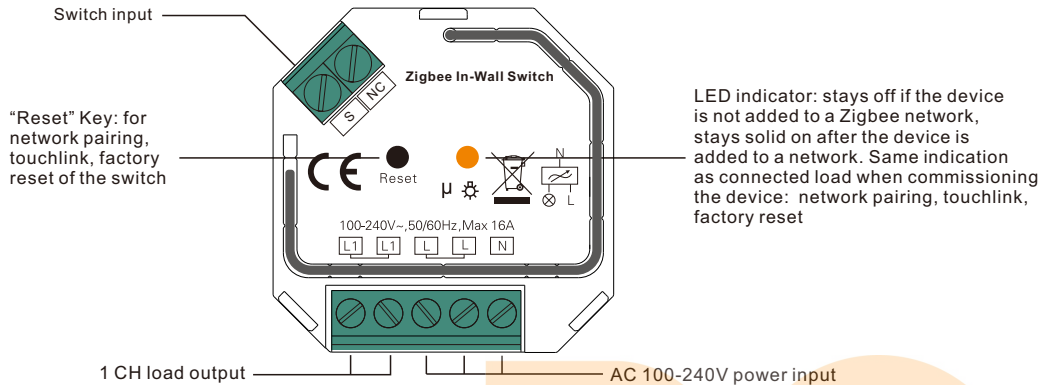# 16A ZigBee In-wall Switch

Important: Read All Instructions Prior to Installation

Function introduction

Switch input

"Reset" Key: for network pairing, touchlink, factory reset of the switch

Zigbee In-Wall Switch

100-240V~,50/60Hz,Max 16A

LED indicator: stays off if the device is not added to a Zigbee network, stays solid on after the device is added to a network. Same indication as connected load when commissioning the device: network pairing, touchlink, factory reset

1 CH load output

AC 100-240V power input

- ZigBee in-wall switch based on latest ZigBee 3.0 protocol
- 100-240VAC wide input and output voltage
- Supports resistive loads and capacitive loads
- 1 channel output, max. load 16A
- Input and output with screw terminals, safe and reliable
- Enables to control ON/OFF of connected load
- ZigBee end device that supports Touchlink commissioning
- Can directly pair to a compatible ZigBee remote via Touchlink without coordinator
- Supports self-forming zigbee network without coordinator and add other devices to the network
- Supports find and bind mode to bind a ZigBee remote
- Supports zigbee green power and can bind max. 20 zigbee green power switches
- Compatible with universal ZigBee gateway products
- Can be controlled by toggle on/off switches
- Active power and energy metering functionality
- Mini size, easy to be installed into a standard size wall box
- Radio frequency : 2.4GHz
- Waterproof grade: IP20

Safety & Warnings
- DO NOT install with power applied to device.
- DO NOT expose the device to moisture.

ZigBee Clusters the device supports are as follows:
Input Clusters
- 0x0000: Basic
- 0x0003: Identify
- 0x0004: Groups
- 0x0005: Scenes
- 0x0006: On/off
- 0x0702: Simple Metering
- 0x0b04: Electrical Measurement
- 0x0b05: Diagnostics

Output Clusters
- 0x0019: OTA

Operation

1.Do wiring according to connection diagram correctly.

2.This ZigBee device is a wireless receiver that communicates with a variety of ZigBee compatible systems. This receiver receives and is controlled by wireless radio signals from the compatible ZigBee system.

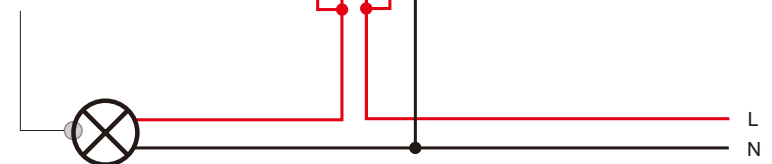#### 3.Zigbee Network Pairing through Coordinator or Hub (Added to a Zigbee Network)

Step 1: Remove the device from previous zigbee network if it has already been added to, otherwise pairing will fail. Please refer to the part "**Factory Reset Manually**".

