

1 General Product Information

1.1 Product Function and Intended Use

The equipment under test(EUT) is a Two way car alarm system operating at 433.920MHZ

FCC ID: VMKCA-788

Model	Product description
CA-788	Two Way Car Alarm System

1.2 Circuit Description

This is main unit of two way car alarm. It consists of auto detection circuit, autocontrol circuit, MCU processor, RF combo IC, amplifying power circuit and power supply circuit. Auto detection circuit consists of door, vibration and ACC detection. Auto control circuit have central door lock diagram, blanking circuit, direction light control circuit, LED reminder circuit and speaker alarm control circuit. RF combo includes IC filter circuit, magnified circuit, frequency compound circuit, adjustment circuit. Amplifying power circuit have L, C filter circuit, amplifying circuit, magnified circuit, antenna match circuit and transform circuit, antenna.

When MCU detected detection circuit, auto control circuit will turn off ignition wires through relay, and the direction light keep flash and control speaker to give out warning sound. Also, MCU processor send warning signal to the RF combo IC (AT5428), and then RF combo IC(AT5428) output faint 433.92 MHz combo signal through FSK adjustment mode. After the combo signal has been be magnified and sent out by R,L,C filter and antenna match circuit, there will be signal from antenna and it will inform detection circuit of remote that the circuit have been trigger.

When the antenna of main unit received combo signal from remote, the signal will be inputted to RF combo IC(AT5428) after it is filter through L,C filter circuit and magnified through magnified circuit. RF Combo IC read out the data from remote, and send to MCU processor for processing. After processing, the MCU will control relevant control circuit to lock or unlock door, release trunk, search car soundly and lightly, make LED light flash and make the main unit in alarming mode or disarming mode.

The power of main unit was supplied by storage battery (DC 12V) and will be sent out to each circuit after filter by capacitance.

1.3 Ratings and System Details

Frequency range:	433.920MHZ
Crystal Tolerance:	±30KHZ
Number of channels:	1
Type of antenna:	Integral antenna
Power supply:	DC 12V
Ports:	DC mains
Protection Class	I
Classification of device:	B