Smart Switch

User Manual

Introduction

Smart Meter switch allows controlling two independent loads both via Z-Wave wirelessly and locally utilizing a traditional wall switch. The switch is no longer directly connected to the load but acts as input device for the in wall switch that is controlling the load. And this device can calculate the total power consumption in time periods of day, month and year. Display the values of the measurements on the remote site.

Package Contents

Smart Switch	x 1
User Manual	x 1

Command Class

Smart Meter Switch Command Class Supported
ZWAVEPLUS_INFO_V2,
BASIC,
SWITCH_BINARY_V1,
METER_V3,
ASSOCIATION_V2,
ASSOCIATION_GRP_INFO_V1,
POWERLEVEL_V1,
VERSION_V2,
MANUFACTURER_SPECIFIC_V2,
NOTIFICATION_V4,
DEVICE_RESET_LOCALLY,
CONFIGURATION,
FIRMWARE_UPDATE_MD_V2

Detailed description of each command class
[ZWAVEPLUS INFO_V2 command class]
The Z-Wave Plus Info Get Command is used to get additional information of the Z-Wave Plus device in question.
[BASIC command class]
The Basic Command Class ensures a basic interoperability if no other command classes are shared by two devices. The Basic Command Class contains commands that can be used to control the basic functionality of a device.

Device Status	Description
0x00	Turn off the Device
0x01 ~ 0x63 or 0xFF	Turn on the Device

[SWITCH_BINARY_V1 command class]
The Binary Switch Command Class can be used to make binary switches. These Commands allow applications to set and get the status of a binary switch.

Binary Switch Status	Description
0x00	Turn off the Device
0x01 ~ 0x63 or 0xFF	Turn on the Device

[METER_V3 command class]
The Meter Command Class is intended for Z-Wave enabled devices capable of reporting energy measurements in addition to any main functionality or features e.g. an appliance module reporting the current consumption of the connected load. This command class is not intended for residential utility sub-metering such as a water meter counting total consumption.
[ASSOCIATION_V2 command class]
Association allows the Smart Switch to send instructions directly to the other devices using the Z-Wave network (not through the Main Controller)

GroupID	Name	Function
1 (0x01)	Lifeline	The Lifeline Group is reserved for communication with the main controller
2 (0x02)	ON/OFF control	BASIC_SET on/off (when the Device is turned on / off will Triggered), up to 5
3 (0x03)	Overload alarm	device can be set Notification triggered when overloaded), Up to 5 devices can be set

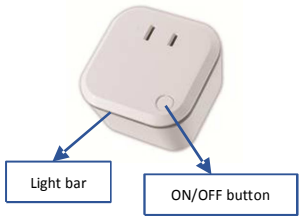
[ASSOCIATION_GRP_INFO_V1 command class]
The purpose of the Association Group Information (AGI) Command Class is to allow a device to report the capabilities of each association group supported by the device.
[POWERLEVEL_V1 command class]
The Powerlevel Command Class defines RF transmit power controlling Commands useful when installing or testing a network. The Commands makes it possible for supporting controllers to set/get the RF transmit power level of a node and test specific links between nodes with a specific RF transmit power level.
[VERSION_V2 command class]
The user can enquire the version of the unit using VERSION_GET command. It will return VERSION_REPORT Command.
[MANUFACTURER_SPECIFIC_V2 command class]
Manufacturer Specific Command Class, version 2 adds a set of commands to communicate unique identification, e.g. the serial number, of the product.
[NOTIFICATION_V4 command class]
When overload condition occurs, Notification is generated

Notification Type	Notification events
0x08 (Power Management)	0x08 (Over-load detected)

[DEVICE_RESET_LOCALLY command class]
The Device Reset Locally Notification Command is used to advertise that the device will be reset to default.
Press the button 3 times in 2 sec., and hold it for more than 3 sec.
Please use this procedure only when the network primary controller is missing or otherwise inoperable.

[CONFIGURATION command class]
With the Configuration Command Class it is possible to change the default factory settings in a device. This could for example be the dimming rate in a lighting dimmer device. When implementing this class in a controller it is RECOMMENDED to be able to set all parameters manually. Since the content of the configuration parameters are not standardized in the Z-Wave framework, it is the vendor's responsibility to document this functionality in the products user manual (or an installer manual).
[FIRMWARE_UPDATE_MD_V2 command class]
Support OTA(Over-The-Air) firmware update function.

