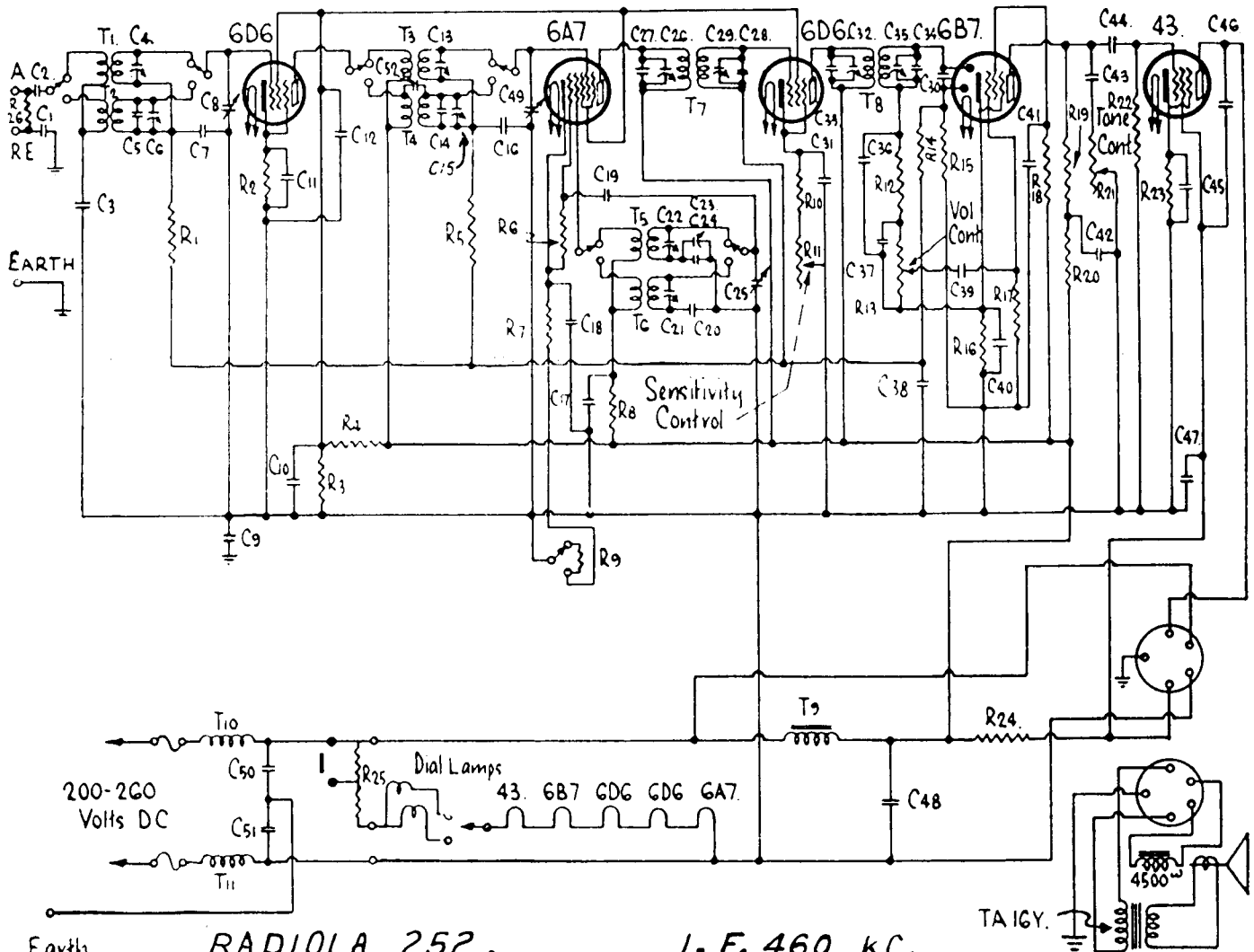


"Radiola" D.C. Mains Dual-Wave Console Model 252



Earth

RADIOLA 252.

I. F. 460 KC.

RADIOLA "252"

1936 CONSOLE MODEL

Uses 8-inch, 4,500 ohms field, loudspeaker.

COMPONENT VALUES.

The numbers in parenthesis following component indices are manufacturer's part numbers.

RESISTORS.

