TX553 Operational Description

The car alarm transmitter is a low powered, hand held unit for remote controlling the car locks and other features. See the function descriptions in attached. The transmitter is powered by a 12 volt battery. It is designed to operated on a single fixed frequency at 433.92 MHz. See the attached block diagram and schematic.

There are 4 buttons trigger the integrated circuit (U1) which produces the digital control signals and will modulate the carrier signal. The carrier signal is generated by a LC oscillator/ amplifier circuit comprised of a npn transmitter (Q1)and VC, L1, C1 ,C4. The modulated output of the RF amplifier stage is coupled to the PCB strip antenna. The coupling network comprised of C2,C3 and R1. The strip antenna is attached on PCB permanently around 10 mm.

The transmitter is manually operated by the buttons pushed and will automatically deactivate within 3 seconds after the button being released. This feature is incorporated by the U1 internally.

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.