Door Sensor User Manual

Please read the manual carefully before operating

Product Introduction

Door sensor is an intelligent security equipment that can transmit through Z-wave network and radio waves. In the Z-wave network communications, door sensor can be connected to any Z-wave gateway. Door sensor can send messages to Z-wave gateway, then realize association with other devices. Different countries or areas, the radio frequency is different.

Each door sensor has a unique ID code. When we add or remove door sensor from gateway, just place it in the z wave network range of gateway. Then we can easily find the door sensor through device ID code. In the communication with Z-wave gateway, door sensor can only send messages to Z-wave gateway, but can not receive messages. When alarm is triggered, door sensor would send messages to gateway, then Z-wave gateway would display the current status of door sensor. At the same time, door sensor can realize association with other devices through z wave gateway. Door sensor is powered by batteries, with small body , and can be installed on the window or door easily. When door or window is open, door sensor would be triggered, then associates with other devices to work, to realize the goal of safety protection.

TECHNICAL SPECIFICATION

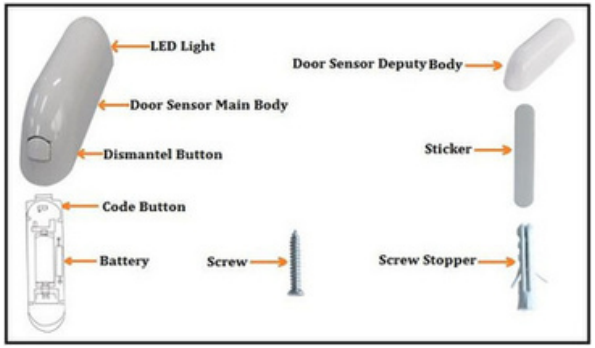
TECHNICAL PARAMETERS

Power	CR2-3V x1
Standby Current	1uA
Battery Life	1 Year
Radio Protocol	Z-Wave
Radio Frequency	865.2MHz IN
Compatible With	300 series and 500 series
Wireless Distance	Upto 60m Outdoor,Upto 30m Indoor
Operation Temperature	0- 45℃ Storage
Storage Temperature	0- 60℃
Size	Door sensor main body (L x W x H): 71mmX20mmX22mm Door sensor deputy body (L x W x H): 40mmX11mmX11mm

TECHNICAL INFORMATION

- Installed on the door or window
- Battery powered
- Easily installed with screws or sticker
- Associate with other devices through gateway
- Compatible with any Z-wave network

Product Configuration



Items List

- Door sensor main body - 1No.
- Door sensor deputy body - 1No.
- Battery - 1No.
- Screw - 4Nos.
- Screw Stopper - 4Nos.
- Sticker -2Nos.
- User Manual - 1No.

Installation Steps

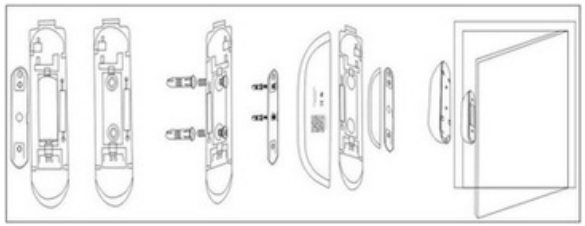
- Door Sensor Installation.
- Battery Installation.

Door Sensor Installation

Step 1 :

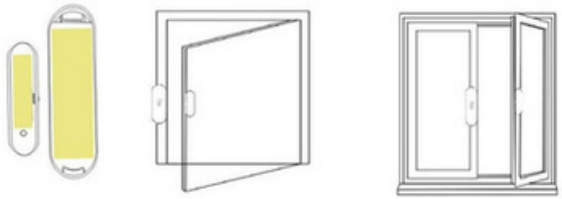
Dismantle the door sensor main body and take out the battery, fix the main body on the door with screws.

Dismantle the door sensor deputy body and fix it on the corresponding door frame position.



