

**AIR-GROUND RADIO
PRIVATE SYSTEMS
ERCO 361-TB TRANSMITTER
INSTALLATION**

1. GENERAL

1.01 This section lists conditions that should be met during and after installation.

1.02 This section is reissued to add certain installation requirements. Marginal arrows have not been used to indicate changes.

1.03 The transmitter should be located in a protected area where there is free circulation of CLEAN air at a moderate temperature.

CAUTION: THE TYPE 361-TB TRANSMITTER USES VOLTAGE WHICH CAN BE FATAL. THE SAFETY PRECAUTIONS IN SECTION 010-110-001 MUST BE FOLLOWED DURING INSTALLATION AND MAINTENANCE.

1.04 The RF output from the Model 361-TB transmitter shall be connected to an Erco type UHD broadband discone antenna or to a gain antenna resonant at the operating frequency of the transmitter.

1.05 The coaxial cable should be as short as possible and either RG-17/U or Styroflex cable. The total cable loss should not exceed 2 db at the operating frequency. A short length of RG-8/U coaxial cable (as short as practicable) equipped with UG-21B/U connectors should be used to connect the transmission line to the transmitter. Where pressurized air line is used, it should be pressurized to the standard value.

1.06 Coaxial cable associated with the 361-TB transmitter should not be exposed to temperatures in excess of 145°F (65°C).

1.07 A stable supply voltage of 110/120 volts at 50/60 cycles should be connected to terminals 1 and 2 on the control unit, using at least No. 12 AWG wire. The ground side of the supply is connected to terminal 1. The power demand is 350 Watts in the stand-by condition and 1400 Watts at 100% modulation.

1.08 A fused type disconnect switch equipped with a 15 ampere "slow-blow" fuse shall be installed in the supply voltage line.

1.09 The disconnect switch shall be located in the same area as the transmitter and labeled to show its function in accordance with Section 010-110-001.

1.10 The utility outlet at the rear of the rear of the transmitter should be wired at the time of installation.

1.11 The transmitter shall be grounded in accordance with standard instructions.

1.12 Each transmitter shall be marked with proper identification and operating frequency.

1.13 All tubes shall be placed in their proper sockets.

Note: The type 6979/4X250B tubes in the IPA and Power Amplifier are installed before shipment.

1.14 The crystal shall be placed in the crystal socket.

Note: Check crystal for correct transmitter output frequency. Crystal frequency is 1/48 of the output frequency. Where a heated crystal is provided, a check should be made to insure proper crystal oven operation.

1.15 A check of the operation of the vane switch should be made at the time of installation and at the intervals specified in Section 406-100-330.

1.16 When installed, the type 361-TB transmitter shall meet all tests in Section 406-100-500.

2. RECORDS

2.01 A record of meter readings and control setting should be made at the time of installation.

2.02 It is recommended that a log record be maintained. Each entry should briefly but adequately describe the nature of work, routine, trouble, etc, the conditions noted and the action taken.