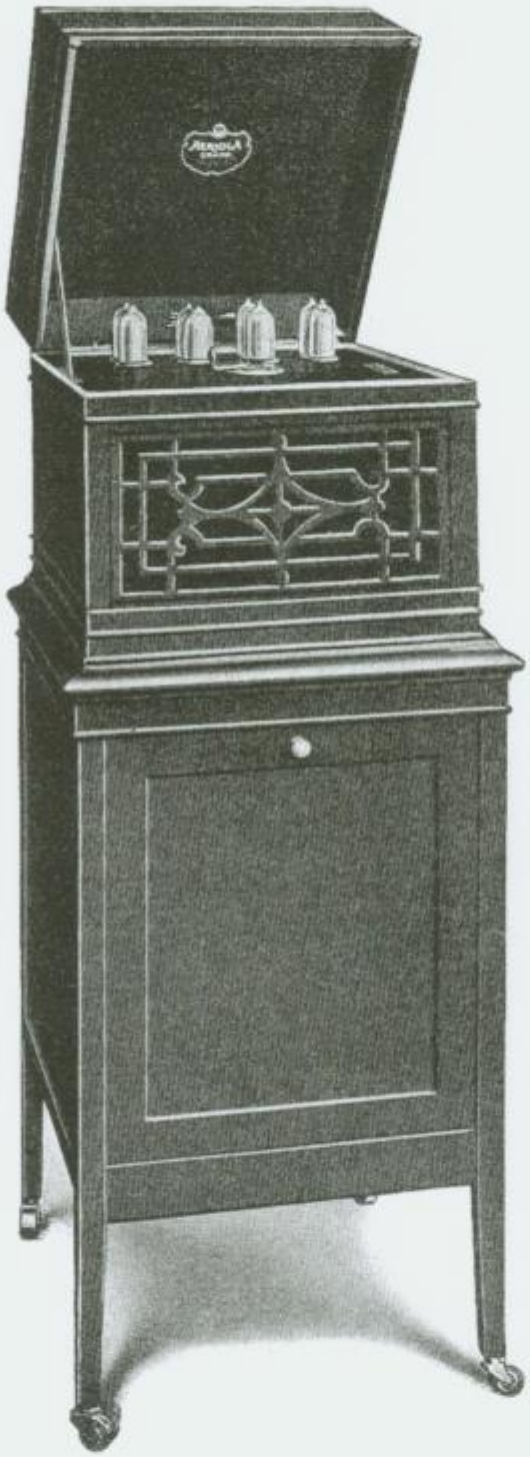
THE AERIOLA GRAND

Simplicity of manipulation and elegant appearance make the Aeriola Grand a popular receiver



An instrument which may well be accorded a place in the most discriminately equipped apartment

AERIOLA GRAND BROADCASTING RECEIVER, MODEL RG

Introducing a De Luxe Design in Broadcasting Receivers.

Aeriola Grand offers all that may be desired of modern radio telephone broadcasting. Its use makes possible the radio dance, the radio concert, the radio party.

HERE indeed is the ideal radiophone receiver for home entertainment. For simplicity of operation and compactness, it is unequaled and holds a leading position in the field of radio broadcast reception. Any man, woman or child can easily operate it without the slightest technical knowledge. A simple snap switch starts or stops it and a **single** tuning lever controls the wave length range. This high grade instrument is a product of the Westinghouse Electric and Mfg. Co.

Combines All Radio Essentials

The Aeriola Grand has been especially designed to receive broadcasting stations operating on the standard wave of 360 meters, but provision is made for an additional range up to 550 meters.

All the essentials of radio detection, amplification and loud speaking are embodied in this popular instrument. By means of the loud speaking chamber the entire family may hear broadcasted music and other entertainments. In fact, the complete outfit is arranged in a cabinet very similar to that of the conventional phonograph cabinet.

With Aeriola Grand it is only necessary to connect the antenna and ground wires, turn the current on by means of a small snap switch and tune in the desired signals with a single control handle. A special plug is provided for reducing the volume of the incoming signals when the broadcasted concerts are too loud.

Automatic and uniform heating of the filament of the detector and three amplifier vacuum tubes used for reception in the Aeriola Grand is obtained by means of four ballast tubes.

