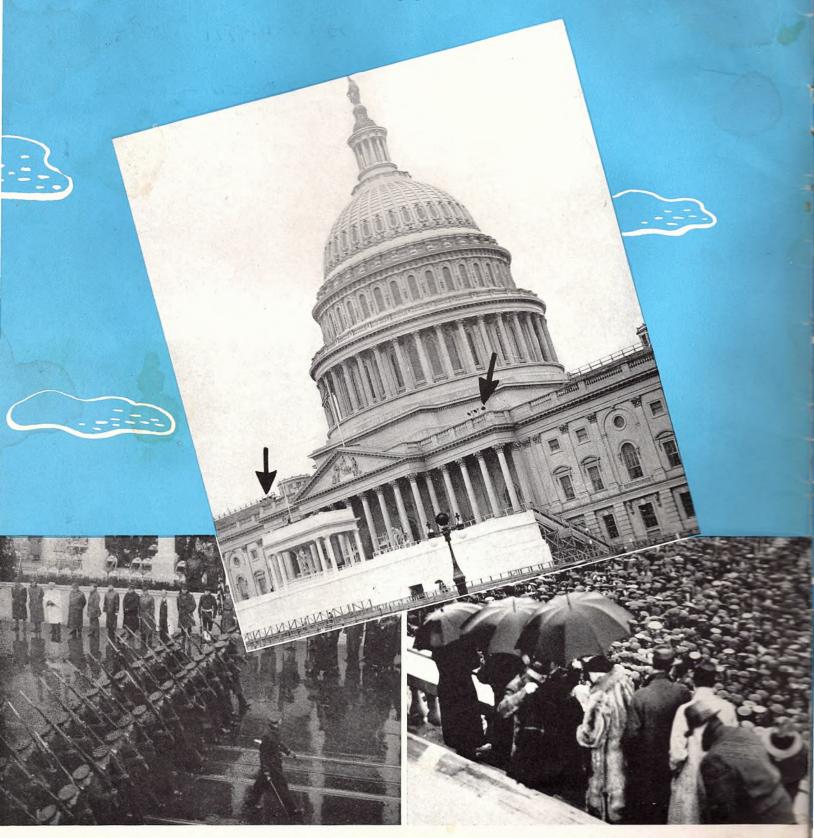


RCA MANUFACTURING CO., INC.

A Service of the Radio Corporation of America

### ALL SOUND JOBS ARE EASY WITH

WASHINGTON, D. C.—More than 50 RCA Directional Baffle Loudspeakers were used to carry the 1936 Presidential inauguration ceremonies to over 200,000 persons at the Capitol and along the line of march. The fact that it rained heavily during the entire period and no sound outages of any kind occurred, is a tribute to the sturdiness of RCA equipment and the excellence of the entire installation.



FOR THE FINEST IN

GO RCA ALL THE WAY . . . . FROM

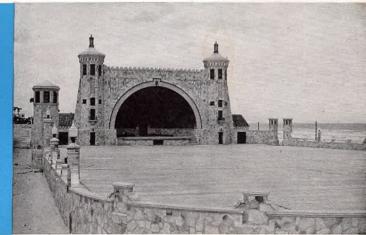
### RCA EQUIPMENT

ROBIN HOOD DELL, Philadelphia, Pa.

"RCA Sound System at Robin Hood Dell has been entirely satisfactory since it was installed. I believe it to be one of the finest systems that anyone could use for reenforcing the music from a musical organization such as the Philadelphia Orchestra."

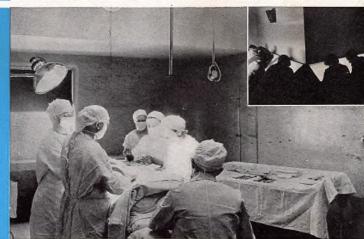
ARENA. Daytona Beach, Fla.

The largest outdoor stage in the world, built right on the ocean front, with southeast trade winds blowing continuously across the arena, made a real installation problem for an RCA P.A. System. However, proper placement of the microphone to avoid the roar of the surf as collected by the band shell, with 40 watts of power and weather-proof speakers solved all difficulties.



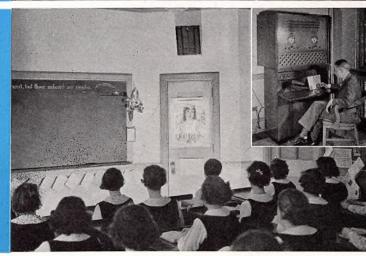
### MASSACHUSETTS MEMORIAL HOSPITAL, Boston, Mass.

RCA Sound Equipment in the Operating Room and Observation Gallery permits the surgeon to explain each step in an operation to the audience of medical students assembled above. Such special installations are excellent examples of the versatility of RCA equipment.



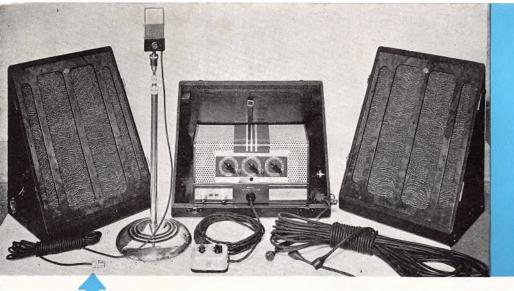
### J. W. HALLAHAN CATHOLIC GIRLS' HIGH SCHOOL, Philadelphia, Pa.

An RCA Victor School Sound System in this school gives complete sound coverage and two-way pick-up between class rooms and principal's office. The educational field is rapidly installing sound equipment, and RCA equipment is the finest. Hundreds of schools throughout the nation are using RCA equipment daily for a wide variety of uses.



SOUND EQUIPMENT

MICROPHONE TO LOUDSPEAKER



### PG 114 Portable Sound System

- 24 watts output—power to spare
- Remote electric mixing another RCA First
- New noiseless high level mixing circuits
- Two position mixer for two microphones—local or remote
- RCA All Metal Tubes and beampower output tubes (glass rectifier)
- Uses RCA Velocity Microphone

# RCA'S FINEST PORTABLE For Audiences up to 3500 Persons

Again RCA leads the way with a host of new features found in no other portable P.A. equipment. For practically every installation where high quality and fidelity of reproduction are paramount considerations, the PG 114 will be found to meet all requirements. Orchestras, large night clubs, churches and the like will find it ideal. The remarkable convenience which characterizes the PG 114 is exemplified by the arrangement for "mixing" at any distance from the amplifier or microphone, a system made possible by new, noiseless, high-level mixing circuits. Beam-power tubes provide an abundance of distortionless power. A phonograph input jack permits the operator to use recorded music either alone or as a background for voices. Dual tone controls and microphone input positions are other highly desirable features. Supplementing the modern amplifier design is the popu-

lar RCA Velocity Microphone and an attractive chromium-

plated stand, which may be used either for banquet or floor purposes. The stand is packed in the case with the other equipment. Two high output permanent magnet dynamic speakers, which are housed in a separate case, make this an outstanding portable P.A. system for practically every use. The entire equipment is housed in two ruggedly built, portable cases, covered with black leatherette.

MI 4123-A—Remote Mixing Unit with 30-foot cable and plug—Code SCUWN . . . . . . . \$24.25

MI 4685 — 50 - foot extension cable with plugs for MI 4123-A—Code SCUWN . . . \$11.60

### **SPECIFICATIONS**

Gain-107 db. at 1,000 cycles.

Frequency Response—±2 db., 60-10.000 cycles.

Output—24 watts.

Tubes—2 RCA-1612, 2 RCA-6N7, 2 RCA-6L6, 1 RCA-5Z3.

Input Impedances—2 at 250-ohms impedance and 2 at 5,600-ohms impedance.

Output Impedances—4, 7½, 15, 60 and 250 ohms.

Input Power-180 watts, 50-60 cycles, 105-125 volts.

Cable Lengths—Microphone 30 feet, amplifier to first speaker, 35 feet; between speakers, 50 feet.

Net Weight of Amplifier Equipment—60 lbs.; Shipping Weight, 66 lbs.

Net Weight of Speaker Equipment—28 lbs.; Shipping Weight, 34 lbs.





#### The New Way



### Remote Electric Mixing ANOTHER RCA FIRST

True remote mixing, which is operated up to 2,000 feet from the amplifier, through a compact portable unit small enough to be held in the hand, permits efficient, noiseless control from the best possible location. This means that the mixer can be placed in the audience where one can best hear the program or on the orchestra leader's stand so that he can control the volume as desired. This is a highly desirable feature and one that has never previously been offered in P.A. equipment of any type. It greatly increases the flexibility of any installation.

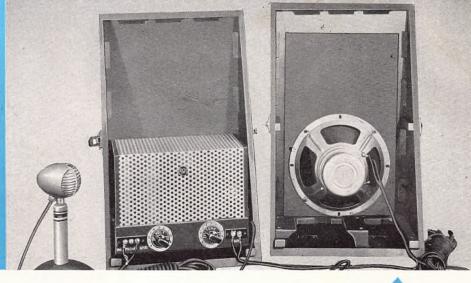
The Old Way



### PG 111

**Portable Sound System** 

- Uses Beam-Power Output Tube
- Uses Permanent Magnet Speaker of High Sensitivity
- Tone and Volume Controls
- Complete in One Sturdy, Compact Case
- Total Weight Only 25 lbs.
- Uses RCA Aerodynamic Microphone
- Includes Phonograph Connection



# RCA'S POPULAR-PRICED PORTABLE SOUND SYSTEM

New, from its attractive Aerodynamic Microphone to its sturdy gray Fab-crackle case, the RCA PG III Equipment is outstanding in the popular-priced P.A. field. It is well suited for small auditoriums, bus terminals, restaurants, window displays, small night clubs and hundreds of other uses where a thoroughly dependable, inexpensive equipment is required. The amplifier is of sturdy construction, has tone and volume controls, and both microphone and phonograph input terminals which permit the use of record reproduction alone

or as a background to voice. The speaker is a heavy permanent magnet type, of  $8\frac{1}{4}$  diameter, while the microphone is the famous RCA Aerodynamic, complete with a 30-foot shielded cable. The PG 111 is another example of RCA's quality engineering and manufacturing in the low-price field.

## \$9950

MI 4706, Complete with tubes.
Code SCWEV

### **SPECIFICATIONS**

Amplifier Gain—110 db.—560,000-ohm input. Frequency Response— ±2 db. from 90-10,000 cycles. Output—6 watts. Tube Complement—1 RCA-79, 1 RCA-6L6, I RCA-80. Tube Impedance—560,000 ohms.

Output Impedance—Universal Transformer, 1 to 15 ohms.
Microphone — RCA Aerodynamic (high impedance).
Speaker—Permanent Magnet, 61/4" diameter.
Net Weight—25 lbs.
Shipping Weight—32 lbs.

