

EXPOSITORY STATEMENT/DESCRIPTION

The Beetle R/C Transmitter (FCC ID:992249) is a crystal controlled low-powered digital transmitter. It consists of one large-scale-integrated (LSI) circuit, one crystal, RF amplifier stage, and passive switch controls. See attached block diagram.

The LSI chip produces the digital baseband modulation that will be modulated onto the carrier. The carrier is produced via the crystal and RF amplifier stages. The crystal oscillator circuit is comprised of X1 (49.86 MHz) and Q1, its associated passive components. The RF signal from the oscillator circuit is modulated by the digital baseband signals at the base of the RF amplifier stage (Q2). The output of the RF amplifier is attached to the antenna via a matching circuit consisting of C6, L3, and C8 - a "pi" circuit. See attached schematic.

The device operates using a single 9.0 VDC Battery. All tuning and verifications are performed by the manufacturer and no external ground is required or used with this transmitter.