

#### **EXPOSITORY STATEMENT/DESCRIPTION**

The BMX R/C Transmitter (FCC ID:AEKA03749) is a crystal controlled low-powered digital transmitter. The transmitter uses a telescopic antenna 18 ½ inches long, when extended.

The BMX transmitter consists of one large-scale-integrated (LSI), IC1 (Taiyo TX5B) circuit, one crystal (X1), RF amplifier stage (Q2), 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 matched to the antenna via a matching circuit consisting of C6, C7, L3, and C8 - a "pi" circuit is used for matching. See attached schematic.

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