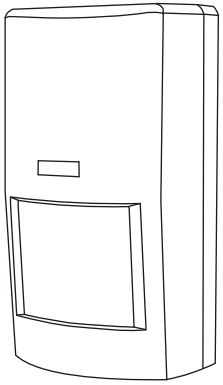
ENGLISH

Wireless passive infrared detector

Installation instructions

1. INTRODUCTION

This is an excellent wireless wall mounted passive infrared detector, passive infrared sensor and accurate plane lens to cover 100 degrees of detection Angle, using ultra-low power microprocessor and low voltage circuit design, with advanced digital signal processing technology, with very low leakage alarm and false alarm. Intelligent temperature compensation technology can complete all kinds of intrusion motion detection in a wide temperature range, in addition to anti-thermal air flow, curtain swing, small animals and other false moving objects also have good performance, its performance and stability far exceeds the market of the same price wireless wall passive infrared detector. The appearance of atmosphere, convenient installation, suitable for indoor applications in a variety of occasions, such as warehouses, hotel rooms, offices, etc.

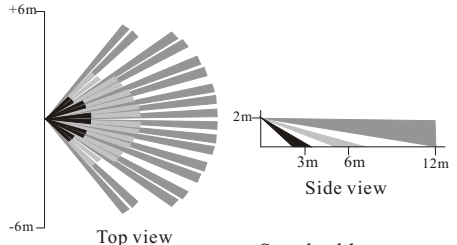


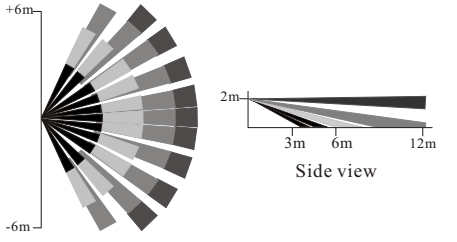
2. BRIEFINTRODUCTION

- Ultra-low power solution design
- High quality large capacity Li-Mn battery
- Dual passive infrared detection technology
- Use smart technology to reduce false positives
- 2 sensitivity options
- 2 pulses are available
- Full patch part design
- Low voltage alarm
- Full range temperature compensation technology
- Anti-electromagnetic radiation interference
- Anti-white light interference
- Pet-proof grade: 25 kg
- Fully sealed optical fittings
- Detection Angle: 100 degrees, diameter: 12 meters

3. SPECIFICATIONS

Power	*: CR123A 3V Li-Mnbattery*
Current	*: 15uA (stand by) 18mA(alarm)*
Mount height	*: 1.8m-2.4m*
Detection range	*:12m×12m 100°*
Temperaturecompensation	*: digital*
Sensitivity	*: 4 gradefor option*
Anti EMI	*:0.1-1000MHz/30V/m*
Anti white light	*:>10000 Lux*
Anti RFI	*:50000V*
Alarm output	*: Ev1527*
Alarm time	*:2s*
Alarm interval	*:4 min (USEmode)*
Wireless distance	*:≥200m (open space)*
Frequencies	*: 315/433MHz*
Operation temperature	*:-25℃/+55℃*
Operation humidity	*:95%RH*
Detection speed	*:0.2-3.5 m/s*
Fire proof	*: ABS plastic*
Pet immunity	*: 25kg*
Size	*:116mm×64mm×48mm*
Lens type	*:Wide Angle standard lens Pet lens Curtain lens Long lens (35m)*

