

Date of design:- 1930.

Frequency range:- 125 - 600 kc/s.

The WX8 wavemeter is supplied for use with transmitter TX29. The instrument is unshielded, employs no mutual coil and uses a neon lamp (104) as indicating device. The circuit consists of a coil (100), with one tapping, tuned by a variable condenser (103) across which is joined the neon lamp (104). A metal dial (105) is fixed to the condenser (103) and has two scales engraved on it. A switch (101) inserts the whole or part of the coil (100) in circuit thus providing the two ranges which cover the following frequencies:-

Range 1. 250 - 600 kc/s.

Range 2. 125 - 250 kc/s.

On range 1 the scale is graduated to 10 kc/s with an accuracy of 2 kc/s and on range 2 to 5 kc/s with an accuracy of 1 kc/s. The condenser is operated by a slow motion device (106).

Provision is made for setting and locking the condenser in any two desired positions. This is achieved by means of clamps (107), rotatable on a ring (108) fixed to the face of the instrument, and bolts (109) fitted to the dial. The clamps and bolts are painted red and green. To set the wavemeter to a given frequency, release the set screw (110), insert the bolt (109) in the clamp slot, rotate the dial to the required frequency and set up the screw (110). The wavemeter is now locked in this position; withdraw bolt to allow free movement of dial. The clamp remains set in position so that to return to the same frequency it is merely a matter of turning the dial to the position for engaging the bolt in the slot. Care must, of course, be taken to use the same colour clamp and bolt.

The instrument should be placed far enough from the transmitter that at resonance a glow in the neon lamp is just visible.

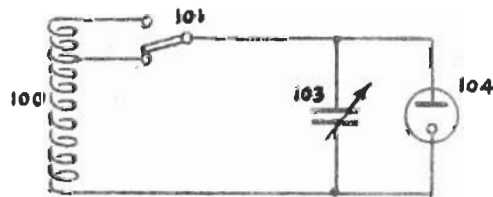


FIG. a.

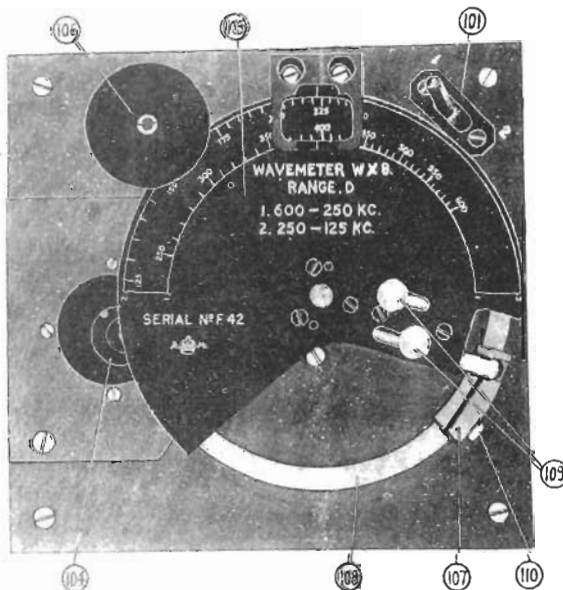


FIG. b.

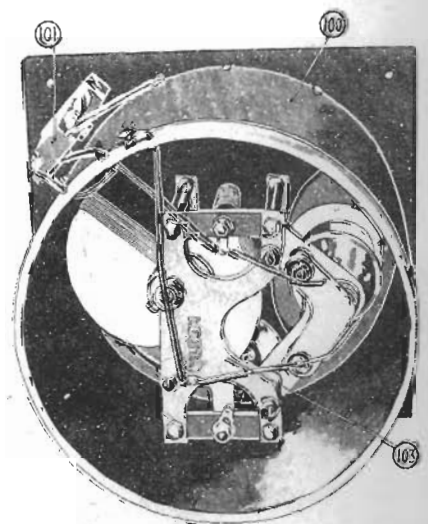


FIG. c.