

### L TR68A Operational Description

The Wintecronics Co., Ltd. Model: TR68A (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: DC 12V via control box.

E). Receiver type : Superheterodyne

Fundamental Frequency	433.92MHz
Power Source	12V
Transmitting Time	Periodic $\leq$ 5 seconds
Associated Transceiver	FCC DOC

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. Its features and functions are described in the separate attached sheet.

The transmission is powered by 12 V of the car alarm control module and works on 433.92 MHz single fixed frequency. Details of circuit diagram and its block diagram are shown on the attached sheets.

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 of a 433.92 MHz crystal and a npn transmitter. The modulated output of the RF amplifier 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.