

COSSOR

Model 508

General Description : Five-valve (including rectifier), three-waveband superheterodyne table radiogramophone. Released April 1952. Price £38 4s. 10d. (plus tax).

Power Supply : A.C. mains, 100-125 and 200-255 volts, 50 c/s. Consumption: radio, 40 watts; gramophone, 55 watts.

Wavebands : S.W. 19-5.85 Mc/s. (15.8-51.3 m.); M.W. 1605-520 kc/s. (187-577 m.); L.W. 325-147 kc/s. (923-2040 m.).

Intermediate Frequency : 470 kc/s.

Valve Analysis :

Valve	Anode Volts	Anode Current (mA.)	Screen Volts	Screen Current (mA.)	Cathode Volts
V1 7S7 (osc.)	230 150	1.5 5.0	80 —	3 —	— —
V2 7B7	230	7.8	80	1.6	—
V3 7C6	65	0.24	—	—	Slight
V4 7C5	265	42	225	3.2	12
V5 7Y4	250 A.C.	32.5 (each)	—	—	280

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

Gramophone Unit : Non-mix, three-speed auto-change for 33, 45 and 78 r.p.m. Interchangeable sapphire stylus pick-up heads, red long-playing, green 78 r.p.m.

Ext. Loudspeaker : 3 ohms impedance.

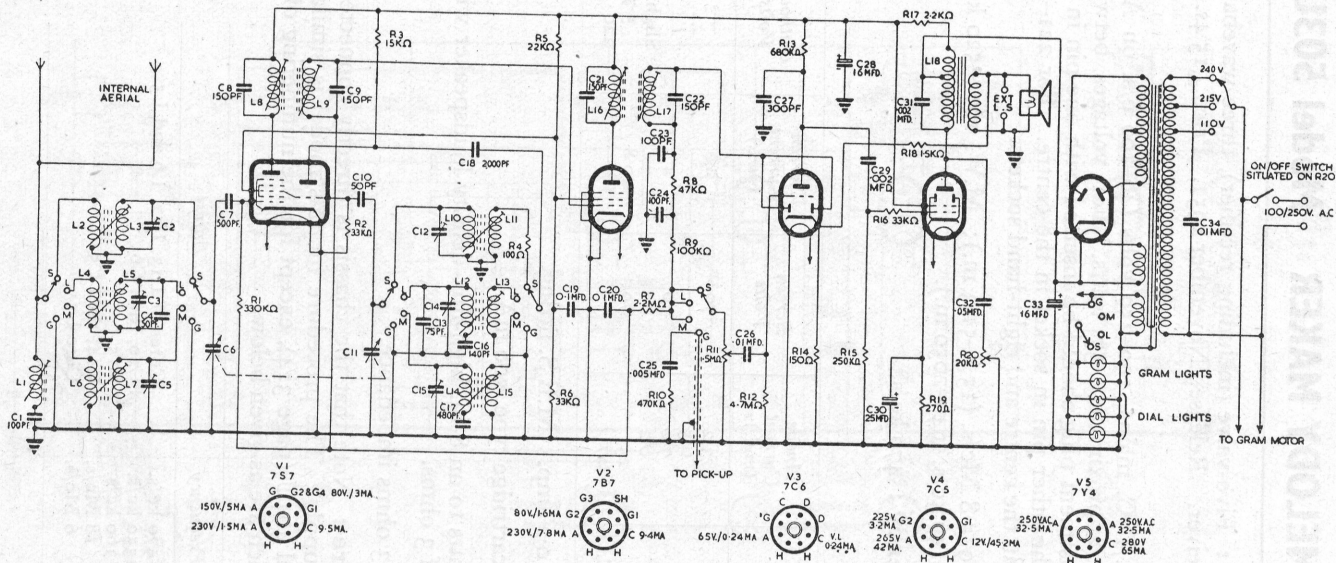
Alignment Procedure : When the chassis is removed from the cabinet, a small piece of 22 S.W.G. wire should be fixed upright on top of the tuning capacitor to coincide with the "gang closed" line on the alignment disc, which is attached to the back of the drive drum to act as a pointer. Output should be maintained at approximately 200 mW. Use standard alignment procedure at the following frequencies:

I.F.: Inject a 470-kc/s. signal to grid of V1 via 0.01-μF. capacitor, and adjust L17, L16, L9 and L8, in that order, for maximum response.

L.W.: Inject modulated signals to A. and E. sockets via dummy aerial. At 150 kc/s. adjust L12, L13, L4 and L5 for maximum output. At 300 kc/s. adjust C14 and C3 for maximum output. Repeat all adjustments successively.

M.W.: At 600 kc/s. adjust L14, L15, L6 and L7 for maximum output. At 1500 kc/s. adjust C15 and C5 for maximum output. Repeat all adjustments successively.

S.W.: At 6 Mc/s., adjust L10, L11, L2 and L3 for maximum output whilst rocking gang. At 18 Mc/s. adjust C12 and C2 for maximum output whilst rocking gang. Repeat all adjustments successively. Care should be taken that oscillator is not tuned to image signal, which should appear approximately 1 Mc/s. away on the lower-frequency side of the tuning signal.



CIRCUIT DIAGRAM—COSOR MODEL 508

D.C. Resistance of Inductors.

L1	17 ohms
L2	Very low
L3	Very low
L4	58.5 ohms
L5	25 ohms
L6	38 ohms
L7	2.5 ohms
L8	6 ohms
L9	6 ohms

L10	Very Low
L11	Very low
L12	10 ohms
L13	5.5 ohms
L14	2.5 ohms
L15	1.5 ohms
L16	6 ohms
L17	6 ohms
L18	17 ohms

T1 (Primary)	320 ohms
(Secondary)	1 ohm
T2 (Primary) 110 v. tapping	10.7 ohms
215 v. tapping	24.5 ohms
240 v. tapping	27 ohms
T2 (Secondary) H.T. winding	190 + 190 ohms
Heater windings	Very low.