

**SEARS 1940**  
**RADIO AMATEUR**  
**TEST EQUIPMENT**  
**SOUND SYSTEMS**  
**CATALOG**  
**SEARS, ROEBUCK AND CO.**



# IT PAYS TO BUY FROM SEARS

**Because your purchase is backed by 54 years of reliable service.**

Sears, Roebuck and Co. guarantee to save you money, to satisfy you perfectly. If you are not pleased with any article purchased from us, we want it returned at our expense. Then, at your option, we will either exchange it for other merchandise or refund your money, including all transportation charges. We know of no stronger or fairer form of guarantee in all the world.

**Because Sears Easy Payment Plan** permits you to use and enjoy the articles you want while paying for them in convenient monthly installments. All your dealings are made through Sears, Roebuck and Co., and your requests are met with friendly, courteous consideration. Complete instructions, telling how to use this Easy Payment Plan, are shown directly below with a table of terms. This is the modern way to better buying.

**Because our selection is complete!** Sears offer you not only the best sellers, but the hard to get items as well. High quality, guaranteed lines that you know are best . . . lines such as National, Hallicrafters, Hammarlund, RCA, Supreme, Cardwell, Stancor, Bliley, Barker and Williamson, and many others. Also, there is Sears own Silvertone line of high quality Public Address equipment, at prices far lower than ever before. Again Sears prove that the best costs less! You're sure of quality—and savings—at Sears.

**Because you can save on shipping charges.** Although the merchandise in this catalog is shipped from Chicago, you pay the shipping charges only from our nearest Mail Order House. There are ten of these Houses scattered throughout the United States, and one near enough to make your shipping charges unusually reasonable. This additional saving often amounts to several dollars on average-weight or heavy items.

## Sears Easy Payment Plan

Millions of Sears customers have found that Sears Easy Payment Plan is an easy, practical way to buy the things they need. It makes it possible to get the equipment you need without disturbing your savings, and to buy goods of better quality than might be possible if limited to the amount of cash available. Your order need total only \$10 or more. Answer the simple questions on the order blank and refer to the table of terms at right for the deposit to send in with your order and the amount payable monthly.

### Parcel Post Rates

Packages weighing up to 70 pounds can be carried by Parcel Post in all zones. If you are not sure which Parcel Post Zone you are in, ask your carrier or postmaster.

2 ounces or less	1½c
3 or 4 ounces	3c
5 or 6 ounces	4½c
7 or 8 ounces	6c

Shpg. Wt.	Local Zone	Zones 1 & 2	Zone 3	Zone 4
1 lb.	7c	8c	9c	10c
2 lbs.	8c	10c	11c	14c
3 lbs.	8c	11c	13c	17c
4 lbs.	9c	12c	15c	21c
5 lbs.	9c	13c	17c	24c
6 lbs.	10c	14c	19c	28c
7 lbs.	10c	15c	21c	31c
8 lbs.	11c	16c	23c	35c
9 lbs.	11c	17c	25c	38c
10 lbs.	12c	18c	27c	42c
11 lbs.	12c	19c	29c	45c
12 lbs.	13c	21c	31c	49c
13 lbs.	13c	22c	33c	52c
14 lbs.	14c	23c	35c	56c
15 lbs.	14c	24c	37c	59c
16 lbs.	15c	25c	39c	63c
17 lbs.	15c	26c	41c	66c
18 lbs.	16c	27c	43c	70c
19 lbs.	16c	28c	45c	73c
20 lbs.	17c	29c	47c	77c
30 lbs.	22c	40c	67c	\$1.12
40 lbs.	27c	51c	87c	1.47
50 lbs.	32c	62c	\$1.07	1.82
60 lbs.	37c	73c	1.27	2.17
70 lbs.	42c	84c	1.47	2.52

### How to Order

Select the articles you want from this catalog and write them down on one of our order blanks or any piece of paper. Put down the catalog number, quantity desired, the name of each article and the price.

#### Send EASY PAYMENT ORDERS to

Sears, Roebuck and Co.  
Chicago, Philadelphia, Boston, Minneapolis, Kansas City, Atlanta, Memphis, Dallas, Seattle, or Los Angeles—whichever is nearest you.

#### Send CASH ORDERS direct to Chicago.

Merchandise will be shipped from Chicago, but you pay transportation charges only from your nearest Sears Mail Order House.

Be sure to include additional money in your remittance to pay postage as charges for parcel post shipments must be paid in advance. We always return every penny you send over actual postage required to cover shipping charges from your nearest Sears Mail Order House.

For ordering merchandise on Easy Payments, see instructions above under Sears Easy Payment Plan.

Sears prices are so low that should the Federal Government or any State increase by taxes, or otherwise, the cost or selling price of any merchandise listed in this catalog, we reserve the right to add any such increased cost to prices in this book.

### Table of Terms

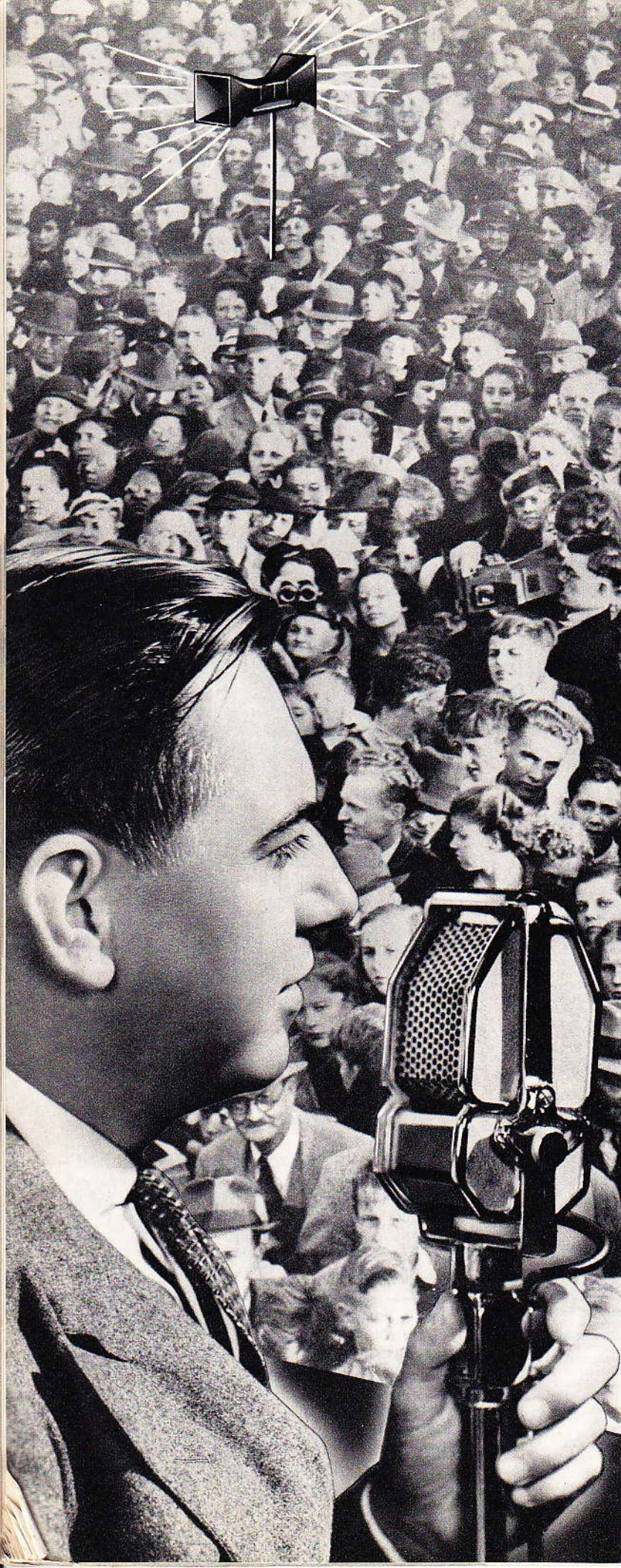
If Cash Price of Order Amounts to	We Will Add as Carrying Charge	All You Need to Send With Order is	Amount Payable Monthly
\$10.00 to \$11.00	\$1.00		
11.01 to 12.00	1.00		
12.01 to 13.00	1.05		
13.01 to 14.00	1.15	\$2.00	\$2.00
14.01 to 15.00	1.25		
15.01 to 16.00	1.35		
16.01 to 17.00	1.45		
17.01 to 18.00	1.50		
18.01 to 19.00	1.60		
19.01 to 20.00	1.70	\$2.50	\$3.00
20.01 to 21.00	1.80		
21.01 to 22.00	1.90		
22.01 to 24.00	2.00		
24.01 to 26.00	2.20	\$3.00	\$4.00
26.01 to 28.00	2.40		
28.01 to 30.00	2.60		
30.01 to 32.00	2.70		
32.01 to 34.00	2.90		
34.01 to 36.00	3.10	\$4.00	\$5.00
36.01 to 38.00	3.30		
38.01 to 40.00	3.50		
40.01 to 42.50	3.65		
42.51 to 45.00	3.90		
45.01 to 47.50	4.15		
47.51 to 50.00	4.40	\$5.00	\$5.00
50.01 to 52.50	4.65		
52.51 to 55.00	4.90		
55.01 to 57.50	5.15		
57.51 to 60.00	5.30		
60.01 to 65.00	5.65	\$6.00	\$6.00
65.01 to 70.00	6.15		
70.01 to 75.00	6.55		
75.01 to 80.00	7.05	\$7.00	\$7.00
80.01 to 85.00	7.55		
85.01 to 90.00	7.95		
90.01 to 95.00	8.45	\$8.00	\$8.00
95.01 to 100.00	8.95		
100.01 to 110.00	9.50		
110.01 to 120.00	10.50	\$10.00	\$9.00
120.01 to 130.00	11.50		
130.01 to 140.00	12.25		
140.01 to 150.00	13.25	\$12.50	\$10.00
150.01 to 160.00	14.25		
160.01 to 170.00	15.00	\$15.00	\$11.00
170.01 to 180.00	16.00		
180.01 to 190.00	16.70	\$18.00	\$12.00
190.01 to 200.00	17.70		
200.01 to 212.50	18.40	\$22.50	\$13.00
212.51 to 225.00	19.65		
225.01 to 237.50	20.65	\$25.00	\$14.00
237.51 to 250.00	21.90		
250.01 to 262.50	22.90	\$27.50	\$15.00
262.51 to 275.00	24.15		
275.01 to 287.50	25.15	\$30.00	\$16.00
287.51 to 300.00	26.40		

Write for Terms on Purchases Over \$300

# INDEX

Amateur Books	34, 35
Amperite Microphones	50
Amplifiers	36-47
Analizers	32, 33
Antenna Equipment	32, 33
Astatic Microphones	60
Automatic Record Changers	59
Baffles	63
Barker & Williamson Coils	16, 17
Beam Antennas	32, 33
Bliley Crystals	34, 35
Books	34, 35
Brush Microphones	61
Cabinets	31
Cables, Microphone	32
Cables, Speaker	32
Cardwell Condensers	20
Carrying Cases	59, 63
Cement	30
Chassis Bases	30
Chime Records	58
Chokes, Audio	27
Chokes, R.F.	17, 19
Chokes, Transmitting	17, 25, 27
Clock	23
Code Practice Sets	15, 18
Coils, Receiving	17, 19
Coils, Transmitting	16, 17
Coil Forms	17
Condensers, Fixed	24
Condensers, Variable	19-22
Crystal Holder	14
Crystals	14
Crystal Sets	19
Dials	23
Dummy Antenna	25
Dynamic Speakers	62
Easy Payment Plan	2
Elmac Tubes	13
Exciter	11, 12
Frequency Monitor	8, 18
Grid Caps	13, 29
Guitar Amplifiers	64
Head Phones	15
How to Order	2
How to Order Sound Systems	48, 49
I.F. Transformers	18
Intercommunications Systems	19
Insulators	28
Jensen Speakers	62
Jacks	16, 17, 29
Keys	15
Knobs	23
Loud Speakers	62, 63
Meters	17
Microphones	19, 60, 61
Mobile Sound Systems	50-56
Modulator	11
Name Plates	23
Neutralizers	20-22
Oscilloscopes	38, 41
Panels	31
Parcel Post Rates	2
Phonographs	55, 58
Phonograph Parts	58, 59
Phones	15
Pickups	59
Pliers	33
Plugs	29, 61
Portable Amplifiers	50-55
Presto Recorders	55
Projectors, Speakers	62, 63
Public Address Equipment	48-64
Racks and Panels	31
Radio Receivers	3-9, 18, 19
Records, Blank	58
Records, Chime	58
Record Changers	59
Record Players	55, 58
Recording Equipment	55, 58, 59
Relays	15
Remote Controls	53
Resistors	25
Rider Books	34, 35
Scratch Filter	58
Screwdrivers	33
Screws	28
Shields	30
Signal Generators	36-42, 44-47
Signal Shifter	8
Sockets	30
Soldering Irons	33
Sound Equipment	48-64
Speakers	62, 63
Speech Amplifier	11
Stancor Transformers	26, 27
Stands, Microphone	60
Switches	29
Television Kits	8
Test Equipment	36-47
Test Prods	29
Tools	29, 33
Transcription Reproducers	55
Transformers	18, 26, 27
Transmitting Chokes	17, 25
Transmitting Tubes	12, 13
Transmitters	10, 11, 18
Tubes, Transmitting	12, 13
Variable Condensers	19, 20, 21, 22
Voltmeters	17
Volume Controls	29
Wire	32





# SILVERTONE

**NEW HIGH QUALITY  
IN PUBLIC ADDRESS  
EQUIPMENT PRICED  
TO FIT ANY PURSE**

The latest triumph of this electrical age. Electricity has given us cheap power to light our houses, toast our bread, sweep our floors, and bring us news and music via our radios. Now by means of the public address system, it is bringing new benefits to practically every walk of life.

## **Public Address Systems at Work**

**In Churches.** The installation of sound equipment is looked upon with favor by a rapidly increasing number of pastors and congregations. It immediately fulfills two definite functions—by improving hearing conditions it lessens the strain upon the hearing mechanism of the parishioner—it also improves speaking conditions for the pastor.

**In Schools.** Too frequently a combination of poor auditorium acoustics and childish voices seriously curtail the enjoyment of school plays and entertainments. Sound equipment is the most economical and most dependable aid to comfortable hearing in auditoriums and gymnasiums. Parent-Teacher Associations are glad to co-operate when the situation is called to their attention and a single entertainment usually raises enough money to cover the moderate cost of an Auditorium System.

**Transportation Terminals.** Airports, Bus Stations, as well as Railroad Depots, are installing sound distribution systems to announce arrivals and departures; to inform passengers of delayed arrivals, as well as to locate patrons.

**Expositions and Amusement Parks** find sound systems of vital importance to a well-conducted enterprise. A centrally controlled system with outlying speakers throughout the grounds permits the park management to inform the patrons of special shows and events, to locate missing children, etc.

**In Dance Orchestras** they have long been recognized as a necessity. Any band which lacks this touch of modernity gets little consideration from either patron or employer.

## **Irresistible Values**

It is for these and hundreds of similar applications that we invite your careful consideration of Silvertone Public Address Equipment. We are confident that we are offering the best values in such apparatus ever offered by any reputable source.

## **Simplicity of Operation**

The rapidly growing use of sound equipment by individuals and organizations without access to technical knowledge of such equipment has made it necessary for our engineers to develop apparatus which can be used by the most inexperienced with complete success. The instructions we furnish with each system are written in such understandable language and are so complete that no one need have the slightest hesitancy concerning his or her ability to obtain professional results immediately. All connecting wires are fitted with polarized plugs which will fit only into the correct sockets. Controls are plainly marked and fused circuits provide full protection against permanent damage through improper use.

## **Easy to Order**

Perhaps you have felt some uncertainty about buying Public Address equipment without benefit of on-location, expert advice. Much material has been written purporting to guide the inexperienced about to make such a purchase. Not only is it bewildering; it is often the worst kind of misinformation—complicating an otherwise elementary procedure. But if you will acquaint yourself with the few very simple fundamentals we point out on the following page, we assure you that you will find a Silvertone public address system is as easy to buy and as easy to use as your radio or your telephone.

