

MULLARD "90" & "94"

1938 Consoles, using 10-inch, 2,000 ohms field loudspeakers. See circuit diagram on facing page.

COMPONENT VALUES

RESISTORS

R1—10,000 ohms, $\frac{1}{2}$ W.; R2, R5, R13—400 ohms, w.w.; R3, R9—30,000 ohms, $\frac{1}{2}$ W.; R4, R11—100,000 ohms, $\frac{1}{2}$ W.; R6—500 ohms, $\frac{1}{2}$ W.; R7, R12—5,000 ohms, $\frac{1}{2}$ W.; R8—100,000 ohms, $\frac{1}{2}$ W.; R10—10,000 ohms, $\frac{1}{2}$ W.; R14—20,000 ohms, 1 W.; R15—1 megohm, $\frac{1}{2}$ W.; R16, R27—50,000 ohms, $\frac{1}{2}$ W.; R17—250,000 ohms, $\frac{1}{2}$ W.; R18—4,000 ohms, $\frac{1}{2}$ W.; R19—50,000 ohms, $\frac{1}{2}$ W.; R20—250,000 ohms, $\frac{1}{2}$ W.; R21—500,000 ohms, volume control; R22—500,000 ohms, $\frac{1}{2}$ W.; R23—5,000 ohms, 1 W.; R24—460 ohms, w.w.; R25—35 ohms, w.w.; R26—5,000 ohms, $\frac{1}{2}$ W.; R28—1 megohm, 1 W.

CONDENSERS.

C1, C5, C14, C26—0.05 mfd., 400 v. paper; C2, C3, C4, C6, C7, C13, C15—0.1 mfd., 400 v., paper; C8—50 mmfd., mica; C9—3,900 mmfd., \pm 1%, mica, S.W. padder; C10—300 mmfd., \pm 3%, mica, B.C. padder shunt; C11—3-plate B.C. padder; C12—500 mmfd., mica; C16, C17—100 mmfd., mica; C18, C22—0.01 mfd., 400 v., paper; C19, C24—10 mfd., 40 v. peak electro; C20—250 mmfd., mica; C21—0.25 mfd., 400 v., paper; C23, C28—8mfd., 500 v. peak, electro; C25—5,000

mmfd., mica; C27—15 mfd., regulating type electro., 350 v. cut-off.

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. The receiver was operating under "no signal" conditions with the wave-change switch in the S.W. position; those readings shown in parenthesis were taken with the wave-change switch in the B.C. position. All readings were taken with the receiver operating from a 215 or 240 v. A.C. supply, after the transformer tap had been moved to the appropriate position. It should be noted that the transformer primary colour code is as follows—black, common; yellow, 200/230 v.; red, 230/250 v.

6D6, R.F. Amplifier: Plate, 230 v.; screen, 100 v.; cathode, 5 v. Plate current, 6.5 mA.

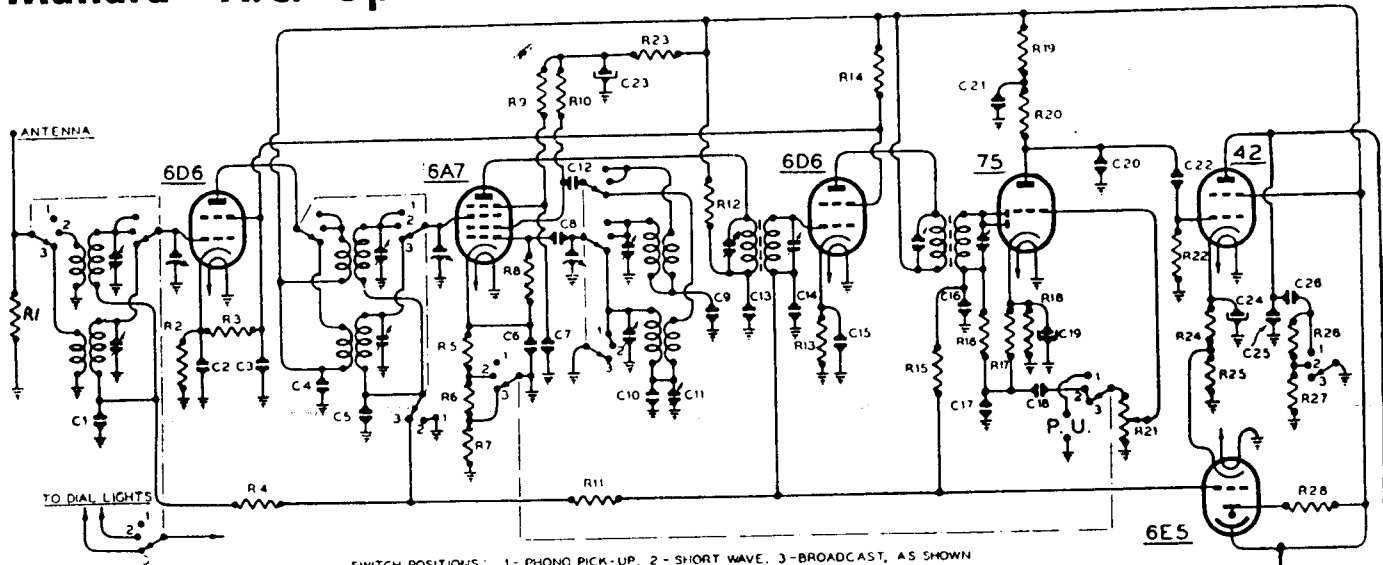
6A7, Frequency Converter: Plate, 215 v.; screen, 90 v. (100 v.); cathode, 4.5 v. (7 v.); osc. anode grid, 135 v. (155 v.). Plate current, 3 mA.

6D6, 456 kC. I.F. Amplifier: Plate, 230 v.; screen, 100 v.; cathode, 4 v. Plate current, 8 mA.

75, Detector, A.V.C. Rectifier and A.F. Voltage Amplifier: Plate, 75 v.; cathode, 1 v. Plate current, 0.4 mA.

42, Output Pentode: Plate, 225 v.; screen, 230 v.; cathode, 15 v. Plate current, 30 mA.

"Mullard" A.C. Operated Dual-Wave Console Models 90 & 94



MULLARD 90 & 94. I.F. 456 KC.

