AERIAL TUNING OUTFIT ETC

ETC

SUMMARY OF DATA

PURPOSE

This outfit provides a means of matching various aerial impedances to a 50 ohm transmitter output (eg Transmitter Type 640) over a frequency range of 1.5 to 24 MHz.

BRIEF DESCRIPTION

The Tuner R.F. consists of a wideband transformer in series with a tunable L or pi network (the configuration is changed automatically for different ranges). The network has three motor-driven tuning elements which are all remotely controlled from either a transmitter or special control box. The tunable elements are inductance, fine input capacitance and range (which is changed by coarse capacitance tuning and altering the network configuration).

The Tuner R.F. cabinet is airtight.

MAJOR UNIT

5820-99-1594 Tuner, Radio Frequency

PRINCIPAL POWER REQUIREMENTS

Separate main or anti-condensation heater supplies are not required, but 230 volts, 50-60 Hz, 360 watts is needed, from its associated transmitter (usually Type 640); for the anti-condensation heater.

PERFORMANCE

Frequency Coverage: 1.5 to 24 MHz in eleven ranges:-

1. 1.5 to 1.8 MHz 2. 1.7 to 2.1 MHz 3. 2.0 to 3.0 MHz

4. 3.0 to 4.0 MHz 5. 4.0 to 6.0 MHz 6. 6.0 to 8.0 MHz

7. 8.0 to 10.0 MHz)
8. 10.0 to 13.0 MHz) 7, 8 and 9 are strapped in some installations.
9. 13.0 to 16.0 MHz)

10. 16.0 to 20.0 MHz $\left. \begin{array}{c} 16.0 \text{ to } 20.0 \text{ MHz} \\ 11. & 20.0 \text{ to } 24.0 \text{ MHz} \end{array} \right)$ 10 and 11 are strapped in some installations.

R.F. Input Power: 1.5 to 2 MHz, 360 W mean f.s.t. 500 W mean c.w.

700 W peak two-tone

2.0 to 3.0 MHz, 400 W mean f.s.t. 600 W mean c.w. 800 W peak two-tone

3.0 to 4.0 MHz, 750 W mean f.s.t. 1 kW mean c.w. 1 kW peak two-tone

Above 4.0 MHz, 1 kW all services.

Input Impedance: 50 ohms

Output impedance: 2 to 80 ohms resisting

-700 to +300 ohms reactive

Matching: Better

Better than 0.85 v.s.w.r.

HANDBOOK

ESTABLISHMENT LIST

INSTALLATION SPECIFICATION

BR 2346

E 1359

B 933