**A FEW DOLLARS DOWN**

Page 48



# SOUND SYSTEMS...

**A SIZE FOR EVERY PURPOSE . . . .**  
**CHURCHES . . SCHOOLS . . CLUBS . .**  
**ORCHESTRAS . . BALLROOMS . . ATHLETIC**  
**FIELDS . . POLITICAL GATHERINGS**

Here is about all you have to know to intelligently select and successfully use Silvertone Public Address equipment: A *microphone* is a device which converts sound waves into electrical currents. A public address *amplifier* is an electrical circuit employing radio tubes and transformers to magnify by millions of times these feeble microphone currents, and having volume controls with which to vary the extent of this amplification. A *loud speaker* is a device equipped with a vibrating cone or diaphragm actuated by electrical impulses fed to it by an amplifier. This vibrating cone or diaphragm thus converts electrical impulses into disturbances in the air which are intelligible to the ear as Sound. Essentially a public address system consists of one or more microphones, an amplifier and one or more loud speakers. An electrical phonograph turntable and pickup is also generally included.

## Microphones

Whether or not you will need more than one microphone will depend upon how many voices you intend to employ and the area over which these persons will be distributed. The output (or sensitivity) of all microphones diminishes with the increase in distance between source of sound and microphone. It is obvious therefore that a large choir or a dramatic production on a large stage could not be satisfactorily picked up with a single microphone. On the other hand, a lecturer would need only one.

## Types of Microphones

We have available three types of microphones: Velocity, Dynamic and Crystal. Don't worry about ordering just the proper type. They are all quite satisfactory for day in and day out use. It is well, however, that you know something of their various characteristics. Velocity Microphones are termed "Bi-directional," because they are sensitive to sound waves approaching them from front or rear. They are more satisfactory, therefore, for use in relatively small enclosures where walls, floor, and ceiling are apt to reflect sound back into the microphone from the sides and cause a high pitched howl known technically as "feedback." Crystal and Dynamic Microphones are less-directional. For all practical purposes they respond with good sensitivity to sounds approaching from a wide front angle. They are better therefore for picking up the voices of large groups where feedback is not a problem. Crystal Microphones are slightly better for the higher frequencies which predominate in speech, though frequency response is good enough in any modern microphone to satisfy all ordinary requirements.

## The Amplifier

There are but two fundamental considerations upon which to base your choice of an amplifier: (1) The number of microphones it must accommodate; and (2) the power it must provide for driving its loud speakers. While varying acoustical conditions as well as noise level will influence coverage somewhat, the table given below will furnish a fairly reliable guide to the power in Watts ordinarily required for satisfactory results. In case of doubt get the larger amplifier.

## Concerning the Number of Tubes

Unless one is a technician he must rely pretty much on the integrity of those he is dealing with. This is especially true when he attempts to use the number of tubes contained in an amplifier as a yardstick of its performance. More tubes than are actually required to fulfill the various circuit functions of the amplifier are sometimes used in order to create an impression of special merit. On the other hand, needed tubes are sometimes omitted from the circuit for reasons of economy. Two and three microphones, for instance, can be fed into a single tube but good engineering practice calls for a separate input tube for each channel.

## Speakers and Baffles

For rooms seating 500 people or less one permanent magnet dynamic speaker with 7 to 9 Watts of power will generally be satisfactory. For auditoriums seating 1000 people two such speakers with 14 to 18 Watts of power will be required. For larger auditoriums seating up to 3000 people, 35 Watts of power will give excellent results and two or three speakers will be needed. (Some idea of the audibility of speakers when using various amounts of power can be gleaned from the home radio when turned on full blast. The average 1939 10-tube A.C. radio will deliver a maximum of about 6 Watts.) In all cases where it might otherwise be necessary to overload a speaker or speakers in order to obtain required coverage, it is recommended that an additional speaker be used so as to keep the volume level below the point where distortion is introduced. Moreover, to avoid a concentration of sound in one portion of the room and such low volume that intelligibility is bad in another, it is better practice to place several speakers about the space, operating each at somewhat lower volume than would be satisfactory were only one used—this gives even volume distribution throughout the entire space.

All speakers require some sort of baffle or horn. Baffles distribute the sound over somewhat wider areas while horns, having a narrower beam, provide greater carrying power.

## Amplifier Recommended for Average Installations

No. of Seats Indoors	Room Size, Cubic Ft.	No. of Seats, Outdoors	Outdoor Area to be Reached	Recommended Amplifier
500—1000	90,000	200—600	30,000 sq. ft.	14-watt
1000—2000	200,000	600—1500	60,000 sq. ft.	18-watt
2000—3000	400,000	1500—2500	90,000 sq. ft.	22-watt
3000—5000	500,000	2500—3500	140,000 sq. ft.	35-watt
5000—7000	850,000	4500—5500	250,000 sq. ft.	70-watt

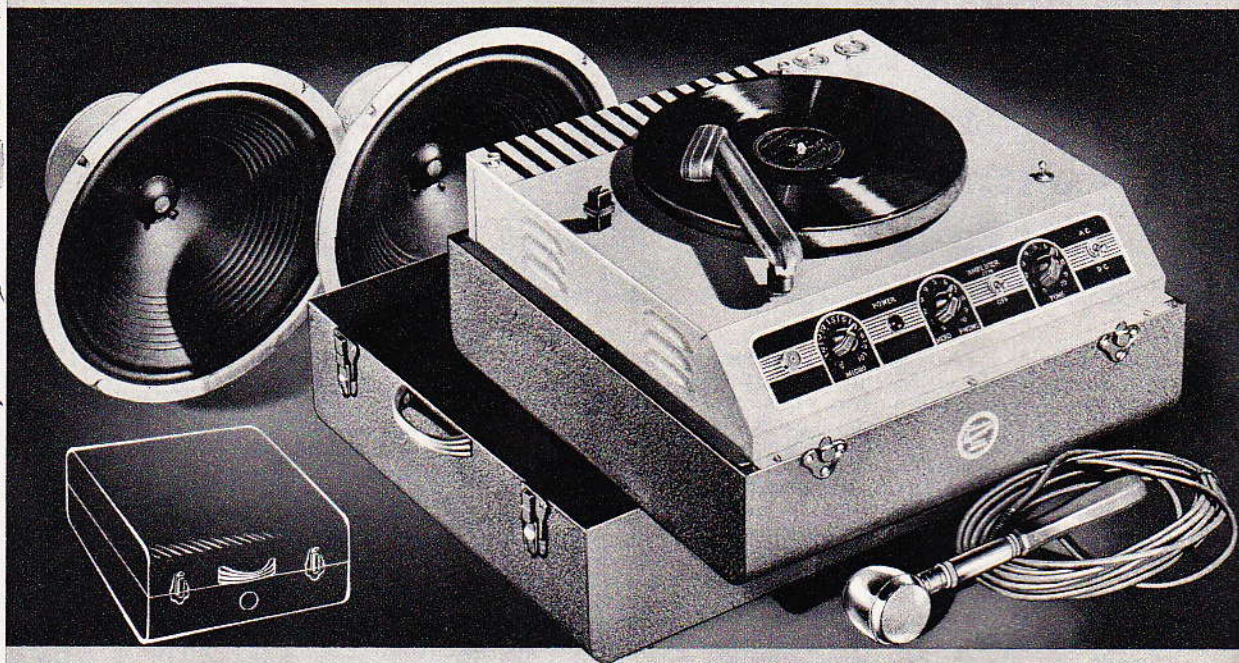
**BUYS THE BEST! . . . . MONTHS TO PAY**

Page 49





# STORAGE BATTERY



## SILVERTONE 20-WATT UNIVERSAL PUBLIC ADDRESS SYSTEM

FOR INDOOR USE

FOR ADVERTISING PURPOSES

The success of radio advertising has proved beyond doubt that people react favorably to auditory appeal. If, therefore, you have something to sell to the public—be it merchandise, service, policy or creed—don't overlook or undervalue the tremendous possibilities of this complete public address system which can be used anywhere—even in a moving automobile!

It operates equally well from regular 110-volt, 60-cycle A.C. or an ordinary 6 volt automobile battery. It delivers 20 watts of pure, distortionless power to its two giant 12-inch speakers and renders voices intelligible and music enjoyable for at least a city block. It will cover indoor gatherings of 2000 people.

When operating from a 6 volt storage battery, this amplifier draws 18 amperes when phonograph is still, or 21 amperes when phonograph is running. Therefore the average automobile generator will keep the battery charged when same is being used in a moving car. Even if no charging is done during operation, about 7 hours service can be had from a fully charged 150 ampere hour battery.

It combines amplifier and phonograph in one compact unit—all steel enclosed and as easy to move about as a suitcase. There are no circuit changes to make when switching from battery to A.C. operation—no power pack to install. All you need do is plug it into the outlet and it's ready for immediate operation. Since it is entirely independent of power lines—if they are not within reach—this system is ideal for evangelists, political campaigners, carnivals and road shows, as well as sound truck operators. Because it will operate on A.C. wherever A.C. is available it is doubly desirable for those who talk or entertain indoors as well as outdoors. To political campaigners this unit is especially recommended. It provides enough power for all ordinary requirements, is simple to operate, and easy to move about. **Specifications:** 6 tube, 20-watt amplifier, with inputs and volume controls for 1 crystal, velocity, or dynamic microphone, and phonograph tone control. Battery-saving stand-by switch which reduces battery drain during intermissions but keeps tube filaments at operating temperature ready for instant service. Phonograph has crystal pickup and 10-inch turntable. Handsome steel carrying case completely encloses unit when it is not in use. Snap clasps permit cover to be easily removed. Two-tone gray

**\$47<sup>50</sup>**

Cash

57 PT 08920

\$5 Down... See Page 2

wrinkle baked-on enamel finish. Ruby bull's-eye on front panel. Microphone and speaker equipment optional.

### Price List

57 PT 08920—20-watt amplifier-phonograph unit and tubes less all other accessories. Shipping weight, 49 pounds. Cash price.....\$47.50

57 PTM 8919—20-watt system including amplifier, phonograph unit, tubes, choice of crystal (C) velocity (D) or dynamic microphone (E) with 25 foot cable, microphone handle, 2-Jensen PM12C speakers with 25-foot cables. Shipping weight, 67 pounds.....\$73.95

57 PT 08918—As above except with 2 square steel speaker baffles (B) in addition. Shipping weight, 121 pounds.....\$88.95

57 PTM 8917—20-watt system same as 57 PTM 8919 except with 2 Jensen PM12B speakers (A) instead of 2 Jensen PM12C speakers. (Substituting these speakers for PM12C speakers is the equivalent of increasing the power output of the amplifier by 250%. Shipping weight, 77 pounds.....\$87.50

57 PTM 8916—As above except with 2 square steel speaker baffles (B) in addition. Shipping weight, 131 pounds.....\$99.95

57 PTM 8915—20-watt system same as 57 PTM 8919 except with 2 Universal SAH driver units and 2 University type LH reflex projectors instead of Jensen PM12C speakers. This is really a deluxe set-up for the sound truck. (See Page 62 for data on University equipment.) Shipping weight, 93 pounds.....\$137.50

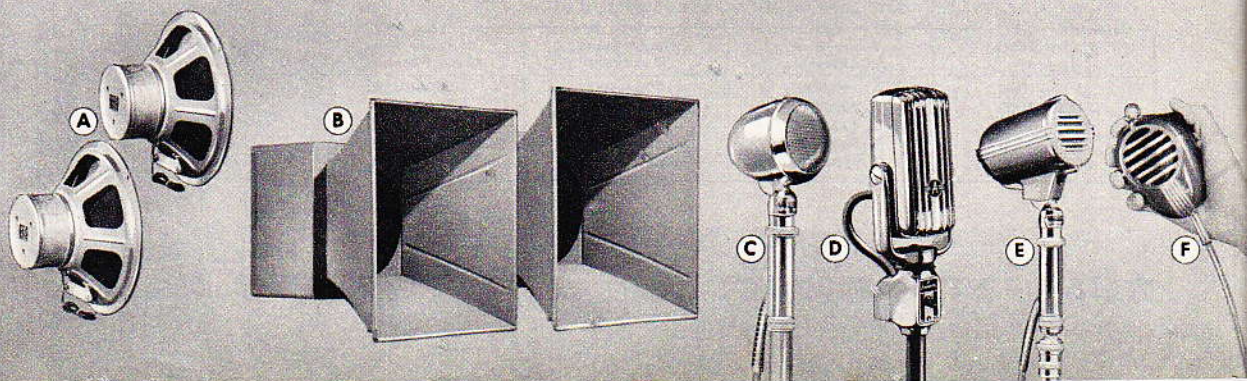
### Shure Military Microphone

Ⓢ If Shure Military Microphone is desired instead of other microphones mentioned, add \$4.00 to the price and so state. Equipment fully licensed by the Electrical Research Products, Inc. under U.S. patents of The American Telephone and Telegraph Co., and Western Electric Co.

This System Gives a Complete Outfit Including Amplifier-Phonograph, Microphone, Speakers and Baffles for Sound Truck or Interior Uses for as Little as \$8.00 Down—See Page 2,

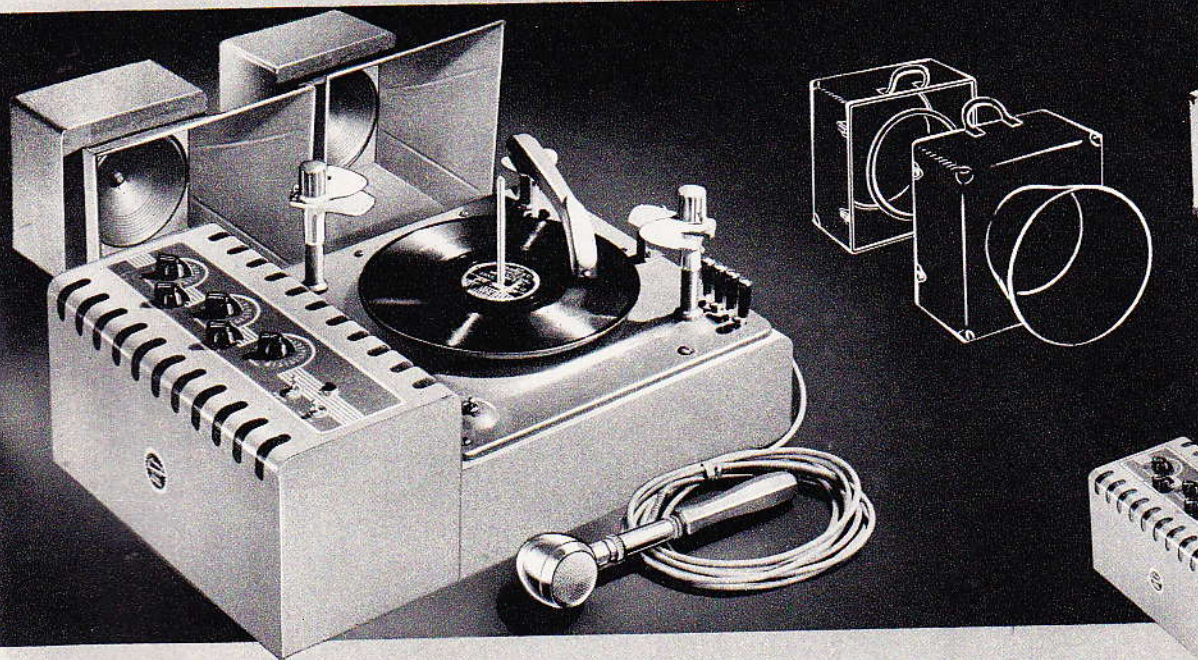
FOR OUTDOOR GATHERINGS

Speakers and microphones at right are supplied with this Silvertone Sound System in various combinations as listed above. Should your requirements call for other types you'll find them on Pages 60 to 63. If you're not sure, write to Sears Personal Service Department in Chicago, stating your problem.





# OR A. C. OPERATED



System can be furnished in two carrying cases, one for amplifier and one for speakers. See lists below at left.



## SILVERTONE 30-WATT DE LUXE SYSTEM WITH AUTOMATIC RECORD CHANGER

You will find that this system has features not available in any comparable apparatus; and these may easily be the very refinements which you require.

This system not only has a phonograph; it has an automatic one! You can put as many as eight 10-inch, or seven 12-inch records on its spindle, turn it on and it will play them through without your having to touch them. This exclusive feature adds immensely to its value and convenience. It works smoothly and positively. Nothing to get jammed, clogged, caught, or out of order. No trouble, no hitch, no waste of time between selections. There are inputs for two microphones with complete mixing and fading facilities for both with phonograph input. High and low tone compensation with continuously variable controls enables you to obtain perfect results under all operating conditions. Output impedances of 3-4, 4-8, 250 and 500 ohms provide for the use of additional speakers (1 to 8) when required. Amplifier and phonograph portions are completely self-contained and, though normally connected rigidly together, can be easily separated when only the amplifier is needed. This is another important and exclusive feature.

