PSM09

Recessed Door Sensor

The Recessed door sensor PSM09 is Base on Z-Wave™ technology.It is the Z-Wave™ plus product, it support the security, OTA... Those newest features of the Z-Wave™ technology. Z-Wave™ is a wireless communication protocol designed for home automation, specifically to remotely control applications in residential and light commercial environments. The technology uses a low-power RF radio embedded or retrofitted into home electronics devices and systems, such as lighting, home access control, entertainment systems and household appliances.
Notice: if user use some command,it have to check device is security bootstrap otherwise some command can not increment.

Add to/Remove from Z-Wave™ Network

There are one tamper key in the device,the key is in the front side. Both of them can add, remove, reset or association from Z-Wave™ network.

SmartStart enabled products can be added into a Z-Wave network by scanning the Zwave QR Code present on the product providing SmartStart inclusion. No further action is required and the SmartStart productwill be added automatically within 10 minutes
of minutes On in the network vicinity

Notice: Including a node ID allocated by Z-Wave™ Controller means "**Add**" or "**Inclusion**". Excluding a node ID allocated by Z-Wave™ Controller means "**Remove**" or "**Exclusion**".

Function	Description
Add	1. Have Z-Wave™ Controller entered inclusion mode. Pressing tamper key three times within 3 seconds to enter the inclusion mode. If the learning code is successful, the LED will flash slowly.
Remove	1. Have Z-Wave™ Controller entered exclusion mode. Pressing tamper key three times within 3 seconds to enter the exclusion mode. If the removal is successful, the code light will flash for 30 seconds. Node ID has been excluded.
Reset	***Notice: Use this procedure only in the event that the primary controller is lost or otherwise inoperable.*** 1. In 3 seconds, press the button 3 times continuously, after 3 successful, then slowly flash for 1 second, press the fourth button, do not release the button, the LED will light up, after about three seconds, the LED will off, and in two seconds Release the button internally. If the clearing is successful, the LED will flash slowly. If it fails, the LED will flash quickly.
Association	1. Have Z-Wave™ Controller entered association mode. Pressing tamper key three times within 3 seconds to enter the association mode. Note: This machine provides a group of groups. Each group can set 5 Nodes. Group 1: Used for event return. Example: Reed trigger state Battery.
• Failed or success in add/remove the node ID can be viewed from Z-Wave™ Controller.	

Notice 1: Always RESET a Z-Wave™ device before trying to add it to a Z-Wave™ network

Z-Wave™ Notification

When the door/windows triggered or the lock tongue triggered, the device will report the trigger event and also report the battery status.

In default the device will using Notification Report to represent the trigger event, it can be changed to lock tongue detection by setting the configuration NO.2.

Z-Wave™ Wake up

After the device adding to the network, it will wake-up once per day in default. When it wake-up it will broadcast the "Wake Up Notification" message to the network, and wake-up 10 seconds for receive the setting commands.
The wake-up interval minimum setting is 30 minutes, and maximum setting is 120 hours. And the interval step is 30 minutes.

If the user want to wake-up the device immediately, please press the tamper key once. The device will wake-up 10 seconds.

Z-Wave™ Auto Report

After the device adding to the network, it will auto-report every 6 hours in default. When it auto-report, it will Notification report message door/windows status ,lock tongue status and battery level to the network.

The auto report minimum setting is 30 minutes, and the interval step is 30 minutes, it can be changed by setting the configuration NO.1.

*** Door/Window and lock tongue Report:**
When the door/window state changed or lock tongue state changed, the device will unsolicited to send the r notification report.

Notification Report (V4)
Notification Type: Access Control (0x06) Event: Door/Window is open (0x16) Door/Window is closed (0x17) lock tongue is lock (0x01) lock tongue is unlock (0x02)

