

TECHNICAL DESCRIPTION

MODEL GMT REMOTE TRANSMITTER

DESCRIPTION

The transmitter is a low-power communication device operating at frequency of 312MHz by adjusting the trimmer (VC1). The signal is a digital-coding modulated transmission that transmitted data to its associated receiver. This digital coding provides different patterns by proprietary integrated circuit (U1) and (U2).

FUNCTION

The integrated circuit (U2) detects the state of the tilt switch (S1) in either open or closed to activate the transmission.

The digital modulator is employed in the integrated circuit (U2) that sends encoded digital data. Ceramic Resonator (Y1) and Capacitor (C2, C3) established the clock rate of 4MHz.

The output data from the proprietary integrated circuit (U2) drives a tuned Colpitts power oscillator. The oscillator is a LC oscillator formed by transistor (Q1) and associated components (C7, C8, C9). The trimmer (VC1) controls the frequency of oscillation. The inductive jumper (L2) is installed on the PCB as the principle radiating element which similar to an elementary dipole. Resistor (R8) in conjunction with the base bias circuit (R5) regulates the power output of the transmitter.

The unit operates from a Lithium battery of 3V.

Warning: Changes or modifications to this unit not expressly approved by the party responsible of compliance could void the user's authority to operate the equipment.