

Wireless PIR Detector

User's Manual

Wireless Passive Infrared Sensor adopts advanced digit signal processing technology with automatic temperature compensation, Lower power alert and timing communication report. It detects human infrared heat energy to emit wireless digit signal to activate alarm host. It is advantage in low rate of false alarm, stable and easy installation.

1. Main Functions And Features

1. Adopt dual infrared sensor, high sensitivity.
2. Single-chip intelligent digit processing
3. Double-channel intelligent signal processing
4. Low power consumption design, static current $\leq 50 \mu A$, anti-pet, anti-electromagnetism interference and low rate of false alarm
5. Three classes of sensitivity.
6. Automatic temperature compensation
7. Adapter DC9V-12V is available. Automatically switch between inner power and external power.
8. With power lower alert and send signal to alarm host to report.
9. Timing communication report and ON/OFF report

2. Technical Parameter

1. Detective distance $\leq 8m$.
2. Detective angle: 90
3. Working Voltage: DC6V (4pcs No.7 dry batteries), and external power (adapter): DC9V~12V.
4. Working Current:
Power supplied by battery, Standard current $\leq 50 \mu A$, Alarm current $\leq 15mA$
Power supplied by the adapter, Standard current $\leq 5mA$, Alarm current $\leq 15mA$ saving mode
5. Blocked time when it is power on: 100 seconds
6. Emission time: 3 seconds
7. Emission Frequency: 433.92MHz
8. Emission power $\leq 70mW$
9. Physical size: 110mm X 60mm X 45mm
10. Working temperature: $0^{\circ}C \sim +55^{\circ}C$
11. Preserving temperature: $-25^{\circ}C \sim +65^{\circ}C$

3. Component Description

3.1 Working Mode: There is three Mode Switch: Testing Mode, Normal Mode, Power Saving mode.

A: Test Mode: After it sends a signal, the sensor won't send a new signal until 5 seconds. It is recommended for debugging. This mode run more power.

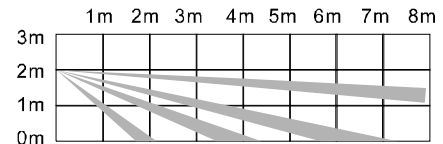
B: Normal Mode: After it sends a signal, the sensor won't send a new signal until 60 seconds. It is recommended for daily work.

C: Power Saving Mode: After it sends a signal, the sensor won't send a new signal until in 240 seconds. It is used in marketing place where have more people in and out.

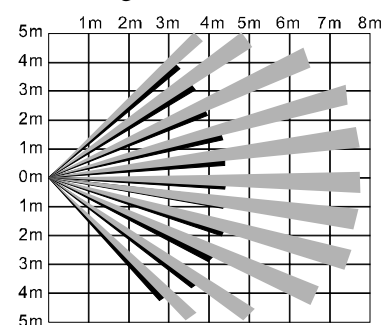
Note: The mode should be changed when power off (including batteries power)

3.2 Tamper: When DOS shell be opened or destroyed illegally, PIR detector will send signal to alarm host and activate alarm. tamper alarm can be activated in 24 hours a day. Even the sensor is in power off state.

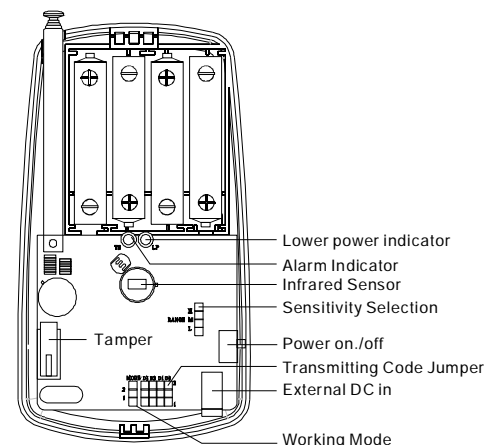
3.3 Power On/Off: Put switch to "ON" position, the detector will



Side elevation



Plan form



start to work, Put switch to “OFF” position, the detector will stop working and report to main unit at the same time.

