

COSSOR Models 470AC, 487AC, 480K, 490K

General Description : Five-valve (including rectifier), three-waveband superheterodyne receiver. Model 470AC released May 1947, price £21 11s. 6d. (plus tax), Model 487AC released December 1947, price £19 15s. (plus tax), Model 480K released May 1947, price £27 16s. 6d. (plus tax), Model 490K released January 1948, price according to cabinet finish.

Power Supply : A.C. mains, 200-250 volts, 40-100 c/s. Consumption approximately 50 watts.

Wavebands : S.W. 16-50 m.; M.W. 200-560 m.; L.W. 1000-2000 m.

Intermediate Frequency : 465 kc/s.*

Valves : (V₁) OM10; (V₂) OM6; (V₃) OM4; (V₄) 6V6G; (V₅) 6X5G.

Dial Light : 8 volts, 0.3 amp.

Variations : Model 487AC differs from Model 470AC in cabinet design. Later version includes modified tone-corrector circuit. Model 480K differs from Model 487AC only in cabinet design. Model 490K uses 487AC chassis with a 6½-in. loudspeaker.

Alignment Procedure : Switch on receiver and signal generator at least 15 minutes before re-aligning.

I.F. Filter Circuit : Inject 465-kc/s.* signal to AE and E terminals. Adjust core of L₁ for minimum signal.

I.F. : Inject 465-kc/s. signal to top cap of V₁ via 0.01-μF. capacitor without removing grid lead. Adjust cores in following order: L₁₆ (lower); L₁₅ (upper); L₈ (lower); L₇ (upper).

S.W. : Tune to 18 Mc/s., inject 18-Mc/s. signal to AE and E terminals via dummy aerial. Adjust C₇ and C₁₆ for maximum output.

M.W. : Tune to 1.4 Mc/s., inject 1.4-Mc/s. signal and adjust C₆ and C₁₇ for maximum output.

L.W. : Tune to 300 kc/s., inject 300-kc/s. signal and adjust C₃ and C₁₉ for maximum output. Inject 160-kc/s. signal and adjust C₂₀ for maximum output. Re-check C₂₀ and C₁₉.

Approx. D.C. Resistance : Resistance of any inductance not listed below is "very low".

L ₂	75 ohms	L ₁₂	26 ohms	T ₂ (primary) 45 ohms, 40
L ₃	20 ohms	L ₁₄	8 ohms	ohms, or 37 ohms accord-
L ₆ , L ₇ and L ₈	10 ohms	L ₁₅ and L ₁₆	10 ohms	ing to tapping
L ₁₁	15 ohms	T ₁ (primary)	400 ohms	T ₂ (secondary) 64 + 64 ohms

Voltage Check Points : All measurements taken with a multi-range 1000 ohms/volt testmeter while receiver connected to 200 volts A.C. (no-signal conditions).

V ₁	Pin 3	276 v.	Pin 4	105 v.	Pin 6	110 v.
V ₂	Pin 3	270 v.	Pin 4	105 v.	Pin 8	4.2 v.
V ₃	Pin 3	35 v.	Pin 8	2.6 v.	—	—
V ₄	Pin 3	250 v.	Pin 4	210 v.	Pin 8	9.4 v.
V ₅	Pin	340 A.C.	Pin 5	340 A.C.	Pin 8	345 v.

* See note on page 328.