Security Network

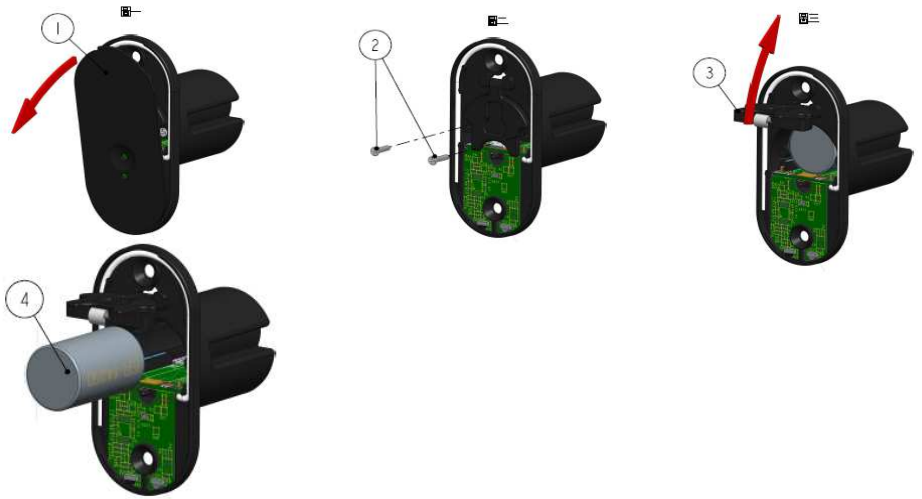
The device support the security function. When the device included with a security controller, the device will auto switch to the security mode. In the security mode, the follow commands need using Security CC wrapped to communicate, otherwise it will not response.

COMMAND_CLASS_ZWAVEPLUS_INFO
COMMAND_CLASS_SUPERVISION
COMMAND_CLASS_WAKE_UP
COMMAND_CLASS_CONFIGURATION
COMMAND_CLASS_TRANSPORT_SERVICE_V2
COMMAND_CLASS_SECURITY
COMMAND_CLASS_SECURITY_2
COMMAND_CLASS_VERSION
COMMAND_CLASS_ASSOCIATION
COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION_V2
COMMAND_CLASS_ASSOCIATION_GRP_INFO
COMMAND_CLASS_MANUFACTURER_SPECIFIC
COMMAND_CLASS_DEVICE_RESET_LOCALLY
COMMAND_CLASS_POWERLEVEL
COMMAND_CLASS_BATTERY
COMMAND_CLASS_NOTIFICATION_V3
COMMAND_CLASS_FIRMWARE_UPDATE_MD_V4

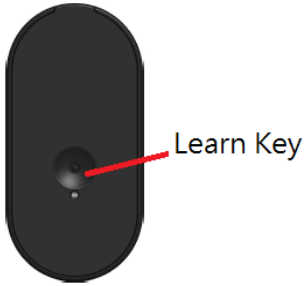
Over The Air Firmware Update

The device support the Z-Wave firmware update via OTA.
Let the Z-Wave™ Controller into the firmware update mode, chose the hex file to update. Wait for 10~15 minutes.
At that time, ***please don't remove the battery***, otherwise it will cause the firmware broken, and the device will no function.
Result will show in Z-Wave™ Controller log.

Battery installation



Overview



Installation

1.Choosing a Suitable Location

1.1 The recommended mounting position is above the bolt and the distance from the lock tongue is less than 4 cm.

1.2 Infrared detection hole must be aligned downward with the lock tongue.

1.3 As close as possible to the lock tongue, the better.

2.Correct the position of the lock tongue

2.1 The infrared detection hole must be aligned with the bolt and a reflective tape between the two.

2.2 Press and hold the button for 3 seconds, then let go, the LED light will be on for 20S. Before the light is off, close the door. After the door is closed, lock the lock tongue in 5S. When 5S is reached,

The infrared will be emitted and the received signal will be stored as a standard on the lock lock. When the calibration is completed, the status will be reported from zwave.

Specification

Operating Voltage	DC3.6V 1200mAh (Li-Battery)
Range	Minimum 40M in door and 100M in outdoor, line of sight
Operating Temperature	-10°C ~ 40°C (85% humidity)
Storage Temperature	-20 C ~ 60°C
Location	Indoor use only
Frequency Range	868.40MHz; 869.85MHz (EU) 908.40MHz; 916.00MHz (USA/Canada) 916MHz (Israel)
FCC ID	RHHPSM09
Patent pending	

** Specifications are subject to change and improvement without notice.

Disposal

	This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

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FCC Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.
These limits are designed to provide reasonable protection against harmful interference in a residential installation.
This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.
However, there is no guarantee that interference will not occur in a particular installation.
If this equipment does cause harmful interference to radio or television reception, which
can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

• Consult the dealer or an experienced radio/TV technician for help.
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.
FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Warning

Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities. Contact your local government for information regarding the collection systems available. If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.

When replacing old appliances with new once, the retailer is legally obligated to take back your old appliance for disposal at least for free of charge.