Amplifier operates on 110-volt, 60-cycle A.C. or 6-volt storage battery current. You can use it anywhere—indoors or out. Efficient 10-tube circuit gives full 30 watts of power. Reproduces speech and music with theater-equipment quality and naturalness.

No circuit changes required for battery or A.C. operation. No bothersome power pack or auxiliary equipment needed. You change from one to the other in a jiffy. Polarized plugs for all connections. Beautiful two-tone gray wrinkle baked-on enamel body.

57 PT 08930—Amplifier and tubes only. No record playing equipment. Size 11 inches high, 15½ inches wide, 26 inches long. Shipping weight, 30 pounds. Cash Price \$54.25

### Systems with Automatic Record Changer

57 PTM 8929—Amplifier, Automatic Phonograph Unit and Tubes. No speakers or microphone. Shpg. wt., 71 lbs. \$89.95  
57 PTM 8928—Amplifier-Phonograph unit, tubes, 2 PM12H Jensen speakers with 35-foot cables, choice of one crystal (C), velocity (D), or dynamic (E) microphone with 25-foot cable and microphone handle. Shipping weight, 91 lbs. \$124.50

**\$54<sup>25</sup>** Cash

Amplifier and Tubes Only

\$5 Down . . . See Page 2

57 PTM 8927—Same as 57 PTM 8928 except with 2 square steel baffles (No. 57 PTM 7469, Page 63) added. Shipping weight, 145 lbs. \$139.50  
57 PTM 8933—Same as 57 PTM 8927 except with 2 Jensen PA8H speakers and 2 steel baffles No. 57 PTM 7470 (see Page 62) instead of 2 Jensen PM12H speakers. Shipping wt., 181 lbs. \$149.95  
57 PTM 8926—Same as 57 PTM 8928 except with 2 Jensen PM12B speakers instead of 2 Jensen PM12H. Shpg. wt., 94 lbs. Cash Price \$129.95  
57 PTM 8931—Same as 57 PTM 8926 with 2 square steel baffles added. Shpg. wt., 148 lbs. Cash Price \$144.95  
57 PTM 8932—Same as 57 PTM 8927 except with 2 University SAH Driver units and 2 PH reflex projectors instead of Jensen PM12H speakers. Shpg. wt., 110 lbs. Cash Price \$159.95

### Systems with Standard Phonograph Equipment Instead of Automatic Record Changer

57 PT 08950—Otherwise same as 57 PTM 8929. Shpg. wt., 54 lbs. \$68.95  
57 PTM 8951—Otherwise same as 57 PTM 8928. Shpg. wt., 74 lbs. \$103.50  
57 PTM 8952—Otherwise same as 57 PTM 8927. Shpg. wt., 128 pounds. \$118.50  
57 PTM 8953—Otherwise same as 57 PTM 8933. Shpg. wt., 164 lbs. \$128.95  
57 PTM 8954—Otherwise same as 57 PTM 8926. Shpg. wt., 77 lbs. \$108.95  
57 PTM 8955—Otherwise same as 57 PTM 8931. Shpg. wt., 131 lbs. \$123.95  
57 PTM 8956—Otherwise same as 57 PTM 8932. Shpg. wt., 93 lbs. \$138.95  
Amplifier Carrying Case. Artificial leather covered. Reinforced corners. Size 27 x 11½ x 15 in. deep. (This case does not fit 57 PT 08930.) \$9.95  
57 PT 08957—Shpg. wt., 26 lbs. \$9.95  
Speaker Case accommodates two 12-inch speakers. Included are 2 round speaker flares which fasten to outside of case. When not in use they pack neatly within the case. Size 18 x 18 x 19 inches. 57 PT 08958—Shipping weight, 30 lbs. \$16.95  
For Shure Military Microphone (F) see Page 50



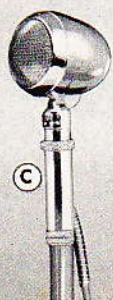
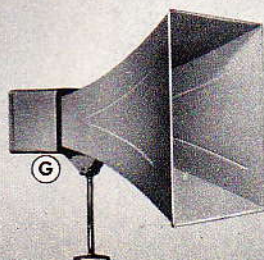
For best average installations we recommend Jensen PM12B speakers with this system. There are undoubtedly more Jensen PM12B Speakers used in Public Address work than any other kind.



For DeLux installations where results are more important than cost we recommend University drivers and projectors with this system. See Page 62.

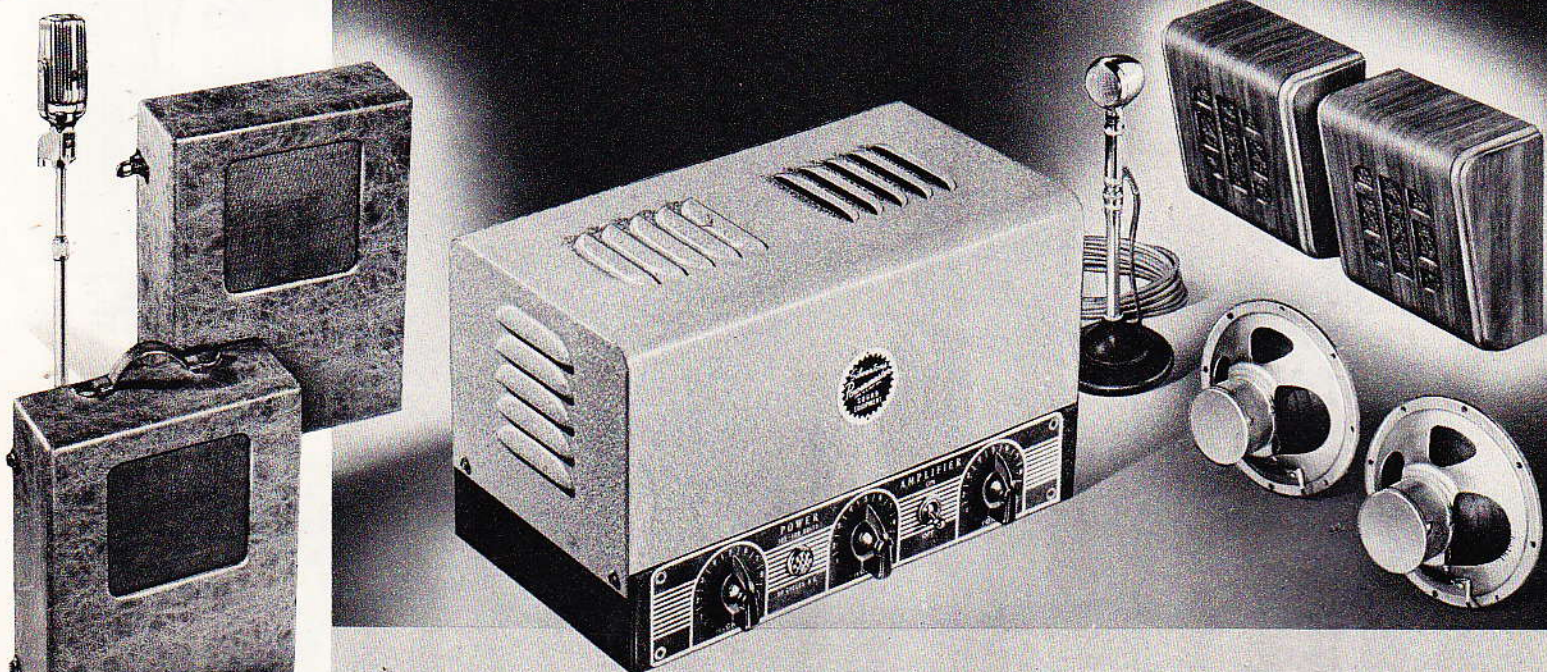


© For extra long reach at moderate cost we recommend Jensen PAH8 Speakers and steel projectors with this unit. See Pages 62 and 63 for complete descriptions of these Units.





# SILVERTONE PORTABLE



## 14-WATT HIGH GAIN SYSTEM

This Silvertone 14-watt Sound System gives you extraordinary power, excellent tone quality and the most modern features at a price unequalled elsewhere. It is proof that you don't have to buy a big amplifier to get a good amplifier ... it is proof that Silvertone leads the field!

Designed by outstanding sound system engineers to give you the best, and longest lasting 14-watt amplifier ... tone quality free from distortion. Built as carefully as an expensive watch, with finest materials obtainable.

The many uses of this instrument are amazing. It performs three major services, listed as follows:

1. You can use it for a phonograph amplifier in either home, school or place of business. When used with suitable phonograph equipment and speaker, it will provide ultra-fine music from ordinary phonograph records at sufficient volume for all normal needs.
2. You can use it for home recording. With apparatus listed on Pages 58 and 59 you can make excellent personal recordings.
3. You can use it for Public Address Work. Its reproduction from either microphone or phonograph pickup will deliver sufficient power for gatherings up to 1000 persons.

**Amplifier Specifications.** 5 tubes: 1-6J7 G, 1-6Y7 G, 2-6V6 G and 1-5V4 G. **Circuit:** Resistance coupled employing 3 stages on the microphone input and 2 stages on the phonograph input. **Inputs:** one crystal, velocity, dynamic, or sound cell microphone and 1 high impedance phonograph. **Output impedances:** 3-4 and 6-8 ohms. **Individual Volume Controls** for microphone and phonograph provide unrestricted mixing and fading of these two when used simultaneously. **Continuous Tone Control** for adjustment of bass or treble response to fit individual requirements. **High sensitivity circuit** eliminates the necessity for "hugging" the microphone to get satisfactory pickup. **Ruby Pilot Lamp** shows through bullseye on front panel when power is on. **Quality Components** used throughout! Aerovox condensers, Centralab controls, Halldorson transformers will never let you down! **Tone Quality** that even hair-splitting engineers call good. **Sturdy auto body steel chassis** and ventilated cover durably and attractively finished in two-tone baked-on gray crackle enamel. Results in a far better looking piece

**\$15<sup>95</sup>**

Cash  
Amplifier and Tubes Only  
\$2 Down ... See Page 2

of apparatus than has ever before been sold at this low price. Size overall of amplifier unit is 6½x6x11 inches long. For 110-volt 60-cycle A.C. Power consumption 85 watts.

**57 PT 08914—14-watt amplifier with 5 tubes.** Shipping weight, 7 pounds. Cash Price. .... \$15.95

**57 PT 08913—(Large view above.)** Complete 14-watt public address system for fixed installations. Consists of amplifier, tubes, 2 Jensen PM8C speakers with 35-foot cables, 2 walnut finished wall baffles for speakers, ban-

quet type Microphone stand (A), and choice of Crystal Microphone (B), Velocity Microphone (C), or Dynamic Microphone (D), each with 25-foot cable. State choice. Microphones described on Page 56. Shipping weight, 45 pounds. .... \$42.50

**57 PT 08912—Same as 57 PT 08913—except** with floor type microphone stand instead of banquet stand. Shpg. wt., 53 lbs. ... \$46.50

**57 PT 08911—Same as 57 PT 08913 less wall baffles.** Shipping weight, 25 pounds. .... \$34.95

**57 PT 08910—Same as 57 PT 08912 less wall baffles.** Shipping weight, 33 pounds. .... \$39.95

**57 PT 08909—(Shown above at left.) Two Speaker Portable System** same as 57 PT 08911 except in artificial leather covered carrying case. Shipping weight, 35 pounds. .... \$41.25

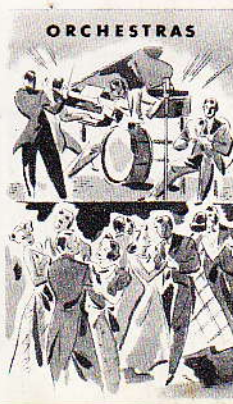
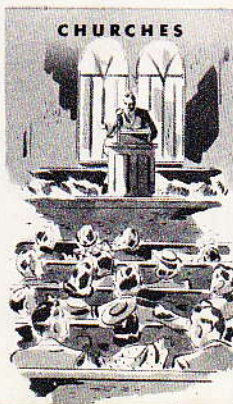
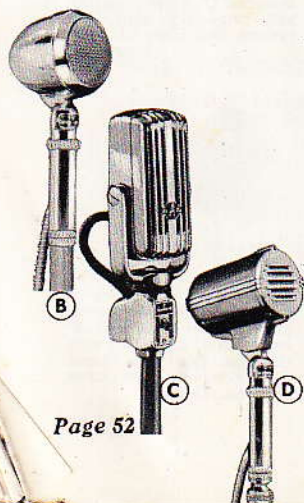
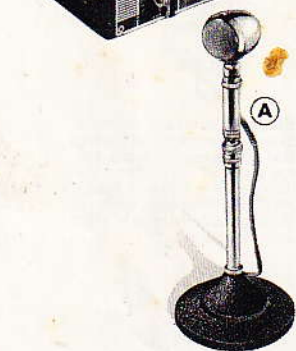
**57 PT 08908—Same as 57 PT 08909 except** with floor type Microphone stand instead of banquet stand. Shpg. wt., 44 lbs. .... \$44.50

**57 PT 08907—Single Speaker Portable Outfit** with Jensen ten-inch PM10C otherwise same as 57 PT 08909. Shipping weight, 28 pounds. .... \$35.50

**57 PT 08906—Single Speaker Portable Outfit** same as 57 PT 08907 except with floor stand instead of banquet stand. Shipping weight, 35 pounds. .... \$39.95

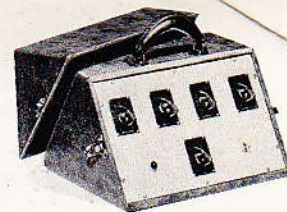
**This equipment is available** at special prices with any speaker or microphone combination selected from this catalog. Write Sears Personal Service Department in Chicago for prices of combination in which you are interested.

Amplifier Licensed by the Electrical Research Products, Inc., under U. S. Patents of the American Telephone and Telegraph Co., and the Western Electric Co.





# SOUND SYSTEMS . . .



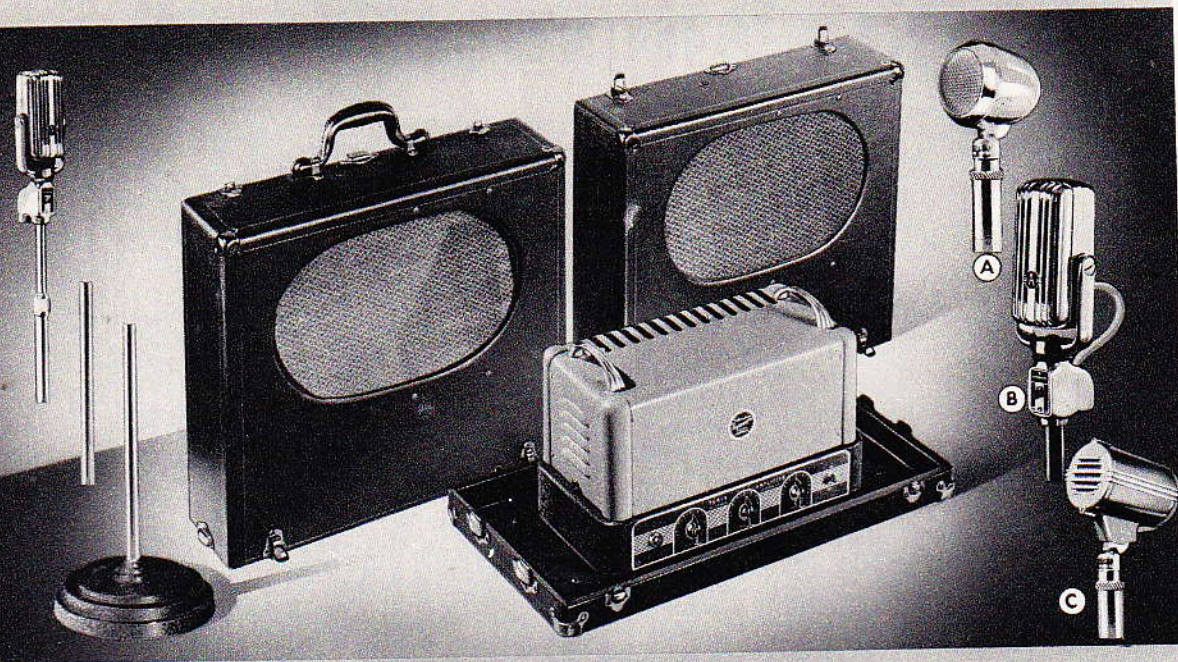
**4-Channel  
Electronic Mixer  
and Pre-Amplifier**

**\$29<sup>95</sup>** Terms  
\$3.00 Down  
See Page 2

The obvious need for a small portable A.C. operated device permitting the use of 4 microphones with small amplifiers, led to the development of this unit. Its seven-tube circuit provides for completely mixing and fading the outputs of 4 crystal, velocity, dynamic or sound cell microphones and feeding their outputs into the regular microphone input of a standard amplifier. Uses 7 tubes.

