VIS_ZF5201
Z-Wave Flood-Sensor

Firmware Version : 14.1

Quick Start

S This device is a Z-Wave Sensor. Inclusion, Exclusion and wakeup are confirmed by one second clicking the program switch inside the case.

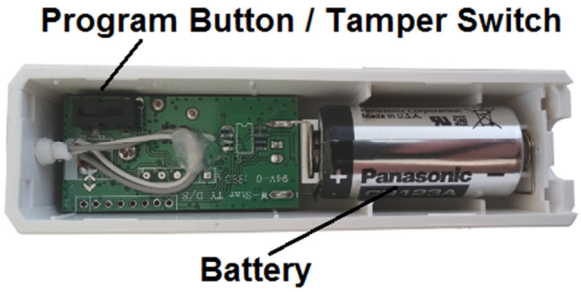
Please refer to the chapters below for detailed information about all aspects of the products usage.

Product description

This sensor monitors leakage and sends an alarm when flooding or leakage is detected. The sensing device can be away up to 2 m from the main device. The unit can be mounted on every flat surface. The installation can be done with screws or double-sided tape.

The device is a battery-powered device, which is in non-operating state unless an action is detected. After a programmable sleeping time the device wakes up and sends status information. After this the unit goes back to non-operating state. The unit will sends a warning to the Z-Wave controller, when batteries need to be replaced. The units send information to a controller or any other associated Z-Wave device. The device has a tamper switch which sends an alarm to the controller when it will be opened.

Installation Guidelines



- Open the Sensor's casing by unscrewing the battery cover.
- Put the CR123A battery in the battery compartment according to the marking.
- The LED will start to flash slowly, which means the sensor in not included into a Z-Wave network.
- Bring your main controller into Inclusion mode.
- Press the program switch inside the case for at least 1 second.

- Refit the battery cover with the fixing screw.
- For mounting use adhesive tape or mounting screws.

NOTE: A clean smooth surface is required to mount the Flood Sensor securely. The length of flood sensor cable is 2 meters. If the cable is too long, roll up the cable and fasten it by twist ties. The transceiver should be placed as high up as possible on the wall to improve communication and to prevent it from coming into contact with water in case of flooding.

Behavior within the Z-Wave network

I On factory default the device does not belong to any Z-Wave network. The device needs to join an existing wireless network to communicate with the devices of this network. This process is called **Inclusion**. Devices can also leave a network. This process is called **Exclusion**. Both processes are initiated by the primary controller of the Z-Wave network. This controller will be turned into exclusion respective inclusion mode. Please refer to your primary controllers manual on how to turn your controller into inclusion or exclusion mode. Only if the primary controller is in inclusion or exclusion mode, this device can join or leave the network. Leaving the network - i.e. being excluded - sets the device back to factory default.

If the device already belongs to a network, follow the exclusion process before including it in your network. Otherwise inclusion of this device will fail. If the controller being included was a primary controller, it has to be reset first.

Make sure that your Z-Wave Controller is in the Inclusion-/Exclusion-Mode. Click one second on the program switch inside the device to confirm the process.

Operating the device

1. When water is detected, the sensor transmits radio signal to controller.
2. In normal operation the LED in the device will not light.
3. If the cover of the device is removed, the tamper switch will send a signal according the status, the LED will go solid. The sensor will go to wake up, when it is opened.

Wakeup Intervals - how to communicate with the device?

W 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.

Click one second on the program switch inside the device or a detected action by the sensor will wake up the device and keep it awake.

It is possible to set the node ID to 255 to send wakeup notifications as broadcast. In this mode device takes more time to go to sleep and drains battery faster, but can notify all it's direct neighbors about a wakeup.

Node Information Frame

NI The Node Information Frame is the business card of a Z-Wave device. It contains information about the device type and the technical capabilities. The inclusion and exclusion of the device is confirmed by sending out a Node Information Frame. Beside this it may be needed for certain network operations to send out a Node Information Frame.

Click one second on the program switch inside the device or a detected action by the sensor sends a Node Information Frame.

Associations

A 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 a common wireless command.

Association Groups:

1 Flood detected (max. nodes in group: 5)

Technical Data

Battery Type	1 * CR123A
Explorer Frame Support	Yes
SDK	6.51.00 beta
Device Type	Slave with routing capabilities
Generic Device Class	Binary Switch
Specific Device Class	Specific Device Class not used
Routing	No
FLiRS	No
Firmware Version	14.1