The workmanship of the Aeriola Grand is unsurpassed. Its parts are housed in a highly polished mahogany cabinet, artistically constructed. Indeed, the instrument forms a valuable addition to the furnishings of any home.

Aeriola Grand is shipped complete with one detector tube, three amplifier tubes, four ballast tubes and the necessary "B" battery. To complete the installation, a 6 volt, 80 ampere-our storage battery and a Model AD Antenna Outfit are required.

Anyone Can Install Aeriola Grand

Suitable stands are furnished for Aeriola Grand if desired. These stands are richly finished and harmonize in every way with the Aeriola Grand.

NOTES ON OPERATION OF AERIOLA GRAND

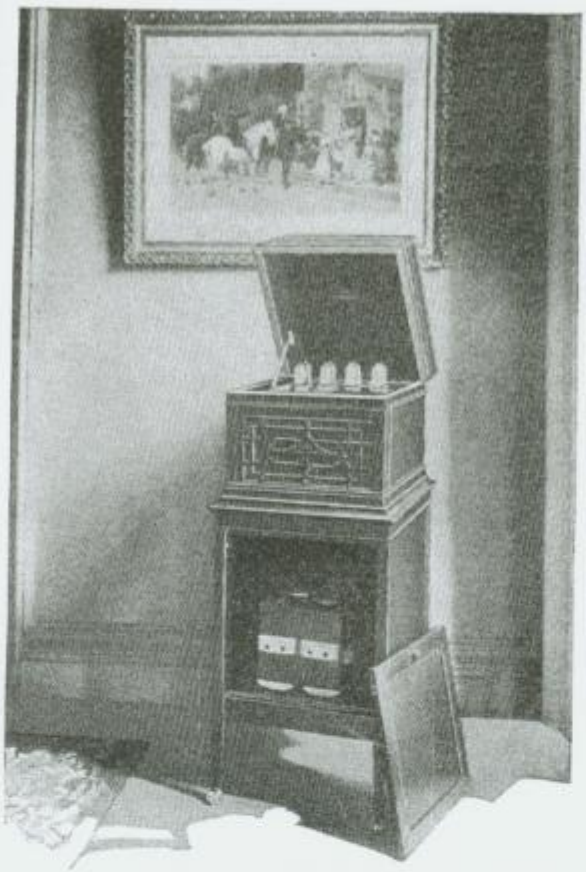
THE Aeriola Grand is a complete radio receiver and loud speaker combined, in a high grade mahogany cabinet. It is designed for use in homes near high power broadcasting stations operating on wave lengths below 500 meters. The distance from such a station, under average conditions, should not exceed 50 miles.

The instrument is well adapted for use by the novice. A push button switch, for turning the current on and off the vacuum tube filaments, and a single tuning lever completes the control. The method of amplifying has been developed to a degree where practically no distortion exists. The reproduction of clear speech and music is one of the outstanding features of the Aeriola Grand.

The Batteries

The vacuum tubes employed in the Aeriola Grand are designed for use with a six volt storage battery for lighting the filaments. The small dry batteries used for supplying the necessary plate voltage for the vacuum tubes are mounted within the cabinet of the Aeriola Grand itself. These dry batteries will give several months of service, after which, replacement is easily accomplished. There are four of them connected in series and secured by a retaining clamp.

As a home entertainer, Aeriola Grand has no equal.



The specially designed mahogany cabinet holds the storage battery and spare parts.

Ballast Tubes

Ballast tubes are used in this receiver instead of the ordinary filament rheostats. The characteristics of the ballast tube filament is such as to automatically maintain a constant value of voltage on the vacuum tubes, thus doing away with four rheostat controls which would otherwise be necessary.

The Battery Charger

The storage battery used for the Aeriola Grand is not included with the set, but can be procured from the dealer. This storage battery should have a capacity not lower than eighty ampere hours. Where alternating current is available a very convenient method for lighting the filaments of the Aeriola Grand is obtained by employing a suitable storage battery and a Tungar or Rectigon battery charger.

An arrangement is possible by which a single switch may be used to connect the storage battery with the filaments of the vacuum tubes, or to charge the battery or to cut it off entirely.

