

PIR MOTION DETECTOR

**CT-SMZW2004-ES**

PIR Motion Detector

Introduction

The Motion Detector is a Z-Wave enabled device which is fully compatible with any Z-Wave enabled network. Z-Wave enabled devices displaying the Z-Wave logo can also be used with it regardless of the manufacture, and ours can also be used in other manufacturer's networks, This Motion Detector can control our modules via controller settings. Inclusion of this Motion Detector on other manufacture's Wireless Controller menu allows remote turn on of connected modules when the detector is triggered.

The Motion Detector is designed with two detecting sensors, Passive Infra Red (PIR) sensor and light sensor, in order to fulfill the purpose of security and home automation. Once night falls, the percentage of ambient illumination is lower than preset value. If a person moves within or across the device field of vision, a trigger radio signal will be transmitted so as to turn on the connected lightings for better illumination.

Technical Information

- Compatible with any Z-Wave network controller
- Battery powered and cost savings
- Support the scene control

Specifications

- Radio protocol: Z-Wave 868.42MHz EU
- Power supply: DC 4.5V(1.5V AA*3)
- RF range : 25m (in an open area of the wireless controller and the latest line-of-sight between Z-Wave receiving module)
- Operation Frequency: 908.42 MHz (SP814-2) / 921.42 MHz (SP814-9)
- PIR Detection Coverage: Wall-Mounted:
 - Up to 10m x 110 ° (at 1.8m mounting height& 25 ° C)Ceiling-Mounted:
 - Up to 5m x 360 ° (at 2.8m mounting height& 25 ° C)
- Dimension : 85 mm x 85 mm x 45 mm

Operation

NOTE:

- ① Lens Cover
- ② Photocell Sensor
- ③ PIR Sensor
- ④ Two-Color Indication LED(red & green)

⑤ Link Key

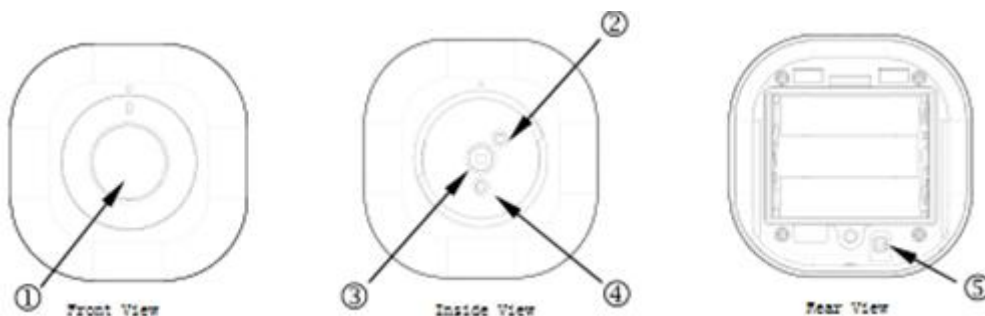

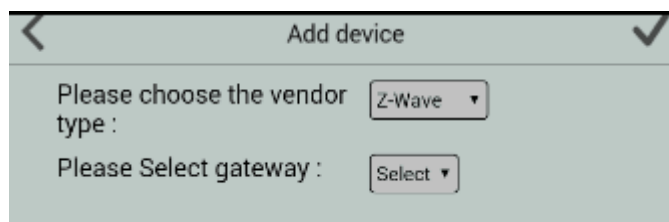


Fig.1

Z-WAVE NETWORK INCLUSION

In the rear casing, there is a link key which is used to carry out inclusion, exclusion, association or reset. When the detector is first powered up, the LED flashes on and off alternately and repeatedly at 2-second intervals. It implies that it has not been assigned a node ID and cannot work with Z-Wave enabled devices.

- 1) Connect the power supply, and make sure that device in a state of "No node ID" (2-second on, 2-second off).
- 2) Choose "Z-Wave" to enter the Network Inclusion mode on the APP, then click " ".



- 3) Pressing link key 3 times within 1.5 second (Detector beeps when link key is pressed.).
- 4) When prompt a message "Request Access Success", please go to the device list interface, and refresh the device list, the device will be displayed.

Z-WAVE NETWORK EXCLUSION

- 1) Make sure the device is connected to the power supply.
- 2) Remove the device on the APP, then click "finish".
- 3) Pressing link key 3 times within 1.5 second (Detector beeps when link key is pressed.).
- 4) Please go to the device list interface, and refresh the device list, the device will not be displayed.

- 5) If the device can still be displayed (network exclusion failed), repeat steps 2-4.

NOTE:

If the device is online, directly perform steps 1-5, if the device is offline, need interruption of the device power supply first, and then perform step 1-5.

MOTION DETECTOR RESET

Reset procedure clears the modules' EPROM memory, including all information about the Z-Wave network controller, calibration and power consumption data.

- 1) Make sure the device is connected to the power supply.
- 2) Pressing link key 3 times within 1.5 second (Detector beeps when link key is pressed.).
- 3) Within 1 second, press and hold the link key until beep stops (A long beep is sounded for 5 seconds).
- 4) IDs are excluded and all of preset value will be reset to factory default (2-second on, 2-second off).

Installation Instructions

It's recommended to install the Motion Detector on a wall or under a ceiling.

MOTION DETECTOR INSTALLATION

- 1) Undo and remove the screw from the bottom edge of the detector to detach the rear cover (Fig.2).



Fig.2

- 2) Unscrew the screw from the battery cover and remove the battery cover.

