

27.145MHZ Transmitter Operational Description

The 1:10 Drifting R/C radio control transmitter is a low powered, hand held V.R for controlling the movement of a toy car, the transmitter is powered by a 6.0V battery(4XAA) ,it is designed to operate on a single fixed frequency in the 27.1450MHZ band .please see the attached block diagram and schematic.

Transmitter is being used a proportional Remote Control EM78458 integrated circuit, the EM78458 is able to Dual pulse width modulation with 10-bit resolution with programmable pull-high I/O pins. When set any where of the V.R, it will have digital control signals, via built-in crystal oscillator and power amplifier, circuit comprised of a crystal X1. The RF carrier signal is modulated by digital control signal. The modulated output of pin57 is capacitably coupled via R10, C16, R7 to the antenna through a pi matching network comprised of C13 C14 and L5. T1 is adjustable.

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