Step 2: From your ZigBee Controller or hub interface, choose to add lighting device and enter Pairing mode as instructed by the controller.
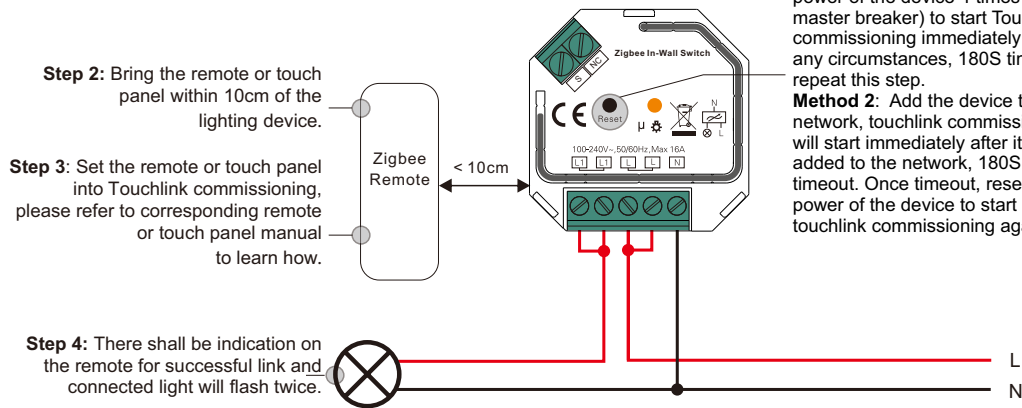
Step 4: Connected light will blink 5 times and then stay solid on, then the device will appear in your controller's menu and can be controlled through controller or hub interface.

Zigbee In-Wall Switch

100-240V~,50/60Hz,Max 16A
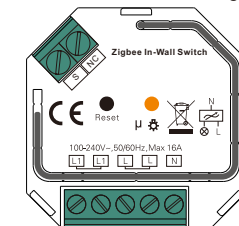
Step 3: Reset power of the device from master breaker to set it into network pairing mode (connected light flashes twice slowly), the network pairing mode will last until the device is added to a zigbee network.

Product Data

Input Voltage	Output Voltage	Output Current	Size(LxWxH)
100-240VAC	100-240VAC	16A max	45.5x45x20.3mm

Compatible Load Types			
Load Symbol	Load Type	Maximum Load	Remarks
	LED lamps with transformers	1220W @ 230V 580W @ 110V	Due to variety of LED lamp designs, maximum number of LED lamps is further dependent on power factor result when connected to switch.
	LED drivers	1220W @ 230V 580W @ 110V	Maximum permitted number of drivers is 1220W divided by driver nameplate power rating.
	Incandescent lighting, HV Halogen lamps	3680W @ 230V 1760W @ 110V	
	Low voltage halogen lighting with electronic transformers	1220W @ 230V 580W @ 110V	
	Electrical appliances such as television, refrigerator, water heating etc.	3680W @ 230V 1760W @ 110V	

Over Current Protection
- When load current is over 16.1A for over 10 seconds, the relay will be forced to off and protected.
- When load power is over 3700W for over 5 seconds, the relay will be forced to off and protected.

4. TouchLink to a Zigbee Remote

Step 1: Method 1: Short press "Reset" button 4 times (or reset power of the device 4 times from master breaker) to start Touchlink commissioning immediately under any circumstances, 180S timeout, repeat this step.

Method 2: Add the device to a network, touchlink commissioning will start immediately after it's added to the network, 180S timeout. Once timeout, reset power of the device to start touchlink commissioning again.

Step 2: Bring the remote or touch panel within 10cm of the lighting device.

Step 3: Set the remote or touch panel into Touchlink commissioning, please refer to corresponding remote or touch panel manual to learn how.

Zigbee Remote

< 10cm

Zigbee In-Wall Switch

100-240V~,50/60Hz,Max 16A

Step 4: There shall be indication on the remote for successful link and connected light will flash twice.

L
N

Note: 1) Directly TouchLink (both not added to a ZigBee network), each device can link with 1 remote.

2) TouchLink after both added to a ZigBee network, each device can link with max. 30 remotes.

3) To control by both gateway & remote, add remote and device to network first then TouchLink.

4) After TouchLink, the device can be controlled by the linked remotes.

5. Removed from a Zigbee Network through Coordinator or Hub Interface
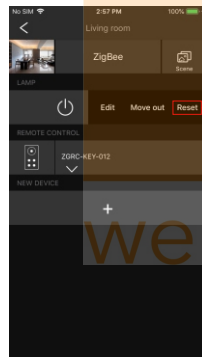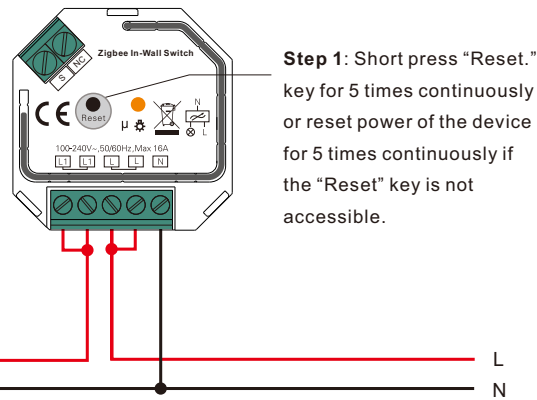
From your ZigBee controller or hub interface, choose to delete or reset the lighting device as instructed. The connected light blinks 3 times to indicate successful reset.