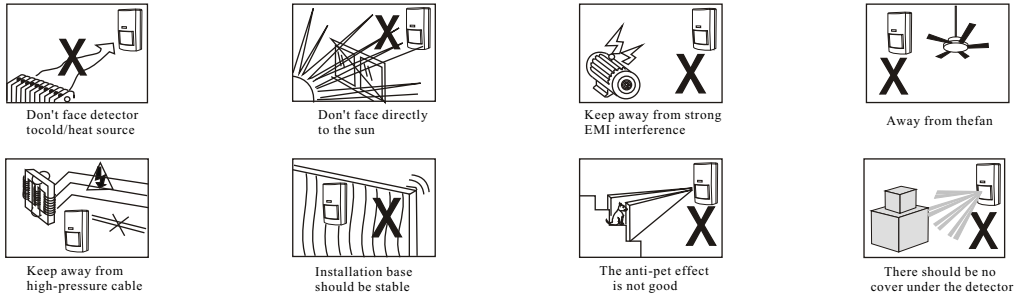




4. INSTALLATION GUIDE

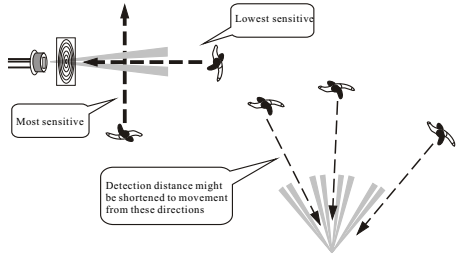
Note the following scenarios

Select most suitable installation point fit for PIR detection, put detector onto proper position, keep away from door, window, running machine or heat source.



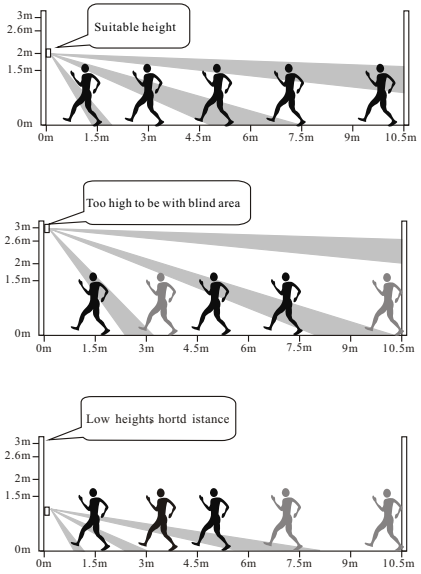
On installation angle

Detection is with mechanical difference to intrusion angles

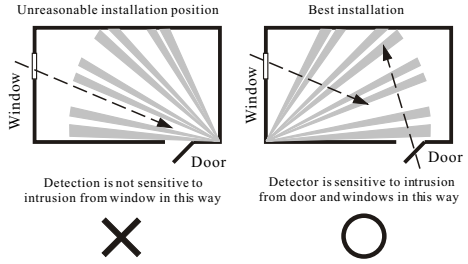


On installation height

Recommended installation height is 1.8-2.4m

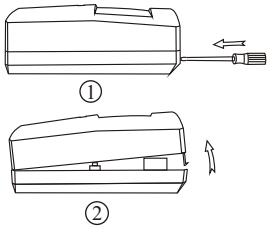


On installation position

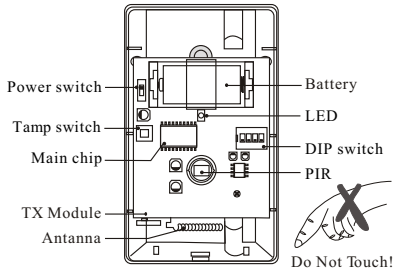


5. WALL FASTENING

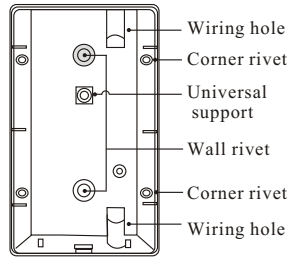
Open the cover



Part explain



Bottom shell installation

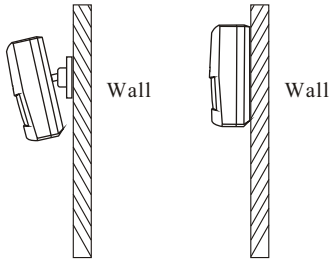


⚠ After commissioning, seal the outlet holes with sealant or glass glue to prevent false positives or damage caused by insects.

