

L TR53A Operational Description

The Winterronics Co., Ltd. Model: TR53A (referred to as the EUT in this report) is a Transceiver of car alarm security system. It offers wireless remote control, ideal for use in vehicle security system to activate the function of center door lock control system and car searching except the alarm system.

A major technical descriptions of EUT is described as following:

- A). Fundamental Frequency: 433.92 MHz
- B). Modulation : Pulse Modulation
- C). Antenna Designation: Non-User Replaceable (Fixed)
- D). Power Supply: 1.5V, Battery Operated.
- E). Receiver type : Superheterodyne

The 2-way pager is a low-powered transmitter device used in monitoring the automobile security status as well as in remotely arming/disarming car security system and other optional features like vibration or audible beeping warning sound during alert mode. Its features and functions are described in the separate attached sheet.

The transmission is powered by a 1.5v AAA-sized battery and works on 433.92Mhz single fixed frequency. Details of circuit diagram and its block diagram are shown on the attached sheets.

There are total 5 buttons which, if pressed, will produce 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 an npn transmitter. The modulated output of the 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.

Fundamental Frequency	433.92MHz
Power Source	1.5v
Transmitting Time	Periodic \leq 5 seconds
Associated Transceiver	FCC ID : NJQTR53A

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: and
- (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.