Zooz Z-Wave Plus On/Off Toggle Switch ZEN23 Manual

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Zooz

Zooz Z-Wave Plus On/Off Toggle Switch

SKU: ZEN23

Quickstart

This is a

On/Off Power Switch
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:
1. Bring your Z-Wave gateway hub or controller within direct range of the switch2. Put your Z-Wave controller in inclusion mode3. Toggle the switch up and down quickly 3 times to finalize the inclusion process4. A new on/off device should appear on your controller's device listTroubleshooting Tips:If you are unable to include the Toggle Switch to your controller, please try one of the following:- Bring the controller closer to your Z-Wave switch or use a hand-held secondary controller for inclusion- Toggle your Z-Wave switch quicker 4 or 5 times once you put the controller in the inclusion mode to ensure the command has gone through- Put your controller in the EXCLUSION mode and toggle the switch quickly 3 times, then try adding it to your network 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

FEATURES- Manual or remote on/off control from your mobile device or computer (when included to a Z-Wave gateway controller)- Z-Wave Plus with improved 500 chip for faster and safer wireless communication- Works with LED, CFL, and incandescent bulbs (minimum 15Watts on load required)- Based on simple and universal binary switch command class – supported by most Z-Wave controllers- May be associated and grouped with other Z-Wave devices for advanced home automation- Built-in Z-Wave signal repeater for a stronger and more reliable networkSPECIFICATIONSModel Number: ZEN23Z-Wave Signal Frequency: 908.42 MHzPower: 120 VAC, 60 HzMaximum Loads: 960W Incandescent, 1800W (15A) Resistive,HP MotorMinimum Load: 15W for LED and CFL bulbsRange: Up to 100 feet line of sight Operating Temperature: 32-104 F (0-40 C)Installation and Use: Indoor only

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.

The Toggle Switch will be reset to factory defaults only by exclusion using a Z-Wave controller. You may use any certified Z-Wave controller to exclude and reset the switch. This device may not be reset manually when the networks primary controller is missing or otherwise inoperable. NOTE: All previously recorded activity and custom settings will be erased from the devices memory.

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

1. Bring your Z-Wave gateway hub or controller within direct range of the switch2. Put your Z-Wave controller in inclusion mode3. Toggle the switch up and down quickly 3 times to finalize the inclusion process4. A new on/off device should appear on your controller’s device listTroubleshooting Tips:If you are unable to include the Toggle Switch to your controller, please try one of the following:- Bring the controller closer to your Z-Wave switch or use a hand-held secondary controller for inclusion- Toggle your Z-Wave switch quicker 4 or 5 times once you put the controller in the inclusion mode to ensure the command has gone through- Put your controller in the EXCLUSION mode and toggle the switch quickly 3 times, then try adding it to your network again

Exclusion

1. Bring your Z-Wave gateway hub or controller within direct range of the switch2. Put your Z-Wave controller in exclusion mode3. Toggle the switch up and down quickly 3 times to complete the exclusion process4. The device should disappear from your controller’s device listPlease repeat the process following all steps carefully if the first attempt is unsuccessful

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: Toggle Control

Use it to change between 2 control modes. Mode 1 will turn the light on when you toggle the switch up, and turn it off when you toggle the switch down. Mode 2 will turn the light on when you toggle the switch down, and turn it off when you toggle the switch up.
Size: 1 Byte, Default Value: 0

SettingDescription

0	Mode 1 (up for on, down for off)
1	Mode 2 (down for on, up for off)

Technical Data

Hardware Platform	ZM5202
Device Type	On/Off Power Switch
Network Operation	Always On Slave
Firmware Version	HW: 1 FW: 20.16
Z-Wave Version	6.51.07
Certification ID	ZC10-16115307
Z-Wave Product Id	0x015D.0x0112.0x251C
Neutral Wire Required	ok
Switch Type	Toggle
Electric Load Type	FluorescentIncandescentLED
Color	White
Frequency	XXfrequency
Maximum transmission power	XXantenna

Supported Command Classes

- Association Grp Info
- Association V2
- Basic
- Device Reset Locally
- Manufacturer Specific V2
- Powerlevel
- Switch All
- Switch Binary
- Version V2
- Zwaveplus Info V2

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.