Mounting steps

To get the best detection and defense coverage, the probe needs to be mounted vertically at a height of 2.1 meters, with no obstructing objects in front of the probe and a wide view. After opening the case, loosen the screws and remove the circuit board. Cut a "wire outlet hole" and pass the wire through the outlet hole. First drill two holes on the wall according to the position of the 6mm impact drill bit, put the rubber plug, and then fix the detector bottom shell on the wall with self tapping screws, and then lock the circuit board back on the bottom shell, connect the lead wire to lock the wiring terminal as required, and then cover the surface shell. Power on, during the initial 40 s of operation, the red LED flashes and the detector enters the state of self-detection. When the red LED goes off and the self-detection is completed, the walking test can be carried out.

Wall hanging and bracket installation diagram

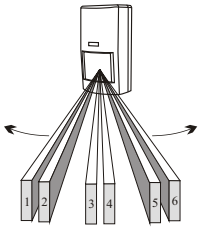


Universal support installation

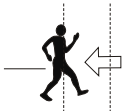
Wall installation

6. WALKING TEST & SETTING

DIP 1 is the alarm LED control
DIP 2 is sensitivity control
DIP 3 is pulse control
DIP 4 is alarm mode control

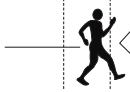


When DIP 3 is set to OFF, detector is set to high sensitivity, alarm will be triggered when 2 pulses are detected



Fast detection on target

When DIP 3 is set to ON, detector is set to low sensitivity, alarm will be triggered when more than 3 pulses are detected.



Excellent way to avoid false alarm

Walking test

Set detector to TEST mode and turn on LED, close well the front cover and wait for LED OFF. Make horizontal movement in detection area and watch the PIR detection status on LED (when alarm is triggered LED will flash for 1 times continuously). This is to confirm that there is no blind angle for PIR in the protection spot.
When intruder makes horizontal movement towards detector, sensitivity is the highest!

When detector is installed in different environments, please adjust PIR sensitivity and detection pulse properly. There are 2 grades for sensitivity: high and low. When pulse is set to 2, detector is with high sensitivity; when 3 pulse is set, detector is in low sensitivity. Normal setting is 2 pulse.

LED display

Warm up	Flash 40 times
Alarm	Light for 2 seconds
Tamper	Flash 3 times quickly
Low voltage	Flash 3 times slow

Setting

When DIP 1 is placed ON, the detector alarm LED will be turned on. At this time, the installation walking test can be carried out. After the test is completed, it is suggested to turn off the LED to save more power.

When DIP 2 is placed ON, the detector is in a state of high sensitivity, and when it is placed OFF, the detector is in a state of low sensitivity, which is convenient for stable operation under different environments.

When DIP 3 is ON, the probe is in a 3-pulse setting, and when OFF, the probe is in a 2-pulse setting.

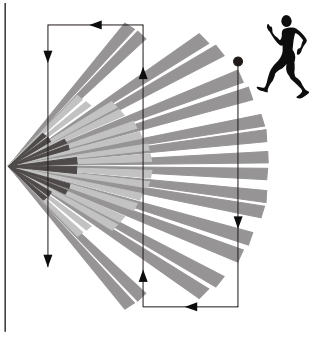
Signal process statement: this detector adopts direct analysis technology on digital signal, microchip will make analysis on frequency、range、polarity etc of detected signals and make comparison with frequent pets data in data base, after that, it will draw a real intrusion analysis and judgment. Here, pulse set is a general index for reference, it doesn't stand exact quantity of pulse during digital signal process.

When DIP 4 is set to USE mode , detector can be triggered for 4 minutes interval time for the purpose of battery energy save , this is recommended mode.
When DIP 4 is set to TEST mode, detector can be triggered any time.

Low voltage warning

If the battery voltage is lower than 2.4V, the system will issue a "low voltage code" prompt, then the battery needs to be replaced, the battery specification is: CR123A,3V, please choose the brand battery or contact us to provide a new battery.

