



Wink Door/Window Sensor Wink D/W Sensor Manual

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The Wink logo, featuring the word "wink" in a bold, blue, lowercase sans-serif font. The letter "i" has a small blue dot above it.

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Wink

Wink Door/Window Sensor

SKU: Wink D/W Sensor





Quickstart

This is a

Alarm Sensor

for

U.S. / Canada / Mexico.

Please make sure the internal battery is fully charged.

To add this device to your network execute the following action:

Follow the instructions for your Z-Wave certified Controller to enter inclusion mode. When prompted by the Controller: 1. For proper inclusion, bring the Door/Window Sensor within range of your Controller. 2. Pull the battery tab on the backside of the sensor to power on, or remove then re-install the batteries. The LED light should blink.

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 Wink Door/Window Sensor is a Z-Wave Plus battery-powered device that detects when a door, window, or cabinet is opened and closed in your home, helping you monitor activity around your home to keep your family safe. Works with exterior and interior doors, garage doors, patio doors, windows, cabinets, drawers, and other openings. When your sensor detects activity, your Wink Hub or other Z-Wave Plus certified hub can send an alert to your smartphone, set off an alarm or chime, or trigger an automation such as turning on your lights. The Wink Door/Window Sensor offers an extra-long z-wave wireless range of up to 150 feet, and requires a Wink Hub or other Z-Wave Plus certified hub for operation. The Wink Door/Window sensor comes with a CR14250 battery and has a three-year battery life, and will send an alert to your smartphone via the hub when the device has low battery. Z-Wave Plus Certified Requires a Z-Wave Plus Certified Hub to operate Works with all Z-Wave Plus compatible networks Up to 150 feet range Three-Year Battery Life (CR14250 Battery included) Low Battery Indication Measurements in millimeters: 19 x 66.3 x 20.2 mm (sensor) and 10 x 39.55 x 10.5 mm (magnet)

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.

If needed, the Door/Window Sensor can be reset locally by following these steps. Only do this when your Z-Wave controller is disconnected or otherwise unreachable. Beware that resetting your device will disconnect it from the system: 1. Remove the SENSOR COVER and confirm that your Door/Window Sensor is powered up. 2. Press and hold the BUTTON for at least 10 seconds then release. A flashing light indicates a successful factory reset. 3. The Door/Window Sensors memory will be erased to factory settings.

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

Follow the instructions for your Z-Wave certified Controller to enter inclusion mode. When prompted by the Controller: 1. For proper inclusion, bring the Door/Window Sensor within range of your Controller. 2. Pull the battery tab on the backside of the sensor to power on, or remove then re-install the batteries. The LED light should blink.

Exclusion

Follow the instructions for your Z-Wave certified Controller to enter exclusion mode. When prompted by the Controller: 1. Press the sensor cover release button to remove the top cover, and be sure the sensor is powered on. 2. Press the Connect Button next to the battery quickly 3 times in a row. The LED indicator will flash five times indicating exclusion/disconnection

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:

Because the Door/Window Sensor is a battery powered device, it wakes up on regular intervals to give battery and other status updates to the controller, as well as to accept configuration settings from the controller (as opposed to always remaining online and draining its battery.) The device can be forced to wake up (to submit these reports or accept new settings immediately) by simply pressing and holding the BUTTON for two seconds.

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 Number	Maximum Nodes	Description
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1	5	Group 1 is the Lifeline group, which can hold five members, typically including the main Z-Wave controller. The Door/Window Sensor sends this group a Notification Report and a Binary Sensor Report when it is opened or closed. It also sends this group a Battery Report in response to Battery Get commands.
2	5	The Door/Window Sensor sends a Basic Set command to association Group 2 (or the Control Group) to directly trigger devices (like a light, chime, etc.) in response to events. Then, after a preset delay, a BASIC_SET(0x00) command is sent to reset the device (e.g. turn off the light.) The value of the Basic Set command (e.g. brightness of the lamp,) and the delay time before the BASIC_SET(0x00) is sent is configured using configuration parameters 1 and 2 respectively.
3	5	Group 3 supports up to 5 members and the Door/Window Sensor sends it a NOTIFICATION_REPORT when the door either opens or closes.
4	5	Group 4 supports up to 5 members and the Door/Window Sensor sends it a SENSOR_BINARY_REPORT when the door either opens or closes.

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 200 it 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: BASIC_SET Off Delay

This parameter sets the delay time from when the Door/Window Sensor sends the BASIC_SET command to Association Group 2 and when the BASIC_SET(0) is sent. It accepts a value up to 65535, in seconds.

Size: 2 Byte, Default Value: 30

SettingDescription

1 – 65535	in seconds
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Parameter 2: BASIC_SET Level

This parameter sets the value sent by the BASIC_SET command to Association Group 2 (for more information, see Association Groups.)

Size: 1 Byte, Default Value: 99

SettingDescription

0	Off/Cancel Alarm/Etc.
1 – 99	Dim Level (for Multilevel Switch)
255	On (for Binary Switch)

Technical Data

Hardware Platform	ZM5202
Device Type	Notification Sensor
Network Operation	Reporting Sleeping Slave
Firmware Version	HW: 65 FW: 3.61
Z-Wave Version	6.51.06
Certification ID	ZC10-17075685
Z-Wave Product Id	0x017F.0x0100.0x0001
Supported Notification Types	Access Control
Sensors	Open/Closed (Binary)
Color	White
Frequency	XXfrequency
Maximum transmission power	XXantenna

Supported Command Classes

- Association Grp Info
- Association V2
- Battery
- Configuration
- Device Reset Locally
- Manufacturer Specific
- Notification V4
- Powerlevel
- Sensor Binary V2
- Version V2
- Wake Up V2
- Zwaveplus Info V2

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.