(CARC5HF)

Operational Description

The NUTEK CORPORATION Model: CARC5HF (referred to as the EUT in this report) is a Transmitter 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: 12V, Battery Operated

E). Receiver type : Superheterodyne

Fundamental Frequency	433.92MHz
Power Source	12V Battery
Transmitting Time	Periodic ≤ 5 seconds
Associated Receiver	FCC DOC

The car alarm transmitter is a low powered, hand unit for remote controlling the car locks and other features. See the function description in attached. The transmitter is powered by a 12 volt battery. It is designed to operated on a single fixed frequency at 434MHz. See the attached block diagram and schematic.

There are 4 buttons trigger the integrated circuit (IC1) which produces the digital control signals and will modulate the carrier signal. The carrier signal is generated by a crystal oscillator/amplifier circuit comprised of a 434MHz crystal(XTAL) and a npn transmitter(TR1). The modulated output of the RF amplifier stage is coupled to the PCB strip antenna. The coupling network comprised of C2,C3, C4 and C5. The strip antenna is attached on PCB permanently around 30mm.

The transmitter is manually operated by the buttons pushed and will automatically deactivated instant after the button being released. This feature is incorporated by the IC1 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.