- 3) Insert 3 AA-size 1.5V alkaline batteries to the battery compartment, ensuring correct polarity is put (Fig.3).

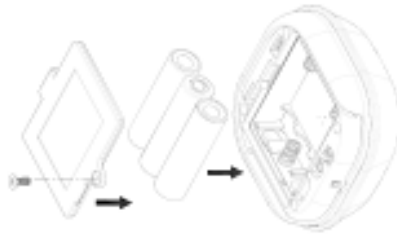


Fig.3

- 4) Two ways of mounting are applicable to the detector. Decide the detector is to be wall-mounted (Fig.4) or ceiling-mounted (Fig.5). Hold the rear cover in position and mark the two mounting holes. Drill the holes, insert the plastic wall plugs and screw the rear cover to the wall or ceiling using the screws provided.
- 5) Engage the detector to rear cover firmly.

i. Wall Mounting

The recommended position for wall mounting is at the height of 1.8m from the flood. At this height, the optimum detection range is up to 10m with coverage range of 110 degrees.

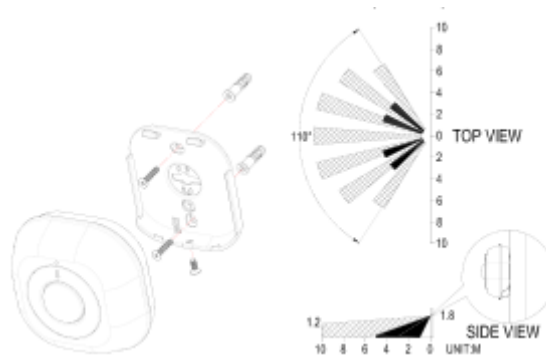


Fig.4

ii. Ceiling mounting

The recommended position for wall ceiling mounting is at the height of 2.8m from the flood. At this height, the optimum detection range is up to 5m with coverage range of 360 degrees.

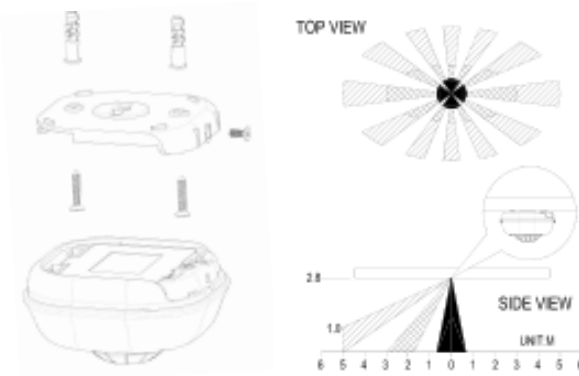


Fig.5

Settings (Coverage Range Adjustments)

Two types of lens covers are provided for the detector. Wall-lens cover (Fig.6a) is to be used when the detector is wall-mounted, whereas ceiling-lens cover (Fig.6b) is to be used when the detector is ceiling-mounted. The coverage range adjustment is only applicable to ceiling-lens cover; choose correct lens cover before mounting.

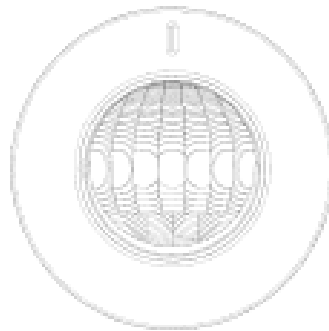


Fig.6a



Fig.6b

NOTICE:

- 1) The shading cap is composed of 12 segments for limiting the detection coverage, and each segment covers detection angle of 30 degrees (Fig.6c). Follow the grooves on the cap, cut the

cap to a suitable size and place it onto the ceiling-lens cover (Fig.6d). The remaining segments are used for blanking off an undesirable detection area.

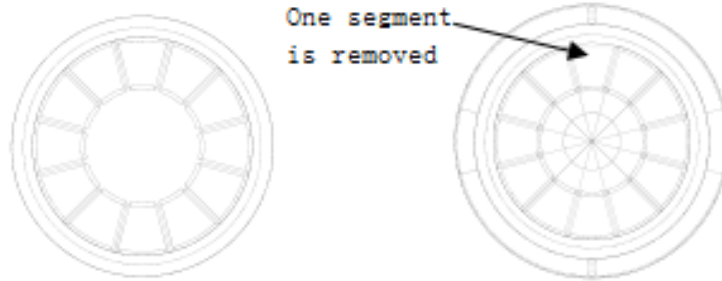


Fig. 6c

Fig. 6d

- 2) Simply turn the cover anticlockwise to remove the wall-lens cover from the detector. Once the wall-lens cover is removed, reload the detector with ceiling-lens cover and turn it clockwise, ensure the mark on the cover is pointing towards and aligned with the mark on the detector.
- 3) To detect movements with detection coverage up to 360 degrees, simply reload the ceiling-lens cover without shading cap. No movements can be detected if the detector is reloaded with a shading cap which maintains 12 lens segments.

Safety Notice

- Don't make the device directly to the window/fan/air-conditioner or sunlight.
- Do not install the device above or facing any source of heat directly, such as fires, radiators, boilers, etc.
- Confirm the device is positioned in place where the light source detected by the detector is consistent with actual ambient illumination. Do not locate the detector in shadowy place.
- Where possible, mount the detector so that the logical path of an intruder would cut across the fan pattern rather than directly towards the detector.
- In order to obtain the best results, please put the detector directly facing the entrance.