

"Lekmek" Battery Dual-Wave Model 505

(Circuit diagram will be found on Page 289.)

Lekmek model "505" is a five-valve, dual-wave, battery-operated receiver. This receiver is of the console type and is fitted with five controls—tone (2 positions), wave-change, tuning, volume, and battery switch (3 circuit, push-pull action, type). The loudspeaker employed is a 10-inch unit of the permanent magnet type. Power supply for this receiver is obtained from a two-volt accumulator ("A"), three series-connected 45 v. dry batteries ("B"), and a tapped 9 v. dry battery ("C"). The connections to

these batteries are colour-coded in accordance with the diagram.

Although the circuit arrangement of this receiver is quite straightforward, it will be convenient to tabulate the valve types and their functions, together with the operating voltages under "no signal" conditions:—

1C6, Frequency Converter: Plate, 135 v.; screen 65 v.; grid, —3 v.; osc. anode grid, 90 v. Plate current, 4 mA.; osc. anode current, 2 mA.

34 (two), 458 KC. I.F. Amplifiers: Plate, 135 v.; screen, 65 v.; grid, —3 v. Plate current, 2 mA. (each).

25S (now 1B5), Detector, A.V.C. Rectifier, and A.F. Amplifier: Plate, 95 v.; grid, —3 v. Plate current, 0.5 mA.

C243N, Output Pentode: Plate, 130 v.; screen, 135 v.; grid, —6 v. Plate current, 3 mA.

COMPONENT VALUES.

RESISTORS.

R1 — 50,000 ohms, 1 W.; **R2** — 10,000 ohms, 1 W.; **R3** — 250,000 ohms, 1 W.; **R4, R5** — 1 megohm, 1 W.; **R6** — 20,000 ohms, 1 W.; **R7, R10** — 500,000 ohms, 1 W.; **R8** — 500,000 ohms volume control potentiometer; **R9** — 100,000 ohms, 1 W.

CONDENSERS.

C1, C2—sections of 2-gang variable; **C3** — 7 plate B.C. padder; **C4** — S.W. padder; **C5, C11, C13** — 0.00025 mfd., mica; **C6, C7, C9, C17** — 0.5 mfd., tubular; **C8, C10, C18** — 0.1 mfd., tubular; **C12, C14, C16** — 0.01 mfd., mica; **C15** — 0.002 mfd., mica.

"Lekmek" Battery-Operated Dual-Wave Model 505

