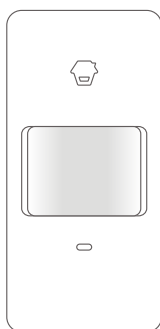# Wireless PIR Motion Detector (For Indoor Use)

PIR-900

Operation Manual

Features

PIR-900 is a high performance wireless P.I.R. motion detector. It consists of digital dual-core fuzzy logic infrared control chip and intelligent analysis which effectively identify interference signals from body movement signals and reduce false alarm rate. With automatic temperature compensation and anti-air turbulence technology, it easily adapts to environmental changes. The detector also has the advantages of energy saving, reliability and easy installation.

FCC Statement

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.
2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Appearance
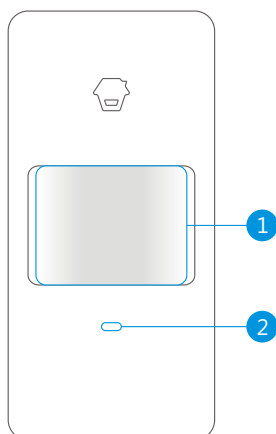
1. Detection window
2. LED indicator
3. Bracket
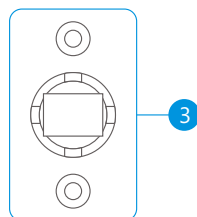
LED Indication

Flash continuously: Under the self-testing state.
Flash once: Intruder is detected.
Flash twice: Self-testing is finished, enters the working mode.
Flash once per 3 seconds: Under voltage indication, please change the batteries immediately.(User will get alert SMS about the low battery if the PIR detector is connected to the GSM alarm system.)

PCB Layout

LED ON / OFF
Infrared sensor
AA 1.5V LR6
AA 1.5V LR6
Tamper switch
Zone setting
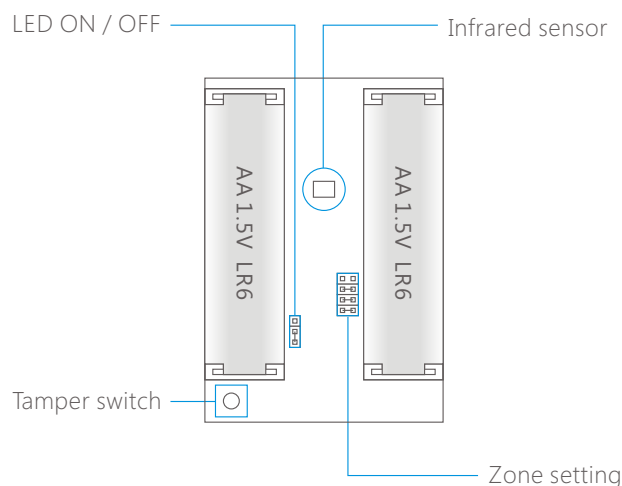
Infrared sensor: It detects the infrared rays released by human body motion, please don't touch the surface and always keep it clean.
Tamper switch: Once the case is opened in working state, the tamper switch will be triggered and then generates an alarm signal.

Usage

Open the case and remove the battery activation strip to activate batteries. It will start self-testing for one minute.

Mode Setting
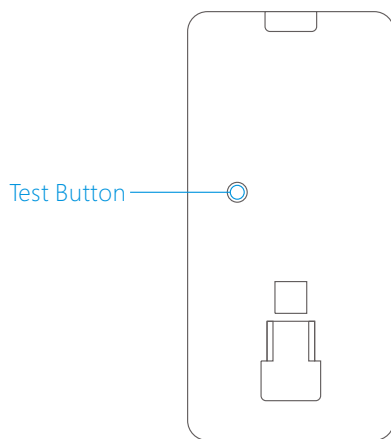
Test Button

Testing mode: After self-testing, press the test button, the sensor enters testing mode, and detects once every 10 seconds. After 3 minutes, the LED flashes twice, and the sensor enters the working mode.

Working mode: In working state, if the sensor is triggered more than twice within 3 minutes, it will enter sleeping mode to save power. After no movement within next 3 minutes, the sensor goes back to the working mode.

Connect to alarm panel: Press the connect key on the alarm panel, and then press the test button of the sensor twice to send alarm signal. When one beep is heard, they are connected. To check if they are connected successfully, arm the system, and trigger the sensor again, if there is an alarming, the connection is successful.
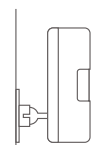
Installation & Notices

Avoid mounting the detector close to windows, air conditioner, heater, refrigerator, oven, sunshine and places where the temperature changes fast or the air stream flows frequently. If two detectors are installed in the same detection scope, please adjust the location to avoid interference and false alarm.

2m
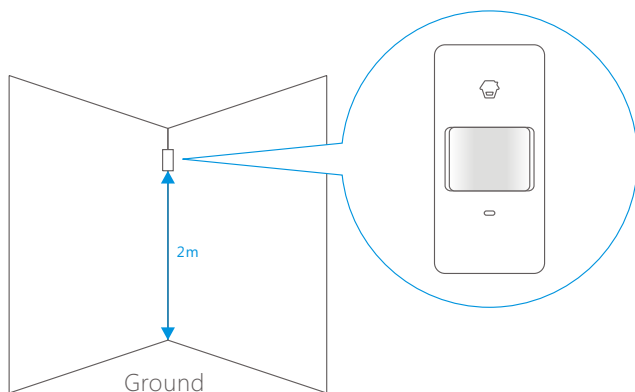
Ground

Top view   Side view

Fix the bracket on the wall with screws and attach the detector to the bracket. Adjust installation height or bracket to change the detection distance and angle. It is recommended to mount it at the height of 2m from the ground.

The detector is more sensitive to the cross movement than to the vertical movement, so the performance of detector is best when the detection direction is vertical to the walking direction of people.

Testing (Walk Test)

A. After installation, power on the detector. After one minute self-testing, press the test button, walk in the scope (from left to right or from right to left) and watch the LED indicator to make sure the detector is working.
B. The LED indicator flashes once when body movement is detected.
C. Adjust the detector angle accordingly to achieve the best detection effect.

Detection Scope

110°

0m   2m   4m   6m   8m
2m

0m

Top view   Side view
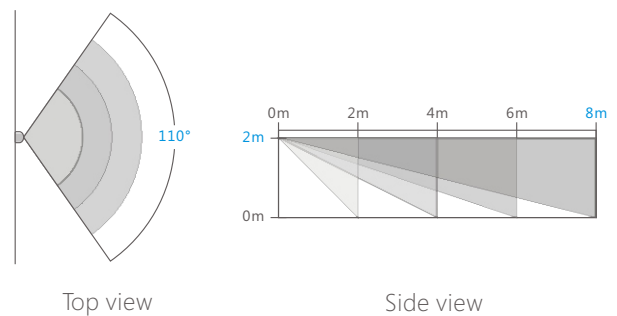
Specifications

Power supply   DC 3V (AA 1.5V LR6 Battery x 2 pcs)
Static current   ≤ 50uA
Alarm current   ≤ 9.5mA
Detection scope   8m/110°
Transmitting distance   ≤ 80m (in open area)
Radio frequency   315.8599MHz
Housing material   ABS plastic
Operation Condition   Temperature: -10°C~55°C
Relative humidity: ≤80% (non-condensing)
Detector dimensions (L x W x H)   108 x 52 x 36.8 mm
Bracket dimensions (L x W x H)   52 x 30 x 26.5 mm