TEST PATH

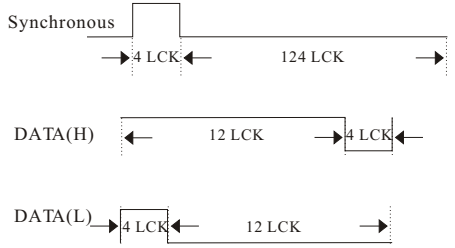


7. ENCODED INFORMATION TYPE

Coding format

The wireless coding format of this product is as follows:

synchronous code	16Bit ID	D1	D2	D3	D4



Definition: 1 LCK=8 pcs OSC CLOCK

Transmit mode

3 group of data to be sent in 2 seconds in a variable area.

Coding specification

Low voltage : *D (1101)*
Tamper: *7 (0111)*
Alarm: *B (1011)*
Self-check report : *6 (0110)*

Rule

Low voltage detection is 2.4V, one scan per minute.

The highest level of tamper switch, alarm priority; Passive infrared intrusion ranked second, and tamper switch was not detected within 10 minutes of power-on.

How can wireless detectors be connected to wired control panel?

It is recommended to power up before installation, so that the alarm host can "learn" the identity ID of the detector: turn on the power switch, after the self-test is completed, operate the relevant Settings of the control panel, gently shake in front of the detector, let the detector alarm, you can send the identity ID to the control panel.

8. COMMON TROUBLE & SOLUTIONS

Trouble	Possible reasons	Solution
Power LED doesn't light	1.Battery low voltage(below 2.4V) 2.Poor contact between battery clip and battery 3.Reversed battery installation 4.Don't switch on LED control 5.May in USE mode	1.Check battery voltage and change new battery 2.Re-install battery or polish contact 3.Make correct installation 4.Turn on LED during test 5.Select TEST mode
Detection less than 12m	1.Improper installation height 2.Improper installation angle	1.Re-adjust installation height (1.8-2.4m) 2.Adjust installation angle
Short battery life	1.Poor battery quality 2.Detector not in USE mode 3.Alarm LED not turn off	1.Change high quality battery(Use factory battery or brand-named battery 2.Set jumper to USE mode 3.Turn off alarm LED to save energy
Not compatible with control panel	1.Different protocol 2.Improper resistance 3.Wrong data set	1.Select proper codes and protocol 2.Select proper resistance 3.Select proper data set
Short wireless distance	Control panel can not receive alarm signal from detector after alarm is triggered.	1.Change detector position 2.Pull out antenna on contorl panel to longest position 3.Select high sensitivity control panel 4.Add a repeater 5.Environment is not suitable for wireless control panel installation
False alarm	1.Periodical alarm, 1 alarm each 60 minutes 2.Tamper switch alarm 3.Strong interference nearby 4.Pets' height and weight more than detection limitation 5. Strong environment interference	1.Low batter voltage, change it 2.Reset tamper switch 3.Keep detector away from strong interference 4.Pay attention to big animal's intrusion 5.Set sensitivity to 3P

9. NOTES & WARNINGS

Even the most sophisticated detectors can sometimes be defeated or may fail to activate due to: DC power failure/improper connection, malicious masking of the lens, tampering with the optical system, decreased sensitivity in ambient temperatures near that of the human body and unexpected failure of a component or circuit. The above list includes the most common reasons for failure and it is recommended that the detector and the entire alarm system be checked weekly to ensure proper performance.
An alarm system should not be regarded as a substitute for insurance. Home & property owners or renters should be prudent enough to continue insuring their lives & property even though they are protected by an alarm system.

WARNING! Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the warranty. This device has been tested and found to comply with the limits for a Class B digital device, pursuant harmful interference in residential installations. This equipment generates and uses or radiates radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio and television reception . There is no guarantee that interference will not occur in a particular installation. If this device does cause such interference, which can be verified by turning the device off and on, the user is encouraged to eliminate the interference by one or more of the following measures:
- Increase the distance between the detector and the electrical/electronic equipment.
- Connect the device to a different power socket which supplies power to the detector.
- Consult the dealer or an experienced radio/TV technician