

Installation and Operation Instructions

SIR-712/708C/708C-D

Passive Infrared Motion Detector

1. Specifications

Infrared sensor: Dual element.

- 1) SIR-712: Wide-angle Detector.
- 2) SIR-708C: Curtain Detector.
- 3) SIR-708C-D: Vector Analysis Detector identify the direction of human walking.

Digital Signal Processing: Advanced passive signal processing technology make it detect Accurate so can effect reduce false alarm.

Temperature Compensation: Digital Temperature Compensation.

Power Supply: 7.5V - 16V/DC,12mA

Alarm output: N.C,Form A relay,30VDC/150mA Max.

Tamper output: N.C,rated at 24VAC/500mA Max.

Light immunity: 6500Lux

RFI immunity: 10V/m,10MHz-1000MHz

Operating Temperature: Temperature: -10°C ~ +50°C (25°F ~ 113°F); Humidity: 5 ~ 95%.

Optic zone : High precision parabola focuscurtain reflector mirrors.

Wide angle mode: Seven curtains.

Detection Range: Curtain detector mode: 8m x 0.8m(Mount height 2.3m);

Wide angle detector mode(selectable) : 12m x 10m(Mount height 2.3m);

Detection Sensitivity: Curtain mode: Walking across at a speed of 0.3-5 m/s.

Wide angle detection mode: Normal walk two to four steps within detection coverage.

Dimension: 92 x 52 x 33mm (L X W X H).

Weight: G.W: 90g; N.W:70g.

2. Mounting location

1. Select a mounting location in which the likely direction of intruder motion is across the coverage pattern door. windows etc.
2. Do not install in which rapid temperature changes from central heating, radiators ducts , air conditioning etc.
3. Make sure there no obstructions that can block the pattern of coverage.

5. Wiring

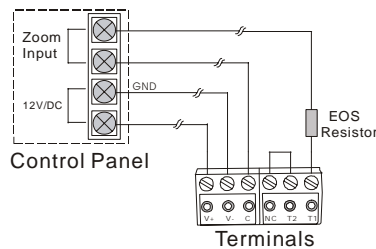
Note: Only apply power after all connections are made and inspected.And ensure the power polarity,14-22AWG wire is reconnended.

Note: Do not leave redundant wire in the detector.

Terminals V+&V-: Power input, Voltage: 7.5 -16V.The max distance is up to 250m/750 feet between the detector and power source if using wire #22AWG.

Terminals C&NC: Alarm output. 30VDC/150mA. Max

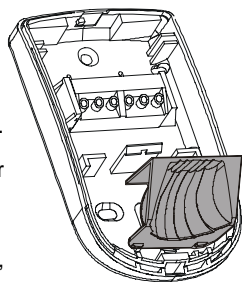
Terminals T1&T2: Tamper output, N.C, 24VAC/500mA.



6. Remove and install the curtain reflector mode

1. When uninstalling, hold on the upper two sides of the mirror, pull the mirror out, following phase of right figure in opposite direction.
2. Installation: push curtain reflecting mirror down into bottom rind. Please refer to right figure.
3. Notice: make sure the position of bottom of the curtain reflecting mirror must absolutely fit into the bottom rind. Please refer to part of the figure.
4. Horizontally push curtain reflecting mirror into the detector. Please refer to right figure.

Notice: After installation, make sure the curtain reflecting mirror is stable, don't touch the mirror when installing.






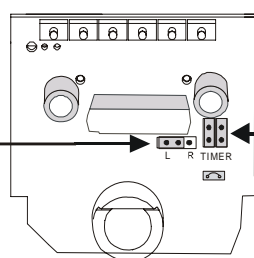
7. LED Indication





Red LED light, alarm output, relay works at about 5 seconds. detection signals an alarm

8. Vector Analysis and Time Delay Setting (SIR-708C-D only)

Choice

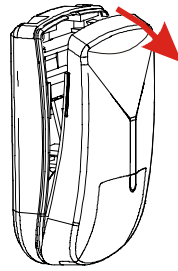
	Jumper is at "L",signals an alarm when enter from the right of detector.Activate time-lapse caculagraph,don't signal an alarm from the right side during this period of time.
	Jumper is at "R",signals an alarm when enter from the left of detector.Activate time-lapse caculagraph,don't signal an alarm from the left side during this period of time.
	Jumper is "none". Signals an alarm when active detector from two sides.



DELAY	
Time	Jumper
0 Second	
40 Seconds	
180 Seconds	
360 Seconds	

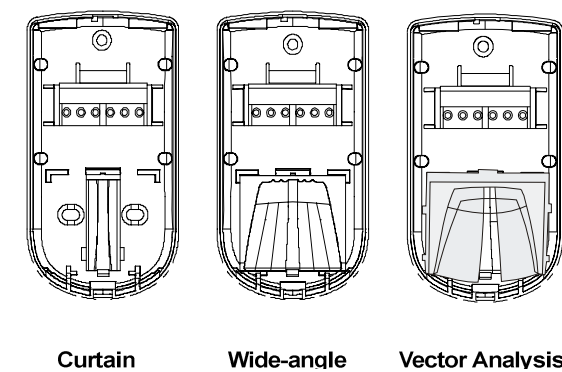
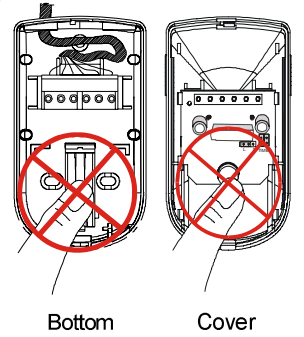
3. Installation

Step1. Push the hook,Prize up the joint line between front and back cover with a blade screwdriver.

