

EKCO**Model U195**

General Description : Four-valve (including rectifier), superheterodyne receiver with facilities for the reception of four pre-tuned stations and built-in frame aerials. Two-colour plastic cabinet and provision for external aerial and earth.

Power Supply : A.C./D.C. mains, 200–250 volts (two voltage-adjustment positions).

Wavebands : Three M.W. and one L.W. pre-selected frequency within the following bands : (1) 188–343 m.; (2) 244–438 m.; (3) 311–555 m.; (4) 1200–1875.

Intermediate Frequency : 470 kc/s.

Valve Analysis : Voltages measured under no-signal conditions with high-impedance testmeter.

<i>Valve</i>	<i>Anode, Volts</i>	<i>Anode Current, mA.</i>	<i>Screen, Volts</i>	<i>Screen Current, mA.</i>	<i>Cathode, Volts</i>
V ₁ UCH ₄₂ .	118	1.5	54	2.1	—
(osc.) .	62	2.1	—	—	—
V ₂ UBF80 .	178	3.6	60	2.0	—
V ₃ UL41 .	178	37.5	118	5.9	5.0
V ₄ UY41 .	204 A.C.	—	—	—	234

Alignment Procedure : It should be noted that one side of the chassis is connected directly to the mains supply.

I.F. : Inject a 470-kc/s. signal to signal grid of V₁ and chassis via isolating capacitors. Adjust cores of I.F. transformer for maximum output, reducing signal when necessary to avoid automatic-volume-control action.

I.F. Trap : An I.F. trap is connected in the signal-grid line of V₁. Inject a 470-kc/s. signal to aerial and earth terminals and adjust core of I.F. trap coil for minimum output.

R.F. : The oscillator coils and the aerial trimmers should be adjusted with the special tool supplied with each receiver. Cores and trimmers are mounted vertically, the top pair being that of the first M.W. range, and then descending in pairs to the L.W. range nearest the chassis. It is usually most convenient to adjust these directly on the required stations rather than with a signal generator. Adjustments should be made with the frame aerial in its normal position.