#### **LUNCH COUNTER**



#### **BUS STATION**

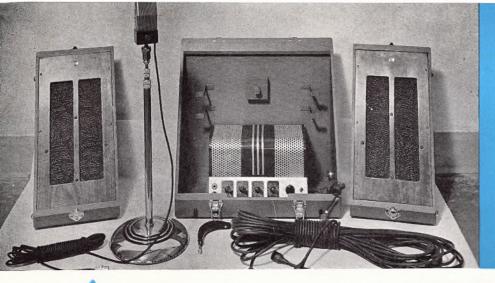


WINDOW DEMONSTRATIONS



### **DEPARTMENT STORES**





### PG 112

Portable Sound System

- 12 watts—ample for most installations
- Mixes two microphone inputs
- Two input positions, one 250 ohms and one 500,000 ohms
- Tone Control and phonograph input jacks
- One attractive black leatherette case holds all equipment
- Uses RCA Velocity Microphone

# RCA'S 12-WATT PORTABLE For Audiences up to 2000 Persons

For that ever increasing market of medium power P.A. users, the RCA PG-112 equipment is unsurpassed. Attractive in price, flexible in operation, it is well-suited for night clubs, restaurants, hotels, or any of the thousands of jobs where audiences are not in excess of 2,000 persons.

A unique feature of the amplifier used in this equipment is its ability to operate from either 110-volt A-C source or from a 6-volt storage battery in conjunction with a dynamotor. This makes it suitable for mobile use, speaker trucks, fairs, and a whole field not reached by standard

equipment. The amplifier is of modern, rugged design, uses RCA all-metal tubes, and beam-power output tubes. It has ample power to cover large audiences.

Two heavy-duty permanent magnet speakers, an attractive RCA Junior Velocity Microphone complete with chromium-plated adjustable stand for either floor or banquet use, and long interconnecting cables, complete the PG-112 equipment and make it an outstanding RCA value.

MI 12750, complete with tubes — Code SCOWD.

### **SPECIFICATIONS**

Gain — 95 db. at 1,000 cycles—250 ohms input; 112 db. at 500,000 ohms input.

Rated Output—12 watts, maximum 19 watts.

Tubes—1 RCA-1612, 1 RCA-6N7, 2 RCA-6L6, 1 RCA-5Z3.

Input Impedances—250 and 500,000 ohms.

Output Impedances—2, 4,  $7\frac{1}{2}$ , 16 and 250 ohms.

Power Required—145 watts, 105-125 volts, 50/60 cycles.

Dynamotor required for 6-volt operation. 350 volts, 150 m.a.

Cable Lengths—Microphone, 30 feet; Amplifier to first speaker, 35 feet; first speaker to second speaker, 50 feet.

Net Weight—60 lbs. Shipping Weight—66 lbs.



NIGHT CLUB



**AUDITORIUM** 



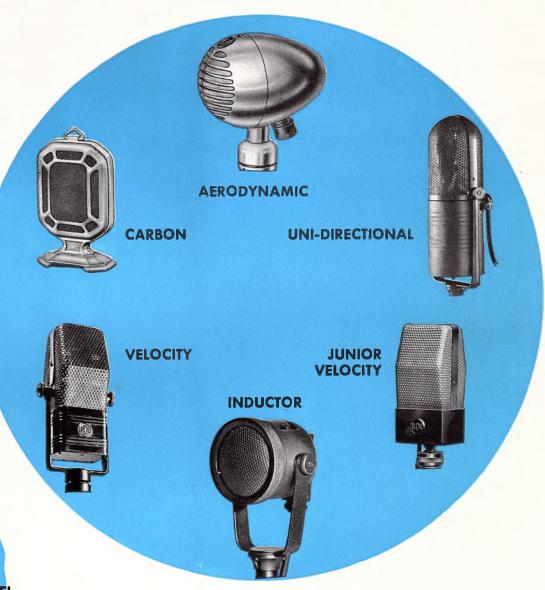
RESTAURANT



CHURCH



# RCA'S COMPLETE LINE OF MICROPHONES FILLS EVERY P.A. NEED



LAPEL VELOCITY

Perhaps in no other field of research has RCA's superior design and manufacture been more evident than in the field of Microphones. Practically every design is an RCA first, every microphone sets a new standard of performance and every unit is priced unusually moderately for its particu-

lar use. Each type of RCA Microphone is designed for a specific application and when so used gives results not exceeded by any other microphones in use today. The following pages give all the important design information covering each type. Check them and select the type best fitted to your needs.

# RCA UNI-DIRECTIONAL MICROPHONE

A new high fidelity microphone having uniform single side response. Permits high gain without feedback, thereby giving each microphone a much greater area of pick-up. Solves many acoustic problems such as reverberant halls, etc.

The RCA Uni-Directional Microphone is an entirely new type of microphone which has a directional pick-up pattern totally different from any other type. It presents public address and production men with a new tool which has any number of unique possibilities, and one which solves many difficult pick-up problems.

Its most striking feature and that which gives it its name, is the ability to pick up sound arriving from one direction *only*, while almost completely rejecting sound from the other side. This characteristic makes it especially desirable for pick-up from stages and other locations where undesired sound is also present.

For example, in auditions where a large audience is present, the audience noise is a serious problem to sound reenforcement. However, with the RCA Uni-Directional Microphone, the audience noise may be completely eliminated from the sound reenforcing system.

The unit is of rugged, fool-proof construction, and is an ideal microphone for permanent installations. It's another RCA contribution to the P.A. field.

### **SPECIFICATIONS**

Output Impedance—250 and 50 ohms.

Output Level (10-bar input)—69 db. (12.5 mw. zero level).

Directional Ratio—10 to 1.

Finish—Polished black.

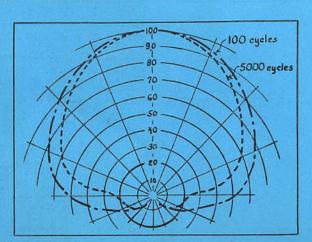
Mountings—Standard swivel, ½ inch pipe thread.

Code SCERY.

MI 4040 \$19000

Complete with 30-ft. cable.

### ANOTHER RCA FIRST . . .



The measured directional response of the RCA Uni-Directional Microphone. The wide angle of pick-up is a particularly noteworthy feature. The two curves are typical of the response at high and low frequencies respectively. For intermediate frequencies lie between these two.



### RCA VELOCITY MICROPHONE

De Luxe Type 44-B

The RCA Type 44-B Velocity Microphone is designed for use wherever the finest sound reproduction obtainable is desired. It is used by the world's leading broadcasting studios and makes possible pick-up which would be difficult or impossible with the other types of microphones. It is completely foolproof, cannot get out of adjustment, and is able to stand more hard usage than any other type of microphone. Its bi-directional characteristics minimize room reverberation; it is free from pressure doubling, cavity resonance and high frequency directivity. Use it for your finest P.A. installations.

### \*I32<sup>20</sup>

MI 4026-A

Code GNAYJ

SPECIFICATIONS Alnico Magnet — High Output

put Frequency Range—30-15,000 cycles Output level (10-bar input—

open circuit)—61 db. Output Impedances—50 and 250 ohms

Adjustable Frequency Compensating Network Incl. Finish—Dull Black Dimensions—H 12", W 734",

Dimensions—II 12", w 144", D 33%", weight 8½ lbs. Fitting Size—½" pipe thread



## RCA VELOCITY MICROPHONE Heavy Duty Type MI 4000-AF

The RCA Heavy Duty Velocity Microphone Type MI 4000-AF is an excellent microphone for general P.A. applications. While it is not the equal of the deluxe Type 44-B; nevertheless, it has all the inherent advantages of the famous RCA Velocity Types — strong construction, wide frequency range and high output. These are features that appeal to those doing good P.A. installations. A standard one-half inch threaded fitting is supplied for mounting on the various types of microphone stands shown on page 11 having this fitting.

\$7775

MI 4000-AF

Code NZIBO

### **SPECIFICATIONS**

Frequency Range — 70 to 6000 cycles

Output level (10-bar inputopen circuit)—63 db.

Output Impedances — 250 ohms & 50 ohms.

Dimensions —  $3\frac{1}{2}'' \times 3\frac{1}{2}'' \times 8\frac{1}{2}''$ 

Net weight—8 lbs. Finish—Dull Gun Metal Fitting Size—1/2" pipe thread



### RCA INDUCTOR MICROPHONE

**Model 50-A for Outdoor Use** 

The RCA Inductor Microphone is an outstanding result of RCA's continued development for a microphone having predetermined characteristics such as—freedom from shock excitation, minimum response to wind effects, high pick-up sensitivity and rugged compact construction, all of which are present in this unique instrument. Operation is achieved by means of a thin aluminum conductor rigidly coupled to a pressure-operated diaphragm. No excitation power is required. A self-contained transformer matches a 250-ohm or 50-ohm line.

### **\$100**00

Complete with 30 foot cable MI 4030-D Code CRAUI SPECIFICATIONS

Frequency Range—60-10,000 cycles
Output level—67 db. (10-bar signal—open circuit)
Output Impedances—50 and 250 ohms
Fitting Size—1/2" pipe thread





# POPULAR-PRICED RCA MICROPHONES

\$4350

(less stand) MI 4036 Code SCHUY

\$26<sup>50</sup>

(less stand) MI 6226—250 ohms, 6-ft. shielded cable—Code SCEXD.

<sup>\$</sup>2995

(less stand)
MI 6228—40,000 ohms, 30ft. shielded cable — Code
SCONK.



### RCA JUNIOR VELOCITY MICROPHONE

The RCA Junior Velocity Microphone is the finest popular-priced unit in RCA's complete line of microphones. It gives performance of a high order, is attractive in appearance, and has the rugged construction and long life that is a feature of all RCA Velocity Microphones. An exceptionally high signal to noise ratio is obtained through the use of Alnico Magnets, while three output impedances adapt it to most input circuits. If you want the best, at an attractive price, use the RCA Junior Velocity—an RCA Masterpiece. Equipped with ball and socket swivel mounting.

#### **SPECIFICATIONS**

Frequency Range—70-9,000 cycles. Output Impedances—50, 250 and 15,000 ohms. Output Level—63 db. (10-bar signal—open circuit). Cable—30 ft., 2 conductor shielded. Mounting—Ball and socket—extremely flexible—½" pipe fitting. Weight (less cable)—2½ lbs.



### RCA LAPEL VELOCITY MICROPHONE

This small unit is designed to clip on the coat lapel of a speaker, thereby removing any limitations of movement occasioned by microphones in fixed positions. The unit is slightly smaller than a match box and is inconspicuous in use. It weighs only  $3\frac{1}{4}$  oz. and is connected to a matching transformer of similar weight, designed to be carried in the speaker's coat pocket. A 30-foot cable gives a wide radius of action. MI 4001-B—Code VLAWI.

#### **SPECIFICATIONS**

Frequency Range—80-4,500 cycles ± 2 db. Overall 80-7,000 cycles. Output Impedance—250 ohm. Output Level—80 db. (10-bar signal). Dimensions—Microphone—1 1/6" x 13/6" x 15/6". Transformer—13/4"x 11/6" x 7/8".

### RCA AERODYNAMIC MICROPHONE

The RCA Aerodynamic Microphone is an outstanding RCA contribution to the popular-priced field. Small, attractive chromium finish, with modern styling, rugged construction and excellent performance, are features that appeal to every microphone user. Check the following specifications and let this microphone solve your difficult pick-up problems.

#### **SPECIFICATIONS**

Output Impedance—250 or 40,000 ohms. Operating Level— -68 db. (10-bar signal—open circuit). Frequency Range—100-8,000 cycles. Fitting Size—½" pipe thread.

