Installation Instructions

WIRELESS INDOOR PIR DETECTOR WITH PET IMMUNITY

1.Product Introduction

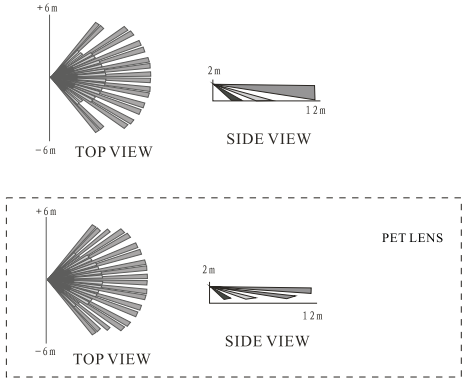
It is an intelligent wireless passive infrared detector by a dual-element PIR sensor matching advanced micro power consumption processing technology. It is very stable, few false alarm and missing alarm. This PIR detector adopts bi-directional temperature compensation technology, which can finish intrusion detection in a very wide temperature range. Its unique calculation way on pets alternative variety can help to avoid false alarm from small animal up to 20kg. Besides, its remarkable performance in anti hot air and faint moving objects such as window curtain swaying, can offer very stable detection by 2 sensitivity grades. Micro power consumption design makes its battery life expectation up to 24 months at least, its function and stability is much better than those detectors selling at similar prices.

2.Main function

-Super micro power consumption design
-2 grade detection sensitivities for option
-Digital pet immunity design up to 20kg
(when used with SUNLIT'S pet immunity lens)
-Bi-direction temperature compensation technology
-High capacity battery
-EDS/anti electric shock/anti mobile phone interference
-Anti white light
-With 18 Fresnel lenses with look-down window on 4 planes
-Well sealed optical parts
-Installation to corner, wall, multi-direction brackets

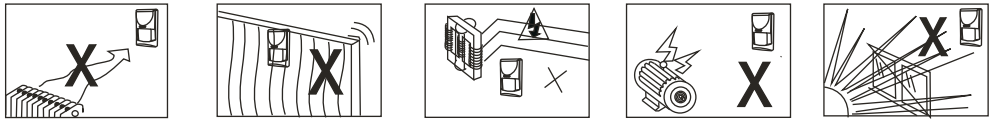
3.Parameter

Power supply:	*3.6V 1/2 AA Lithium battery*
Current:	*12uA (stand by), 15mA(In alarm), factory battery can support more than 24 months*
Installation height:	*1.5m-2.4m*
Detection range:	*12m*12m 100°*
Alarm output period:	*2s*
Temperature compensation:	*intelligent digital compensation*
Sensitivity:	*2/3 pulses for option*
Anti EMI:	*0.1-500MHz/30V/m*
Anti white light:	*＞10000 LUX*
Alarm output:	*EV1527 or PT2262 available*
Alarm period:	*4 minutes (In USE mode)*
Wireless TX distance:	*＞200m in open area*
Operation temperature:	*-10℃/55℃*
Operation humidity:	*95% (relatively)*
Detection speed:	*0.2m/s-3.5m/s*
Fireproof protection:	*ABS material*
Pet immunity:	*20kg*
Size:	*109*65*47mm (H*W*D)*



4.Installation guide

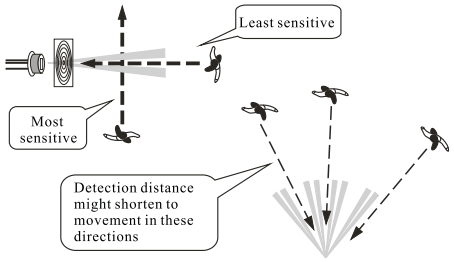
Choose the best installation position which matches PIR technology and put It onto it. Keep it away from door, window, running machine and hot source



Detector should not face cold/hot source. | Installation foundation should be very stable | Installation should keep away from high-pressure cable. | Take care of strong EMI interference. | Installation should not face directly to the sunshine.