Installation

If the Aeriola Grand is to be installed less than 10 miles from a broadcasting station it is not always necessary to use all three stages of amplification, for the sound intensity is apt to be too great. To offset this possibility the front, left-hand amplifier tube should be removed from its socket. In its place the socket plug found in the dummy socket at the rear of the panel should be inserted. The withdrawn amplifier tube may then be placed in the receptacle formerly occupied by the plug. This arrangement reduces the number of tubes acting as amplifiers as well as the volume of the received sound.

Simplicity of operation has made Aeriola Grand the most popular Receiver for use in large cities served by radio telephone broadcast transmission.

The Aeriola Grand performs most satisfactorily in residential sections of cities where broadcasting stations operate. Caution should be used in attempting to make installations in the heart of large cities, for unless an antenna is relatively free from the screening effect of nearby buildings, especially steel-framed buildings, a marked decrease in signal strength is apt to result. However, installations made within a few miles of a broadcasting station will, of course, function even under such unfavorable conditions.

The Antenna System

The satisfaction derived from the performance of the Aeriola Grand depends largely on the care used in erecting the antenna system. The antenna should consist of a single wire 75 to 150 feet long, suitably insulated, as described in Part 2. Other forms of antennae may be used, according to circumstances. In some locations indoor antennae may be employed satisfactorily. For private residences the antennae should be at least 30 feet above the ground and in apartment houses this wire should be at least 15 feet above the roof. In any event, the antenna wire should not come closer than 10 feet from trees, smokestacks, towers, cupolas, etc. The antenna wire should not be strung above trees or behind tall buildings if any other arrangement is possible.

The Ground Connection

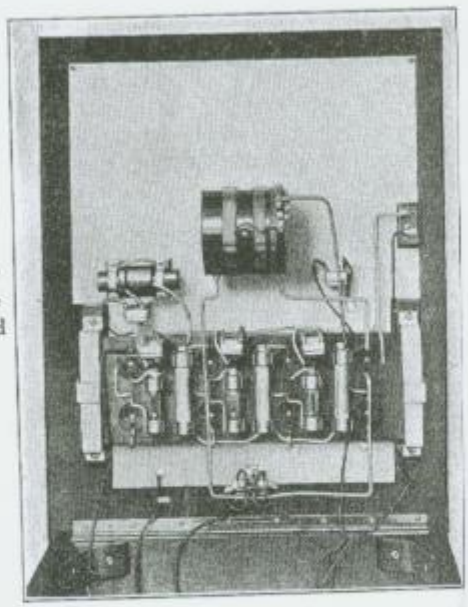
The ground wire is as important as the antenna wire, and if possible, should be connected to a water pipe on the same floor as the instrument itself. In many cases equally good results may be obtained by connecting the ground wire to a steam or hot water radiator, rather than wiring a great distance to the water pipe.

Service by Local Dealer

The Aeriola Grand has been designed for people having little or no technical knowledge of radio, but nevertheless an arrangement should be made with the local radio dealer to have the equipment inspected at regular intervals. A service arrangement of this character can be made with a responsible dealer and it offsets the possibility of overtaxing any part of the equipment, assuring at the same time satisfactory results under all conditions.

Testing of Vacuum Tubes

In purchasing vacuum tubes, either for the Aeriola Grand or any other type of receiving instrument, it is advisable to have these tubes tested by the dealer in order to be perfectly sure they are in good condition and were not damaged during transportation.



An Interior View of the Aeriola Grand Receiver

OPERATING INSTRUCTIONS FOR AERIOLA GRAND

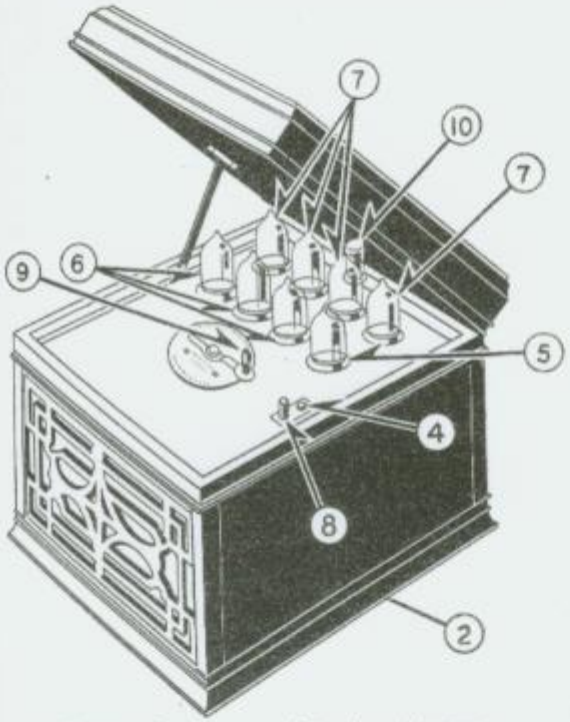
Numbers Correspond with Diagram

No. 1. First, refer to accompanying sketch, then erect antenna and place protective device in position as described on page 56.

