Ecolink Intelligent Technology Z-Wave Plus WirelessFlood/Freeze Sensor FLF-ZWAVE5 Manual

Contents

Ecolink Intelligent Technology

Z-Wave Plus WirelessFlood/Freeze Sensor

SKU: FLF-ZWAVE5

Quickstart

This is a

Alarm Sensor
for
U.S. / **Canada** / **Mexico**.

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

To add this device to your network execute the following action:
The sensor must be added to a Z-Wave network prior to use. To include the sensor in a network both the sensor and the network controller must be in inclusion mode at the same time. Refer to the instructions provided by the manufacturer of your specific controller for details on initiating the controllers inclusion mode.1) Verify that the Z-wave Plus controller you are using is compatible with the Flood Freeze sensor.2) Either mount or move the Flood Freeze sensor as close as possible to the location the sensor will remain. See installation section below.3) Put your Z-wave Plus Controller into add (inclusion) mode.4) To add the sensor to an existing Z-Wave network, follow the directions to put your Z-Wave Controller into add (inclusion) mode. The Flood Freeze enters add and remove (inclusion/exclusion) when powered on (when battery is added). If the LED starts blinking continuously, the sensor has no node ID and was not successfully added, so start step C over again. Make sure to remove the battery for 10 seconds if adding to a z-wave network fails.5) If after 5 seconds the LED is not blinking, look on the Z-Wave controllers interface for feedback on whether the sensor was added successfully. If you do not see any feedback that the sensor was added, follow directions for removing the sensor from a Z-Wave network, and then try adding the sensor again. If you are still having problems, you may need to add additional Z-Wave listening devices in-between the controller and the sensor.

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

Z-Wave Plus WirelessFlood/Freeze Sensor.Product Overview-Z-Wave Plus enabled device which detects flood and freeze.-Reports tamper condition when cover is open.Product Specifications-For indoor use only-Operating frequency: 908.42 MHz-Operating temperature: 049C, 32120F (ambient temperature)-Operating humidity 5-95% non-condensing-Battery type required: 3V Lithium CR123A-Battery life approximately 5 years

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 reset is done on Exclusion."Please use this procedure only when 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

The sensor must be added to a Z-Wave network prior to use. To include the sensor in a network both the sensor and the network controller must be in inclusion mode at the same time. Refer to the instructions provided by the manufacturer of your specific controller for details on initiating the controllers inclusion mode.1) Verify that the Z-wave Plus controller you are using is compatible with the Flood Freeze sensor.2) Either mount or move the Flood Freeze sensor as close as possible to the location the sensor will remain. See installation section below.3) Put your Z-wave Plus Controller into add (inclusion) mode.4) To add the sensor to an existing Z-Wave network, follow the directions to put your Z-Wave Controller into add (inclusion) mode. The Flood Freeze enters add and remove (inclusion/exclusion) when powered on (when battery is added). If the LED starts blinking continuously, the sensor has no node ID and was not successfully added, so start step C over again. Make sure to remove the battery for 10 seconds if adding to a z-wave network fails.5) If after 5 seconds the LED is not blinking, look on the Z-Wave controllers interface for feedback on whether the sensor was added successfully. If you do not see any feedback that the sensor was added, follow directions for removing the sensor from a Z-Wave network, and then try adding the sensor again. If you are still having problems, you may need to add additional Z-Wave listening devices in-between the controller and the sensor.

Exclusion

1) Any sensor can be removed from any Z-Wave Plus controller. Follow the directions to put your Z-Wave Plus Controller into exclusion mode.2) Open the Flood Freeze case and remove the battery for 1 seconds. Replace the battery and the controller should remove the device from the Z-Wave network.

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:

The device is woken up when the case is removed and replaced.

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	1	Z-Wave Plus Lifeline

Technical Data

Hardware Platform	ZM5202
Device Type	Notification Sensor
Network Operation	Reporting Sleeping Slave
Firmware Version	255.0.0
Certification ID	ZC10-17085762
Z-Wave Product Id	0x014A.0x0005.0x0x10
Color	White
Frequency	XXfrequency
Maximum transmission power	XXantenna

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.

Manuals+,