

**General Description :** Five-valve (including rectifier), three-waveband superheterodyne table receivers. These models are identical in every respect except cabinets: 500, wooden cabinet; 501, moulded cabinet. Released: 500, May 1950; 501, June 1950. Prices: 500, £15 2s. 9d. (plus tax); 501, £12 19s. 6d. (plus tax).

**Power Supply :** A.C. mains, 200-255 volts, 40-100 c/s. (three adjustment tappings). Consumption approximately 40 watts.

**Wavebands :** S.W. 19-5.8 Mc/s. (15.8-51.3 m.); M.W. 1605-520 kc/s. (187-575 m.); L.W. 320-146 kc/s. (940-2050 m.).

**Intermediate Frequency :** 470 kc/s.

**Valve Analysis :** For alternative types see "Notes" below.

Valve	Anode Volts	Anode Current (mA.)	Screen Volts	Screen Current (mA.)	Cathode Volts
V <sub>1</sub> 7S7 (osc.)	208 96	3 3.2	80 —	3.4 —	— —
V <sub>2</sub> 7B7	204	10	80	2.3	—
V <sub>3</sub> 7C6	46	2	—	—	—
V <sub>4</sub> 7C5	268	32	202	2.5	9
V <sub>5</sub> 7Y4	250 A.C.	29 (each)	—	—	280

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

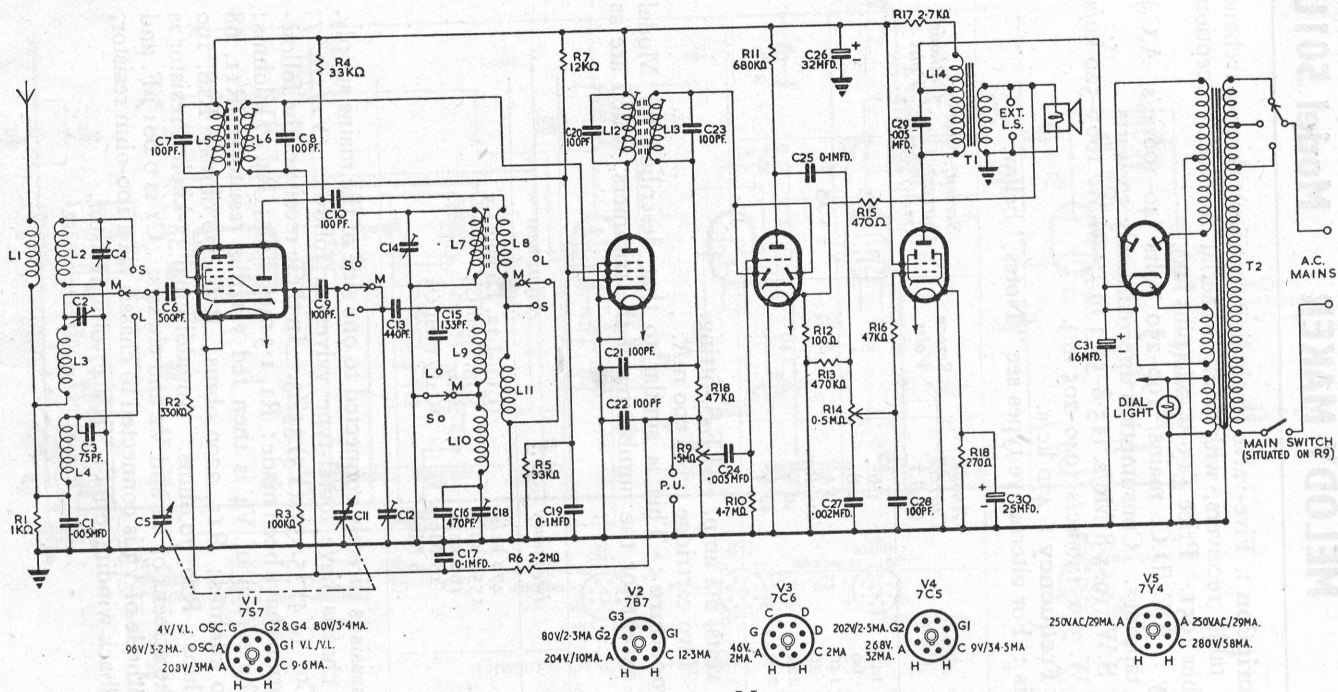
**Alignment Procedure :** This is similar to that described for Model 502 (page 302), except for the numbering of the trimmers, which are as given below:

Range	Frequency	Adjustment
I.F.	470 kc/s.	L <sub>13</sub> , L <sub>12</sub> , L <sub>6</sub> and L <sub>5</sub>
M.W.	1550 kc/s.	C <sub>12</sub> , then C <sub>2</sub>
L.W.	160 kc/s.	C <sub>18</sub>
S.W.	18 Mc/s.	C <sub>14</sub> , then C <sub>4</sub>
	6 Mc/s.	L <sub>7</sub>

**Notes :** Some receivers are fitted with 8A valves as follows: (V<sub>1</sub>) 62TH; (V<sub>2</sub>) 62VP; (V<sub>3</sub>) 62DDT; (V<sub>4</sub>) 67PT; (V<sub>5</sub>) 66KU. On these models R<sub>3</sub> is 18 kilohms and R<sub>18</sub> is 180 ohms.

Some receivers use an octal range as follows: (V<sub>1</sub>) OM<sub>10</sub>; (V<sub>2</sub>) OM<sub>6</sub>; (V<sub>3</sub>) OM<sub>4</sub>; (V<sub>4</sub>) 6V6GT; (V<sub>5</sub>) 6X<sub>5</sub>G. In these chassis R<sub>13</sub> is 270 kilohms, R<sub>11</sub> 100 kilohms and C<sub>25</sub> is 0.01 μF.

In a few models the loctal range is used with the exception of V<sub>4</sub>, which is replaced by an octal-based 6V6GT. There are no circuit variations in this case.



CIRCUIT DIAGRAM—COSMOR MODELS 500, 501

*D.C. Resistance of Inductors.*

- L1 Very low
- L2 Very low
- L3 3.5 ohms
- L4 13.5 ohms
- L5 9 ohms
- L6 9 ohms
- L7 Very low

- L8 2.5 ohms
- L9 2.8 ohms
- L10 7.5 ohms
- L11 5.5 ohms
- L12 9 ohms
- L13 9 ohms
- L14 13 ohms

- T1 (Primary) 280 ohms
- (Secondary) Very low
- T2 (Primary) 200-v. tapping 40 ohms
- 220-v. tapping 43.5 ohms
- 240-v. tapping 47 ohms
- (Secondary) H.T. winding 265 + 265 ohms
- Heater windings Very low