

HOT POPPER #B5113

27.145MHz TRANSMITTER OPERATIONAL DESCRIPTION

The Hot Popper radio control transmitter is a low powered, hand held unit for controlling the movement of a toy car .The transmitter is powered by a 9 volt battery .It is designed to operate on a single fixed frequency in the 26.98---27.28MHz band. See the attached block diagram and schematic.

Input switches trigger integrated circuit (U1) which produces the digital control signals which will modulate the carrier signal .The carrier signal is generated by a crystal oscillator / amplifier circuit comprised of a 27.145MHz crystal (Y1). The modulated output of RFO is capacitively coupled (via C7)to the antenna through a “Pi” matching network comprised of C9 、 C11 and L5 .The antenna is 11 inches long and permanently attached.

All tuning and verifications are performed by the manufacturer and there are no adjustments that can be made by the User .No external ground is required or used with this transmitter.