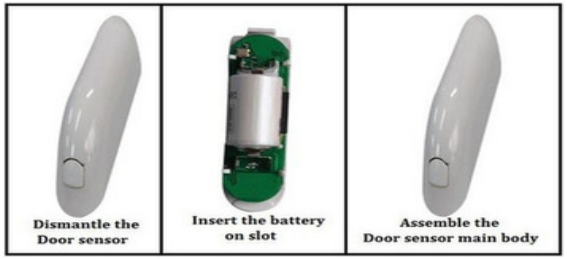
Step 2 :

Put the sticker on the bottom of door sensor then fix it on the wall



Note: When installing door sensor, doorsensor deputy body must be installed on the bulge side of the doorsensor main body.

Battery Installation



Tips

When installing the door sensor, the distance between main body and deputy body should be less than 2cm in the state of door closed. When door is closed, that is to say, distance between main body of door sensor and deputy body is less than 2cm, app would display door is closed. When door is opened, that is to say, distance between main body of door sensor and deputy body is more than 2cm, the app would display the door is opened. Through gateway, door sensor can associate with IP camera to take pictures and record video, siren to alarm.

Make sure door sensor is placed in the Z-wave network range of gateway.

Battery Usage Tips

Battery life of door sensor is approximately 1 year. The power level of battery would be displayed in the gateway. Red icon means the battery needs replacing, and then mobile app would receive a message “Power level is low, please remember to replace battery” from gateway. In order to avoid false alarm, before replacing battery, please disconnect association of door sensor with other devices.

Note:

Door sensor is powered by battery, and please use battery in a correct way to avoid exploding. When handling the battery, refer to environmental law please.

The Status of LED

1. When door sensor is triggered, LED lights would flash red color 1 time.
2. When door sensor is installed with battery, LED lights would flash red color 5 times.
3. Add or Remove door sensor from Z-wave network by quickly pressing the button 3 times, then LED lights would flash red color 5 times.
4. Press and hold the code button for 10-15 seconds, then door sensor would be restored to factory default settings. Meanwhile, LED lights would flash red color 5 times on and off alternately.
5. Under the normal state, LED lights would keep “off “state.

Add Door Sensor to Z-Wave Network

Door sensor can be included to Z-wave network by pressing the code button.

1. Disassemble the main body of door sensor by pressing the disassemble button, then install battery. After making it powered on, please do not operate it within 20s.
2. Place door sensor within z wave network range of gateway.
3. Set Z-Wave gateway into inclusion mode (Refer to gateway user manual)
4. Press the code button in door sensor three times continuously, then door sensor will enter inclusion mode. Meanwhile, LED light would flash red color five times on and off alternately.
5. Door sensor will be detected and included in the Z-wave network.
6. Wait for gateway to configure the sensor.

Remove Door Sensor from Z-wave Network

1. Make sure door sensor is powered on.
2. Set Z-Wave gateway into exclusion mode (Refer to gateway user manual)
3. Press the code button in door sensor three times continuously, then door sensor will enter exclusion mode. Meanwhile, LED light would flash red color five times on and off alternately.
4. Wait for gateway to remove the sensor.

Note:

During the process of resetting, please make sure door sensor is powered on all the time.

Associations (Association Command Class Version 2)

This Sensor supports 4 association groups. Every group can be supported to associate 5 devices max. This has the effect that when the sensor is triggered, all devices associated with it will receive relevant reports. Through association, door sensor can control another Z-Wave network device, e.g. an alarm device, wall plug, lamp etc.

GROUP 1 is lifeline service that assigned to Sensor (Door/Window detector) status – Open/Close. It enables the sensor to send reports and readings to Z-Wave Gateway whenever the sensor is triggered.
This Group Support:
NOTIFICATION_REPORT
BATTERY_REPORT
SENSOR_BINARY_REPORT
DEVICE_RESET_LOCALLY_NOTIFICATION

GROUP 2 allows sending control commands to associated devices such as relay module, etc
This association group is configured through the advanced parameters no. 1 and no. 2.
This Group Support:
BASIC_SET.

GROUP 3 allows Sending Notification to associated devices in this group.
This Group Support:
NOTIFICATION_REPORT

GROUP 4 allows for Send Notification to associated devices in this group.
This Group Support:
SENSOR_BINARY_REPORT

Advanced Configuration

- **Configuring the OFF Delay**

This configuration parameter can be used to adjust the amount of delay before the "OFF" command is transmitted. This parameter can be configured with the value of "0" through "65535", where "0" means send "OFF" command immediately and "65535" means "65535" seconds of delay.
Function: On/Off Duration.
Parameter Number: 1.
Parameter Size: 2 Byte
Available Settings: 0-65535 (in seconds, each 1s).
Default Setting: 0(s).