### RCA DOUBLE BUTTON CARBON MICROPHONE

For microphone applications where good performance at the lowest possible price is an essential, the RCA Double Button Carbon Microphone is ideal. Attractive appearance, smooth frequency response, low carbon hiss—these are qualities that make this microphone outstanding. It is mounted in handy, rugged, all-metal case, suitable for either desk or hand use.

MI 6225-A—Code TUGEJ.



### **SPECIFICATIONS**

Type—Two-button carbon-grain. Frequency Range—50 to 6,500 cycles. Output Level— -63 db. (10 - bar signal—open circuit). D-C Resistance—200 ohms per button. Impedance—250 ohms. Excitation Voltage—4 to 6 volts. Dimensions—6" high,  $3\frac{1}{2}$ " wide, 2" thick. Net Weight—2 lbs.; Shipping Weight—4 lbs.



### RCA STANDARD ANNOUNCE STAND

This smartly designed announce stand is adjustable from 8 to 10½ inches, ample for all announcing uses. It is finished in attractive chromium and black and features a heavy cast base. Has 1/2-inch standard pipe thread fitting. Code CROYZ. MI 4065-A . . . (stand only)

### **INEXPENSIVE FLOOR** OR BANQUET STAND

This beautiful chromium plate microphone stand may be used as a floor, chair or banquet stand, for either the RCA Aerodynamic or the RCA Junior Velocity microphone. It is adjustable from 20 to 55 inches in height, has a special clutch that eliminates thumb screws, and is of heavy, rugged construction, not easily overturned. A special tilting swivel permits use of the aerodynamic microphone in any position, a desirable feature. Fitting is for standard 1/8-inch pipe thread, although adaptor for 1/2-inch thread included. Code SCIEH.

MI 4074 . . . (stand only)

#### STUDIO FLOOR STAND

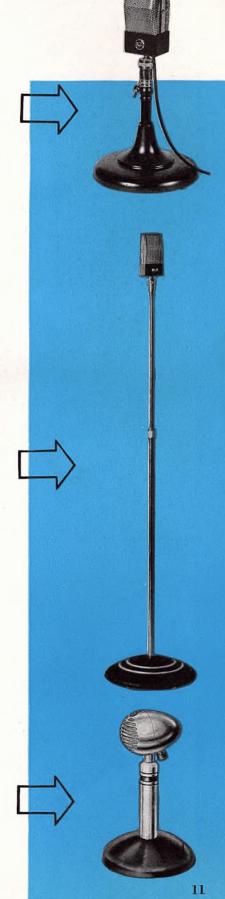
A heavy base, rugged microphone stand, for use with any of the RCA Velocity Type Microphones. Its modern design is in keeping with today's studio design, and its chromium and black finish is in harmony with all colors. Adjustable from 35 inches to 67 inches. Has ½-inch standard pipe thread fitting. Code SCAAL. MI 4068-A. . . (stand only)

### **DE LUXE STUDIO FLOOR STAND**

For installations that demand the best-the answer is this beautiful microphone stand. It is standard equipment in many broadcasting studios and will stand the most severe service. Features such as Air-Cushioning, dash-pot lowering and locking devices, and a tripod base, make this stand as outstanding as the RCA microphone it holds. Has 1/2-inch standard pipe thread fitting. Code TUVAW. MI 4056 ! . . . (stand jonly)

### TABLE STAND FOR **AERODYNAMIC MICROPHONE**

A striking, chromium-plated stand, having a heavy black base and black trimmings. Makes ideal table or hand stand. Has felt cover on base and is 6 inches in height. Not easily turned over. Fitting is for standard 1/8-inch pipe thread. Code SCIDG. MI 6227 . . . . (stand only)



# RCA BEAM-POWER TUBE



MI 4264 Code SCUYP **\$3650** 

Less tubes

Complete set of tubes \$4.45

- Operates from all High Impedance Microphones
- High Gain—Wide Frequency Response
- Two Inputs-One Microphone, One Phonograph
- Universal Output Transformer
- **●** Beam-Power Output Tube
- Lightweight—Small Size—Attractive Finish

This new RCA amplifier is an excellent foundation unit for small paging systems, counter demonstrations, any of the many applications of small P.A. systems. Its high impedance input works directly from the RCA Aerodynamic, velocity, or similar high impedance microphones. Its excellent frequency response insures high quality output, while an inverse feedback circuit gives good output

regulation and low distortion. Two input circuits make possible the mixing of both phonograph and voice inputs, thereby giving a musical background to voices when desired, or the phonograph may be operated alone. The small compact design, attractive finish—gray and aluminum—and popular price, make this amplifier an outstanding value in the low price field.

### **SPECIFICATIONS**

Gain—110 db. (560,000-ohm input impedance).

Frequency Response—Within plus or minus 2 db. from 90 to 10,000 cycles.

Output Power—6 watts maximum.

Phonograph Input—High impedance pick-up.

Tube Complement—1 RCA-79

1 RCA-6L6

1 RCA-80

Input Power—56 watts.

Output Impedance—Universal Output Transformer—Wired for 6-ohm speaker impedance.

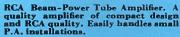
Weight—9½ lbs.

Dimensions—Length,  $10\frac{1}{4}$ "; Height,  $7\frac{5}{8}$ ", Depth,  $6\frac{3}{4}$ ". Shipping Weight— $13\frac{1}{2}$  lbs.

## RCA SERIES 6 SYSTEMS

A quality RCA system for small announce purposes, counter call service, window and store demonstrations and many other P.A. applications requiring low power of high quality.







RCA MI 6248-A Speaker Unit. An 8¼ inch permanent magnet unit of sturdy construction and excellent frequency characteristics.



MI 6228 Aerodynamic Microphone. A high impedance microphone of outstanding frequency characteristics. Complete with 30-foot shielded cable and attractive desk stand.

Here is a real P.A. System that is suitable for hundreds of uses where small, compact units are desired to cover relatively small audiences. This equipment is of traditional RCA quality, has excellent performance and is priced within the range of thousands of users.

The RCA Aerodynamic Microphone is one of the best designed for P.A. equipment; it requires no excitation power, has a 30-foot shielded cable, and has excellent frequency characteristics. It is mounted on an attractive chromium stand, having a heavy black base. The amplifier is the popular RCA Beam-Power Tube amplifier described on the preceding page, which has outstanding frequency characteristics and uses a beam-power output tube. The speaker is a rugged 8-inch permanent magnet type, designed for heavy P.A. service. The entire equipment is engineered to function as a unit, thereby avoiding difficulties encountered when merely a collection of components of various manufacture is used.

### SERIES 6-1

- 1 MI 6228 Aerodynamic Microphone
- 1 MI 6227 Desk Stand
- 1 MI 4264 Amplifier
- 1 MI 6248-A 81/4" Permanent Field Dynamic Speaker Unit (less tubes)

**\*78**45

### SERIES 6-2

Same as above but with MI 4074 Microphone Floor Stand (less tubes)	<b>*91.20</b>
1 Complete Set of Tubes for either of above systems	4.45
MI 6292 Walnut Surface Housing for MI 6248-A Speaker Unit	8.35
Additional Speaker Units, MI 6248-A, each	8.25
See page 21 for applications of this equipment	

### RCA 12-WATT AMPLIFIER



Complete set of tubes \$10.60

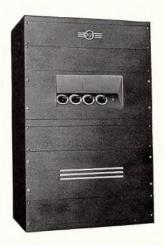
- New Type Electric Mixing.
- Two Input Positions—one 250 ohm and one 500,000 ohm.
- 12 Watts Undistorted Output— 19 watts maximum.
- Two-Purpose Design Operates from 6-volt storage battery and dynamotor or from regular 110-volt A-C. Excellent for mobile use.
- All-Metal Tubes with Beam-Power Output Tubes. (Glass Rectifier.)

This new RCA moderate power amplifier takes its place with other RCA outstanding engineering achievements. It is a high quality amplifier for that large group of applications which need only moderately high power and excellent quality. Electric mixing of a new type permits two different inputs to be mixed in one tube without modulation distortion. High gain-112 db.-beam-power tubes for high output at low distortion, tone control, phonograph jack are important quality features. The amplifier has both high and low impedance inputs, each of which is separately controlled. Microphone input may be mixed with phonograph input if desired, thus giving a musical background for speech. A continuously variable tone control and a master gain control gives complete flexibility of operation.

The entire assembly is attractively styled and finished

in silver gray and aluminum lacquer. All controls are handily located on a sloping control board.

An attractive cabinet for housing two RCA 12-watt amplifiers, one amplifier and field supply or one amplifier and switching panel is available for use with this equipment. See page 31 for complete details and prices.



### **SPECIFICATIONS**

Gain-95 db. at 1,000 cycles-250 ohms input 112 db. at 500,000 ohms input

Power Output—12 watts Maximum Output-19 watts

Tubes—1 RCA-1612 1 RCA-6N7

2 RCA-6L6 1 RCA-5Z3

Input Impedances—250 and 500,000 ohms

Output Impedances—2, 4, 7½, 15 and 250

Weight-Net, 171/2 lbs.; Shipping, 22 lbs.

Power Required (Underwriters' Rating)—145 watts; average—118 watts; 105-125 volts—50/60 cycles

Dynamotor Required for 6-Volt Operation—350 volts-

Dimensions—141/8" x 81/8" x 8"

14

### RCA SERIES 12 SYSTEMS

A high quality, moderately priced RCA P.A. System for bowling alleys, lunch rooms, small night clubs and other mediumpower applications of sound equipment. See page 21 for uses.



and with RCA quality to offer at an attractive price, sales are easy to close.

The Series 12-1 equipment consists of an RCA Aerodynamic Microphone complete with an attractive floor stand, a powerful 12-watt amplifier having a maximum output of 19 watts, and two heavy duty permanent field dynamic loudspeakers. The Series 12-2-3 and 4 systems include better microphones and speakers, as shown. All are built to do a real job—all are outstanding values at these attractive prices.

Series 12-1—1 MI 6226 Aerodynamic Microphone; 1 MI 4074 Floor Stand; 1 MI 4274 Amplifier Unit; 2 MI 6248-A 81/4" Permanent Field Dynamic Speaker Units (less tubes)

<b>Series 12-2</b> —Same as above, but with RCA Broadcast Type Velocity Microphone MI 4036 and MI 4068 Floor Stand (less tubes)	<b>\$</b> 157.35
<b>Series 12-3</b> —Same as Series 12-1, but with two MI 6247-A 12½" heavy duty permanent field dynamic speaker units (less tubes)	<b>\$</b> 154.55
<b>Series 12-4</b> —Same as Series 12-3, but with RCA MI 4036 broadcast type velocity microphone and MI 4068 floor stand (less tubes)	<b>\$170.</b> 35
Complete set of tubes for any of above	\$10.60
MI 6292 Walnut Speaker Housings for MI 6248-A Speaker Unit, each	<b>\$8.35</b>
MI 6294 Walnut Surface Cabinets for MI 6247-A Speaker Unit, each	\$8.90
MI 4428 27" Directional Baffles for MI 6247-A Speaker Unit, each	<b>\$28.25</b>
See page 21 for applications of this equipment	

RCA Aerodynamic Microphone (low impedance) and the popular RCA MI 4074 Floor and Banquet Stand make an ideal microphone complement for this equipment.

