

EKCO**CLOCK RADIO****Model A244**

General Description : Five-valve (including rectifier), two-waveband table receiver, with electric clock which provides time-control switching both for receiver operation and for general electrical appliances rated at under 5 amps. An alarm buzzer is also provided. The receiver has internal ferrite-rod aerial and provision for external aerial. External loudspeaker sockets are incorporated. Moulded plastics cabinet.

Power Supply : A.C. mains, 200–250 volts, 50 c/s. Note that although the receiver uses A.C./D.C. technique, the clock is suitable for A.C. only. The chassis is connected to one side of the mains supply.

Wavebands : L.W. 1100–1900 m.; M.W. 190–550 m.

Valves : (V₁) UCH₄₂; (V₂) UF₄₁; (V₃) UBC₄₁; (V₄) UL₄₁; (V₅) UY₄₁. Voltages shown on diagram are measured with a high-sensitivity meter.

Dial Lamps : Two 10 volts, 0.2 amp.

Intermediate Frequency : 470 kc/s.

Alignment Procedure : *I.F.* : Inject a 470-kc/s. signal to grid of V₁ (pin 6) via a 0.1- μ F. capacitor. With set on M.W. and gang enmeshed adjust cores of I.F.T.2 and then those of I.F.T.1.

I.F. Trap : Inject a 470-kc/s. signal to aerial socket via dummy aerial and adjust core of L₃ for minimum output.

R.F. : Check position of pointer. Inject signals via dummy aerial to aerial and earth sockets. With gang at maximum capacitance pointer should coincide with datum marks. Note that in some cases maximum capacitance will occur slightly before limit of travel of tuning gang.

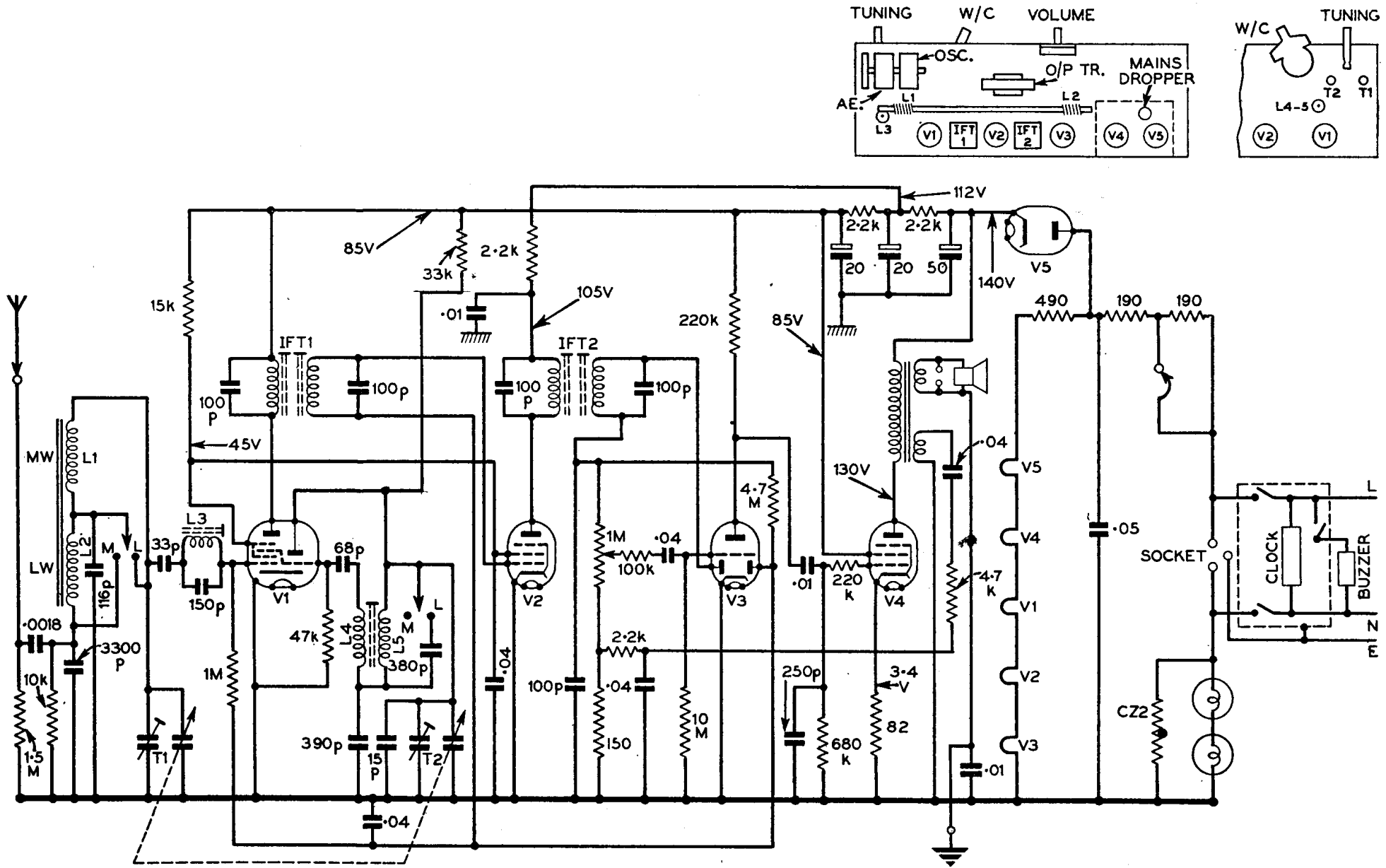
M.W. : Inject a 600-kc/s. signal, tune to 500 m. and adjust core of L₅ and then position of L₁ on aerial rod for maximum output. Inject 1400-kc/s., tune to 214 m. and adjust T₂ and then T₁ for maximum output. Repeat sequence of operations until maximum sensitivity and accuracy of calibration is achieved.

L.W. : Inject a 210-kc/s. signal, check calibration (1430 m.) and then adjust position of L₂ on aerial rod for maximum output.

Servicing Notes : The clock units are manufactured by Smiths English Clocks, Ltd., and reference should be made to their service depots should a fault arise.

Should the mains lead be replaced, correct three-core cable should be used and the earth lead (green) connected to the frame of the clock and to the earth (centre) pin of the auxiliary appliance socket.

Modifications : On some early models the L.W. padding capacitor was 375 pF. and the negative feedback resistor was 2.2k instead of 4.7k.



CIRCUIT DIAGRAM—EKCO MODEL A244