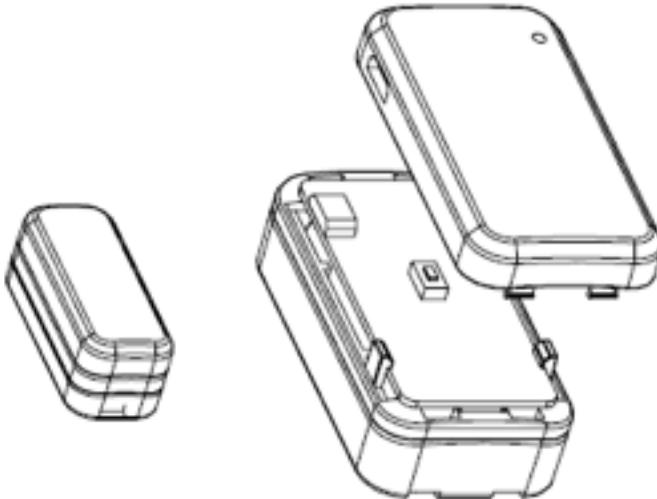# Door/Window sensor

GR-309N

Thank you for choosing Door/Window sensor, the manual can be your guidance of installation and function features, it can help you to use our products completely and flexibly.Please keep it in good condition .

Safety Warning

Please read the manual throughout before using to make sure to use this unit safety.,

Copyright

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About using:

The manufacturer do not bear any responsibility in the case of the unit used by illegal operation which will cause damage or property lost

Maintenance

Under the warranty period , the unit is defected under the correct operation, the manufacturer will guarantee to keep the unit in repair if consumer can provide guarantee card and purchase receipt.

Product Introduction

The door sensor (GR-309N) is using Z - Wave technology which is a new wireless communication technology base on radio frequency .

This product 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.

Product Specification

Installation Method: Magnetron
Working Voltage： 2xAAA
Working Current: <35mA (When it is triggered)
Sleeping Current: ：≤5uA
Working Temperature：-10℃~ +50℃
Operating Humidity ≤ 80%
Communication Technology：Z-Wave plus
Communication Frequency：868.42MHz
Transmission Speed：9.6/40/100 kbps
Transmission Distance：outdoor 40M

Operating Principle

The Door sensor adopt design which will save the power. When the door is close, it does not transmit radio signals. And the power consumption of only a few microamps. At once the door is open, it will launch a wireless alarm signal in about 1 second immediately , then stop itself. The door sensor won't send any signal even the door is opened . This is to prevent the battery not to run out and keep running if the transmitter sending the information continuously .

The door sensor detector is usually installed on the inside of the door. it consists of two parts. One is the small component with permanent magnet with a permanent magnet inside .It is used to produce a

constant magnetic field. The bigger one is the magnetometer detector,the main part. It has an internal open type magnetron. When the permanent magnet and magnetron approach to very close distance, less than 5 mm, the, door magnetic detector will turns to standby status. When the permanent magnet leaves from magnetron with a certain distance, the door sensor will launch 868.42MHZ ,the wireless signal immediately. According to the wireless signal , The controller can identify which door sensor is sending the alarm information.
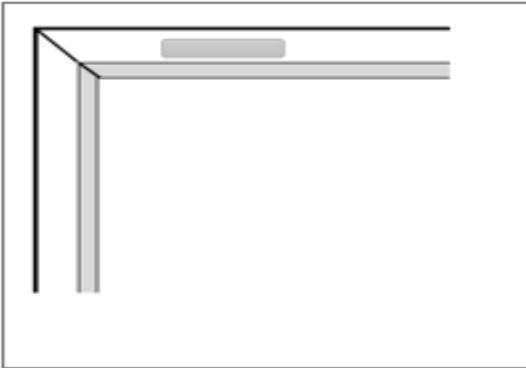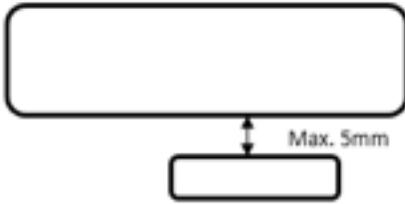
Installation Instructions