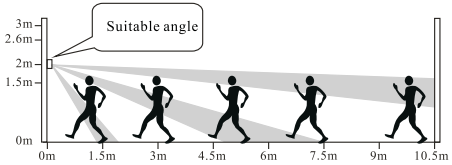
Installation angle

Detector sensitivity is with great difference with intrusion angle

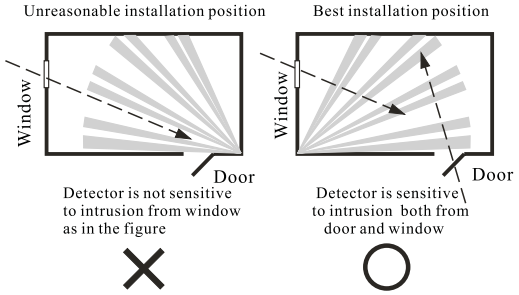


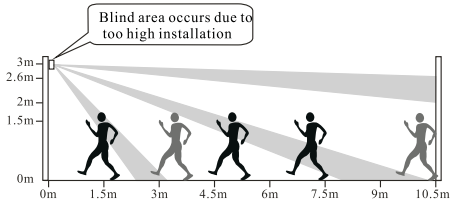
Installation height

Recommended installation height is 1.8-2.4m



Installation position

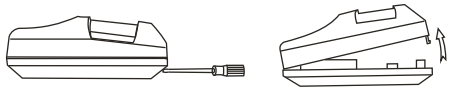




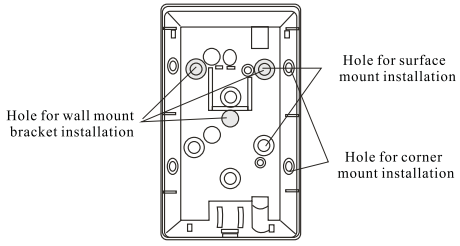
5.Installation and internal parts

Wall mount

Please insert a small slotted screw driver to open detector as figure, and then loose the screw on PCB by a small screw driver (don't need to take off completely), take out PCB and then detector is ready to be installed

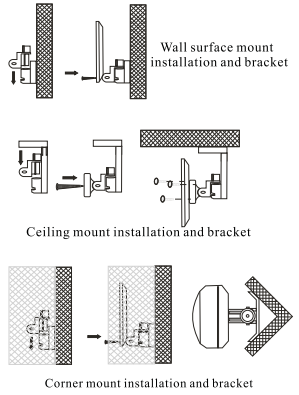


In order to get best detection range, detector must be installed onto 2.1m high vertically. In a word, gurantee that there is no obstacle in front of detector, view angle is wide. According to actual need, select needed hole for installation and then make a mark on wall and then drill out 4 holes with 6mm, hammer 4 stoppers into the holes on wall, then detector can be fasten onto the wall.

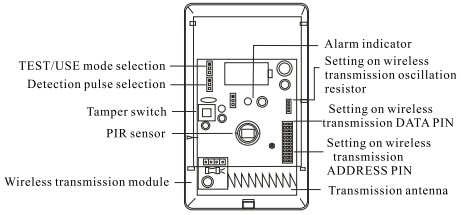


Bracket installation

See 3 kinds of installations with bracket as figure



Introduction on internal parts



6. Various settings & walking test

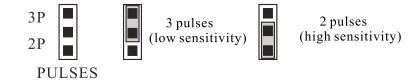
TEST/USE mode switch

When jumper switch is in TEST MODE, detector can detect intrusion signal any time
When jumper switch is in USE MODE, it will take detector 4 minutes to get 2nd alarm signal (This is just to save battery energy, it is the recommended setting)

Setting on detector sensitivity pulses

When jumper switch is set to mode of (2 pulses), detector is set to high sensitivity, basically 2 pulses will trigger alarm

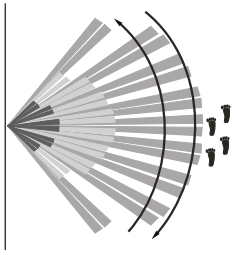
When jumper switch is set to mode of (3 pulses), detector is set to low sensitivity, only more than 3 intrusion pulses can trigger alarm



LED control

walking test

Set detector to TEST MODE, set LED to ON status and closed the front cover,perform horizontal movement in the detection area after LED turns off, you can get the detection status on PIR by the red LED (During alarm, red LED will flash 2 times continuously). This step can confirm whether there is detectiondead angle in protected area or not, for PIR is the most sensitive when movement to PIR is horizontal.
In addition, PIR sensitivity can be adjusted properly in different environment installation. Sensitivity is set to 2 grades: 2 and 3 pulses. When 2 pulses is set, detector is with high sensitivity, when 3 pulses is set, detector sensitivity is low relatively, so normally please set it to 2 pulses.
After test is finished, you can turn off alarm LED or keep it as (ON).
Strong suggestion: set detector to (USE MODE) and (LED OFF MODE) in order to extend battery life.



