



Radio Apparatus
for
Broadcast Reception



"There's a Radiola for every Purse"

Introduction

RADIO has placed a new, inspiring and powerful resource at the disposal of civilization.

It has brought new romance into the world to replace the exploits of Paul Revere and John Paul Jones. It travels swift as light, not through one valley, or on one lonely sea, but to the world at large on the wings of the ether. Radio answers the call for more liberal education of nations and peoples, and permeates the remote places of the earth with the cultivating influence of music. Radio Telephony, following closely upon the heels of radio telegraphy, is sweeping the country, carrying into the homes of rich and poor alike a modern facility of pleasure and education which is binding the people together in a new and democratic brotherhood. A richer and more complete home-life, with mental stimulus and pleasant relaxation, has been made possible through broadcasting and its receiving corollary, the radio telephone receiver.

At present there are perhaps 125 to 200 radio telephone broadcasting stations in the United States which are regularly sending out news and entertainments to the hundreds of thousands of listeners who have receiving apparatus. They are located in the larger cities, which is essential for two reasons: that their



programs may reach the largest number of people possible and that artists of recognized ability may be secured to join the other entertainers.

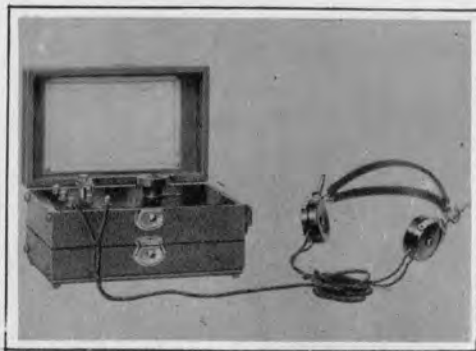
It is estimated there are over 150,000 receiving sets in use, and artists at the larger broadcasting stations have had their entertainment heard by hundreds of thousands of people simultaneously.

Illustrating
Radiola 1



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Radiola I



THIS practical receiver covers a band of wavelengths from 180 to 525 meters in two steps. These ranges are from 180 to 300 and 300 to 525 meters respectively.

By merely releasing the bottom catch, the wooden cabinet may be opened to receive the telephone headset, an arrangement which makes the set completely portable. When it is not in use, it may be closed up so that there are no exposed wires. By means of a single control you change from one station to another and bring in signals from any station at their greatest strength. This also minimizes interference from other stations.

Complete with Head Phones, Antenna

Equipment and Full Instructions \$32.50

As above, less Antenna Equipment 25.00

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Radiola Junior Model R E



RADIOLA JR. is a complete Radio receiving outfit. Its range varies from ten to twenty miles. The only adjustments necessary include the occasional finding of a "sensitive spot" on the crystal detector and the simple turning of a tuning control arm to cover the wave length range of 100-500 meters. Built in a very substantial and attractive wood cabinet, the receiver has a compartment for storing the telephone receivers when the set is not in use.

This instrument includes a tuner, a fixed condenser, a supersensitive crystal detector, and a high grade set of head telephones.

Radiola Jr. may ordinarily be employed for receiving from the broadcasting stations up to a maximum distance of twenty miles; often it will pick up broadcasting over greater distances.

Complete with Head Telephones, Antenna Equipment, Spare Crystals, and Full Instructions..... \$32.50
As above, less Antenna Outfit..... 25.00

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Radiola Model AR1375



THIS crystal receiver was designed to cover a wave-length range of 170 to 2,650 meters.

The set is sold complete with a pair of sensitive telephone receivers.

A wave change switch provides three distinct wavelength ranges: 170-410, 350-965, 925-2650 meters. Variations between these can easily be obtained by manipulating the tuning knob in the center of the panel!

The receiver is provided with a metal cover held in place by two snap catches. One end of the case is removable and forms a suitable receptacle for the telephone receivers when the set is being carried about. Provision is also made for connecting a vacuum tube amplifier unit for loud speaker operation.

