



THE TOP VIEW

Note the double-shielding between the R.F. and detector circuits, and the unique arrangement of parts.

are plugged in, the signal input to the last tube is completely disconnected. *It is important, however, that the plate circuit of the output tube be complete at all times.* If the speaker is to be disconnected, a jumper must be inserted in the tip-jacks to connect them together. The receiver should not be operated from the above mentioned power supply with the output tube removed, as the voltage might rise above 180 volts. When operated from batteries, the removal of the 6F6 is permissible and will give better battery economy.

Controls

The main dial is the tuning control; calibration curves for the various coils are shown on page 7. The curves are accurate to about three percent. It will be noted that frequency increases with dial reading.

The switch at the lower righthand corner breaks the positive B-supply lead and is useful for temporarily rendering the receiver inoperative during periods of transmission or when changing

coils. When using B-battery plate supply, the switch should be thrown to the "Off" position at all times when the receiver is not in use, in order to avoid parasitic drain. No switch is provided for opening the heater circuit.

There are three small dials in addition to the main tuning dial. These control detector regeneration, audio gain, and the alignment of the R.F. circuit, and are marked accordingly.

Operating Characteristics

The "1-10" receiver is designed primarily for the experimenter and to this end has been made to have maximum sensitivity and a wide frequency range. The use of a self-quenching super-regenerative detector with a stage of tuned R.F. provides excellent sensitivity and AVC action. Unfortunately, this type of detector introduces some distortion, since it does not have a linear characteristic. The distortion is small when signals are not modulated heavily, and increases with the percentage of modulation.