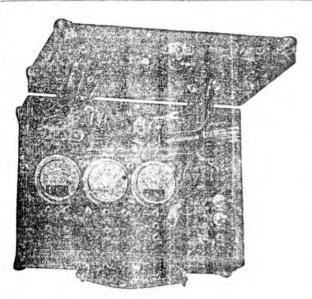
Your 35c

## Carter Switch



Long spring type. Neutral off position, Makes one contact and breaks one on one side and makes one on the other side.

Cat. No. Your 19c



No. 2700. Shpg. wt. 7 lbs. List. \$35.00.

Your \$14.70

## Senior Set Analyzer

The Reliable Senior Set Analyzer will make every test necessary on any receiver. It is a three meter job, built by one of the largest electrical instrument manufacturers in the industry. Ruilt to a design furnished by men who know every ragle of servicing, it is sure to ratisfy every one using it.

TESTS ALL TUBES INCLUDING 280

The Senior Analyzer tests all tubes including the new two-volt tubes. Tests both plates of 280 rectifiers. It also makes the following tests: Line Voltage, Filament Voltage, Plate Current and Voltage, Screen Current and Voltage, and Grid Dias. The asking continuity test is also provided for. Also tests the new Pentode tubes. l'entode tubes.

METERS CAN BE USED INDIVIDUALLY

An added feature usually found only in the higher priced testers is provision for using the meters independently of the tester. When go used it provides an A. C. voltmeter with ranges of 0-10-140-700 volts. The D. C. voltmeter range is 0-60-300-600. The full scale resistance on the 600 volt range is 180,000 chms. The milliometer ranges are 0-20-100 mills.

CAPACITY AND RESISTANCE MEASUREMENTS

Charts and curves furnished with the tester make it possible to calibrate the analyzer to make the following measurements: Capacity measurements from .1 to 24 mfd; resistance measurements of 0 to 600 ohms, 0 to 1,000 ohms and 1,000 to 100,000 ohms. The analyzer comes complete with cables, adapters, test leads and C battery.

## RELIABLE TUBE TESTER

Tests Screen Grids-Pentodes-Rectifiers



for 110 volt 60 cycle A.C.

The Reliable Tube Tester provides a quick and accurate way to check all tubes. Engraved scale on face of the instrument shows what the correct value for each tube should be. Operates directly from 110 volt A.C. line. Wide swing on second reading to give mutual conductance value shows instantly whether tube is good or bad. At this low price, no service man or dealer can afford to be without one. Supg. wt. 6 lbs.

Cut. No. 3001, 14st \$22.00.

Your \$10.95

The Reliable Tube Tester

In an astractive carrying case

**OHMMETER** 

Your \$11.85

### Readrite Adapters





No. 128-54. Contains 5 prong Socket on a 4 prong Pluz. Has all connections complete to plug.

Four 58c

No. 129-45, Contains 4 prong Socket on a 5 prong Plus Has all connections complete to plus. List \$1.00

Your 58c

#### Readrite Plug-in Line Voltmeter



By plugging into AC or DC socket with this instrument, the exact voltage at that socket is readily determined. Ships, wit, 1.16.

No. 127-148, 0-150 Volta AC.— DC. List \$3,00

YOUR \$1.75

## **MULTIPLIER**



This resistor when used with a 2012 voit battery increases the range of the Readrite resistance meters to 50,000 ohms. A necessary adjunct for both resistance meters shown on this name.

Cat. No. 3002-503, List \$1.50.

Frice 88c

#### Test Leads

A pair of leads furnished with insulated polarity test prods. Five foot long. Indispensible for the service man.



No. 1970.

Your 35c

#### Readrite Ohmmeter



Direct reading. Tests resistance up to 10.000 olms, also D.C. volts 0.4.5. Contains small 3-cell flashight battery; current drain is negligible. Adjusts to zero by shorting the two jacks and turning rhoostat kinds. Supplied with two wire leads five feet long for use in continuity and resistance testing. A high grade instrument. Case is steel. 4" dia. Indispensable for service work. Shpg. wt. 2 lbs. No. 321-500. List 86.00. Direct reading. Tests resistance vice work. Shpg. wt. 2 lbs. No. 321-500. List \$6.00.

Your \$3.50

#### Readrite Resistance Meter

This is the same meter as used in Readrite No. 500, shown above without it small flashlight cells and circular metal case. Shps. wt. 1 1b.



No. 325-501 List \$2.50 YOUR

> PRICE \$1.44

## Utility Test Cables



A 5-prong moulded bakelite plug with a 5-foot coded cable. For use in testers, or as speaker connectors, etc. Shpg wt. ½ 1b. No. 2178. List \$1.50.

Your 45c

Socket for above plug.

Your 15c

## Readrite 3-Light Tube Short Tester



Used for testing "shorts" in tubes before the electrical tests are made. Plugs directly into socket on No. 400 tester or may be connected to any 4½ v. battery. Lights burn only when a short exists between two elements in tube. Speedy. Handy. Saves time and trouble. Complete with lamps and plug. Slogs, wt. 2 lbs.

No. 216-450, List \$3.50.

Your \$2.06

## Readrite Socket Testing Voltmeters



For reading plate or filame voltages by plugging directly in tube socket. Shpg. wt. 1 lb.

No. 213-146, Plate Voltmeter —0.300 volts. Resistance 54.000 olms. List \$3.00.

Your \$1.77

No. 214-150. Grid Voltmeter-0.60 volta. Resistance 8.800 ohms. List \$3.00.

Your \$1.77

No. 215-152. Filament Voltmeter A.C.-D.C. 0-10 volts. List \$2.50.

Your \$1.47

## HANDY TEST EQUIPMENT FOR THE LAB!

## New!

## RADIO PHYSICS **COURSE** (Second Edition)

672 Pages... Over 750 Illustrations



Finer and larger than ever, the new Radio Physics Course contains 672 pages and over 750 illustrations. Covers everything new Development of the covers of t

Your \$3.00 Price

## Radio Set Analyzers and How To Use Them

By L. VAN DEB MEL



MEL

A most inportant and
it mely new
publication. It
fills a long
recognized
want. The
first hook
that explains
completely the
operation of operation analyzers, tube checkers, osul-lators, etc. from a thoroughly practical stand-point. Comi-plete in every sense. Easily understood. Cat. No. 3946 Your 50c analyzers, tube

## PRACTICAL RADIO REPAIRING HINTS

Another book that will complete the equipment of every Radio man is the new "Practical Radio Repairing hints by Rider. Full of practical repairing hints and kinks covering all types of receivers and radio parts. It includes countless emergency renairs, temporary meastern to the country of t temporary measures rapid means of locating trouble and hundreds of other aids It is a practical book in every way, all theory being omitted. 128 pages, cloth bound.



Your \$1.90

## JOHN F. RIDER'S TROUBLE-SHOOTER'S MANUAL



#### Over 1,000 Pages of Service Information

Complete, comprehensive and up-to-date, this new manual covers the entire radio and public address field. It will supply you with the vital data concerning circuits, tube layouts, voltage charts, color codes, internal wiring diagrams. You will find the entire line of popular American and Canadian receiver manufacturers contains diagrams not available from any other source. Wiring diagrams of set analyzers, oscillators, public address and power ampliflers, short wave sets, etc. Loose-leaf, beautifully bound.

## AN ABSOLUTE NECESSITY

Cat. No. 3657

Your \$4.50 Price



## FREE!

Your choice of either John F. Rider's Trouble Shooter's Manual or the New 1932. Official Ser-vice Manual with every order amounting to \$35.00 or more. This offer for a limited period only.

> Get Your Copy Now



## 1932 Official Service Manual

The most plete and most valuable of all Service Manuals. Service Manuals, containing 1,000 pages, cranimed full of the most pages, crammed full of the most comprehensive information. All original and new material, many chapters never before appearing in print. Over 2 000 diagrams, Over 1,500 diagrams and hooking of commercial receivers, including 1932 models. New data covering Pentode, Variable-Mu tu hes, nugget receivers, superheterodyne, test e of every description, color codes of win resistors, short ways seis and converters address systems, talking notion picture et and hundreds of practical service hints.

le, test equipmentles of wiring and converters, public meture equipment, on comand hundreds of mercial receivers

Cat. No. 3945 Your \$4.00



### Reliable Service Oscillator

modulated oscillator for adjusting R. F. in T. F. circuits. Fully shielded with T.F. circuits. Fully shielded with ate battery compartment. Covers 550-1500 R. C. and from 120 to eparate from 550 185 K C

INS K. C. Used to align R.F. gang condensers, locate defective R.F. transformers, adjust I.F. transformers, check oscillator etages, and determine acceptivity and galocif tocalver. Complete in leathers to car type of the control of

lying case. Reliable Service Oscillator, complete with batteries, tubes, and output meter.

LIST PRICE \$38 Price \$20.60 Cat. No. 3938

Same se above but less output meter LIST PRICE 830 Price \$17.64

FREE With every Reliable Service Oscil

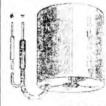
## Reliable Output Meter

A copper oxide rectifier type meter with a range of 0.5 and 0.50 volts. A condenser is incorporated in the high range to prevent D. C. current from passing. Measures A.C. or D. C. Used to measure gain and Inling up R.F. and I.F. atages. Needed by every serviceman. Complete with test leads. Mounted in a seamless metal case.

Oak. No. 8040 List Price \$6.00

Your \$3.53 Price

## Reliable Exploring Coil



Designed for the serviceman to use in localizing R. F. frou ble. The process of localizing time faults with exploring time to a minimum. Both cotl and connecting wire are completely shielded. Cat. No. 3941

Your \$2.06

## Reliable Capacity Tester



Cat. No. 3912 List Price \$15.00 Your \$8.82 Price

Same as above but in steel case with cover and handle for outside service work.

Cat. No. 3913 List Price \$17.00 Your \$9.99 Price \$9.99

## Reliable Capacity Meter



A double scale capacity meter. Double range lower range .008 25 mfd. Upper range 1 to 10 mfd. Connects to 100-130 voits. 60 cycle line supply contains rheostat to set full each of 100 voits. In near test case. Baked ename! fin teb. Complete with test leads Cat. No. 3914 List Price 18.00

Your \$4.81

## JEWELL PRECISION MEASURING METERS

## D.C. Instruments Patterns 53, 135



These 2-in, flush are of matched size and appear-ance. The instru-ments are fur-nished in three styles of mount-ings: the front

styles of mountines: the front of bo ard type with stude projecting through the board, the rim type in which it is necessary to drill a 2 ½-loch hole, mounting with a cup or clamp, and conventional flush or flange mounting with 3 holes for screws in the flange. They are suited for mounting in the panels of radio receivers or for use in experimental work where the small instrument gives adequate accuracy.

No.	Range List	Net
	Pattern 53 for D.C.	
1986	0.5, 8, 10, 15,	
	50 volts \$7.50	85.51
1987	0-100 volta 9.00	6.62
1988	0-150 volts 9.50	6.98
1989	0-300 vnlts 12.00	8.82
	0-500 volts 15.50	
1991	1-1000 volta 22.50	16.54
1992	0-3000 volta 49.50	36.38
1993	0-3, 5, 10,	
	15 amp, 7.50	5.51
1994	0-5, 10, 15, 25,	
	30, 50, 100 mill 7.50	
1995	C-3 mill 9.00	6.62
1996	0-1.5 mill, 9 00	6.62
	Pattern 135 for D.C.	
1997	0.5. 8, 10 volts 7.00	5.15
1998	0-100 or 1-150	
	volts 7.50	5.51
	Double Reading	
1999	0-8-200 v 8.50	6.21
2000		
	ecale 7.00	5.15
2001	ecale . 7.00 0-10, 15, 25, 50,	
	80, 100, 300,	
	500 mill 7.00	8.15

## JEWELL PATTERN **574 VOLTOHMMETER**



The meter has a double scale, the upper reading being relian,000 chms, the lower scale is 0 to 200 volts. The toltage and resistance of 1,000 chms per volt. Ship, with battery and test leads, List Price \$35.00

\$25.73 Your Price

Pattern 209 Tube Checker



Pattern 210 Tuba Checker

developed Gives direct readings on all tubes from g an actual UX199 to UX250. In Was developed for dealers requiring an accurate and effective tube checker at a moderate price. Operates on 50-50 cycle 110-120 volt AC. Tests all tubes type. Correct 88 are given on Was

including heater luciding heater type. Correct value of readings are given on chart on the face of the tube checker. A vitrified popular resistor is supplied in the circuit to prevent damage in the event of a shorted tube. Slipg, wt. 7

List \$30.00

Your \$22.05

## Patterns 190 A.C. Instruments



mounting holes.

The pattern 190 are similar in size and appearance to the pattern 53, and 135. Pattern 190 are regularly furnished in new mounting type but can also be super type with three less.

Range	List	Price.
0.1.5. 3. 5 5 10. 15, 20 vol(s.	\$7.50	\$5.51
0-150 volts	P 50	6.98
0-1, 3, 5, 10, 15 aniperes	7 50	5.51
0.20, 30, 50, 100, 300, 500 Milliamp	7.50	5.51

High Frequency Thermo Couple Type, Pattern 165 Similar in shape and size to Pattern 190 but for use on H. I circuite.

Range	List	Price
0.1	\$12.00	\$8.82
0.1.5	 12.00	8.82
0-2	 12.00	8.82
0-3	 12.00	8.83
0.5	 12.00	8.83
0.10	 12.00	8.83
0.15	 12.00	8.83

operation the net change in plate cur-rent is read directly rent is read directly from the instrument. The 210 contains an A.C. voltmeter, a di-rect current instru-ment and a trans-former for supplying rheostat compensates for all line variations Shpg. wt. 13 lbs List \$65.00,

Your **\$47.73** 

#### Pattern 135 Ohmmeter



resistances, rui-nished with flance for mount-ing in box or panel. Shpr. wt 3 lbs. Ava able in three following rungs Your List 1933 0.3 volts, 0.10 1931 0.4.5 volts, 0.10, 0.00 ohms ... \$7.00 \$1.16 1931 0.4.5 volts, 0.15,000 ohms 7.00 4.46 1935 0-4.5 volts, 0.100,000 10.00 ohms

ohms 10.00 6.37

MICROFARAD METERS

Pattern 78 and 75 microfarad meters are a great asset to any laboratory, sloop or service man. They measure capacity directly. Double range afford easy and accurate reading. Ranges are 0-1.5 microfarads. Operate from 115 volt 60 cycle supply. Pattern 75 is a 4 size meter. Pattern 75 is a 4 size meter.

Pattern, 78, List \$22,50, Microfara-l Meter Your Price ... \$16.53 Pattern 75; Microfarad Meter. List \$40.00, Your Price ... \$29.40

### Popular Test Trio Pat. 88, 68, 78

e Jewell Trio Radio instruments is popular for building spe-cial test panels and service in-struments: for use on experi-mental laboratory apparatus, and amateur trans-



mitting. They come in flush type bakelite cases. Flange diameter is 3 ½". Approximate shpg. wt. 5

1	3 12 ".	Approxi	mate	ehpg.	wt.	5
١	lhs.					
١		tern 88	D.C.			
١		Range 0-S-10-15-	20		Ne	·t
1	5403	0-8-10-15- 50 volta 0-150 vol 0-300 vol 0-500 vol	30	5 ~ EA	\$5.	5.1
1	0002	Ou tolla		0.50	6	
	200.1	0.200 vol	1 0	12.00	8.	
	2005	0.500 vol	t a	15.50	11.	
1	2006	0.750 vol	1.39	19.00	13.	
1	2003	0.750 vol 0.1000 vo	lin	22.50	16.	
1	2008	0.1500 **	lta	28.50	20	94
1	2009	0.2000 30	lta	34.50	25.	36
١	2010	0.2000 vo 0.2500 vo 0.3000 vo	lta	42.50	31.	24
1	2011	0-3000 vo	Ita	49.50	36.	38
1		Milli	iamet	ers		
1	2012	0-5-10-15-	25-50			
١		100-150-20	0.0			
١		250-300-5	00	\$7.50	\$5.	51
1	2013	0-1 mi <b>l</b> .		9,00	G.	62
١	2014	100-150-20 250-300-50 0-1 mill. 0-1.5 mill. 0-2 mill.		0.90	6.	es
1	2015	0-0 mill.		9,00	6.	63
1					6.	62
١	3012	0-200, 30	n m1-			
		eroampere 0-1, 1.5.		17.50	1.5	86
1	2019	11-1, 1.5,	٠, ٠١,	F F 0		*1
1	0000	5, 10, 15 50-0-50 gr	amp.	0.00	6	69
- 1	2020	30-0-30 g	11 V 1110	Instru	niante	O.v.
4	Thomas	ttern 78 have n	20.00	ients	of 1	llie
-	201. (1.21.1.6	or iron two	Left.			
1	2021	0.3. 5. 11	1.5			
		20 30 10	ilts	\$7.50	85.	51
	2022	0-150 vol	1.9	9.50	6.	98
	2023	0-3, 5, 1 20, 30 vo 0-150 vol 0-300 vol	15	12.00	8	8:
	2021	0-3-15-150	tri-			
1		ple range.		13.50	9	92
	2025	0.25, 50,	100			
		200, 300, milliamper	500		_	
		milliamper	res	7.50	- 5	.51
	5058	0-1, 2, 3,		),	_	
		15 amper		7.50		51
	Pa	ttern 68			uency	
		Inst	rume	nta		
	These	are very	tire	therm	0-0011	1) =
	Type.	are truy	aceu	rate at	nd ha	11.5

a guaranteed overload capacity of

No.	Range	List	Not.
2027	0-10 mill.	\$10.00	\$29,10
::0:28	0-05 mill	37.50	27.56
2029	0.50 mill	35,00	25.73
2030	0-100 mill.	32.50	23.88
2031	0.5, 1.1.5, 2		
	2.5, 3, 5, 10,		
	15 amperes	13.35	9.81
2032	0.100 galvano.	15.00	11.03

## Jewell Pattern 89 Voltmeter and Ohmmeter



Are mounted in cases of modeled bakelite with smitable terminals as illustrated. A 1½ volt dry cell is mounted inside the case of the Pattern 89 ofmineter making it independent of outside sources of supply. A magnetic shinit provides convenient adjustment to compensate for variations in cell voltage. Ships. wt. 3 lbs. Pattern 89 Ohmmeter with either 0-1,000, 0-30,000, 0-10,000, or 0-30,000 ohm ranges including battery and test leads. List Price \$16.50.

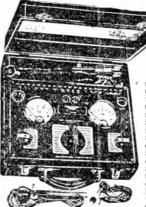
Your \$12.12

## Voltmeter

The Voltmeter for radio service is a three range instrument with scales of 30, 300 and 600 volts; 1,000 ohms per volt. Pattern 89 Voltmeter with 0-30-300-600 scales and test leads.

Your \$18.38

#### Jewell Pattern 444 Set Analyzer



Establishes an entirely new standard of usefulness and value in portable Radio Servicing requirement. Tests every circuit in any receiver. full-wave rectifiers, high-mu, Pentodes. Equipped with 2 shatter-proof glass precision meters, having 24 measuring ranges. A.C. meter provides 0-4-8 amperes, 0-20-100 milliamperes. 9-6-12-30-60-120-300-600 volt ranges. 3 resistance measurement ranges of 1,000-10,000, 100,000 and low medium, high output more ranges for measuring sensitivity and balancing receivers. An improved switching system is presented in the Pattern 444 analyzer entirely different than any previously existing michod. Incorporating pin-jacks for easy connections, detachable plugs and cable. Complete with pair of test prods, pair of test leads with m thod. Incorporating pin-lacks for casy connections, detachable plugs and cable. Complete with pair of test prods, pair of test leads with clips, line plug and cord and adapter for output measurements. Instructions, data book and pad of charts included.

Cat. No. 3678

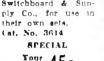
List \$112.00

Your Price

## Miscellaneous ITEMS of INTEREST

## Kellogg 227 Tubes

absolutely first tube. Not seconds. Quick heating, high meter reading. Manufactured by Kellogg Switchboard & Supply Co., for use in their own sets.



SPECIAL. Your 45c



#### Carter Outlet Plates



Designed to be used for installation of extra aprakers at remote points. Beautifully bronzed finished ecutcheon plus. Comes complete with mounting hardware and volume control.

List \$2.50 Oat. No. 3615 Your 49c

## R.C.A. .1 Mfd. By-Pass Condensers

Shielded condenser in metal case. Used for R.F. by-pass and filter, Working voltage 450 D.C. Small, compact, with flexible leads pact. leads.





## Lincoln Electric Clock Churchill Model

Exquisite design. Enthralling beauty in its walnut finish bakelite case, with dull pubbled page. pebbled panels. Dependable and accurate. Has 3½ dial. Full dial. Full sweep second hand. Shps. wt., 5 lbs.



Cat. No. 3617

Your Price

#### Centralab 3 Ohm Power Rheostat

A real heavy duty unit made to carry heavy cur-rent. Metal jacket with broad flat resistance wire.
Will carry in excess of two Cat. No. Your 15c



#### Arcturus Sonora RA 1 Tubes (ARCTURUS TYPE 28)



Genuine Arcturus tube made especially for Sonors Radio sets. Has a 15 volt indirectly heated cathode. For all R.F. and A.F. amplification.

Cat. No. 8620

Your Your Price 45c Each In Lots of 10, 35c each

#### John E, Fast 2 Mfd Filter Condenser

Mounted in a metal case with mounting first and connecting Rated at 450 m/s. Rated at 450



## Lincoln Gothic Clock



A dainty Gothic model electric slock, Finished in helblide case of walnut bakelite, silvered dial, Full sweep second hand, For the desk, mantle, table or boudofr.

Cat. No. 3622

List \$8.25 Your \$3.75

## WESTINGHOUSE A. C. MOTORS

Horsenower motors single phase, 60 cycle 220 volt supply. Rotates at speed of 1800 R.P.M. Self-starting. Attains full speed in-Self - starting. stantly. Long life bronze bearings. Has ½" shaft to take any standard pulley or attachment. Enclosed terminal plate. Does not require

epecial etarting apparatus. Enclosed in black steel frame. Will not set up interfor in noises of any kind to interfere with radio reception. Shes. Cat. No. 3624



Genuine

List 837.50

YOUR PRICE

LIMITED QUANTITY

## SIEMENS ACCURATE RESISTORS



These resistors are accurate to within 1% and rated at two watts. Can be used for metar multipliers, abunts or wherever a very accurate resistor is needed. Available in sizes ranging from 100 ohms to 10 megohms,

Your Frice 50c Each

In Lots of 10 or More, 45c each

#### Lincoln Kitchen Clock |

Will dress Dp any kitchen. Positive necessity in the home. Decorated porcelain with equare dial. Full aweep second hand. Colors: Blue, Green, Ivory.

Oat. No. 8626

List \$5.50

Your \$2.95

#### New Lincoln Electric Alarm Clock

An ideal bedroom clock in a futuristic de eign bakelite case. Alarm is set and shut off by a switch in side of case. Very effective pleasing tone

alarm Cat. No. 8627 Your Price

Clear and Amber

YOUR PRICE \$1.97

box of 25 Singly 9c each

Cat. No. 3630

colors



## PENTODE POWER TRANSFORMER

An unshielded transformer for pentode, 245 and Loftin White circuits. Has a 21 volt winding at 3 anps, 212 volts at 0 2 anps, 800 volt center tapped secondary and 5 volt 2 anni winding for 280. The primary is tapped for operation on 100 110, 120 and 130 volt line. Makes an ideal replacament transformer. All leads are brought out to a marked for connect terminal strip,

marked for connection

Cat. No. 3618 Your Price

#### RELIABLE PHONIC TELEVISION MOTOR

The latest televi-The latest televi-sion drive. Use to drive the dis-or drain in exac-sien with the transmitter. The phonic wheel la receivable impulse, from the trans-mitter keeps the Insures rotation at exact speed of 1900 R.P.M. regardless of voltage fluctuation. For Baird or Jenkins

Cat. No. 3623

Your \$12.75

## PILOT LITES



Standard Pilot lits replacements. 6 volts. 3 1/2 volts, and 2 1/2 volt sizes.

Cat. No. 3628

Your 55c Per box Price 55c of 10 \$5.25 Per 100

#### **FUSES**

Standard Edison Screw fuses. Packed 5 to a box. 10, 20, 25, 30 ampere.

Cat. No. 3629 Your \$1.10



Flashlight Lamps Miniature Base, In

110-Volt Pilot Light

Candelabra Base

clear and opal glass. 2 % and 3 % volt sizes.

Cat. No. 3631

Your  $29c_{\text{of }10}^{\text{box}}$ \$2.45 carton of 100

## Remarkable Values In Battery Operated Sets

## GREBE SYNCHRO-PHASE RECEIVER



This receiver is one of the finest battery sets on the market today. Superior design and craftsmaniship throughout. Uses famous Litz-wound binocular coils producing utmost sinstitute and selectivity. Single dial control with optional vernier dial control for each R.P. stage. Five point tone control switch. Few battery sets have this important feature. Tremendous volume and fidely control to the stage of large size audio transformers. Protective first lamp safeguards circuit. Shpg. wt. 40 lbs.

Cat. No. 3193

Your Price

\$12.75

## ATWATER KENT MODEL 20



Fire 201A tubes are used in this sensitive and selective runed R.F. receiver. The panel is metal timished in flat brown. Switch permits local or long distance reception famous for its repulsion of long distance stations due to its separately timed R.F. stages. One of the most popular sets made by Alwater Kent. Shps. wt. 20 lbs.

Cat. No. 3190

Your \$9.65 Price

## SPECIAL ANNOUNCEMENT!

AND THE RESERVE THE PROPERTY OF THE PROPERTY O

We Have Made Arrangements with the

## Radio Technical Service Bureau

to furnish our customers with radio information of any kind. This includes answers to questions, circuit diagrams of commercial receivers, diagrams of special receivers you may want to build from parts shown in this catalog, etc. Special attention will be given to our customers.

will be given to our customers.