Complete with Head Telephones, Antenna Equipment, and Full Instructions.... \$47.50
As above, less Antenna Equipment..... 40.00

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Radiola Senior Model R7



RADIOLA SR. is designed to fill the popular demand for an inexpensive set for broadcast reception with a greater range than a crystal set. Radiola Sr. makes use of the Regenerative Circuit in conjunction with a vacuum tube detector. A big feature of Radiola Sr. is that the filament of the vacuum tube may be operated from a single dry cell.

Radiola Sr. will be found especially useful to the farmer for the daily reception of market and weather reports. Because it possesses the added feature of a more exact tuning adjustment, the possibility of interference from undesired stations is greatly reduced. Radiola Sr. is portable; its upkeep expense is very small and its wavelength range is from 100 to 500 meters.

Complete with One Model WD-11 Vacuum Tube, One Filament Dry Cell, One Plate Dry Battery, Head Telephones, Antenna Equipment, and Full Instructions. \$75.90

As above, less Batteries and Antenna Equipment. 65.00

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Radiola Sr. Amplifier Model AC



THE Radiola Sr. 2 Stage Amplifier has been designed to operate in conjunction with Radiola Jr. or Sr. amplifying signals received by them to such an extent that satisfactory loud speaking results are obtained over considerable distances.

One outstanding advantage of this instrument is the fact that the tubes are operated from dry cells in the same manner as the widely used Radiola Sr.

Separate rheostats are used to control the filament of each tube, and telephone jacks enable the operator to select at will any of three degrees of intensity. The filaments of the unused tubes in this case are automatically disconnected, thus conserving the battery.

The instrument is encased in a beautifully polished solid mahogany cabinet and is similar in appearance to the Radiola Sr., with which it has been especially designed to operate.

Radiola Model R F with Two WD-11 Dry Battery Tubes. \$68.00

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Radiola RS



RADIOLA RS is similar in every detail to the very popular Radiola Senior, except that it is provided with two tubes, and embodies a detector and one stage of audio frequency amplification.

Regeneration is also employed in this very efficient and compact set.

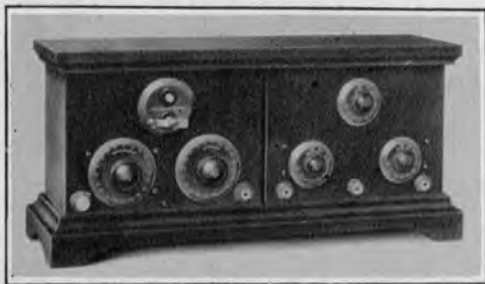
The entire apparatus is mounted on a molded panel and enclosed in a richly finished mahogany cabinet. Terminals are provided for battery and head telephone connections as well as for the antenna and ground.

With the Radiola RS are supplied two WD-11 vacuum tubes and one Brandes head telephone set. Price.....\$72.50

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Radiola V



RADIOLA V is a new and important addition to the Radiola family.

It is a regenerative receiver with a detector and two-stages of audio frequency amplification built into two brass cases with rich mahogany finish.

These cases, while separable, are rigidly bound into a single unit by means of two solid mahogany trays, top and bottom. All cabinet work is rubbed to a high piano finish.

Dull black, integral knobs and dials supplant the former knobs and pointers.

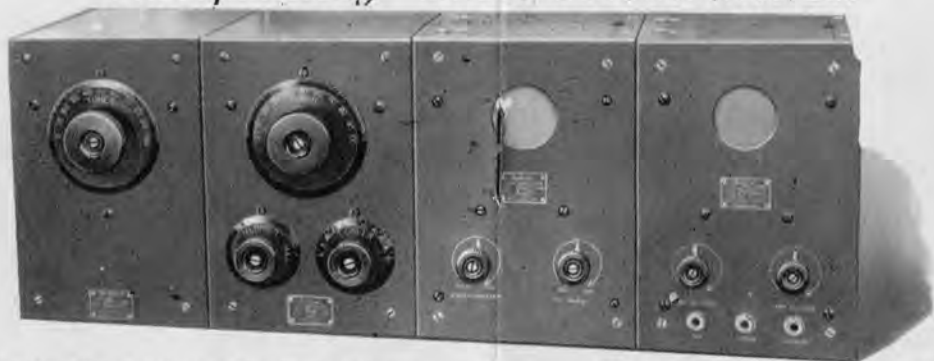
The interior construction is similar to that of the well known AR-1300 and AA-1400. An important new feature is a vernier condenser in the tuner. Price.....\$132.50

