

CW signals. An amplified and delayed automatic volume control system is provided. Associated with the automatic volume control system is a signal strength meter, calibrated in S-units from 1 to 9 and in db. above S-9 from 0 to 40 db. A built-in power supply designed for operation from a 115 volt ( $\pm 10\%$ ) 50/60 cycle\* AC power source supplies all voltages required by the receiver.

### 1.2 Output Circuit

1.21 Two audio output circuits are provided:

(1) A headphone jack is mounted on the front panel. The correct load impedance for the headphone output circuit is 600 ohms. Maximum audio power output at the headphone jack is approximately 12 milliwatts. The headphone jack is so wired that the loud speaker circuit is opened when the phone plug is inserted.

(2) A pair of loud speaker output terminals (pin jacks) are located at the rear of the chassis. The proper load impedance of the loud speaker output circuit is 500 ohms. The maximum undistorted audio power available is 2 watts.

### 1.3 Antenna Requirements

1.31 Antenna input terminals are located at the rear of the chassis near the center. The input circuit is suitable for use with a single wire antenna, a balanced feed-line or a low impedance concentric transmission line. The impedance of the antenna or transmission line at the receiver input terminals should not be less than 70 ohms.

1.32 Two insulated binding posts are provided together with a short length of flexible lead permanently attached to the receiver chassis. By means of this lead, either input terminal may be grounded to the chassis if required.

1.33 In an installation having a simple antenna-ground combination, connect the single wire lead-in to either of the two input terminals, and ground the other terminal to the chassis by means of the flexible lead, referred to in Par. 1.32. It is recommended that the equipment be permanently grounded; the ground lead may be attached directly to the input terminal which is connected to the chassis or the terminal E-104. The dimensions of the single wire antenna system are not at all critical: The recommended minimum overall length of antenna and lead-in is fifty feet; the recommended maximum overall length is two hundred feet.

1.34 In an installation having a balanced feed-line, connect the two leads directly to the two input terminals. The grounding lead, referred to in Par. 1.32, is not used.

\*See Notice, Page ii.