6. Factory Reset Manually

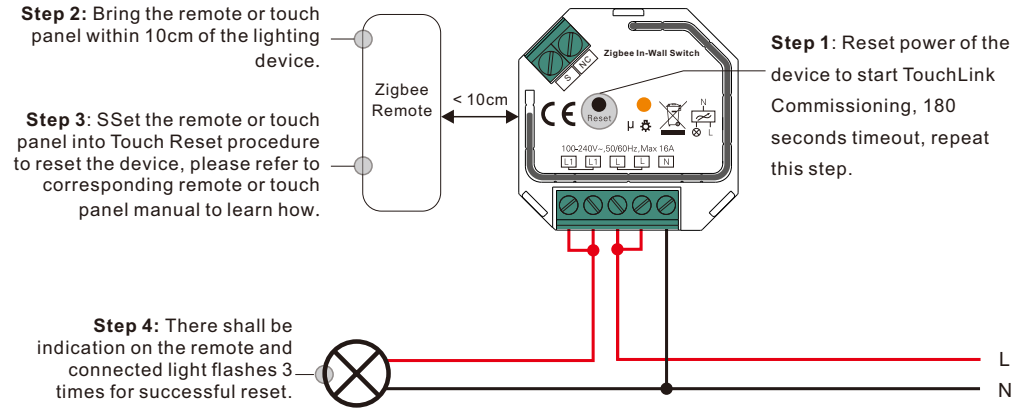**Note: 1) If the device is already at factory default setting, there is no indication when factory reset again .**

2) All configuration parameters will be reset after the device is reset or removed from the network.

Zigbee In-Wall Switch

100-240V~,50/60Hz,Max 16A

Step 1: Short press "Reset." key for 5 times continuously or reset power of the device for 5 times continuously if the "Reset" key is not accessible.

Step 2: Connected light will blink 3 times to indicate successful reset.

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7. Factory Reset through a Zigbee Remote (Touch Reset)
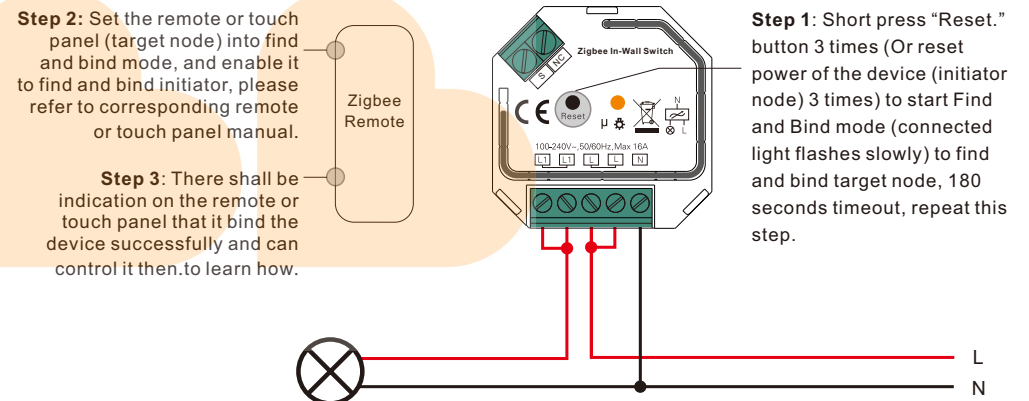
Note: Make sure the device already added to a network, the remote added to the same one or not added to any network.
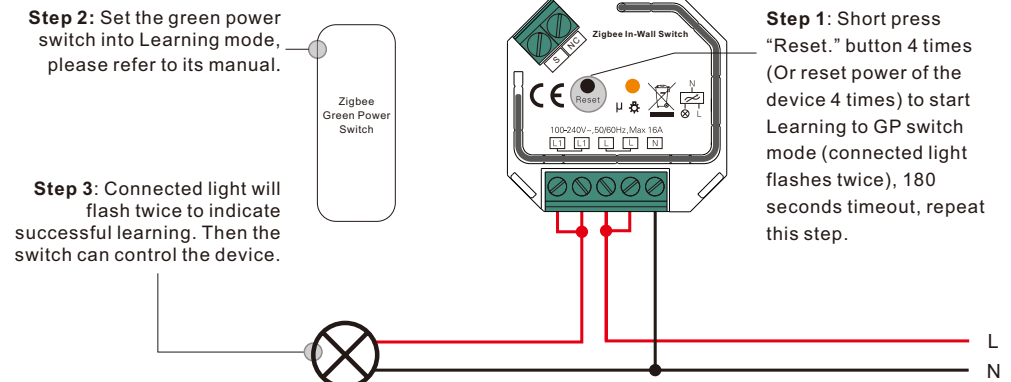
Step 2: Bring the remote or touch panel within 10cm of the lighting device.