Product Overview



Power Consumption Notification

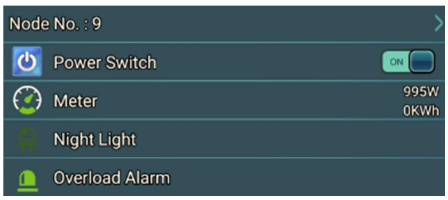
RGB LED

Cyan	Orange	Red
Under 500W	501~1000W	1001~1500W

Application Diagram

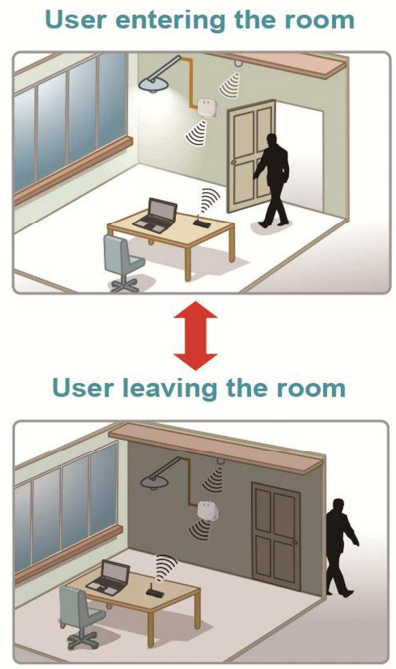
Energy Saving

- Smart Switch has power metering functionality.
- You can view the energy consumption of your home in the APP and use it to reduce your monthly bills.



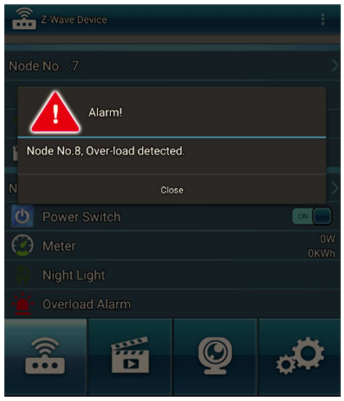
Scene Management

- Z-Butler APP provides the scene management. The device will turn on of the light switch buttons into scene trigger.



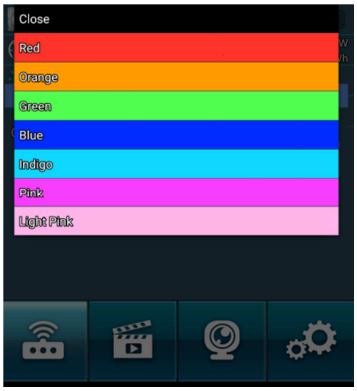
Over-Current Protection

- When the wattage exceeds the load of product, Smart Meter Switch will start overload protection mechanism, and this device will be automatically powered off.
- Z-Butler will receive a warning message notification.



Nightlight Function

- Smart Switch can be used as the nightlight. Choose the color according to your preference among the 7 colors we provided.
- The nightlight function provides a safe walkway for the user getting up in the midnight.



LED Indicator

LED Signal	Status
OFF	Plug not powered ON/ APP light OFF
Green LED Blink	Plug not paired
Blue LED Solid ON	Plug paired
	Switch status is ON

Button Function

Function	Operation
Switch (ON/OFF)	Press and hold for 3 sec. to turn ON or OFF the power. Open status: LED aperture indicator blue light solid ON. Close status: LED aperture indicator OFF
Include	Select “Add Z-Wave device” on APP, and press the button for 3 times to include the device. After successfully included, LED will be solid blue. Now the switch is ON.
Exclude	Select “Remove Z-Wave device” on APP, and press the button for 3 times to exclude the device. After successfully excluded, LED will be blinking green (1 time every 1 sec.) Now the switch is to be included.
Reset	Press the button 3 times in 2 sec., and hold it for more than 3 sec. If the device is successfully restored to the factory value, the LED aperture indicator will be blinking green (1 time every 1 sec.), clear all the buffer values, and restore to the unpaired status.
Over Load	Over 1501W: Relay interrupted, and the red light of the device continues to blink until manually push the button to release the red light blinking status. (APP displays Overload screen)

Specification

Smart Meter Switch	Specifications
Power	AC100~240V, 50/60Hz
Max Load	1500W
Power Consumption	0.5W
Indicator	RGB LED (Nightlight Function)
Button	Function: Inclusion/Exclusion/Reset
Protocol	Z-Wave Plus
Z-Wave Frequency	908.42/922.5 MHz
Data Rate	9.6kbps/40kbps/100kbps
Operation Temperature	0~40℃
Operation Range	Up to 100 feet
Dimension	58mm(L) x 58mm(W) x 35mm(D)

Advanced setting

Select **Smart Switch** device on APP, and enter the following value to configure the function

Parameter	Word Length	Value	Default Value	Description
1	2	5~1092	30	How often to send a meter report(minute)
2	1	0~1	0	Sets the night light mode 0:Turn off the night light 1:Turn on the night light
3	1	0~7	0	Set the night light color 0:none color 1:Red 2:Orange 3:Green 4:Blue 5:Indigo 6:Pink 7:Light Pink

Z-Wave Plus

This product can be included and operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers and/or other applications. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

Regulatory Compliance

PSE Caution

【禁止するもの及び危険性について説明文を記載する。】

【ラベルを使用者が貼る場合は、貼る必要性を記載する。】