The Radio Technical Service Bureau is headed by Mr. Alfred A. Ghirardi, E.E., formerly Technical Consultant for the Pilot Radio & Tube Corp., and Associate. Editor of Radio Design Magazine. Mr. Ghirardi is well known as consulting engineer, writer and teacher. He is the author of the famous Radio Physics Course textbook on radio. Rates for information, diagrams, etc., will be furnished free of charge upon application to the

## RADIO TECHNICAL SERVICE BUREAU

36 R Stuyvesant St. New York, N. Y.

The rates for this service are very resonable and rou will find it profiteble to make use of it. The correct answer to some puzzling problem may save you many dollars and loss of time. Brite now 

## RADIOLA 25 SUPERHETERODYNE



The most sensitive and selective receiver of its kind today. A second harmonic super with 10 K.C. separation. Distant stations come in like locals. No outside aerial its meerssary. The set is timed by means of the two drum dails which can be operated areaftly on the scale of the dail. Small black center knob controls a novel mukiple switch which brings into play either one or two stages of audio frequency. Headphones may be used by plugging into the namel jacks. Cabinet of two-tone mahogamy vener completely houses the chassis and all dry hatteries. John over tube. Set supplied with loon aerial. Overall dimensions are 18x19x12 in less high. Ships wt. 55 lbs.

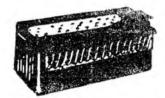
(34. No. 340?

Cat. No. 3402

Your Price

\$7.85

## SUPERHETERODYNE **CATACOMB** REPLACEMENTS



Have you a Radiola, Brunewick or Victor Super lying in some corner because of a defective reat." No need at all for this Bring it cut and dust it off, for here is a chause to get genuine replacement catacombs for your defective sets. Both 6 and & tube panels. Also ideal for use in an intermediate frequency amplifer in long and enort wave superfict receivers. Ships, wt. 3 los.

AR 810, AR 812, 24, 26

Lat No. 3186

Your \$4.45

6-Tube Catacomb for use in Radicia 25

Your \$4.45

R. Tuhe Catgromb for use in Hadiola 28

Cat. No. 3188

Your \$4.75

## STROMBERG-**CARLSON** TREASURE CHEST



MODEL 601

The world-famous neutrodyne receiver offered at a fraction of the manufacturing cost. No expense was spared when these sets were built. Has three tuned R.F. stages and a tuned detector. Every stage is individually shielded. Develops tremendous gain due to the carefully designed R.F. stages. Real Stromberg tone. Weston filament meter on front panel protects against excessive battery voltage. Amenna switch permits use of any length aerial without changing tuning. Straight-line tuning spreads stations over entire dials. So powerfully and substantially constructed that a loop aerial can be used in place of the usual aerial system. S.C. output filter protects the speaker against burnout and blasting. Uses tive 201A tunbes and a power tube, either 112A or 171A. Shus vi. 75 lbs. Your Price

Cat. No. 3191

\$24.85

## FREED-EISEMANN N. R. 5 NEUTRODYNE



The most famous of all Freed Eisemann neutrodynes. Ideal for long distance reception. Each R.F. stage is under perfect control. Jacks on panel used to plug in phones for "DX" reception. Large audio transformers give fine reproduction. Uses five 2014's or four 2014's and a 112A or 171A power tube. A perfectly balanced receiver. Shop, wt. 30 lbs.

Cat. No. 8480

Your \$5.25

With every purchase of two or more radio sets featured on

## A Complete Set of Matched Tubes

will be given absolutely free of charge. This offer is made to carry out a policy of giving the most for every dollar spent for our merchandise. Take advantage of this generous offer now.

#### WARE MODEL T



Your

The famous reflexed neutrodyne receiver. Operates a loud speaker on three UV199 tubes. Space for batteries in cabinet. Two-dial control. Original list price was \$65.00. Measures 14" long by 13" deep The ideal set where space is an important factor. Shpg. wt. 16 lbs.

Cat. No. 3082

## FREED-EISEMAN Model 30



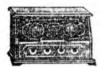
Your Price

\$8.75

This Model 80 Freed Elseman receiver is licensed under Latour patents. Uses 6 tubes, 8 201A tubes and a 171A or 112A power tube. Two-dial control with an tenna trimmer. Totally shielded with nonmicrophonic clips for detector tube. Extremely effective and sensitive. Supp. wt.

Cat. No. 3084

#### RADIOLA 20 \*



Your Price

One of the finest battery receivers ever made. A General Electric product. Neutralized T.R.F. receiver with a regenerative detector. Uses 4 UX199's and a 120 power tube. Exceptionally fine for distance reception. Provision for long and short antenna connection. Verniers on both tuning and regeneration controls. Shog, wt. 35 lbs.

Ont. No. 3083

## Freshman Masterpiece\* Type E



Your Price

 $11^{.75}$ 

One-dial control receiver. Has a control for distance reception and a combined on-off switch and volume control. Oversize audio frequency transformers insure faith ful reproduction. The tube sub-panel is sponge rubber mounted to absorb vibrations from reaching the tubes. Has three RF, tuned stages. Uses 5 201A's and a 112A or 171A power tube. Measures 20' by 10'' by 10''. Housed in a walnut capinet, with metal front panel. Window type dial. Shoc. wt. 30 lbs. Ная One-dial control receiver

## SEMI-PORTABLE SUPER-HETERODYNE AR-812



Your Price

This semi-portable super uses 6 UV198 tubes. antenna is needed as it has a built-in loop. End compariments provide space for the batteries. catacomb assembly makes a fine intermediate frequency amplifier for a short wave super-heterodyne receiver. Just the receiver to use for the car, camp or boat. Shpg. wt. 36 lbs.

Ont. No. 8086

## BARGAINS

## BATTERYSETS

The sets described on these pages are battery sets which were used as floor and demonstration models in the large radio and department stores in New York City and the vicinity. Most of these sets can he easily electrified by any of the A and B combinations described in this catalog, while others can be easily adapted for the use of the new two-volt battery tubes. These sets offer great possibilities to the progressive dealers, as there is a large demand for battery receivers for use at bungalows, camps. automobiles, motor boats, etc.

We do not sell these sets as brand new, but every receiver is tested and put in perfect electrical condition before it leaves our plant. The prices quoted do not include tubes or accessories. On this special sale we cannot exchange or accept returned sets for credit.

#### Atwater Kent Model 35\* In Metal Cabinet



Your Price

Perhans the most popular A. K. receiver ever bulk. This is an ideal receiver for use in automobile installation. Small sized metal cabinet measuring only 174% by Sty 5-12 allows it to be placed almost anywhere. Full visioned single-dial control. Uses a very sensitive high gain tuned R.P. circuit. The input stage is automed allowing for perfect results over the entire dual scale. Receiver uses 5 201A/s and 1 112A or 171A power tube. A distinct buy. Shps. wt. 16 lbs.

Cat. No. 3085

#### SUPER-HETERODYNE RADIOLA 28



The Radiola 28 is a second harmonic "Super" using a funed R.F. stage ahead of the first detector. A double drum dial control assures case of operation. Revolving foop gives maximum eelectivity possible. The eight-sube catacomb assembly may be used as an intermediate amplifier for short wave superhets. All batteries are placed in compartment below the receiver specially built for them. Access to this is obtained by raising the receiver on its hunges. Uses 7 UX190's and 1 UX120 power tube. One of the most sensitive receivers ever built by R.C.A. Shpk. wt. 75 lbs.

## THE NEW SIX-VOLT TUBES

The latest type tubes announced are the types '36, '37, and '38. These tubes are designed to operate from a six volt storage battery. The 236 is a screen grid, the 237 is a general purpose and the 238, a power Pentode output tube. These tubes can be adapted to many of these battery sets by a small wiring job. Besides being more efficient, they will give increased volume and power. These tubes can be operated in series for operation from the 110 D.C. line. Below are the characteristics of the tubes.

The bases are of the UY type. They resemble the 224 and 227 excepting that the glass envelopes

Type	'36 Screen Grld	37 General Purpose	'38 Pentode
Heater Volts		6.3	6.3
Heater Current	.3 amp	.amp	gma S.
Flate Volta	135	135	135
Screen Vol's	7.5	-	135
Grid Bias	1.5	—-H	-13.5
Plate Current	3.5 ma	4.5 nia	8ma
Plate Resistance	250,000 ohme	10.000 ohma	110,000 obm
Amp Factor	275	8	100
Mutual Cond	1.100	800	900
Undistorted Output		74 niw	
Screen CurrentNo	t over 1-3 of plate	, x (1) w	375 m ₩ 25 ma

\*Note all sets marked \* can use the latest 2-volt tube without any wiring changes whatsoever.

### Superior Midget Condensers



These condensers are widely used as grid condensers, plate by-cassing, for impedance and resistance coupling. Small in size, measuring 1½ x1". Will withstand voltages to 500 D.C. Power factor and radio frequency loss very low.

Cat.		
No.		List
3105	.0001, 0002, .00025, .0005	10e
		_
	PRICE 23c	
3106	.001, .002, .004	450
	PRICE 26c	
3107	.005 mfd.	80 a
		800
	PRICE 29c	
3104	.006 mtd.	850
3100		11110
9100		600
2100		11110
	PRICE 35c	
	- 2000 07	
9110	.09 mfd.	6ñe
	PRICE 38c	
8111	.Of mfd.	780
	PRICE 43c	
	PRICE 4JC	

### Superior Condenser Blocks



These blooks are unronditionall grangements, and will give estatageing service in poster that a construction of time (on Year). We will be No. For Continuous continu

3118 946 0.2-2-2-0-1-0-1 800 D.C. FRICE \$9.26

3114 PIO 0222111 450 DC.

NOTE \$13.23

### R.C.A. Faradon Condenser Sections

These linuscipled condenser units were made by the Faradon Condenser Corp. for R.C.A. Victor Co., All are rated at 650 volts D.C., working voltage. Piach tosted at 5700 volts. Caf. No.



# SUPERIOR CONDENSERS

## 1,000-volt Type HSM Filter Condenser

The very latest in high voltage condensers. Rated at 1,000 volts D. C. 660 volts rms R.A.C. Special construction makes then light in weight and small in size. Mounted in metal container with fork type terminals for easy connection. Non-inductive type winding.



Cat.	Туре			FOUR
No.	HEM	Mfd.	IJet	PRICE
8196	8	.05	1.10	.79
8197	10	.1	1.20	.82
8198	8.8	.25	1.80	.85
3190	80	.5	1.40	.89
8201	200	9.	8.00	.95
3200	1.0-0	1.	8.00	1.65
	400	6.	4.00	3.25
8303	44141	-	8.00	

## Non-Inductive By-Pass and Filter Condensers-Metal Cased

These condensers are mounted in nest metal cases with Highed logs for easy soldering. The filter condensers are rated for continuous on 400 colt. D. C. and 200 cms. A. C. Ideal for midgets.



Cat. No. 8208, GF 10 1 mfd. List Felea 80c FOUR. 26c

28 mfd 1 let Price 88c

Cot. No. 3208. GF 50 5 mfd. Tial Pilce 686 YOFR 35C

Cat. No. 3206. GF 100 to mid that Price PRo

2. mfd. Flat Price \$1.46 VOUR 78C

Ont No. 3208, GF 400 4. mfd. List Price \$2.70 YOUR \$1.45 The hypers condensers are paired for confinguage use at 200 colts D.C. or 190 cms. A.C.

(at. No. 8200, GB-10 1 mfd List Frice 400 FRICE 19C

Cat No. 3210 GR 28 28 mid. List Frice 48c VOCR 25c

Cat. No. 3211. OR 50

B mfd. List Trice 500

VOUR

FRICE 27c

Cat. No. 3212, GR 100 1. mfd List Price 70e TOTE 33C

Cat. No. 3213, GR-200 3, mfd. List Price \$1,20 VOUE 63C

Cat. No. 3214, GR 400
4. mtd. list Price \$2.10
YOUR \$1.05

## Non-Inductive Filter Condensers Uncased

This condenser is recommended for use in all elemits employing type 45 tubes. Rated at 600 volts D.C. (440 rms. A.C.). Designed to withstand extreme temperature changes and heavy duty service.



Cat.	Type	Mfd.	List	TOUR
				.27
821A	10	-1	.80	.30
	2.5	.25	.88	.33
8217	50	.8	.65	.51
8218	100	1.	.98	.75
8219	200	9,	1.40	1.35
8220	400	4.	2.50	1.00

#### A Filter Condensers

bligh capacity, low voltage filter condensers. Electrolytic of the dry type, can be used in all "A" eliminators or speaker filters. Cas.



Cat. Mfd. V.D.C. List

3221 1.000 12 5.75

8922 2.000 18 6.23

8228 4.000 12 8.75

3.38 3.67 5.14

## High Tension Transmitting Condensers



More Flechibelm condensers are used in transmitters throughout the world than any other type.

TVPF TO for use on 1,000 rolts D. C. (750 rms. R. A. C.). Cat. Link 2.21 8224 TC100 3.83 3228 6.47 822A TOLOG TYPE rolts C.). rine Cat. PRICE 2.64 2227 T100 5.00322A 8.52 3220 14.50 T400 4. 9.000. Welle rite for prices on 2.000, 3.0. 3.000, und 7,000 colf. condensers.

## Faradon Condenser Blocks



These blocks were made by Faradon Equipped with mounting use with the 12 mfd size is for use with 145 packs. Rated at 600 volts D. C.; 300 volts A. C. Flash feet 1.200 volts D. C. Measures S'x5'x3'x'. Has taps at 5. 5. and 2 mfds. Cat. No.

70UR 41.05
7230 PRICE \$1.75

The 7 mfd. unit is similar in appearance to the 12 mfd. Measures 5"x3%"x1". Equipped with mounting brackets. Rated at 300 volt D. C., 150 volts A. C. Flash te 400 V. For 171 packs. Tapped 3, 3, 1 mfd. sections.

Cat. No. YOUR PRICE



#### AEROVOX BUILT BETTER X CONDENSERS AND RESISTORS

# AEROVOX DRY ELECTROLYTICS

SELF HEALING
500 VOLTS D.C. PEAK

ABSOLUTELY DRY



ŧ

The Aerovox HI-Farad electrolytic condensers are the latest development in Radio. They can be used wherever any high-grade paper condenses or block is used. Can be mounted in any position without any likelihood of spilling or leakage, with the resultant saving of much space due to their high capacity. They are constructed for all practical purposes and can be handled in the same manner and with more safety than paper filter condensers, due to the self-healing and high but, operating voltage characteristics. The 500 VOLTS D.C. PEAK permits their use in most of the standard high power supply units, receivers, iransmitters, power amplifiers and replacements in "B" eliminators. The ideal high-capacity, high-voltage, in any type or combination.



1	in any type or	combination.		2 2 4 1			All the second
		Total Mfdn.	Your Price			rpe Total Mids.	Your Price
		1			******* <b>E</b> 5-	8814	\$2.23
						888	
		4				8888	
8710	E5-8		\$1.18	3714		348	\$2.65

# COMPACT TYPE CONDENSERS



These condeners are non-inductively wound and are thoroughly impressed. They are provided with timed soldering leads. They are ideal for use in all radio and sydio frequency be-passing circupts, as coupling condensers, teolating condenser or for air purpose where a compare to be passing circupts, as a compare to the provided the provided section of the second section of the section of the second section of the se

No.		fap.		Trpe	Fries		
	2170	MIE	m fri	180.100	,	15c	
	2180	. 01	mfd	180 100	ŕ.	15c	
	2181	0.2	mfd	180 100	+	15c	
	3182	_03	mfd	150 100	+	17c	
	2183	1	mfd	100 100	*	19c	
	2181	24	m fel	280.200	-	20c	

# AEROVOX HIGH VOLTAGE SOCKET POWER FILTER CONDENSERS



All condensors are non-inductively wound, theroughly impregnated, sealed in metal cans and provided with convenient terminals for wiring.

They are very conservatively rated and have a high factor of eafety for safe operation at much more than their rated voltages (with terminal leads).

		D.		Four
TITE	31 fd.	Valt	Link	Price
602	1	800	27.75	81.65
An?	2	600	4.60	2.36
BOY	4	ROO	7.25	4 2'
802	1	600	3.50	2 0
807	2	800	5 25	3 0
800	4	200	25.5	15 77
1000	1	1000	4.25	2.80
1000	2	1000	705	4.41
1000	4	1000	2000	

High Voltage Transmitting Condensers

	Milli 1	rorcelain	l'erminala	1	
1003 1003 1003 1003 100 304	Mfd	D C Velt 1000 1000 1500 2500 2500 3000	1.15t 54.50 8.00 1.50 12.50 12.00 12.00	Your Eric \$2.6 4.7 4.4 7.3 8.8	50150

Tour

## LAVITE RESISTORS



Figh current carrying resistors, Will fit any standard grid leak mounting Beststances, 1,000 to 500,000 044, No. 2728

Your 58c

#### EDISON BASE RESISTORS



From 3 obms to 1 000 obms Cos. No. 3774 Yiet \$1.50

Your SSC

# MOULDED BAKELITE CONDENSERS



		The name of	THE CHARGE	1	1/100	Frice
ep.		Tour Price		.002	-	22c
0004	- 16					
0003				6.03		97
00007				00.45	40.000	27c
.000075				300.1		
.0001				.005		30c
.0001A	4	0 -		.006	X 1000 - 100 - 1	JUC
.0002		Se			********	45
.00025		00		0.1	Technology and the second	45c
.00037				.015		70
0005						17.0
				.0.5		01.00
001						\$1.20
.0015			0.3			Trafet U

# 

## IGRAD MIDGET CONDENSERS

Small Tight Impregnated Tinned Ings. Factors tested at 1500 tolts. Can be used for contiguous operation at 1000 tolts. All brand new and perfect.

No.	Cap.	List	Frice				
8715		.85	8c	8710	.01	.88	12c
8716	,005	.40	9c	<b>*</b> 720	025	:75	15c
3717	,002	.85	10c	8721	0.5	.85	15c
3718	.006	.48	10c	8722	J	1.00	20c

# RELIABLE HIGH VOLTAGE UNCASED

SURGE PROOF CONDENSERS

An excellent surge-proof high voltage condenser for all repair or constitution. Dupped and coated with impressable compound of high quality making for good wallating and moisture-proof qualities. Long leads, 600 VOLTS DC, WORKING VOLTAGE. Keep several in your kit for handy use.

Cat. No. 3697	% mfd.	Your Price	15c
Cat. No. 3698	3/2 mfd.	Your Price	20c
Ont. No. 3699	1 mfd.	Tour Price	27c
Cat. No. 3700	2 mfd.	Your Price	35c
Cat. No. 3701	4 mfd.	Vout Price	65c

#### HIGH VOLTAGE CASED CONDENSERS

Here is a very bigh grade filter condenser for all general or special purposes. A 650 Vol T CONOLNEER, carefully wound, fully imprecinted in a tender of the most all penderal case. Will stand up under the most all machines and give perfect satisfaction. Once in most you can forget about these wonderful conditions.

Cat. No. 3106 In Lots of 12	4 mfd. or More-1	Your Price \$1.25
Cat. No. 3705	2 mfd.	Four Price 69c
Cat. No. 3704	1 mfd.	Your Price 52c
Cat. No. 3703	35 mfd.	Tour Price 390
Cat. No. 8702	1/4 mfd.	Tone Price 30C

Above Prices



# All Replacements For All Receivers

We can supply replacements for almost every receiver made, whether it he power transformer, and blocks, resistors or volume controls. All we need know is the type set, serial number, model number, part needed, whether it is shielded or fits into a can. Just give us sufficient information and you will receive the replacement part identical to the one that is to be replaced as to size, capacity, voltage, and resistance. Once installed, our replacement parts do not have to be replaced. They are built to last and give entire perfect satisfaction. If you are in need of Call upon them for help when necessary,

Name of Sei and Model	Price Con- denser	Price Trans- former	Name of Set and Model	Price Con- denser	Price Trans- former	Name of Set and Model	Price Con- denser	Price Trans- former	Name of Set and Model	Price Con- denser	Price Tran
C. Dayton Co.	87.00	-4.50	Columbia- Kolater	4.00		G 608, 25 cycle K & K608	6.25 5.00	4.50	20 Sentinal B & C	6.75	
A. C. 63 me Elec. Co.	5.25	#4.50	C1-C3	8.50	4.50	Equaphase-			Elini	4.50	
AC7		4.60	02-C4 930	3.25	4.50	Arcturus Garod EA	5.50 5.50	6.75	8flver-Marshall A. H. C. 850	6.25	H
fohawk A-10	00.8	8.75	C-5	6.00	7.00	EA	8.00	6.75	72 77 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	8,00	1
Туре	5.00	■.00	C-6 901	4.50 7.50		General Motor 85077 5080		4.50		6.00	
A-B Elimi-		1	950	7.00		Model A		8.75		0.75	1
nator d Trans-	4.50		8 G 8	5.50 5.50		Gould-Uni PWR ABC 135	7.50	1		8.00 4.00	
former		6.75		6.25 5.40		Grebe A C d	7.30 3.75	4.50	B3A - 84A - 85A	2.15	6.
) (Lyric) rad AC7		<b>6.75</b> <b>4.50</b>		0.25		Green-Hrown A. High Power B	4,00		Sonora B30-81 Sparton A C 5	5.00	
1		6.75		5.50 6.25		B Super Power	4.25	1	A C 7-02-63	4.75	4.
ex 6, 25 eyele	4.75		Crosley	2.50		Howard S G A	79.441)	6.75	109	8.00	D.
fl. 60 cycle	4.50 4.50	6.75	809-33%-	1.25		8 Green Diamond		4.50	891	6.00 2.75	6.
7, 60 cycle 1, 60 cycle	5.00	6.75	345-825	2.75	6.75	Kellog 523-526		6.75	69-79.4		
6, 60 cycle borphone 45	4.50 5.00	6.75 4.50	815-405- 415-425	2.75	6.75	Kennedy- Colin B	6,40		60 cycle 69-79 l	4.75	5.
5	0.00	4.50	Buddy & Chum	,,	3.74	, B	2.00		25 cycle	5.50	
gus Elec., 91-210, con=			610-609-704A- 41-42A	2.10	5.00		5.00 5.80		Splitdorf-Abbey	4,50	4
nina choke	6.25	4.50	706-708	2.10	4.50		6,00		Steinite 50	7.50	1)
vater Kent 36 7-38 Inc.	<b>6.00</b>	4.50	704B AC7-AC7C	2.75 2.75	4.50	20 10	2.75	6.75 5.00	10 1 ~ 15-60	5.00 4.75	5 6
chokes	4.00	8.00	Day-Fan	6.00	4 80	King Model J	4.70	6.75	991-992-993	4.50	5
0-42-52 Pack 0-42-43-44-52	10.00	4.50	Earl 21-22 31-32	4.75 4.75	4.50 6.75	Kodel B-114	4.85 4.60	6.75	261 40C	3.00 5.50	4 7
5-55C	F 00	6.75	41-42	5.00	0.75	A-single	1.50		12	6.00	
Cond only	2,00		78 21-22, 25 eycle	5.00	0.75	A-2 In 1 Comb A-3-In 1 Comb	2.50 3.50		Sterling A Cond	6.75 4.00	
0 Cond only	2.00		Edison	6,00	7.50	Kolster 61f		6.25	Stewart A Cond	4.50	
y Pass ly Pass	75		R4-R5-C4 Elkon A Cond.	1.75		6J=6K=6R K20=21=42	3.50	4.50 4.50	Siewart-Warner Mal. Pack	4.25	1
i DC	0.00		Eveready 50 Exide Willard	5.50	6.75	K21-K23	3.00	4.50	539 Sterling	5.00	0
Comp Pack	5.50		Elim., 60 cycle	5.25		K 43 24	3,00 6,00	6.25	950-909 Stromberg-		6
kelt			25 cycle Fnda ABC	6.75		K45	3.75	7.50	Carlson	5,00	ß
Ellminators	5.00		A Cond	1.50		K44 Majestle A	3.25	6.50 5.00	G41-652-654 Temple	D'ON	
V	4.50	6.75	ABC B Cond 10-11-16-17-	5.00	7.50	Standard B Master B	* 00	0.50	500-550-800 761	4,50	7
•	6.00	6.75	20-31-32	0.00	7.00	Super B	2.90	8.50	Tube A	2,00	
ich little 6	5.00	4.50	16 25	4.25	6.75	Special Master B		8.50	Victor 32-45-75 32-45-75	5.50 5.25	7
8 Cond-Choke	4.50	7.50	35	5.00	7.00	70-71-72	4,00	6.50	Willord B Ellm		•
9-825 Pack 01-502-503	5.00 4.25	10,00 3.75	E-420-50-70- 71-75-77	5.50		80-180 90-91-92	4.00		25 cs. 60 cy.	4.00	11
8	4.50	5.70	E180	5.50	5.00	Inc Chk	4.50	7.00		6,00	
ich A Eliminator	3.50		Farrand B Eliminator	4,00	3.75	90 B 70-71-72, 25 cy	4,00 6.25	7.00	Zenith Z1:9-	6.00	
indes B-10	4,00		Federal	0.00		Melrose			116-116	3.50	G
l-15, 16 mer-Tully	3.50 5.00		D-E-F-G	2.50 2.50	4.50	(See Apex) Mohawk AC27-			80-51-52-00 By Pass	1.75	
-20A, S-21A	5.50		K	2.00	5.00	to 28 226 type	2 - 0	0.05	50-51-52-60	2.75	1 3
-40 -70, 7-71	5.50	6.00 4.50	Buffer-2 Freed-Elseman	1.50		Pack Peerless 65	3.50 3.75	6.25 7.00	ZE 3	3.75	5 5
wning-			NR 60	4.00	4.50 4.50	Philico 77	4.85	6.25	ZE 4 ZE 6	6,00	5
Drake MB30 9-70-71		6.75	NR 57-457 NR 67	5.00	4.50	511-12-18-14 65	3.80 4.50	4.50 6.75	ZE 18	6.00	6
inswick		1	NR 70-470 NR 80 DC	0.00 2.50	7.50	ABC B Cond	4.05		ZE 11-12-14- 15-16	. 7.00	
KRO -KRO, RI,		4.50	NR 60=			Powerlzer		6.75	Z11 17	7.00	12.
5KR6, 5-KR 1-82 (Pana-		4.50	NR 80 AC	2.50 4.00	4.50	210 Pack R C A 17	5.00	4.50	ZE 8 ZE 5	4.75	
trope) \$31		6.75	00 SAC	7.1117	6.75	18-31-51	4.75		Z 70 (uses 2)	1.25	1 7.
. 14, 821, l.T.S., 818,82		0.75	NR 95 AC Freed 55-50	4.75	6.75	Inc choken	2.00 3.75	4.50 5.00	Z 70 (uses 1)	2.10	7.
5-22		6.75	78	5.00		60 Cont. choke	4.30	4.50			
ckingham	5.00 2.10		41 Freshman	5.00		30 A 30 A	4.75 6.00				
sh & Lane	4.10		Polydyne			101 (Speaker)	2.50		Our Par	ts A	re
onial 12 SG	10.00	0.75	QD15-16-16 N11-2N12-	5.00	7.00	64-4mfd Repair Unit	3.90		11		
11	2.25	4.50	Poly. 250	6.00	7.00	64	16.00	12.00	Guarar	ntes	he
32	2.25	6.75	M 12-M608-171	4,50	7.00	30 (3 nmed)	1.80		- Caului		_



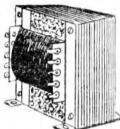
# RELIABLE POWER TRANSFORMER FOR UNIVERSAL REPLACEMENT

FULLY GUARANTEED

The transformers listed below will replace the transformers in 89% of the receives in use today. They are absolutely brand new—made of the finest quality merchandise and guaranteed to give them roughed some year from date of sale. Conservatively rated. Universal mounting brackets allow them to be mounted with little trouble. Long timed soldering large permit easy installation. Electrostatic shields which are grounded makes it possible to mount them does to the other parts in the receiver. A wiring diagram is furnished with each transformer. Deads and former Missiand with a six as to be pressed for future service calls, and to avoid delay on repair and service pobs.