Step 3: SSet the remote or touch panel into Touch Reset procedure to reset the device, please refer to corresponding remote or touch panel manual to learn how.

Zigbee Remote

< 10cm

Zigbee In-Wall Switch

100-240V~,50/60Hz,Max 16A

Step 1: Reset power of the device to start TouchLink Commissioning, 180 seconds timeout, repeat this step.

Step 4: There shall be indication on the remote and connected light flashes 3 times for successful reset.

L
N

8. Find and Bind Mode
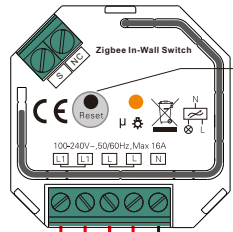**Note: Make sure the device and remote already added to the same zigbee network.**

Step 2: Set the remote or touch panel (target node) into find and bind mode, and enable it to find and bind initiator, please refer to corresponding remote or touch panel manual.

Step 3: There shall be indication on the remote or touch panel that it bind the device successfully and can control it then.to learn how.

Zigbee Remote

Zigbee In-Wall Switch

100-240V~,50/60Hz,Max 16A

Step 1: Short press "Reset." button 3 times (Or reset power of the device (initiator node) 3 times) to start Find and Bind mode (connected light flashes slowly) to find and bind target node, 180 seconds timeout, repeat this step.

L
N

9. Learning to a Zigbee Green Power Switch

Step 2: Set the green power switch into Learning mode, please refer to its manual.

Step 3: Connected light will flash twice to indicate successful learning. Then the switch can control the device.

Zigbee Green Power Switch

Zigbee In-Wall Switch

100-240V~,50/60Hz,Max 16A

Step 1: Short press "Reset." button 4 times (Or reset power of the device 4 times) to start Learning to GP switch mode (connected light flashes twice), 180 seconds timeout, repeat this step.

L
N

Note: Each device can learn to max. 20 zigbee green power switches.

10. Delete Learning to a Zigbee Green Power Switch

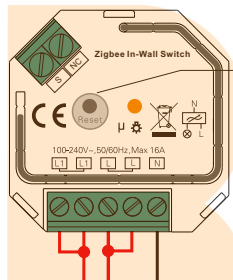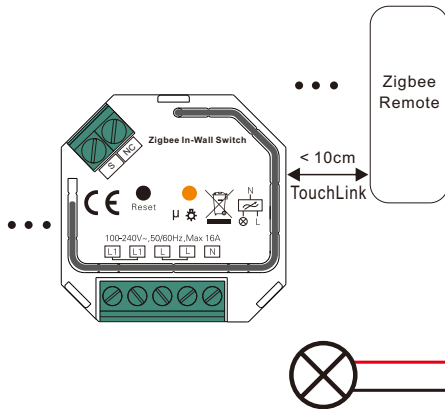**Step 2:** Set the paired green power switch into Learning mode, please refer to its manual.

Step 3: Connected light will flash 4 times to indicate successful deleting.

Zigbee Green Power Switch

Zigbee In-Wall Switch

100-240V~,50/60Hz,Max 16A

Step 1: Short press "Reset." button 3 times (Or reset power of the device 3 times) to start delete Learning to GP switch mode (connected light flashes slowly), 180 seconds timeout, repeat this step.

L
N

11. Setup a Zigbee Network & Add Other Devices to the Network (No Coordinator Required)

Zigbee Remote

Zigbee In-Wall Switch

< 10cm
TouchLink

Zigbee In-Wall Switch

100-240V~,50/60Hz,Max 16A

100-240V~,50/60Hz,Max 16A

Step 1: Short press "Reset." button 4 times (Or reset power of the device 4 times) to enable the device to setup a zigbee network (connected light flashes twice) to discover and add other devices, 180 seconds timeout, repeat this step.

L
N
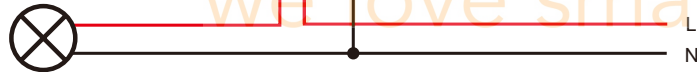
Step 2: Set another device or remote or touch panel into network pairing mode and pair to the network, refer to their manuals.