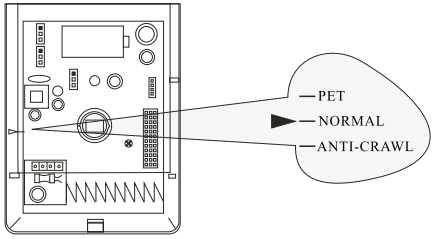
7. PCB adjustment

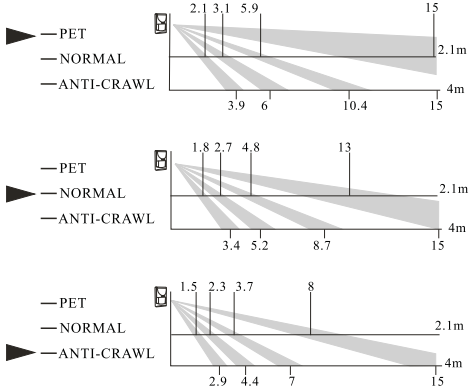
The best detection can be reached by vertical height setting of PCB, suggest installer make the optimum setting on PCB vertical height according to actual environment.

PET- When PCB is set to this mode, detector can get the strongest pet immunity function

NORMAL- When PCB is set to this mode, detector is in the most standard status.

ANTI-CRAWL- When PCB is set to this mode, ambitious crawling intrusion can be avoided effectively, but at this mode, pet immunity function will dropped down slightly.





8.Other setting

Setting of oscillating resistor

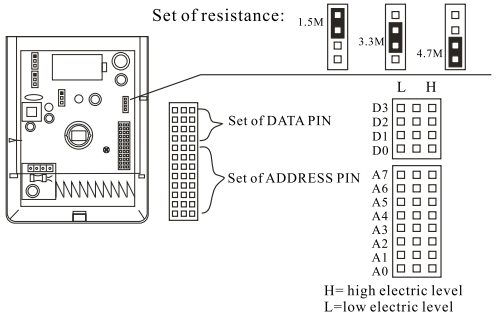
In order to match setting of control panels with other brand, data set can be reached by adjustment of oscillating resistance on coding microchip. We have 3 modes as right figure: 4.7M/3.3M/1.5M.

Setting of data pin

Suitable coding data for recognition by other control panel can be acquired by setting on
DATA SET: D3/D2/D1/D0

Setting of address pin

Different address ID for recognition by other control panel can be acquired by setting on 8 address pins



9.Setting from wireless to wired by receiver

Brief introduction of wireless to wired receiver

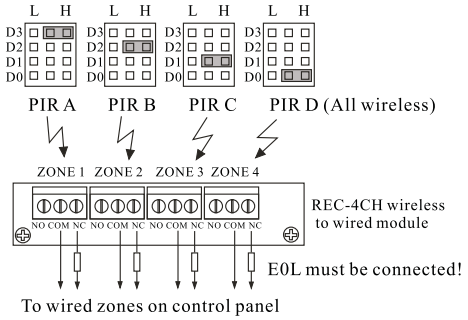
REC-4CH intelligent wireless receiver with 4 channels is with 4 relays and can control the open/close conversion of switch and various kinds of special control procedures. This unit is with the characteristics of stable performance, small size and high receiving sensitivity etc, can be used in intrusion alarm to reach the conversion from wired to wireless system. This control unit is compatible with wireless remote control and wireless detector with various kinds of microchips or multiple codes, and protocols can be 2262/2260/1527/2240.

Main technical parameter:

*Operation voltage: DC12V
*Static operation current: ≤6mA
*Receiving sensitivity: ≥-105dBm
*Operation frequency: 315/433MHz (optional)
*Output current: ≤1A
*Operation temperature: -40℃+80℃
*Output voltage: AC, DC for option
*Size: 72mm x 52mm x 26mm

How to connect wireless detector to wired control panel by this module

4 different detectors can be set into different data pins in order that REC-4CH module can recognize them into different zones. Address pins can be set to same or different. If data settings on 4 detectors are different, each detector must be learnt into control panel again. (ie, if you want to code detector into some channel in the module, you must set relevant data pin set to "H" level, other pins to "L").



Study/ delete way and steps

1. Press down "STUDY" key, the indicator will turn on, then leave go off, trigger detector and indicator on module gives 2 flashes and turn off, study is successful.
2. Delete: keep pressing down the STUDY (the black knob) key for 8 seconds, indication will turn off then all messages are deleted successfully.