widom Smart Double Switch N 7 WDSN700 Manual

Contents

widom

Smart Double Switch N 7

SKU: WDSN700

ZWave+

Security V2

Quickstart

This is a
secure
Binary Switch DT
for
.

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

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

Smart Double Switch 7 is an ON/OFF control device designed to independently control two separate loads, suited for being controlled by both remote and local switches.

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.

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.

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	0	
2	8	
3	8	
4	8	
5	8	
6	8	
7	8	

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: IN1_TYPE

Define the input 1 type. (1: button, 2: toggle switch, 0: no switch input)
Size: 1 Byte, Default Value: 1

Setting	Description
0	0

Parameter 10: IN1_TOGGLE

Define which events on the input 1 toggle output 1. (1: 1 click , 2: 2 clicks, 4: 3 clicks, 8: Hold down, 16: Up)
Size: 1 Byte, Default Value: 15

Setting	Description
0	0

Parameter 11: IN1_ON_EXCLUSION

Define which input 1 event do not switchOn output 1. (1: 1 click , 2: 2 clicks, 4: 3 clicks, 8: Hold down, 16: Up)
Size: 1 Byte, Default Value: 0

Setting	Description
0	0

Parameter 12: IN1_OFF_EXCLUSION

Define which input 1 event do not switchOff output 1. (1: 1 click , 2: 2 clicks, 4: 3 clicks, 8: Hold down, 16: Up)
Size: 1 Byte, Default Value: 0

Setting	Description
0	0

Parameter 15: IN2_TOGGLE

Define which events on the input 2 toggle output 2. (1: 1 click , 2: 2 clicks, 4: 3 clicks, 8: Hold down, 16: Up)
Size: 1 Byte, Default Value: 15

Setting	Description
0	0

Parameter 16: IN2_ON_EXCLUSION

Define which input 2 event do not switchOn output 2. (1: 1 click , 2: 2 clicks, 4: 3 clicks, 8: Hold down, 16: Up)
Size: 1 Byte, Default Value: 0

Setting	Description
0	0

Parameter 17: IN2_OFF_EXCLUSION

Define which input 2 event do not witchOff output 2. (1: 1 click , 2: 2 clicks, 4: 3 clicks, 8: Hold down, 16: Up)
Size: 1 Byte, Default Value: 0

Setting	Description
0	0

Parameter 2: IN2_TYPE

Define the input 2 type. (1: button, 2: toggle switch, 0: no switch input)
Size: 1 Byte, Default Value: 1

Setting	Description
0	0

Parameter 21: OUT1_TYPE

Define the output 1 type. (0: direct load control or normally Open relay, 1: normally Closed relay)
Size: 1 Byte, Default Value: 0

Setting	Description
0	0

Parameter 22: OUT2_TYPE

Define the output 2 type. (0: direct load control or normally Open relay, 1: normally Closed relay)
Size: 1 Byte, Default Value: 0

Setting	Description
0	0

Parameter 23: STARTUP_OUT1

Define the output level on startup (0: OFF, 1: ON, 2: Previous status, 3: equal to input)
Size: 1 Byte, Default Value: 2

Setting	Description
0	0

Parameter 24: STARTUP_OUT2

Define the output level on startup (0: OFF, 1: ON, 2: Previous status, 3: equal to input)
Size: 1 Byte, Default Value: 2

Setting	Description
0	0

Parameter 25: LOCAL_SCENE

Define the Local scene configuration. (0: independent channel, 1: never both on, 2: sequencing)
Size: 1 Byte, Default Value: 0

Setting	Description
0	0

Parameter 30: TIMER_CH1_SETUP

EP1 output events that start timer (1: 1 click , 2: 2 clicks, 4: 3 clicks, 8: Hold down, 16: Up, 32: Network, 64: sys)
Size: 1 Byte, Default Value: 0

Setting	Description
0	0

Parameter 31: OFF_EP1_TIMEOUT

Time in tenth of second after which the output on EP1 will be switched Off.
Size: 4 Byte, Default Value: 0

Setting	Description
0	0

Parameter 32: ON_EP1_TIMEOUT

Time in tenth of second after which the output on EP1 will be switched On.
Size: 4 Byte, Default Value: 0

Setting	Description
0	0

Parameter 33: TIMER_CH2_SETUP

EP2 output Events that start timer (1: 1 click , 2: 2 clicks, 4: 3 clicks, 8: Hold down, 16: Up, 32: Network, 64: sys)
Size: 1 Byte, Default Value: 0