Makes a 4-channel amplifier one normally equipped to handle but one or two. Also provides the preamplification necessary to run long microphone lines, or to use low level microphones with an amplifier of insufficient gain to do so without preamplification. Four gain controls and one master gain. For 110-volt 60 cycle A.C. Metal case finished in gray baked-on wrinkle enamel.

**57 PT 08993**—Complete with 7 tubes. Shipping wt., 20 lbs. Cash price, \$29.95



## 22-WATT REMOTE CONTROL SYSTEM

Designed for more faithful reproduction, more trouble-free service and ease of operation. Designed for users without technical experience who want a sound system that can be set-up and taken down easily . . . a set that will perform perfectly under a wide variety of conditions. This powerful 22-watt Silvertone meets these needs . . . it has flexibility and portability . . . it is built to give you absolute dependability. Intended for gatherings of 1700 persons or less, with Remote Control an optional feature at small extra cost. Consider these nine important Silvertone features:

1. 8 tubes—an ample number to perform the many circuit functions of the amplifier and handle its output without overloading and consequent distortion.
2. **Remote Control**—so operator can control output from a position in the audience where he may be positive that his amplifier is adjusted to provide the best and most comfortable hearing conditions possible. Optional, see details at right.
3. **Two Input Channels** with plugs for two microphones and one phonograph. The first volume control handles one microphone. The second control is split, the left half controlling one microphone and the right half the phonograph. If a phonograph pickup which has its own volume control (such as our No. 57 PT 08900 shown on Page 58) is used you can mix and fade two microphones with phonograph input.
4. **Four stage high gain circuit** provides needed sensitivity when microphone is situated several feet from the source of sound.
5. **High and Low Tone Compensation** which brings out and strengthens either the "high" or "low" and enables the operator to accurately adjust the system for best results under all operating conditions.
6. **Jeweled Pilot Light** reminds you to turn the power off during intermissions or when performance has ended.
7. **The handsomest, most professional appearing** piece of public address apparatus ever offered at this low price. A rounded corner, set-back, base and ventilated cover beautifully finished in two-tone baked-on wrinkle gray enamel, attractively trimmed with two gleaming chrome plated handles; velvet black and burnished aluminum escutcheon.

**\$34<sup>50</sup>** Cash

Amplifier and Tubes Only  
Less Remote Control

\$4 Down . . . See Page 2

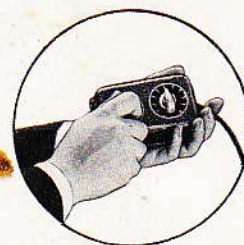
8. **Output Impedances** 3-6, 6-8, 250 and 500 ohms to take care of multiple speaker requirements.
9. **Tone quality that is clear and beautiful.**

Here are a few of the many applications of this equipment: **Traveling Musical Organizations** will find it valuable for sound reinforcement in ninety-nine out of a hundred engagements. For **Political orators** who must often make several speeches each day such an outfit is a godsend.

All but the smallest **Churches** need some sound reinforcement and this is the ideal system for the average congregation. By improving hearing conditions it lessens the vocal strain on the pastor as well as auditory strain on the part of the congregation; hence, permits better attention to the text. **Schools, Colleges and Universities** can make excellent use of it in their dramatic public speaking, and musical activities.

Amplifier is designed for 110 volt 60 cycle A.C. Power consumption, 125 watts. Size, 8x9x14 inches long. Licensed by Electrical Research Products Inc., under U. S. Patents of the American Telephone and Telegraph Co. and the Western Electric Co.

Units below are priced without Remote Control feature.  
**57 PT 08922**—22-watt amplifier and 8 tubes. Shipping weight, 22 pounds. Cash Price. (Remote Control extra). . . . \$34.50  
**57 PT 08923**—22-watt amplifier, 8 tubes, 2 Jensen PM12C (12-inch) speakers with 35-foot cables. Floor type microphone stand, 25-foot mike cable and your choice of one crystal microphone (A), State Velocity Microphone (B) or Dynamic Microphone (C). \$64.95 choice. Shipping weight, 56 pounds. . . . \$73.75  
**57 PTM 8924**—Two speaker portable system. Same as 57 PT 08923 except with 3-piece carrying case. Size 2½x25x15 inches. Artificial leather covered. Leather handle and reinforced corners. Shipping weight, 64 pounds. . . . \$73.75  
**57 PT 08925**—Two channel remote control unit with 50 feet of cable. Described at right. For use with above amplifiers. Shipping weight, 6 pounds. . . . \$5.85  
**Optional Equipment.** This equipment is available at special prices with any speaker or microphone combination selected from this catalog. Write Sears Personal Service Department at Chicago for prices of combination in which you are interested.



**Remote Control  
Unit**

**\$5<sup>85</sup>**

To accommodate those who have no need for remote control, we have quoted the equipment at left without the remote control unit. Since it is an accessory and is not required for the normal operation of these amplifiers it is optional equipment. Silvertone 22 watt, 35 watt, and 70 watt A.C. Amplifiers described on Pages 53, 54, and 56 of this catalog have provisions for this Remote Control unit. It plugs into the rear side of the chassis and may be either used or disconnected depending upon requirements.

It provides control of two channels from any desired point within the enclosure served by the system and is of great value in adjusting volume level for best results for the various speakers or entertainers who may appear on any single program. It eliminates the difficulty of obtaining complete audibility without introducing feedback. Supplied with 50 feet of cable but longer lengths are available if required.

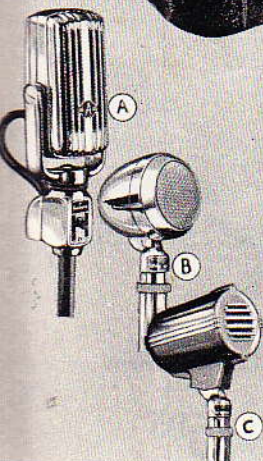
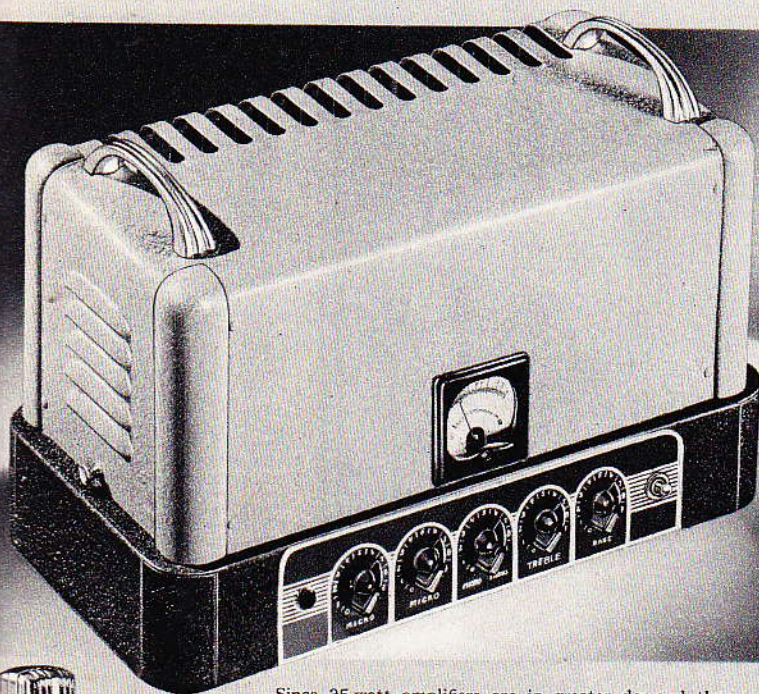
**57 PT 08925**—Shipping weight, 6 pounds. . . . \$5.85

Page 53





# SILVERTONE 35-WATT HIGH GAIN THREE CHANNEL SOUND AMPLIFIER



Since 35-watt amplifiers are in greater demand than those of any other power rating, our strongest bid for business is in this field. We are out to get that business with values you've never dreamed of getting! When this unit was planned by our merchandising and engineering department we made up our minds that we would include every single feature, every refinement that could possibly add to the desirability of owning such an amplifier and then price it sensationally low. We did it. You get the benefit.

Anybody, everybody, can now afford ample power, all the new features that make for greater flexibility, sweeter tone and added operating simplicity that heretofore have been available only in expensive custom-built equipment.

**Compare these features:** 9 tubes; use of one to four microphones and one phonograph; three electronic mixing and fading controls for microphones (2 in parallel when four are used) and phonograph. Individual high and low tone equalizing controls; Output level indicator (optional) calibrated directly in watts gives you the method of control which broadcasting stations use. Remote control (optional—see Page 53). Power stage connection for future increase of power (see Page 56). Polarized plug-in connections which insure quick set-up and make mistakes impossible. Ruby pilot light on front panel. Four stage high gain circuit. Output impedances of 3-4, 6-8, 25 and 500 ohms which permit the use of 1 to 8 speakers.

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

Amplifier 57 PT 08936

With Tubes

\$5 Down... See Page 2

Safety fused power circuit for full protection against accidental shorts. Handsome professional style steel cabinet finished in two-tone gray baked-on wrinkle enamel. Two chrome plated handles. Fully licensed by E. R. P. I. under patents at A. T. and T. and W. E. Co. Size 8x9½x15 inches long. For 110-volt, 60-cycle A. C.

57 PT 08936—35-watt amplifier only with 9 tubes and volume level indicator as illustrated. Shipping weight, 30 pounds. Cash Price..... \$44.95

57 PT 08935—35-watt amplifier with 9 tubes less output volume indicator. Shpg. wt., 31 lbs..... \$39.95

57 PTM 8937—Complete 35 watt fixed system consisting of 57 PT 08935 amplifier, tubes, 2-Jensen PM12H speakers with 35 foot cables, 2 walnut veneer wall baffles, choice of one velocity (A), crystal (B) or dynamic (C) microphone with 25 foot cable and full length floor stand. State microphone. See Page 56 for details. Shipping weight, 82 pounds..... \$89.95

57 PTM 8938—Same as 57 PTM 8937 except with 57 PT 08936 amplifier. Shipping weight, 83 pounds..... \$94.95

57 PT 08939—Same as 57 PTM 8937 except less wall baffles. Shipping weight, 62 pounds..... \$77.50

57 PT 08940—Same as 57 PTM 8938 except less wall baffles. Shipping weight, 63 pounds..... \$82.50

## 35-WATT PORTABLE SYSTEMS

**\$88<sup>95</sup>** Cash

57 PTM 8941

\$8 Down

See Page 2

For portable uses the above amplifier is without equal. It has the power to cover the largest gathering that is likely to assemble in any enclosure not served by a permanent installation, combined with lightness in weight that is truly amazing for its tremendous output. The sturdy three-piece case is built to withstand the hard knocks of severe usage; reinforced at corners and joints where strain occurs. Covered with heavy, durable artificial leather. When completely closed, this Silvertone Portable Public Address System is scarcely larger than an ordinary suitcase. When opened, it discloses the super-power amplifier described above, 2 Jensen 12-inch PM speakers (each with 35-foot cables), floor type microphone stand and microphone with 25-foot cable.

57 PTM 8941—Complete system including amplifier 57PT08935 as illustrated for 110-volt, 60-cycle A.C., tubes, 2-Jensen PM12H speakers with 35 foot cables, your choice of velocity (A), crystal (B) or dynamic (C) microphone with 25 foot cables and full size floor type microphone stand; 3-piece case. Size 21x22x12 inches. No volume level indicator. State microphone. Shipping weight, 89 pounds. Cash Price..... \$88.95

57 PTM 8942—Same as 57 PTM 8941 except with 57 PT 08936 amplifier (as illustrated at top of page), with Volume Level Indicator. Shipping weight, 89 pounds..... \$93.95

### REMOTE CONTROL FEATURE



Page 54

### FOR PUBLIC SPEAKERS



### FOR AUCTIONEERS



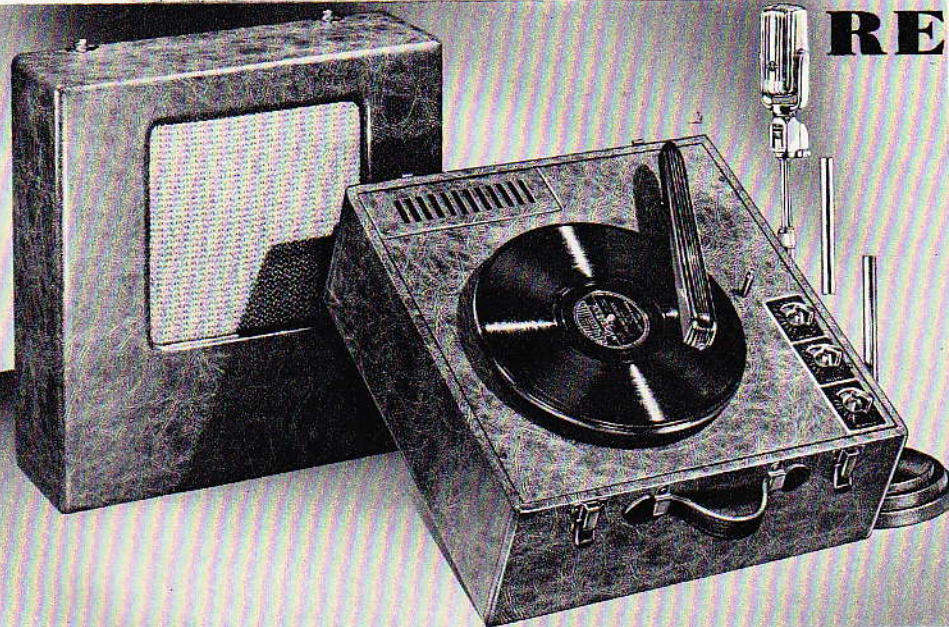
### FOR ORCHESTRAS—ENTERTAINERS







# NEW SILVERTONE TRANSCRIPTION REPRODUCER



The useful applications of this unit are so many and varied that by no stretch of the imagination could one explore them all. It is truly a marvelous device. Essentially it is a self-contained 14-watt, 7-tube high gain, high fidelity amplifier with microphone input, an electric phonograph and a very fine speaker—all in a small artificial leather covered carrying case measuring only 16x16x12 inches.

Its most extensive use may well be among **salesmen and sales managers**. It makes possible top quality reproduction of transcription recorded talks which may be presented in conjunction with industrial and advertising movies at regional sales meetings and the like. For this purpose it offers the advantage of optional microphone use with fading and mixing with phonograph. **Mortuaries** can render better community service with the aid of this device. Recorded organ, chime, choir, or vocal soloist music can be reproduced with ultra-fine quality, or funeral sermons, remarks and other spoken portions of the service can be suitably reproduced and amplified to large audiences and overflow groups.

**Small restaurants and tea rooms**, desiring to give their patrons music with their meals yet unable to afford the expense of an orchestra, can solve this problem very nicely and at little expense by using this unit.

In **schools** the microphone is educationally valuable as a means of developing skill in technique of speech, drama, and music, while the phonograph portion of this system will render valued service in many ways—music for school dances and parties, for instance. Youngsters who gather for parties and dancing will find this a very economical solution to their music problem.

**Music stores** will find it excellent for demonstrating phonograph records.

**\$42<sup>50</sup>**  
Cash

Less Microphone

**\$5 Down .. See Page 2**

Every lodge, club and Legion post should have one of these fine reproducers on hand if for only occasional use. The cost is almost negligible. The power output of 14 watts is ample for small dances and for club room use. No finer phonograph reproducer could be asked for. **Standard Model**. Has 14-watt, 5 tube high gain amplifier for 110-volt, 60-cycle operation, Microphone and phonograph volume control (with mixing and fading of both). Tone control. 10-inch Jensen PM10C speaker with 35 foot cable, standard 78 R.P.M. phonograph motor with 10-inch turntable.

**57 PT 08991**—Without microphone and stand. Shpg. wt., 38 lbs. Cash Price.....

**\$42.50**  
**57 PT 08992**—As above with choice of velocity (A), crystal (B) or dynamic microphone (C) (see Page 56) with 25 foot cable and full length floor stand. **State microphone**. Shipping weight, 50 pounds. ....

**\$66.50**  
**Professional Model**. Has amplifier as described above, 10-inch Jensen PM12H speaker with 35 foot cable, transcription phonograph motor (two speeds: 78 R.P.M. and 33 1/4 R.P.M.) with 12-inch weighted turntable and automatic stop. Will play any size record up to 17 1/4 inch. Shipping weight, 50 pounds.