We Will Allow a 5% Extra Discount on Orders for Six or More Assorted Transformers

## Type 245 Power Transformers



.

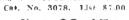
For replacement in sets or power packs using up to 6 or 7 227s, 231s, 251s or 247s and a 280 Rating 350 FT 50 volt 125 mile, 5 volts 2 amps, volt 11 ame C.T. Can be used for replacement the following or in any radius of the above tube combinations. Measure 14, 23, 23.

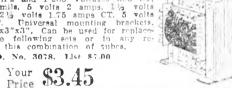
Your \$3.95

All American Mohawk, Model 96, B. Lythe American Bosch ... Model 48, 58, 60 Model 55, 550 Model 55, 550 Model 67, 500 Model 68, 82, 831, 818, 82, 15, 22 Model 81, 82, 831, 818, 82, 15, 22 Model 1286 Model 32AC Atwater Kent .... Balkite Browning Drake Brunswick Bush and Lane. Colonial | Model | SPAC | Model | SPAC | Model | SPAC | Model | SPAC | Columbia | Phono | Columbia | SPAC | Model | SPAC | SPAC | Model | SPAC | SPAC | SPAC | Model | SPAC | King Monarch Model
Kolster Model 930, K13 Zenith Model 60, 61, 62, 602, 612, 622, 64, 67, 612, 572, 54, 52, 53, 70

## Type 171 Power Transformers

For use with receivers using 4 to 5 226's, 1-227, 2-171A's and 1-280 Voltages 300 CT, 300 at 85 mils, 5 volts 2 amps, 1½ volts 5.25 amps, 2½ volts 1.75 amps CT, 5 volts 2 amps CT. Universal mounting brackets, Measures 4"x3"x3", Can be used for replacement in the following sets or in any receiver using this combination of subes.





	0.00	
AC Daylon		Model AC-63
Acme Electric Co.	and was a second of the second	Model AC-7
Amrad Corn	COLUMN DE LA VASSE	Model AC-7
Ashambana		Model 45 and 55
Arnorphone	Marial DC 7	7, 38, 40, 42, 43, 44, 53
Arwaier Kent	access annual so.	11. 11. 11. 11. 11. 11. 11. 11.
Bremer Tully	ARREST CONTRACTOR OF THE PARTY	Indel R.T. 6-10, 7-70, 7-71
Brunewick	Model :	SKR. SKEO. SKEO. 64. Bel
Columbia Phono Co.		Model C1, C2, C3, C1, 930
1 rosles	Model 608, 701H, 70	16. 610. 609At, 41A, 41M
Charles Freshman C	0	Model G
General Motors		Model 5077, 5080
Grebe		Model 100
Grebe		Madel 6 Cases Diamond
Howard		Model & Green Diamond
King		Model J. H
Kolster	**********	Model 6K-AC. 7-AC
Kolater	Mode	1 K 20, 22, 26, 27, 37, 12
Pilot		Model K-108
PCA Victor		Medel 17, 18, 26
Dadish	************	Model 17, 18, 25, 50, 51
r-daimin	EXTENSO ( ) - ( ) - ( ) - ( ) - ( )	The second secon
Splitdorf		Model Abbas 131
Standard Radio		Mirrel 19
Steinito		Model 281, 362
Radio & Teles	rislen	Model 80
Zenith		Model 11F, 14E
CHILLE		A11 111 277751 1151 212

## Midget Set Power Transformer Replacement

This is one of the most popular of replacement transformers as it is the replacement jub to sell gothers and require towesters of the matter, we note and require towesters of the matter, we note at 4 2 22. Universal mounting brack to vote at 5 amperes, 12 to total at 12 amps, o vote at 2 amps. Can be tised for teplacement in the following resolvers on any energy eather towe continuations.

(at. No. 3079, 11st \$7.00

Price



Advance Electric to ralk Model 11-18
Atchison Kadio Co
Nathaniel Baldwin, Inc Baldwinette Model
Brown and Manhael Ranger Model 44
Cardinal Radio Co Model 70, 80
Carteret Radio Lab Model AC-7, AC 8, DC My
Champion Radio Model 82
Crasley Mula fo
Crosley Radio to Buddy Model Echophoro Radio Mfg. Co Petrophone Model
Filtrora Lambing to
Elmore Lambing to Singer Model federated Purchaser Melocad Cathedral-Tone Model
flight Parties 4
Unit Radio to Midget Lord Radio to Model A
J French & Sons Plano Co Junior Model
Gilbert, R. W Model 69
Gray Danielson Remier Cameo Model
Griffin-Smith Mile Co.
Griffin-Smith Mrg. Co Royalo Model Hvatt Electric Corp Model AC-7
Tielwan Poll (c)
Jackson Bell (a Model 62 Jewell Mig. (a Model M
Keller-Fuiter Radiette Model 14-F
Kemper Radio (u Kompek Model 80
Master Redio (o
McCormick Model 424
Midget Model
Mission Bell Radio Mantle Model National Top forms (a Balkeit Modei
Bettered 11 in terms to Balkeit Model
Patterson Radio Corp Model 5-69, 7-69
Pierco Airo, Im Dewald Model 524
Plymouth Radio Corp Model 3
Powell Mfg. (a Cathedral Model Premier Electric Ca Home-Pal Model Premier Pal Model Pal Pal Pal Pal Pal Pal Pal Pal Pal Pa
tremer in Model
Reinler Division-Gray and Dan elson Cameo Model 14
Republic Radio Co Model 31-M, 31-J
Sceley Electric Co Model 5, 6
Simpley Radio to Model R
Fred Stein . Model 130-0
Steinite Mfg. Co Model 410
Sterling Mfg. (o Model F-1-60
Transformer Corp of America
Tray-ler Mig. (a Model B
U. S. Radio & Television Apex Model 27
Waltham Radlo Corp
Wholesale Radio Service Co Lafayette Midget Model

## Type 250 Power Transformers



The 250 power transformers will supply receivers using up to S or 8 227s or 224s, and a not 2.51s. Voltages 1300 volta 2.51s. Voltages 1300 volta 2.51s. Voltages and 15 cm. Voltages 2.51s. Voltage

# ATWATER KENT BEPLACEMENTS

## A.K. 37 CONDENSER-

# CHOKE BLOCK

(With 3 Chokes)



For replacement in Atwater Kent 37 and 35 receivers. Con-tains combina-tion of 2 FILT-FR CHORE-TION OF 2 FILTER CHOKES.

S P E A K E R
O U T P U T
CHOKE AND 4
FILTER CONDENSERS. AN

DENSERS. An exact duplicate of the original as to size, capacities and colored leads, making for encedy replacement. Fits right into place. This compact, efficient block can be utilized to newstage in any fitering existen designed for 171-A tubes. Caso is of heavy sauge metal, not tin.

8406

Your \$2.40

## A.K. 37-38 FILTER ASSEMBLY

Composed of 4 bigh voltage filter condensers, pitch-dipped, forming a compact sincle unit. To replace defective condenser in A. K. choke block after 'shot' condensers have been melted out. Makea an ideal filter assembly for any A.C. set. Contains 1.1 mid-300 V. 2.1 mid-300 V.



Cat. No. 8409

Your \$1.45

## A.K. REPLACEMENT **AUDIO TRANSFORMERS**



For universal replacement in all A. K. receivers as well as any other sot. especially midgets and portables. Provides tramendous distortionfree amplification. All stage ratio.

Oat, No. 8416

Your 60c

## PHOSPHOR-BRONZE FOR A.K. DIAL BELTS

Strong flexible phosphor bronze belting for all A. K. sets. Comes ¼ inch wide Have several feet on hand and "Roll Your Own."

Cat. No. 8411

Your 7c per Price 7c ft.

## ATWATER KENT POWER PACK

For 40-41, 42, 44, 52 Models



A complete replacement power pack for use in the above models of A. K. Safe, reliable and highly efficient construction. The proper highly efficient construction. The proper POWER TRANSFORMER AND FILTER CHOKE BLOCK impregnated in a heavy, pressed steel case. Soldering the flexible leads to the resistance and terminal strip, and to the 280 rectifier is the only work to be done in replacement. A guaranteed unit supplying all filament plate and bias veltages.

Cat. No. 3407

Your \$5.45 Price \$5.45

## POWER PACK FOR A. C. CONVERSIONS



A complete power-pack which supplies filament and plate current for 4.226, J-227, 1-171A,1-280 type tubes and will change any Aiwater Kent hattery receiver into a modern electric set. Pack contains power transformer, filter chokes, filter condensers, and all necessary resistances for bias, etc. All high grade parts. Although designed for A. K. sets, can very handily be used for any other battery set. Makes a battery set modern and up-to-date at a very low price. Cat. No. 3414

Your \$7.50

## REPLACEMENT BY-PASS CONDENSERS

For A.K. Sets



For R. P. filament and plate circuit by pass. Slightly different in construction than the original, but nevertheless a perfect replacement. Available in .1, .25, .5, 1 and 2 and, most.

Cat. No. 8113

Your 25C each

A.K. 37

## POWER TRANSFORMER

A well-constructed power transformer for Atwater Kent 37-38 model receivers. An exact duplicate 38 model receivers.
An exact duplicate of the original as to size, voltages and colored leads. Fits right into place without any changes whatever. A replacement block that can be universally used



ment block that can be universally used in any receiver using 4 or 5-220, 1-227, 1-171A and 1-280 type tubes. High voltage secondary 500 volta A.C. center-tapped. In a compact pressed steel attractive shield

Cat. No. 8408

Your \$2.25

## A.K. 37 3-SECTION **BY-PASS**



A high grade replacement condenser for by-passing the R. F. filament and plate circuit of the following Atwater Kent models! 37, 38, 40, 42, 44, and

Oak No. 8415

Your 95c

## A.K. SPEAKER FILTER BY-PASS



Constructed and designed to take the place of the odd-mounted output filter condenser as used in models 87, 83, 40, 44, 46. Especially well made.

Cat. No. 8410

Your 75c

## FLEXIBLE GRID **SUPPRESSORS**

These excellent guaranteed flexible resistors are the perfect replacement for all A. K. grid suppressors. Rounded, they are easily handled and installed. Cat. No. 3419

Your \$1.00 Price \$1.00

# CROSLEY REEPLACENTES FOR ALL VEGEDELS

Crosley Model 706 Transformer

Part No. W-5115



Genuine Crosley power transformer for replacement in model 706 receiver or any set using 4-226, 1-227, 2-171-A and 1-280 type tubes. Especially well constructed. Large, tight heavy cores for hum-free, moiscless operation. Supplies 1½ volts at 8 amps, 2½ volts at 3 amps, 5 volts at ½ amp, 5 volts at ½ amps for 280, and 500 volts bigh voltage center-tapped secondary. Primary tapped for high and low A.C. input voltage. An excellent transformer at this very low price. Ship, wt. 7 lbs.

Cat. No. 3383

Your \$1.35

# Power Transformers

Crosley Model 608 Transformer

Part No. W-5145



Here is another Crosley product for replacement in the 608 model receiver. This set makes use of half-wave rectification with a 280 type tube. Used in conjunction with an Electrolytic condenser and good choke, this transformer will deliver up to 220 volts at 1s map. Also 5 volts at 2 amps for the 280. High voltar is secondary deliver 250 volts AC. For 3 or 4-226 tubes, I or 2-227 1 or 2-171-A tubes. Shor, with 7 lbs.

Cat. No. 3381

Your \$1.10 Price \$1.10

Half-Wave 289 Circuit Furnished On Request

| Crosley Model 609-610 Transformer Part No. W-5898



For 110 Volt, 60 Cycle A.C. Similar in construction to all Crosley tower transformers Rugged, well built, noiseless and hundess. Five secondary windings supplying 1½ volts at 3 amps, 2½ volts at 3 amps, 5 volts at 4 amps, 5 volts at 5 amps, 5 volts at 2 amps, 5 volts at 3 amps, 5 volts at 3 amps, 5 volts at 4 amps, 5 volts at 2 amps, 5 volts at 4 amps, For 110 Volt, 60 Cycle A.C.

Cat. No. 3386

Your \$1.15

Croslev Model 609-610 Transformer

Part No. W-5026



For 220 Volt 60 Cycle A.C.

For replacement in Crosley models 600 and 610 "Gemehest and 'Gemehox" Oversize transformer. Silicon steal core laminations, strongly builted together for noiseless operation. For use also with any set using 4/22d 1/22r, 1/171A, and 1/280 typenhos. Delivers 1½ volts at 6 amps. Clay volts at 3 amps. 65 volts at 1½ amp. for 1711A, 5 volts at 2 amp for 280, and high voltage secondary of 500 volts, center topol Crosses operation. Ships, wt. 7 bs.

Cat. No. 3385

Your 95c

## CROSLEY POWER PACK **CHOKE**



Small, compact units in black shielded cases. Ideal for replacements and use in portable and midget receivers. Excellent tone. Two Ratios — 4:1, 9:1. Sbpg. wt., 1 lb.

Cat. No. 8390

Original Crosley choices 20 henry, 85 mils. For replacement purposes or use in any power pack or producer. Fully shielded, Comes in neat black shield can with long flexible leads. Shes. wt., 3 lbs.

Cat. No. 3387

Your Price 65c

Crosley Audio Transformers

Your Price 33c

CROSLEY TRANSFORMER

For Model A.C. 7 Receiver

Power Pack

# CROSLEY DOUBLE CHOKES



A series wound double choke totalling 60 heuries, Will pass 85 mils. Diend for use in a brune force filter, and all Cro-ley receivers. Fully shredded ring brown metal case, with lour connecting leads. Shop wt., 3 lbs.

Cat. No. 3388

Your 75c

#### Cros'ey By-Pass Condensers

Excellent metal cased long lasting condensers for by possing plate circuits, has resistance, the Accurate capacities. Hamily ligs for pass soldering, Mounting tabs. Cat. No. Capacity Lour Frice.

W.1+ 1441	4 147	1034 11.5	1 1111	Littee	-
397	. 2	mfd		45c	D.
3892	. 1	mfd .		25c	
3893					ES. THEORETCH DANSE
3394					
1305	1	mfd		18c	0

25c 3396 .1. .1. 45c Less 10% in Lots of 12 MICA TYPE Capacity Your

## CROSLEY DYNACONE ADAPTER

Adapts any set to use the famous Dynacone speaker. Remove power tube, place adapter on tube and insert both into socket. Instructions attached to adapter.

(at. No. 3102

Your Frice 50c

#### CROSLEY CHOKE



An 85 mil, 30 henry cholic for Crosley receivers or any lower pack. In an attrac-tive munded brown ease, Fully shielded. Long Pack, Mounting screws already fairfuld to base. Ships wt. 3 lbs.

Cat. No. 3330

Your 60c

## CROSLEY RESISTORS

Great current carrying capacity. Essectally suitable for Dr receivers. Wire wound and baked cuamy!, 47.7 chms tapped at 15.

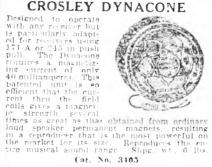
Cet. Na. 8404

Your Price 35c

140 ohms for power pack replacement. Cat. No. 3103

Your Price 25c

## CROSLEY DYNACONE



Cat. No. 3105

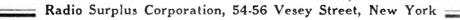
Your \$1.95

IDEAL FOR AUTO RECEIVERS

#### Price 006 85c 3100

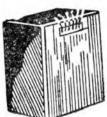
004 Per Doz.





# Freshman-Freed-Earl-Freed-Eiseman Condensers

## Freed-Eisemann Filter Block For NR80 Model



Original and genuine replacement block for NR-80 A.C. model receiver. Highly efficient. In sealed metal can. Total capacity 9.6 mfd. Consists of 1-4 mfd., 400 V., 2-1 mfd., 400 V., 1-2 mfd., 200 V., 1-1 mfd., 250 V., 1-1 mfd., 400 V.

Cat. No. 3357

Your \$1.50

## Freed-Eisemann Filter Block For NR85 Model

Genuine F. E. replacement unit, factory No. 2441. Total capacity 10.1 mfd. Composed of longlasting, high-working voltage condensers. An original block for all NR-85 F. E. receivers.

Cat. No. 3358

Your \$3.10



## Freshman G-60-S Condenser



Original blocks. Factory No. 3078. Correct size and capacity. Only difference is in higher working voltages, resulting in longer life and greater satisfaction.

Cat. No. 8359

Your \$2.40

Freshman O Condenser Block Factory No. 4453



Manufactured by Freshman for replacement in all "Q" model re-ceivers. Best quality and highest grade materials used in their manufacture. Total capacity 8%

Cat. No. 3360

Your 95c

## Freshman O D Condenser Block



Factory No. 4909. A later designed, genuine condenser block made by Freshman for all QD receivers. Utmost satisfaction. Total capacity 7½ mfds.

Cat. No. 3362

Price

## Freshman N-60-S Condenser Blocks



Original manufacturer's filter unit, Factory No. 4528. Composed of the correct capacities totalling 1114 mfd. Later de-sign and more satisfaction. Cat. No. 3361

\$3.75 Your Price

## Earl Model 31-31S-32-32S-33-33s Condenser Blocks



For use in all above models. Original and genuine factory units. Blocks for 60 cycle models total 7.1 mfd. 1, 4. 1, 1, 1/10 mfd. sections.

Cat. No. 3363. 60 Cycle Your \$5.40 Price \$5.40 Vour \$5.75

## Earl Model 21, 22 Condenser

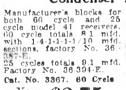


Genuine replacement blocks for Earl 21-22 models. 60 cycle unit. Factory No. 36 413-E. Totals 8.6 mfds.

25 Cycle unit, factory No. 36.479-E. 9 % mfd.

Car. No. 3365. 60 Cycle Your \$4.75 Price \$4.75 Cat. No. 3366. 25 Cycle Your \$5.15

## Earl Model 41 Condenser Block



Your \$2.75

Cat. No. 3368. 25 Cycle Your \$3.15

Freed Model 95 Block

#### Freed Model 55-56 Condenser

Genuins replacement blooks for Freed 55-56 models.

60 eyele unit, factory No. 86.379-3 totals 8.6 mfds.

25 cycle mait, factory No. 86.379-F totals 9% mfd.



Oat, No. 8869. 60 Cycle Your \$2.75

Cat. No. 8370. 25 Cycle

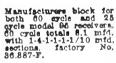
Your \$3.15

## Freed Model 78-785-79-795 90-905-65-36-395-396 Condenser Blocks

For was in all above models. Original and genuine factory units.

Blocks for 60 cycle mod-els total 7.1 mfd. 1-4-1-1-1-1/10 mfd sections. Blocks for 25 cycle mod-els total 8.1 mfd. 1-4-11-10 mfd. sections.

Cat. No. 8371. 60 Oycle Your \$2.75 Cat. No. 3372. 25 Cycle Your \$3.15



25 cycle totals 0.1 mfd. with 1-4-3-1-1-1/10 sections, factory No.



Oas. No. 8373, 60 Cycle

Your \$2.75

Oat. No. 8374, 25 Cycle Your \$3.15 Price \$3.15

## Phosphor Bronze Belts

For Earl, Freed, Freshman, Freed-Eisemann

Replacement belts for all above receivers using belt drives for tuning. Strong, flexible; already made to fit without any trouble. For Models 60, 20, 20%, 40, 40%, 48%, NR-8, NR-9, NR-60, and NR-66.

nt. No. 3375 Your Price 15c

#### Freed and Earl Knobs



Beautiful wooden knobs. Brown in color with gold engraved denter.  $1^{1}{}_{2}$  outside diameter. For  $1^{1}{}_{4}$  shaft.

Cat. No. 3376 Your Sc Price SC

## Freshman Q and QD Volume Controls

Original 8000 ohm tapered rhecatate for all Q and QD Freshman receivers.

Cat. No. 3377

# FREED, EARL, FRESHMAN, Power Transformers

## Freshman Q Transformers



Standard replacement for Freshman and Polydyne receivers. Supplies 222, 226. 227, 171A and "SO tubes

Cat. No. 3316

Your \$3.85 25-Cyrle Model. \$1.25

## Earl and Kolster Transformer With Brackets



•

Replacement for Earl and Kolster receivers. but can be used for any set using 5-226's. 2:227's, 2:171A's and a 280. Comes complete with brackets ready to mount.

Cat. No. 8317

Your \$1.75

## Earl A B C Replacement Transformers



Same transformer as above but less brackets. Wirfing No.: 1 and 11-2/2 volts for 227 tube, No. 4 center tap for 227. No. 2 and 5, 110 volt line: Same transformer No. 3 and 15 11 volts for 226 tubes

No. 6 and 0, 5 volts for 1716; No. 7 and 8 center tap of 171A; No. 10 and 16. 5 volts for 280, and No. 12, 13. 14. are high voltage, Cat. No. 3318

Your \$1.35

## Freed Eisemann NR 85 Power Transformer



Replacement for F.E. NRS5 receiver supplies 5-226, 1-227, and 1-250 with a 281 rectifier. The first audio 2:16. is on a separate filament winding.

Your \$4.50

## F. E. NR-11 Replacement Transformer

Supplies 5-201's and 171A in conjunction with B. A. Raytheon rectifier, For all 2014, series filament receivers.

Cat. No. 8319

Your \$5.35 Price

## Freed and Earl Transformer Coil and Terminal Strip



(a. No. 8320

Assemble with the laminations of the old core. For Earl Models 31, 32, 328 and 41, Freed Models 78, 79, 798, 65, 90, 45.

Your \$2.25 Price \$2.25

We carry the largest stock of Freshman, Freed Eisemann, and Earl Replacement Parts. can supply replacements for any part of any of these sets. Send in the part to be replaced.

## Freed 78, 79, 95 Power Transformers



Replacement for Freed Models 78 79, 798, 65, 90, 95. Supplies 5 or 6-227's or 224's, 245's and 1-280. Complete with brackets and terminal strip.

Your \$4.50 Price

## Earl 31-32 Power Transformer

Replacement for Earl Models 81 318, 32 328, 33 338, 24, 41 Complete ready to mount. Cat. No. 3322

Your \$4.50





## Freed 55, 56 Power Transformer

Replacement for Freed Models 55 and 56 Supplies 226's, 227's, 171A and 280.

Cat. No. 3323

Your \$3.10

## Earl Power Transformers

Models 21, 22, 55, 58, Supplies 226's 227 s. 171A and 280. Cat. No. 2021

Your S1.95



### Freshman M60S Transformer



Replacement for M series receivers Supplies 4:226 a, 1:227 and 1:121 with a 280 rectifier. The filter choice are fully into the same casing as the transformer. This unit has two 1:2 vol windings, the first audio being on a version of windings. windings, the first separate winding,

Cat. No. 3325

Your \$4.50

#### Freshman N Power Transformer

Replacement for N series receivers. Supplies 4-228, 1-227, and 1-250 and 281 rectifier. Filter chokes are in the same case with the transformer. Has two 123-volt windings, the first audio being on a separate filament winding.

Cat. No. 8326



Price

## Freshman Audio Transformer



Replacement for models, Q. Q.D. N and M. Cat. No. 3327

## Freed Eisemann Audio Transformer

Replacem en t for all Freed receivers, 3 1/2 to 1 ratio. Excellent tone and quality.



Cat. No. 3328 Your Price 45C

#### Freshman Q D Transformer

Replacement for QD

222, 226, **227**, **171**,

and 280. Self con-

tained filter choke

and supplies power

for dynamic speaker

8upplies

receivers.



Cat. No. 3329

Your \$4.50 Price \$4.50

### Freshman G-60-S Plate Transformer



Supplies 1 14 V for 226's, 214 V for \$20 or 224's or 5 volts for 171A. & wolt and 21/2 volt windings center tapped. Replacement for Fresh-

Your \$1.65

## Freed Eisemann NR80 Power Transformer



Replacement for F. E. NRSO receivers. Supplies 5-226s, 1-227, and 1-171 and 1-280. Has 232 volt windings; the first audio stage being on a separate winding.

Cat. No. 3331

Your \$4.75 Price \$4.75

## Freshman G-60-S Filament Transformers

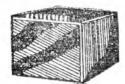
Supplies high voltage and filament for 251 for Freshman G-60-S receivers.

Cat. No. 3332

Your \$2.25



## Freshman Plate Transformer for Power Amplifier



Supplies high voltage and 7% wolt winding for the rectifier. Supplies 210 or 250.