### RCA 24-WATT AMPLIFIER



(less remote mixing unit and tubes)
MI 4284—Code SCQUP
Complete set of tubes
\$15.60

For those who require up to 24 watts output, the RCA MI 4284 Amplifier is unexcelled. It incorporates the finest of circuit design, is ruggedly manufactured, and is extremely flexible in operation. Use of RCA long-life, conservatively operated metal tubes in all stages permits high gain without microphone and circuit noises. Matched circuits throughout insure maximum amplification without feedback. Other features include high quality, shielded input transformers for each cushion-mounted pre-amplifier, input mixing facilities for two or four positions, speech-music switch, continuously variable tone control and pilot lamp. The housing is designed along modern lines and is finished in silver gray and aluminum lacquer. Its distinctive controls and attractive appearance make it excellent for counter or window display purposes.

### SPECIFICATIONS

Gain—107 db. at 1,000 cycles. Frequency Response—60-10,000 cycles plus or minus 2 db. Power Output—24 watts. Tubes—2 RCA-1612, 2 RCA-6N7, 2 RCA-

6L6, 1 RCA-5Z3.

Input Impedances—2 250-ohm inputs. 2 0-5,600-ohm inputs. Output Impedances—4,  $7\frac{1}{2}$ , 15, 60 and 250 ohms.

Net Weight—25 lbs.

Shipping Weight—30 lbs.

Dimensions—16" x 8" x 8".

Power Requirements—180 watts (155 watts normal), (Underwriters' Rating)—50/60 cycles—105-125 volts A-C.

### Remote Electric Mixing



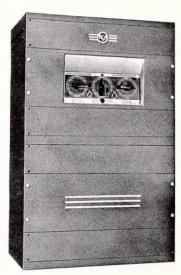
Remote electric mixing is a new RCA development which permits control of amplifiers and microphones from the most advantageous location, at any distance up to 2,000 feet from the equipment. It is accomplished by mixing and controlling electrically in the amplifier rather than in the signal circuits. Such control means that the control circuits handle simple D-C potentials that are not critical and may be of any desired length. Remote mixing is another of RCA's many contributions to the Commercial Sound field.

- Remote Electric Mixing Another RCA First.
- Permits controls to be located any distance from microphone or amplifier.
- New, noiseless, high-level mixing circuits. Beam-Power output tubes— Inverse feedback circuit — Low distortion.
- Automatic bass compensation for phonograph.
- Two microphone pre-amplifiers—Microphone input jacks furnished.



#### **Control Unit**

This unit is plugged into the amplifier and may be used to mix the various inputs in any desired manner. It is a simple, compact unit of handsome appearance and may be placed on the orchestra leader's stand, in the back of an auditorium, or any convenient central location.

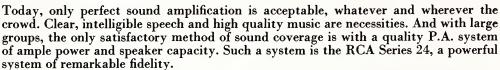


An attractive cabinet for housing two RCA 24-watt amplifiers, one amplifier and field supply or one amplifier and switching panel. See page 31 for complete details and prices.

### RCA SERIES 24 SYSTEMS

Powerful Public Address Systems for large groups up to 3500 persons—Night Clubs—Amusement Parks—Churches—Lodge Rooms—and many others. Excellent for outdoor gatherings.





The basic unit of this system is the new RCA 24-watt amplifier, which features Remote Electric Mixing. Heavy duty, 12-inch permanent magnet speakers and either the RCA Aerodynamic or Velocity Type Microphones complete the equipment. All equipment is engineered for a completely co-ordinated sound system of great flexibility and powerful performance. It's the right system for tough jobs.

Series 24 Systems are quoted less speaker housings or baffles, since different types are needed for different applications.

### **SERIES 24-1**

1 MI 6226 Aerodynamic Microphone (30-foot cable)

1 MI 4074 Floor Stand

1 MI 4284 24-watt Amplifier

2 MI 6247-A 121/4" heavy duty, permanent field, dynamic speaker units . . . . . . (less tubes)

**\$209**45

### SERIES 24-2

Same as above but with RCA Broadcast Type MI 4036 Velocity	
Microphone and MI 4068-A Floor Stand (less tubes)	<b>\$225.25</b>
MI 6294 Walnut Surface Housing for 6247-A Speaker Units . each	<b>\$8.90</b>
MI 4428 27" Directional Baffles for 6247-A Speaker Unit each	<b>\$28.25</b>
Complete set of tubes for either of above	\$15.60

### ADDITIONAL EQUIPMENT

Microphones and Floor Stands (See pages 8, 9, 10 and 11) (Maximum two).	
MI 4123 Two-position Remote Mixer Control (less cable)	\$15.50
See page 21 for applications of this equipment	

## RCA 50-WATT AMPLIFIER

CLASS "A"







MI 4123—For mixing inputs 1 and 2 on amplifier MI 4297—Code SCRUO (less cable) \$15.50. MI 4124
—For master volume control and suppressor-expander on amplifier MI 4297, Code SCRYS (less cable) \$15.50.
MI 4126—For mixing inputs 3 and 4 on amplifier MI 4297, Code SCRIC (less cable) \$15.50.

These units are finished in chromium, have a heavy black felt base, and may be mounted permanently. Due to proper circuit and mechanical design, it is not necessary to clean pads periodically to insure quiet mixing. MI 4685-50-foot Extension Cable with plug. Code SCUWN. **811.60.** 



MI 4726—Signal Mixing unit for position 3 on MI 4297, Code SCYUH. \$19.95.

MI 4727—Signal mixing unit for position 4 on MI 4297, Code SCYWJ. **819.95**.

Each unit is complete with knob and escutcheon plate. These units mix the inputs at the amplifier, the controls merely governing the operating voltages, thus avoiding the mixing of signal currents in the controls.

An attractive cabinet for housing one RCA voltage amplifier and one RCA power amplifier or two RCA power amplifiers. See page 31 for complete details and prices.



### Price \$26000 Complete Gode SCQID Code SCQID

Power Amplifier MI 4288 \$14000 Code SCQAW (less tubes) Complete set of tubes

Voltage Amplifier Drives Up to 4

Power Amplifiers Master Mixer Volume Control

High Power-50-watts output

Voltage Amplifier MI 4297 Code SCOYV (less tubes) \$12000 Complete set of tubes 814.25

- Volume Expansion for Life-like
- Volume Suppression for Prevention of Blasting
- Remote Electric Mixing

Without any qualification whatsoever, RCA proudly presents the finest amplifying equip ment ever offered to P.A. users. High power, low distortion, volume expansion and suppression, and a host of other features, make this equipment outstanding in every way. Regardless of how large the installation—ball parks, beach patrols, football games—this equipment will handle them easily. It is RCA's answer to difficult and complex P.A. jobs. Voltage Amplifier—The new MI 4297 Voltage Amplifier as supplied, consists of 2 signal-mixing units, 1 master mixer, 1 suppressor-expander unit and 1 base and control unit. Space is provided for adding two additional mixing systems, all of which have an input impedance of 250 ohms. The new signal mixing circuits eliminate any crosstalk, insertion

impedance of 250 ohms. The new signal mixing circuits eliminate any crosstalk, insertion losses, frequency discrimination or low level distortion. The remote control units may be located up to 2,000 feet from the amplifier, thus permitting mixing at the best location for proper monitoring.

For compensating between music and voice pick-up, there is a switch for cutting out low frequencies. The expander circuit gives record reproduction a new life-like tone, while the suppressor circuits hold the volume substantially the same as long as the speaker stays in

the near vicinity of the microphone.

Power Amplifier—The new MI 4288 Power Amplifier utilizes four beam-power tubes for obtaining its high power, low distortion output. All tubes are operated at conservative ratings, insuring long life. A high frequency tone control gives up to a 24 db. cut at 10,000 cycles, while degenerative circuits have been applied to the driver. This provides low distortion and effective loudspeaker dampening, to the extent that the output may be varied from a full load to a single loudspeaker with only a 20 percent rise in output voltage.

### **SPECIFICATIONS**

#### **POWER AMPLIFIER**

Output—50 watts 5% distortion. 40 watts 2% distortion.

Tubes-2-RCA-6C5

2-RCA-5Z3

Output Impedances-4, 71%, 15, 60 and 250 ohms.

Weight-Net 33 lbs.; Shipping 40 lbs.

Input Power-260 watts.

Dimensions-16" x 11 14" x 71/4".

#### **VOLTAGE AMPLIFIER**

Inputs—2-250 ohms with provision for 2 additional 250-ohm inputs. For each additional signal input add 1 MI 4117 unit.

Dimensions-16" x 11 4" x 10 1/2".

Weight-Net 131/2 lbs.; Shipping 16 lbs.

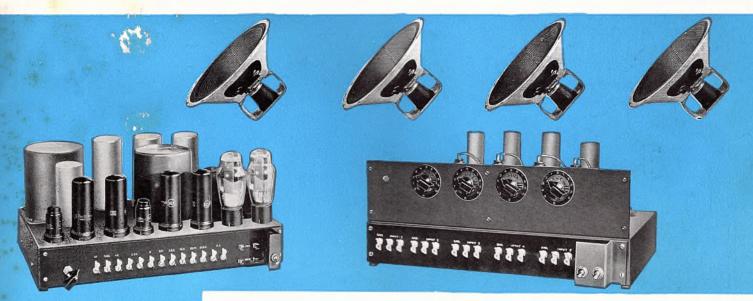
Output—Sufficient to drive 4 MI 4288 power amplifiers.

Gain—105 db. at 1,000 cycles in combination with MI 4288 amplifier.

Tubes-4-RCA-1612 1-RCA-6H6

## RCASERIES 50 SYSTEMS

Flexible, high-power P.A. systems for auditoriums, amusement parks, stadiums, industrial plants and others requiring high coverage and quality reproduction. See page 21 for uses.



Conservatively rated at 50 watts output, the new RCA Series 50 Systems offer performance of an unusually high order—out-performing many systems rated at much higher output. The basic systems consist of either Aerodynamic or broadcast type Velocity Microphones with floor stands, the MI 4297/4288 amplifying equipment and four 1214" heavy duty permanent field dynamic loudspeaker units. Either wall type speaker housings or directional baffles should be added as required, together with additional microphones, amplifier cabinets, remote mixing positions, etc. For installation where high power and high quality are necessary, the RCA Series 50 Systems will be found unsurpassed.

#### SERIES 5 O - I

1 MI 6226 Aerodynamic Microphone (30-foot cable) 1 MI 4074 Floor Stand 1 MI 4297/4288 Voltage and Power Amplifier Combination (50 watts) 4 MI 6247-A 12 ½" Permanent Field Dynamic Loudspeaker Units (less tubes)

### SERIES 50-2

Same as above but with MI 4036 Velocity Microphone and MI 4068 Floor Stand (less tubes)

Baffles—MI 6294 walnut surface housing for MI 6247-A speaker unit, each

MI 4428 27"directional baffle for MI 6247-A speaker unit, each

See other pages for additional equipment for these systems.

Tubes-One complete set for any of above equipments

**\$2795** 

### SERIES 50-3

Uses theatre type Photophone electro-dynamic speaker units and 37" directional baffles—
unusually smooth, even response. Adaptable for auditorium and stage reenforcement of orchestras, symphonies, concerts and all applications where highest quality is essential.