**57 PT 08994**—Without microphone and stand. .... **\$65.00**

**57 PT 08995**—Same as 57 PT 08994 with choice of velocity (A), crystal (B) or dynamic (C) Microphone (see Page 56) with 25-foot cable, and full size floor stand. **State microphone**. Shipping weight, 60 pounds. .... **\$79.00**

**Big Users: Get our Special Quotations on these units in Quantities. We can save you money. Write Dept. 657 Chicago.**

## PRESTO PORTABLE RECORDER

Presto recording is a new and fascinating amusement. This highly perfected sound recorder makes permanent phonograph records of all ordinary sounds on acetate blanks. The tone is clear and natural, equal in quality to high grade radio reception. With this Presto recorder, you can make records of conversations, songs, stories or short dramatic sketches. It can be attached to any radio set to record programs on the air. In this way you can often obtain phonograph recordings of new songs long before the ordinary records are on sale. Business men find it useful in making records of conferences and long distance calls. Hundreds of actors, musicians and entertainers study their own work through Presto recordings; it provides the only way for them to apply their critical abilities to their own performance. In every way this Presto Recorder is a thoroughly practical instrument for all commercial and educational uses.

Records can be played back as soon as they are recorded. No treatment is required to make them suitable for playing. Records can be played 100 times or more on any phonograph, using ordinary steel needles. Microphone furnished will pick up voices at a distance of 20 feet or more.

Presto Sound Recorder is equipped with 12-inch turntable and is suitable for making 6, 8, 10 or 12-inch records at 78 R.P.M., the standard phonograph speed. Exclusive rubber tire on turntable rim absorbs vibration, gives steady speed, and eliminates all waver from recordings. The Presto rubber tire turntable eliminates idler wheels and has practically unlimited life. Constant speed self-starting motor.

Cutting head is driven by a positive action worm and gear system located beneath the turntable for protection from dust or accidental damage. Cuts 100 grooves per inch, the pitch that gives greatest economy consistent with long playing life. Cuts outside to inside.

High grade magnetic type pickup and cutting head the kind used in the most expensive sound recording and record playing installations. Easy to adjust angle of cutting needle and cutting pressure. A cam lever lowers cutting head gently onto disc, preventing accidental damage to sapphire cutting needles.

Four-Stage Amplifier has a maximum undistorted output of 5 watts and an overall gain of 115 db. Amplifier control panel contains a volume indicator meter, volume controls for recording and playing records, and a tone control. A jack serves to connect the recorder to any radio set for recording radio programs. Case size, 10x16x20 inches. For 110-volt 60-cycle A.C. Shipping weight, 68 pounds.

**57 PTM 8998**—Complete with tubes, microphone and stand. Not Mailable. Cash Price..... **\$169.50**

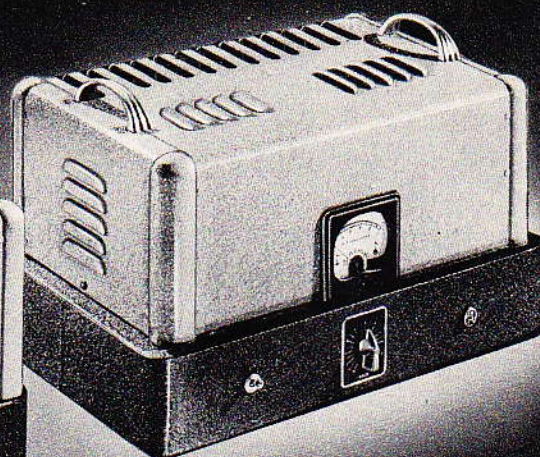
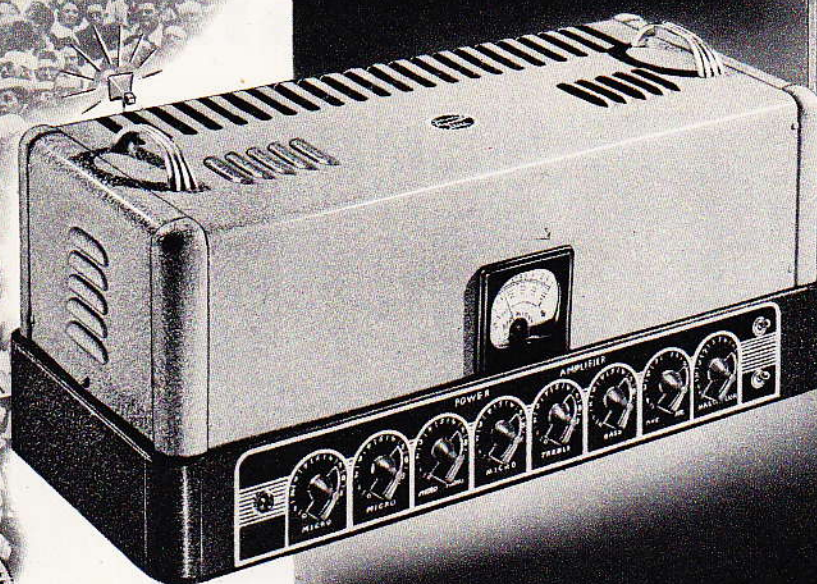
**\$169<sup>50</sup>**  
Cash

\$15 Down

See Page 2







- AUTOMATIC VOLUME CONTROL
- AUTOMATIC VOLUME EXPANSION
- HIGH AND LOW COMPENSATION
- FOUR-CHANNEL REMOTE CONTROL

## 70-WATT FOUR-CHANNEL AMPLIFIER AND POWER STAGE

**\$69<sup>95</sup>**  
Cash

Amplifier and Tubes Only  
Less Remote Control  
**\$6 Down . . . See Page 2**

(Shown above at left) Here is the engineers' amplifier—a brilliant example of what can be accomplished by capable designers when untrammelled by limitations of time and material costs . . . unquestionably one of the most advanced, most versatile and most complete single pieces of sound apparatus ever offered the American public.

Designed to meet the most exacting requirements of the finest of high power installations and built to rigid laboratory standards, this unit cannot fail to capture the imagination of every experienced sound man who considers thoughtfully its many outstanding refinements. This amplifier has 4 input channels, accommodates 4 microphones or 3 microphones and one phonograph. Has complete mixing and fading controls for all four channels. This is a prime requisite for satisfactory microphone pickup of stage productions. Even the smallest stage requires several. It has high and low tone compensation with individual controls for bass and treble responses. Bass boost maintains proper tone balance at high volume levels where all speaker efficiency begins to fall off on lower frequencies. You get faultless reproduction at 7 watts or 70 through the proper manipulation of these controls.

**Automatic Volume Control** maintains desired volume level as established by volume control settings. Velvet smooth operation irrespective of input signal variations.

**Automatic Volume Expansion**, the most important single contribution to the art of amplifier design in recent years. Crescendos barely perceptible through amplifiers without this refinement become soul stirring surges of swelling volume that mere words cannot adequately describe.

**Output Level Indicator** calibrated directly in watts. Gives you the accuracy of instrument control over volume. Predetermined volume levels can be instantly re-established without experimentation.

**Four Channel Remote Control Connections.** Two of our remote control units shown on Page 53 will provide distant monitoring of all 4 channels of this amplifier.

**Power Stage Connections.** For power requirements beyond the rated 70 watts of this amplifier one or more 70-watt power stages as illustrated alongside the amplifier can be used.

**Output Impedances.** Four taps of 62.5, 125, 250, 500 ohms provide suitable impedance matching for any conceivable speaker requirement of up to 72 speakers. The number of speakers you can use is limited only by the amount of power you wish to feed to each.

**Separate Plate and Filament Switches** serve the dual purpose of protecting circuit during warm up time and providing means of rendering amplifier completely inoperative without allowing filaments to cool.

**Master Gain Control** provides overall control of amplifier's combined output.

**Handsome and Professional appearance.** Steel base and cover finished in two-tone gray baked-on enamel. Chrome plated handles. Cover ventilated by means of louvers on top and three sides.

**Coverage.** The tremendous output of this amplifier when suitably used will provide satisfactory coverage of indoor gatherings of up to 7500 persons.

**The Circuit.** To perform the many functions of this amplifier, 17 tubes are required, and there are no dummies. The most modern inverse feedback transformer coupled circuit provides the smooth, distortionless performance you would expect from such a high class piece of apparatus. Five stages insure high sensitivity and perfect operation with any type high impedance microphone you may wish to use (carbon excepted). Size 10½x9x21½ inches long. Amplifier is designed for use on 110-volt, 60-cycle A.C. and is licensed by Electrical Research Products Inc., under U. S. patents of American Telephone and Telegraph Company and Western Electric Company. **Not Mailable.**

**57 PTM 8970**—Amplifier and tubes. Shpg. wt., 55 pounds. Cash price. . . . . **\$69.95**

**57 PTM 8971**—Amplifier, tubes, choice of one Velocity (A), Crystal (B), or Dynamic microphone (C) with 25-foot cable, floor type microphone stand and 4 Jensen PM12H speakers with transformers but without cables (see Page 32 for speaker cable). Shipping weight, 110 pounds. . . . . **\$132.50**

**57 PTM 8972**—Same as 57 PTM 8971 with 4 square steel baffles added (see 57 PTM 7469, Page 63). Shpg. wt., 228 lbs. . . . . **\$156.50**

**57 PTM 8973**—Same as 57 PTM 8972 except with 4 Jensen PAH8 speakers and 4 steel projectors (see 57 PTM 7470 on Page 63) instead of PM12H speakers. This is an excellent combination for chime tower. Shpg. wt., 285 lbs. . . . . **\$169.50**

**57 PTM 8975**—Same as 57 PTM 8972 except with 4 University SAH Driver units with transformers and 4 University LH reflex projectors. This is the very finest combination for chime towers. Shpg. wt., 157 lbs. . . . . **\$239.95**

**57 PTM 8976**—Complete auditorium equipment consisting of 70-watt amplifier, tubes, 2 microphones of your selection from Velocity (A), Crystal (B), or Dynamic (C) with 25-foot cables, 2 microphone floor stands, 6 Jensen PM12H or PAH8 speakers with transformers, 6 baffles of your selection from among 57 PT 07468, 57 PT 07440, 57 PT 7470 or 57 PT 07443 on Page 63. Order speaker cable as required, see Page 32. Approximate shpg. wt., 275 lbs. **\$229.95**

### Power Stage

(Shown above at right) Any number of these stages can be driven by any amplifier having a 500 ohm output impedance tap. Since it is strictly a power stage it must be used in connection with an amplifier. When so used it adds 70 watts to the total available output. It supplies no field current and must, therefore, be used with P.M. or A.C. electro dynamic speakers. It has an output level indicator calibrated in watts and output impedances of 62.5, 125, 250 and 500 ohms brought out to screw terminals. Four speaker sockets with adjustable taps provide impedances of 125, 250 and 500 ohms. Master gain control. Tubes used 4-6L6G, 1-6F6G and 2-5U4G. Class AB circuit. Uniform in height and width with 70 watt amplifier. Length 14 inches. For 110-volt, 60-cycle A.C. **57 PT 89880**—Power stage complete with tubes. Shipping weight, 41 pounds. **Mailable. . . . . \$49.95**

### Choice of Microphones

At no additional cost you may have your choice of Dynamic (A), Velocity (B), or Crystal (C) Microphones with these systems. The dynamic, without baffle, can be made semi-directional in the horizontal position and non-directional when head is tilted to vertical position. Frequency response 50 to 7000 cycles. The Velocity is somewhat directional and is eminently suited to enclosures which occasion feed-back trouble. The Crystal has a response characteristic which favors voice frequencies and is therefore recommended for speech pick-up.

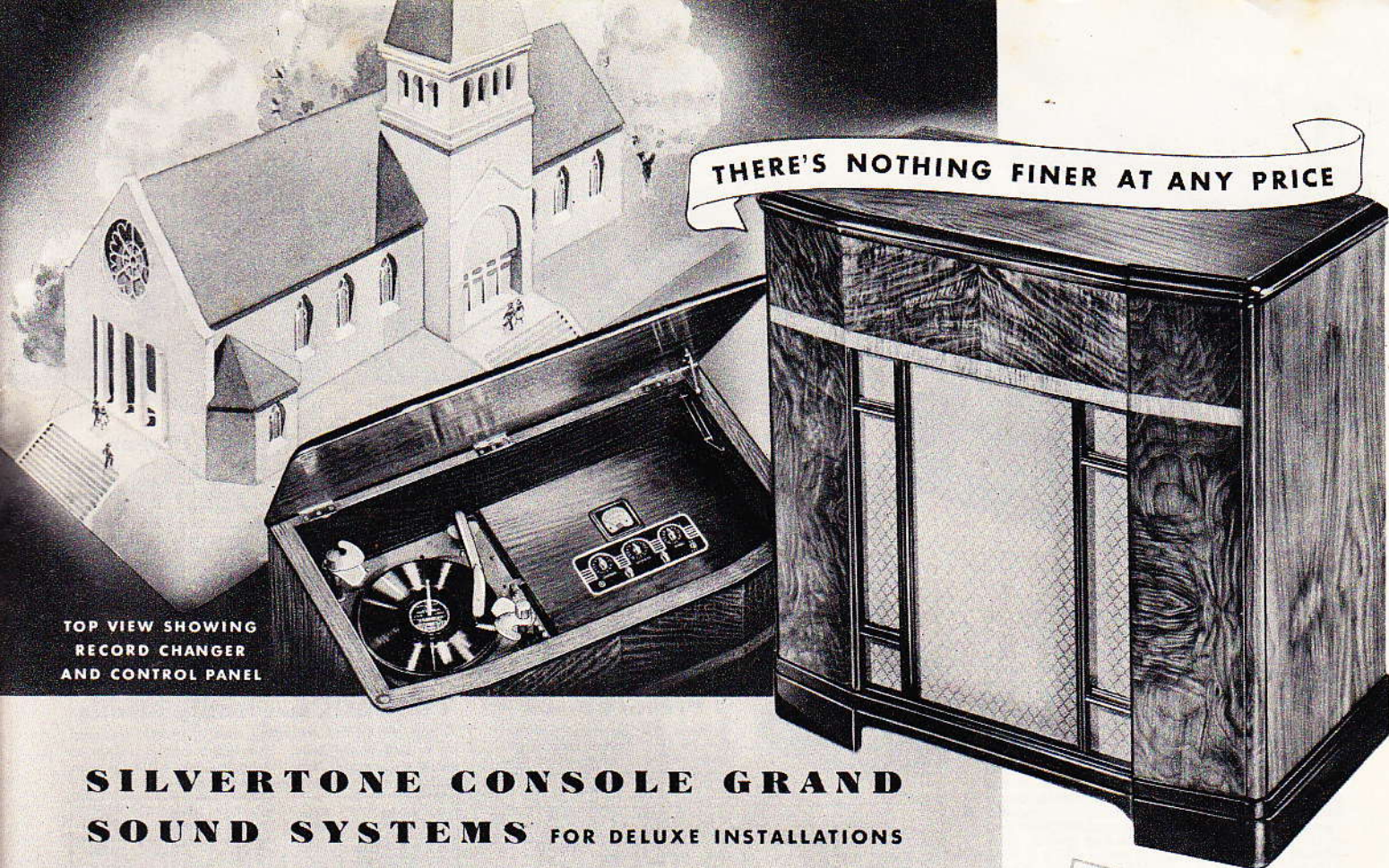
### DeLuxe Microphone Equipment

To accommodate those who require better-than-ordinary microphone equipment we have made these systems available with Turner "99" Dynamic (D) and Brush All-Purpose Crystal (E) Microphone at slight additional cost. See microphone pages for full description of these fine microphones. If Turner "99" Dynamic is desired instead of optional equipment mentioned above add \$2.65 for each microphone so substituted. If Brush All-Purpose Microphone is preferred add \$5.00 for each substitution.

### Speaker Equipment

While Jensen PM12B Speakers (F) are standard equipment, a wide choice of Speakers and Enclosures is open to you in the purchase of this and all other Silver-tone Public Address Equipment. We have types which best fulfill each individual requirement. If you wish to cover long distances select projector (H) with Jensen PAH8 Speakers or University Projectors (G). If wider coverage with corresponding decrease in reach is desirable, select 12-inch Speakers with Steel Baffles (J). Jensen 12-inch Peridynamic Baffles (K) for ultra-fine interior reproduction can be substituted for (J) baffle at an additional cost of \$3.49 for each substitution.





