Vision Security Motion Detector (with Temperature Sensor) ZP3102EU-5 Manual

Contents

Vision

Motion Detector (with Temperature Sensor)

SKU: ZP3102EU-5

Quickstart

This is a

Alarm Sensor
for
CEPT (Europe).

To run this device please connect it to your mains power supply.

To add this device to your network execute the following action:
Put the Z-Wave Interface Controller into ‘inclusion’ mode, and follow its instructions to add the ZP3102 to your Z-Wave network. For a successful inclusion, it is suggested to have the sensor and your Z-Wave controller about one meter apart.Press the Program Switch of the ZP3102 (refer to the manual for the location of the program switch) ready the ZP3102 for inclusion into the Z-Wave network.If inclusion does not take place or is unsuccessful within 20 seconds, the ZP3102 will go to sleep; if this happens, simply repeat pressing the program switch to try again.

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

The ZP3102 is a Z-Wave enabled motion detector and temperature sensor.The motion detector has 120 degrees of horizontal visibility and 60 degrees of vertical visibility.The temperature sensor that is built in to the ZP3102 is capable of reporting in both Celsius and Fahrenheit scales, and may be queried for the temperature and it will report it automatically when it detects changes.The sensor is battery operated and includes the ability to report the battery level and will transmit an alert signal if the battery assumes a critically low level.The ZP3102 is future-proofed by also supporting the ability to have its firmware updated over the Z-Wave network.

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.

Removing the rear cover to wake up the device.Press Program Switch 10 times within 10 seconds, ZP3102 will go back to factory default. (This is to be used only in the case of the primary controller being inoperable or otherwise unavailable.)

Safety Warning for Mains Powered Devices

ATTENTION: only authorized technicians under consideration of the country-specific installation guidelines/norms may do works with mains power. Prior to the assembly of the product, the voltage network has to be switched off and ensured against re-switching.

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

Put the Z-Wave Interface Controller into ‘inclusion’ mode, and follow its instructions to add the ZP3102 to your Z-Wave network. For a successful inclusion, it is suggested to have the sensor and your Z-Wave controller about one meter apart.Press the Program Switch of the ZP3102 (refer to the manual for the location of the program switch) ready the ZP3102 for inclusion into the Z-Wave network.If inclusion does not take place or is unsuccessful within 20 seconds, the ZP3102 will go to sleep; if this happens, simply repeat pressing the program switch to try again.

Exclusion

Put the Z-Wave Interface Controller into exclusion mode, and following its instruction to delete the ZP3102 to your Z-Wave network.Press the Program Switch of ZP3102 once to be excluded. The LED on the ZP3102 should start to flash.

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:

Remove the rear cover to wake up the device, or set the wake up interval time from 10 minutes to 1 week.The battery will be drained quickly if you fail to replace the cover after using that method to wake up 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

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: Retriggering Time

User could set up the retriggering time from 1 ~ 255 minutes using values 0x00 to 0xFF (-128 to 127).
Size: 1 Byte, Default Value: 3

SettingDescription

1 – 255	Retriggering Time

Parameter 2: Temperature Scale

User could choose the temperature reported scale by following:0x00 – Celsius0x01 – Fahrenheit
Size: 1 Byte, Default Value: 0

SettingDescription

0 – 1	Temperature type

Parameter 3: Infrared sensor sensitivity

Infrared sensor sensitivity adjustment:1 = most sensitive 7 = most insensitive
Size: 1 Byte, Default Value: 4

SettingDescription

1 – 7	Sensitivity Adjustment

Technical Data

Hardware Platform	ZM5202
Device Type	Notification Sensor
Network Operation	Reporting Sleeping Slave
Firmware Version	02
Z-Wave Version	6.51.02
Certification ID	ZC10-14100005
Z-Wave Product Id	0x0109.0x2002.0x0205
Frequency	XXfrequency
Maximum transmission power	XXantenna

Controlled Command Classes

- Basic

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.