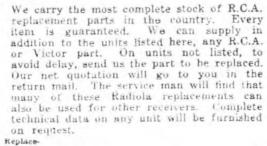
Cat. No. 3333

Your \$1.95

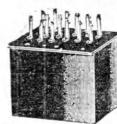
# Replacement Parts







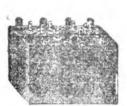
## R.C.A. 64-67 Power Transformer



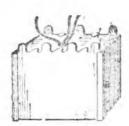
For replacement use in the R.C.A. Models 64 and 67. The 64 uses 8-227, 2-250 and 2-281. The 67 uses 7-227, 1-250 and 2-281. This is also an ideal transformer to use in building up a 250 push pull amplifier. Shpg. Wi. 12 lbs. List \$25.00

\$7.95 Your Price











mens No.	Part Description			Madiole	List	Your Price
8476	Filter Condenser Block me me ore with an	44.	46		x. \$12.00	\$3.95
8382	Filter Condenser Block	62			12.00	5.25
8483	Power Transformet	66		4	12.90	3.95
8484	Power Transformer	66-2	5 0	yele	18.75	5.25
8301	Power Transformer	17-2	5 (	yele	18.75	5.25
8340	Power Transformer	18-3	3-5	1-25 cycle	18.75	5.25
6021	Condenser Block and Audio Trans.	66 .	4.0		- 18.75	5.95
8373	Power Transformer	64 - 2	20	V-50-60 cycle	40.00	8.75
8287	Power Transformer	17-	-50-	BO cycle	** 12,90	3.20
8350	Power Transformer	60-2	5 0	cycle	18.75	5.25
5667	Two Stage Audio Pack	16, .	17,	18, 33, 41, 50, 51	6.75	1.45
8335	Power Transformer	17,	18,	33, 51	. 12.90	2.95
5807	Neutralizing Condenser	33,	60,	62, 64	. 1.20	.19
8336	Double Filter Choke	18,	33,	51	10.05	.65
2242		18,	33,	51	80	.15
8333		18,	33,	51	7.40	1.35
5901	Volume Control					.25
6037						.60
	Power Transformer					4.75
8472	Power Transformer	44,	46.		. 12.90	3.25
5996	By-Pass Condenser	18,	33		3.00	.19
	Push Pull Audio Pack			************		1.09
8555	Filter Choke					.75
7058	By-Pass Condenser Block	80				.19
7059	By-Pass Condenser (1 mfd.)	80				.19
	Filter Condenser Block					2.50
	Filter Condenser			F# 4 # 812 F# 810 SIO SIV 814		3.95
	By-Pass Cond. (.111)			mie ma sie ato ere <u>pi</u> a a e s		.19
	By-Pass Cond, (.11)			** ** ** ** ** ** * * * * * * * * * *		.19
	By-Pass Cond. (.7525)			** ** ** ** ** ** * * * * * * * * * * *		.19
	Filter Condenser	77.00		## ## * * * * # # * * * * * * * *		3.25
	R.F. Coil Assembly					1.10
	Power Switch			2'0 070 070 070 070 0 0 0 0 0 0 0		.15
8289						2.95
5899	The second street work and the second			C. Speaker		1.45
	R.C.A. Power Transformer					7.95
	R.C.A. Power Transformer	80,	82,	86	17.50	4.95

## R.C.A. Double Choke for Models 18, 33, 51



Consists of two 30 henry 80 milli-ampere chokes. When connected Consists of two 30 benry 80 milli-ampere chokes. When connected in parallel they are rated at 15 benry at 160 milliamperes. Series connection will give an individuce of 60 benry at 80 milliamperes. DC resistance 475 chms. Show, wt, 5 lbs.

Cat. No. 8336

List \$10.05

Your

R.C.A. Power Transformer for



This unit supplies 4.274's 2-227 s. 2.245's and 1.780. This is the transformer used in the superhetrodyne series. This re-ceiver was made up in similar models under General Electric. Westunkhouse and Graybar trade marks. Shpg. wt. 7 lbs. Cat. No. 8286. List \$17.50

Models 80, 82, 86

Your \$4.95 Price \$4.95

## R.C.A. Filter Condenser



Used In Model 17

Total capacity 14 mfds. Has two 3.5 mfd. sections, one 3 mfd., one 2 mfd. and two 1 mfd. sections. Working voltage, 450 D.C. Shog, wt. 4 lbs.

Oat. No. 8269

List \$19.20

Your \$2.95

## R.C.A. Bypass Condensers



Four section unit with three 1 mfd. and a 5 mfd. section. Rated at 450 volts D.C. Ideal for all R.F. and A.F. by-pass-Ing.

Used In Models 18, 88, 51 Part No. 5996

List \$3.00

Your 19c

We can supply Majestic Replacement Parts for all types and model receivers. and facilitate replacement send in the defective part which you want replaced. All our replacement parts are fully guaranteed.

## Majestic Power Transformer For 90, 91, 92, 100



91, 92, 100 Efficiently designed and built to give perfect sat-istaction. Incomparable for replacement in above model receivers. Supplies hament for 5-227, 2-215, and 1-280 type tubes, all separate seg-TRANSFORMAL TRANSFORMAL TRANSFORMAL TRANSFORMAL TRANSFORMAL Under the second transfer and high voltage for plates of rectifier; 245 and high voltage and the strong

metal shield can.
Cat No. 3681
Your 110 volt primary.

\$5.25 Price

## Majestic Condenser Blocks

Designed to fit the needs of the individual replacement. Each block composed of highest quality condensers. High working voltages and proper care proper capa-proper capa-prope



2683 171A Power tubes | Your \$2.65 250 | Power tubes | Price

#### Filament Transformer For Model 180 TYPE SPG



A very valuable replacement transformer not only for the 180 model, but for may power amplifier, using much pull 250 power tubes. Three secondary windings: 2½ volts for up to 6 tubes and two 7½ volt center typed windings, one for each 250.

Your \$3.20

#### Plate Transformer for Model 180 TYPE 8PG



A high voltage power transformer simplying the plates and obtained of two 284 restlying these. Unusually well constructed to withstand heavy loads placed upon it. This transformer was designed for model 180 Majestic receives, but in ment transformer, a perfect pair of blocks are obtained for a powerful sewer amplifier.

Int. No. 3601

Your \$4.80

## Fower Pack Chokes For Majestic Receivers

All in chielded cases. im premated Freellent f iltering purposes SFG for model 180

TP6 for models 70 71 72 7FB6 for models 70, 71, 72



## Majestic "B" Eliminator Transformer



For all Majestic Eliminators. An exact duplicate of the original but better; correct size and voltages. Primary has extra tap for 'hi-lo arljustment. Secondary is center tapped. The very transformer for any Raytheon Eliminator. Cat. No. 8682

Your \$2.10

## "B" Eliminator Condenser Blocks

A replacement block that has long been awaited. The condensers that comprise the unit were selected with extreme care, so that the trouble, common with the original, will not occur here. An excellent value excellent value.



FOR SUPER "B" AND MASTER "B"

Cat. No. 8688 FOR SPECIAL MASTER "B" Cat. No. 8689

Your \$2.00 Your \$2.05

## Majestic "A" Condenser



rugged replacement "A" condenser for the Malestic "A" power unit.

Cat. No. 8685

Your Price

## Resistors for All Majestic Sets and Packs



Cat. No.	Ohma	Size	Lour Price
SARO	8600	3	25c
3681	1000	10	30c
3682	2170	1 4 "	25c
RAAR	9170	1 14 *	30c
RRRA	· •	center tan	10c

## Majestic Push-Pull Input



For Models 10, 72, 71 90, 91, 92, 100, 180 Capable of fremendous volume, free from distortion. In shielded metal case. Impervious to moisture. Oat. No. 8600

\$1.50

## Majestic Power Transformer Plate and Filament

For Models 70, 71, 72

TAPE SEC and A.C. high volumes to aled in durable block metal can. 110 V metal can.

Cat. No. 3686

Your \$5.25 Price

TYPE 78P6

Same in size and appearance as 7P6 mapplies slightly higher plate voltage, shielded and scaled. 7P6 unit line

Cat. No. 3687

Your Price

\$5.35

## By-Pass Condenser Units for Majestic Sets

No. 714-For model 90 meries contains ½ mfd. condenser. Used to by-pass cathode and plate circuits.



No. 715—Same for models 70, 71, 73 used throughout for by-passing filament and placercuits.

No. 717-For model 90 series 130A chassis 4 mfd condenser for detector cathode by-pass.

No. 711—Cat. No. 3686 | Your No. 714—Cat. No. 3687 | Price \$1.35

## Push-Pull Output Transformers

As Used in Models 70, 71, 72, 90, 91, 92, 100, 180



An ideal replacement output transformer for the above models. Printmatches the imnelauce of the power tubes mend. Secondary right to voice coil of dynamic speaker. Thoroughly impregnated. Fully shield-

Cat. No. 3680

Your \$1.75

# Majestic Set Dial Cables

Cables already made up to size with evelets sold end to the ends for ear replacement Especial strong and very fixible. Several of these should be carried in your service kits for ready replacement.



Cat. No. 3605 Your Frice, nach

18c 150

In lots of 6.

# Filter Chokes for All Power Units

## COLONIAL "B" CHOKE



Genume Colonial filter choke as used in model 32 A.C. receive. Can be used in any set because of high cur-rent carrying capacity. Will pass 125 cultiampers at 39 horars. D.C. re-sistance, 75 ohms. Shpg. wt., 2 lbs. (at. No. 3735

Your 69c Price

## Freshman, Freed and Earl Chokes

These chokes are original factory-made units and will give complete satisfaction is reasuse brand new.

Your Price 40c C. A. EARL, 22, 24, 31, 32, 42 Double 3736 45c FREED EISEMANN, NR 57 ..... 3737

27c 3338 FREED EISEMANN, NR 70 Single 27c FREED EISEMANN, NR 80 Double 3739 27c 3740 FREED EISEMANN, NR 85 Single ...

FREED 55, 56, 78, 79, 95 Double.

EARL DOUBLE CHOKES

A carefully wound and constructed double choke coil. Will serve admirably in any powor pack. Has separate leads, so can be used on any hookup. Each

Cat. No. 3712

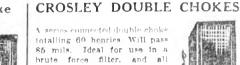
Your \$1.02

## Crosley Power Pack Choke

Original Crosley chokes, 30 Henry, 85 mils, For replacement purposes or use in any power pack or receiver. Fully shielded. Comes in neat black shield can with long flexible leads.

Cat. No. 3387

Your 65c



3741

A series connected double choke totalling 60 henries. Will pass 85 mils. Ideal for use in a

brute force filter, and all Crosley receivers. Fully shielded in a brown metal case. with long connecting leads.

Cat. No. 3388

Your 75c



## CROSLEY CHOKE

An 85 mil. 30 Houry choke for Crosley receivers or any power pack. In an attractive rounded brown case. Fully shielded. Long leads. Mounting screws already fastened to base.

Cat. No. 8389

45c

Your 60c



## General Electric Chokes



Constructed with G.E. accuracy and precision. A double choice that will pass 80 mil. at 50 henries, D.C. resistance, 500 ohus.

Cat. No.

Your Price

3255

Enshlelded

\$1.95

3256

Shielded

\$2.25

## Thordarson Choke

A sturdy 30 henry choke, 120 mile.

Cat. No. 3713



Your \$1.15

## Westinghouse Filter Choke



Mounted in containers and impregnated in gosta-beeswax com-pound. They are rated at 15 henry at 35 milliamperes. Two can be used in

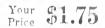
series and you will have a 30 henry choke at 35 milliamperes. They are splendid for use in "B" climinators or as plate impedances. D.C. resistance 500 ohm.

Your. Price 40c Cat. No. 3747

## Reliable Double Choke

In attractive shielded case. For two in any receiver, power pack, or amplifier where high quality is essential. Two 20 henry chokes that will passible that the control of the control of the control of the control of the case of the ca

Cat. No. 3741



## T.C.A. Filter Choke



This choke is made by Trans-former Corpora-tion of America. epocialists power equipment.

Rated at 30 honry at 120 miles amperes D.C. resistance, 425 ohms. Ideal for 215 power packs. Equipped with flexible hads and mounting legs. Can also be used as an output choke. Ships, wt., 5 lbs.

Cat. No. 3748

Tink \$2.50

Your 70c Price

## Victor Tapped Chokes



A 400 ohm choke, tapped at 15 nhms, For use in tuned-filter circuits to climinate hum. Will pass up to 125 mile.

Cat. No. 3745

Your 95c

## R.C.A.-Brunswick Choke

Used by B.P.A. 3-ECA replacement repression Y1008, Leanures So, P. 27H, 2H 5/1-03, 5H bills. Mounted.



Cat. No. 3749

Your 65c

# R.C.A. Filter Chokes



These choics are rated at 15 hours as to militarizers. Two consected in series will make a 40 hours, 40 militarizers blood for educes as well. use as plate impedances as

Cat. No. 3716 Your

Your 35c

VICTOR FILTER CHOKE

## Reliable Shielded Power Choke

A heavy duty choke in-corporating finest work-manship and materials. Laminations securely bolt-ed and shielded. Terminal lug connections. For all power packs employing high voltage, this clock will stand the gaff. Capac-ity 125 mils at 30 heavys. Cat. No. 3752

#### Reliable Pentode 245 Choke

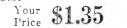
A thoroughly impregnated filter choke designed especially for power packs supplying 245. Pentode amplifying tubes. 30 henry at 105 mils.



Cat. No. 3750

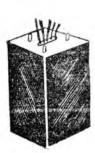
# A fully shielded, impregnated improved design choke. An original replacement part for Victor models 32, 45, 52, 75 and all packs where a high grade choke is necessary. 30 henrys, 125 mils. Cat. No. 8751

Your Price 95c



## REPLACEMENT CONBENSEE BLOCKS

## Reliable Condenser Blocks for Pentode, Multi-Mu, and 245 Receivers



A scientifically designed product guaranteed to give perfect satisfaction in every respect. The highest quality foil and paper were used in their manufacture, fully impregnated to include moisture and assure long life. All new, fresh and perfect to the last detail. Neat and compact, attractively housed in a sturdy black metal can with long leads. Screws for mounting. Excellent for midget receiver manufacture. Safely rated and tested at three times the working voltage.

ture	e um	es the	WUL	WIII F
1	mfd-	<b>-5</b> 00	V.,	
1.5	mfd		V	82.0
1	mfd-		V	474 }
2	mfd-	-200	V	
1	mfd-	-200	V	ore ]
			70.7	20.4

Your Price

Capacity 6 1/2 mfd. Cat. No. 3432

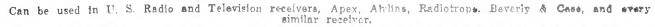
1 mfd—500 V 8 mfd—400 V 1 mfd—200 V 1 mfd-200 V ...

1 mfd-500

Capacity 6 mfd.

Cat. No. 8433

Your 70c





## Brunswick-Bremer-Tully Condenser Blocks

Recommended for their easy application to any radio receiver on the market today. The condenser capacities were purposely made low so that any capacity combination can be obtained by connecting condensers in parallel. An excellently constructed bank, the appearance of which will greatly enhance any receiver in which it is used. High working voltages safely rated. Contains:

2-1.75 mfd-600 V mfd--600 V

1-1.5 mfd--300 V mfd--300 V 1---1

1-- .25 mfd--300 V 1--1. mfd-200 V

Used in all Brunswick 14, 21, 81 SPU and equivalent Bremer Tully receivers.

Cat. No. 3431

Your Price



## Acme Parvolt 8.7 mfd. Block



A high grade replacement block for all Peerless and Kylectron receivers, or any similar

set. 54

leads.

Brown Orange

Black.

Highly sultable for replacement in all 245 power packs. Beliminators and all type reverse Taped at

2.3 mlds. 600 V. 1.8 mfds. 600 V. 2.3 mfds. 800 V. 800 V. 800 V. 8 mf4\* 5 mf46. Cat. No.

Your \$1.15 Price

Peerless 7 mfd. Block

No. Your

2 mfd 600 V.
1 mfd 400 V.
- common for above
1 mfd 300 V.
1 mfd 300 V.
1 mfd 300 V.
2 mfd 300 V.
2 mfd 300 V.
- common for above

## Bosch 48 Condenser Block



A B Exceller. replace mant for Bosch models 48, 16, 17. 4 leads.

Red .		mfd	 600	Y.
Black	4.	mid	 600	٧
Yellow	08	mid	 600	₹.
Blue .			sto to to	acı

Out. No. 8441

Your Price

Kolster - Dubilier



Original as used in Kolster sets. Total espacity 7.1 mfds. Conservatively rated at 400 volts.

Cat. No. 3139

Your 95c

## Kolster 6J-6K Condenser



2 mfd 400 V wild . 400 V 1 mtd 400 V t mid 1co V Capurity 9 mid

Cal. My. 8432

Price \$3.50

Potter 10 4 mfd for Zenith



For Zenith models ZE-11, 12, 14, 18, Makes an ideal replacement block for any make 248, 210 or Pentode set 600 Dt., vols, 100 mans 24 mid., 12 mid., 12, 16, condensers, Leads 12 inches

Cat. No. 3135

Your \$1.15 Price \$1.15

## Victor 105% mfd, Block



Genuine Victor replacement for Morels R.Sz. R 12 RE-15, RE-15 all 245 sets. dut voits DC working voltage. Tape: 125 mid.

Cad. No. 8487

Your Price

Potter 934 mfd. Block



Used in Metrodyne Receivers and as replacement for any 171-A receivers. Safely rated at 300 volte. Sections 2-4 mfd., 1 mfd., 4-% mfd. In metal case with convenient mounting serews.

Oat. No. 3436

Your \$1.50

# CONDENSEE REPLACEMENTS

R.C.A. Brunswick 4.5 Mfd. Block

4.5 Mfd. Block



A 400 Volt working volt-age condenser block for re-placement in R. C. A. and Bruns wile k Bruns w i c k sets. Contains 2-2 mfd. sec-tions and 1-12 mfd. section.

Oat. No. 3350

Your 85c

Bremer-Tully-Dubilier Block

7 mfd.

A standard re-

mfd., 5 leads,

strong metal

Cat. No. 3351 Your \$1.75 Dubilier-Brunswick 6 Mfd. Filter



Used in 6-tube receivers. mfds. at 600 volts D.C. working volt-

Cat. No. 8353

Your \$1.40

Faradon 5.1 Mfd. Block

For Kolster and Brandes Sets

Contains 1-2 mfd., 2-1 mfd. and 1-.1 mfd. condensers. 450 volts D.C. working voltage and 2-5 mfd. condensers, 200 volta D.C. worlding voltage.



Oat. No. 8353

Your 75c

## Philoo-Dubilier 16 Mfd. Block



For replacement in all Infice 25 cycle sets, and any set requiring large capacities at high working

(b). No. 8854

Your \$1.50

## Fada Condenser Block

For Fada Model 25



For Fada Models

35, 352, 40 Shite

Oak No. 3350 Fada 35 etc. Your \$1.50 Price \$1.50

Cat. No. 8855 Fada 25 Your \$1.50

## Dubilier Condensers

Type P. L. 1073



mfd. Total Capacity 2 mfd. 400 D.C. Volta 1 mfd. 400 D.C. Volta 5 mfd. 400 D.C. Volta 5 % Total .5 mid. 200 D.C. Volta .25 mid. 200 D.C. Volta

Oat, No. 3348

Your 95c

## Thomas 8.5 Mfd. Block 450-V. D.C.



High working voltage condenser block. Contains 2.3 mfd. 2-1 mfd. 1-12 mfd. condensers. Ideal for replacement purposes.

Cat. No. 3349 Your \$1.05

## Faradon 6 Mfd. Block



Composed of three condensers 1 3 and 3 mid | TuC, washing voltage 450 voltage Cat. No. 3315

Your 65c

Polymet 41/2 Mfd. Blocks



1-9 mft., 21 mfd., 2 4 mfd. Cat. No. 8316

Your 55c

## R.C.A. 41 Condenser



A highly improved block identical in size and capacity with the original Containing 2.2 mfd. 4-2 mfd. condensers.

Cat. No. 3847

Your \$4.25

## Eveready-Bosch Condenser Block



voltage.

Cet. No. 8344 Your Price

## Stromberg-Carlson 23 mfd.



For models d 35. d 36. any s requi

Cat. No. 3331

## Radiola Condenser Blocks

Designed and built especially for Radiola sets. Contains high voltage-surge-proof condensers in neat shielded case.

Cat. No. Model

8335...R.C.A. 17

Your \$3.75

3336....R.C.A. 18, 33, 51

Your 90c

3337....R.C.A. 60, 62

Your \$3.75

3338....R.C.A. 66

Your \$1.85

#### Sparton Blocks For Models AC-7, 62, 63, 930, 66, 70



A thoroughly reliable product built to last. Pesigned for simple replacement to Sparton sots.

C. Station of the Control of the Con			
	Model		Your Price
8839	7. 69.	88	\$4.35
8340930			\$4.35
884169.	79. 89		\$4.35

## Temple Condensers



For models 8-60, 8-80, 8-90, 12 % mfds., 500

For models 7-50, 7-80, 19 mids., 600 V.

Cat. No. 3342

Your \$1.19 Either Model

# POWER TRANSFORMERS

# Genuine Kolster Power Transformer

Replacement for model K-24 sets taking 210 or 250 tubes



This transformer has a 1100 volt secondary, center tapped, 1½, 2½, 7½ and 15 volt filament windings. Shpz. wt. 7 lbs.

Cat. No. 8269

Your \$5.75

## Stromberg-Carlson Power Transformer

Replacement for models 685, 686



For 5-227, 1-171A and 1-880. A high grade conservatively rated transformer. Shpg. wt. 10 lbs.

Oat. No. 8270

Your \$4.50 Price \$4.50

## Stromberg-Carlson Power Transformer

Replacement for 641 and 642 Series Receivers

For \$45, 997 and 980 type tubes. Conservatively rated. Color code furnished with each transformer.



Oat. No. 8971

Your \$4.75

## Victor ABC Power Transformer



This power block is a replacement for Victor receivers. Conservatively rated, they will supply a 245 push pull amplifier and also 227's, 244's, 280's and 226's.

For 56-60 CYCLE No. 1922

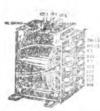
Your \$2.50

For 25-35 CYCLA No. 1923

Your \$3.25

## UNIVERSAL REPLACE-MENT TRANSFORMER

For 227, 245, 247, 224, 551, and 280 Tubes



Can be used as replacement for most receivers in use today, Supplies filament voltages for 227, 224, 245, and 280 tubes. All taps are mounted on a bakelite panel. Variable primary voltage. Measures 412 "x33" x

Measures 4½"x33½"x

5%" high. Will take care of 6 to 7-227's
or 224's, 2-245's, and a 280. Shipping
weight, 5 lbs.

Cat. No. 3272 YOUR PRICE

\$3.15

## GENERAL REPLACE-MENT TRANSFORMER



Unmounted transformer for replacement purposes in receivers using 224's, 227's and 245's and a 280. All connections made to soldering lugs on side. Shipping weight, 4 lbs.

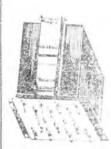
Cat. No. 3273

YOUR PRICE

\$2.25

# COLONIAL POWER TRANSFORMER

For Model 32 A.C.



Mounted in electrostatically shielded can. Special open type construction allows vertical ventilation preventing any over-heating. Can be used with any 245 power unit, amplifice or receiver. Will supply 2 245%, 5 to 5 227% or 224%, 1-289 high voltage winding delivers 750 velts.

Primary tapped to allow operation on any line voltage between 95 and 100 volts.

> Cat. No. 3274 YOUR PRICE

\$2.95

## Freshman Filament Supply Transformer



Supplies filament current to 226, 224, 227 and 171-A tubes. The 24 and 5 volt windings are center tapped.

Your 90c

## Amrad Power Transformer

Replacement in Bel Canto series for the Screnata, Aria, Symphony and Duct. Supplies 4-224's, 2-246's and a 280. Shipping weight, 5 lbs.



Your \$3.45

Earl Transformer Coil and Terminal Strip



Replaces the power transformer coil in Earl Models 31, 32, 32-8, 41. Freed models 78, 70, 70-8, 65, 00, 05. Reassemble with the laminations of the old transformer, Sbpg. wt. 3 lbs.

Cat. No. 8277

Your \$2.25

## Earl and Freed Power Transformer



This transformer supplies 6-227 or 224. 2-245 and a 280. It is a replacement for 15 Freed and Earl receivers. Replacement for the following Freed sets: Models 78. 78-S. 70. 70-S. 65, 78-S. 95, 90. 90-S; and Earl Models 31, 32, 31-S. 32 S, and \$1, 24 83, 33-S.

Your \$4.50

For Models No. 21, 22, 25, 56 Cat. No. 3301 Your \$3.00 Price \$3.00

#### 250 or 210 Transformer



Delivers 750 volts output high voltage secondary. Half wave rectifier. Has 1½ volt winding for 5-226's, 1 or 2-227's, 1-250 or 210 and 1-281,

Cut. No. 3302

Your \$3.25 Price \$3.25

# POSTER TEANSETORNERS for all SETS and PACKS

## Radiart Step-Down Transformer



Your \$3.15

### Peerless Power Transformers



A genuine replacament transformer for all purposes, amply pro-portioned with large oversize laminations and heavier windings. For models 651, 652, 653. Using 21, 22, Find

653. Listing 21, 22, 655. Supplies 8 224. 255. Supplies 8 224. 2-527 to 145 and 1 280 tubes. Pil mary to tapped for 10b and 120 voit operation. An excellent transformer for any sex using these tubes.

Your \$3.10

## 12-Volt Step-Down Transformer

For Isbasshieht in all AC dynamic speakers and 0 volt "A" eliminators 2% amprea capacity Car. even be used as Try or Bull ill ing transformer For 100 volt 50 60 tycle AC. Shis wide



CAR NO. 8434

Price 65C

## Reliable Filiment Transformer



A fully shielded. 

Cat. No. 3449

Your \$2.15 Price \$2.15

## General Use Filament Transformer



Anstormer

A rugged transformer that can be employed in a number of different circuits. Heavy laminations and ottersize wire prevent breait down and over-leating. Easily supplies 2.3 volts at 4 amps; 1.5 volts at 4.25 amps, and 7.5 volts at 1.25 amps. By connecting sistance in series with

2.5 ohm resistance in series with the leg of the 75 volt winding. It supply 5 volts at 5 mays 12.5 volts at 1.75 amps 15.245. Sbpg. wt. 5 lbs.

Cat. No. 3418

Your \$1.75

# UNIVERSAL POWER TRANSFORMER

For Pentode Multi-Mu



Azin

820 Carr

D 1504

Here is an opportunity for every live adio man to obtain a power transformer at will fill his every requirement. Designed to withstand the severest overloads without breaking down or over-heating.

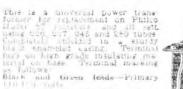
without breaking down or over-heating.

Not just another transformer but THE TRANSFORMER. High voltage center tan a secondary stopples 800 volts A.C. at 125 mile smile-test current for two Proofe at 125 type tubes and the field a 16 dynamic separate. 5 volt 2 secondary the mile speaker. Two type tute and two Pentode or 245 type tute and two Pentode or 245 type tute. All windings center tanged Primary tapped for 100, 110 and 120 volts. Extra heavy laminations fixures hum-free operation. In an attractive black metal housing with next, lettered terminal surip for easy connection.