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Radiola Combination For Super Selectivity

Incorporating Units RT, RA, AR, DA



RADIOLA Super Selective Combination consists of Models RT primary coupler; RA secondary coupler; AR 3 stage radio frequency unit, and DA detector, 2 stage audio amplifier illustrated, in the order given, at the head of these pages. It is designed for use with an outdoor antenna for broadcast reception over long distances, and under conditions where extreme selectivity is desired.

Model RT is an antenna coupling device providing a continuously variable inductance and capacity on the one shaft, controlled by the single dial on the panel. The unit is virtually a very loosely coupled and therefore highly selective primary circuit with variable series capacity and readily controlled for the minute variations in tuning.

Model RA embodies the secondary circuits. The largest dial at the top of the panel is for rough secondary adjustment, while the smaller adjustment in the lower right hand section is for very close, or vernier tuning. The dial opposite this, controls regeneration (when used as a regenerative set).

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Model AR is a three stage, radio frequency amplifier of extraordinary sensitivity. Provision is made for variation of negative potential on the grid in the potentiometer control located in the lower left hand section. A single rheostat on the opposite side controls the filament brilliancy of all three tubes.

Model DA provides for the detector and two stages of audio frequency amplification. One rheostat controls the detector filament and another regulates the amplifier tubes. Three jacks make possible the selection of various degrees of signal intensity and, as with Model AR, the brilliancy of the tubes may be observed through the screened opening.

Altogether, these four models constitute a modern, sensitive receiver with a high degree of selectivity. What is equally important, the controls are very simple to manipulate. Full instructions for connections and operation accompany the units in the package.

Radiola Combination RT, RA, AR, DA.

Price.....\$263.00

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Radiola Model RC

Models RA and DA combined



RADIOLA Model R. C. is a modern, compact and efficient Regenerative Receiver with a detector and 2 Stages of amplification incorporated in the same cabinet. It is in fact Radiola R A and D A combined.

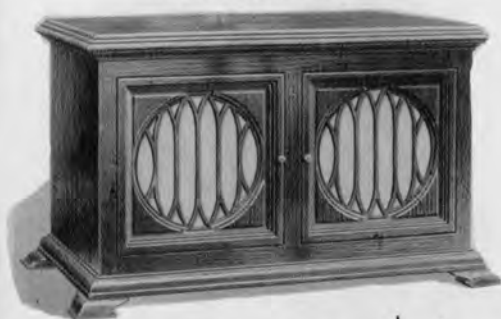
Broadcasting may be received with detector alone, or with one or two stages of amplification on wavelengths between 180 and 700 meters. With the addition of Load Coil Model CB, a band of wavelengths between 1,800 and 2,800 meters is available.

Model R C is furnished with polished nickel-plated metal parts on a black insulating panel and is enclosed in a highly polished and electrically shielded solid mahogany cabinet.

Complete with Load Coil, one Radiotron Detector Tube, two Radiotron Amplifier Tubes, one six-volt Storage Battery Model 6HR-9, Telephone Plug, two "B" Plate Batteries, Vocarola Loud Speaker, Rectigon Battery Charger (5-ampere size), Receiving Antenna Equipment, and Full Instructions.....\$260.75
Short Wave Regenerative Tuner, Model RC, less all above equipment..... 132.50

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Radiola IV



RADIOLA IV is a self contained console-type broadcast receiver.

The cabinet contains a regenerative receiver, a detector, two stages of audio frequency amplification, a new loud speaker of unsurpassed tone quality and all necessary batteries.

