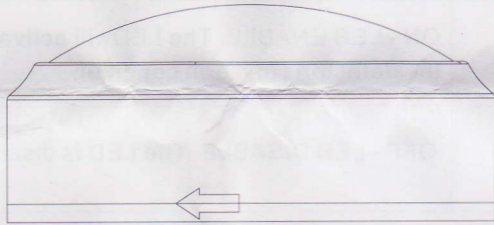


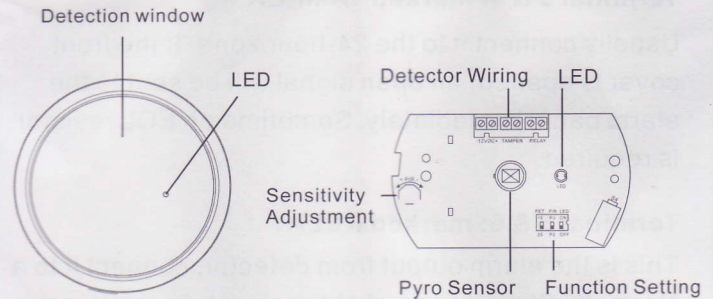
QUAD ELEMENT CEILING PIR DETECTOR



Manual and Installation

Introduction

The new generation dual element PIR detector is based with an ASIC technology MCU processor, which can distinguish the real motion of an intruder or the interference of the environmental factors. The adopted new algorithm have the PIR detector immune to the strong EMI/RFI and light interference. The equipped thermal element and the temperature compensation technology greatly increase the applicability of different temperature environment.



APPEARANCE

PCB DIAGRAM

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Specifications

- Detection Mode: Quad-element PIR
- Power Input: 9VDC~14VDC
- Power Consumption: 10mA in standby mode
30mA in alarm mode
- Alarm Output: NC, Solid State Relay
up to 30VDC, 100mA
- Alarm Period: 2 Sec
- Pulse Count: 2 or 3, Selectable
- LED indicator: LED is on When Alarm,
ON/OFF Selectable
- Tamper Output: NC, 30VDC, 1A
Open when cover is removed
- RFI Protection: 30V/m 10 - 1000MHz
- EMI Protection: 50000V Electronic Interference
- White Light Immunity: Up to 8000 LUX
- Temperature Compensation: Yes
- Sensitivity Adjustable: Yes
- Pet Immunity: 15Kg or 25Kg, Selectable
- Detection Area: 360 degree X 12M
DIA AT 3M HEIGHT
- Operating Temperature: -10°C to 50°C
- Operating Humidity: ≤95%
- Dimensions: φ80.5x36.6mm

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Installation

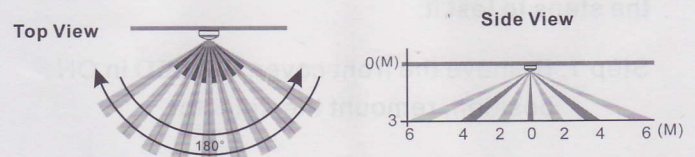
1. The detector is designed for ceiling mount without bracket. The installation height is around 2.5-3.5m. For better performance, the detector should avoid the location close to the following sources of interference: reflective surfaces, direct air flow from vents, fans, windows, sources of steam, oil vapor, infrared light sources and objects causing temperature changes such as heaters, refrigerators and ovens.
2. The detector should be flat after installation, and the detection area is better across the lens, not facing the lens.

Step 1: Swivel to remove the front cover, you will find there is a knock-out for cable through purpose on the base.

Step 2: Drill or break out the knock-out you need, and connect the wires, then mount the base to the ceiling.

Step 3: After setting the DIP SWITCH, swivel the front to finish the installation.

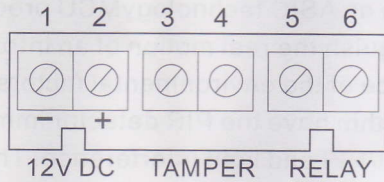
Step 4: Test the detectors. (refer to the walk test program.)



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Detector Wiring

Please follow the following instructions for wiring and functions setting.



Terminal 1&2: marked + (12V +)

Connect it to the positive power supply (9VDC~16VDC)

Terminal 3 & 4: marked TAMPER

Usually connect it to the 24-hour zone. If the front cover is opened, an open signal will be sent to the alarm panel immediately. Sometime an EOL resistor is required.

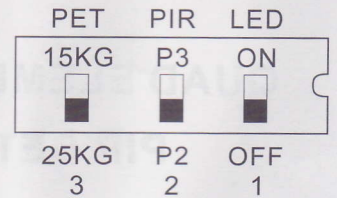
Terminal 5 & 6: marked RELAY

This is the alarm output from detector, connect it to a Normally Closed zone of alarm panel. Sometime an EOL resistor is required.

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Function Setting

The digital detector is designed with different function settings for different purposes and environment.



1. LED Setting

This jumper is used for setting-LED Enable / Disable.

ON	ON - LED ENABLE. The LED will activate when the detector is in alarm condition.
OFF	OFF - LED DISABLE, The LED is disabled.

2. Pulse Counting (PIR)

This jumper is used to set the PULSE count function for keeping best performance in different environment.

P2	Stable environment Jumper P2 = ON With pet immunity up to 15KG
P3	Moderate nuisance situation Jumper P3 = ON With pet immunity up to 25KG

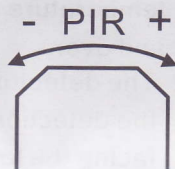
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3. Pet Immunity Setting

15KG	Weighting up to 15 kg
25KG	Weighting up to 25 kg

4. Sensitivity Adjustment

Use the potentiometer with mark PIR to adjust the sensitivity between 15% to 100% according to the environment. The factory default sensitivity is 60%.



Walk Test

It is important to test the coverage area after installation. And it is recommended to test the detector once half year to ensure the detector is in proper status. After the detector is powered for about 60 seconds for warm up time, please follow the steps to test it:

Step 1: Remove the front cover. Set LED in ON position, remount the detector.

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Step 2: Walk around the detector from the far end of the coverage pattern of all sides. The LED should be on for 2~3 seconds each time when the motion is detected. The interval between each motion is not less than 5 seconds.

Step 3: After finishing the test, you can set the LED off, and fix the front cover.



The detector design is according to EN50131-2-2:2008 grade 2 standard CE approved.

version 1, Jan. 13, 2014

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