

LH-990ZW Passive Infrared Detector Installation Guide

Introduction

LH-990ZW Passive Infrared Detector are designed to detect the intruder which across the detection area, and send an alarm signal to the panel controller, provide the ability to add various automation services. Signals can also be used to activate a chime based on system settings.

Specification

Frequency	908.42 MHz
Battery Type	CR123A Battery 1 PCS
Operating Temperature	-10 °C to 55 °C (14°F - 131°F)
Storage Temperature	-20°C to 60 °C (-4°F - 140°F)
Operating Air Range	Up to 152 feet line of sight
Low Voltage Alarm	2.5V ±0.2V
Detecting Range	12m
Mounting Height	2.2m
Dimension	106x60x36mm

Inclusion Sensor

For Inclusion a network: Put the Z-Wave Interface Controller into “Inclusion” mode, and following its instruction to include LH-990ZW to your controller. This PIR needs to be included before installation.

- 1、 Pull out the insulating strip, making the device power on. (Figure 1)

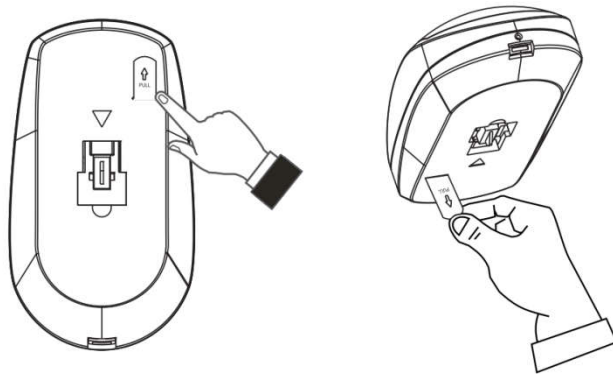


Figure1

- 2、 Pressing the test key three times. (Figure 2)

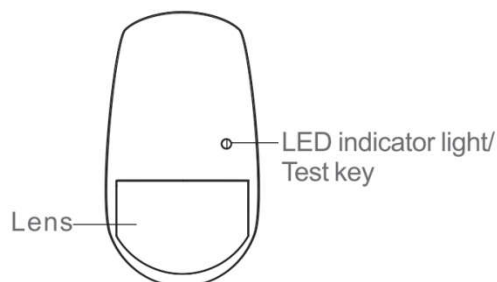


Figure 2

- 3、 Red LED will blink three times while the network inclusion successful (Figure 2).
- 4、 If inclusion failed, the sensor will go into sleep mode. To wake up the sensor again, you need

to press the key to trigger an inclusion process, and then repeat steps from 3 to 4.

Exclusion Sensor

For Exclusion a network: Put the Z-Wave interface controller into “Exclusion” mode and following its instruction to exclude PIR from your Z-Wave controller:

- 1、 Pressing the test key three times the enter exclusion mode.
- 2、 Red LED will blink three times while the network exclusion successful.

Factory Default Reset

Press the test key five times while installing battery.

Note: Use this procedure only in the event that primary controller is lost.

Installation

- 1、 The PIR installation position should be chosen at the entrance where the intruder may break into. Try to make the intruder across the detection area. (Figure 3)

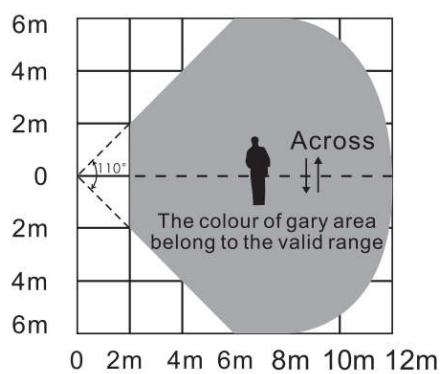
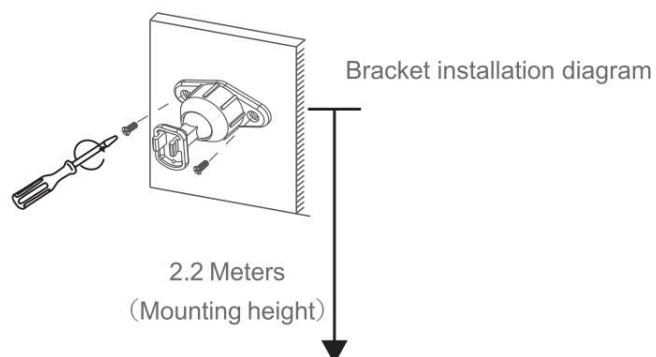
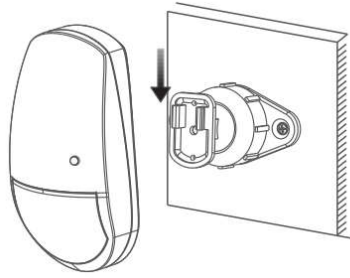


Figure 3

- 2、 Choose the location of the wall installation, fix the bracket by screw on the wall.



- 3、 Fix the product on the bracket, adjust the detection position.



4、 The PIR can be included and operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers and/or other applications. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

5、 Association

Support grouping identifier = 1

Support one group with 5 nodes.

All triggering report and low voltage report will be sent to the associated nodes.

Z-Wave Command Classes

- COMMAND_CLASS_ZWAVEPLUS_INFO
- COMMAND_CLASS_VERSION
- COMMAND_CLASS_MANUFACTURER_SPECIFIC
- COMMAND_CLASS_DEVICE_RESET_LOCALLY
- COMMAND_CLASS_POWERLEVEL
- COMMAND_CLASS_BATTERY
- COMMAND_CLASS_NOTIFICATION
- COMMAND_CLASS_ASSOCIATION
- COMMAND_CLASS_ASSOCIATION_GRP_INFO
- COMMAND_CLASS_SENSOR_BINARY
- COMMAND_CLASS_WAKE_UP

Notification Type

	Switch Type	Status
Notification Type	Reed Switch	0x06
	Tamper Switch	0x07
Event	Reed Switch	Close:0x17, Open:0x16
	Tamper Switch	Close:0x00, Open:0x03
Sensor Binary Report	Reed Switch	Close:0x00, Open:0xFF

Operation

1. When Power on, the device will enter into self-inspection state, LED flashes 60s.

2. The device will enter into test mode for 5 minutes, after self-inspection, if someone across the detection area, the LED light will flash and send out the alarm signal.
3. Enter normal usage patterns after 5 minutes test mode finished, the device will not send out the signal even if it has sensing the signal again within 2 minutes from the first alarm happens.
4. The device will send out a tamper signal once when the device is disassembled, and it will send out tamper signal resume when the tamper switch recovers.