Setting	Description
0	0

Parameter 34: OFF_EP2_TIMEOUT

Time in tenth of second after which the output on EP2 will be switched Off.
Size: 4 Byte, Default Value: 0

Setting	Description
0	0

Parameter 35: ON_EP2_TIMEOUT

Time in tenth of second after which the output on EP2 will be switched On.
Size: 4 Byte, Default Value: 0

Setting	Description
0	0

Parameter 40: G1_EP1_SETUP

Input 1 events that control EP1-G1 association group. (1: 1 click , 2: 2 clicks, 4: 3 clicks, 8: Hold down, 16: Up)
Size: 1 Byte, Default Value: 1

Setting	Description
0	0

Parameter 41: G2_EP1_SETUP

Input 1 events that control EP1-G2 association group. (1: 1 click , 2: 2 clicks, 4: 3 clicks, 8: Hold down, 16: Up)
Size: 1 Byte, Default Value: 2

Setting	Description
0	0

Parameter 42: G1_EP2_SETUP

Input 2 events that control EP2-G1 association group. (1: 1 click , 2: 2 clicks, 4: 3 clicks, 8: Hold down, 16: Up)
Size: 1 Byte, Default Value: 1

Setting	Description
0	0

Parameter 43: G2_EP2_SETUP

Input 2 events that control EP2-G2 association group. (1: 1 click , 2: 2 clicks, 4: 3 clicks, 8: Hold down, 16: Up)
Size: 1 Byte, Default Value: 2

Setting	Description
0	0

Parameter 44: G1_EP1_ASS_VALUE

Value used to control EP1-G1 association group. (0-99: specific value, 100: ON, 101: propagate, 102: toggle remote)
Size: 1 Byte, Default Value: 101

Setting	Description
0	0

Parameter 45: G2_EP1_ASS_VALUE

Value used to control EP1-G2 association group. (0-99: specific value, 100: ON, 101: propagate, 102: toggle remote)
Size: 1 Byte, Default Value: 101

Setting	Description
0	0

Parameter 46: G1_EP2_ASS_VALUE

Value used to control EP2-G1 association group. (0-99: specific value, 100: ON, 101: propagate, 102: toggle remote)
Size: 1 Byte, Default Value: 101

Setting	Description
0	0

Parameter 47: G2_EP2_ASS_VALUE

Value used to control EP2-G2 association group. (0-99: specific value, 100: ON, 101: propagate, 102: toggle remote)
Size: 1 Byte, Default Value: 101

Setting	Description
0	0

Parameter 60: SCENE_SETUP

Define event sent by central scene notification. (0:none, 1:1 click , 2:2 clicks, 4:3 clicks, 8: Hold down, 16: Up)

Size: 1 Byte, Default Value: 31

Setting	Description
0	0

Parameter 70: E_REPORT_DELAY

Time in minutes after which the next Energy report will be sent.
Size: 1 Byte, Default Value: 10

Setting	Description
0	0

Parameter 71: W_REPORT_DELAY

Time in minutes after which the next Power report will be sent.
Size: 1 Byte, Default Value: 10

Setting	Description
0	0

Parameter 75: W_ISTANT_REPORT

The percentage change from the last sent report that trigger an new Power report.
Size: 1 Byte, Default Value: 30

Setting	Description
0	0

Technical Data

Hardware Platform	ZGM130S037HGN2 / ZGM130S037HGN1
Device Type	Binary Switch DT
Network Operation	Always On Slave
Firmware Version	HW: 01 FW: 02.01
Z-Wave Version	7.16.3
Certification ID	ZC14-22120173
Z-Wave Product Id	0x0149.0x0004.0x0005
Security V2	S2_UNAUTHENTICATED ,S2_AUTHENTICATED
Frequency	XXfrequency
Maximum transmission power	XXantenna

Supported Command Classes

- Application Status

- Association Grp Info V3
- Association V2
- Basic V2
- Switch Binary V2
- Central Scene V3
- Configuration V4
- Device Reset Locally
- Firmware Update Md V5
- Indicator V3
- Manufacturer Specific V2
- Meter V5
- Multi Channel Association V3
- Multi Channel V4
- Powerlevel
- Security 2
- Supervision
- Transport Service V2
- Version V3
- 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**