4 MI 4036 Broadcast Type Velocity Microphones

4 MI 4036.A Floor Stands

1 MI 4728 Amplifier Cabinet

1 MI 4297/4288 Voltage and Power Amplifier Combination (50 watts)

1 MI 4726 Signal Mixing Unit for Position 3

1 MI 4727 Signal Mixing Unit for Position 4

1 MI 4123 Remote Control Unit-Mixing Positions No. 1 and No. 2

1 MI 4126 Remote Control Unit-Mixing Positions No. 3 and No. 4

1 MI 4124 Remote Control Unit-Mixing Positions No. 3 and No. 4

1 MI 4125-A 37" Electro-Dynamic Directional Loudspeakers

(less tubes and remote cable)

Complete set of tubes for Series 50-3

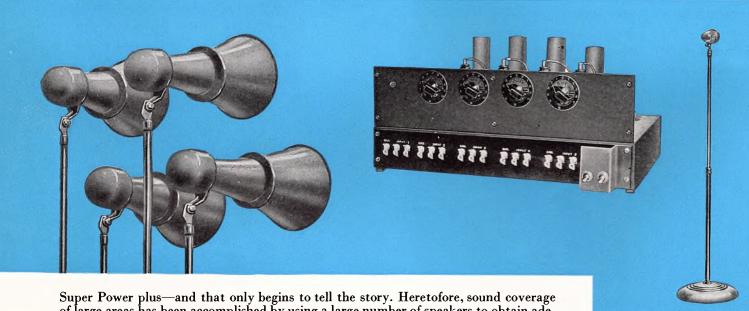
Where unusual acoustical difficulties are encountered or extended pick-up range is required, we suggest MI 4040 Broadcast Type Uni-Directional Microphone or MI 4026-A Broadcast Type Velocity Microphone. See page 9.

19

ANOTHER RCA FIRST

## SUPER POWER COMBINED WITH RCA QUALITY

### RCA SERIES 200 SYSTEMS



Super Power plus—and that only begins to tell the story. Heretofore, sound coverage of large areas has been accomplished by using a large number of speakers to obtain adequate sound distribution. Now, however, with the RCA Series 200 System using four of the new MI 6255 Sound Projectors, capable coverage of outdoor audiences up to 100,000 persons is easily accomplished. In actual tests, this system has delivered crisp, natural speech and smooth, musical reproduction at a distance of 4,000 feet from the loudspeakers—nearly a mile. Where the utmost in power and quality is necessary, the RCA Series 200 System is the only answer available today.

### **USES NEW SPEAKER**

One of the major reasons for the outstanding results obtained with the Series 200 System, is the new RCA Directional Speaker. These speakers are of an entirely new design, utilizing a powerful permanent field type dynamic unit and having an individual capacity of 60 watts. No field excitation power is required.

Series 200 Systems easily cover football stadiums, large fairs, large ball parks, outdoor construction jobs such as dams, power projects, etc.; line of march of parades, large beaches, and amusement parks.

### **SERIES 200-1**

- 1 MI 6226 Aerodynamic Microphone (30-foot cord)
- 1 MI 4074 Floor Stand
- 1 MI 4297 Voltage Amplifier
- 4 MI 4288 Power Amplifiers
- 4 MI 6255 High Power Directional Speakers (less tubes)

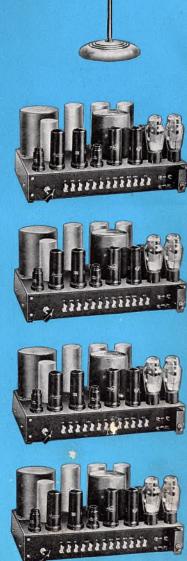
\$151645

### **SERIES 200-2**

Same as above but using RCA broadcast type Velocity Microphone MI 4036 and MI 4068 Floor Stand (less tubes)

Additional microphones and stands, pre-amplifier units, remote mixing, master gain control and expander-suppressor controls, as well as all other additional equipment listed under Series 50 Systems, can be added to Series 200. The metal cabinet described on page 31 may be used to house this equipment.

See page 21 for applications of this equipment



# HOW TO CHOOSE THE PROPER SYSTEM FOR YOUR INSTALLATION

The RCA Sound Systems described in the preceding pages are grouped to cover a wide variety of applications. However, it should be remembered that it is both impractical and impossible to attempt to list a system for every application inasmuch as many installations are extremely individual in their character. The basic systems represent the fundamental equipment required, to which may be added additional microphones, speakers, baffles, remote controls, etc., as required by a particular job. Should you desire

additional information concerning the grouping of equipment or recommendations for a specific job, send your inquiry to your RCA Commercial Sound Distributor, or to RCA Manufacturing Co., Camden, N. J.

The following table gives a few suggestions for the type of equipment for a typical installation. While it is reasonably accurate, many deviations may be found for individual installations.

	SERIES 6	SERIES 12	SERIES 24	SERIES 50	SERIES 200
Airports	Market Warrant College			* 1	1940
All open air applications where high power is required					*
Amusement parks	BUILDING FLAT STORY		*	*	HALL CONTRACT
Armories	Walter Street			*	KARATA KARATA
Athletic fields			STATE OF THE PARTY.	*	*
Auction rooms	*	CONTRACTOR OF THE PARTY OF THE			
Auditoriums	STATE OF THE PARTY		*	AND DESCRIPTION	
Auditoriums (large)			A THE RESIDENCE	*	DESCRIPTION OF THE PARTY OF THE
Ball parks			DESCRIPTION OF THE PARTY OF THE	*	*
Ballyhoo systems	*		SOURCEMENT	THE RESERVE OF THE PARTY OF THE	
Bathing beaches			CORNEL OF THE PARTY OF	ALEXANDER PROPERTY.	*
Beer gardens		*	The second second	and the second second	
Beer gardens (small)	*				
Bowling alleys	Many Carlotte Control	*			
Bowling alleys (small)	*	AND DESCRIPTION OF THE PERSON		Mary Alexander Control	CONTRACTOR AND
Bus stations	TO CONTRACT CONTRACT OF THE	*	*		Name of the last o
Bus stations (small)	*		ATTENDED TO STATE OF THE STATE		
Cometeries			Company of the Company	*	
Churches			*	A CONTRACTOR OF THE PARTY OF TH	
Churches (small)		*	**************************************		
		•		*	
Conventions			*		
Country clubs			<b>X</b>		
Counter demonstrators	*				
Dance halls			*		
Dance studios	King below and				
Dept. stores	ENGINEER CONTRACTOR		TO THE STATE OF	Market Services	
Dept. stores (small)		*			
Drug stores	* 100				HARRIE CONTRACTOR
Fairs and expositions		Market Constitution			*
Hotel ballrooms		A LONG CONTRACT	San Maria A Carlo		
Industrial plants				*	
Lunch rooms	*	*	*		
Lodge rooms			*		
Mass meetings	THE MODEST COST	Maria Salah Ca			* * *
Night clubs			*	MATERIAL SECTION	
Orchestras			*		CONTRACTOR OF THE
Race tracks				1.00 May 1	
Railroad stations	Control Colorada	*	*		IN THE ASSESSMENT OF THE
Railroad stations (small)	Maria Maria		THE RESERVE	THE PERSON NAMED IN	
Restaurants	Example Hater	****	STATE OF STREET		Committee of
Restaurants (small)	*			Service Service	THE REAL PROPERTY.
Ships			WATER THE PARTY	*	*
Skating rinks	THE RESIDENCE OF THE PARTY OF T	TO BE WAS THE OWNER OF THE OWNER.	*	*	
Sound trucks	BESSHARE TELEVISION	*			
Sports renas	PROPERTY CALLS	Markey Co. Co.		*	
Stadiums	45,500,505,505,000,000	SECTION STATE	SILE SERVICE YEAR	*	*
S. S. piers			*	Harrison and the second	MACOUNTED TO
Traffic control	A STATE OF THE STA	*	*		SECRETARION OF THE SECRETARION O
Weighing stations	*			SOUTH SOLUTION ST	CONTRACTOR NAME
Window demonstrators	*	EITE SERVICE AND A			
WINDOW COMPUBLIATORS					

### RCA SPEAKER MECHANISMS

### GIVE OUTSTANDING REPRODUCTION AT LOW COST

### RCA Electrodynamic Speaker Mechanism

### RCA Permanent Magnet Speaker Mechanism

For General P.A. applications, the permanent magnet dynamic speaker is unexcelled. Elimination of field supply units and associated wiring represents a material saving on all installations. This unit, which uses the new Alnico metal for the magnet structure, is compact, sturdy, and is particularly well suited for school class rooms, hotel rooms, call systems or other applications where a powerful unit of moderate size is required. The voice coil is sealed to prevent accumulation of foreign material. The speaker should be installed at least 1 inch from any magnetic material. MI 6248-A—Code SCAZJ

Recommended for use with MI 6292 Speaker Housing.

### RCA Permanent Magnet Speaker Mechanism

### RCA High Fidelity Electrodynamic Speaker Mechanism

This ruggedly designed speaker unit is for use in applications where unusually high quality reproduction is required. It uses an aluminum voice coil which extends the higher range above 7,000 cycles, while excellent low frequency response is also obtained. A self-contained matching transformer has a wide variety of input impedances from 800 to 8,800 ohms. Dust shields are provided for the cone while a complete housing covers the field coil. MI 6243—Code CROVW . . .

Recommended for use with MI 4428 Directional Baffle.

### RCA High Fidelity Electrodynamic Speaker

#### **SPECIFICATIONS**

Voice Coil Impedance — 2 ohms.
Field Resistance—1,000 ohms
—110-135 volts D-C, 0.1 ampere.
Overall Diameter—81/4".
Overall Depth—4".
Weight—Net, 33/4 lbs.; Shipping, 5 lbs.

#### **SPECIFICATIONS**

Voice Coil Impedance — 2 ohms.
Output Transformer Impedances — 225, 410, 1,250, 2,500 and 5,000 ohms.
Maximum Power Input—6 watts.
Overall Diameter—8½".
Overall Depth—4".
Weight—Net, 3 lbs.; Shipping, 5 lbs.

#### **SPECIFICATIONS**

Voice Coil Impedance — 2 ohms.
Transformer Impedances — 225, 410, 1250, 2500 and 5000 ohms
Maximum Watts Input—10 watts.
Overall Diameter—12½".
Overall Depth—6½ lbs.; Shipping, 8½ lbs.

#### **SPECIFICATIONS**

Voice Coil Impedance — 12 ohms. Field Resistance—1,100 ohms (110 volt, 100 m.a.). Finish—Black wrinkle. Weight—Net, 21½ lbs.; Shipping, 25 lbs.

#### **SPECIFICATIONS**

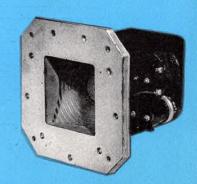
Voice Coil Impedance—15 ohms.
Field Excitation—10 to 18 watts.
Field Voltage—MI 1425-A—100 to 140 volts, 100 m.a.
MI 1430—12 to 18 volts, 1.5 amp.
Overall Dimensions—8" x 8" x 8".
Weight—Net, 26 lbs.; Ship ping, 30 lbs.



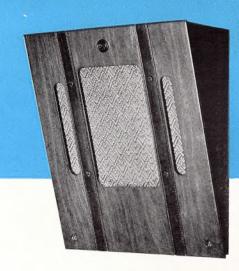












RCA Metal Housing—This metal speaker housing is designed for applications where rugged unit of neat appearance is desired. It is made of steel and finished in an attractive brown wrinkle lacquer. For MI 6248-A speaker unit or other 8-inch speakers of similar dimensions. It is 95%" in diameter, 4" deep, and weighs only 2 lbs. (less the speaker unit). Shipping weight, 4½ lbs.