R1, R5, R12, R19, R26—100,000 ohms, $\frac{1}{2}$ W.; R2, R9, R10—600 ohms, $\frac{1}{2}$ W.; R3, R4—11,000 ohms, $\frac{1}{2}$ W.; R6—60,000 ohms, $\frac{1}{2}$ W.; R7—300 ohms, $\frac{1}{2}$ W.; R8—20,000 ohms, $\frac{1}{2}$ W.; R11 (2088)—3,000 ohms, variable, sensitivity control; R13 (2271)—300,000 ohms, volume control; R14, R15, R17—1.75 megohms, $\frac{1}{2}$ W.; R16—3,000 ohms, $\frac{1}{2}$ W.; R18—1 megohm 1 W.; R20—50,000 ohms, $\frac{1}{2}$ W.; R21—300,000 ohms, variable, tone control; R22—300,000 ohms, $\frac{1}{2}$ W.; R23—500 ohms, 1 W.; R24—1,500 ohms, w.w.; R25—610 ohms, w.w.

CONDENSERS.

C1, C2—500 mmfd., mica, high voltage test; C3, C7, C16, C38, C39, C44—0.5 mfd., paper; C4, C16, C13, C15, C21, C22—5/20 mmfd., mica, coil trimmers; C5, C14—10 mmfd., mica, S/W. coil trimmer shunts; C8, C25, C49 (2074)—sections of 3-gang

variable; C9, C42—0.5 mfd., paper; C10—0.25 mfd., paper; C11, C12, C18, C31, C41, C50, C51—0.1 mfd., paper; C17, C47—2.5 mfd., paper; C19—50 mmfd., mica; C20—2,800 mmfd., S/W. padder; C23 (1153)—10/50 mmfd., mica, B/C. padder; C24 (1153)—890 mmfd., mica, B/C. padder shunt; C26, C29, C32, C35—10/50 mmfd., mica, I.F.T. trimmers; C27, C28, C33, C34—30 mmfd., mica, I.F.T. trimmer shunts; C30—700 mmfd., mica; C36, C37—200 mmfd., mica; C40—5 mfd., 25 v., W., electro; C43—0.01 mfd., paper; C45—25 mfd., 25 v., W., electro; C46—0.005 mfd., paper; C48—5 mfd., paper; C52—10 mmfd., mica.

COILS, ETC.

T1 (2358)—B/C. aer. coil; T2 (2358)—S/W. aer. coil; T3 (2360)—B/C. R.F. coil; T4 (2360)—S/W. R.F. coil; T5 (2359)—B/C. osc. coil; T6 (2359)—S/W. osc. coil; T7, T8 (2078)—1st and 2nd I.F. transformers respectively, 460 KC.; T9 (2089)—smoothing choke; T10, T11 (2191)—line filter chokes.

OPERATING VOLTAGES.

The following measurements were made with a "1,000 ohms per volt" meter, and voltages are those existing between the socket contact indicated and negative busbar. The receiver was operating under "no signal" conditions from a 240 v. D.C. supply with all controls turned to their maximum clockwise position. Those readings shown in parenthesis were taken with the wave-change switch in the "S/W." position, and the alternative readings were made with the receiver on "B/C."; all other readings are unaffected by the position of the wave-change switch.

6D6, R.F. Amplifier: Plate, 210 v.; screen, 80 v.; cathode, 4 v. Plate current, 3 mA.

6A7, Frequency Converter: Plate, 210 v. screen, 80 v.; cathode, 6 v. (3 v.); osc. anode grid, 130 v. Plate current, 2 mA (3 mA.).

6D6, 460 KC., I.F. Amplifier: Plate, 210 v.; screen, 80 v.; cathode, 4 v. Plate current, 3 mA.

6B7, Detector, A.V.C. Rectifier, and A.F. Voltage Amplifier: Plate, 60 v.; screen, 25 v.; cathode, 1.5 v. Plate current, 1 mA.

43, Output Pentode: Plate, 140 v.; screen, 150 v.; cathode, 20 v. Plate, 30 mA.

MODEL 252 A.C. CONVERSION

The design of model 252 is such that it was found a comparatively easy task to convert it for operation from an A.C. supply. In case such a receiver is encountered, the A.C. conversion is also given.

The component indices shown for model 252 apply equally to its A.C. conversion where such indices appear on the circuit diagram of the latter, and all values are identical with the exception of a few whose values have been altered. These will be found plainly marked on the modified circuit diagram on page 305.

Circuit for Conversion of Radiola 252 to A.C. Operation

See page 301 for original circuit diagram and full details of Radiola 252