THERE'S NOTHING FINER AT ANY PRICE

TOP VIEW SHOWING  
RECORD CHANGER  
AND CONTROL PANEL

## SILVERTONE CONSOLE GRAND SOUND SYSTEMS FOR DELUXE INSTALLATIONS

Sound systems are now a basic necessity in every large house of worship. They enable congregations to hear better and thus derive greater inspiration from church services—for, as every minister and priest knows, parishioners lose interest and fail to get the good of sermons when they cannot hear without straining. Choir and solo music takes on new beauty and dignity when picked up by the microphone and distributed clearly and distinctly throughout the edifice. Organ and recorded chime selections win community approval when transmitted out-of-doors through tower or belfry speakers—especially on festival occasions such as weddings, christenings, confirmations, and on religious days like Christmas and Easter.

Modern cemeteries, too, have need for a centralized sound distribution system. For example, a completely equipped Masonic cemetery near Chicago on each Sunday from May to October broadcasts chime, organ, instrumental and vocal recordings through loud speakers concealed in a cupola atop the cemetery office. At large funerals and on patriotic holidays such as Memorial Day and July 4th the microphone is used to reproduce the voices of speakers, singers, and instrumentalists and distribute the sound throughout the grounds.

It is to fulfill such applications that the Silvertone console grand was designed.

Housed in its beautiful and massive cabinets are a 35-watt 3-channel amplifier and an automatic record changer. The top of the console lifts to give access to the controls which, when once adjusted, require no further attention. A visual volume level indicator calibrated directly in watts makes adjustment easy and positive.

The 35-watt basic amplifier delivers adequate power for the interiors of even the largest churches and cathedrals. Even coverage of basement and adjoining rooms will rarely call for more. For a more complete description of the amplifier used see Page 54.

When it is desired to include belfry speakers for the broadcasting of chime and organ programs one or two power stages must be added. There is ample room in the console for these also and the amount of power required will depend, of course, on the elevation of the speakers and the distance the tones are to carry. Speakers at great heights will require more power than those nearer the sidewalk level. Usually 70 watts will be sufficient. If, after a trial, it is found that still more power is needed, another stage can be added at little expense.

The basic amplifier has inputs for 1, 2, 3, or 4 microphones in addition to the phonograph; one for the choir and organist, the other for the pastor. There is also provision for connecting headphone wires leading to the section in the church set apart for the hard-of-hearing. Headphones and volume control boxes for this purpose are listed on Page 15.

The automatic record changer accommodates eight 10-inch or 12-inch records with each loading. Special chime records suitable for church and cemetery use will be found on Page 58.

**\$137<sup>50</sup>**  
Cash

57 PTM 8985F

\$12.50 Down - See Page 2

Cabinet is a distinctive design with an offset front treatment that produces a lovely overall effect. Hand-rubbed, selected stump walnut veneers with Australian Blackwood inlay form the pilasters and front of cabinet. Cabinet size: 34 in. high, 33 1/4 in. wide, 17 1/2 in. deep. Licensed by Electrical Research Products Inc., under U. S. patents of the American Telephone and Telegraph Company and Western Electric Company. Numerous combinations are available using the basic amplifying unit described, all at special prices. Below are listed a few of them for your convenience and guidance in making a suitable selection. If, however, you desire a different selection of combinations you may have it at a comparable money-saving price. Write our Personal Service Department, Chicago, for special quotations on systems not listed below. If you need assistance in making your selection we will gladly give it. This is Custom-Built Equipment. Allow 14 days for shipment.

For Sears Easy Terms, See Page 2

**57 PTM 8985F**—Basic 35 watt amplifier, tubes, and phonograph unit in console as shown. Not Mailable. Shipping weight, 107 pounds. Cash price, . . . . . **\$137.50**

**57 PTM 8986F**—As above with 4 Jensen PM12B speakers, 4 walnut wall baffles No. 57 PT 07443 shown on Page 63, two velocity (A), crystal (B) or dynamic (C) microphones (see preceding page for illustrations) each with 50-foot cable, and two floor type microphone stands. Not Mailable. Shipping weight, 255 pounds. . . . . **\$225.00**

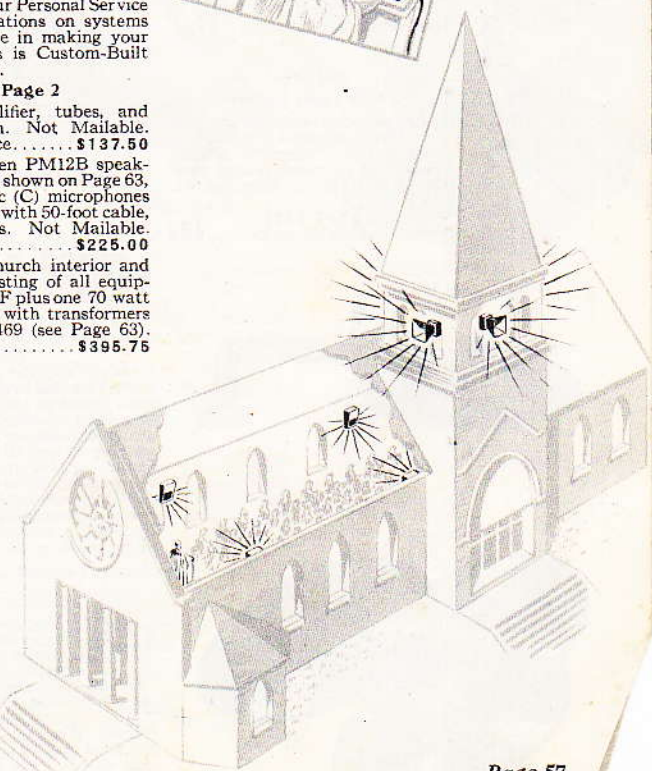
**57 PTM 8987F**—Complete 105-watt church interior and belfry chime broadcasting system consisting of all equipment contained in selection 57 PTM 8986F plus one 70 watt power stage, 4 Jensen A12PM speakers with transformers and 4 steel baffles number 57 PTM 7469 (see Page 63). Shipping weight, 476 pounds. . . . . **\$395.75**

**57 PTM 8988F**—Same as the 57 PTM 8987F except 4 University WRSR Driver units and 4 LH University reflex projectors are substituted for 4 Jensen A12PM speakers and 4 steel baffles, No. 57 PTM 7469. A superb combination—worthy of America's finest cathedrals and chime towers. Shipping weight, 400 pounds. . . . . **\$472.50**

### Pulpit Volume Control

We also have available for this system a handsome two channel volume control with visual output meter designed to enable the pastor to control the volume from either Microphone without leaving the rostrum. Solid walnut. This device makes for such added convenience and efficiency that it should be a part of every Church System. 50-ft. cable.

**57 PT 08989**—Shipping weight, 16 pounds. . . . . **\$15.50**







## SHURE

### "UNIDYNE" Uni-Directional Microphone

Very latest in dynamic microphone design. Eliminates feedback, audience and background noise—greatly reduces reverberation pickup. Employs the exclusive Shure "uniphase" principle. Gives smooth wide-range reproduction from 40 to 10,000 cycles over a wide angle at the front, yet is dead (down 12-15 db) at the rear. Solves many troublesome sound pickup problems in public address, recording and broadcasting. Rugged, shock-proof construction with specially-suspended, double-wind-screened moving-coil system. Practically unaffected by heat and humidity—ideal for severe outdoor as well as indoor service. Ultra-modern streamlined design finished in beautiful satin chrome. Head tilts through full 90-degree angle. Built-in cable connector. Special locking microphone plug attached to cable 1/2 in.-27 thread for stand mounting. Case dimensions: 4 1/4 in. high; 3 1/4 in. wide; 3 1/4 in. deep. Net weight, less cable, 2 1/4 lbs. Shipping weight, 4 pounds 4 ounces.

57 PT 8205—Model 55C. High impedance (100,000 ohms).  
Price.....\$26.46



### Amperite KONTAK Mikes

These microphones faithfully reproduce the vibration of any musical instrument on which they are placed. Frequency range 40 to 9000 cps. Output level—40 db. Suitable for use on all string instruments such as guitars, violins, string bass viols; or other instruments including pianos, reed organs, harmonicas, trumpets, clarinets, etc. Can be used with any Amplifier. Or, with Amperite Booster transformer listed below, can be used with modern radios of 6 or more tubes. Cannot be used without amplifier or radio. 15-foot cable. No phone plug or attaching clamp. Standard Model SKH illustrated at left above. No volume control. Foot pedal control listed below is recommended. Shipping wt., 1 lb.

57 PT 8206—  
Price.....\$7.06

DeLuxe Model KKH illustrated at right above. Has hand volume control. Shpg. wt., 1 lb.

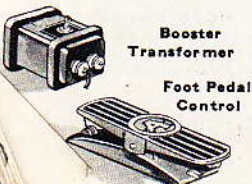
57 PT 8207—  
Price.....\$10.58

Booster Transformer Model BT for use with above mikes for playing through radio set. Shpg. wt., 2 lbs.

57 PT 8208—  
Price.....\$1.76

Foot Pedal Control. For Model SKH. Shipping weight, 4 pounds.

57 PT 8209—  
Price.....\$7.06



## THE AMPERITE ACOUSTIC COMPENSATOR VELOCITY MICROPHONE

### Distinguished in Design and Quality

\$2470  
Cash

Terms: \$3 Down  
See Page 2

Genuine Alnico Magnet. Hand-hammered ribbon. Impervious to temperature and humidity changes. High output. Excellent for close talking or distant pickup. Free from background noise. Acoustic Compensator permits increase of high frequencies by merely moving finger button. Frequency range 40 to 11,000 cps. output—65 db. Chrome finish. Complete with built-in switch and 25-foot cable. Shpg. wt., 8 lbs. Also sold on Easy Terms. See Page 2.  
57 PT 8201—Model RBHK. High impedance. For cable lengths up to 125 ft. Price.....\$24.70  
57 PT 8202—Model RBMK. Low impedance (200 ohms). For cable lengths up to 3000 feet. Price.....\$24.70

### Popular Priced Model RSHK

Almost, but not quite as good as the models listed above. Same case, same features except that less expensive construction reduces frequency range to 60 to 8000 cps. Output—68 db. High impedance. Chrome finish. Shpg. wt., 8 lbs.  
57 PT 8202—Complete with 25-foot cable. Price.....\$18.82



## THE AMPERITE MODEL SR 80 STUDIO VELOCITY MICROPHONE

### For Those Who Demand the Very Best

\$3920  
Cash

Terms: \$4 Down  
See Page 2

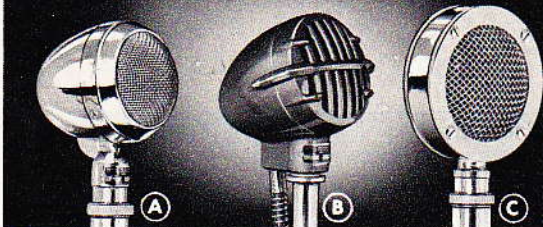
This fine microphone will fully meet the requirements of the most exacting purchaser. Considered by many the finest microphone available for general use. Designed primarily for broadcasting studio and recording uses, it is nevertheless being used extensively in the better quality Public Address installations. Having the amazingly broad frequency range of 40 to 15000 cps. it reproduces voice and music with the utmost fidelity. Output—56 db. No preamplifier needed with high gain amplifiers. Gun metal finished case. Comes complete with built-in switch and 25-foot cable. Shpg. wt., 8 lbs.

Buy on Sears Easy Payment Terms if you prefer. For details see Page 2.

57 PT 8203—Model SR80H. High impedance.  
57 PT 8204—Model SR80 Low impedance (200 ohms). Price either model.....\$39.20

When low impedance microphones are used with amplifiers having high impedance inputs it is necessary to provide a matching transformer between microphone and amplifier. See transformer number 57 PT 8245 shown on Page 61.

## ASTATIC



### T3 Diaphragm Crystal Microphone

(A) For Public Address, Recording, Amateur and general Applications. Tilting head. Chrome plated case. Interchangeable plug and socket. Response substantially flat, 30 to 10,000 cps. High impedance. Output—52 db. 25-foot cable furnished. Shipping weight, 2 lbs. See Page 2 for Easy Payment Terms.

57 PT 8210.....\$14.70

### JT30 Diaphragm Crystal Microphone

(B) A new popular-priced wide-range model of good response and high output. Substantially flat 330 to 6000 cps. Output—52 db. Genuine Bimorph Crystal. Die-cast case with fixed angle position. Opalescent-gray finish. Spring cable protector. 25-foot cable. Shipping weight, 1 pound 8 ounces.

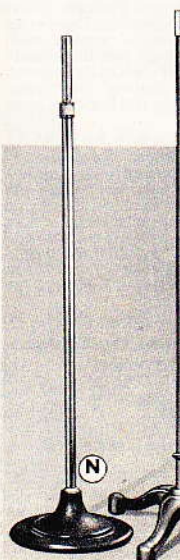
57 PT 8211.....\$9.70

### D104 Crystal Microphone

(C) Designed especially for and used by more than 12,000 Radio Amateurs. Response has rising characteristic above 500 cps. to stress the important speech frequencies. Solid bronze case, chrome finish. High impedance. Output—40 db. requires minimum gain in Amplifier. 8-foot cable. Shipping weight, 1 pound 12 oz.

57 PT 8212.....\$13.23

Microphones like everything else at Sears sold on Easy Terms. See Page 2.



### "Velvet-Action" Floor Stand

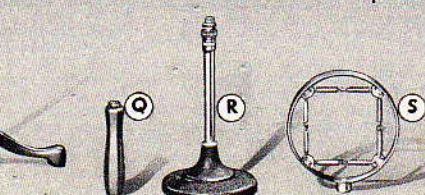
(N) Tubes of heavy brass, heavily chrome plated. Ten-inch metal base, black crackle finish. Stand is adjustable from 36 to 67 in. Threaded for 1/2 in.-7-27 microphone. Shpg. wt., 10 lbs.

57 PT 08213.....\$3.60

### Shure Bros. Studio Stand

(P) Model S55A. Super-positive friction lock clutch. Adjustable 48 to 70 in. Leg spread 15 1/4 inches. Iridescent gray finish. Shipping weight, 14 pounds.

57 PT 08214.....\$9.11



## UNIVERSAL BRUNO



### Universal Velocity Microphone

(D) An outstanding microphone development for all-around use. Combines striking beauty with superlative performance. Chrome finished. Suitable for either close-talking or distant pickup. Frequency range 40 to 10,000 cps. Output level—65 db. High impedance. Has 1/2-inch 7-27 thread. 25-foot cable. Shipping weight, 3 pounds. See Page 2 for Sears Easy Payment Terms.

57 PT 8219—Model 5MM-H.....\$14.41

### Universal Crystal Microphone

(E) A strictly first-quality instrument. Curvilinear diaphragm. Free from background noise. Low Acoustic feed-back. Modernistic chrome-finished case. High impedance. Fits 1/2-inch to 7-27 thread. Output—64 db. Frequency response 50 to 5,000 cps. Shipping weight, 3 pounds. See Page 2 For Complete Details of Sears Easy Payment Terms.

57 PT 8220—Model 15MM-X.....\$14.41

### Bruno VRHP Dynamic Microphone

(F) One of the finest Velocity Microphones ever offered at a popular price. Embodies the latest electroacoustic improvements. Free from cavity resonance and background noise. Output—67 db. Frequency response 80 to 12,000 cps. Gun metal finished case. 25-foot cable. Fits 1/2-inch 7-27 thread. Shipping weight, 4 pounds. See Page 2 For Complete Details of Sears Easy Payment Terms.

57 PT 8221.....\$14.70

### Utility Microphone Handle

(G) Ebonized wood with brass threaded insert to fit standard 1/2-inch 7-27 microphone and rings. Shipping weight, 1 pound.

57 PT 8215—Price.....25c

### Swivel-Type Table Stand

(R) Black wrinkle base. Chrome plated tube. Height 10 1/4 inches. Ball and socket swivel has 1/2-inch 7-27 thread. Shipping weight, 5 pounds.

57 PT 8216—Price.....\$1.59

Same as above except without swivel. Height, 8 1/4 in. 1/2-inch 7-27 thread. Shpg. wt., 4 lbs. 8 oz.