Radiola IV is not only a highly efficient receiver, embodying the latest developments in design, but has the charm and dignity of a fine piece of furniture.

Price, complete with 4 tubes (1 spare), all batteries, headset with telephone plug, and silk covered leads for antenna and ground.....\$275.00

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Radiola Grand Model RG



THE Radiola Grand has been especially designed to receive broadcasting stations operating on the standard wavelengths of 360 and 400 meters but an additional range is available up to 550 meters. The finest principles

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Radiola Grand Model RG

of radio detection, amplification and loud speaking are embodied in this popular instrument. By means of the resonant loud speaking chamber, the entire family may receive broadcasted music and other entertainment and instruction. The apparatus is contained in a beautifully finished mahogany cabinet of the same size and general appearance as a conventional phonograph. With a Radiola Grand it is only necessary to connect a battery of four ordinary dry cells, the antenna and ground wires, turn the filament knob and tune in the desired signals with a single control handle. For especially fine tuning vernier adjustment is embodied and a simple control serves to reduce the volume of the signals when within only a few miles of a broadcasting station. A telephone jack is provided in order that head telephones may be employed for the reception of broadcasting over great distances by means of head telephones. An exceptional feature of this instrument is its amplifying system which has been developed to such an extent that practically no distortion of speech or music exists.

Radiola Grand and Mahogany Stand
with four dry cells, tubes, antenna
equipment and full instructions..... \$359.10

As above, less dry cells and antenna
equipment..... 350.00

Without stand..... 325.00

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Radiola VI

Radio-Audiofrequency Amplifier



WITH Radiola VI, it is possible to obtain radio entertainment with the entire equipment installed indoors.

Radiola VI comprises three stages of radio frequency amplification, a detector, and two stages of audio frequency amplification. It is finished in mahogany and enclosed with a handsome solid mahogany tray and cover.

Radiola VI is primarily intended for operation with a loop antenna. This instrument enables the broadcast enthusiasts to obtain results with indoor equipment substantially equal to that of a standard regenerative set and amplifier, connected to an outdoor antenna, and when used with a tuner and antenna, exceptional distances may be covered.

Radiola VI with loop antenna AG-1380
variable condenser UC-1820 and Vo-
carola loud speaker (less Radiotrons
and batteries).....\$214.00
Radiola VI only..... 162.50

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Vocarola

Loud Speaker Model LV



WHERE broadcast music and speech is being received and it is desired to have volume enough to fill a room so that many persons may hear, the Vocarola may be employed to advantage. It is but necessary to remove

the plug of the telephones from the jack in the amplifier unit, placing the loud speaker plug in its place.

Loud Speaker, with Flexible Cord and Telephone Plug.....\$20.00

Phonograph Attachment

Loud Speaker Model LS

WITH this device your phonograph may be converted into a loud speaker for radio reception. It is but necessary to remove the reproducer or "sound box" from the tone arm of the phonograph, replacing it with this attachment.



Victrola Attachment with Cord and Plug, \$18.00
Graphonola Attachment, with Cord and Plug..... 18.00

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Radiotron Model UV 200

Detector Tube

WHERE long distances are to be covered, where stability of operation, long life and its resultant low cost are desired, where detector tubes of uniform characteristics are required for critical receiving adjustments, in fact wherever real results are sought, there is but one answer to the detector tube question—Radiotron UV-200.



Radiotron Model UV-200..... \$5.00

Model UV 201-201 A

Amplifier Tubes



RADIOTRON UV-201 is an amplifier tube whose excellent qualities are so well known that a description is unnecessary.

For those desiring an even better Radiotron there is the super amplifier, Radiotron UV-

201-A. This Radiotron gives several times the amplification of previous tubes with one quarter the filament current consumption.

