

Project : **Dodge**

49.86MHz TRANSMITTER OPERATIONAL

DESCRIPTION

The Dodge Vehicle 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 49.82 – 49.9MHz band. By using this fixed frequency, 3 channel ID function can be achieved by software See the attached block diagram and schematic.

Input switches trigger integrated circuit, MCU, which produce the digital control signal which will modulate the carrier signal. The carrier signal is generated by a crystal oscillator / amplifier circuit comprised of a 24.93MHz crystal. The modulated output is capacitively coupled via to antenna through a "Pi" matching network. The antenna is housed outside plastic controller and is 40cm long. .

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.