

## **Marconi Models 73, 74 Alignment Intructions**

## GENERAL DATA:

Circuit:—Dual wave, 7 tube superhetrodyne with preselector and full automatic volume control and adjustable selectivity.

The circuit is essentially the same as Models 67 and 68.

Frequency Range:—B.C.Band—529 to 1725 K.C. S.W.Band 5650 to 18000 K.C.

Intermediate Frequency:—462.5 K.C.

Power Output:—Undistorted—3.9 Watts. Maximum 5.5 Watts.

Sensitivity:—Better than 5 microvolts on the broadcast band and better than 3 M.V. on shortwave, for an output of 0.5 Watts.

Selectivity.—34 or 24 K.C. at 1000 times input.

Image Ratio:—Better than 20,000 at 1,000 K.C.

Power Rating:—115 V. A.C.; 60 Cy., 72 Watts; 25 Cy., 74 Watts.

Adjustable Selectivity:—By means of a D.P.D.T. switch either one of two I.F. transformer may be used, one of which provides a broad I.F. channel and the other a narrow channel. A third winding is incorporated in the latter to introduce a small amount of regeneration which improves the selectivity and increases the gain. In replacing this coil assembly be sure that the polarity of the coils is correct.

Tuning Indicators:—Models 73 and 74 are equipped with a shadow type tuning meter which is actuated by the plate current of the R.F. tube.

In Model 75 the new R.V.C. 6E5 Cathode Ray tuning indicator is used. The A.V.C. voltage is applied to the control grid of the triode portion which acts as a D.C. amplifier to control the electron beam.

## ALIGNMENT:

I.F. Trimmers:—With the selectivity switch in the High Selectivity position, supply a 462.5 K.C. signal to the grid clip of the 6A8 through a .1 Mf. condenser. Adjust, in order, C17, C16, C15, C14.

Switch to "Broad Selectivity" and adjust C13 and C12.

Broadcast Band Trimmers:—With the gang condenser set at minimum capacity, the pointer should be set midway between the letter "C" and the end of the broadcast scale.

Using a standard dummy antenna, supply a modulated 1600 K.C. signal to the A. and G. terminals. Set pointer at 1600 and adjust C8, C6 and C4 for maximum output.

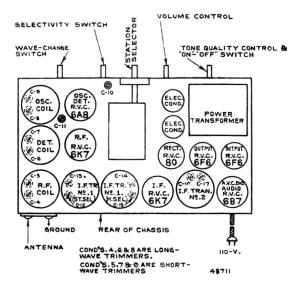
Supply a 580 K.C. signal and track C10 while rocking the tuning control back and forth. Recheck C8 at 1600 K.C.

Short Wave Band Trimmers:—Switch to shortwave and rotate tuning control until pointer is at 1510 K.C. Supply a 16 M.C. signal using a 400 ohm non-inductive resistor in series with the lead to the "A" terminal, and adjust C9, C7 and C5 for maximum output. If two peaks are noticed when adjusting C9, the one with the trimmer further out is correct.

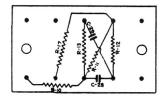
Rotate tuning control to set pointer at 570 K.C. and supply a 6 M.C. signal. Adjust C 11 while rocking the tuning control to obtain the adjustment giving maximum output.

Check alignment at 16 M.C. and re-adjust C9 if necessary.

We recommend that a tuning wand be used to check the correctness of alignment on Broadcast and Shortwave Bands.

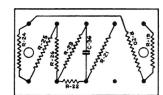


Models 73, 74



49874 (Models 73-74 only)

RESISTOR PANELS.



49870 (Models 73-74-75)