3.4 External DC in: DC9V~12V is available (polarity ⊖ ⊕), External power supplied and inner power supplied can be changed automatically.

4. Installation Requirement and Diagram

4.1.1 The infrared detector has the highest sensitivity when a human body moves parallel with the mirror surface and the sensitivity is the lowest when a human body moves vertically against the mirror. As the angle and height against the horizontal surface should be noted during installation, which will greatly effect the range of the defense area. The high shall be 2 meter or so and the angle against the wall.

4.1.2 Stand off the straight light and other straight light source (e.g. car light)

4.1.3 Stand off the warm or cold sources, e.g., warm air or cold air outlet, air conditioning outlet, electric radiators, air cooling machines and etc. stand off from the windows.

4.1.4 There is no barrier within the defended area of a detector.

4.1.5 If infrared detector works in temperature that is near human temperature, the detective effect is inefficient. So in this instance, Infrared detector is suggested to be installed in lower temperature in that area.

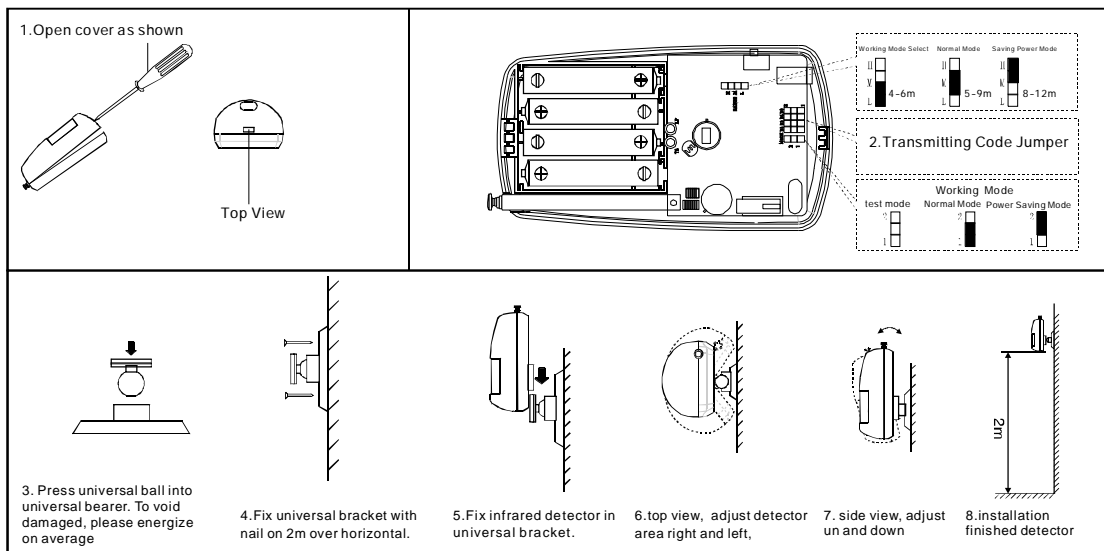
4.1.6 In interference instance, infrared detector is suggested to set in low sensitivity position.

4.1.7 Infrared detector is asked to be stable on the wall without sway.

Diagram

4.2 Open top cover of detector, select the sensitivity class and working mode according to security requirements.

4.3 Install 4 pcs No.7 batteries according to battery case remark. Put ON/OFF switch to “ “ON” position, and fix it on the wall



Indicator

Alarm Indicator: When happens alarm, alarm indicator will be flashing.

Power Lower Indicator: When power is lower, lower power indicator will be on.

Simulating Demo

After powering on for 100 seconds, human body motions in 0.75m/S by 8-10m in distance. Its alarm indicator is on and it activates alarm host to alarm. That means installation is correct and success.

5. Note

5.1.1 To void its sensitivity, infrared sensor is not allowed to be touched by hand. And have to keep clear. If the surface is dirty, power off and clear it with a cotton ball dipped in 75% alcohol.

5.1.2 Test infrared detector periodically

5.1.3 This infrared detector can prevent theft conduct, but not insure no risk at all. For security, users are asked to use this products correctly and improve alert in daily