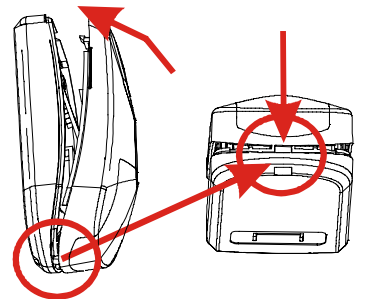


Step2.

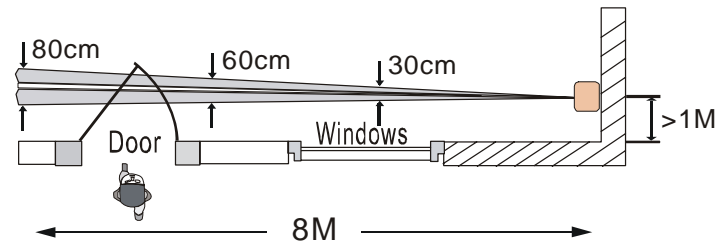
- a) Prevent reflector from dust of drilling hole, please remove reflector when mounting back cover, avoid your hands to contact reflectors surface when removing or mounting reflector.
- b) Connect the wires to terminal, observe connect polarity
- c) Don't let your hands contact with infrared sensor,only blow off them or wipe off them slightly with soft cloth after founding dust not other things for keeping better detection effect.



Step4. Place front cover into the mounting hole of back cover.



4. Select the install location

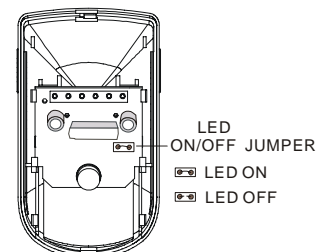


Note: please install the detector on wall, the place which should be one meter or higher.

9. Walk Test

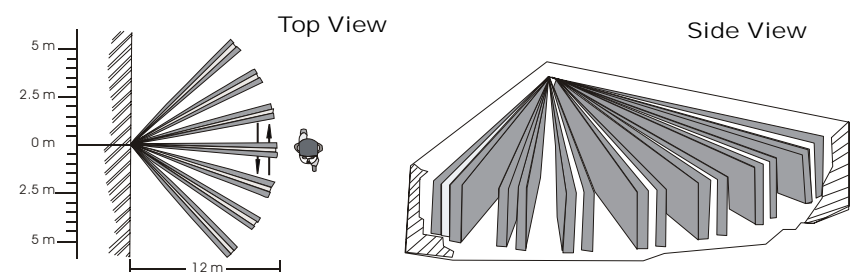
A Walk Test enables you to determine the effectiveness of the installation.

1. Warm-up time: 80 seconds is required after power up.
2. Curtain mode Walk across the curtain area, detector will alarm and red LED light is on.
3. Wide angle mode: Walk 2-4 steps freely in the protection area, detector will trigger an alarm and Red LED is on.
4. Curtain mode :

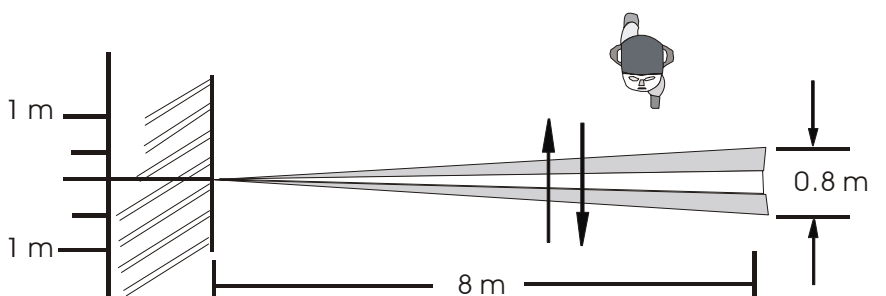


- a) Detect direction if motion:set time-lapse time 0 seconds,make walk ing test. walk across the curtain area, detector signal an alarm and Red LED is on, from outside to inside. Walk across the curtain area, detector doesn't signal an alarm and Green LED is on.
- b) Delay test: Set external delay time 40 seconds,walk across the curtain area from inside to outside, detector doesn't signal an alarm and Green LED in on constantly. When in the last 30 seconds, Green LED begin to flicker.

10. Wide angle detection pattern



11. Curtain mode detection pattern



Note: Check the detector one time per half year at least for security.