MI 6296-Code SCILO . . . . . . \*3.80

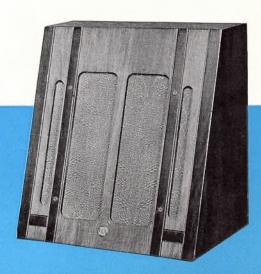
RCA Semi-Flush Baffle—This attractive baffle is designed for restaurants, hotels and others who desire a semi-flush housing that may be mounted high up on the wall and yet will project sound to those who are listening. It is made of wood, attractively finished in walnut, andwill accommodate most 8-inch loudspeakers. Must be used with MI 6161-A Wall Box. Dimensions 11½" wide, 133%" high and 4½" deep at its maximum depth, and weighs 2 lbs. less speaker unit. Shipping weight, 5 lbs.

### HOUSINGS FOR RCA PERMANENT MAGNET SPEAKERS

RCA Sloping Front Housing—For 8-inch type loudspeakers, such as the RCA MI 6248-A, this housing will be found extremely useful. It may be mounted either on the wall or on a table or desk. It is attractively finished in walnut and improves the tone quality of the speaker. An excellent unit for hotel rooms, office buildings, restaurants and other multiple outlet P.A. installations. Dimensions: 105%" wide, 12½" high, 7½" deep. MI 6292—Code SCIFI.

RCA Sloping Front Housing—This attractive unit will accommodate the RCA MI 6247-A 12-inch speaker and others of similar dimensions. It may be used either for mounting on the wall or for placing on a table, desk, etc. It is made of wood, attractively finished in walnut, and is an ideal unit for use with multiple speaker P.A. installations. Dimensions:  $14\frac{1}{2}$ " wide,  $16\frac{1}{2}$ " high,  $10\frac{5}{8}$ " deep (maximum). Weight: Net, 4lbs.; Shipping, 6 lbs.MI6294.Code SCESC.





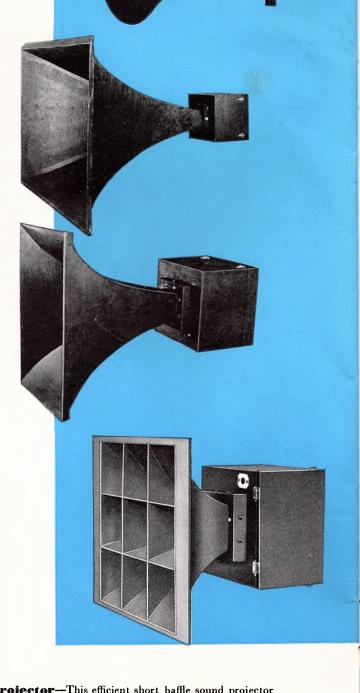
### RCA SOUND PROJECTORS

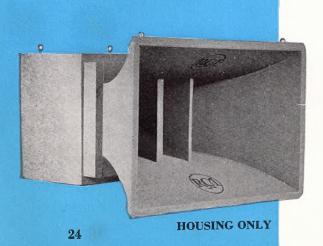
### For All Sound Coverage Requirements

(Complete with MI 1425-A Speaker Units)

RCA High Fidelity Sound Projector—For high quality reproduction in the average size auditorium, this unit will be found most satisfactory. The frequency range is substantially flat from 100 to 6,000 cycles, and the distribution angle is 55° in all directions. The projector is made of seasoned hardwood, finished in black. It uses the MI 1425-A speaker unit described on page 22. Size: Length 63 inches, Width 58 inches, Height 43 inches. Weight: Net 82 lbs., Shipping 200 lbs.

RCA Sound Projector—Where space is limited and acoustical problems are difficult, the MI 1469 sound projector will solve the problem. Only 25 inches long, and having a high low-frequency cut-off, boominess of voice is eliminated and music is clear and crisp. The distribution angle is 60° both horizontally and vertically, giving a wide angle for short halls. The cellular construction of this baffle insures excellent high frequency distribution. Dimensions: Length 25 inches, Width 25 inches, Height 25 inches. Weight: Net 50 lbs., Shipping 85 lbs.





### RCA HIGH FIDELITY CONSOLE LOUDSPEAKER Model 64-A

Uses Double Voice Coil Speaker Unit

For the exacting requirements of classes in music appreciation, music rooms, hotel lobbies or any place where quality of reproduction is a factor of prime importance, the RCA High Fidelity Console Loudspeaker is to be recommended. The wide frequency response of this speaker results in lifelike reproduction of music and voice that is uncanny in its realism. So faithful is it to the original that many broadcasting studios use it for monitoring their programs.

The cabinet and speaker unit are not the outcome of separate developments, but are a combined co-ordinated design, which makes possible the acoustical results obtained. The cabinet is styled in today's trend and finished in black with aluminum trimmings. The housing is completely enclosed.

MI 4435/4466—110-volt field -Code SCHYB. MI 4435/4467—56-volt field —Code SCIAD

### **SPECIFICATIONS**

Frequency Response—Substantially flat 60 to 10,000

Speaker Voice Coil Impedance—15 ohms.

Maximum Watts Input-10 watts.

Speaker Dimensions—Face, 8" x 8"; depth, 7".

Cabinet Dimensions—331/3" high, 281/4" wide, 161/2" deep.

Net Weight Cabinet—71½ lbs.

Net Weight Speaker Unit—18½ lbs.

Shipping Weight Cabinet—100 lbs.

Shipping Weight Speaker Unit—23 lbs.

Cabinet Material—Wood.

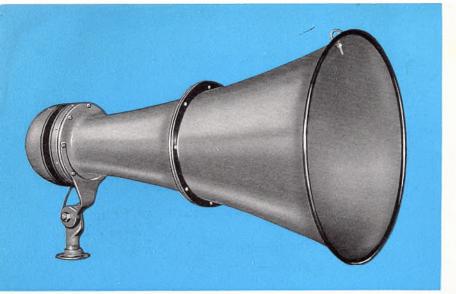
Cabinet Finish—Black with aluminum trimming.



The splendid aluminum double voice coil speaker unit insures large acoustic outputs of highest quality.



is an integral part of the entire acoustic system. Coordination of speaker unit and cabinet design insures extremely faithful reproduction.



- Projects sound nearly a mile
- No field supply required
- Wide distribution angle
- High power handling capacity
- Excellent quality of both speech and music
- Sturdy construction Attractive appearance

### RCA SUPER-POWER SOUND PROJECTOR

For long-distance projection of quality sound, providing crisp speech or life-like music, the RCA Super-Power Sound Projector will be found to give excellent results. It is of the metal-horn-projector type, uses a heavy permanent-magnet speaker unit and easily handles either 60 or 100 watts.

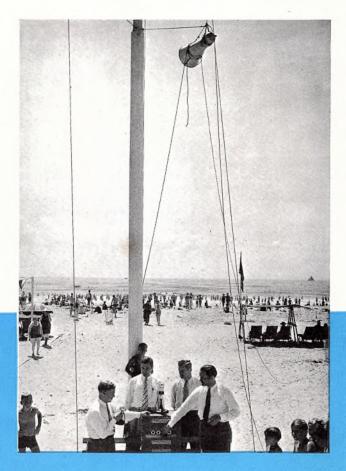
In actual tests this speaker has been found to project intelligible speech for distances of more than 4,000 feet, nearly one mile, and over water for a considerably greater range. A bank of these speakers will adequately cover large-scale events such as air races, football games, baseball games and others for which ordinary loudspeakers prove insufficient. The equipment is ideal for the needs of transportation companies—freight yards, steamship piers and other places where the noise level is extremely high.

MI 6255—Code SEBPA. 60 watts . . \$19750

RCA engineers, demonstrating the RCA Super-Power Sound Projector to city officials at Atlantic City, N. J. Sound was clearly audible for great distances up and down the beach. The Super Projector provided lifeguards with a remarkably effective means of handling the enormous crowd of bathers in a safe and orderly manner.

### **SPECIFICATIONS**

Frequency Response	100 to 7,000 cycles
Distribution Angle	
Bell Diameter	
Mounting Requirements	. Standard 11/4" pipe fitting
Length	$1 \cdot \cdot$
Weight—MI 6255	58 lbs.
MI 6256	





### RCA MULTI-WAVE ANTENAPLEX

### For Apartment Houses, Hotels, Hospitals, Radio Dealers' Display Rooms and Institutional Buildings

Now, for the first time, through the new RCA Multi-Wave Antenaplex System, reception may be obtained by any number of receivers—from either domestic or foreign broadcast stations, including police, aviation and amateur calls—from a single antenna. Moreover, reception is superior to that obtained with individual antennas and noise is greatly reduced. Tenants with fine receivers can now enjoy them to the full.

The new system permanently eliminates the usual unsightly maze of haphazard individual antennas, greatly improves the appearances of buildings and reduces maintenance cost. It conforms to fire laws and municipal regulations; does away with costly and unpleasant misunderstandings; brings satisfaction impartially to all tenants.

It accomplishes these results with a single, easily installed antenna system, clear of all interference-creating electrical disturbances within the building, and provides for the greatest possible pick-up of signal in each broadcast band, on every receiver.

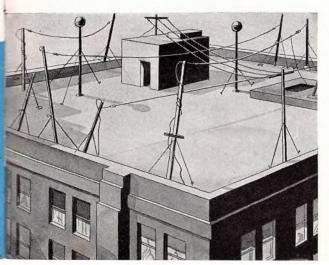
"An interesting installation of the RCA Multi-Wave Antenaplex was made in the Western Furniture Exchange and Merchandise Mart at San Francisco, California. The 519 outlets were concentrated mostly on the fourth floor and it is probably the greatest concentration of different types and styles of radio receivers in any equal footage in the world. All of them can be demonstrated perfectly. Results are very pleasing to everyone."

—An extract from a report by H. D. King of the Leo J. Meyberg Company, San Francisco.

### WHAT IT DOES FOR YOU

- Provides world-wide antenna facilities for any number of radios. Frequency range 530-18,000 kcs.
- Greatly reduces interference from electrical devices, etc.
- Gives better reception for every radio connected to the system than if each had individual allwave antenna.
- Keeps old and new tenants satisfied; helps augment rentals.
- Conforms to law, fire and police regulations.
- Prevents damage to roof.
- Eliminates problem of individual antennas.
- Flexible in application to suit individual building's requirements.

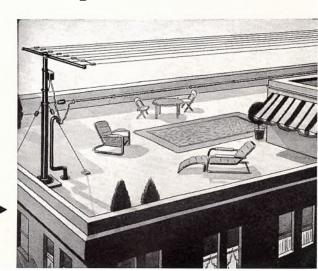
## Write For Prices On A Complete Installation



### BEFORE

Elimination of the usual antenna jungle on the roof of apartment houses is an important feature of the new RCA Multi-Wave Antenaplex. It greatly improves the appearance of the building and permits using the roof for other purposes.