- The door sensor need to be installed on the active door or window. Please clean the door or the window before install. And then use the 3M adhesive to stick stability

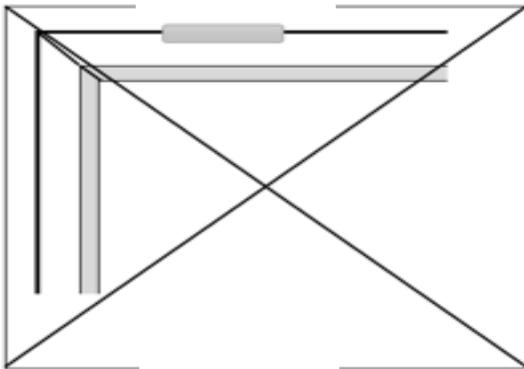- Please pay your great attention on the following points

The door sensor A (main part) and the door sensor B (magnet) need to be installed separately . The door sensor A(main part) namely the transmitter need to be installed in the fixed frame of the window or the door. And the door sensor B (magnet) need to be installed on the door or window which can be moved.

The door sensor B (magnet)need to be placed in the right side of the door sensor B (main part) with some upper position. The distance between the two parts should not over 5mm.
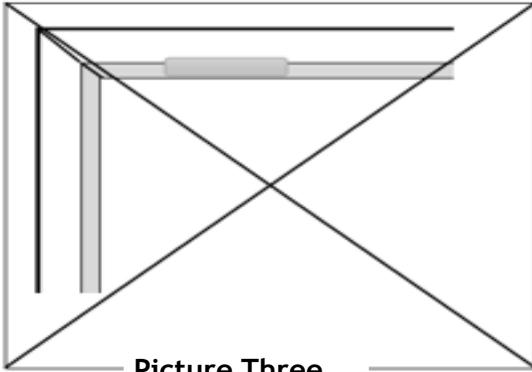
- The door sensor can be used in other place, It can be flexible used according to the specific situation;

Max. 5mm

Picture One

Picture Two

Picture Three

Products usage   Z-Wave Controller   Pad

Products Networking

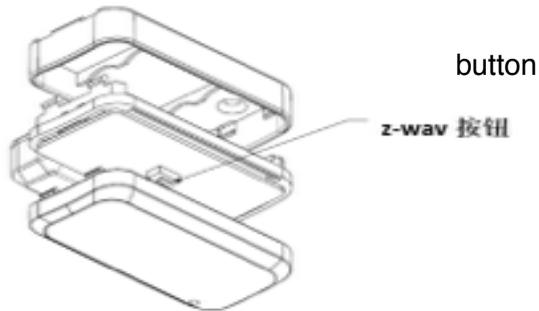This product should be used in together with Z-Wave controller.

Door sensor

cell phone

门磁

GR-100

平板

手机

Z-Wave install

button

z-wav 按钮

Inclusion(Add) / Exclusion(Remove)

Inclusion(Add) : press the Z-Wave button 1 time in the door sensor when the Z-Wave controller sends the instructions for inclusion or Add new devices.

Exclusion(Remove): press the Z-Wave button 1 time in the door sensor when the Z-Wave controller sends the instructions for exclusion or Remove devices.

Remarks: Please pay your attention that the detector cannot be set in the place where is over one meter distance from the controller. If the controller has not yet received the signal, please press the button for inclusion/exclusion several times.After do the inclusion, please fix the equipment in the place you want . Make sure the distance is under the operating range.

Association Capabilities

This door sensor can directly control another device which is also using Z-Wave network.
Group 1-Lifeline can setting and support 5 nodes. (Group 2~5 is not support)
Group 1 support command_class:

COMMAND_CLASS_BATTERY Report
COMMAND_CLASS_BASIC Set
COMMAND_CLASS_NOTIFICATION Report
COMMAND_CLASS_DEVICE_RESET_LOCALLY Notification

Device Reset

Press the button 6 times the device will send the reset notification to the list node in the group 1 and erases the device memory, when the light flash is resetting success.
Use this procedure only in the event that the network primary controller is missing or otherwise inoperable.

