M053EVer1.1

PRODUCT INTRODUCTION

The product is a Ceiling-mounted passive infrared detector with high stability. It adopts advanced signal processing technology which provides superhigh detection ability and anti-false alarm ability, and MCU processing ensuring the reliability from design basis. When an intruder passes through the detection area, the detector will detect the movements of human body automatically. If any movements, it will send alarm signal to the connected alarm host. It suits for safety protection in residential houses, villas, factories, shopping malls, warehouses and office buildings etc.

PRODUCT PROFILE



TECHNICAL SPECIFICATION

Operation voltage: DC 9-16V

Current consumption: ≤18mA (DC 12V)

Detecting distance: \$\Phi 6 m at 3.6 m of ceiling installation

Detecting speed: 0.3m/s-3m/s

Detecting an: 360°
Self-testing time: 60s
Alarm time: 3s/30s optional
Alarm indication: Red LED

Sensor: Double element pyroelectrie infrared sensor

Operating temperature: -10°C~ +50°C

Environment humidity: ≤95% RH(no congelation)

Anti RF interference: 10MHz-1GHz 20v/m Installation model : Ceiling mounted

Installation height: 2.5m-6m

Alarm output: N.C.or N.O. (DC28V 100mA)
Tamper output: N. C. (DC28V 100mA)

Execute criterion: GB10408.1-2000; GB10408.5-2000

Outline Size: \$\Phi\$100*36mm

MAIN FEATURES

- MCU control, resist false alarm efficiently
- Double temperature compensation
- Pulse count adjustment
- Anti white light interference
- Anti RF interference (20V/m-1GHz)
- Fresnel lens
- Wall/ceiling installation
- Alarm output N.C. or N.O.
- Alarm time optional (3s or 30s)
- Intelligent floating thresholds technology
- Patent appearance design
- SMT manufacture technology with high stability

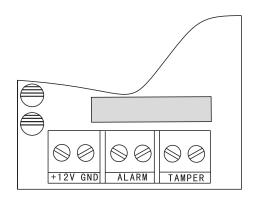
INSTALLATION

- 1, Please avoid installation in outdoor, places with pets, air-condition, heat source nearby, places with direct sunshine and places under rotating objects.
- 2, The installation surface should be solid without vibration.
- 3, Please install the detector in places where an intruder may passes easily.

INSTALLATION STEPS

- 1, Screw the bottom off and open the detector
- 2, Remove the PCB
- 3, Drill a wire hole in the rear housing
- 4, Install the rear housing in a suitable position
- 5, Fix the PCB
- 6, Connect the terminal block as follows
- 7, Fix the detector cover

TERMINAL BLOCK FIGURE



+12V GND ALARM DC ANODE DC CATHODE

ALARM ALARM OUTPUT PORT TAMPER TAMPER OUTPUT PORT

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OPERATING INSTRUCTION

Jumper setting

1) PULSE Jumper: can adjust sensitivity and the ability of anti RF interference by choosing different Pulse jumpers.

Short 1&2: Class 1 pulse, high sensitivity, good anti RF interference ability, suits for ordinary environment.

Short 2&3: Class 2 pulse, low sensitivity, strong anti RF interference ability, suits for environments with heavy RF interference.

2) Relay Jumper: choose N.C. or N.O. to set the state of alarm output according to different requirements of alarm host.

Short 1&2: N.O.

Short 2&3: N.C. (Default)

3) Delay Jumper: used to set the lasting time of relay and alarm indicator when alarming.

Short 1&2: 3S (Default)

Short 2&3: 30S

4) LED jumper: used to control LED indicator. This function will not influence the normal working of detector. In order to provide better concealment, the LED indicator can be off after test by pulling out all the jumpers.

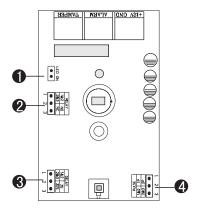
PRODUCT TESTING

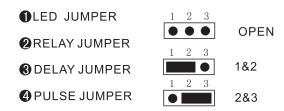
Connecting power supply (DC12V), LED indicator flashes, the detector will go into self testing state for about 60s. When the LED indicator off, the detector enters into normal working state. The tester should walk within the detection range in parallel with the wall where the detector is installed. When the LED indicator lights, the detector enters into alarm state.

NOTICE

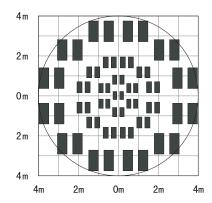
- 1, The detector should be installed and used properly according to Manual. Do not touch the sensor surface in order not to decrease the sensitivity. If the sensor needs to be cleaned, please use soft cloth with little alcohol after cutting off the power.
- 2, The detector can decrease the rate of the accident but can not assure no risk at all. For safety concern, besides proper usage of the detector, please enhance vigilance and take good protection in daily life.
- 3, Constant power supply should be provided to ensure normal working. Walking test should be carried out periodically. Once a week is recommended.

JUMPER SETTING FIGURE

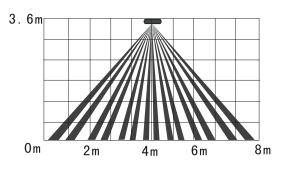




DETECTING AREA VIEW



Planform



Side View