Ness Z-Wave Single Button ZU-116011 Manual

Contents

Ness

Ness Z-Wave Single Button

SKU: ZU-116011

ZWave+

Security V2

Quickstart

This is a

secure
Central Scene DT
for
.

Please make sure the internal battery is fully charged.

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 Ness Z-Wave Single Button (ZWSB) is a simple Z-Wave scene controller that allows you to control devices through the Z-Wave network and run various scenes defined in your Z-Wave gateways.

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.

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.

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
1	5	
2	5	
3	5	

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: The command to 2nd association group

This parameter defines how the Basic Set commands send to the nodes listed in 2nd association group after a Key Pressed 1 time scene event has triggered. 0 – No Basic Set commands send; 1 – Basic Set ON/OFF alternately; 2 – Basic Set ON with delay off; 3 – Basic Set OFF.
Size: 1 Byte, Default Value: 1

Setting	Description
0	0

Parameter 2: The Basic Set OFF Delay

The period of time in seconds to send Basic Set OFF command to Association Group 2 after BASIC Set ON command has reported. This parameter take affected only the option 2 has been selected in Configuration Parameter 1. 10 – disable BASIC Set OFF report; Time in seconds to send BASIC Set OFF command.
Size: 2 Byte, Default Value: 10

Setting	Description
0	0

Parameter 3: The Key Held Down Duration

This parameter defines the duration that the key need to be pressed and held down to trigger the Key Held Down Scene event. The value is in seconds.
Size: 1 Byte, Default Value: 2

Setting	Description
0	0

Parameter 4: The commands to 3rd association group

This parameter defines how the Start Level Change/the Stop Level Change commands send to the nodes listed in 3rd association group. 0 – No any Start Level Change and Stop Level Change commands send; 1 – Send the Start Level Change/the Stop Level Change commands when the Key Held Down/the Key Released scene event has triggered; 2 – Send Start Level Change command when the Key Held Down. It does not sent the Stop Level Change command when the Key Released.
Size: 1 Byte, Default Value: 1

Setting	Description
0	0

Parameter 5: The duration of multilevel start level change

This parameter defines the duration in Switch Multilevel Start Level Change command. The value is in second. 0 – Instantly transition from the current value to the new target value; 1 ~ 120 – The time transition should take from the current value to the new target value.
Size: 1 Byte, Default Value: 2

Setting	Description
0	0

Parameter 6: Low battery setting

Report battery low warning message when battery level reaches this value in percentage. Range: 10~50 (10%~50%); The battery level range: 100% – 3V; 0% – 1.8V.
Size: 1 Byte, Default Value: 10

Setting	Description
0	0

Parameter 7: Battery Scheduled Report Interval

The battery level scheduled report interval time is based on every 30 minutes per kick. The value N related to the time in minutes is N x 30 minutes. Range: 0~120. Default: 12 (12×30 =360 minutes). Value = 0 – Disable Battery level scheduled report.
Size: 1 Byte, Default Value: 12

Setting	Description
0	0

Technical Data

Hardware Platform	ZGM130S037HGN2 / ZGM130S037HGN1
Device Type	Central Scene DT
Network Operation	Reporting Sleeping Slave
Firmware Version	HW: 01 FW: 01.01
Z-Wave Version	7.16.3
Certification ID	ZC14-22100153
Z-Wave Product Id	0x0189.0x0104.0x0601
Color	White
Switch Type	Push Button
Security V2	S2_UNAUTHENTICATED ,S2_AUTHENTICATED
Frequency	XXfrequency
Maximum transmission power	XXantenna

Supported Command Classes

- Application Status
- Association Grp Info V3
- Association V2
- Battery
- Central Scene V3
- Configuration V4
- Device Reset Locally
- Firmware Update Md V5
- Indicator V3
- Manufacturer Specific V2
- Multi Channel Association V3
- Powerlevel

- Security
- Security 2
- Supervision
- Transport Service V2
- Version V3
- Wake Up 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.

References

- User Manual