For 60-60 cycle 100 130 volts operation. Sur, Star, Star,

Cut. No. 8412. List \$12.50. Your \$2.95

## PHILCO POWER TRANSFORMER



No. W-High voltage

No. 6 and No. 10—5 voite at 3 comps for 280.

No. 6 and No. 10—5 voite at 3 comps for 280.

No. 7 and No. 4—2 % voite at 3 8 note for 277.

Tellow feed—Center tap for No. 2 and No. 4.

No. 11 and No. 12—14 voite at 3 amps for 245. for 245. No. 3 Conter tap for 245, No. 7 and

A Thordarson Product-Safely rated.

3445

Your \$2.95



## Stromberg-Carlson 846 Power Transformer

A well designed and carefully constructed power trans-former for re-placement in Stomberg Carl-ton Models 846.



Stromberg - Carlton Models 848
12. 14 and
other eets. Has
three 25 volt
windings. on e
4 anny winding
for two 245
tubes one 4 anny winding for one or
two type 227 tubes and one 12 anny
center tapped winding for five or ext
screen grid and 227 type tubes. A
6 volt 2 anny winding is provided for
the 280 rectifier. The high voltage
secondary delivers about 375 volte
AC each side of the center tap at
about 100 mils. Primary has electrostatic shield to prevent line noises
from recching filanient
Also Hi-Lo primary taps for 105-125
volt operation. A great deal of satiafaction and usefulness is built into
these transformers.

Your
Price \$4.75

#### Raytheon Transformer

An ideal universal replacement transformer for all Ray-theon or sail type tecnifier "B" eliminators. Delivers 275 A.C. volta sach side of the center tapped high voltage secondary. Shpir wt. 2 ibs

lba Cat No 3450
Your \$1.25



#### Kolster Power Transformer



For replacement in models K20, K22, K25, E27 receivers. Supplies filament for up to 5, 226 or 2-227, 1 or 2, 171A and 1-250, also center tapped high voltage winding designed.

Your JAPA

### Steinite Power Transformers

Sturdy replacement unit for models using 4.226, 1.227, 1.171, 1.280 type tubes. May also be used for any set employing sums tubes.

Your \$4.60



## RELIABLE POWER TRANSFORMERS

Not Surplus Stock. But the Best Obtainable

Ideal for new power units or for replace-ment purposes. Fully guaranteed against burnouts and break downs.

250 Push Pull A.C. Power Transformer

For any power plant and amplifier using push null 1.50 tubes. Has 4 center tapped secondary windings; 2½ your at 14 amps; 7½ volts at 12 mms; 7½ volts at 14 mms; 7½ volts at 14 mms; 7½ volts at 14 mms; 7½ volts at 12 mms; 7½ volts at 12 mms; 7½ volts at 12 mms; 7½ volts at 110 volt AV principy. Rated low for safety. Lar 2.50 to 1.31 and 2.51 or 2.57 tubes or combination. Harman 100 wates 5 x4 x shpg, wt. 20 lbs.

Tour 95.25

245 A.C. Power Transformer

For 5-224, 3-227, 2-245, 1-280 tubes or any combinations of 2% volt tubes. Four center tapped secondary A C, windings; 600 volts; 2% volt 14 apps, 2% volts, 3 amps; 5 volt; 2 amps, and 110 volt primary 175 watt capacity. Conservatively rated, 5% x4% x4% x3%. Shpg. wt. 14 lbs. Fully guaranteed.

Cat. No. 8452

Your \$4.65

171 A.C. Power Transformer

For seta using up to 6.226, 2.227, 1 or 2 171A and 1.280 tubes. Five A.C. secondary windings; 6000 volts center tapped—115 volts, 8 amps; 2½ volts, 3½ amps; 5 volts, ½ amp; 5 volts and 110 volt A.C. primary. Fully shielded, 5½ "x 4½ "x 3½". Shpg. wt. 13 lbs.

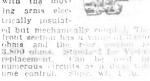
Cat. No. 3454

Your \$3.95

# Volume Controls, Potentiometers, Rheastats

## Frost Double Volume Control

ume control with the moving arms elec-



No. 1981. List Price St.00.

Your Price 45c

#### **CENTRALAB**



Air-Cooled Volume Control 2,000

Cat. No. 3168

Your Brice 30c

## Carter Volume Control's

With A.C. Switch

These volume controls are were wound and will not become noisy after lung beriods of use Equipped with A.C. toggle switch which is automatically A.C. toggle switch, which is auto-matically operat-ed when volume is at zero. Available in 3.000 and 10.000 and



Cat. No. 3206. List \$1.75.

Your Price

## Frost Volume Controls

Frost volume
controls are
noted for noiseless operation.
Employ "Famous
Frost Roller Contact." Bakelite
case. Long shift.
Available in 10000, 25 000, 50,000 and 100,000
chm sizes



Cat. No. 3268. List \$1.23.

Your 35c

## Frost 200,000 Ohm Volume Control

With Switch



Wire Wound.

Car. No. 3168

Your Price 20c

## Freshman, Freed-Eisemann and Earl Volume Controls

Set	Description	No.	Price
Freshman	Q. 2Q, 3Q	3170	. 35c
Freshman	3, QD		. 35c
Freshman	G. 60 S		. 45c
Freshman	N, 60, S	3173	. \$1.35
Freshman	M, 60, S		. \$1.35
Freed Eiseman	nn NR80	3175	27c
Freed Einema	nn NR85	3176	27c
C. A. Earl	22, 24 (10,000-25,0		
C. A. Earl	31, 32, 41 (50,000)	) 3178	. 35c
C. A. Earl	32S (100,00-50,000	) 3179	56c

## Eddiestat O-1 Meg. Control



rable voltage reducer — for Beliminators. Dissertes 4 watts. pates 4 watts
One hole mount
ing. Shpg. wi
lib.
Cat. No. 3368

Your 35c

## R.C.A. Brunswick 60 Ohm Power Amplifier Potentiometer

Cat. No. 3181 Your OF Price ZOC



## Freed and Earl 20 Ohm Hum Potentiometer



Cat. No. 3182 Your Price 15c

## Pacent 20 Ohm Potentiometer

Cut. No. 3183

Your Price 20c



#### E-5 Bradleyohm



Heavy duty, variable voltage reducer-for "B" eliminators. Dissipates 4 watts. One hole mounting. Shpg wt. 1 lb.

No. 682-E5. List \$2.25.

Your 30c

## Freshman Models "M" and "N" Volume Control



Cat. No. 3180 Your \$1.35

#### Carter 3,000 or 10,000 Ohm Volume Control



Cat. No. 3184

Your 95 Price

\$2.75 DOZEN

## Carter 200,000 Ohm Potentiometer

Wire wound. Ale cooled. Cat. So. 3185

Your 25c

\$2.40 PER DOZEN

## General Electric 200-Ohm Potentiometer Complete with Knob



Heavy duty wire wound unit on porcelain base. Comact arm is of wide withing type giving a contact at all times. Complete with brown bakelite knob.

Cat. No. 3267. List 85c.

Your 25c Price

## Bradleyometer



A 400 ohm potentiowaits. The resistance unit is composed of cabon disks placed diemately, between metal disks. The router arm makeron resistance variation. Noise operation, Made by the

Allen-Braelley Co. Cat. No. 3265. List \$3.25.

> Your Price 69c 3000 Ohm Size, 79c

### Centralab Twin Potentiometer 10,000 and 250,000 ohms



An Ideal volume control for all sets. Will not burn out. Operates quietly and uniformly always.

(at. No. 3186.

Your Brice 35c \$3.60 DOZEN

### Carter Midget Air-Cooled Potentiometer 6 OHMS

Can be used to adjust filament voltages on all tubes

Cat. No. 3187

Your Price 20c

## Pacent 20 Ohm Hum Control



Cas. No. BLES

Your Price 20c \$2 00 DOZEN

#### Hum Potentiometer



Used in all Brunswick and Bremer-Tully sets. Cat, No. 3189.

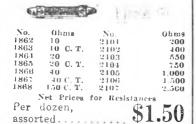
Your 25c

## RESISTANCES

The question of choosing the correct resistor has become more and more confusing to the average Service Man, since the advent of new circuits and new electric tubes. To calculate the value of a resistor needed, to provide a grid bias, we find value in volts of bias needed, the current drawn at the plate voltage used and this will give the biasing

To find the binsing resistor needed the plate current (in amperes) of the tube or tubes to be blased is divided into the value of the bias in volts. For example, to find the biasing resistor for two 245 tubes, the plate current is 68 mils at 250 volts plate. The binsing voltage is 50 volts. Then, the plate current .068 amps. divided into 50 will give 746 ohms. However, any value from 700 to 800 ohms will give good results.

#### Wire-Wound Resistances



## Flexible Wire-Wound Grid Suppressors

0



\$1.00 10c each

## C. T. Resistance No. 684. 10 ohms YOUR PRICE 10c



## Variable Grid Leak



Micrometer adjustment. Fits any sind leak mount. Range. 1 meg to 10 megohms. Shpg. wt. 4 oss. No. 3671

> Price 48c Your

## Wire-Wound Grid Suppressors



2300 Ohm Kolster Grid Suppressor No. 1899 \$1.50

dowen 1000 Onm Acuster Grid Suppression

No. 1883 \$1.50

## Carbon Resistors



Per dozen 

## RELIABLE VITREOUS ENAMELED RESISTANCE UNITS

These highest etandard resistors are not to be confused with the surplus stocks of resistors now flooding the market—Reliable Vitreous as sold by us. ARE GUARANTEED ONE YEAR!

No. 0lms Mills 1730 250 315 1740 500 220 1741 750 180 1742 800 177 1743 1,000 155 1756 20,000 26 1741 750 187 1756 20,000 26		<b>35</b>	Watt	Rating		in. Lo	ng	OUR
1730 250 315 1740 500 220 1741 750 180 1742 800 177 1743 1,000 155 1742 800 177 1743 1,000 155 1743 1,000 155 1743 1,000 155 1757 25,000 23	No	Ohme	Mille					
1740 500 220 1741 750 180 1742 800 177 1743 1,000 155 PRICE 1756 20,000 26								176
1741 750 180 177 1756 1756 20,000 26 1743 1,000 155 PRIOR 1756 20,000 26 27 1754 1,000 155 PRIOR 1757 25,000 23 1757 25,000 25				OUB				
1742 800 177 1743 1,000 155 PRICE 1756 20,000 26								Each
1743 1,000 155 7 1757 25,000 23				PRICE	1756	20,000	26	
1711 1701 107 107 107 107 107 107 107 10					1757	25.000	23	200
1744 1,800 128 2 7 1738 30,000 21 000	1744	1.500	125	ソスム	1738	30,000	21 (	JUL
1715 2,000 110 1 1759 33,000 16   Pach	1715	2,000	110		1759	33,000	16	Pack
1746 2,500 100 1760 40,000 15		2,500			1760	40,000	15	
1747 3,000 90 Each 1761 45,000 14) 050	1147	3,000	ยบ	Fach	1561	45 000	145	
1748 3.500 84 1762 50.000 13 JOC	1748	9.500	84					<b>33</b> C
1763 60,000 9 Each					1763	60,000	9	Each
1719 1,000 787 / 70,000 8	1719	4.000	78	150	1764	70,000	8	
1719 1,000 78 45c 1764 70,000 8 1 95				40C	1765	80.000	8	95
1751 6.000 64 1768 90 000 7 1 440				70 h			7 7	.40
1752 7,500 57 Each 1767 100,000 7 Each	1752	7,500	57)	Lach			7	Each

#### 60 Watt Rating—4 in. Long

		Ou	r Price			Oπ	r Price
No.	Ohma	Milla	Each	No.	Ohma	Milla	Each
1768	220	438	\$0.55	1783	12.000	61	.90
1769	500	310	.58	1783	15.000	54	.80
1770	750	253	.55	1784	20.000	43	1.13
1771	800	237	-55	1785	25,000	38	1.15
1772	1.000	210	.55	1786	35.000	29	1.15
1773	1.500	170	.55	1787	50,000	25	1.15
1774	2,000	150	.56	1788	75,000	18	1.30
1778	2.500	133	.55	1789	100.000	13	1.30
1776	3,000	120	.80	1790	125,000	11	1.65
1777	1,000	105	.80	1791	150.000	9	1.65
1778	5,000	บธ	.80	1792	175.000	7	1.90
1779	7.500	77	.80	1793	200.000	7	1,90
1780	8.000	75	.80	1794	225,0(H)	6	1.90
1781	10.000	67	.80	1795	250.000	6	1.90

## Brand-New, Fully Guaranteed Enameled Wire Resistors

2-Inch Size Rated ut 30 Watta

Rated at 20 Watta
The resistors listed below are absolutely brand new and in perfect condition. Each resistor is individually and correctly labeled. They are wire wound and insulated with a heavy enamel. For use in all service work where drain does not exceed 40 watts. Our prices represent exceptional value for resistances of this quality. Order an assortment today.

Cat. No. 8147. Shpg. Wt., 8 cs.

Obrus 5	Frice 80.24	0hma	Price	Ukma	Your Price
10	.24	750	\$0.28	8000	80.35
95	.24	800	.27	3250	.35
50	.24	1000	.86	8500	.85
75	84	1100	30	8750	-85
106	.24	1200	.80	4000	.33
150	.24	1250	.30	4500	-35
200	24	150ú	30	5000	35
280	24	1730	.30	6000	.40
300	.28	1830	.30	7000	-40
350	25	200ū	.30	7500	10
± 000	-58	5590	.30	8666	45
000	25	€400	.30	10000	.43
630	28	3500	33	13300	+ 5
700	23	2730	-35	13000	50

## REPLACEMENT RESISTORS FOR ALL R.C.A.-VICTOR RECEIVERS



For R32, R52, R43 Replacement Resistors for 1929-30 Victor receivers resistor is manufactured by Aerovox and is standard replacement for 1929-30 receivers for all type and 1930 china tapped sections of 2000, Resistor state is 6 % by % Equipped with unned soldaning lugs.

Your Price

No can furnish replacement resistors for all type Radio-

We can furnish replacement registers for all type Radio-ias and Victors Give type receiver and resistor, or, better yet, send in the old resistor

## Colonial Dividers

For Models 32-33-34
Voltage Divider for above models, 121.at 50,000, 10,000, 11.000 ohms.
Cat. No. 8148 Your Price 65c

Bias Divider For Models 82-33-34 4,200 ohms tapped at 1800 ohms.

Your Price 50c Cat. No. 8148A

## R.C.A. Voltage Divider



Total 8940 chms, tapped at 440 and 1600 with a separate 1600 ohm section. R.C.A. part No. 2242.

4 1/2" Long-100 Watte Your Price, 30c each.....

## Freshman Fixed Resistances



Wire Wound—Baked on Lava Tubes 13,000 ohms total used in Freshman N Modela. Tapped 1500, 4800, 3300. 13,000 0222 N Models. Tapped 1002. 0500 and 2200 chms. Cat. No. 8150

Your Price, **75c** each.... Divider for Model M. Your Price 75c

Temple Resistances and Voltage Dividers (OHMITE)



0.850 uhma Tapped at 1.000, 5.000, 880 21,600 chma at 8,000, 1,600, 8,000 be used as voltage divides in

Cut. No. 8151 25c each \$2.00 dozen

## Earl-Freed Resistance



Tapped at 4 000 and 750 Ohms

Cat. No. 5152 \$3.00 35C each dozen

Bremer Tully 510 Resistor



4.500 úhma Oat, No. 3153 Special 60c

#### RESISTORS **PIGTAILS** RHEOSTATS WIREWOUND

## Metalized Pigtail or Carbon Resistors

A necessity for the Dealer and Service Man. All sizes carried in stock. rating of I walt to not exceeded

		These resistors	9 410	accurate	to plus	or minus	5 %	if current
0	Opton	Ohma	- 1	Ulima	1	Ohma	1.	Ohma
A DEG	25	200	- 4	850		2,500		25,000
1 M	3.5	250		875		3.000		30,000
1 2	40	800		900		3,500		35,000
200	50	400		1,000		4,000	- 1	40,000
5 題	65	500		1,100	- 1	4,/500	- 1	50.000
	75	600	- 1	1,125		5,000	1	60,000
1 to	TOO	700		1,200		10,000		73,000
	125	780	- 1	1,500		18,000		100,000
•	150	800		N,000	- 1	20.000	1	180,000

Your 81 Price 82C each 200.000 250,000 500.000 1 mes

14 meg 9 ning 8, 4, A, 6, 8, 9, 10 mega Lots SC each

of 100 C each Cat. No. 2369



#### Amsco Resistors

1



A standard grid leak mount resistor for use in power packs, "B" elimi-nators, etc. Has large power handling capacity. Non-inductive type resistor. hators, etc., rates and capacity. Non-inductive type resistor. Available in following popular sizes: 25,000 chms, 15,000 chms, 10,000 chms, 250,000 chms, 500,000 chms, 10,000 chms, 10,000

Your Price 20c \$2.00 Per Dozen

Oat. No. 8429

## "20" Resistor Kit



This kit consists of 20 of the most commonly used sizes in present day receivers. They are rated at 1 watt and are accurate to about 5% on the small sizes and 10% on the rarger sizes. Their small size and long timed leads primit easy replacement and soldering. Odd-size values can be obtained by connecting two or more resistors in secrets or parallel. A compact kit and easy to carry. The S-ryler Man cannot be without them. Color code furnished with each kit. Shps. W. 1 lb.

(at. No. 8430. List \$6.00.

Your \$1.85 Price \$1.85

## Carter Wire Wound 3 Watt Resistors



An accurate wire wound resistor capable of dissipating 3 watts. Grid lask mounting type. Supplied in the following sizes: 800 chins, 1 000 chins: 1,500 chins, 1,700 chins. 2,000 chins, 5,000 chins, 10,000 chins.

Your 45c

Oat. No. 8427

#### Rheostats



Perfect contact arm rheostats. Frames made of moulded bakehte. Very sturdy and will not heat up unduly. Complete with bakehte moulded knobs.

Will serve many	(4969)	Sups W	1. 0 02
Type	List	Your	Price
6 ohm with vernier	. 50e		.00
10 ohm	. 55c	4-	Doses
Cas	No. 8	128	

Variable Voltage Divider Variable Slides





This variable wire would resister was designed for heavy duty use in "B" eliminators power packs, amplitude etc., where a strong variable resistance is required. The special high grade resistance wire is would on a thoroughly balact moisture-proof form. The shders are set for the desired voltage and fastened into place. Resistance will not vary often to impute chemical properties in the wire. A law priced resistance and perfect in performance will take the place of 2 to 7 resistances. Full resistance with monotone brackets. Especially adapted for replacement in Freshman and Earl receivers. All rated from 5 to 100 walls.

Cat. No. 3424.

10,000 ohm. 2 sliders.

Price 550

Cat. No. 3425, 25,000 ohm. & sliders.

Cat. No. 3126. 50,000 ohm. 8 sliders.

Price 85c Your 95c

## R.C.A. Voltage Control

#### MAINTAINS CONSTANT VOLTAGE



Originally misle for voltage control in Bruhswick R. P. 4. 14 and R. P. A. 4, with Panalrope receivers, but can be used with any power pack to maintain voltage by commelling from B minus to 80 volts plus. Connect F plus of here to B mind-and Grid to 80 volts Takes Place of Radiction 5/4

Price 65c Cat. No. 8417

#### Carter Resistors 900 ohms 1,000 chms



A special wire would resistance coated with baked enamel to exclude moisture. It w long 1½ diameter Two sizes, 2000 ohms.

Cat. No. 8418

Your 25c

Carter Voltage Divider

Wire wound baked enamel divider Total resistance, 19,500; tapped at 2,000, 8,000, 8,000, 1,500

Your 29c Price 29c

00

## C.R.L. Volume Controls



Non-inductive, carbon type for different set replacements. Long wearlns, noiseless operation 8,000 cam, 5,000 cam, 20,000 ohm, \$0,000 ohm and 75 000 ohm sizes

Price 25c

Oss. No. 8426

## Durham Metalized Resistors



Machanically prifest metalized Academies Will hot valy resistor Assurate will not vali Co-efficient, Extremely quiet to operation even after years of A (ested and provon att vile product for manufacture, service and repair Pigial and gild leak styles.

375 chine 1 000 ohma 2 000 ohma 4 700 chins 50 000 chins 100 000 chins 2 magchins

Price \$1.00 Per Dones Oak No. 8441

## Splitderf 12,500 ohm Resistor



Eahed ename! who would be elstance Will ethnic heaviest louds without beaming down, a factor long lot wait.

Your 2000
Price 2000

Cat No. 3422

#### Electrad 100,000 ohm Resistor



An 'Electrat' product wifewound Impervious to moisture
Eatables somelderable current
Baked someld a long.
Your
Price
Cat. No. 3423

# Wire-Wound Insulated Resistors



60-WATT RATING

These are Wire Wound Resistors. Never have they been offered at our low prices. They are all new and perfect, and each one is marked as These resistances are 4 in, long and are soldering lugs are furnished with each

Cat. No. 2003. Shipping weight: 12 oz. each.

	Ohma	Your Price	Opma	Your I'rice
	10		6.000	
	80 50 100 250	32c	7.000	50c
	700	~ .	12,000 15,000	
1	000	,	25.000	-} 55c
1	.150 .250 .500	100	50,000	
3.	250 500 000 000	100	100.000	65c

#### K-2673067 Resistor

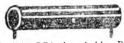


Ohms Tapped at 270 and 310 Used in RPA5. Part No. R67 1.lst, \$1.50 Cat. No. 3008

Your 60c

## K-2673090 Resistor

2,450 Ohms



in RPA 4 and 4A. Part Used R90.

Cat. No. 3009 List, \$1.50 Your 60c

## K-2673091 Resistor



3.400 Ohms Tapped at 1,400 Ohms Caed in RPA 4 and 4A. Part No. R91.

Cat. No. 3010 Your Price 60C List, \$1.50

#### K-2673047 Resistor 6.000 Ohms



Used in 7 and 7A. Part No. R47. Cat. No. 3011 List, \$1.50 Your 60c

## K-2670325 Resistor

4.000 Ohms Untapped



Used in RPA 1A and 4. Part No. R25. Cat. No. 3004 List \$1.50

Your Frice 60c

#### K-2673092 Resistor



Ohms Tapped at 300 Part No. Rive. Used in RPA

Your Price 60c List \$1.50

#### K-2673031 Resistor



Part No. R31. 1.100 ohms tapped at 300 and 400.

## K-633822 Resistor

30 ohms tapped at 10, 10, 10, 10, Part No. 2043. Used in RPA 3, 3A and 3B. List, \$1.50 Cat. No. 3006

Your 60c

#### K-2673044 Resistor



1.100 ohms tapped at 200. Used in RPA 7 and 7A. Part No. R44.