57 PT 8217—Price.....\$1.10

### Carbon Microphone Rings

(S) Attractive chrome finish. 8 rust-proof springs included. Fits 1/2-inch 7-27 thread. For use with any stand or handle here described. Diameter, 6 inches. Shipping weight, 1 pound

57 PT 8218—Price.....\$1.25



# ASTATIC NEW MODEL DN DYNAMIC MICROPHONE



## Moving Coil Type Microphone

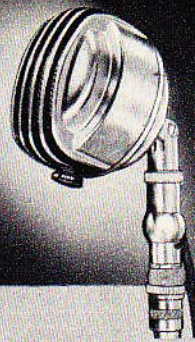
The Model "DN" is replete with new engineering accomplishments. Outstanding features incorporate Astatic's new UNITARY MOVING COIL SYSTEM, a correctly designed magnetic structure with ALNICO magnet, and a carefully proportioned ACOUSTIC CIRCUIT to highly damp the natural resonance of the moving system and provide a response characteristic substantially flat from 50 to 7000 cycles. The case design is distinctively new and good looking and attractively finished in two-tone, opalescent-gray and chrome. Side vented grille design protects against crushed diaphragms. Complete barometric compensation is also provided. The "DN" design employs all features necessary for wide applicability, including Astatic's tilting-head swivel mount, and plug-connector with spring cable protector. High impedance. Output 55 db. 25-foot cable. Fits 3/4-inch 7-27 thread. Shpg. wt., 2 lbs. 10 oz.

57 PT 8222—Cash Price.....\$13.23

**\$13.23**  
Cash

Terms: \$2 Down  
See Page 2

# NEW BRUSH MODEL "AT" ALL PURPOSE CRYSTAL MICROPHONE



## High or Low Impedance in the Same Mike

The first commercial high fidelity microphone, by present day standards, was the Brush crystal sound cell type introduced in 1933. Today, Brush sound cell microphones, more than ever before, are generally accepted the world over as standard for the most exacting sound measurements and for all applications in which the highest quality is required. The diaphragm type of crystal microphone was developed to secure greater output. In general, this type has been characterized by somewhat less uniformity of response for the higher frequencies than the sound cell type. Consequently, Brush and its licensees have pioneered in developing special methods of compensation, to secure marked improvement in quality.

As a good general purpose microphone, the Brush AT is without equal. Never before has such a universal microphone been offered at the price. Its many features are housed within a satin chrome, die cast case of modern and arresting design. Exceptional sensitivity—(48 db.), satisfactory operation with even the smallest type of P.A. Amplifiers. Conveniently variable tone control of bass and treble. "Mellow Quality" or good articulation as desired. Effective output of amplifier (also transmitter) may be increased by eliminating unnecessary bass. Control of feed-back. High or low impedance operation, viz., crystal impedance (22,000 ohms at 1,000 cps.) or 50,200 or 500 ohms. Conversion of impedance easily and quickly accomplished. Crystal capacity unusually high (.007 mfd.), permitting the use of considerably more cable than with ordinary microphones. Moderately directional. No compensation necessary for cable length. Position of microphone easily adjustable with new unique swivel design. Suitable for outdoor operation; immune to wind disturbances. Shipping weight, 5 pounds. See Page 2 for Easy Payment Terms.

57 PT 8223—Microphone complete with 3-prong, plug and socket and 25 feet of cable. Cash Price.....\$17.35

**\$17.35**  
Cash

Terms: \$2.50 Down  
See Page 2

## CARBON TYPES



### Universal Press-to-Talk Sets

Ⓒ Combines microphone and receiver in one unit. Double pole press switch in receiver end. Can be operated in either hand with equal ease. 2000 ohms receiver. Recommended for "Pack" transmitter, portable two-way systems, yachts and similar uses. Has 6-foot, 4-conductor cable. Shipping weight, 1 pound 8 ounces.

57 PT 8224—With Single Button Carbon Mike.....\$8.53

57 PT 8225—With High Impedance Crystal Mike.....\$16.76

### Universal Model W Carbon Mike

Ⓗ Single Button. Combines high sensitivity, light weight, and compactness. Diameter only 1 1/4 inches. Thickness 1/2-inch. Impedance 200 ohms. Output—38 db. Bakelite case. Shipping weight, 8 ounces.

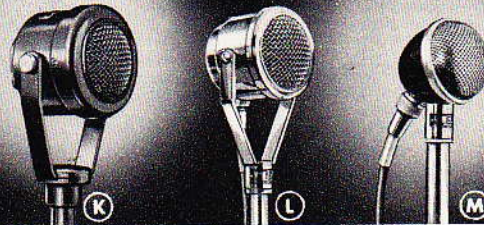
57 PT 8226—Price.....\$1.76

### Universal XX Carbon Microphone

Ⓙ Double Button. Unquestionably the most popular microphone of its type on the market. Its high output insures maximum volume on either high or low gain amplifiers. Highly polished chrome plated. Diameter, 2 1/4 inches. Thickness, 1 1/4 inches. Duraluminum diaphragm. Frequency range 40 to 6,000 cps. Impedance 200 ohms per button. Shipping weight, 1 pound.

57 PT 8227—Price.....\$5.88

## TURNER



### Turner Model 99 Dynamic Microphone

Ⓚ Indoors or out, regardless of climate or temperature you get sure-fire operation with this superb instrument. Designed for the man who can't afford to have a failure. Response range 50 to 9000 cps. Output level—54 db. Removable connector with locking feature. Clear, crisp reproduction of either speech or music. Gunmetal finish. High impedance. 3/4-inch 7-27 thread. 25-foot cable. Shipping weight, 5 lbs. See Page 2 For Easy Payment Terms.

57 PT 8228—Price.....\$17.35

### Turner Model 66 Crystal Microphone

Ⓛ Designed to give better high frequency response than the ordinary crystal. Narrow beam pickup reduces feedback. Wind and blast proofed. Compensated for barometric changes. An ideal mike for radio amateur use. Chrome case. Range 40 to 9000 cps. Output—54 db. 3/4 inch 7-27 thread. High impedance. 25-foot cable. Shipping weight, 3 pounds 8 ounces. See Page 2 For Easy Payment Terms.

57 PT 8229—Price.....\$14.70

### Turner Model 55R Crystal Microphone

Ⓜ The lowest priced crystal microphone on the market. A very popular unit with Radio Amateurs. Entirely suitable for all except the most exacting installations. Response 50 to 7000 cps. Semi-directional characteristics reduce feed-back and reflections. Output—56 db. High impedance. 15-foot cable. Shipping weight, 3 pounds.

57 PT 8230—Price.....\$9.38

Ⓣ Amphenol type MC1 connectors for microphones, phono pickups, and speakers. Single conductor utilizes shell for second conductor. Accommodates cable up to 1/4 inch. Chrome plated. Shipping weight, each, 4 ounces.

57 PT 8231—Type MC1F. Female, with coupling ring.....29c

57 PT 8232—Type MC1M. Male, with coupling threads.....24c

57 PT 8233—Type PC1M. Male connector for chassis mounting.....18c

Ⓤ Amphenol Multiple conductor connectors.

57 PT 8234—Type MC3M three conductor Male with coupling ring.....59c

57 PT 8235—Type MC3F three conductor Female with thread.....59c

57 PT 8236—Type SP-PC3F three contact Female for chassis mounting.....59c

Ⓥ Amphenol Cable Connectors. Metal cased. Male plugs fit standard tube socket. Shipping weight, each, 3 ounces.

57 PT 8237—4 prong Male.....15c

57 PT 8238—4 contact Female.....15c

57 PT 8239—5 prong Male.....15c

57 PT 8240—5 contact Female.....15c

57 PT 8241—6 prong Male.....15c

57 PT 8242—6 contact Female.....15c

Ⓦ Microphone Plug suitable for either two or three conductors. Bakelite shell. Shipping weight, plug or jack, 3 ounces.

57 PT 8243—Plug.....39c

57 PT 8244—Jack.....29c

Ⓧ Amperite Line Impedance Matching Transformer. Enables use of low impedance microphone and cable lengths up to 5000 feet with high impedance amplifiers. For 25, 50, or 200-ohm microphones. Shipping weight, 3 pounds.

57 PT 8245.....\$3.53

## SHURE

### "UNIPLEX" Uni-Directional Microphone

Ⓐ Response 30 to 10,000 cycles at the front, yet is practically unaffected by sound approaching from the rear. Output level 62 db. Specially moisture-proofed Grafoil Bimorph crystal. Tilting head. Finished in Chrome. 25-ft. of cable. Standard 3/4-inch—27 thread. Shpg. wt., 3 lbs.

57 PT 8248 Price.....\$19.11

### Model 700D

Ⓑ Response, 30 to 10,000 cycles. Dual-Drive Grafoil Bimorph Crystal. Internal Screen Protected Cartridge. Crystal Triple Moisture-Sealed. Output Level—53 db. Curvilinear Diaphragm. Swivel-type. Semi-directional. Tilting head. Satin-Chrome finish. 25-ft. cable. Shpg. wt., 3 lbs.

57 PT 8249 Price.....\$14.70

### "Rocket"

Ⓒ Response from 30 to 10,000 cycles. Output: 55 db. below 1 volt per bar. Special moisture-sealed Grafoil Bimorph crystal and other exclusive "Ultra" features. Model 705A—"ROCKET" Crystal Microphone. Complete with 25-ft. shielded single conductor cable. Shpg. wt., 2 lbs.

57 PT 8250 Price.....\$14.70

### Streamliner

Ⓓ Gives voice and music reproduction highly suitable for low-cost public address. Beautifully streamlined; rich Satin-Chrome finish. 3/4-inch—27 thread for stand. Diameter, 2 1/4 in.

CRYSTAL MODEL. Response 30 to 10,000 cycles. Output—53 db. Grafoil Bimorph crystal, fully moisture-proofed. Complete with 7-ft. cable. Shpg. wt., 2 lbs.

57 PT 8252 Price.....\$9.70

### "Military"

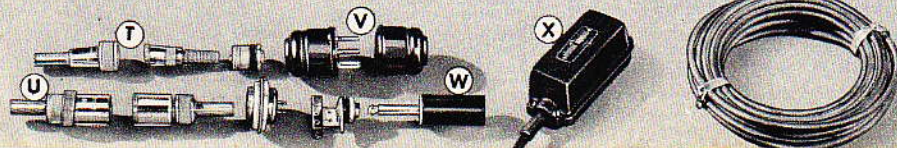
Fits naturally, comfortably in the palm of the hand. Light and compact, takes minimum space in portable equipment. Sturdy cast-aluminum case, with bright Satin grille and bars against a background of Iridescent Gray. Excellent response and high output level. Improved cam-operated switch locks in the "ON" position when pushed "up," operates "ON-OFF" in the "down" position. Switches to control external circuits can be furnished on special order. An ideal unit for sports announcers.

Size: 3 3/4 inches high; 2 1/4 inches wide; 1 3/4 inches thick. Complete with removable Suspension Hook, and 7-ft. shielded rubber jacketed cable with spring cable projector. Shipping weight, 1 pound. See Page 2 for Sears Easy Terms.

57 PT 8253—Complete with switch.

Price.....\$13.23

Page 61



For Microphone  
Cables Shown  
at left See Page 32



# UNIVERSITY REFLEXED SPEAKERS

The importance of good speakers for public address installations cannot be overestimated. No sound system is better than its speaker equipment. Efficient speakers justify their cost not only by virtue of their better tone quality—through their increased efficiency they convert the highest possible percentage of the amplifiers' electrical energy into sound waves, thereby increasing the apparent power output of the apparatus.

**The Driver Units:** Only the highest quality materials and workmanship are used in University driver units. Pole pieces are machined "Armco" electrical quality iron which is 99.7% pure iron. The surface of the "Alnico" Magnets and washer shaped pole pieces are ground microscopically flat.

Due to an exclusive method of voice coil centering these units have far greater efficiency than can possibly be realized with ordinary speakers. Fully 75% of the magnetic gap is occupied by the voice coil as compared to the usual 50%. The construction of the diaphragm alone requires 23 separate and distinct operations.

## Specifications of Driver Units

Model No.	Power Capacity In Watts with Horns			Frequency Range Cycles	Max. Height	Max. Diam.
	SMH	LH	PH			
WRSA	..	18	17	70-7500	4 in.	4 in.
SAH	21	27	25	90-5000	4 1/2 in.	4 in.
PAH	..	25	24	70-5000	4 in.	5 in.

## Price List of Driver Units

To make up a complete loud speaker you must have a driver unit and a projector. These we price separately. Horns with wide projection angles will not carry the sound as far as those with narrow projection angle. The longer the projector the better the low frequency response. All University Driver Units are of the Permanent Magnet Dynamic type and require only two connecting wires. All voice coils are of 8 ohm impedance. Any driver unit fits any projector here described.

**Type WRSA Driver Unit.** Power handling capacity (18 watts). Excellent for public address work where the utmost in clarity in speech and music is required. Aluminum cover furnished when purchased with projector.

57 PT 07480—Shipping weight, 8 pounds.....\$22.34

**Type SAH.** This entire unit is enclosed in a spun aluminum head assembly. The unit is thus absolutely watertight. Best unit for outdoor use. Handles 25 to 30 watts.

57 PT 07481—Shipping weight, 8 pounds.....\$17.64

**Type PAH.** For standard public address work requiring power handling capacity up to 24 to 27 watts. When ordered with any University projector an aluminum cover is furnished at no extra cost.

57 PT 07482—Shipping weight, 12 pounds.....\$26.46

## Specifications of Jensen Speakers

The rating in watts is the output of the amplifier with which the speaker can be used. The efficiency of a speaker is its relative ability to convert electrical energy into sound energy. It is cheaper therefore, to buy better speakers than to invest in more powerful amplifiers. You will notice that you can get as much "loudness" from an A12PM speaker with 3.15 watts input as you can get from a PM10C using 10 watts.

Jensen speakers are without transformers. All speakers and transformers are arranged so that you can easily complete the assembly.

Speaker	Size, In.	Power Rating Watts	Relative Efficiency
PM10C	10	9	0. db=10 watts
PM12C	12	10	+0.5db= 8.9 watts
PAH8	8	15	-2.5db= 5.6 watts
PM12H	12	12	-2.5db= 5.6 watts
PM12B	12	14	-4.0db= 4.0 watts
A12PM	12	15	-5.0db=3.15 watts
M18AC	18	25	-8.5db=1.43 watts

**Jensen Speaker Transformers**  
Model X Transformers are for public address use in matching impedance

values of 500, 1000, 1500, 2000 and voice coil.

57 PT 7425—Core 3/4 x 3/4 inch. For models PM10C and PM12C. Shpg. weight, 1 lb. 8 oz. Each. \$1.32

57 PT 7426—Core 7/8 x 7/8 inch. For models PM8H, PM12H, PM12B, A12PM. Shpg. wt., 2 lbs. Each. \$1.62

**Model X Transformers** are for radio use. Impedance values are: Voice coil, 4500, 7000, 10,000, and 14,000 ohms.

57 PT 7427—Core 3/4 x 3/4 inch. For model PM10C and PM12C. Shipping weight, 1 pound 8 ounces.....\$1.32

# FAMOUS JENSEN SPEAKERS

## Jensen "C" Speakers

For Radio and Low Power P.A. Heavy duty, highly efficient reproducers for better quality radio and medium power public address uses. Have magnet covers. Voice coil 6 ohms. Priced without transformer.

57 PT 7430—PM10C. 10-inch. 9 watts. Shipping wt., 6 lbs.....\$6.17

57 PT 7431—PM12C. 12-inch. 10 watts. Shpg. wt., 7 lbs. 4 oz.....\$7.79

## "H" Speakers

A new series designed especially for public address work. Have magnet covers. Voice coil 6 ohms. Priced without transformer.

57 PT 7432—PAH8—8-inch. 15 watts. Designed for projector such as our 57 PTM 7470 shown on next page. Shipping weight, 11 lbs.....\$8.82

57 PT 7433—PM12H—12-inch. 12 watts. Shipping weight, 10 pounds.....\$11.47

## PM12B Speaker

A widely used permanent magnet type reproducer for public address work. Featured in our own systems. Somewhat more efficient than the model "H." Will handle 14 watts continuously. 8 ohm voice coil. Does not have cover over magnet. See upper illustration at right. Shipping weight, 12 pounds.

57 PT 07434—Less transformer.....\$14.70

## A12PM Speaker

Recommended where as much as 15 watts must be handled by each reproducer. A marvel of tone quality and efficiency. Unquestionably the most widely used 12 inch PM speaker in the public address industry. Has magnet cover. 8 ohm voice coil. Shipping weight, 18 pounds.

57PT07435—Less transformer.....\$20.43

## 18-inch Dynamic Speaker

**\$50.86** Jensen M-18 A.C. The largest, most powerful, most capable speaker in the famous Jensen line. Power handling capacity 25 to 40 watts. Its size and unusual performance ability strongly recommend it for super quality public address installations. Very extensively employed in theater installations. Its conversion efficiency is the highest ever attained in electro dynamic Cone speakers. Voice coil impedance 8 ohms. Cone housing diameter 18 in. Voice coil diameter 2 1/2 in. For 110-volt, 60-cycle A.C. See table above for efficiency comparison with that of other Jensen Speakers. Shpg. wt., 78 lbs. Not Mailable.

