

EH-DS-02 Door/Window Sensor Installation Guide

Introduction

Z-Wave Door/Window sensors are designed to secure the perimeter of the residential premise, and provide the ability to add various automation services. The Z-Wave Door/Window sensor, which consists of a magnet that attaches to a door or window, will communicate door events to the home security system. When the magnet is moved away from the sensor, a signal will be sent to the control panel that communicates the changed state to the security system. Signals can also be used to activate a chime or convenience lighting based on system settings.

Specification

Frequency	908.42 / 908.40 / 916.00 MHz
Battery Type	CR123A Battery 1 PCS
Operating Temperature	0 °C to 50 °C (32 °F - 122 °F)
Storage Temperature	-20°C to 60 °C (-4 °F - 140 °F)
Operating Air Range	Up to 148 feet line of sight
Dimension	Device: 94.5 mm x 24.3 mm x 22.4 mm Magnet: 46 mm x 12.8 mm x 13.3 mm

Add (Inclusion) Sensor

For Adding in (Inclusion) a network: Put the Z-Wave Interface Controller into “Add (Inclusion)” mode, and following its instruction to add EH-DS-02 to your controller. This Door/Window sensor needs to be included before installation.

1. Remove device front cover, open the device. (Figure 1)



Figure 1

2. Pressing the function button three times in 2 seconds.

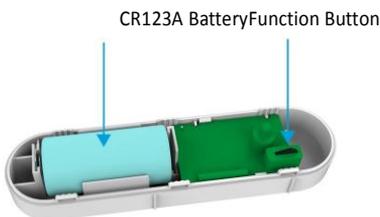


Figure 2

3. Red led will blink three times while inclusion the network successful (Figure 2).

Red LED Indicator



Figure 3

4. If inclusion failed, the sensor will go into sleep mode. To wake the sensor again, you need to use magnet or tamper (Figure 3) to trigger a Adding (Inclusion) process, and then sensor will repeat steps from 3 to 4.

Remove (Exclusion) Sensor

Inclusion Sensor

For Removing from (Exclusion) a network: Put the Z-Wave Interface Controller into “Remove (Exclusion)” mode, and following its instruction to delete EH-DS-02 to your Z-Wave controller.

1. Open the device and pressing the function three times and enter exclusion mode. (Figure 4).

Pressing the function button

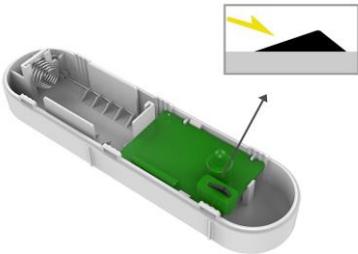


Figure 4

2. If remove (exclusion) successful, go auto Adding procedure.
3. Node ID has been remove.

Factory Default Reset

Installation

Pressing the function button while installing battery.

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

Installation

Inclusion Sensor

1. Please make sure that the sensor and magnet is located less than 0.7 inch from each other. For optimal performance, it is highly recommended to install the Door/Window sensor on the fixed frame and the magnet on the moving part of the door/window. Place the sensor near the top of the door that close to the opening edge of the door. This is the mounting location for the sensor.
2. Use the provided double-sided tape on the sensor. Attach the sensor to the door. Press firmly and hold in place for a few seconds (Figure 5). Secure it with silicone if needed.

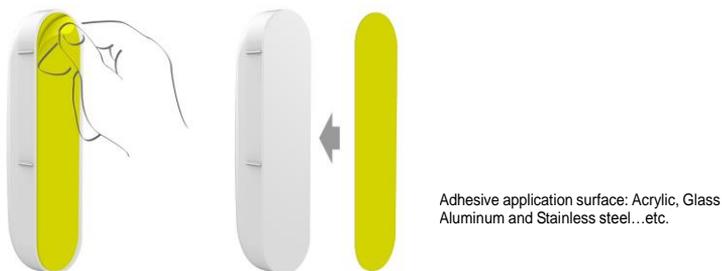


Figure 5

3. Use provided double-sided tape on the magnet. Make sure the alignment of both sensor and magnet alignment mark are facing each other (Figure 6). Press firmly and hold in place for a few seconds. Secure it with silicone if needed.

Alignment Mark



Figure 6

4. EH-DS-02 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.
6. Awake mode
 - It will be triggering after opening bottom cover. EH-DS-02 will send “Wake Up Notification” after 10 seconds. If EH-DS-02 received “Wake Up No More Information” command then will go off or it will wait 10 seconds then go off. It will proceed all the commands after sending the “Wake Up Notification”.
7. Auto Wake Up
 - Use “Wake up” command to set up the awaking time and send the wake up notification to controller.
 - User can use command to change the auto wake up from 1 minute to 24 hours, interval increment is 1 minute. Factory default is 5 minutes.

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
Alarm Type	Reed Switch	0x06
	Tamper Switch	0x07
Alarm Level	Close:0x00, Open:0xFF	

Operation

1. The LED will stay off during the normal operation.
2. The sensor is equipped with a tamper switch. If the cover of sensor is removed, the sensor will send an alarm to the home controller.
3. Tamper switch event will be ignored when in auto inclusion procedure.