

DETECTOR AND TWO-STAGE AMPLIFIER, MODEL DA

THIS unit is designed along advanced engineering principles and is especially adapted for the use of those who have not made an extensive study of radio but who desire to receive over ranges greater than those of Aeriola Jr., or the RA receiving sets when used without any external amplifying units. Within a very attractive mahogany cabinet equipped with a hinged cover all the elements necessary for a vacuum tube detector and two-stage audio frequency amplifier are found. This device when used in conjunction with the type RA short-wave regenerative tuner described on page 21, forms a combination for radio reception of a very high order for the non-technical user.

Three Vacuum Tubes Are Employed

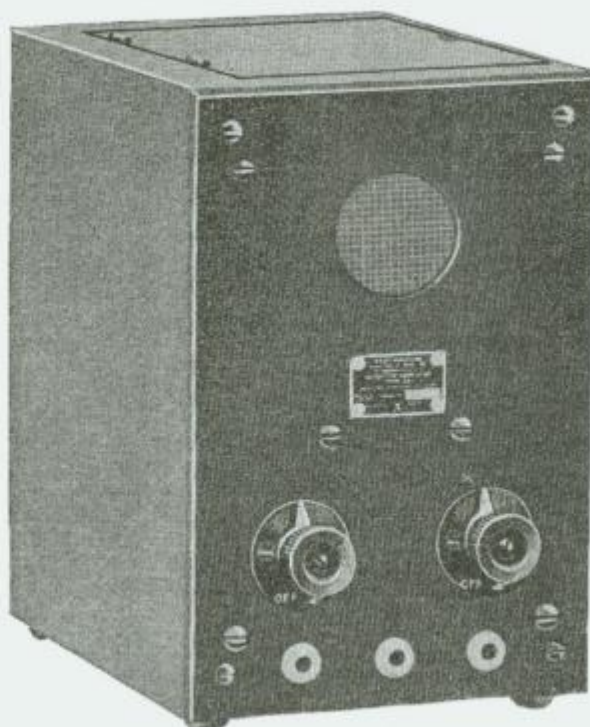
The amplifier acts as a magnifier of the signals received by the detector. With each stage of amplification the incoming signals are magnified many times, so that with this detector and two-stage amplifier, signals which at times cannot be heard with simpler sets, may be received with ease on a loud speaker.

Vacuum tubes require two batteries for their operation, one for the heating of the filament, known as the "A" battery (in this case a storage battery of 6 volts with a capacity from 40 to 130 ampere hours), and the other a dry battery of 40 to 60 volts known as the "B" battery. For the best results it is necessary to regulate the amount of current supplied by the storage battery to the filament of the vacuum tube. In type DA unit are two rheostats, one of which regulates the current in the detector tube, and the second that regulates the supply to both amplifying tubes.

Three Controls Provided

Three telephone jacks are mounted on the panel and are arranged to control the internal circuits according to the desire of the operator. Thus, by inserting the telephone plug in the first jack the signal is received with the detector tube alone. With the plug in the second jack we have one stage of amplification. The second stage of amplification is made available by inserting the plug in the third jack.

A screened window is provided in front of the panel in order that the operator may observe the brilliancy of the vacuum tubes. All the vacuum tube sockets are mounted on the same base which in turn is mounted on heavy rubber shock absorbing supports.



Amplifier DA is the logical graduating step for owners of Tuner RA previously described.

The cabinet is mounted on rubber feet to prevent scratching of the table or desk upon which it is placed.

This instrument will be found entirely satisfactory for amplifying weak radio signals and producing loud signals when used in conjunction with a Vocarola loud speaker (Model LV) for entertainment.

SPECIFICATIONS.

- Panel**—Micarta finished in black matte. An opening protected by metal gauze is provided for ventilation and to give a visual indication of the tubes in operation.
- Cabinet**—Natural mahogany, varnished and polished. Door provided in top for ready inspection and replacement of vacuum tubes.
- Knobs**—Moulded black composition.
- Rheostats**—Continuously variable type with open circuit position. Polished nickel pointers.
- Sockets**—Metal on micarta base with tangential contacts. Shock-proof mounting.
- Binding Posts**—Moulded insulated posts, brought out at rear.
- Amplifying Transformers**—Closed core type, designed for maximum efficiency with standard tubes.
- Wiring**—Covered with varnished cambric tubing. All wiring neatly done. All connections soldered.
- Shielding**—Instrument completely shielded on all sides, eliminating capacity effects from operator's body.
- Wiring Diagram**—A wiring diagram showing all connections is furnished, together with complete instructions.

Detector and Two-Stage Amplifier, Model DA, less Vacuum Tubes, Batteries and Telephone Plug \$70.00

Dimensions: 9½ in. x 8½ in. x 6½ in.

Weights: Net, 10 lbs.; shipping, 15 lbs.

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