AFTER >



# RCA VICTOR SCHOOL SOUND SYSTEM

MI 6721-B-Two program channels
Price \$121110 up

MI 6720-B—One program channel Price \$87790 up

(Prices vary according to number of rooms)

The RCA Victor School Sound System has been developed by the cooperative efforts of nationally known educators and the RCA Manufacturing Company, Inc., the pioneer leader in the field of radio and recorded sound. It is one of the finest educational and administrative tools ever devised.

By means of this electrical system the principal can convey radio programs, recorded speech and music and direct announcements from his office to any or all rooms in the school. Also the speakers in each room can be used as a microphone, thereby enabling the principal to communicate with any room at will.

The equipment may also be used to amplify voice or music for either indoor or outdoor gatherings, such as in the auditorium or on the athletic field. The cost of the RCA School Sound System is within the limits of the most conservative budget, from the smallest school to the largest. Quality of performance of RCA equipment is in keeping

### RADIO SECTION

with all modern advances in the art of sound reproduction.

The radio section, located in the upper part of the cabinet, contains: (1) Either one or two RCA radio receivers (these instruments include both domestic and foreign receiving bands); (2) Monitor speakers for each program; (3) Complete controls for tuning and adjusting the volume of each program, and (4) Complete distribution switch control.

A typical switch panel is shown in the illustration and is flexible enough to meet the average operating condition. However, special switching of practically any type may be furnished on order.

Each 4-point switch controls the distribution of sound to its own class room from four control positions: "A" for one sound program, "B" for second program, "S" for supervisory control, and "Off" for disconnecting all distribution except the monitor speaker.



This handsome school cabinet contains a complete sound system for the most exacting of school requirements. If desired, either the radio section at the top or the announcement and phonograph section at the bottom may be purchased separately.







The master switch enables one to turn off all the class rooms simultaneously and leaves the monitor speakers free. This makes it easy to tune in on the monitor the program desired before switching it into any class room.

### ANNOUNCEMENT AND PHONOGRAPH SECTION

The announcement and phonograph section, located in the lower part of the cabinet, contains a newly designed RCA Victor automatic record changing mechanism, which plays either manually or automatically, 10- or 12-inch records. Also included are amplifier input control switches, A-C power switches and a high gain amplifier having 20 watts output. Space is provided for an additional 20 watts amplifier, if necessary, at any time.

### OUTDOOR SPEAKERS

Weather-proof metal directional loudspeakers, which have been designed primarily for outdoor use, are described in other pages of this catalogue, and may be



used in conjunction with this equipment. Football, base-ball, track or any other outdoor rallies are greatly increased in their effectiveness when a sound system is available for announcements, musical programs, etc. They can be provided for any coverage desired, and to overcome any sound level that may be encountered, even a football game in a large stadium. See pages 24 and 26 for details.

### RCA LOUDSPEAKERS

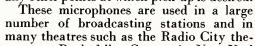
RCA loudspeakers, designed for either table or wall mounting, are installed in all class rooms, gymnasiums or other indoor locations at which it is desired to have sound from the main system. These speakers are noted for their high efficiency and fine natural reproduction.

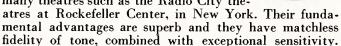


In the auditorium, RCA directional baffle loudspeakers are easily installed. These loudspeakers, because of their directional characteristics and wide frequency range, help overcome acoustical difficulties or dead spots so that pupils even in the last row can hear perfectly. The system may be used for sound reenforcing when speeches or any type of stage presentation is made in the auditorium.

### RCA VELOCITY MICROPHONE

Any of the RCA Velocity Microphones described in this catalogue (see pages 8, 9, 10 and 11) may be supplied for use with this equipment, either in the auditorium or any other points at which pick-up is desired.



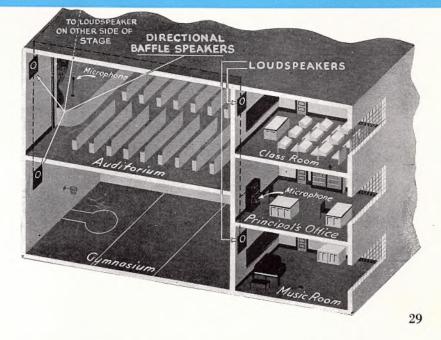


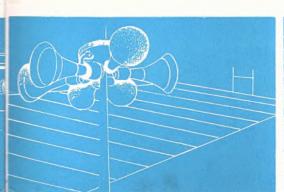


### EQUIPMENT NEEDED BY AN AVERAGE SCHOOL

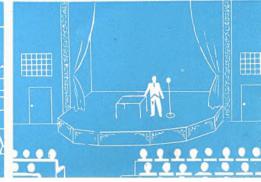
The illustration at the right shows a typical layout of a few rooms of a school in order to give an idea of the minimum equipment needed. This may be added to if desired and should be, for example, in the auditorium where the space to be covered is quite large.

To obtain an estimate of your particular installation we recommend that you write direct to the RCA Manufacturing Company, Inc., Camden, N. J. Your inquiry will receive prompt attention.









### RCA TRANSCRIPTION AND RECORDING TURNTABLE TYPE 70-A

The RCA Transcription and Recording Turntable, Type 70-A, while designed primarily for broadcast station operation, is a high quality de luxe equipment designed for the most exacting of uses. Colleges, high schools, high quality P.A. users and many others will find this equipment extremely useful for all recording and reproducing needs. Outstanding features include operation at either 78 or 33½ r.p.m., improved pick-up for either vertical or lateral cut records, freedom from "wows" and heavy, rugged construction for long-life operation. It is handsome in appearance, quiet in operation to permit the close proximity of microphones and has unusually high fidelity reproduction characteristics. The self-contained cabinet holds the entire equipment, and it is merely necessary to plug in the A-C power supply and operate.

A high torque self-starting synchronous motor drives the cast aluminum turntable through a perfected mechanical filter. Speed reducing is achieved through the use of an ingenious ball-bearing reduction device, exclusive in RCA reproduction equipment.

MI 4850 (Type 70-A) (For laterally cut records only)—Code SCOOL...

#### **SPECIFICATIONS**

Pick-up-Lateral Type.

(Vertical type with vertical arm, extra.) Reproduction Speeds— $33\frac{1}{3}$  and 78 r.p.m.

Frequency Response

Lateral Reproduction—30 to 7,000 cycles. Vertical Reproduction—30 to 10,000 cycles. Output Level (Test Record)—0.01 volt r.m.s. Power Supply—105-125 volts, 60-cycle only. Cabinet Dimensions—19" x 21½" x 31". Finish—Black with silver striping. Net Weight—136 lbs.; Shipping Weight, 200 lbs.



### Vertical Tone Arm Attachment Kit Type 71-A

This kit is supplied for use with Type 70-A equipment when reproduction of vertically cut records is desired. The pick-up is of the moving coil type, fitted with a diamond point needle and has excellent reproduction characteristics. MI 4852 (Type 71-A)—Code SCOPM. \$280.00

### Type 72-A Recording Attachment

The RCA Type 72-A Recording Attachment has been developed for use with the Type 70-A equipment for making instantaneous recordings of programs on acetate records. Fits on the equipment as shown at left. Excellent for courtrooms, schools, colleges or anyone requiring the recording of high quality records at minimum expense. MI 4880 (Type 72-A)—Code SCORD. \$140.00





### RCA VICTOR INSTANTANEOUS RECORDING DISCS

Non-breakable recording discs in 10, 12 and 16-inch sizes are available for use with the Type 72-A recording attachment. Can be used for instantly playing back with steel needles. A special steel recording cutter is also available.

Write for full details and prices.



### RCA PORTABLE TURNTABLE UNIT

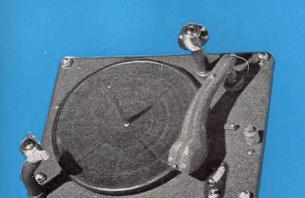
This turntable is supplied in an attractive suitcase type cabinet, which is covered with black leatherette. It is of rugged construction and will withstand heavy abuse while in transit or due to constant handling. The synchronous motor is adjusted for playing standard 78 r.p.m. records, and has sufficient torque to maintain uniform speed with either a 10-inch or 12-inch record. 331/3 r.p.m. can be supplied at slightly added cost. Pick-up impedance is 18 ohms, while the power consumption is 30 watts.

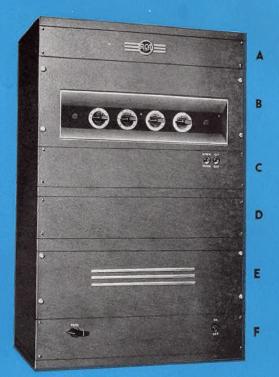
MI 4810—Code CROJK . . . . .



### RCA VICTOR RECORD PLAYER

This small, compact turntable unit, a standard unit of RCA Victor instrument line, permits you to play any 78 r.p.m. record through practically all types of amplifier systems, and all of RCA's new Portable P.A. Equipments. It is furnished with a magnetic type pick-up of 1,400-ohms impedance. Includes volume control, pick-up, on-off switch, and a compensated volume control. The cabinet is of an attractive walnut finish and the entire unit weighs but 12 lbs.





MI 4728 Illustrated Above

#### RCA AMPLIFIER CABINETS

These cabinets will be found to be ideal for housing standard RCA amplifiers and accessory equipment. Sturdily constructed and finished in attractive crackle lacquer, they improve the appearance and efficiency of any P.A. installation.

MI 4666 Cabinet alone, less panels.

#### PANELS

Refer to letters adjacent to above illustration.

E-MI 12305-Blank panel for all types-Code SEAVH

MI 12307—Switch panel for MI 4288 amplifier—Code SEBAM. 82.65 MI 12306—Blank panel for MI 4274 or MI 4284 amplifier —Code SEAWI . \$2.45

### **COMPLETE CABINET ASSEMBLIES**

MI 4732—Code SEAKX—Complete cabinet with panels for one MI 4288

### RCA JUNIOR AUTOMATIC RECORD CHANGER

The new RCA Junior Automatic Record Changer is a small low price unit that changes automatically seven ten-inch records or plays 12inch records manually. It repeats the last record of either size indefinitely until the motor is turned off. The small, compact size of this unit which is only  $13\frac{1}{2}$ " long,  $10\frac{1}{4}$ " deep, and with a total height of 83%", makes it ideal for replacement use in conjunction with manual type motorboards. It is finished in an attractive brown wrinkle finish, with a pick-up of 96-ohms impedance and has a shipping weight of 15 lbs. Supplied as mechanism only.

MI 6986—Code SCOXU 5550

## RCA VICTOR-PHONE

## JUST PLUG IN AND TALK!





# AN INTER-COMMUNICATING CALL SYSTEM THAT REQUIRES NO WIRES

Here's the handiest system for inter-communicating between offices, hotel rooms, factory buildings or any of the other thousands of places where a simple, reliable means of inter-communication is required.

Just plug the units into an A-C or D-C outlet, press the button and talk. That's all there is to it—no wires—no batteries—no expensive installation. Anyone can install it and it works perfectly every time.

The RCA Victor-Phone is of the carrier frequency type.

The carrier frequency of 100 kcs. may be adjusted to  $\pm$  25%, thus permitting as many as three systems to operate in proximity to each other without interference. Voices up to 10 feet and more will be picked up by the unit and reproduced at the receiving end with sufficient volume to fill an ordinary room. Each unit is provided with a volume control.

MI 6350—Code SEBMY.

