1/6 Batmobile

27.145MHz TRANSMITTER OPERATIONAL DESCRIPTION

The Batmobile radio control transmitter is a low powered, hand held unit for controlling the movement of a toy car .The transmitter is powered by a 3-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 pin ID0, ID1 of U1 is connected to a slide switch, the slide switch on bottom cover is used to select different channel to control the corresponding car. Input switches (SW1~SW4) trigger integrated circuit (U1) which produces the digital control signals and these signals 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 from pin ANT of U1 is capacitive coupled (via C7)to the antenna through a “Pi” matching network comprised of C5、C6 and T1 .The antenna is 11 inches long and permanently attached.

The manufacturer performs all tuning and verifications and there are no adjustments that can be made by the user. No external ground is required or used with this transmitter.