Step 3: Pair more devices and remotes to the network as you would like, refer to their manuals.

Step 4: Bind the added devices and remotes through Touchlink so that the devices can be controlled by the remotes, refer to their manuals.

Note: 1) Each added device can link and be controlled by max. 30 added remotes.

   2) Each added remote can link and control max. 30 added devices.

12. OTA

The device supports firmware updating through OTA, and will acquire new firmware from zigbee controller or hub every 10 minutes automatically.

Wiring Diagram

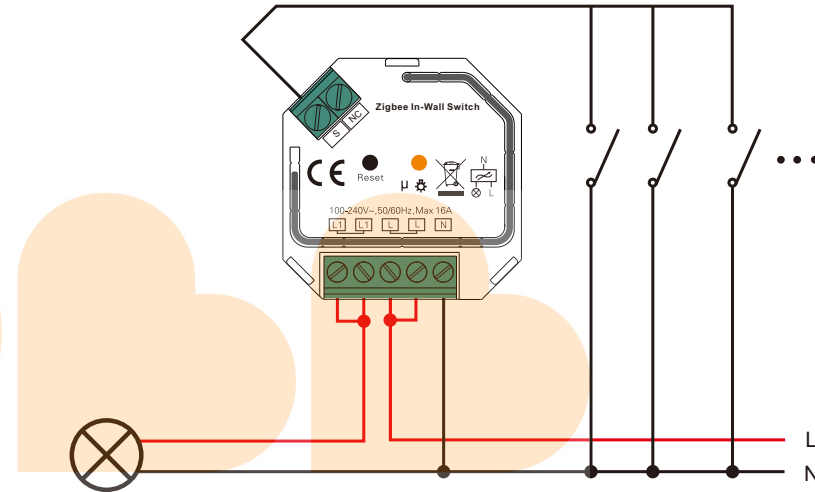**Notes for the diagrams:**

L - terminal for live lead

N - terminal for neutral lead

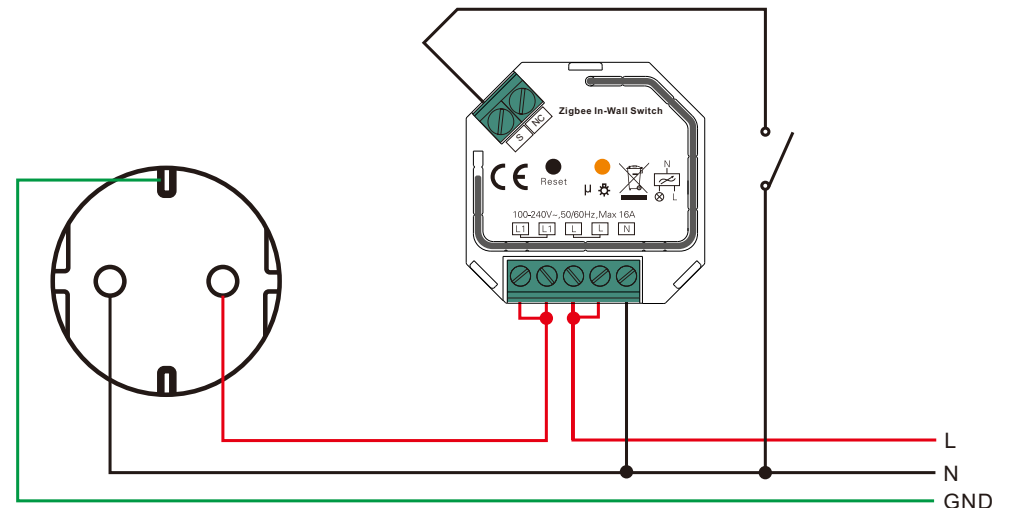**L1** - output terminals of the device (controlling connected light source)

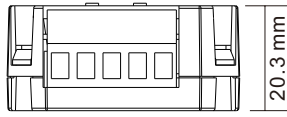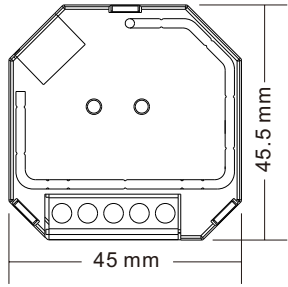**S** - terminal for external switch

NC - No Connection

1) With Light Load

Zigbee In-Wall Switch

100-240V~,50/60Hz,Max 16A

L
N

2) Connect With Socket

Zigbee In-Wall Switch

100-240V~,50/60Hz,Max 16A

L
N
GND

Product Dimension

45.5 mm

45 mm

20.3 mm

ROBB

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