Cat. No. 3007 List. \$1.50 Your Price 60c

# REPLACEMENT RESISTORS



FREED EISEMANN, Model 411, 100 ohms 3025 206 FREED EISEMANN, Model 411, 100 ohms 3025 206 FREED EISEMANN, Model 411, 100 ohms 3022 206 FREED EISEMANN, Model 411, 1750 ohms 3022 206 FREED EISEMANN, Model 411, 1550 ohms 3025 206 FREED EISEMANN, Model 411, 150 ohms 3025 206 FREED EISEMANN, Model 411, 150 ohms 3025 206 FREED EISEMANN, Model 411, 150 ohms 3025 206 FREED EISEMANN, Model 411, 1000 ohms 3025 206 FREED EISEMANN, Model 411, 1000 ohms 3025 206 FREED EISEMANN, Model 411, 1000 ohms 3025 206 FREED EISEMANN, Model 57, 4,000 ohms 3028 206 FREED EISEMANN, Model 57, 4,000 ohms 3023 206 FREED EISEMANN, Model 57, 4,000 ohms 3030 226 FREED EISEMANN, Model 57, 350-2,000 ohms 3033 226 FREED EISEMANN, Model NR60, 1,750 ohms 3033 226 FREED EISEMANN, Model NR60, 1,750 ohms 3033 226 FREED EISEMANN, Model NR60, 350-2,000 ohms 3033 226 FREED EISEMANN, Model NR60, 350-2,000 ohms 3033 226 FREED EISEMANN, Model NR70, 2,000-1,000-350 ohms 3033 226 FREED EISEMANN, Model NR70, 2,000-1,000-350 ohms 3033 226 FREED EISEMANN, Model NR70, 2,000-1,000-350 ohms 3033 226 FREED EISEMANN, Model NR70, 4000-350 ohms 3033 226 FREED EISEMANN, Model NR80, 1750-2000 ohms 3033 256 FREED EISEMANN, Model NR80, 1750-2000 ohms 30	We can supply replacement resistors		-
EARL, Model 31, 32, 328, 41; 4.000-750 ohms, 3017, 356 FREED, Model 65, 78, 79, 95; 6.000 ohms, 3018, 356 FREED EISEMANN, Model 78, 79, 95; 5.000 ohms voltage divider  Streed EISEMANN, Model 10, 1000 ohms, Per doz, 3020, \$1,500 FREED EISEMANN, Model 16, 540 ohms, Per doz, 3021, \$1,500 FREED EISEMANN, Model 411, 1.750 ohms, 3022, 206 FREED EISEMANN, Model 411, 1.750 ohms, 3023, 206 FREED EISEMANN, Model 411, 4.000 ohms, 3023, 206 FREED EISEMANN, Model 411, 10 ohms, 3023, 206 FREED EISEMANN, Model 411, 10 ohms, 3024, 256 FREED EISEMANN, Model 411, 1350 ohms, 3025, 206 FREED EISEMANN, Model 411, 1000 ohms, 3027, 206 FREED EISEMANN, Model 411, 1000 ohms, 3027, 206 FREED EISEMANN, Model 71, 1000 ohms, 3027, 206 FREED EISEMANN, Model 71, 1000 ohms, 3028, 206 FREED EISEMANN, Model 71, 1000 ohms, 3028, 206 FREED EISEMANN, Model 71, 1000 ohms, 3030, 226 FREED EISEMANN, Model 71, 1000 ohms, 3031, 206 FREED EISEMANN, Model 71, 1000 ohms, 3033, 226 FREED EISEMANN, Model 71, 2000 ohms, 3033, 226 FREED EISEMAN,	for all receivers. Write for prices	Cat	Your
EARL, Model 31, 32, 328, 41; 4.000-750 ohms, 3017, 356 FREED, Model 65, 78, 79, 95; 6.000 ohms, 3018, 356 FREED EISEMANN, Model 78, 79, 95; 5.000 ohms voltage divider  Streed EISEMANN, Model 10, 1000 ohms, Per doz, 3020, \$1,500 FREED EISEMANN, Model 16, 540 ohms, Per doz, 3021, \$1,500 FREED EISEMANN, Model 411, 1.750 ohms, 3022, 206 FREED EISEMANN, Model 411, 1.750 ohms, 3023, 206 FREED EISEMANN, Model 411, 4.000 ohms, 3023, 206 FREED EISEMANN, Model 411, 10 ohms, 3023, 206 FREED EISEMANN, Model 411, 10 ohms, 3024, 256 FREED EISEMANN, Model 411, 1350 ohms, 3025, 206 FREED EISEMANN, Model 411, 1000 ohms, 3027, 206 FREED EISEMANN, Model 411, 1000 ohms, 3027, 206 FREED EISEMANN, Model 71, 1000 ohms, 3027, 206 FREED EISEMANN, Model 71, 1000 ohms, 3028, 206 FREED EISEMANN, Model 71, 1000 ohms, 3028, 206 FREED EISEMANN, Model 71, 1000 ohms, 3030, 226 FREED EISEMANN, Model 71, 1000 ohms, 3031, 206 FREED EISEMANN, Model 71, 1000 ohms, 3033, 226 FREED EISEMANN, Model 71, 2000 ohms, 3033, 226 FREED EISEMAN,	FIRE All 1 000 -b	No.	Price
FREED   Model   65, 78, 79   95   4,000-750   ohms   3018   356   FREED   EISEMANN   Model   78, 79   95   5,000   ohm   voltage   divider   3019   356   FREED   EISEMANN   Model   10, 1000   ohms   Per   doz   3020   \$1,50   FREED   EISEMANN   Model   16, 540   ohms   Per   doz   3021   \$1,50   FREED   EISEMANN   Model   411, 1,750   ohms   3022   200   FREED   EISEMANN   Model   441, 1,750   ohms   3023   200   FREED   EISEMANN   Model   441, 4,000   ohms   3023   200   FREED   EISEMANN   Model   441, 550   ohms   3025   200   FREED   EISEMANN   Model   441, 100   ohms   3025   200   FREED   EISEMANN   Model   441, 100   ohms   3025   200   FREED   EISEMANN   Model   441, 100   ohms   3027   200   FREED   EISEMANN   Model   441, 1000   ohms   3028   200   FREED   EISEMANN   Model   441, 550   ohms   3028   200   FREED   EISEMANN   Model   441, 550   ohms   3029   200   FREED   EISEMANN   Model   441, 550   ohms   3030   200   FREED   EISEMANN   Model   57, 4,000   ohms   3030   200   FREED   EISEMANN   Model   57, 4,000   ohms   3030   200   FREED   EISEMANN   Model   57, 4,000   ohms   3030   200   FREED   EISEMANN   Model   57, 550   2,000   ohms   3033   200   FREED   EISEMANN   Model   57, 650   0hms   3033   200   570   0hms   3033   200   0hms   3033	FARI Model 21 20 200 41 4000 EEO	3018	206
FREED EISEMANN, Model 78, 79, 95; 5,000 ohm voltage divider  FREED EISEMANN, Model 16, 1000 ohms Per doz 3020 \$1,500 FREED EISEMANN, Model 16, 510 ohms. Per doz 3021 \$1,500 FREED EISEMANN, Model 411, 1,750 ohms. 3022 20c FREED EISEMANN, Model 411, 1,750 ohms. 3023 20c FREED EISEMANN, Model 411, 1,750 ohms. 3023 20c FREED EISEMANN, Model 411, 1,750 ohms. 3023 20c FREED EISEMANN, Model 411, 10 ohms. 3025 20c FREED EISEMANN, Model 411, 10 ohms. 3025 20c FREED EISEMANN, Model 411, 10 ohms. 3025 20c FREED EISEMANN, Model 411, 100 ohms. 3027 20c FREED EISEMANN, Model 411, 1,000 ohms. 3027 20c FREED EISEMANN, Model NR55, 1,750 ohms. 3028 20c FREED EISEMANN, Model 57, 4,000 ohms. 3029 20c FREED EISEMANN, Model 57, 4,000 ohms. 3029 20c FREED EISEMANN, Model 57, 350-2,000 ohms. 3030 22c FREED EISEMANN, Model NR60, 1,750 ohms. 3031 20c FREED EISEMANN, Model NR60, 300-2,000 ohms. 3033 22c FREED EISEMANN, Model NR60, 300-2,000 ohms. 3033 22c FREED EISEMANN, Model NR70, 10,000 ohms. 3033 22c FREED EISEMANN, Model NR70, 2,000-1,000-350 ohms. 3035 25c FREED EISEMANN, Model NR70, 10,000 ohms. 3036 35c FREED EISEMANN, Model NR80, 400-350 ohms. 3036 35c FREED EISEMANN, Model NR80, 1750-2000 ohms. 3036 35c FREED EISEMANN, Model NR80, 1750-2000 ohms. 3036 35c FREED EISEMANN, Model NR80, 1000-350 ohms. 3037 25c FREED EISEMANN, Model NR80, 1000-350 ohms. 3039 60c FRESHMAN, Model NR80, 4000-350 ohms. 3039 60c FRESHMAN, Model NR80, 4000-350 ohms. 3039 60c FRESHMAN, Model NR80, 4000-350 ohms. 3044 75c FRESHMAN, R608-6560 ohm tapped at 1100, 1500, 1460  FRESHMAN, R608-6560 ohm tapped at 1100, 1500, 1460  GENERAL MOTORS, No. 16005-9372 ohms tapped at 800  SPLITDORF, 12500 ohms. 3044 75c SPLITDORF, 12500 ohms. 3045 80c SPLITDORF, 12500 ohms. 3044 75c	EPEED Model 65, 52, 545, 41; 4,000-750 onms.	.3017.	856
divider	ERECD ELECTION No. 18, 19, 15, 4,000-750 ohms	.3018	356
FREED EISEMANN, Model   10, 1 000 ohms   Per doz   3020   \$1.50			
FREED EISEMANN, Model 411, 1.750 ohms. 3022 206   FREED EISEMANN, Model 411, 1.750 ohms. 3023 206   FREED EISEMANN, Model 411, 1.750 ohms. 3023 206   FREED EISEMANN, Model 411, 1.750 ohms. 3023 206   FREED EISEMANN, Model 411, 10 ohms. 3025 206   FREED EISEMANN, Model 411, 10 ohms. 3025 206   FREED EISEMANN, Model 411, 1.750 ohms. 3027 206   FREED EISEMANN, Model 411, 1.750 ohms. 3027 206   FREED EISEMANN, Model 57, 4.000 ohms. 3027 206   FREED EISEMANN, Model 57, 4.000 ohms. 3028 206   FREED EISEMANN, Model 57, 4.000 ohms. 3029 206   FREED EISEMANN, Model 57, 4.000 ohms. 3030 226   FREED EISEMANN, Model 57, 4.000 ohms. 3031 206   FREED EISEMANN, Model 57, 4.000 ohms. 3033 226   FREED EISEMANN, Model 57, 4.000 ohms. 3033 256   FREED EISEMANN, Model 57, 4.000 ohms. 3033 256   FREED EISEMANN, Model 57, 4.000 ohms. 3036 356   FREED EISEMANN, Model 57, 4.000 ohms. 3036 356   FREED EISEMANN, Model 57, 4.000 ohms. 3037 256   FREED EISEMANN, Model 57, 4.000 ohms. 3039 606   FRESHMAN, Model 500 ohm 585 1000-350 ohms. 3039 606   FRESHMAN, Model 5000 ohm 587 2000 ohms. 3044 756   FRESHMAN, 6008-10.500 ohm 587 2000 ohm 587 2004 756   FRESHMAN, 6008-10.500 ohm 587 2000 ohm 587 2004 756   FRESHMAN, 6008-10.500 ohm 587 2000 ohm 587 2004 756   FRESHMAN, 6008-10.500 ohm 587 2000 ohm 587 2004 756   FRESHMAN, 6008-10.500 ohm 587 2000 ohm 587 2004 756   FRESHMAN, 6008-10.500 ohm 587 2000 ohm 587 2004 756   FRESHMAN, 6008-10.500 ohm 587 2000 ohm 587 2000 ohm 587 2004 3004 3004 3004 3004 3004 3004 3004	FREED FISCUANN Malel 10 1000 -1 P	.3019.	356
FREED EISEMANN, Model 411, 1.750 ohms 3022 20c FREED EISEMANN, Model 411, 4.000 ohms 3023 20c FREED EISEMANN, Model 411, 550 ohms 3023 20c FREED EISEMANN, Model 411, 10 ohms 3025 20c FREED EISEMANN, Model 411, 10 ohms 3025 20c FREED EISEMANN, Model 411, 1.000 ohms 3027 20c FREED EISEMANN, Model 411, 1.000 ohms 3027 20c FREED EISEMANN, Model NR57, 1.750 ohms 3028 20c FREED EISEMANN, Model 57, 4.000 ohms 3029 20c FREED EISEMANN, Model 57, 350-2.000 ohms 3030 22c FREED EISEMANN, Model NR60, 1.750 ohms 3031 20c FREED EISEMANN, Model NR60, 4.000 ohms 3033 20c FREED EISEMANN, Model NR60, 4.000 ohms 3033 22c FREED EISEMANN, Model NR60, 350-2.000 ohms 3033 22c FREED EISEMANN, Model NR60, 350-2.000 ohms 3033 22c FREED EISEMANN, Model NR70, 10,000 ohms 3035 25c FREED EISEMANN, Model NR70, 2.000-1.009-350 ohms 3035 25c FREED EISEMANN, Model NR80, 1750-2000 ohms 3035 25c FREED EISEMANN, Model NR80, 1750-2000 ohms 3037 35c FREED EISEMANN, Model NR80, 4000-350 ohms 3037 35c FRESHMAN, 4000-350 ohm 4000-350 ohms 3037 35c FRESHMAN, 4000-350 ohms 4000-350 ohms	PREED FISHMANN Model 10, 1000 onns, Per doz.	.3020.	\$1.50
FREED EISEMANN, Model 411, 4,000 ohms 3023 20c FREED EISEMANN, Model 411, 550 ohms 3025 20c FREED EISEMANN, Model 411, 10 ohms 3025 20c FREED EISEMANN, Model 411, 1350 ohms 3026 20c FREED EISEMANN, Model 411, 1,000 ohms 3027 20c FREED EISEMANN, Model 411, 1,000 ohms 3028 20c FREED EISEMANN, Model 57, 4,000 ohms 3028 20c FREED EISEMANN, Model 57, 4,000 ohms 3029 20c FREED EISEMANN, Model 57, 4,000 ohms 3020 20c FREED EISEMANN, Model 57, 4,000 ohms 3030 22c FREED EISEMANN, Model 57, 4,000 ohms 3033 20c FREED EISEMANN, Model NR60, 1,750 ohms 3033 20c FREED EISEMANN, Model NR60, 1,000 ohms 3033 20c FREED EISEMANN, Model NR60, 350-2,000 ohms 3033 22c FREED EISEMANN, Model NR70, 2,000-1,000/350 ohms 3035 25c FREED EISEMANN, Model NR70, 2,000-1,000/350 ohms 3035 25c FREED EISEMANN, Model NR80, 4000-350 ohms 3036 35c FREED EISEMANN, Model NR80, 4000-350 ohms 3037 35c FREED EISEMANN, Model NR80, 4000-350 ohms 3037 35c FREED EISEMANN, Model NR80, 4000-350-2000 ohms 3038 35c FREED EISEMANN, Model NR85, 1000-350-2000 ohms 3037 35c FREED EISEMANN, Model NR85, 1000-350-2000 ohms 3037 35c FREED EISEMANN, Model NR85, 1000-350-2000 ohms 3037 35c FRESHMAN, Model NR85, 1000-350-2000 ohms 3047 35c FRESHMAN, 6008-10,950 ohm bias Resistance 3041 15c FRESHMAN, 6008-10,950 ohm bias Resistance 3041 15c FRESHMAN, 6008-10,950 ohm voltage divider 3042 75c FRESHMAN, 6008-10,950 ohm voltage divider 3042 75c FRESHMAN, 6008-10,950 ohm voltage divider 3042 75c FRESHMAN, 6008-10,950 ohm voltage divider 3043 75c FRESHMAN, 6008-10,950 ohm sapped at 800.  50, 1863, 2000, 4500 ohm sapped at 800.	FREED FISHMANN Model 411 1 550 - barre	3021	\$1,50
FREED EISEMANN, Model 411, 550 ohms. 3024 25c FREED EISEMANN, Model 411, 10 ohms. 3025 20c FREED EISEMANN, Model 411, 150 ohms. 3026 20c FREED EISEMANN, Model 411, 150 ohms. 3026 20c FREED EISEMANN, Model 411, 1500 ohms. 3027 20c FREED EISEMANN, Model 411, 1,000 ohms. 3027 20c FREED EISEMANN, Model 57, 4,000 ohms. 3029 20c FREED EISEMANN, Model 57, 350-2,000 ohms. 3030 22c FREED EISEMANN, Model NR60, 1,750 ohms. 3031 20c FREED EISEMANN, Model NR60, 4,000 ohms. 3033 20c FREED EISEMANN, Model NR60, 4,000 ohms. 3033 22c FREED EISEMANN, Model NR60, 350-2,000 ohms. 3033 22c FREED EISEMANN, Model NR70, 10,000 ohms. 3033 22c FREED EISEMANN, Model NR70, 10,000 ohms. 3035 25c FREED EISEMANN, Model NR70, 2,000-1,009-350 ohms. 3035 25c FREED EISEMANN, Model NR80, 4000-350 ohms. 3037 35c FREED EISEMANN, Model NR80, 4000-350 ohms. 3037 35c FREED EISEMANN, Model NR80, 4000-350 ohms. 3038 40c FRESHMAN, Model N608 Voltage Divider. 3049 60c FRESHMAN, Model N608 Voltage Divider. 3040 60c FRESHMAN, Model N608 Voltage Divider. 3041 15c FRESHMAN, Model N608 Voltage Divider. 3042 75c FRESHMAN, 608-6560 ohm voltage divider. 3042 75c FRESHMAN, K608-6560 ohm tapped at 1100, 1500, 1460 6ENERAL MOTORS, Na 16005-9372 ohms tapped at 800. 50, 1863, 2000, 4500 shuss 3044 80c SPLITPORF, 12500 ohms 3044 80c SPLITPORF, 12500 ohms 3044 80c	FREED FISHMANN Model 411, 1,750 onms	.3022.	206
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FREED EISEMANN, Model   411, 350 dhms   3028   20c		. 3024.	200
FREED EISEMANN, Model 411, 1,000 ohms			
FREED EISEMANN, Model NR57, 1.750 ohms 3028 20c   FREED EISEMANN, Model 57, 4.000 ohms 3029 20c   FREED EISEMANN, Model 57, 4.000 ohms 3030 22c   FREED EISEMANN, Model 57, 350-2.000 ohms 3033 22c   FREED EISEMANN, Model NR60, 1.750 ohms 3031 20c   FREED EISEMANN, Model NR60, 360-2.000 ohms 3033 22c   FREED EISEMANN, Model NR70, 10.000 ohms 3033 22c   FREED EISEMANN, Model NR70, 10.000 ohms 3033 22c   FREED EISEMANN, Model NR70, 10.000 ohms 3034 25c   FREED EISEMANN, Model NR70, 2.000-1.000-350 ohms 3035 25c   FREED EISEMANN, Model NR80, 1750-2000 ohms 3036 35c   FREED EISEMANN, Model NR80, 4000-350 ohms 3037 35c   FREED EISEMANN, Model NR80, 4000-350 ohms 3037 35c   FREED EISEMANN, Model NR80, 4000-350 ohms 3037 35c   FREED EISEMANN, Model NR80, 4000-350 ohms 3038 40c   FRESHMAN, Model NR60 Voltage Divider 3040   Goc   FRESHMAN, Model NR60 Voltage Divider 3040   FRESHMAN, Model NR60 Voltage Divider 3041   15c   FRESHMAN, All Models-1800 ohm Bias Resistance 3041   15c   FRESHMAN, K608-10.950 ohm voltage divider 3042   75c   FRESHMAN, K608-10.950 ohm voltage divider 3042   75c   FRESHMAN, K608-10.950 ohm voltage divider 3043   75c   FRESHMAN, K608-10.950 ohm voltage divider 3043   75c   FRESHMAN, K608-10.950 ohm voltage divider 3043   75c   FRESHMAN, K608-10.950 ohm tapped at 100, 1500, 1460   1500, 1460   1500, 1460   3044   75c   3046   3045   3046   3045   3046			
FREED EISEMANN, Model 57, 4,000 ahms   3029   20c   FREED EISEMANN, Model 57, 350-2,000 ahms   3030   22c   FREED EISEMANN, Model NR60, 1,750 ahms   3031   20c   FREED EISEMANN, Model NR60, 1,750 ahms   3031   20c   FREED EISEMANN, Model NR60, 350-2,000 ahms   3032   20c   FREED EISEMANN, Model NR70, 10,000 ahms   3033   22c   20c			
FREED EISEMANN, Model 57, 350-2.000 ohms, 3030 22c FREED EISEMANN, Model NR60, 1.750 ohms, 3031 20c FREED EISEMANN, Model NR60, 4 000 ohms, 3032 20c FREED EISEMANN, Model NR60, 350-2.000 ohms, 3033 22c FREED EISEMANN, Model NR70, 10,000 ohms, 3033 22c FREED EISEMANN, Model NR70, 2.000-1.009-350 ohms, 3035, 25c FREED EISEMANN, Model NR80, 1.750-2000 ohms, 3035, 35c FREED EISEMANN, Model NR80, 1.750-2000 ohms, 3037, 35c FREED EISEMANN, Model NR80, 4000-350 ohms, 3037, 35c FREED EISEMANN, Model NR80, 4000-350-2000 ohms, 3038, 40c FRESHMAN, Model N608 Voltage Divider, 3039, 60c FRESHMAN, Model N608 Voltage Divider, 3040, 60c FRESHMAN, Model N608 Voltage Divider, 3041 15c FRESHMAN, Model N608 Voltage Divider, 3041 75c FRESHMAN, All Models1800 ohm Voltage Divider, 3042, 75c FRESHMAN, 608-6560 ohm voltage divider, 3042, 75c FRESHMAN, K608-6560 ohm voltage divider, 3043, 75c FRESHMAN, K608-6560 ohm tapped at 1100, 1500, 1460  60NFREAL MOTORS, No. 16005-0372 ohms tapped at 800, 50, 1863, 2000, 4500  SPLITDORF, 12500 ohms, 3045, 80c SPLITDORF, 12500 ohms, 3046, 85c STROMBERG-CARLSON, 10 and 11 3047, 80c			
FREED EISEMANN, Model NR60, 1.750 ohms 3031 20c FREED EISEMANN, Model NR60, 4000 ohms 3032 20c FREED EISEMANN, Model NR60, 350-2.000 ohms 3033 22c FREED EISEMANN, Model NR70, 10.000 ohms 3033 22c FREED EISEMANN, Model NR70, 2.000-1.000-350 ohms 3035 25c FREED EISEMANN, Model NR70, 2.000-1.000-350 ohms 3036 35c FREED EISEMANN, Model NR80, 1750-2000 ohms 3036 35c FREED EISEMANN, Model NR80, 4000-350 ohms 3037 35c FREED EISEMANN, Model NR80, 4000-350 ohms 3037 35c FREED EISEMANN, Model NR85, 1000-350-2000 ohms 3038 40c FRESHMAN, Model NR85 voltage Divider 3039 60c FRESHMAN, Model NR08 Voltage Divider 3040 60c FRESHMAN, Model NR08 Voltage Divider 3041 15c FRESHMAN, All Models-1800 ohm Bias Resistance 3041 15c FRESHMAN, All Models-1800 ohm Voltage Divider 3042 75c FRESHMAN, K608-10.950 ohm voltage divider 3042 75c FRESHMAN, K608-6560 ohm voltage divider 3033 75c FRESHMAN, K608-6560 ohm tyoltage divider 3044 75c GENERAL MOTORS, No. 16005-9372 ohms tapped at 800 50, 1863, 2000, 4500 3045 80c SPLITPORF, 12500 ohms 3044 55c SPLITPORF, 12500 ohms 3047 80c		2020	220
FREED EISEMANN, Model NR60, 4 000 ohms. 3032 20c FREED EISEMANN, Model NR60, 350-2,000 ohms. 3033 22c FREED EISEMANN, Model NR70, 10,000 ohms. 3034 2Ac FREED EISEMANN, Model NR70, 10,000 ohms. 3035 25c FREED EISEMANN, Model NR70, 2,000-1,000-350 ohms. 3035 35c FREED EISEMANN, Model NR80, 1750-2000 ohms. 3036, 35c FREED EISEMANN, Model NR80, 1750-2000 ohms. 3038 40c FREED EISEMANN, Model NR85, 1000-350 ohms. 3037, 35c FREED EISEMANN, Model NR85, 1000-350-2000 ohms. 3038 40c FRESHMAN, Model NR68, 4000-350-2000 ohms. 3038 40c FRESHMAN, Model NR68, 4000-350-2000 ohms. 3039, 60c FRESHMAN, Model NR68, 1000-350-2000 ohms. 3039, 60c FRESHMAN, Model NR69, 400-350-2000 ohms. 3039, 40c FRESHMAN, Model NR69, 400-350 ohms. 3041 15c FRESHMAN, 608-10,000 ohm bilas Resistance. 3041 15c FRESHMAN, 608-10,000 ohm voltage divider. 3042 75c FRESHMAN, 608-10,000 ohm voltage divider. 3042 75c FRESHMAN, 608-6560 ohm tapped at 1100, 1500, 1460  50, 1863, 2000, 4500 ohm tapped at 800. 50, 1863, 2000, 4500 ohms. 3045 80c SPLITDORF, 12500 ohms. 3046 80c SPLITDORF, 12500 ohms. 3047 80c			
FREED EISEMANN, Model NR60, 350-2.000 ohms 3033 22c FBEED EISEMANN, Model NR70, 10,000 ohms 3033 22c FBEED EISEMANN, Model NR70, 2.000-1.009-350 ohms 3035. 25c FREED EISEMANN, Model NR80, 1750-2000 ohms 3035. 25c FREED EISEMANN, Model NR80, 1750-2000 ohms 3036 35c FREED EISEMANN, Model NR80, 4000-350 ohms 3037 25c FREED EISEMANN, Model NR85, 1000-350-0000 ohms 3038 40c FRESHMAN, Model N608 Voltage Divider 3039 60c FRESHMAN, Model N608 Voltage Divider 3040 60c FRESHMAN, Model N608 Voltage Divider 3041 15c FRESHMAN, Model N12-1500 ohm Bias Resistance 3041 15c FRESHMAN, Model N12-1500 ohm Voltage Divider 3042 75c FRESHMAN, K608-10-950 ohm voltage divider 3042 75c FRESHMAN, K608-6560 ohm voltage divider 3043 75c FRESHMAN, K608-6560 ohm tapped at 1100, 1500, 1460 1500, 1000 3044 75c GENERAL MOTORS, No. 16005-0372 ohms tapped at 800. 80 1863, 2000, 4500 3045 80c SPLITDORF, 12500 ohms 3046 35c SPCIMBERG-CARLSON, 10 and 11 3047 80c			
FREED EISEMANN, Model NR70, 10,000 ohms 3034, 236 FREED EISEMANN, Model NR70, 2,000-1,000-350 ohms 3035, 25c FREED EISEMANN, Model NR80, 1750-2000 ohms 3036, 35c FREED EISEMANN, Model NR80, 4000-350 ohms 3037, 25c FREED EISEMANN, Model NR80, 4000-350 ohms 3037, 25c FREED EISEMANN, Model NR85, 1000-350-2000 ohms 3038, 40c FRESHMAN, Model N808 Voltage Divider 3039, 60c FRESHMAN, Model N808 Voltage Divider 3040, 60c FRESHMAN, Model N808 Voltage Divider 3041, 15c FRESHMAN, Model N808 Voltage Divider 3042, 75c FRESHMAN, All Models—1800 ohm Bigs Resistance 3041, 15c FRESHMAN, G608-10,550 ohm voltage divider 3042, 75c FRESHMAN, K608-6560 ohm voltage divider 3043, 75c FRESHMAN, K608-6560 ohm tapped at 1100, 1500, 1460 1500, 1000 GENERAL MOTORS, No. 16005-9372 ohms tapped at 800, 804, 75c SPLITDORF, 12500 ohms SPLITDORF, 12500 ohms SPLOWBERG-CARLSON, 10 and 11, 3047, 80c			
FREED EISEMANN, Model NR70, 2.000-1.000-350 ohms 3035, 25c FREED EISEMANN, Model NR80, 1750-2000 ohms 3036, 35c FREED EISEMANN, Model NR80, 1750-2000 ohms 3038, 35c FREED EISEMANN, Model NR85, 1000-350 ohms 3038, 40c FREED EISEMANN, Model NR85, 1000-350-2000 ohms 3038, 40c FRESHMAN, Model N608 Voltage Divider 3039, 60c FRESHMAN, Model N608 Voltage Divider 3040, 60c FRESHMAN, Model N12-1500 ohm Bias Resistance 3041, 15c FRESHMAN, All Models—1800 chm Voltage Divider 3042, 75c FRESHMAN, 608-6560 ohm tapped at 1100, 1500, 1460  1500, 1000 3044, 75c GENERAL MOTORS, No. 16005-9372 ohms tapped at 800, 50, 1863, 2000, 4500  SPLITDORF, 12500 ohms 3046, 35c SPLITDORF, 12500 ohms 3064, 35c STROMBERG-CARLESIN, 10, and 11, 3047, 80c.			
FREED EISEMANN, Model NRS0, 1750-2000 ohms 3036 336 FREED EISEMANN, Model NRS0, 4000-350 ohms 3037 356 FREED EISEMANN, Model NRS0, 4000-350 ohms 3037 356 FREED EISEMANN, Model NRS5, 1000-350-2000 ohms 3038 406 FRESHMAN, Model N608 Voltage Divider 3039 60c FRESHMAN, Model N608 Voltage Divider 3040 600 FRESHMAN, Model N12-1500 ohm Bias Resistance 3041 156 FRESHMAN, All Models-1800 ohm Voltage Divider 3042 756 FRESHMAN, G608-10-250 ohm voltage divider 3042 756 FRESHMAN, K608-6560 ohm voltage divider 3043 756 FRESHMAN, K608-6560 ohm tapped at 1100, 1500, 1460 1500, 1000 3044 756 GENERAL MOTORS, No. 16005-0372 ohms tapped at 800. SPLITDORF, 12500 ohms 3045 80c SPLITDORF, 12500 ohms 3046 356 SPLITDORF, 12500 ohms 3046 356 STROMBERG-CARLSIN, 10 and 11 3047 80c		3035	256
FREED EISEMANN, Model NRS0, 4000-350 olums 3037 356 FRESHMAN, Model NR85, 1000-350-2000 ohms 3038 406 FRESHMAN, Model NR85, 1000-350-2000 ohms 3038 406 FRESHMAN, Model N808 Voltage Divider 3039 606 FRESHMAN, Model N808 Voltage Divider 3040 606 FRESHMAN, Model NR2-1500 ohm Bigs Resistance 3041 156 FRESHMAN, All Models—1800 ohm Voltage Divider 3042 756 FRESHMAN, G608-10-550 ohm voltage divider 3043 756 FRESHMAN, R608-6560 ohm voltage divider 3033 756 FRESHMAN, R608-6560 ohm tapped at 1100, 1500, 1460 1500, 1000 3044 756 GENERAL MOTORS, No. 16005-9372 ohms tapped at 800 50, 1863, 2000, 4500 3045 806 SPLITDORF, 12500 ohms SPROMBERG-CARLSIN, 10 and 11 3047 806			
FREED EISLMANN, Model NR85, 1000-350-2000 ohms 3038, 40e   FRESHMAN, Model NR08 Voltage Divider 3039, 60e   FRESHMAN, Model G008 Voltage Divider 3040, 60e   FRESHMAN, Model G008 Voltage Divider 3041, 15e   FRESHMAN, Model N12-1500 ohm Bias Resistance 3041, 15e   FRESHMAN, G008-10-250 ohm Voltage Divider 3042, 75e   FRESHMAN, G008-10-250 ohm voltage divider 3043, 75e   FRESHMAN, G008-6560 ohm tapped at 1100, 1500, 1460   1500, 1000   3044, 75e   GENERAL MOTORS, No. 16005-0372 ohms tapped at 800, 50, 1863, 2000, 4500   3045, 80e   SPLITDORF, 12500 ohms 3046, 35e   SPLITDORF, 12500 ohms 3046, 35e   STROMBERG-CARLSIN, 10, and 11   3047, 80e   STROMBERG-CARLSIN, 10, and 11   3047, 80e   STROMBERG-CARLSIN, 10, and 11   3047, 80e   3046, 3046, 3047, 80e   STROMBERG-CARLSIN, 10, and 11   3047, 80e   3046, 3046, 3046, 3047, 80e   3046, 3046, 3046, 3046, 3047, 80e   3047, 80e   3046, 3046, 3046, 3047, 80e   3046, 3046, 3046, 3046, 3047, 80e   3046,			
FRESHMAN, Model N608 Voltage Divider. 3039 60c   FRESHMAN Model G608 Voltage Divider. 3040 60c   FRESHMAN Model N12-1500 ohm Bias Resistance 3041 156c   FRESHMAN, Models—1800 chm Voltage Divider 3042 75c   FRESHMAN, G608-10-950 ohm voltage divider 3043 75c   FRESHMAN, K608-6560 ohm voltage divider 3043 75c   FRESHMAN, K608-6560 ohm tapped at 1100, 1500, 1460 1500, 1000 3044 75c   GENERAL MOTORS, No. 16005-9372 ohms tapped at 800. 8015-802 1863, 2000, 4500 3045 80c   SPLITBORF, 12500 ohms 3046 35c   SPLITBORF, 12500 ohms 3046 35c   STROMBERG-CARLSIN, 10 and 11 3047 80c   STROMBERG-CARLSIN, 10 and 11 3047 80c   SPLITBORF, 12500 ohms 3046 35c   STROMBERG-CARLSIN, 10 and 11 3047 80c   SPLITBORF, 12500 ohms 3046 35c   STROMBERG-CARLSIN, 10 and 11 3047 80c   SPLITBORF, 12500 ohms 3046 35c   STROMBERG-CARLSIN, 10 and 11 3047 80c   SPLITBORF, 12500 ohms 3046 35c   STROMBERG-CARLSIN, 10 and 11 3047 80c   SPLITBORF, 12500 ohms 3046 35c   STROMBERG-CARLSIN, 10 and 11 3047 80c   SPLITBORF, 12500 ohms 3046 35c   STROMBERG-CARLSIN, 10 and 11 3047 80c   SPLITBORF, 12500 ohms 3046 35c   STROMBERG-CARLSIN, 10 and 11 3047 80c   SPLITBORF, 10 and 11	FREED EISEMANN, Model NRS5, 1000-350-2000 ohms	3038	400
FRESHMAN, Model   G608   Voltage   Divider   3040   600     FRESHMAN, Model   N12-1500   0hm   Bics   Resistance   3041   150     FRESHMAN, All   Models   1800   0hm   Voltage   Divider   3042   75c     FRESHMAN, G608-10-950   0hm   voltage   divider   3043   75c     FRESHMAN, K608-6500   0hm   tapped   at   1100   1500   1460     1500   1000   3044   75c     GENERAL   MOTORS   No   16005-9372   0hm   tapped   at   800     50   1803   2000   4500   3045   80c     SPLITDORF, 12500   0hm   3046   35c     STROMBERG-CARLSIN, 10   and 11   3047   80c     800   800   8047   80c     1800   1800   3047   80c     1800   3047   80c	FRESHMAN, Model Neos Voltage Divider	3039	60c
FRESHMAN, Model	FRESHMAN, Model GGOS Voltage Divider	3040	600
FRESHMAN, All Models—1800 chm Voltage Divider. 3042, 75c FRESHMAN, 608-10-950 chm voltage divider. 3043, 75c FRESHMAN, K608-6560 chm tapped at 1100, 1500, 1460  1500, 1000	FRESHMAN, Model N12-1500 ohm Bias Resistance	. 3041	150
FRESHMAN, K608-6560 ohm tapped at 1100, 1500, 1460 1500, 1000	FRESHMAN, All Models1800 chm Voltage Divider	3042	75c
1500, 1000 3044 75c GENERAL MOTORS, No. 16005-0372 ohms tapped at 800. 50, 1863, 2000, 4500 3045 80c SPLITDORF, 12500 ohms 3046, 35c STROMBERG-CARLSIN, 10 and 11 3047 80c	FRESHMAN, G60S-10.950 ohm voltage divider	3043	75e
GENERAL MOTORS, No. 16005-9372 ohins tapped at 800, 59, 1863, 2000, 4500	FRESHMAN, K60S-6560 ohm tapped at 1100, 1500, 146	0	
59, 1863, 2000, 4500 3045 80c SPLITDORF, 12500 ohms 3046 35c STROWBERG-CARLEON, 10 and 11 3047 80c	1500, 1000	3044	75c
SPLITDORF, 12500 ahms         3046, 35c           STROMBERG-CARLEON, 10 and 11         3047, 80c	GENERAL MOTORS, No. 16005-9372 ohms tapped at 800	),	
STROMBERG-CARLEON, 10 and 11	59, 1863, 2000, 4500	3045	80c
TEMPLE 8-60, 8-80, 8-90, 6850 when voltage digitor, 3048, 30c.	SPLITBURE, T2000 abnis	3046.	,35c
	TEMPLE 900 POD CON PERSONAL	.3047.	80c
TEMPLE D.C33 ohm voltage divider	TEMPLE D.C. 22 above voltage divider	3048	30c
TEMPLE 7.60 and 7.80—21600 olan voltage divider 3050 60c	TEMPLE 7.60 and 7.80 21 - 600 of m voltage divider	3050	406
TEMPLE, All 6850 ohm voltage dividers	TEMPLE. All 6850 ohn voltage dividers	3050	304
TEMPLE, All 1500 bias	TEMPLE, All 1500 bins	3052	300