- **Basic Set Level**

Basic Set Command will be sent where contains a value when the door/window is opened or closed, z-wave controller or z wave gateway will take it for consideration; for instance, if a lamp module receives the Basic Set Command of which value is decisive as to how bright of dim level of lamp module shall be.
Function: Basic Set
Parameter Number: 2
Parameter Size: 1 Byte
Available Settings: 0, 1 - 99 or 255
0 – OFF, Alarm cancelling or turning a device off.
1 - 99 o 255 – ON (Binary Switch Device).
Dim Level (Multilevel Switch Device).
Default Setting: 255

Notification Command Class

Once the detector detects the magnet of sensor is to be opened, it will send NOTIFICATION_REPORT and SENSOR_BINARY_REPORT to the nodes of lifeline to inform there is an intrusion event. When the magnet is to be closed, NOTIFICATION_REPORT and SENSOR_BINARY_REPORT will be sent again to the nodes in lifeline.
For compliant to Z-Wave 300 Series, there also realize the Binary Sensor Command Class.

Notification Report Command

Event Present:

- **Command Class:** COMMAND_CLASS_NOTIFICATION
- **Command:** NOTIFICATION_REPORT
- **Notification Type:** NOTIFICATION_TYPE_ACCESS_CONTROL3
- **Event:** NOTIFICATION_EVENT_ACCESS_CONTROL_WINDOW_OR_DOOR_IS_OPENED

Event Clear:

- **Command Class:** COMMAND_CLASS_NOTIFICATION,
- **Command:** NOTIFICATION_REPORT
- **Notification Type:** NOTIFICATION_TYPE_ACCESS_CONTROL
- **Event:** NOTIFICATION_EVENT_ACCESS_CONTROL_WINDOW_OR_DOOR_IS_CLOSED

Binary Sensor Report Command

Event Present:

- **Command Class:** COMMAND_CLASS_SENSOR_BINARY
- **Command:** SENSOR_BINARY_REPORT
- **Sensor Type:** SENSOR_DOOR_WINDOW
- **Value:** 0xFF

Event Clear:

- **Command Class:** COMMAND_CLASS_SENSOR_BINARY
- **Command:** SENSOR_BINARY_REPORT
- **Sensor Type:** SENSOR_DOOR_WINDOW
- **Value:** 0x00

Wakeup Command Class

Door sensor stays in dormant state for the majority of time in order to conserve battery life. The minimum wakeup interval is 300s (5 minutes)

The maximum wakeup interval is 16,777,200s (about 194 days)

Allowable min step among each wakeup interval is 60 seconds, such as 360s, 420s,

Note: The default value is 12 hours. The larger the value is, the greater the battery life

Battery Check Command

Users can also enquire the battery status of door sensor by sending BATTERY_GET command. Once door sensor receives the command, it will return BATTERY_REPORT command. Door sensor would send BATTERY_LEVEL = 0xFF command to Z-Wave gateway to inform that door sensor is in dead battery status, otherwise BATTERY_LEVEL value range is 0% to 100%.

Command Classes

This Sensor (Door/Windows Detector) supports Command Classes as Below:

- COMMAND_CLASS_ZWAVEPLUS_INFO (V2)
- COMMAND_CLASS_VERSION (V2)
- COMMAND_CLASS_MANUFACTURER_SPECIFIC (V2)
- COMMAND_CLASS_DEVICE_RESET_LOCALLY (V1)
- COMMAND_CLASS_POWERLEVEL (V1)
- COMMAND_CLASS_BATTERY (V1)
- COMMAND_CLASS_ASSOCIATION (V2)
- COMMAND_CLASS_ASSOCIATION_GRP_INFO (V1)
- COMMAND_CLASS_WAKE_UP (V2)
- COMMAND_CLASS_NOTIFICATION (V4)
- COMMAND_CLASS_SENSOR_BINARY (V2)
- COMMAND_CLASS_CONFIGURATION (V1)

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For any technical and support queries,
please contact the Manufacturer

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Karnataka, India

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www.confiolabs.com

Serial Number:	
Dealer Code:	
Installation Date:	
Stamp:	