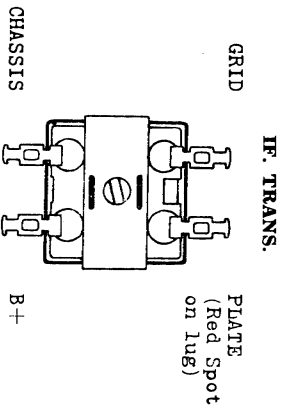


PB 861

Operation No.	Generator Connection	Generator Frequency	Dummy Antenna	Instructions
1.	To control grid of 6BE6 valve (pin No. 7)	455 Kc/s.	0.01MFC Mica capacitor in series with Generator.	Turn tuning control anti-clockwise until perm. tuner cores are out of the windings on coil formers and the unit is hard against the stop. Leave grid wire attached to valve socket. Peak IF. trans. pri. and sec. for max. output.
2.	To antenna junction lug on chassis	1000 Kc/s.	200MFC Mica capacitor in series with Generator.	Turn tuning control until dial pointer aligns with centre of alignment spot on dial reading at 1000 Kc/s. Peak oscil. coil trimmer cond., then peak antenna coil trimmer cond. for max. output. Re-peak oscil. coil trim condenser.
3.				Check logging at each end of the dial. Tuning range after alignment 535-1640 Kc/s.



ANTENNA TRANS.:

Start of winding-furthest from mounting end-Signal grid. Finish of winding-nearest to mounting end-Junction of circuit Nos. 9, 10 & 30. A small quantity of receivers were despatched from the factory with the connections to the aerial coil reversed. This will cause a 2DB drop in overall gain. Receivers returned for service are to be checked and have the connections corrected if found incorrect.

OSCL. COIL:

Start of winding-furthest from mounting end-Junction of circuit Nos. 3 & 8. Finish of winding-nearest to mounting end-Oscil. Grid.

POWER TRANS. (T141) 50 cycle

- PRI. Red lead-common.
- Green lead-200V. mains tap.
- Black lead-230 & 240V. mains tap.
- HT. SEC. Blue lead-start.
- Yellow lead-finish.
- IFT. SEC. Start and finish in winding wire.

POWER TRANS. (T142) 40 cycle

- PRI. Red lead-common.
- Green lead-230V. mains tap.
- Black lead-250V. mains tap.
- HT. SEC. Blue lead-start.
- Yellow lead-finish.
- IFT. SEC. Start and finish in winding wire.



TECHNICAL BULLETIN

MANTEL MODEL "DLP"

2 VALVE SUPERHETERODYNE BROADCAST RECEIVER

FOR OPERATION FROM:

200-240 Volt 50 Cycle Supply Mains (Power Transformer T141)
Power Trans. Primary Mains Tap—red—common.
'' '' '' ''-green 200V. mains.
'' '' '' ''-black-230 & 240V. mains.
230-250 Volt 40 Cycle Supply Mains (Power Transformer T142)
Power Trans. Primary Mains Tap—red—common.
'' '' '' ''-green-230V. mains.
'' '' '' ''-black-250V. mains.

POWER CONSUMPTION:

18 Watts approx.

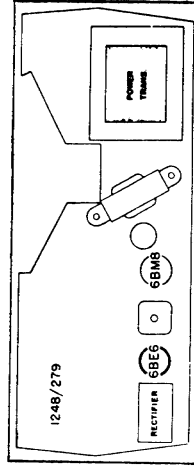
TUNING RANGE:

535-1640 Kc/s. : 560.7-182.9 Metres.

THIS BULLETIN CONTAINS:

Alignment Instructions.
 Circuit Diagram.

Instructions for Changing Mains Voltage Tap.
 Instructions for Removing Chassis from Cabinet.
 Valve Placement Diagram.
 Instructions for Replacing Dial.



ALIGNMENT PROCEDURE:

ALIGNMENT CONDITIONS:

EQUIPMENT:
 Signal Generator: Load Impedance: 7,000 ohms.
 Output Meter: 50 Milliwatts
 Mica Capacitor: 0.01MF (for IF. trans. alignment)
 Dummy Antenna: 200MMF Mica Capacitor
 Alignment Tools: Type M195 and PM581

ALIGNMENT CONDITIONS:
 Output Level: 50 Milliwatts
 Vol. Control: Max. Vol. fully clockwise
 Intermed. Freq.: 455 Kc/s.
 Input Voltage: 230 Volts 50 Cycle AC.
 input to trans. 230-240 volt pri. tap

NOTE 1:

Dummy Antenna: The 200MMF dummy antenna must not be connected to the free end of the 25 ft. antenna during alignment, but must be connected to the antenna junction lug on the chassis. It is not necessary to have the 25 ft. antenna connected to the receiver during alignment. If it is connected it should be rolled up into a small hank.

NOTE 2:

The receiver chassis does not have to be removed from the cabinet for alignment of the IF. or RF. signal circuits. All alignment functions may be made when the rear section of the cabinet is removed from the front section.

NOTE 3:

To remove cabinet rear section from front section, prise off the two spring clips from the cabinet base with a thin blade screwdriver or knife, then at the base of the cabinet insert the thin blade screwdriver or knife into the crevice between the two cabinet sections and prise the rear section of the cabinet away from the front section.

NOTE 4:

Dial Pointer Setting: Turn tuning knob anti-clockwise until perm. tuner iron cores are out of the windings on the coil formers and the unit is hard against the stop. Set centre of transparent dial pointer line on centre of end of travel spot on dial reading near 1700 Kc/s.

NOTE 5:

Positioning of the dial pointer may be made by loosening the two grub screws fastening the tuning spindle to the core carriage roller. Set the centre of the dial pointer on centre of end of travel spot on dial reading near 1700 Kc/s. then with the iron cores out of the windings on the coil formers and the core carriage hard against the stop securely tighten the two grub screws.

NOTE 6:

Both iron cores are pre-set at the factory to an exact dimension of 2.275" between the extreme end of the former protruding through the rubber grommet, and the end of the iron core in the former, when the unit is turned fully anti-clockwise and is hard against the stop.
 If incorrect logging and misalignment are to be avoided, no adjustment of the iron cores must be made to vary this dimension. Both iron cores must have the same colour identification spot on the end of the iron core.