57 PTM 7436—Less transformers. Cash Price. \$50.86

Page 62

**The Projectors:** It is a well known fact that the driver unit exponential horn loud speaker possesses the highest possible acoustic efficiency. A correctly designed combination having up to 50% electro-acoustic conversion efficiency at speech frequencies, as compared to about 10 to 20% for cone speakers. The invention and development of University reflexed exponential projectors constitute one of the very few important contributions to the further improvement in this type in recent years. To obtain proper "loading" (which is essential to wide frequency response) without undue length and bulkiness, these projectors are so designed that the air column is almost three times the overall length of the horn itself. This sound travel provides frequency responses as wide as 70 to 7,500 cycles.

**Waterproof Chambers:** The reflexed chambers of University Projectors act as a trap against the possibility of any water entering the mouth of the driver units. It is impossible for a direct stream of water into the horn to get further than the second turn.

## Specifications for Reflex Projectors

Model No.	Mouth Opening	Overall Length	Acoustic Length	Low Cut-Off C.P.S.	Projection Angle	Application
PH	21 in.	16 in.	42 in.	140	80°	Speech
LH	25 in.	21 in.	56 in.	115	90°	Speech and Music
SMH	14 in.	12 in.	32 in.	180	75°	P.A. Speech

## Price List of Projectors

**① Type LH.** Very heavy gauge aluminum with all exposed edges made with oversize beads. The double curvature of surface results in a structure absolutely free from all resonance or possibility of rattle. Each horn is tested throughout the audio spectrum, 30 to 10,000 cycles at maximum power. Coupling thread 1 1/8 x 18 inches. See above table for dimensions. Not Mailable.

57 PTM 7483—Shipping weight, 12 pounds.....\$19.99

**② Type PH.** Same as type LH except for dimensions, for which see table above. Mailable, but we recommend freight or express.

57 PT 07484—Shipping weight, 9 pounds.....\$12.35

**Type SMH.** Not shown. Similar to type LH. Same construction except dimensions are smaller. See table above.

57 PT 07485—Shipping weight, 7 pounds. Mailable.....\$9.11

**③ Type LWM.** Non-Reflex Type. Double cone projector for one 12-inch standard dynamic speaker. Mounting speaker within projector results in bi-directional coverage from a single speaker. All metal, rubber edges at bell. Bell opening 20 inches. Depth overall 30 inches. Mounting brackets extra.

57 PTM 7486—Shpg. wt., 10 lbs. Not Mailable.....\$13.52

57 PT 7487—Mounting bracket for LWM projector.

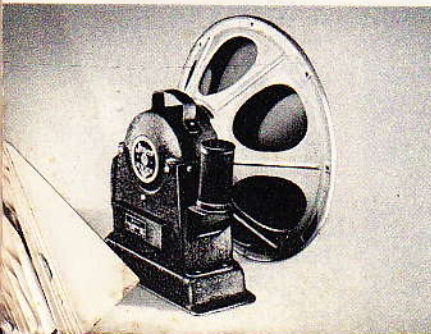
Shipping weight, 3 pounds.....88c



## ← Replacement Radio Speakers

Finest quality radio type speaker for replacements or extension speakers. P.M. Speakers have Universal transformers with taps to match all popular output tubes, both single and push-pull. Magnetic Speakers have 10,000 ohm inputs and are suitable for practically all uses to which a magnetic speaker can be put except public address.

Size In.	P. M. Dynamic			Magnetic		
	Catalog Number	Shpg. Wt. Lbs. Oz.	Price Each	Catalog Number	Shpg. Wt. Lbs. Oz.	Price Each
6	57 PT 5661	3 10	\$1.98	57 PT 5611	3 10	\$1.10
8	57 PT 5662	6 8	2.79	57 PT 5612	6 8	1.65
10	57 PT 5663	7 4	3.25			



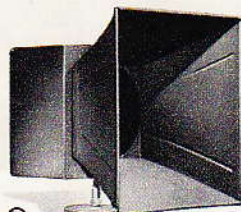




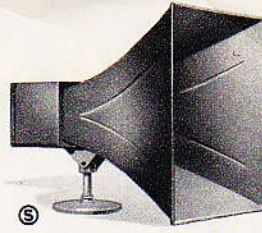
(N)



(P)



(R)



(S)

All Items in this Catalog can be bought on Easy Payment Terms on orders of \$10 or more ... See Page 2

# SPEAKER ENCLOSURES

## Waterproof Marine Horns

(N) Reflex construction prevents damage to speaker from rain. Made of heavy aluminum. Bracket is extra. Type WX-8. For 8-inch speaker (Jensen PAH8 listed on preceding page is an ideal speaker for this horn). Bell opening 18 inches, length 13 inches.

57 PT 07465—Shpg. wt., 10 lbs. .... \$9.11

Type WX-12. For 12-inch speaker. Bell opening 23 in., length overall 16 in. 57 PT 07466—Shpg. wt., 14 lbs. \$16.46 Adjustable Mounting bracket. Shpg. weight, 12 lbs.

57 PT 7467—For WX-8.....\$4.12  
57 PT 7476—For WX-12.....4.12

(P) Marine Midget Speaker. Designed for indoor and outdoor use. Inverted reflex design provides air column length of 15 inches. Made of heavy aluminum. PM speaker supplied has power handling capacity of 5 watts. Voice coil impedance 6 ohms. Bell opening is 10 inches in diameter, length 8 inches. An excellent unit for factory call systems and similar other applications where a good small speaker as well as one which is fully protected is needed. Comes complete with mounting brackets.

57 PT 07468—Shipping weight, 4 pounds.....\$6.17

## All Steel Heavy Duty Flare Baffles

(R) This all steel baffle is of spot welded 20-gauge steel throughout and finished in baked-on wrinkle lacquer to give protection from weather through many years of service. Scientifically proportioned to give proper air column "loading" to produce good quality reproduction of both voice and musical frequencies. Bell opening 20x20 inches. Length overall 18 1/2 inches. Comes complete as illustrated including adjustable mounting bracket. For 12-inch speaker. Not Mailable.

57 PTM 7469—Shipping weight, 27 pounds.....\$8.15

(S) This baffle when used in conjunction with a Jensen PAH8 speaker (see preceding page) will provide long range coverage with minimum power. Such a combination is a good compromise between the long-range but relatively poor tone quality of the "Morning glory" horn, and the short-range, excellent tone of the Short flare baffle. Made of spot welded 20-gauge steel. Black baked-on wrinkle lacquer finish. Bell opening 27x27 inches. Length overall 31 inches. For 8-inch cone type speaker. Bracket included.

57 PTM 7470—Shpg. wt., 42 lbs. Not Mailable.....\$13.95

## Dynamic Horn

(D) The directional qualities of this horn make it particularly suited to outdoor applications where extreme reach and penetrating power is required. Combines the extreme range of the older type morning glory horns with cone type speaker tone. Designed for use with 10 or 12-inch cone type dynamic speaker which gives good tone quality. Made of acoustic stormproof material which has no resonance frequency of its own and which, therefore, reproduces all frequencies within the range of the speaker used without vibration or resonance peaks. Finished in aluminum. Shipped taken apart, though very easy to assemble. All necessary hardware furnished. Bell opening 35x23 inches. Length overall 44 inches. Shipping weight, 8 pounds. Not Mailable. 57 PTM 7475—Complete with speaker housing as shown....\$10.95

## Round Projector

(E) For either indoor or outdoor use. Widely used for auto-top mounting in combination with auto-top mounting platform listed below. Can be easily and quickly removed from auto to auditorium. Projector is made of spun aluminum and steel, weather protected by coating of wrinkle lacquer. Mounting platform has four sponge rubber feet to protect car top. Four heavy web straps and adjustable catch fasteners provide steadfast anchorage to door openings, ledges and other readily available constructional features of any automobile. Projector is for 12-inch speakers.

57 PT 07440—Projector and mounting bracket only (No auto top platform). Shpg. wt., 18 lbs. ....\$8.15  
57 PT 7441—Auto Top Mounting Platform complete with straps (less Projector). Shipping weight, 10 pounds. Each.....\$4.10

## Flare Baffle

(F) Improves frequency response and controls sound distribution. Shipped taken apart. Easily assembled. Weatherproof material. Aluminum finish. Baffle takes 10, 11, or 12-inch speakers. Price does not include speaker housing. Bell, 22x23 inches; depth, 25 inches. Very directional. Gives long range with relatively narrow beam. Shipping weight, 15 pounds.

57 PT 07471—Each.....\$5.00

Wide angle type. Bell, 30x18 inches; depth 14 inches. Less reach than above but wider beam. Shipping weight, 10 pounds.

57 PT 07472—Each.....\$4.12

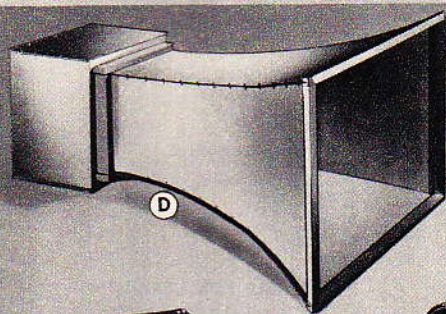
57 PT 7473—Weatherproof speaker housing for either baffle. Size, 15 1/2 x 15 1/2 x 11 inches deep. Shipping weight, 8 pounds. Each.....\$2.35

## Jensen Enclosures

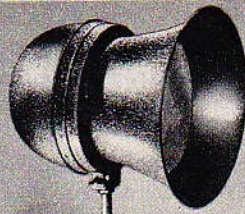
(G) Whole octaves are added to music—speech is crisp and intelligible. Objectionable resonance and boom is eliminated and performance becomes more independent of acoustic environment when these baffles are employed. Combines the famous Peri-dynamic and Bass-Reflex principles developed by Jensen laboratories. Only the energy radiated from one side of the speaker diaphragm is directed into free space. No uncontrollable mass of air escapes from the cabinet and, hence, no objectionable resonance. Beautiful walnut finish. Shipped taken apart. Easy to assemble. All hardware included.

57 PT 07437—BR10 for 10-inch speaker. Size 28x21 1/2 x 12 1/2 inches. Shpg. wt., 38 lbs. ....\$11.64

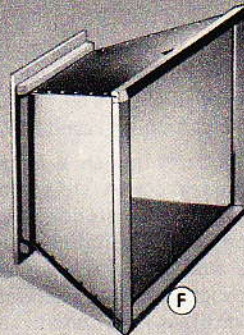
57 PT 07438—BR12 for 12-inch speaker. Size 30 3/4 x 23 3/4 x 12 1/2 inches. Shipping weight, 47 pounds.....\$13.44



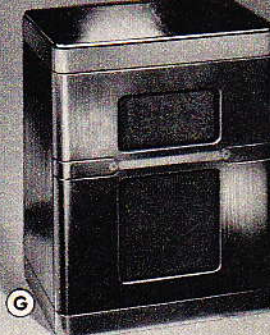
(D)



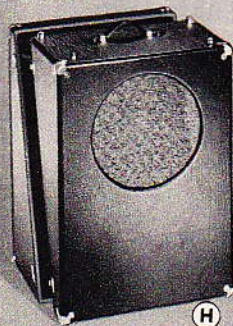
(E)



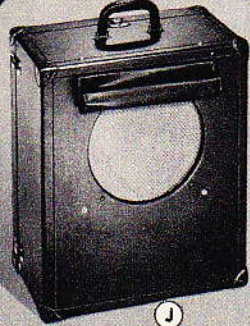
(F)



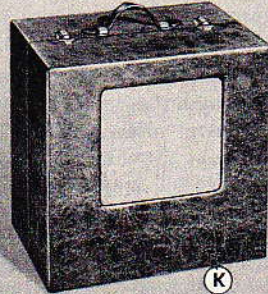
(G)



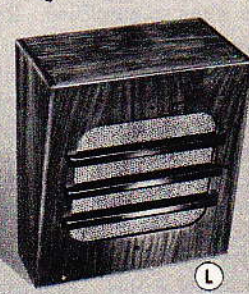
(H)



(J)



(K)



(L)



(M)

## Dual Case

(H) A practical, black artificial leather covered case for one or two 12 1/2-inch (or smaller) dynamic speakers. Divides diagonally, each half forming a separate speaker case which rests with wide end on the floor. Strong clasps hold halves of case together firmly. Overall size when closed, 21 1/2 inches high, 13 1/2 inches wide, and 8 1/2 inches deep. Net weight, 7 pounds. Shipping weight, 11 pounds.

57 PT 07474—Each.. \$5.69

## 2-Section Case

(J) Case has two sections. Size overall when closed, 18 1/2 inches deep, 22 inches wide, 29 1/2 inches high. Speaker section drilled for standard 12-inch speaker. Tray section accommodates amplifier tray for microphone stand, microphone and cables. Covered with heavy grade black seal-grain artificial leather. Deluxe quality.

Shpg. wt., 26 lbs. ....\$6.79  
57 PT 07442.....\$6.79

## Carrying Case

(K) This deluxe quality single speaker carrying case will accommodate a 10-inch or 12-inch speaker and provide enough baffle area to give you good tone quality. Cheaper cases, of which there are many varieties, are usually too small to give you this needed area. Substantially constructed and covered with a heavy grade of artificial leather. Size overall 16x16x12 inches.

57 PT 07495 Shpg. wt., 12 lbs.....\$4.95

## Standard Baffle

(L) Made of slightly lighter material than the wall baffle described at left. A good value. Guaranteed the equal in quality and appearance of any hardwood wall baffle you can buy at a comparable price. Walnut veneer. Size 15 1/2 x 14 x 11 inches. For 12-inch (or smaller) speaker.

57 PT 07490 Shpg. wt., 6 lbs.... \$3.90

See Page 2 for Easy Payment Terms

## Quality Baffles

(M) This is better quality merchandise than is generally offered in wall baffles of this type. Costs a little more; worth a great deal more! Shaped and proportioned to give best possible acoustical results. Generous in size for good low frequency response. Made of well seasoned walnut veneers. Shipping weight, 7 pounds.

57 PT 07443—For 12-inch speakers. Each.....\$4.95



# SILVERTONE ARISTOFONE



The Silvertone Aristofone represents the last word in electrical amplification for musical instruments. The Aristofone requires no specially constructed instrument with which to use it. You can use your favorite guitar, mandolin, violin or "bull" fiddle and equal results from special-built instruments.

Aristofone accommodates up to 4 different instruments at one and the same time—a valuable feature for string ensembles. Provisions are also made for amplifying the pickup of a standard velocity, dynamic or crystal microphone—opening up amazing possibilities for entertainers! Announcements and entertaining gags as well as vocal solos can be picked up by the standard microphone, while straight musical selections are picked up by the instrument microphones. Reed or brass instruments as well as the harmonica secure marvelous effects when so amplified. Reed organs and pianos are also suitable.

The very efficient Amperite Kontak Microphones described on Page 60, are used on the instruments! These small devices slip under the strings of the instrument, or may be temporarily held in place by adhesive tape. Two volume controls at top side of the amplifier case control instrument pick-ups, and standard microphone. The convenient location of the controls makes for ease of manipulation. Foot pedals (57PT 8209, Page 60) may be used to control instrument microphone if desired, or 57PT8207 microphones (Page 60) having a volume control built-in is suitable. Four Kontak Models SKH or KKH can be used simultaneously. Case is covered with a good grade of artificial leather. Size  $8\frac{1}{2} \times 12\frac{1}{4} \times 17\frac{1}{2}$  inches. Eight-inch electro-dynamic speaker system has a 5-tube 8-watt amplifier which operates on 110-volt 60-cycle A.C.

**57 PT 08960**—Aristofone, tubes, case and speaker. No microphones. Shpg. wt., 19 lbs. **\$22.50**

**57 PT 08961**—As above with one Kontak model SKH microphone. Shpg. wt., 21 lbs. **\$29.50**

**57 PT 08962**—Same as 57 PT 08961 except with one Amperite foot pedal volume control included. Shipping weight, 25 pounds. **\$34.50**

**57 PT 08963**—Complete DeLuxe Outfit consisting of Aristofone, tubes, four Kontak model KKH volume control microphones, one Velocity microphone as illustrated and one floor type microphone stand. Shipping weight, 41 pounds. **\$77.50**



SUITABLE FOR UPRIGHT  
OR GRAND PIANOS



BRINGS OUT THE FULL RICH  
OVERTONES OF THE VIOLIN



MAKES THE HUMBLE HARMONICA  
SOUND LIKE A PIPE ORGAN

**SEARS, ROEBUCK AND CO.**