PSM09-A/B

Recessed Door Sensor + Door lock Sensor

PSM09 is only for indoor using device.
PSM09 can detect the the door is open or not.
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 cannot increment.
This device is a security enabled Z-Wave Plus product that is able to use encrypted Z-Wave Plus messages to communicate to other security enabled Z-Wave Plus products.
This device must be used in conjunction with a Security Enabled Z-Wave Controller in order to fully utilize all implemented functions.
This product can be operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

*The device is Security Enabled Z-Wave Plus Product

Function Compare A/B

	Door Sensor	Door lock Sensor
PSM09-A	**V**	**V**
PSM09-B	**V**	

Add to/Remove from Z-Wave™ Network

There are one 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 product will be added automatically within 10 minutes 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. Check Z-Wave™ Controller enter 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. Check Z-Wave™ Controller enter 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. Press the button three times in three seconds, then LED will flash for one second slowly. Press the button again and hold, the LED will light up, after about three seconds, the LED will off. Please release the button in two seconds. If the clearing is successful, the LED will flash one time per second. If it fails, the LED will flash quickly.
Association	This machine provides a group of groups. Each group can set 5 Nodes. Group 1: Used for event return. Report type: 1. **Door sensor state** 2.Battery state 3.Reset report
Smart start	1.Product has a DSK string , you can key in first five digit to increment smart start process,or you can scan QR code. *User can find Qrcode and dsk string on our product package and product   2.SmartStart enabled products can be added into a Z-Wave network by scanning the Z-Wave QR Code present on the product providing SmartStart inclusion. No further action is required and the SmartStart product will be added automatically within 10 minutes of minutes On in the network vicinity • 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, the device will report the trigger event.

In default the device will using Notification Report to represent the trigger event.

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 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.

*** Battery level report:**

Battery level report: Every 6 hours report once in default.

*** Low Battery level report:**

When the battery level is too low, every 30 minutes will report once.

*** Door/Window Report:**

When the door/window state changed, the device will unsolicited to send the notification report.

Notification Report (V8)
Notification Type: Access Control (0x06) Event: Door/Window is open (0x16) Door/Window is closed (0x17)

Z-Wave Configuration Settings

A	B	NO.	Name	Default	Valid	Description
☑	☑	1	Auto report state time	12	0 ~ 127	The interval time for auto report the door/window & battery level. 0 means turn off auto report state. Units of 30 minutes.

Notice:

* All of the configuration, the data size is 1.

* The configuration mark with star (*), means after the remove the setting still keep, don't reset to factory default. Unless the user execute the "RESET" procedure.

* The reserve bit or not supported bit is allowed any value, but no effect.

Security Network

The device supports 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.

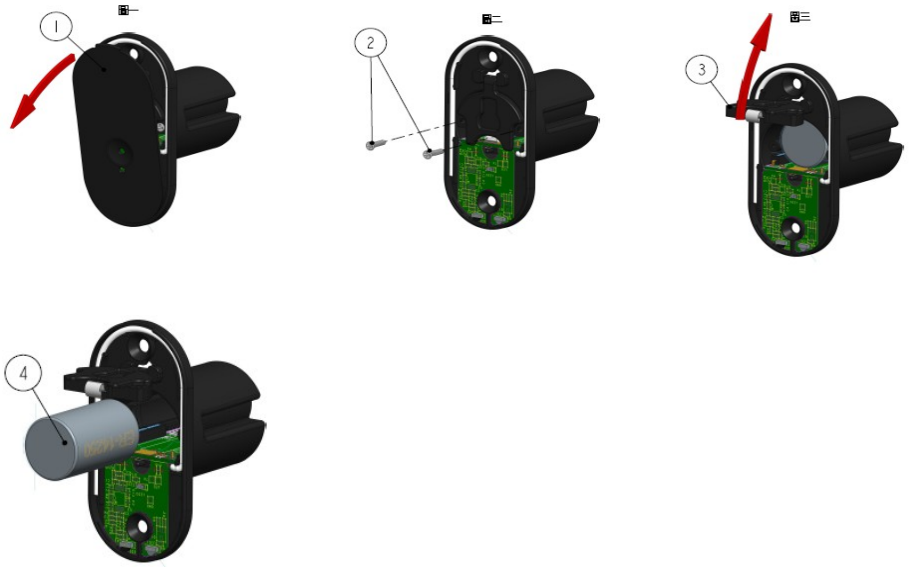
Command Class	Version	Required Security Class
ZWAVEPLUS INFO	2	None
Supervision	1	None
Configuration	1	Highest granted Security Class
Transport service	2	None
Security 0	1	None
Security 2	1	None
Version	3	Highest granted Security Class
Association	2	Highest granted Security Class
Multi chanel Association	3	Highest granted Security Class
Association grp info	1	Highest granted Security Class
Manufacture specific	2	Highest granted Security Class
Device Reset Locally	1	Highest granted Security Class
Power Level	1	Highest granted Security Class
Battery	1	Highest granted Security Class
Notification	8	Highest granted Security

		Class
Firmware update md	4	Highest granted Security Class
Wake up	2	Highest granted Security Class

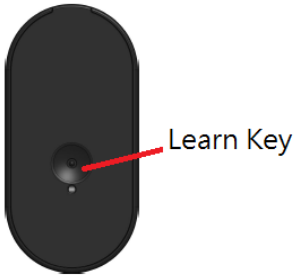
Over The Air Firmware Update

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 Please follow the battery anode and cathode screen printing indication to install the battery. Wrong battery installation will cause device damage.

Specification

Operating Voltage	DC3.6V 1000mAh (ER14250 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) 922~927MHz (Japan) 920~924MHz (Taiwan; Korea)
RF Maximum Power (peak)	+5dBm (peak)
RF Maximum Power (Average)	-10dBm (Average)
RF Modulation Type	FSK (Frequency-Shift Keying)
FCC ID	RHHPSM09
Patent NO.	M558835

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

FCC ID: RHHPSM09

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.

Company: Philio Technology Corporation
Address: 8F., No.653-2, Zhongzheng Rd., Xinzhuang Dist., New Taipei City 24257, Taiwan (R.O.C)
www.philio-tech.com

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.