# Wire-Wound Voltage Dividers on Baked Lava Tubes



Cat. No.         Ohms         Tapped At         Watte         Price           3053         2350         200         350         25         25           3054         540         360         90         5         10e           3055         30         10         10         10         75         25e           3057         5135         4185         950         25         25e           3058         6850         5200         900         7500         50         30e           3059         6855         5000         1000         80         50         30e           3060         7090         90         695         625         50         25e           3061         4835         3400         3800         55         80         25e           3063         1100         300         750         50         25e           3063         100         300         750         50         25e           3064         10000         300         75         25e           3063         10000         3 sliders         (variable)         100         76e           3066         12300								1 0ur
1054   230	Cat.	10.	Ohms	Tapped	At		Walte	Price
10	3053		2350	 350		 	. 25	25e
3055   30								
3056								
3057								
3058								
3059								
3060   7090   90, 605, 6205   50   25c   3061   4835   3440, 3800, 55, 80, 40, 380   50   75c   3062   9150   5500, 3200, 750   50   25c   3063   1100   300   75   25c   3064   10000   5000   50   25c   3065   10000   3   61ders   (variable)   100   75c   3066   12300   8000   4100   50   25c   3066   12300   8000   4100   50   25c   3068   23600   2100   10000   1500   75   45c   3068   23600   2100   10000   10000   1500   75   45c   3069   25000   4   61ders   (variable)   100   90c   3070   21500   8000   1000   8000   4000   100   60c   60								
306  1535								
3062								
3063   1100   300   75   25c   3064   10000   5000   500   25c   3065   10000   3   sliders (variable)   100   75c   3066   12300   8000   4:06   50   25c   3066   12300   8000   4:06   50   25c   25c   3068   2:3600   2:100   10000   1500   75   45c   3068   2:5000   4   sliders (variable)   100   90c   3070   2:500   8000   1000   8000   4000   100   60c								
3064   10000   5000   50   25c   3065   10000   3   sliders (variable)   100   75c   3066   12300   8000   4300   50   25c   3067   12900   9000   3200   600   25   25c   3068   23600   2100   10000   10000   1500   75   45c   3069   25000   4   sliders (variable)   100   40c   3070   21500   8000   1000   8000   4000   100   60c   60c   3070   21500   8000   1000   8000   4000   100   60c   3070   21500   8000   1000   8000   4000   100   60c   3070								
3066   10000   3 sliders (variable)   100   75c   3066   12300   8000   4300   50   25c   25c   3067   12900   9000, 3200   600   25   25c   3068   23600   2100   10000   15000   75   45c   3069   25000   4 sliders (variable)   100   90c   3070   21500   8000   1000   8000   4000   100   60c								
3066.     .12300     .8000, 4:00     .50.     .250.       3067.     .12900     .9000, 3:00.     .900.     .25.     .25c.       3068.     .23600     .2100.     .10000, 10000, 1500.     .75.     .45c.       3069.     .25000     .4.     .8lders (variable)     .100.     .90c.       3070.     .21500.     .8000, 1000.     .8000, 4000.     .100.     .60c.								
3067.     12900     9000, 3200, 600     25     25c       3068.     23600     2100, 10000, 1000, 1500     75     45c       3069.     25000     4 sliders (variable)     100     90c       3070.     21500     8000, 1000, 8000, 4000, 100     100     60c								
3068         23600         2100         10000         1500         75         45c           3069         25000         4 sliders (variable)         100         90c           3070         21500         8000         1000         8000         1000         60c								
3069250004 sliders (variable)								
3070 21600 8000 1600, 8000 1000 100 60c								
3071 50000 6 sliders (variable)								

## Kolster Wire Wound Resistance



Kolster No. 3983. 7.835 olims tapped at 3,400, 3.800, 55, 80, 40, 360.

Cat. No. 3012

Your 30c No. 4919. 5.700 obms. Ca4. No. 3013

Your 30c Price

## Stromberg-Carlson



3,100 ohm tapped at 1,100 ohm.

Cat. No. 3014

Your Price 75c

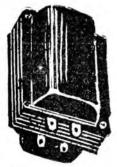
6,000 ohm tapped at 3,000 ohm.

Cat. No. 3015

Your 75c

# Audio Frequency Transformers and Impedances

## Automobile and Portable Set Audio Transformers



Oat, No. 8764

For an audio transformer as small and compact as these, the amount of volume and pure tone derived has agreeably surprised the many manufacturers and set builders who have made their acquaintance. Totally shielded, black in color. these transformers make a very neat and attractive appearance. Four threaded holes in base allow for easy mounting. Supplied in two ratios, 4:1 and 91. When the 4:1 is used in a lat stage audio and 9:1 used in 2d stage, an audio amplifler is obtained that will both delight and please you.

Mithe Hatte

## General Motors Push-Pull Input Split-Secondary

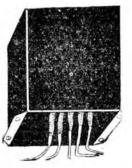
A high grade transformer originally made for General Motors sets. Capable of handling tremendous volume with the best tonal reproduction.

Split - Secondary makes possible the location of the exact electrical center for minimum hum.

Only the most expensive and best transformers have this feature. Totally shielded, sealed in a strong can. An unusual value offered at an unusually low price.

Cal. No. 8765

Your \$1.45



R.C.A. PUSH-PULL TRANSFORMER



PART NO 6115 For use in Madiota Su

Your 350

A push pull audio unit with the output and imput transformers in one
housing. The cutput transformers in one
designed to comment directly to the
voice coil or any dynamic loud speaker whose voice coil has an impedance
of 10 to 25 ohms. The transformers
are designed for use with 245 tubes
but will give equally fine results with
121 s. 245 s. 210 s. and 250 s. The
pulmary of the input transformer is
of sufficiently high impedance to opefalt out of screen gird of Power
defector.

Your \$1.09

## GENERAL RADIO AUDIO TRANSFORMER



The teschial leadure of these transformers to the the input impedance being several times higher than the tube impedance at the luwest Dequency is sulling in the most faithful reproduction over the enthre range Type 285 D has a 3 1 ratio type was-H bas a o i rally Ships wi

No 386 H List \$6.00

110 180 D 1.151 \$6.00

\$1.45

Your \$1.45

Dynamic Speaker Output Transformer



As used on all Faltand Bruhawich Bremel Tully Speakers Genuine col-or coded leads Pro-tects speaker voice cell from burning out

tal No 3100

Price 85c

Sangamo Type BX Push Pull Input Transformer



With mounting

Cat No 3101

Price 75c

## Colonial Push-Pull Input



For Models 31-32-33-34 Genuine Colonial made trans-formers. Open frame type. Cat. No. 3761

Your Price 95c

# T.C.A. Push-Pull Output



Your 85c

### REPLACEMENT TRANSFORMER COILS Excellent output chokes and



transformer ready to slip on your core secondary of transformer 1 15 ohms. Primaries mate plate impedance of 171 245.

Cat. No. 8753 Your Price 20c

rush pull for replayment in Peerless or Symington speakers. OUTPUT CHOKE

Your Price 15c

# Thordarson Plate Impedance

Federal Shielded 65A

Audio Transformer



Fully shielded in compact black metal case, Attrac-tive and efficient, For all high grade power amplifiers, Use in series with plate, for parallel plate freet circuits,

Your 79c



An old standby still in popular demand. Unusually well made, shielded. All stage 13tho. Sbog, wt. 3 lbs. tat. No. 3756

Your #1 M

\$1.00 Price

## FADA AUDIO TRANSFORMER



A high grade transformer for replacement in all Fada receivers. Can also be used in any receiver where a compact unit is needed. Ratio 314":1".

Cat. No. 8755

 $^{\text{Your}}_{\text{Price}}~45c$ 

## **GREBE AUDIO** TRANSFORMER

A mighty audio transformer for replacement in high-priced sets and for use in power amplifiers and Public Address Systems. Contains 4% Sillcon-steel laminations. Straight line frequency straight line response.

Cat. No. 3757

Your Price 95c



## NA-ALD OUTPUT UNIT

Essential for the pro-tection of the windings of Magnetic or the Output Transformer of A.C. Dynamic Speakers against excessive voitage.

Cat. No. 3763

Your Price 45c



#### SELECTUNER STATION SELECTOR AND STATIC REDUCER



Separates stations over the entire wave band on any type of receiver and effectively cuts through the locals and enhances the quality of reception. Insert between the arreal lead-in and the set. Sbpg. wt. 1 b. Shpg. wt. 1 b. 38. List \$1.50. No. 638.

Your 75c

## FILTERVOLT



For most types of common interference about the home, arising from vacuum cleaners, sewing machines, electric fans, toasters, etc. Installed by plugging the unit into the wall socket between current and receiver. Shpg. wt. 1 lb.
No. 730. List \$3.00.

Your \$1.71

#### POWERTENNA



COMBINATION SOCKET ANTENNA AND CURRENT OUTLET Shpg. wt. 1 (b). No. 637. List \$1.00.

Your 59c

## BELDEN FUSED CABLE



A seven wire battery cable maying ... A and B circuits fused to protext the tubes. For all battery sets. wire battery cable baying the

Your 39c

## HAMILTON VOLTAGE REGULATOR



An hir cooled voltage resultator. Prevents line voltage rising above 115 volts as is required for best operation and longest the life. Ballasing type of resistor. Necessity for every A.C. receiver.

Your 55c

## FRESHMAN MIDGET CONDENSER



A seven-plate midget originally tised on Freshman receivers us tuning vermers. Can be used in short wave receivers as neutralizers, regeneration controls, etc.

Cat. No. 3646

Your 45c

## FREED-EISEMANN NRSO VOLUME CONTROL STRIP



Used to rapines the volume control strip in the model 80 receivers. Tapered type, resistance value 1,000 choics.

Cat. No. 3617

Your Price 23c

## I.C.A. ACCURATUNER

Utilizing the Band Pass principle the Accuratuner by a simple adjustment allows you to cut out interfering stations. Eliminates cross talk and allows reception of distant stations through the locals.

Cat. No. 3648

Your \$1.47

#### MULTI-SPEAKER RELAY

Allows the comparison of up to four speakers or the operation of two simultaneously. A turn of the knob switches from one speaker to another. Sturdily built; does ne( affect the operation of the ret (at. No. 3649 List \$2.75

Your \$1.61



## ILLUMINATED DRUM DIAL

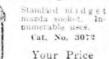


This is an artistically disigned This is an artistically designed dynam dial. An automatic spring take his insures positive drive at all times. The meant carrying the found-tases is additing by a specially treated cord which is wound around the mean and connects with a small pail you the shaft torned by the control fution. There smoothly and easily writtent book first use condensor. Mounts on supported, possboard or to the finite panel. The scale is at band scatterial with their which lates situationed. The strategy of 100. Bluminated Engraved 0.100 Shpg, wt 3 lbs.

No. 1971. List 83.25.

Your \$1.56

## Dial Light



75c per doz.

## Bronze Escutcheon Plate



Beautifies the radio.

Cat. No. 3073

## \$1 per doz. Price

#### AMRAD VARIOMETER



se as an antenna trimmer, regeneration control, ination control, in-ductance trim-mer, in short wave sets. Quan-tity limited, so order now.

Cat. No. 3074

Your Price 39c

## SUB PANEL SOCKETS



Particularly adapted for use on metal sub-panels. Tinned panels. Tinned lugs project through bottom

through bottom for easy connection. Socket terminals are marked on the base to facilitate wiring. Heavy nickled phosphor bronze springs insure perfect contact. Shell of socket is one piece moulded bakelite. Supplied in 4 prong for UX type tubes and in 5 prong for UY type tubes. Shpg. wt. ½ lb.

No. 1982. List Price 35c.

Your Price 15c

## EBY BINDING POSTS



Non - removable top. Have hole through shanks. Bakelite. Shpg. wt., 4 oze. No. 365

Your 49c per Price 49c doz.

## NA-ALD BAKELITE SOCKETS

4 and 5 Prong (at. No. 361



Your

Price 10cea.

I.C.A. INSULTENNA COMPLETE AERIAL AND GROUND INSTALLATION

BUILT IN AND CONCEALED

Complete; mount-ie) on brown bakelte plate which fits all standard baxes which his all standard baxes July ground elamb and 25 his of country and an extension of an extension of market for a standard with the country and the countr



cat. No. 3075. List \$3.75.

Your \$1.95

## I.C.A. SUPER VOLTAGE CONTROL



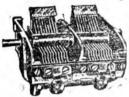
Universal, operates on A.C. or D.C. radios, including 32volt farm systems. Constructed of brass and bakelite; approved by Board of Fire Underwriters. Capacity, 350 watts. Shpg. wt. 2 lbs.

Cat. No. 3076. List \$3.50.

Your \$1.75

# Radio Frequency Tuning Coils and Condensers

## DE-JUR TWO GANG VARIABLE CONDENSER



Cat. No. 3774

JNDENSER
A sturdy, discast condenser, both tub type.
Two gang with each section 0.005 infl, capacity. Shaft is removable. Provided with heavy spring contacts on rotors and compansators for each section. Condenser sections shielded from one another.

Your Py Price 75C

### ZENITH 4 GANG DIE CAST CONDENSER



A heavily built variable condenser that will always keep its adjustment, due to superior design in construction. Condenser plates are 1/16" thick as axainst, 0.34 in most condensers. Die cest for rigidity and strength. Capacity of each section is, counds mid, permitting its use in any recurver and for any purpose. Large spacing between plates and electrostatic shield between each condenser section. Equipped with pilot lamp language. Three hole base mounting. Shpg. wt.

Cat. No. 3775

の問題

Your \$1.25

Above condenser equipmed with toggle switch, automatically operated when condenser at maximum capacity. The extra-

## Bruno .0005 R.F. Coil



the finest low loss silable today. Wound on open frame form. Quartzite insulation. Re-quires a .0005 quires a .0005 mfd tuning condenser to cover range of 200-575 meters. Shpg. wt., 1 lb. Cat. No. 3791

Your Price 65c

#### Super Het I.F. Transformers



Splendid units, remplere with colls, should god with colls, should not think colls, and the street of second post-street for second post-street for second post-street the second of the second posts of the second

Cat. No. 3777 Your \$3.25

## R.C.A. I.F. Tuning Condensers



Your F Price /5C

Cat. No. 3785

#### Bank Pass and Oscillator Coils



## Matched R.F. Multi-Mu Screen Grid Coils



Cat. No. 8784 Your 95c per set Price 95c of 4

## Crosley Single Condensers

With Vernier Adjuster Genuine Crosley Condensers plates. Can be had about 1915 and a starter Your Price Cat. No. Mtd

.0005 2288

(with vernier adially 3790

(with vernier add a summa)



45c 50c

## frame to prevent

Special 2 Gang Condenser



Your \$1.35

### Colonial Condenser



model 32. Brass plates, low loss porcelain insulation .0005 mid capacity. Straight line frequency. Cat. No. 3783

Your 45c

## General Motors Single .00035 Mfd Condenser

Low loss construction, sturdy, compensator for alignment. Equipped with drum, enabling use of several together for single dial control with copper coupling belts.

Oak No. 8778



45c Your Price

#### 3 GANG CONDENSER



Strong bath type cond Plates of Strong bath tub condenser. Plates of spring brass. Sections accurately matched; mout of the highest crade tuners and receivers with maximum efficiency at low cost.

Your \$1.95

### Day Fan-General Motors Untuned R.F. Transformer



The ideal untuned unit for use in all untuned input and kF. stages. Carefully constructed. Primary and secondary wound on the same form. An excellent the same forn coupling device.

Cat. No. 3786

Your 35c

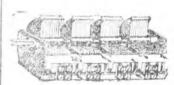
#### Colonial R.F. Coils



As used in Colonial model 32 recelvers but wound only with sayondery. Primary may be high impedance choke inserted within the 2"x1" coil form. With long mounting lug. Make floe screen grid roils.

Your 15c

#### Day Fan G.M. 4 Gang Condenser



4 gang .000375 nifd bathtub condenser, die cast for durability. Each section accurately matched by means of signal generator, at the faciory.

Your Price 95c

## R.C.A. Super Het I.F. Trans. Coils



Intermediate Frequency transformers peaked at 175 KC. Designed for use with MMF capacity tuning 220 condensers.

Cat. No. Your 19c

#### Shield-Base-Cap

For 221.222.227 Tubes Astounding value! Base fits around any socket. Cap fits around arid terminal. Shpg. wt., 1 lb.

SET OF 8 PIECES Your Price 10c



## Equalizing Condenser

Cat. No. 3781

Componsates condenser sections, also used in neutralizing circuits.

Price 15c

#### Aluminum Shields



For all nurposes. Heavy polished aluminum. 2 % "x2 % ". or 2 % "x 8 8/16". State size desired in your order Cat. No. 8799

Your 73c per Price 73c doz. SINGLY, 100 EACH

# MATCHED R. F. COIL SETS

## FREED COILS



As used in Freed 95 and Earl 42 receivers. Impregnated form mounting brack-ets. Long solder-ing lugs. For .0006 mid. con-denser.

Out. No. 8793

Your 39c ea.

## Screen Grid Multi-Mu Coils



A high gain screen grid coil designed for multi-mu rubes, with high impe-dance pomery. Used the course coil conserve. Mounting bracket. Cut. No. 3794

Your 35C each

## Hammerlund .0005 Condenser



The well-known H a m merlund quality. Low loss straight line frequency 0005 mfd. condenser with soldered plates.

Your 95c 8703 Price

## Grebe Binocular Coils



The famous Grebe Litz-wound hi-mu coils as used in A.C. 6 and A.C. 7. For use with .00025 condenser. Tremendous gain possible with this coil.

Cat. No. 2798

Your Price 35c



### THREE-COIL ASSEMBLY

R.F. and Detector coll assembly used in R.C.A. 38. Mounted on metal strip with 2 balancing condensers. Cas. No. 3797

Your \$1.10

## R.F. and OSCILLATOR COILS



For Brunswick P138 and P148 and R.C.A. 28. Well wound and carefully designed ooils.

Cat. No. 3798

Your \$1.25

### MATCHED MULTI-MU COILS



Comes in sets of three or four matched coils, complete with aluminnum shield cans with removable covers for use with 00035 condensers. Excellent for construction and conversion of variable-mu screen grid receivers.

Cat. No. 3788 Your \$1.25 Your \$1.50

## GREBE CONDENSERS



A .00005 condenser complete with bakelite tuning knob and 8:1 ratio vernier. Compunsating condeneer. Ideal for use in uscillators. Covers entire broadcast range with proper coll.

