

Operational Description

The radio frequency car-alarm is a system that it controllers locking(arm) and unlocking(disarm) the door of vehicle by wireless remote controller. This system consists of transmitter and receiver.

The transmission (TX-100) is powered by DC 12V and works on 433.92 MHz single fixed frequency. Details of circuit diagram and its block diagram are shown on the attached sheets.

signals and modulate the carrier signal. The carrier signal is generated by a crystal oscillator/ amplifier circuit composed of a 433.92 MHz crystal and a npn transmitter. The modulated output of RF amplifier stage is coupled to the coil.

The automobile's sensor will trigger the digital control signals and modulate the carrier signal. The carrier signal is generated by a crystal oscillator/ amplifier circuit composed of a 433.92 MHz crystal and a npn transmitter. The modulated output of RF amplifier stage is coupled to the coil.

All the tuning and verification are done by manufacturer during the production process and no adjustment is allowed by any consumer. No external ground is needed in such device.

The receiver (EUT) is fixed inside the vehicle and powered 12V from car battery. It works intermittently to prevent the battery exhaustion and check the vehicle status. It is designed to operate on a single fixed frequency 433.92 MHz by frequency modulation. It runs continuously to receive the signals completely, when the receiving module in receiver detects several synchronous codes, unique identification code, security code and function code transmitted from transmitter. After receiving the signal, the 8bit CPU in receiver decides which operation will be performed. And then driving circuit in receiver performs selected operations by pressing the button of the remote transmitter.

All tuning and verification are performed by the manufacturer and there are no adjustments which can be made by the user. External ground is the chassis of vehicle and receiving antenna is fixed on enclosure of the receiver.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received: including interference that may cause undesired operation.

Note: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modification to this equipment. Such modification could void the user's authority to operate the equipment.

