Popp Z-Wave Door/Window Sensor w. Gyro and external sensor POPE700892 Manual

Contents

Popp

Z-Wave Door/Window Sensor w. Gyro and external sensor

SKU: POPE700892


Z-WAVE
PLUS
SECURE V2

Quickstart

This is a
secure
Alarm Sensor
for
CEPT (Europe).

Please make sure the internal battery is fully charged.

To add this device to your network execute the following action:
Tripple clicking the tamper button includes (adds) the device.

Please refer to the
Manufacturers Manual for more information.

Important safety information

Please read this manual carefully. Failure to follow the recommendations in this manual may be dangerous or may violate the law.
The manufacturer, importer, distributor and seller shall not be liable for any loss or damage resulting from failure to comply with the instructions in this manual or any other material.
Use this equipment only for its intended purpose. Follow the disposal instructions.

Do not dispose of electronic equipment or batteries in a fire or near open heat sources.

What is Z-Wave?

Z-Wave is the international wireless protocol for communication in the Smart Home. This device is suited for use in the region mentioned in the Quickstart section.

Z-Wave ensures a reliable communication by reconfirming every message (**two-way communication**) and every mains powered node can act as a repeater for other nodes (**meshed network**) in case the receiver is not in direct wireless range of the transmitter.

This device and every other certified Z-Wave device can be **used together with any other certified Z-Wave device regardless of brand and origin** as long as both are suited for the same frequency range.

If a device supports **secure communication** it will communicate with other devices secure as long as this device provides the same or a higher level of security. Otherwise it will automatically turn into a lower level of security to maintain backward compatibility.

For more information about Z-Wave technology, devices, white papers etc. please refer to www.z-wave.info.

Product Description

POPP Door/ Window Sensor is a small window position sensor for your smart home, it monitors window and their exact opening position and lets your know when a window is tilted or completely opened. It also supports connecting external binary sensors through the dry binary contact of the Door/ Window sensor.

Prepare for Installation / Reset

Please read the user manual before installing the product.

In order to include (add) a Z-Wave device to a network it **must be in factory default state.** Please make sure to reset the device into factory default. You can do this by performing an Exclusion operation as described below in the manual. Every Z-Wave controller is able to perform this operation however it is recommended to use the primary controller of the previous network to make sure the very device is excluded properly from this network.

Reset to factory default

This device also allows to be reset without any involvement of a Z-Wave controller. This procedure should only be used when the primary controller is inoperable.

This device also allows to be reset without any involvement of a Z-Wave controller. This procedure should only be used when the primary controller is inoperable.Once Cover is removed and tamper switch is tripped, push the tamper for 5 seconds until red LED blinks. Then release tamper and push it again for 5 seconds until LED blinks.

Inclusion/Exclusion

On factory default the device does not belong to any Z-Wave network. The device needs to be **added to an existing wireless network** to communicate with the devices of this network. This process is called **Inclusion**.

Devices can also be removed from a network. This process is called **Exclusion**. Both processes are initiated by the primary controller of the Z-Wave network. This controller is turned into exclusion respective inclusion mode. Inclusion and Exclusion is then performed doing a special manual action right on the device.

Inclusion

Tripple clicking the tamper button includes (adds) the device.

Exclusion

Tripple clicking the tamper button excludes (removes) the device.

Communication to a Sleeping device (Wakeup)

This device is battery operated and turned into deep sleep state most of the time to save battery life time. Communication with the device is limited. In order to communicate with the device, a static controller **C** is needed in the network. This controller will maintain a mailbox for the battery operated devices and store commands that can not be received during deep sleep state. Without such a controller, communication may become impossible and/or the battery life time is significantly decreased.

This device will wakeup regularly and announce the wakeup state by sending out a so called Wakeup Notification. The controller can then empty the mailbox. Therefore, the device needs to be configured with the desired wakeup interval and the node ID of the controller. If the device was included by a static controller this controller will usually perform all necessary configurations. The wakeup interval is a tradeoff between maximal battery life time and the desired responses of the device. To wakeup the device please perform the following action:

A single click on the tamper button will wakeup the device.

Quick trouble shooting

Here are a few hints for network installation if things dont work as expected.

1. Make sure a device is in factory reset state before including. In doubt exclude before include.
2. If inclusion still fails, check if both devices use the same frequency.
3. Remove all dead devices from associations. Otherwise you will see severe delays.
4. Never use sleeping battery devices without a central controller.
5. Dont poll FLIRS devices.

6. Make sure to have enough mains powered device to benefit from the meshing

Association – one device controls an other device

Z-Wave devices control other Z-Wave devices. The relationship between one device controlling another device is called association. In order to control a different device, the controlling device needs to maintain a list of devices that will receive controlling commands. These lists are called association groups and they are always related to certain events (e.g. button pressed, sensor triggers, …). In case the event happens all devices stored in the respective association group will receive the same wireless command wireless command, typically a ‘Basic Set’ Command.

Association Groups:

Group NumberMaximum NodesDescription

1	5	Z-Wave Plus Lifeline
2	5	Control devices when magnet or external dry contacts trips
3	5	Sends our alarm message when magnet controlled or external dry sensor trips.
4	5	Sends alarm messages when tamper is tripped

Configuration Parameters

Z-Wave products are supposed to work out of the box after inclusion, however certain configuration can adapt the function better to user needs or unlock further enhanced features.