Your 45c

## KELLOGG R.F. COILS



Four matched comis to the set. One antenna and three R.F. nersen gold coits. Used in Kellogg receivers. For use with .0005 condens .a.

Cut. No. 3803

Your 75c

## R.C.A. Neutralizing Condensers



Bakelite condenser with mounting holes. Used as R.F. compensator detector trimmer and plate coupling condenser. Cat. No. 3803

Your Price 12c

## R.F. CHOKE



Rakelite one 50 millioner bake. Stagger would be adminized of buted capacity. Cat. No. 2804

Price 350

## NUMBERED KNOBS



Produtt) ( talente - trobs number d 1 to 10. For both Argo moles, etc. Set week rbaft last

Cat. No. 3300 Your AC each

#### FULL VISION DIAL



An attractive universal Full Vision vernier dial; will accommodate both '4" and '8" tuning "and s tuning
rung shafts. Removable
fluminated dial light.
bracket. Never slip friction drive. Shaft takes
knob. Beautifully
colored celluloid scale.

Complete with exquisitely designed escutcheon plate.

Cat. No. 3808

Your Price 95c

## Freshman Basket Weave Coils



Set of 3 For boods mid con denser.

Cat. No. 3805

Your 30c Per Set Price 30c of 3

## FREED DIAL SCALE



translucent dial scale for Freed & Earl receivers Numbered 0 100 and 550-

No. 3807 Your 15c \$1.65 per duz

## Microphone Button



With this micro With this minum phone bastlen, a gleat many experiments and be spined and sensitive device that and be used as a unimplement to a verification of the sensitive device that and be used as a unimplement by the control of the verification of the sensitive to the sensitive the sensitive to the sensitive to

graph music speech, ste Lirecuons furnished to make some twenty-five experimenta.

Cat. No. 8509

Your 65c



#### Microphone Button Transformer

or any introduction of the will be a selected as a selecte

Cat. No. 8810

Your 75c



Amplex Lavite Resistors (3 Watts) Resistors (3 Watts) a very securate resistor with plus or minus 25 securacy to me a complete with heavy snap mounting tips 48,000 ohm size. I sed whetever a very act that resistor capable of anytine heavy current without change of resistance value is needed. Laying the selection are non-inductive compact and easily mounted. The apecial mounting tips provide sood contact at all times (Cat. No. 3825).

Your 25c ea.

## HONEYCOMB COILS



Duo-lateral wound. niehed and unmo ound. Varcolla.

Cat. No. Turns Your Price 46.85 .46 .50 .59 .69 200 .85 .95 1.16

Cat. No. Four Price Turns \$1.80 3820 600 3821 600 1.50 3422 1000 1.75 3823 1500 R.50 8824 2000 8.95



Made by Gene are indispensable and home. Can be dicators, circuit testi. on" indicators, or as "h. home, consuming less t. hour. Available in two ty with mushroom type electroise with tubular electrodes.

Cat. No. 3586. Large Neon Lamp.

Your Price

Oat. No. 3535. Small Noon Lamp.

Your Price

## Microphone Adapter



This handy little device enables you to use a microphone with any radio set. Ideal for testing. Cat. No. 355S. List \$1.00.

Your 50c

Jones Mul



The cable of many purposes. Used by years. For making instantaneous conn. bother and langer of tangled wires. Elin. plug fits into socket only one way. Comple. ridiculously low.

Cat. No. 8538

Your \$1.25 co.

## Trouble Finder and Adapter



and Adapter

A valuable addition to every service man's testing equipment. In stantly adaptable in trouble shooting and making connections to a 4-or 5-prong edulpment by only removing proper circuit link. May be used for connecting phonograph pickups or meters to radio sets or amplifiers. Shpg. wt. 4 ozs. Indicate type wanted—4-or 5-prong.

Cat. No. 2540

Your 95c

## Solderless Tips and Jacks



THE "EVER-SURE" GRIP TIP JACK Single hole mounting Nickeled. Oat No. 3545

The perfect solder less tip plugs. Will fit any tip jack. Nickled. Cas No. 8544

42c Per Dozen

45c Per Dosen

#### Battery Clips



Finest battery clips
ever made. Lead
ooated be prevent
corrosion. Special
springs will last
lifetime. Convenient
screw-terminal connection. Small size
ideal for test lead
clips and for hasty
hook-ups.

Cat. No. 3531

Cat. No. 3531
15 amps
Your 20 for 70c

Cat. No. 3532 50 amps Your 10 for 90c

## Connector Plugs 4 and 5 PRONG



These plurs readily suggest themselves for many uses. Perfect for making external connection of dynamic speaker to receiver. For use in set analyzers to supply voltages to an external time? For use in set analyzers to supply voltages to an external tuner from an amplifier. A strong, durable plug furnished either in 4 or 5 prongs.

Cat. No. 3539
Your 256
Sockets the shore plus

Sockets for either above plugs. Your Price 15c.

## Servicemen's **Impregnating** Compound



The long-awaited addition to shop equipment. It is now possible to use original transformer and condenser cans by melting our the defective units and replace a good, new part with this excellent impregnating compound. Simple to user just heat the handy pail containing the compound and pour off the required quantity. A real buy. 9 lbs to the pail.

Cat No. 383S

Your 75c

## Pentode Tube Adapter



Enjoy the great volume and clarity of the new Pentode power tubes without rewiring your present set. No external connections necessary with this handy little adapter. Insert Pentode into the adapter and then both into your present 245 power stage. The added results will more than pay for the cost of this well constructed unit.

Cat. No. 3285
Your C1 10

Your \$1.20

## Pickup A



Simple to use. Easy to conner Phono pickups hooked up in jiffy. Several styles. Grid to filanient or cathode; or breaking into plate circuit. Has other uses, like tone control adapter.

otc. Your Price 29c

## Pocket Pen-lite



The perfect flashlight for radio service men, because of its size. Small and compact, it clips into the pocket as a fountain pen. Safety switch, an added feature, permits steady or intermittent lighting. Complete with battery and bulb. Shpg. wt. 1 b. Cat. No. 3534. List \$1.00.

Your Price 29c

## 17-Wire Cable

A splendid silk-covered cable for many purpose. Made up of 17 stranded rubber and silk covered wires, all differently colored. Can be used for remote control devices, multi-speaker installations, etc. At this price you should keep a supply on hand Cat, Na. 3530

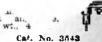
Your 12c per foot

#### Bus Bar

Round hard-drawn No. 14 copper busbar. Well tinned for easy soldering, 18" lengths. Cat. No. 3527

2 lengths Price 5c

60 lengths Your Price



Your Price 15c

### Detecto-lite



Tests any current from 110 to 550 volts and will indicate voltage and polarity, whether A.C. or D.C. It will show how many cycles and indicate line and ground wires. Sturdily constructed from bakelite. Slips into the pocket. An absolute necessity for radio service men, electricians, building superintendents, etc. Fool-proof. Shog. wt. 1 lb. 7529

Cat. No. 3529

Your Price 99c

## Rubber Sleeving

Strong, flexible, rubber tubing which can be made to serve different purposes. Ideal in automobile radio installations for covering cables and wiring to make them waterproof. Also as added insulation precaution. Cat. No. 3526

Your 5c per Price 5c foot

## Junior Test Leads



A pair of genuine R.C.A. leads colored for polarity. Equipped with phone tips at one end the other solder-dipped. Hundreds of uses will suggest themselves when you see these leads. Get several dozen pair at this special price. 5 feet long.

(Dat. No. 3528

Your Price 23c per pair

## SPEAKER

.s. utauto
ker ns
ful and
Measures
nting lugs
the unit are
rge tungsten
sis. Complete

TRICE \$4.50

on YOUR \$3.90

Carlson YOUR \$1.90



## JLYTIC SERS

k) electrolytic condensers. Will mount in very little a, because of higher capacity.

	Cat.	Cap.	Peak Volts	Anodes	Your Price
	3915	18	500	2	81.65
.50	3916	24	500	3	1.95
.60	3917	32	500	4	2,35
.90	3918	36	500	а	2.65
1.85	3919	53	500	4	8.35
.50	3920	54	800	4	8.35

For By-Pa .ng Blag Resistors in Pentods Amplifiers

Cat. No. 3921 8922 Cap. Mfd. 5 mfd. 10 mfd.

i.

Peak Volts Anodes You 25 25

## General Electric Phonograph Motor



A quick starting heavy duty phonograph motor. Product of General Electric. Equipped with a 12-inch turnable and automatic speed control. Powerful torque. Measures 4 ½7 inches. For 110 volt. 50 to 60 cycle A.C. operation only.

Cat. No. 3908

Your \$9.50

## Zenith A. C. Power Transformer

16

Replacement for Zenith 33, 33-X, 34, 35, 35-Z Delivers 300 volts cach side of center tap. Also supplies 5 volts at 3 amperes for two 171-A's. 5 volts at 2 amperes for 280, and 2½ volts winding for seven 224's or 227 tubes.



Cat. No. 8923

Your \$1.95

Peerless Courier No. 22

Voltage Divider

## Peerless Audio Transformers



A high-grade moisture proof transformer. Special iron core. Tinned lugs for easy solder-ince. Flat amplification curve. All stage ratio.

Cat. No. 8985

Your 65c

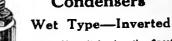
## 2,500-Ohm Filter Choke



This choke is designed to be used in place of the dynamic speaker field. By inserting this choke you can use any speaker with your receiver without impairing the efficiency of the power supply unit. Cat. No. 3926

Your \$1.85

# Flechtheim Superior Electrolytic Condensers



An 8 mfd, unit having the finest electrical characteristics to be used in standard filter circuits where peak voltage is not ever 500 volts D.C. For use in 45 and Pentode circuits which employs a plate transformer delivering up to 875 volts BMS A.C.

Oat, No. 8987

Your 95c

## **Important Notice**

Future issues of our catalog will only be mailed to those who are interested in receiving future bulletins of this type. New catalogs and flyers and notes of special interest will be mailed regularly to you if your name is on our 1932 mailing list. Write and ask to be placed on it now. Address Department 32.

Contains two separate sections of 100 000 and 2,500 ohms. Also following sections in series 3,000, 150,000, 100,000 and 500,000 ohms.

Cat. No. 3924

Your 65c

## ING HEAD



hine will find many a use in the boratory. Precision built throughrings and all steel parts are highly A two step pulley is provided for ag. it is provided with a carefully taper screw on one end. The other s an arbor having a %" capacity tuck. The polishing head comes with suck. The pollshing head comes with wheel, a Carborundum grinding stone, wire cleaning wheel and a piece of couge. This polishing head can be a grinder or as a polisher, to clean it small metal parts. It can also be a horizontal drill press. The polishins in the pressure of the comes complete with buffer wheel, studied with the property of the comes complete with buffer wheel, and wheel and bullet wheel and polished the comes wire brush wheel and bullet wheel whe buffer wheel, wheel and bufgrindstone, wire brush uge. Shpg. wt. 6 lbs.

Your \$2.25

## GOODELL PRATT UTILITY BENCH LATHE



No. 1919. Complete with all Attachments. The Lathe is perhaps the most versatile tool to be found in the experimenters "shop." This size, we have selected as the most convenient for radio work. The Lathe is a product of Goodell-Pratt Co., an assurance of good workmanship. It is substantially constructed throughout. The bed is 12" long and is milled its entire length. The head stock has a spindle with a taper hole in both ends, in which the regular equipment, consisting of a taper thread spindle, saw arbor, 0 to 5/32" capacity check and slotted face plate. fit. The tail stock is adjustable for position and is equipped with screw feed and clamp lock. The rest is adjustable for position and height.

Extreme distance between centers is 3\(\frac{1}{2}\)'. Swing 5". The pulley steps are 1" and 1\(\frac{1}{2}\)' in diameter with \(\frac{1}{2}\)" face. Large step is grooved, so round belt can be used if desired. Frame, tail stock and tee rest finished in red and black enamel. Steel parts are polished. Shpg. wt. 16 lbs.

Your PA OE

Your \$9.85 Price

#### AUTOMAT BENCH .

This is a fine bench drill for general use in the radio shop. It take all round shank drills up to 14". All the working parts of thi machine are clamped to a 10" steel rod of 1/4" diameter, which sets into a black enameled base that takes a bench space of only 4" by 8". The automatic feed is operated by the hand wheel and thumb screw at the top of the steel feed screw. The auto-matic feed will lower the drill and raise it at a the drill and raise it at a rate determined by the cutting speed. The drive shaft is constructed with % "thrust ball bearing.
Gears and pinions are machine cut from solid blanks. The table proper is 2½" square. All iron parts are finished in red and black entant at the parts are polished. A clamp is vided to hold the drill to the table with drilling. Shpg. wt. 6 lbs.

No. 1920.

Your \$2.45 Price

### Lenk Automatic **Blow Torches**



Develors a blast of 1,700° Fabrenheit, and will operate for about three hours on one filling. Uses denatured and commercial alcohol. A detachable shield is provided 10 protect blast from all drafts on outdoor work. Blows itself. Starts in twenty seconds. 7° long by Highly nickel plated. No. 805-30. IJst \$3.00.
Your \$2.06



## Blow Torch

64"x2%". Flame heat 1400". Leak-proof. Uses denatured alcohol. Nozzle cap. Blows ivself. Sbpg. wt. 1 lb. No. 606-66. List \$1.75 Your \$1.20

## Radio Tool Chest



The most necessary and ever needful radio tools are in this kit—should be in every custom set builder's or service man's tool box. And just as useful in your laboratory or workshop. Here are the contents: S and 5 in. screw driver, scriber, reamer, countersink, pliers, center-punch. socket wrench set for hexagon and knurled nuts; and 3 wrenches for hexagon nuts, ranging from 4 to 4. Attractive cardboard case. Shops wt 3 lbs. Your \$1.95

## Aluminum Solder



No. 609. Per 2 oz. strip 21c (17"x3/16") ...

## Diagonal Cutting Pliers



Snips wires off in pleasing man-ner. Shpg. wt. 8 czs.

No. 587-6" long. 587-486. Your 43c No. bo. 588-486. Your 49c

## Klein Pattern Pliers



Shog. wt. 1 to 2 lbs. A89-498.

No. 589 590-498. 8" loog.

Your 55c Your 70c

## Combination Pliers



INSULATED HANDLES! TEST-ED TO 5,000 VOLTS! Com-bines side cutter, wire cutter, flat nose, and gas piler, screw driver and reamer. Correctly hardened and tempered jaws and cutters. First quality. Shpg. wt. 1 to 8 lbs.

No. 584-492. 6" long.

No. 585-492. 7" long.

No. 586-492. 8" long. Price 75c

Your 55c Your 65c

## Telephone Pliers



Long nose, with side cutter. 5½ long. First quality hardened and tempered steel. Shog. Your 20. 39c Price No. 583-484.

#### Wrench Set



Adjusts nuts impossible to reach Adjusts nurs impossible to reach with other larger tools. Fits 14", rg", bg", 's" and 4". An alligator law tool included sod sizes. Shps. wt 8 ozs. Note cass.

No. 602-2034. Price 23c

#### Reamer



ENLARGES drilled bakelite and wood. holes in Shpg. wt. 8 023. No. 578.

Your 21c

## Socket Wrench Set

.....

The 5 sockets (¼", 4", 8", 4", 4") snap on to metal shank—grip hex nuts firmly. An old favorite. Shpg. wt. 1 lb. No. 579.

Your Price 55c

## Scriber

Cas. No. 604. Your 23c

## Electric Soldering Iron



Maximum performance at a minimum cost! Long life nichrome wire heating element. Best materials throughout. Shpg. wt. 1

lb. No. 610. List \$2.50.

Your 87c Extra Tip, 15c each

## Rosin-Core Solder

Simplifies soldering — assures perfect electrical and mechanical joint. No. 607. 4 oz. can.

Your 17c No. 608. Une Pound Spool.

Your Price 63c

## Perfect Grinders Cat. No. 3378.



Your 99c 3370. Cat. No. 33 5" Wheel Your \$1.47 Cat. No. 3380.

Your \$2.98

#### Bench Vises

Carefully machin-ed and polished jaws. Unusually sturdy. One ns wide, and clamps on any place. Steel screw, two steel guilding rods.



Cat. No. 3382. 2½" wine-Your \$1.35 Price \$1.35 Oat. No. 3381. 3½" wide jaw. Your Price \$2.25

Jawset



anel bladekeyhole blade. rectly hardened, iled. Shpg. wt.

3554 59c

on Square



rule, try-square or 45°. Divided into %ths, on both sides. machined. Shps. wt.

Cat. No. 3946 Your 78c

### vry-Use Electric 10tor Attachment



Holds grindstone, buffs, saws, drills, wire scratch brushes, etc., for grinding tools and cutlery, polishing and buffing of all kinds, drilling holes, preparing metals for welding. Simply fastens with seasonews directly to shaft of your small motor in a jiffy. Made of tighest grade cold rolled steel, with machined flances, and fitted with three jaw 0 to 9/32" drill chuck. Comes in five sizes to fit 14". " " " " " " " " and %" motor shafts. Be sure to state size of your motor shaft when ordering.

Cat. No. 3558

Your Price 98c

## Automatic Push-Drill



Nickel plated, fully hardened steel. Extra heavy spring, released by knob at top of handle by simple turn. Handle contains 8 drill points from 1/16" to 11/64", each in separate compartment. 8hpg. wt. 3 lbs.

Cat. No. 8559

Your \$1.56

## Carbon Steel Twist Drill Sets



Consists of one of each drill: 1/16" 5/64" 3/32", 7/64" 1/8", 9/64", 5/32", 11/64", 3/16", Cat. No. 3561
Your Price

35c

Consists of one drill each size from No. 1 to No. 60. Wire gauge. 60 drills in all. Shogs. wt. 1 lb. Cat. No. 35622

Your \$1.95

of the above drill sets are put in conveniently folded paper containers.

## dy rool Kit



Just the kit for those installation jobs. Contains 7 pieces. Natural finish. Drop forged tools. Contains: 5" Serew Driver, 6" Comb Piler, 9" Wrench, 10 oz. B.P. Hammer, %" Cold Chisel, 25 D.E. Wrench, 3%" Punch.

Shpg. Wt. 7 lbs.
Cat. No. 3555

Your \$1.50

In Lots of Six, \$8.35

## Handrill



Solid disc wheel. 8 jaw opens to 12". Very carefully machined. 1112" long. Shpg. wt. 3 lbs. chuck

Your 89c

## Angle Wrenches



Drop forged steel, correctly hardened and tempered, justing jaw mecha 2 to 5 lbs. i tempered. Note bolt ad-iaw mechanism. Shpg. wt.

6" long. Price 41c Your Cat. No. 3563 8" long.

Cat. No. Your 3564 Price 10" long.

Your Cat. No. 79c 3568 Price

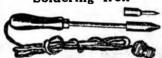
#### Countersink



Fits all hand and breast drills. Size %". Shpg. wt. 4 ozs.

Your Price 19c Cat. No. 8560

## Heavy Duty Electric Soldering Iron



Uses famous long life nichrome heating element. Perfectly bal-anced. Cool handle. Long copper tip. Cat. No. 8566

List \$2.50 Your \$1.15 Extra Tips, 15c each

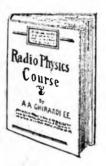
SERI SET L TECHI STUDE EXPERIME.

Can Afford to Be Without th.

# "RADIO PHYSICS COURSE"

RY

ALFRED A. GHIRARDI, B.S.E.E.



Associate Editor "Radio Magazine. In charge of ment of Radio Comm and Applied Electricity in York Technical Pres School. Formerly Associ tor "Radio Engineering." Mechanics." Former Te Consultant, Pilot Radio and Corp.

# FREE!

This \$2.50 book, one of the best ever writt one of the finest texts on radio. Used as book in the R.C.A. Institutes, and many throughout the country. We are giving this away free to our customers with every order merchandise amounting to \$15.00 or more. is your opportunity to get this \$2.50 book lutely free, the first time an offer like this has been made.

## Rauland Ultra Violet Lamp

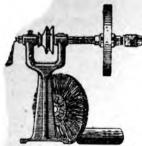


This lamp is designed for home use. The perfected Arc control consists of a single exposed lever. It will operate on A.C. or D.C. Special safety construction prevents any chance of burning. Costs no more to operate than average electrical appliance. Neat, trim, well-proportioned. Finished in hard baked enamel of crackle design-silver and grey in color. The Rauland health lamp will relieve colds and

respiratory disorders; kills infections and every known bacteria; enriches the blood with calcium, iron and phosphorus, prevents rickets, and is a good tonic for nervous disorders. The Health lamp comes complete with special protective goggles, six type A (sunshine) carbons, handy tongs for removing carbons, wire screen for reflector, instruction book and treatment book. Shpg. wt., 30 lbs. Cat. No. 3567.

Table Model. Shpg. wt. 15 lbs. List Price \$29.50. Your Price.....

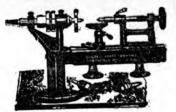
Extra Sun Ray Carbons, per doz. Your Price.....



thine will find many a use in the boratory. Precision built throughrings and all steel parts are highly A two step pulley is provided for A two step pulley is provided for ng. It is provided with a carefully taper screw on one end. The other s an arbor having a %" capacity nuck. The polishing head comes with wheel, a Carborundum grinding stone, wire cleaning wheel and a piece of rouge. This polishing head can be a grinder or as a polisher, to clean if small metal parts. It can also be a horizontal drill press. The polishis finished in red enamel and polished Comes complete with buffer wheel, grindstone, wire brush wheel and bufuge. Shpg. wt. 6 lbs.

Complete with all Attachments Your \$2.25

## GOODELL PRATT UTILITY BENCH LATHE



No. 1919. Complete with all Attachments. The Lathe is perhaps the most versatile tool to be found in the experimenters "shop." This size, we have selected as the most convenient for radio work. The Lathe is a product of Goodell-Pratt Co., an assurance of good workmanship. It is substantially constructed throughout. The bed is 12" long and is milled its entire length. The head stock has a spindle with a taper hole in both ends. In which the regular equipment, consisting of a taper thread spindle, saw arbor, 0 to 5/32" capacity check and slotted face plate. Ift. The tail stock is adjustable for position and is equipped with screw feed and clamp lock. The rest is adjustable for position and height.

Extreme distance between centers is 3\(\frac{1}{2}\). Extreme distance between centers and 1\(\frac{1}{2}\) and 1\(\frac{1}{2}\) in diameter with \(\frac{1}{2}\)" face. Large step is grooved, so round belt can be used if desired. Frame, tail stock and '\(\frac{1}{2}\) energy in red and black enamel. Steel parts are pollshed. Shpg. Wt. 16 lbs.

Your \$9.85 Price

### AUTOMAT BENCH .

a fine bench drill for general use in the radio shop. It take all round shank drills up to v. All the working parts of thi machine are clamped to a 10" steel rod of 1/3" diameter, which sets into a black enameled base that takes a bench space of only 4" by 8". The automatic feed is operated by the hand wheel and thumb screw at the top of the steel feed screw. The auto-matic feed will lower the drill and raise it at a rate determined by the cutting speed. The drive shaft is constructed with %" thrust ball because shaft is constructed with %" thrust ball bearing.
Gears and pinions are machine cut from solid blanks. The table proper is 2 %" square. All iron pars are finished in red and black enall steel parts are polished. A clamp is vided to hold the drill to the table drilling. Shpg. wt. 6 lbs. No. 1920.

d. A clamp is to the table wh

Your \$2.45 Price

## Lenk Automatic Blow Torches





## Blow Torch

1 Orch
1400°. Leak proof.
Uses denatured alcohol.
Nozzle cap. Blows itself. Shor. wt. 1 lb.
No. 604-66. List \$1.78
Price \$1.20

## Radio Tool Chest



The most necessary and ever needful radio tools are in this kit—should be in every custom set builder's or service man's tool box. And just as useful in your laboratory or workshop. Here are the contents: 3 and 5 in. screw driver, scriber, reamer, countersink, pilers, center-punch, socket wrench set for haxagon and knurled nuts; and 3 wrenches for hexagon nuts, ranging from to the cardboard case. Shpg. wt 3 lbs. Your \$1.05.

## Aluminum Solder



No. 609. Per 2 oz. etrlp 21c

## Diagonal Cutting Pliers.



Snips wires off in pleasing man-ner. Shug, wt. 8 ozs.

Your 43c No. 587 6" long. 587-486. 588-486. Your 49c long.

## Klein Pattern Pliers



Shpg. wt. 1 to 2 lbs. 589-498.

No. Do. No. 590-498. 8" look.

Your 55c Your 70c

Your 55c

## Combination Pliers



INSULATED HANDLES! ED TO 5,000 VOLTS! bines side cutter, wire cutter, flat nose, and gas piler, screw driver and reamer. Correctly hardened and tempered jaws and cutters. First quality. Shpg. wt. 1 to 8 lbs. cutter,

No. 584-492. 6" long. No. 585-492.

Your 65c No. 586-492. 8" long. Your 75c

## Telephone Pliers

DU.



Long nose, with side cutter. 5½ long. First quality hardened and tempered steel. Shuk. 8 ozs. Your 200 Your 39c No. 583-484.

## Wrench Set



with other larger tools. An alligator jaw tool included fits add sizes. Shpr. wt 8 028. Note Your 23c

#### Reamer



ENLARGES drilled bakelite and wood. 8 028. No. 578.

Your 21c

### Socket Wrench Set

## 00000

The 5 sockets (¼", ¼", ¼", ¼", ¼", ½") snap on to metal shank—grip hex. nuts firmly. An old favorte. Shus. wt. 1 lb. No. 579.

Your 55c

#### Scriber

Oak No. 604. Price 23c

### Electric Soldering Iron



Maximum performance at a mini-mum cost! Long life nichrome wire heating element. Best ma-terials throughout. Shog. wt. I

No. 610. List \$2.50.

Your 07C Price 07C Extra Tip. 15c each

## Rosin-Core Solder

Simplifies soldering — assures perfect electrical and mechanical joint. No. 607. 4 oz. can.

Your Price 17c No. 608. One Pound Spool.

Your 63c Price

# Perfect Grinders



Cat. No. 3378.

4" Wheel

Your 99c Cat. No. 3370. Your \$1.47 Cat. No. 3380.

Your \$2.98

#### Bench Vises

Carefully machined and jaws. Unusually sturdy, Opens wide, and clamps on any place. Steel screw, two steel guilding rade.



Vour Price \$1.35

31/2" Vour \$2.25 wide jaw.