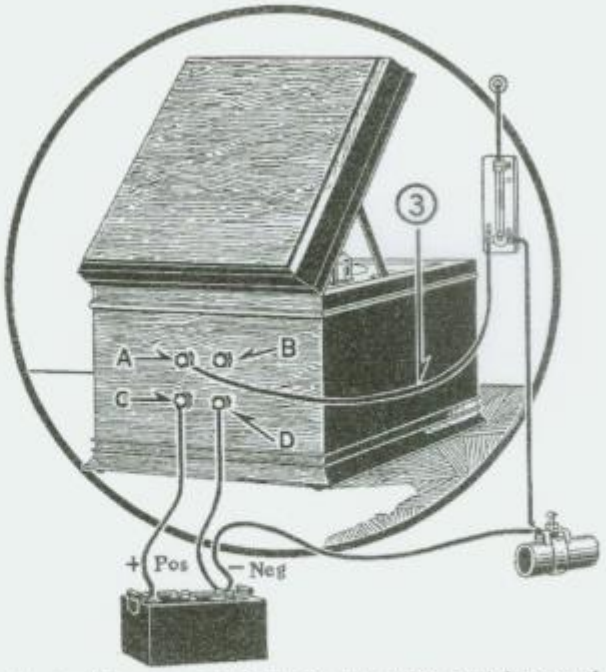
No. 2. Place Aeriola Grand on table or stand and connect wire as shown herewith. The two wires connecting the Aeriola Grand to the protecting device should be separated by at least one foot. No. 18 rubber-covered wire may be used for connections. The rubber covering on each end should be carefully removed and the wire scraped with a knife until bright. The clean bare wire should then be placed under the terminal caps and these caps screwed tightly into position.

No. 3. The wire from terminal R of the protective device connecting to terminal A of the Aeriola Grand should be removed and connected to terminal B when signals below 350 meters are desired.

No. 4. Press the black button of the snap switch, thus disconnecting the battery.



Text numbers correspond to above diagram.



Illustrating easy method of connecting aerial ground and filament storage battery.

No. 5. Insert Model WR-21-D Aeriotron detector tube into the right hand front socket so that stamped trade mark is facing toward front of cabinet. Tube should be pressed firmly into socket.

No. 6. Insert three Model WR-21-A Aeriotron amplifier tubes in the remaining front sockets.

No. 7. Insert four Model WB-800 ballast tubes in rear sockets. Be sure that pins register with holes and press firmly into place.

No. 8. Press red button of snap switch (4) clear down. All Aeriotron filaments should now be lighted.

No. 9. Slowly rotate tuning handle over the scale until sound is loudest.

No. 10. This plug should be used to replace the front left-hand tube if the broadcasting station is so near as to make the sound abnormally loud.

Caution: Always press black button of snap switch (4) when not using instrument, as this conserves battery energy.

Complete Aeriola Grand Broadcasting Receiver, Model RG, and Mahogany Stand, 150-550 meters, with six volt Storage Battery, Model 6HR-9, Rectigon Battery Charger (6 ampere size), Receiving Antenna Equipment and Full Instructions **$409.50**

Aeriola Grand Broadcasting Receiver, as above, less Stand, Storage Battery, Charger and Receiving Antenna Equipment **$325.00**

With Stand **$350.00**

Mahogany Stand Only **$35.00**

Dimensions: Receiver Cabinet, 21 in. x 17½ in. x 14½ in. Stand, 31¾ in. high x 22¾ in. x 19¾ in.

Weights: Net 50 lbs.; Shipping 70 lbs., with Stand 140 lbs.

NOTE: For Prices of other Complete Receiver Combinations, see page 35.