

## Operational Description

The car FM transmitter is a low powered, hand held unit for controlling the Car FM Receiver. See the function descriptions in attached. The transmitter is powered by a 12 volt car battery. It is designed to operate on a single fixed frequency at 88.7/106.45MHz. See the attached block diagram and schematic.

There is one the integrated circuit (IC1) which produces signals amplifier and will modulate the carrier signal. The carrier signal is generated by a crystal oscillator/ amplifier circuit and two npn transmitter (Q2/Q3). The modulated output of the RF amplifier stage is coupled to the PCB strip antenna. The coupling network comprised of C10 · C11 · L4 · L5 · L6 and C12. The strip antenna is attached on PCB layout.

All tuning and verification are performed by the manufacture and there are no adjustments can be made by the user. No external ground is required or used with this transmitter.