

L-500HAA Operational Description

The Wintercronics Co., Ltd. Model: L-500HAA (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 1.5V, Battery Operated.
- E). Receiver type : Superheterodyne

Fundamental Frequency	433.92MHz
Power Source	1.5V Battery Operated
Transmitting Time	Periodic $\leq$ 5 seconds
Associated Receiver	FCC DOC

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

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

There are total 4 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 Mh crystal and a 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.

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 modifications could void the user's authority to operate the equipment.