Command Class support

Device Type: Sensor Notification
Device Role Type: Reporting Sleeping Slave(RSS)

COMMAND_CLASS_ZWAVEPLUS_INFO
COMMAND_CLASS_VERSION
COMMAND_CLASS_MANUFACTURE_SPECIFIC
COMMAND_CLASS_DEVICE_RESET_LOCALLY
COMMAND_CLASS_POWERLEVEL
COMMAND_CLASS_BATTERY
COMMAND_CLASS_ALARM
COMMAND_CLASS_ASSOCIATION
COMMAND_CLASS_ASSOCIATION_GRP_INFO
COMMAND_CLASS_WAKE_UP

Notification Explanation

Notification type: Burglar (0x07)
Event: 0x00 is normal status, 0x02 is trigger
The Tampering Event is not used on this device.

Battery low warning

When used the 2xAAA battery that is low than 2.5V the door sensor will send the battery low warning 0xFF to the list node in the group 1.

According to the requirements of the national standard GB50166-92 , the sensor need to be tested at least once in every half a year. And it need to have cleaning and maintenance in every two years for the sensor which has been fixed.

The working performance for the siren is mainly influenced by the quality of the environment. If the siren is working under the the environment with dust or high wind speed , the maintenance period need to be shorten

Under one year guarantee period base on the date of manufacture, we will be responsible for free repair or replacement if the defected goods are caused by material or workmanship .

The GR Smart Home company will take care the repair for the non warranty product. If you need to repair or assist, please contact us.Meanwhile, we hope to get some important information about the repair products from you, such as failure situation and reasons of the defect goods in order to find a solution in the shortest possible time. It also can provide reference to improve and perfect our products and the design.

Attentions

Disclaimer：If there is function or software upgrade,GR Smart home won't have any further notice . The customer can contact with us to consult the relevant information .   GR Smart home is qualified for the right of interpretation Interpretation.

This product should be installed in the interior renovation completed, before installing this product should be stored in a the place which is dust proof, moisture pro of a mould proof.

Except the battery, there is no other part can be changed by the user. If there is any fault for the sensor , please contact us timely.

The battery is only a backup power use and not recommended as the main power supply

The product installation shall comply with the provisions of the state standard, reference GB50166-92 "code for construction and acceptance of automatic fire alarm system"

Product Guarantee Card

Customer Name		Product type	GR-309N
Telephone		Post Code	
Customer Address			
Purchasing Date			
Service Time	Repair Content	Satisfaction (YES/ NO)	Signature Confirmation

Note: Please keep this warranty card in good condition. We do not make up the lost.

- **Quality Assurance**

Under the warranty period , the unit is defected under the correct operation, the manufacturer will guarantee to keep the unit in

repair if consumer can provide guarantee card and purchase receipt.

Please pay your attentions for the following things, Under one year guarantee period base on the date of manufacture, we will be responsible for free repair or replacement. We only charge the repair fee if it is over one year guarantee period .

We will charge the repair fee in the conditions as below,

(1)Cannot provide the guarantee card and the effective purchase vouchers

(2)Beyond the guarantee period and the free repair period

(3)Failure and damage because of an error caused by improper use and self repair

(4)Defect due to the crash, extrusion, high temperature, corrosion, foreign body into the equipment,incorrect usage or and other abnormal reasons.

(5)Failure or damage due to force major natural disasters, wars caused

(6)Default caused by the repair and disassemble by the unauthorized repair agencies or some persons Without clear label to show the factory's name or model No .

Please send the repair goods together with your warranty card and receipt . The transportation cost will be bore by the user.

The warranty terms will excluding the appearance of the product which easy to damage. And we won't repair the other parts which not show in the warranty card.

Please keep the warranty card in good condition . We do not make up if lost