IMPORTANT: Controllers may only allow configuring signed values. In order to set values in the range 128 … 255 the value sent in the application shall be the desired value minus 256. For example: To set a parameter to 200â€ˆit may be needed to set a value of 200 minus 256 = minus 56. In case of a two byte value the same logic applies: Values greater than 32768 may needed to be given as negative values too.

Parameter 1: Sensor Operation Mode

This parameter defines if the internal magnet sensor or the external terminal input is detected and used to issue alarm notification. There is always one input active only. The other sensor input the deactivated.
Size: 1 Byte, Default Value: 0

SettingDescription

0	Internal Magnet Sensor Used
1	External Terminal Inputs Used

Parameter 10: Time Delay of Off command frame

Off command is sent after a delay defined in this parameter.
Size: 2 Byte, Default Value: 0

SettingDescription

0 – 32400	seconds

Parameter 11: Delay of Tamper Alarm Cancellation

Time a tamper alarm is delayed.
Size: 2 Byte, Default Value: 0

SettingDescription

0 – 32400	seconds

Parameter 12: Reporting Tamper Alarm Cancellation

This parameter defines if the alarm cancellation event is reported.
Size: 1 Byte, Default Value: 1

SettingDescription

0	Do not send Report
1	Send Report

Parameter 13: Central Scene Event Functionality

This parameter enables/disablesthe central scene function.
Size: 1 Byte, Default Value: 0

SettingDescription

0	Disabled
1	Enabled

Parameter 14: Tilt Sensor Functionality

This parameter enables/disablesthe tilt function.
Size: 1 Byte, Default Value: 1

SettingDescription

0	Disabled
1	Enabled

Parameter 2: Sensor State Polarity

This parameter defines the polarity of the magnet sensor.
Size: 1 Byte, Default Value: 0

SettingDescription

0	Closed when Magnet in proximity
1	Opened when Magnet in proximity

Parameter 3: Visual LED Indications

This parameter defines when the red LED will indicate events. Disabling all indications may extend battery life.
Size: 1 Byte, Default Value: 7

SettingDescription

1	No Indications
2	Open/Close Status Change
4	Wake Up
16	Device Tampering

Parameter 4: Range Test after double click

Allows to enable the activation of a Z-Wave range test with double clicking the tamper switch.
Size: 1 Byte, Default Value: 0

SettingDescription

0	Disabled
1	Enabled

Parameter 5: 2nd Association Group Trigger

his parameter defines the status of the magnet switch that causes sending a BASIC command to all devices of Association Group 2.
Size: 1 Byte, Default Value: 0

SettingDescription

0	Switch after Open and Close
1	Switch after Open
2	Switch after Close

Parameter 6: Command Sent to Devices of Association Group 2

This parameter defines which commands is sent to 2nd Association Group
Size: 1 Byte, Default Value: 2

SettingDescription

0	On
1	Off
2	On and Off

Parameter 7: BASIC command value sent to 2nd Association Group on On event

This is the BASIC command value sent in case of On event.
Size: 1 Byte, Default Value: -1

SettingDescription

0 – 99	Value
-1	Value

Parameter 8: BASIC command value sent to 2nd Association Group on Off event

This is the BASIC command value sent in case of Off event.
Size: 1 Byte, Default Value: 0

SettingDescription

0 – 99	Value
-1	Value

Parameter 9: Time Delay of Off command frame

Off command is sent after a delay defined in this parameter.
Size: 2 Byte, Default Value: 0

SettingDescription

0 – 32400	seconds

Technical Data

Hardware Platform	ZM5101
Device Type	Notification Sensor
Network Operation	Reporting Sleeping Slave
Firmware Version	HW: 1 FW: 1.00
Z-Wave Version	6.81.01
Certification ID	ZC10-19056505
Z-Wave Product Id	0x0154.0x0004.0x0007
Supported Notification Types	Access ControlHome SecurityPower Management
Sensors	Open/Closed (Binary)
Color	White
Firmware Updatable	Updatable by Consumer by RF
Security V2	S2_UNAUTHENTICATED
Frequency	XXfrequency
Maximum transmission power	XXantenna

Supported Command Classes

- Association Grp Info
- Association V2
- Battery
- Central Scene V3
- Configuration
- Device Reset Locally

- Firmware Update Md V4
- Manufacturer Specific V2
- Multi Channel Association V3
- Notification V8
- Powerlevel
- Security 2
- Sensor Binary V2
- Supervision
- Transport Service V2
- Version V3
- Wake Up V2
- Zwaveplus Info V2

Explanation of Z-Wave specific terms

- **Controller** — is a Z-Wave device with capabilities to manage the network. Controllers are typically Gateways,Remote Controls or battery operated wall controllers.
- **Slave** — is a Z-Wave device without capabilities to manage the network. Slaves can be sensors, actuators and even remote controls.
- **Primary Controller** — is the central organizer of the network. It must be a controller. There can be only one primary controller in a Z-Wave network.
- **Inclusion** — is the process of adding new Z-Wave devices into a network.
- **Exclusion** — is the process of removing Z-Wave devices from the network.
- **Association** — is a control relationship between a controlling device and a controlled device.
- **Wakeup Notification** — is a special wireless message issued by a Z-Wave device to announces that is able to communicate.
- **Node Information Frame** — is a special wireless message issued by a Z-Wave device to announce its capabilities and functions.