Widom WiDom Smart Plug WSP Manual

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Widom

WiDom Smart Plug

SKU: WSP

Quickstart

This is a
secure
On/Off Power Switch
for
CEPT (Europe).

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

To add this device to your network execute the following action:
Triple clicks on the integrated button

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

Smart Plug is able to detect overvoltage and/or overcurrent cases and through a multicolor LED can send alerts. Furthermore, it protects appliances from eventual overload. A very innovative design, which integrates a complex system that allows a precise energy consumption monitoring. The integration of these features in its very small size product, make it unique on the market.Alerts and visual feedback with RGB LEDAn RGB LED on the device provides visual feedback for overvoltage and / or overcurrent and overpower detection.Small size and innovative designThe WiDom Smart Plug has an elegant design and small size that allows a perfect integration in any home environment.Monitoring of energy consumptionWithin the WiDom Smart Plug is integrated a very precise energy consumption meter that allows you to monitor the consumption of the connected equipment.Simplified device inclusion and exclusionWiDom Smart Plug can be included in any Z-Wave network and work with Z-Wave devices from any other company. WiDom Smart Plug, used as a constantly powered node, will act as a signal repeater to increase network reliability. WiDom Smart Plug is compatible with all Z-Wave certified controllers.Associations and MulticlickWiDom Smart Plug can control, through association, other devices of the Z-Wave network in which is included, when an event of overcurrent, overvoltage or events on the Push Button occur. It is possible to activate a multiclick recognition, for example, you can check with a single click the load connected to the Smart Plug and double-click the associated devices.Zero crossing – Contact protection technologyTo reduce the electrical stress on the relay contacts and ensure a longer life, the open / closed switching of the device always occur when the

instantaneous value of voltage is 0.S2 SecurityThe Smart Roller Shutter uses a strong and secure S2 protection system, which provides advanced security features and eliminates the risk of hacking of devices.

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.

Inclusion

Triple clicks on the integrated button

Exclusion

Triple clicks on the integrated button.As soon as the device has been removed form the network it will be reset to the factory setting.

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	8	Z-Wave Plus Lifeline
2	8	Nodes belonging to this groups will be controlled by a basic set if over current event occur;
3	8	Nodes belonging to this groups will be controlled by a basic set if over voltage event occur;
4	8	Nodes belonging to this groups will be controlled by a basic set if the button receive one click
5	8	Nodes belonging to this groups will be controlled by a basic set if the button receive two clicks

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 200âit 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: Local load control

Defines which sequences of click control the local load.
Size: 1 Byte, Default Value: 3

SettingDescription

1	1 click turn ON/OFF the local load
2	2 clicks turn ON/OFF the local load
3	1 click or 2 clicks turn ON/OFF the local load

Parameter 10: Overcurrent Alarm Reset

Define how to reset the over-current alarm and breaks off the red blinking.
Size: 1 Byte, Default Value: 1

SettingDescription

0	Manual when the relay change its state through the Push Button
1	When the over-voltage event is terminated

Parameter 11: Level used to control the devices associated to group 2

Define how to control the devices associated to the overcurrent alarm.
Size: 1 Byte, Default Value: 0

SettingDescription

0	The associated devices are switched OFF
-1	The associated devices are switched ON
1 – 99	The associated devices (dimmer, roller shutters) are set to the indicated level

Parameter 2: Level used to control the devices associated to group 4 (

Defines how to control the devices associated to 1 click event.
Size: 1 Byte, Default Value: 100

SettingDescription

0	The associated devices are switched OFF
-1	The associated devices are switched ON
1 – 99	The associated devices (dimmer, roller shutters) are set to the indicated level
100	If the relay is ON/OFF, the associated devices are ON/OFF

Parameter 3: Level used to control the devices associated to group 5

Defines how to control the devices associated to 2 clicks event.
Size: 1 Byte, Default Value: 100

SettingDescription

0	The associated devices are switched OFF
-1	The associated devices are switched ON
1 – 99	The associated devices (dimmer, roller shutters) are set to the indicated level
100	If the relay is ON/OFF, the associated devices are ON/OFF

Parameter 4: Overvoltage level

Defines the voltage level (in Volts) beyond which an overvoltage event is identified and the overvoltage timer is activated. The timer is reset when the event ceases, i.e. when the voltage returns below the overvoltage level. As soon as an overvoltage event occurs, the LED starts a BLUE blinking. If the overvoltage event ceases before the overvoltage timer expires, the blue blinking is stopped, otherwise the alarm is generated and the blinking reset is established by parameter 6.
Size: 2 Byte, Default Value: 253

SettingDescription

110 – 260	Defines the overvoltage level (in Volts)

Parameter 5: Overvoltage Timer

Define the time (seconds) in which the voltage must persist above the overvoltage level so that an alarm is generated.
Size: 2 Byte, Default Value: 5

SettingDescription

1 – 3600	Overvoltage time interval (in seconds) after witch an alarm is generated

Parameter 6: Define how to reset the overvoltage alarm and breaks off the blue blinking.

Size: 1 Byte, Default Value: 0

SettingDescription

0	Manual when the relay change its state through the Push Button
1	When the overvoltage event is terminated

Parameter 7: Level used to control the devices associated to group 3

Define how to control the devices associated to the overvoltage alarm
Size: 1 Byte, Default Value: 0

SettingDescription

0	The associated devices are switched OFF
-1	The associated devices are switched ON
1 – 99	The associated devices (dimmer, roller shutters) are set to the indicated level

Parameter 8: Overcurrent level

Defines the current level (in Amps) beyond which an overcurrent event is identified and the overcurrent timer is activated. The timer is reset when the event ceases, i.e. when the current returns below the overcurrent level. As soon as an overcurrent event occurs, the led starts a red blinking. If the overcurrent event ceases before the overcurrent timer expires, the red blinking is stopped, otherwise the alarm is generated and the blinking reset is established by parameter 10.
Size: 1 Byte, Default Value: 12

SettingDescription

1 – 12	Defines the overcurrent level (in Amps)

Parameter 9: Overcurrent Timer

Define the time (seconds) in which the current must persist above the overcurrent level so that an alarm is generated and the relay is opened.
Size: 2 Byte, Default Value: 10

SettingDescription

1 – 3600	Overcurrent time interval (in seconds) after witch an alarm is generated

Technical Data

Hardware Platform	ZM5101
Device Type	On/Off Power Switch
Network Operation	Always On Slave
Firmware Version	HW: 255 FW: 0.02
Z-Wave Version	6.81.04
Certification ID	ZC10-19046462
Z-Wave Product Id	0x0149.0x1214.0x0700
Firmware Updatable	Updatable by Consumer by RF
Supported Meter Type	Electric Energy
Switch Type	Push Button
Security V2	S2_UNAUTHENTICATED
Frequency	XXfrequency
Maximum transmission power	XXantenna

Supported Command Classes

- Association Grp Info V2
- Association V2
- Basic V2
- Configuration
- Firmware Update Md V4
- Manufacturer Specific V2
- Meter V3
- Multi Channel Association V3
- Powerlevel
- Security
- Security 2
- Supervision
- Switch Binary
- Transport Service V2
- Version V2
- Zwaveplus Info V2

Controlled Command Classes

- Basic V2
- Supervision

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.