

The circuit arrangement of this receiver is fairly conventional and requires very little description. Attention should be paid to the "local/distance" switching arrangement which is incorporated in the wave-change switch; this consists of a cathode resistor switching arrangement in which the bias resistor for the converter and I.F. valves is changed from 500 to 750 ohms in the "local" position. Compensation for line voltage fluctuations is performed in this receiver by a type C1 barretter and, as a final point of interest, it should be noted that the pilot lamp is wired directly in series with the heaters. Consequently, failure of the pilot (dial) lamp will cause the receiver to stop operating.

OPERATING VOLTAGES.

All measurements were made with a "1,000 ohms per volt" meter, and voltages are those existing between the socket contact indicated and chassis. Measurements are shown with the wave-change switch in its various positions of B/C. (Distance), B/C. (Local), and S.W.; the CK1 (Frequency Converter) and CF2 (I.F. Amplifier) are the only valves directly affected by this switch. Where only one value is given it applies to all positions of the wave-change switch.

CK1, Frequency Converter: Plate, 165 v.; screen, 85 v.; cathode, 5 v. (B/C. Distance, and S.W.), 6 v. (B/C. Local); osc. anode grid, 110 v. Plate current, 1 mA. (B/C. Distance, and S.W.), 0.5 mA. (B/C. Local).

CF2, 470 kC. I.F. Amplifier: Plate, 165 v.; screen, 110 v.; cathode, 5 v. (B/C. Distance, and S.W.); 6 v. (B/C. Local). Plate current, 2 mA. (B/C. Distance, and S.W.), 1 mA. (B/C. Local).

CB C1, Detector, A.V.C. Rectifier, and A.F. Voltage Amplifier: Plate, 40 v.; cathode, 1.5 v. Plate current, 0.4 mA.

CL2, Output Pentode: Plate, 145 v.; screen, 165 v.; cathode, 20 v. Plate current, 40 mA.

CY2, Rectifier: Each plate to chassis, 240 v.; total plate current, 56 mA.

Genalex A.C./D.C.- Operated Dual-Wave Model BC350

Circuit Diagram and Component
Values will be found on page 232.

Genalex model "BC350" is a five-valve receiver designed for dual-wave coverage and operation from 200-260 volts, A.C. or D.C. mains. This chassis type is fitted to three different cabinet styles—a mantel, a console, and a "radio-gram"—but bears the same model number in each case. All three of these receivers are fitted with four controls, these being for volume, tuning, wave-change (with extra position for "local broadcast" reception), and tone (continuous). The loudspeaker used in each case is an 8-inch unit with a field-coil resistance of 1,650 ohms. These receivers were marketed during 1936.