

General Description : Five-valve (including rectifier) three-waveband superheterodyne radiogramophone receiver. Released October 1948. Price £66 3s. 9d. (plus tax).

Power Supply : A.C. mains 200–255 volts, 40–60 c/s. Consumption approximately 72 watts.

Wavebands : S.W. 18.6–5.96 Mc/s. (16.15–50.4 m.); M.W. 1540–538 kc/s. (195–557 m.); L.W. 347–140.5 kc/s. (865–2135 m.).

Intermediate Frequency : 465 kc/s.

Valves : (V₁) OM10; (V₂) OM10; (V₃) OM4; (V₄) 6L6G; (V₅) 52KU.

Audio Output : 5 watts.

Dial Lights : 6.5 volts, 0.3 amp. M.E.S. fitting.

Circuit Notes : The triode section of V₂ provides an additional stage of A.F. amplification for gramophone record reproduction. The power unit is built on a separate chassis and connected to the main unit by a multi-way cable. Total H.T. consumption is 79 mA. (approx.). Push-button selectors for wave-change and gram. operate in the following sequence : *top* gram.; *second* L.W.; *third* M.W.; *fourth* S.W.

Record Changer : Garrard RC60/H16 or Garrard RC65/D16.

Alignment Procedure : Use either ganging oscillator and double-beam oscillograph or an accurately calibrated signal generator and output meter to match 3 ohms.

I.F. : Inject 465-kc/s. signal to grid of V₁ via 0.01-μF. capacitor. Adjust L₁₇, L₁₆, L₉ and L₈ for maximum response.

I.F. Rejector : Inject 465 kc/s. to AĒ and E sockets via dummy aerial. Adjust core of L₁ for minimum response.

S.W. : Set pointer to 18 Mc/s. and inject 18-Mc/s. signal. Adjust C₁₅ for maximum response (least capacity position). Adjust C₃ for maximum response (rocking gang). Set pointer to 6 Mc/s. and inject 6-Mc/s. signal. Adjust cores of L₁₀ and L₃ for maximum response. Repeat operations.

M.W. : Set pointer to 214 m. and inject 1400-kc/s. signal. Adjust C₁₈ and C₄ for maximum response. Set pointer to 522 m. and inject 575-kc/s. signal. Adjust L₁₂ and L₅ for maximum response. Repeat operations.

L.W. : Set pointer to 1153 m. and inject 260-kc/s. signal. Adjust C₂₁ and C₅ for maximum response. Set pointer to 1875 m. and inject 160-kc/s. signal. Adjust L₁₄ and L₇ for maximum response. Repeat operations.

Voltage Check Points : Readings taken on 1000-volt range of 1000 ohms/volt testmeter with receiver connected to 200 volts A.C. mains.

V ₁	Pin 3	230 v.	Pin 4	100 v.	Pin 6	80 v.
V ₂	Pin 3	220 v.	Pin 4	80 v.	Pin 6	30 v.
V ₃	Pin 3	110 v.	Pin 8	1.6 v.	Pin 8	1.6 v.
V ₄	Pin 3	300 v.	Pin 4	220 v.	Pin 8	12 v.
V ₅	Pin 2	430 v.	Pins 4, 6	350 A.C.	Pin 8	430 v.

