Wireless PIR Detector

Manual Instruction
(Low consumption for indoors)

Product Introduction

PIR sensor adopts digital fuzzy logic infrared control system and Intelligent analysis algorithm; it can tell the interference signal and human movement signal to avoid fault alarm. Also it has temperature compensation and air flow technology to get used to the change of the environment. The device has the features of environmental-friendly, safety and easy installation. It can reflect the low voltage automatically to help the GSM alarm to send low voltage message to users. The product is suitable for housing estate, villa, factory, warehouse, office building and so on.

Function parameters

1. Adopts CMOS low-power consumption microprocessor
2. Low power consumption, the battery with a longer life
3. Built-in Millions of codes
4. Transfer digital wireless signals
5. Low voltage alert function
6. All-around automatic temperature compensation
7. Intelligent logic analysis to avoid fault alarm
8. Anti white light
9. Anti high frequency interference

Product appearance

1. Detection window
2. LED Indicator
3. Installation bracket

LED Indicator light
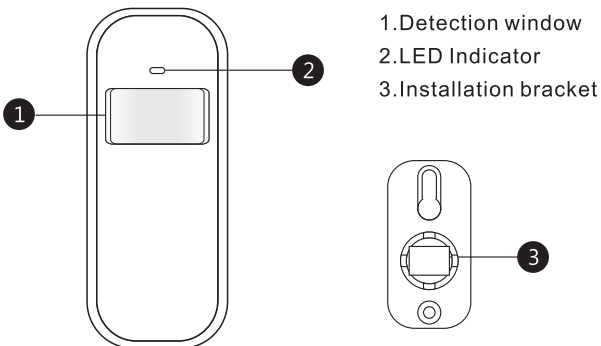
LED flashes frequently: device is in self-checking state
LED flashes once: device is alarming
LED flashes twice: device finishes self-checking and enters into working mode ❶ .
LED flashes three times: hints of battery under-voltage (you will receive low voltage alert message if your GSM alarm system connected PIR sensor)

❶ Working mode includes testing mode and sleeping mode, Jumper J4 can define.

PCB Layout
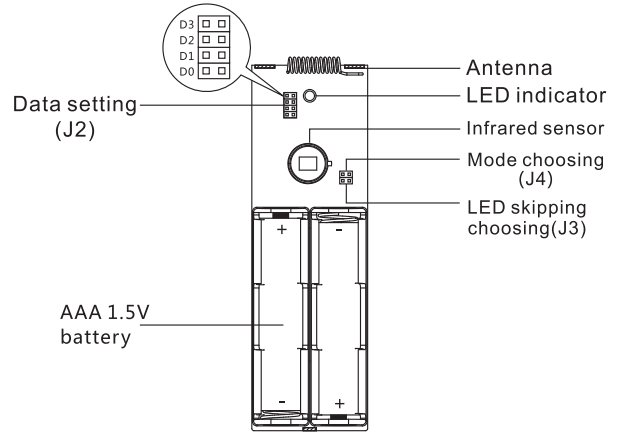
Infrared sensor: Used to detect infrared signal of human body radiation, please don't touch the lens with your hand and keep it clean.
Data setting (J2): Setting appropriate data bits according to the alarm panel with user's requirement. (should insert)
**LED choosing (J3):** To enhance the elusive of the detector to disable LED (should insert)
Mode choosing (J4): To insert J4 to be sleeping mode, without J4 to be test mode.

Use instruction

Once the insulated tape was pulled out,the device releases 2-second wireless signal immediately,then into self-checking for 30s.You can setup working mode to be test or to be sleeping by jumper J4 after that.

Working Instruction
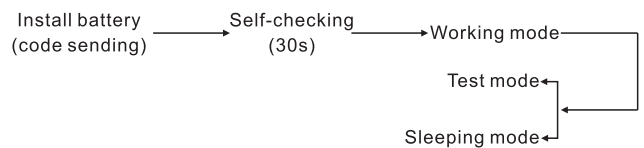
Test mode: The detector detects once every 2.5s. It will release the wireless alarm signal when detects the infrared signals from human body which can avoid the missing alarm. Meanwhile, the users check the installation height and the angle of the detector and make some adjustment if needed.