Complete with tubes . . . per pair

\*76<sup>50</sup>

Excellent for use in the home-kitchen to dining room, living room to nursery, house to garage, etc.



#### **SPECIFICATIONS**

Dimensions—W 10¾", H 7¾", D 65%".

Weight—16 lbs. each (net); shipping weight, 20 lbs. each.

Carrier Frequency—100 kcs.  $\pm$  25%.

Tube Complement—1—RCA-25Z5, 2—RCA-43, 1—RCA-75.

Input Power-40 watts.



### RCA VICTOR-PHONE Master Wired System

### A 5-POSITION SELECTIVE INTER-COMMUNICATING SYSTEM

For All Inter-Communication Uses

For inter-communicating installations that require more than two positions, the RCA Victor-Phone Master Wired System will be found to be exceptionally desirable. It permits communication between the master unit and any one of five remote positions. Conversely, any one of the remote positions may communicate with the master position. After calling from a remote position one may both listen and talk without turning the switch.

Connections between the various units are simple, a three-wire cable being required to connect each remote unit with the master unit. Remote units may be placed up to 1,000 feet from the master, and secrecy is insured because of the individual wiring of the system. Power for the master unit may be obtained from any 110-volt A-C or D-C circuit. No power is required for the remote units. Each unit is housed in a small, attractive walnut-finished cabinet.

A master unit in your living or bedroom permits you to *listen-in* or talk to any other five rooms in your home. Excellent for conversation between kitchen and bedroom.

#### SPECIFICATIONS-MASTER UNIT

Dimensions—Height, 7½"; Depth, 6½"; Length, 10¾".

Weight-Net, 83/4 lbs.; Shipping, 10 lbs.

Tubes-1 RCA-6J7, 1 RCA-25L6, 1 RCA-25Z5.

Power Consumption-45 watts.

### SPECIFICATIONS-REMOTE UNIT

SECRETARY

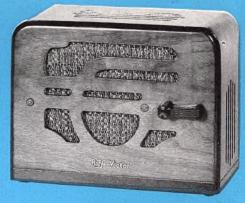
Dimensions—Height, 6½"; Depth, 5¾"; Length, 8¾".

Weight-Net, 23/4 lbs.; Shipping, 5 lbs.



#### **MASTER UNIT**

By rotating the Selector Switch, conversation between the Master Unit and any one of five (or less) remote positions may be secured. The knob at the left is for adjusting the volume while the center switch is pressed for talking. When out of the office, turning the Selector Switch to the secretary position, permits the secretary to hear all incoming calls.



#### REMOTE UNIT

By pushing the "talking" switch, any one of five Remote Units may be used to call Master Unit. After the Selector Switch on the Master Unit is turned to the proper position, conversation may be carried on without touching the "talking" switch of the Remote Unit.



EXECUTIVE





**SHIPPING** 



LABORATORY



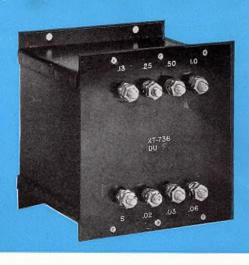
SHOP



DRAFTING







### RCA Speaker Matching Transformer

For matching variable types and numbers of speakers and for transmitting audio power over long distances, use this rugged transformer. Taps are provided at 7.5, 15, 100, 250, 500 and 2,500 ohms, giving a wide range of impedances by connecting between taps. Has 40-watt power rating with less than 3% power loss. Flat frequency characteristics between 35 and 14,000 cycles. Weight: Net 9 lbs., Shipping 15 lbs.

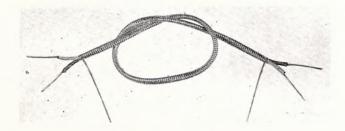
MI 4603—Code CRAQE.

### RCA Speaker Matching Transformer

### RCA Speaker Matching Transformer

Use this transformer for matching up to eight 15-ohm speakers to a single 15-ohm output circuit. Easily handles up to 40 watts audio power with less than 3% loss in power and no frequency discrimination between 35 and 14,000 cycles. A large, rugged transformer that will stand up under severe conditions. Weight: Net 9 lbs., Shipping 15 lbs.

MI 492—Code CZOOJ



### RCA Shielded Cable — 2-Conductor

This cable has been developed by RCA for the distribution of audio power to loudspeakers, radio pillows, headphones, etc. It effectively eliminates crosstalk and other annoying disturbances that invariably occur when ordinary wire is employed. It permits several programs to be carried in the same conduit, an impossibility with other types of wire. A heavy galvanized, soft steel, spiral armor provides sturdy protection against physical damage and facilitates the work of pulling this cable through conduits. Leads available in various colors.

MI 18—Code TWOZS . . . . . . per 1,000 feet.

### **RCA** Westminster Chimes

RCA Electrical Chimes give schools, churches, banks, public buildings, memorial parks and other similar institutions, chimes of any notes desired which may be played in any volume possible through the amplifying system through which they are used. The striking medium requires 12 volts D-C for field supply, while the output impedance is 250 or 500 ohms. MI 4750 (5 notes: G, F, E Flat, B Flat, G)—Code \$328.85

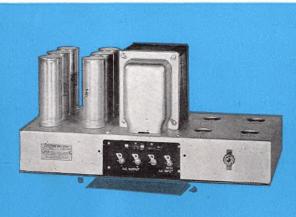
MI 4753 (1 note) (Normally furnished in G-387½ cycles; other notes on special order)—Code SCOWT . . . \$87.00

### RCA Field Supply Unit

### RCA Loudspeaker Field Supply Unit

A small, compact, easily mounted field supply unit that provides excitation for one standard 10-watt, 100 m.a., 100-volt, D-C field. Where more than one speaker is used, a separate MI 4352 should be used for each unit. Is well constructed and will stand continuous heavy duty service. Operates from 110-volt A-C source and consumes 40 watts power. Uses 1 RCA-80 tube. Size: 4" x 4" x 3\(\frac{9}{2}\)". Weight: Net 3\(\frac{1}{2}\) lbs., Shipping 6 lbs. MI 4352 — Code VLAEV.







FORT WORTH

R.C.A. Manufacturing Co. Camden, New Jersey.

Attention: Mr. J.W. Cocke.

Speaking for the Fort Worth Frontier Centennial and for myself, may I thank you for your cooperation and compliment you on the quality of your amplification system - both on the grounds of the Frontier Centennial and in the various amusement buildings.

This is the first operation in which I have used R.C.A. sound the first operation in which I have come in contact with R.C.A. service Not only am I impressed with what I consider to be the finest amusement amplification to date, but I am even more impressed by the unprecedented spirit and cooperation of your technical staff. It had the enthusiasm and skill of an All-American football team.

Outstanding theatrical executives have told me that they consider the amplification system at the Casa Manana the finest anywhere in America.

I want to take this occasion to personally thank Mr. Volkmann, Mr. McIntosh, Mr. Linquist and Mr. Toepperwein of your organization. To have satisfactorilly solved the many new problems that this operation entailed, is something your organization may well be proud of.

BILLY ROSE, Director General.



## UNITED ENGINEERING TRUSTEES, Inc.

25 WEST THIRTY-NINTH STREET, NEW YORK

Commercial Radio-Sound Corp 570 Lexington Avenue New York, N. Y. Attention: Mr Kenneth G Gove

For several years the inadequacy of the public address system obliques a real one to satisfy the critical audiences. Our

problem was a real one to satisfy the critical audiences. Our Shen in the summer of 1935 you ware called in to suggest was close for such conditions as inability to carry a speaker's voice under the beloomy, to climinate apprimit noises, etc., the sanewr was a range and adding so conducted. The Folder our silled theories projectors and adding so conducted. The Folder theory is the sanewr was a range of the set of the Marting the projectors of the Marting theory of the sanewritten of the selection of the Marting the sanewritten of the selection of the sanewritten of the sanewri

that we have also eatled upon you to reinforce speech in our fifth floor assembly rooms, in the large of which the acceptance of your work with our Auditorium assembly rooms, in the large of which the acceptance in our fifth floor assembly rooms, in the large of which the acceptance are notoriously poor. In addition, the requirement of the property of the acceptance of

It is impressionable to quote the many expressions of satisfaction which have come to us on our new MCA-Victor high fidelity sound systems, but I can assure you of the enthusiastic appreciation of the users of our hells, and our own delight in better cerving our membership.

John Arms. John ARMS, Secretary



HOTEL HERMITAGE

NASHVILLE, TENN.

Mr. W. L. Rothenberger, Manager, Commercial Sound Sales, SCA Manuracturing Company, Inc., Canden, New Jersey. Dear Mr. Rothenberger;

Though it has been six years since you installed for Contract Red to System in our Hotel Red to System in our Hotel Red to System in our Hotel Herset at 1, 1s still thought you sight be in our Hotel Herset age. The track of the system is the system of th

Also, a thing that interests me, as well as every other hotelman, is the cost of operation. I have a total labor cost for operation of the cost of the If you will remember, we installed this on our so to run in once in a while and take a look at it, an

Consider a radio in every room as part or a motivate service to its guess, whether a part or a motivate service to its guess, whether a paraon and appreciate it can of the people do and appreciate it. It just guess away from are a better all-round hotel.

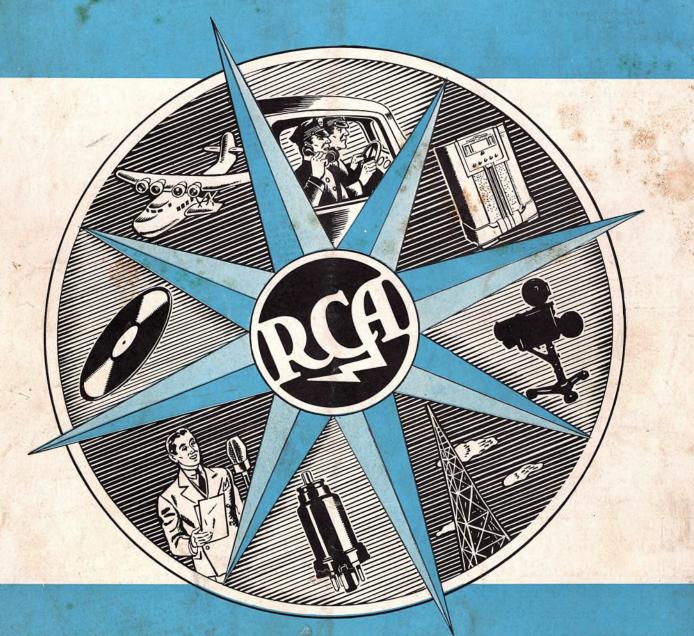
HEB: AD

### THANK YOU:

In the end, the only thing that matters is the buyer's satisfaction. It ranks above any advertising claim or guarantee that was ever devised. That's why we appreciate the enthusiastic comments from happy users, and why we are glad

to be able to reproduce them-a few of the many—here. Read these voluntary testimonials and you will understand why RCA Sound Systems rank highest with the judge whose opinion means most to you-the man who owns and uses one.

# IN RADIO OR SOUND, IT PAYS TO GO RCA ALL THE WAY



PRODUCTS IN THIS CATALOG OR FURTHER INFORMA-TION CONCERNING THEM MAY BE OBTAINED FROM

### THE EASTERN CO.

Wholesale Exclusively

620 Memorial Drive,

Cambridge, Mass.

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