



Vision Security 4 in 1 Door Sensor ZD2301EU-5 Manual

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Vision

4 in 1 Door Sensor

SKU: ZD2301EU-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:

4.For Inclusion in (adding to) a network: Put the Z-Wave Interface Controller into inclusion mode, and following its instruction to add the ZD2301 to your controller. To get in the inclusion mode, the distance between sensor and controller is suggested to be in one meter. Press the program switch of ZD2301 for sending the NIF.After sending NIF, Z-Wave will send the auto inclusion; otherwise, ZD2301 will go to sleep after 20 seconds.

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

Visions wireless 4 in 1 Multi-Sensor (door window contact sensor, humidity sensor, temperature sensor, and light sensor) of the home security device. This sensor is a Z-Wave enabled device two-way (interoperable, RF mesh networking technology) and is fully compatible with any Z-Wave enabled network and its security framework. Every main powered Z-Wave enabled device acts as a signal repeater and multiple devices result in more possible transmission routes which helps eliminate RF dead-spots. This door sensor sends Z-Wave signal when door or window is opened and closed or humidity, temperature, luminous change. When the device is secure included into Z-Wave network, above communication will be encrypted. Security enabled Z-Wave controller must be used to fully utilize the product.

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.

Factory Default Reset: *Open the rear cover to send the Alarm Report and then press the program switch 10 times in 10 seconds, ZD2301 will send the Device Reset Locally command and reset to the factory default.

*Please use this procedure only in the event that the network primary controller is missing or otherwise inoperable.

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

4.For Inclusion in (adding to) a network: Put the Z-Wave Interface Controller into inclusion mode, and following its instruction to add the ZD2301 to your controller. To get in the inclusion mode, the distance between sensor and controller is suggested to be in one meter. Press the program switch of ZD2301 for sending the NIF. After sending NIF, Z-Wave will send the auto inclusion; otherwise, ZD2301 will go to sleep after 20 seconds.

Exclusion

5.For Exclusion from (removing from) a network: Put the Z-Wave Interface Controller into exclusion mode, and following its instruction to delete the ZD2301 from your controller. Press the program switch of ZD2301 for 1 second at least to be excluded. Note: All user and network settings will be cleared and the device reset to factory defaults when the device is excluded.

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:

Awake Mode: Press the Program SW, the LED will flash one time and ZD2301 will send Wake Up Notification after 5 seconds. If ZD2301 received Wake Up No More Information command then the ZD2301 will go to sleep or it will wait 10 seconds then go to sleep. It will precede all the commands after sending the Wake Up Notification

Quick trouble shooting

Here are a few hints for network installation if things don't 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. Don't poll FLIRS devices.
6. Make sure to have enough mains powered device to benefit from the meshing

Association – one device controls another 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, typically a 'Basic Set' Command.

Association Groups:

Group Number Maximum Nodes Description

1	5	Z-Wave Plus Lifeline Lifeline group used command : Notification Report, Device Reset Locally.
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Technical Data

Hardware Platform	ZM5202
Device Type	Notification Sensor
Network Operation	Reporting Sleeping Slave
Firmware Version	02
Z-Wave Version	6.51.06
Certification ID	ZC10-15110007
Z-Wave Product Id	0x0109.0x201F.0x1F20
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 announce that it is able to communicate.
- **Node Information Frame** — is a special wireless message issued by a Z-Wave device to announce its capabilities and functions.