Sleeping mode: If the detector constantly detects 4-times alerts within 3 minutes, it will enter into dormant state to save battery power.It will activate itself after waiting for 3 minutes when there's no alert.

Coding operation: Make the alarm panel to be in coding state, then the detector will send wireless signal to alarm panel after installing the battery. Also please move your hand to trigger the device to alarm after self-testing, then it will sent the wireless signal to alarm panel.

Product Installation

In order to make the detector far away from the place where temperate changes frequently and air flows fast, please don't put your detector near window, air conditioner, fluorescent lamp, heating apparatus, fridges, oven, stove, sunshine, etc. Also do not install 2 detectors in the same zone to avoid interference and fault alarm.


2.2m

Ground

Look down   Side looking
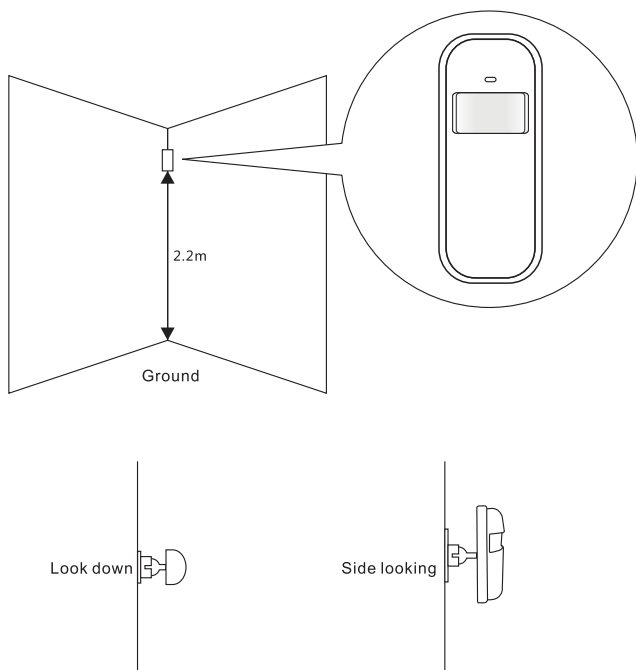
Fasten the detector on the mounting bracket, and then adjust the height or adjust the bracket to change the detection angel and distance, suggested height is 2.2m above the ground.

PIR detector has high sensitive on human's lateral movement, but low sensitive on human's longitudinal movement, so please install the detector on the direction vertical to human's walking direction.

Product Testing

A. After installation of the battery, the device will self-check 30 seconds and then go to test mode, pleas walking around in the detection zone from left to right or right to left), observing the LED's flashes, make sure the device is working normally.

B. The LED indicator flashes once when detect the movement of human body.

C. Adjust the height and the angle of the device to the best detection range.

Detection Range Diagram

Look down   Side looking
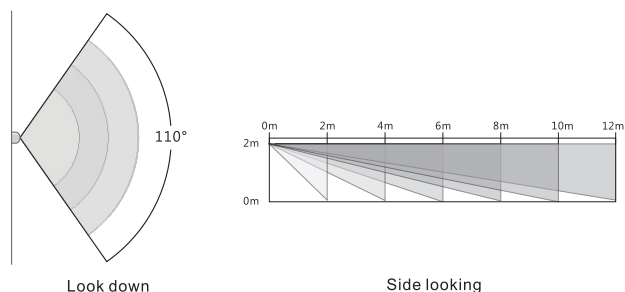
Technical Parameters

Operating Voltage	3V AAA*2 alkaline battery
Working current	≤25mA
Static current	≤15uA
Emission frequency	315Mhz/433Mhz（ASK） 868Mhz（FSK） (optional)
Transmitting power	≤10dB
Emission Distance	≥80m(in open air)
Detection Range	8m~12m（25℃）
Working temperature	-10℃~55℃
Installation Way	Wall hanging
Installation Height	1.8~2.2m (Focus on the center of the detector)
Detection Degree	110°
Dimensions	105*40*26mm

Trouble shooting

Failure	Solution
LED failed	Check battery installed well or not
	Check the power of battery run out or not
	Check jumper J3 whether inserted or not
LED flashes 3 times periodically	Low voltage, please replace the battery
Wireless distance gets closer	The battery is running out
No response for detecting	Jumper cap J4 to be sleeping mode or not