Radiotron Model UV-201..... \$6.50

Radiotron Model UV-201-A..... 9.00

Antenna Outfit Model AD



Includes 150 feet No. 14 Copper Weld Antenna Wire; 50 ft. No. 18 Copper Ground Wire; 50 ft. No. 14 Copper lead-in Wire; 1 PA Antenna Protective Device; 1 Entrance Bushing; 2 Antenna Insulators; 2 Screw Eyes; 1 Ground Clamp; 3 Porcelain Knobs; 1 Connector; 12 Insulated Staples. Antenna Outfit Model AD, Complete with Instructions..... \$7.50

Antenna Outfit Model AG788



Includes 175 ft. No. 14 Copper Weld Antenna Wire; 50 ft. No. 14 Copper Lead-in Wire; 25 ft. No. 14 Copper Ground Wire; 1 UQ-1310 Antenna Protective Device; 1 Porcelain Entrance Bushing; 3 Antenna Insulators; 3 Screw Eyes; 1 Ground Clamp; 5 Porcelain Knobs; 12 Insulated Staples; 8 Wood Screws.

Antenna Outfit Model AG-788, Complete with Instructions.. \$7.50

Head Telephones Model UD790



Model UD-790 Head Telephone Receivers embody many desirable features, among which are good tone quality, sensitivity and light weight. Head Telephones, with 6ft. Flexible Cord. \$8.00

Storage Battery Model 3-LXL-9

THIS battery has given complete satisfaction in radio work ever since first installed on ship-board. The separators are made of selected, hard wood—specially treated. The jars and covers are made of tough "Giant Compound Rubber."

Model 3L X L—5
40 amp. hrs. \$17.50
Model 3L X L—9
80 amp. hrs. 23.00
Model 3L X L—13
120 amp. hrs. 30.00



Storage Battery Model 6-HR-9



THESE radio batteries embody the most advanced engineering principles and the finest materials and workmanship possible. They are built to meet and maintain a standard of quality and service established by the makers during the last fifty years.

Model 6-HR—5
50 amp. hours... \$18.00
Model 6-HR—9
100 amp. hours... 24.00
Model 6-HR—13
150 amp. hours... 33.50

"B" Battery Model 269

MODEL 269 "B" batteries have been designed especially for use with the foregoing apparatus. They are furnished with convenient taps for the UV-100 detector tube, are fully waterproofed and have exceptionally long life.

"B" Battery, Model
269, 22.5 volts... \$2.50



PATENT LICENSE

"(1) Purchasers of tubes, grid leaks, transformers, condensers, or other parts, or of sets, are not licensed by the Radio Corporation of America under any patents owned by the Radio Corporation of America, or under which it is licensed to use the same for commercial purposes. The sole license the purchaser of any such part or set obtains by the purchase thereof is to use it for amateur and experimental radio use, involving no business feature and including broadcast reception of news and music and other entertainments, but not broadcast transmission.

"(2) Purchasers of parts are given no license, either express or implied, by reason of such purchase, to assemble or make up sets, or parts of sets, which sets or parts of sets (as distinguished from the separate parts), infringe patents under which the Radio Corporation of America holds rights. The purchaser of a part is licensed by such purchase to use such part only and is not licensed under any patent covering a combination or organization composed of such part and other parts. The right, under any patents relating to such a combination or organization, to assemble parts into complete sets, or to assemble in part such sets, is reserved by the Radio Corporation of America, except to the extent that it from time to time permits amateurs to assemble sets under certain conditions as provided below:

"(3) To meet and develop the interest of amateurs in the radio art, such amateurs are, until further notice, authorized under the patents under which the Radio Corporation of America has the right to grant licenses, to assemble and use sets (but only for amateur and experimental radio purposes as above defined in section (1), provided the tubes forming elements of, or used with, such sets have been sold by the Radio Corporation of America or such other persons, if any, as have been authorized by it to manufacture and sell the same for use in the United States of America, and provided that such amateur does not use any assembled or partially assembled set, but himself assembles the various distinct parts.

"(4) No license under any such patent covering a combination or organization of elements is granted to replace any tubes in any set sold by the Radio Corporation of America or assembled under license from it, with other tubes not sold by the Radio Corporation of America."