Manuals+ — User Manuals Simplified.

SUNRICHER SR-ZG9100A-S ZigBee In Wall Smart Switch Instructions

Contents

SUNRICHER SR-ZG9100A-S ZigBee In Wall Smart Switch

Function introduction

Switch input

"Reset" Key: factory reset of the switch, short press to turn on/off load

In-wall Smart Switch

Ratings:100-240V,50/60Hz,
MAX:4.8A (💡)
MAX:1.4A (🔌)

LED indicator, stays off when power on the switch, turns on after added to a zigbee hub, indicates (same status as connected load) when program the switch (network pairing, touchlink, factory reset)

Load output
(2-wire with No Neutral output)
(3-wire with Neutral output)

AC power input
(2-wire with No Neutral input)
(3-wire with Neutral input)

Input Voltage	Output Voltage	Output Current	Size(LxWxH)
100-240VAC	100-240VAC	Resistive load: max. 4.8A Capacitive/Inductive load: max. 1.4A	45.5x45x20.3mm

- ZigBee in wall smart switch based on latest ZigBee 3.0 protocol
- 100-240VAC Wide Input and Output Voltage
- Supports resistive loads, capacitive loads or inductive loads
- 1 channel output, max. load up to 4.8A
- Input and Output with Screw Terminals, Safe and Reliable
- Enables to control ON/OFF of connected light source
- 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 feature and can bind max. 20 zigbee green power remotes
- Compatible with universal ZigBee gateway products
- Mini Size, Easy to be Installed into a standard size wall box
- Radio Frequency : 2.4GHz
- Waterproof grade: IP20

Main Features:

- Can operate under two-wire connection with no neutral lead or three-wire connection with neutral lead
- Soft start function,
- Works with various types of switches – momentary, toggle, three-way, etc.
- Active element: semiconductor electronic switch,
- To be installed in wall switch boxes of dimensions allowing for installation, conforming to provisions of applicable regulations,
- The Bypass is an extension unit.

The switch operates under the following loads:

- Conventional incandescent and HV halogen light sources
- ELV halogen lamps (with electronic transformers)
- MLV halogen lamps (with ferromagnetic transformers)
- Compact fluorescent CFL tube lamps with electronic ballast
- Fluorescent tube lamps with electronic ballast
- Supported light sources (power factor > 0.5) with minimal power of 3W using the Bypass (depending on the type of load)

ZigBee Clusters the device supports are as follows: Input Clusters

- 0x0000: Basic
- 0x0003: Identify
- 0x0004: Groups
- 0x0005: Scenes
- 0x0006: On/off
- 0x0702: Simple Metering

- 0x0b05: Diagnostics
- 0x0b04: Electrical Measurement

Output Clusters

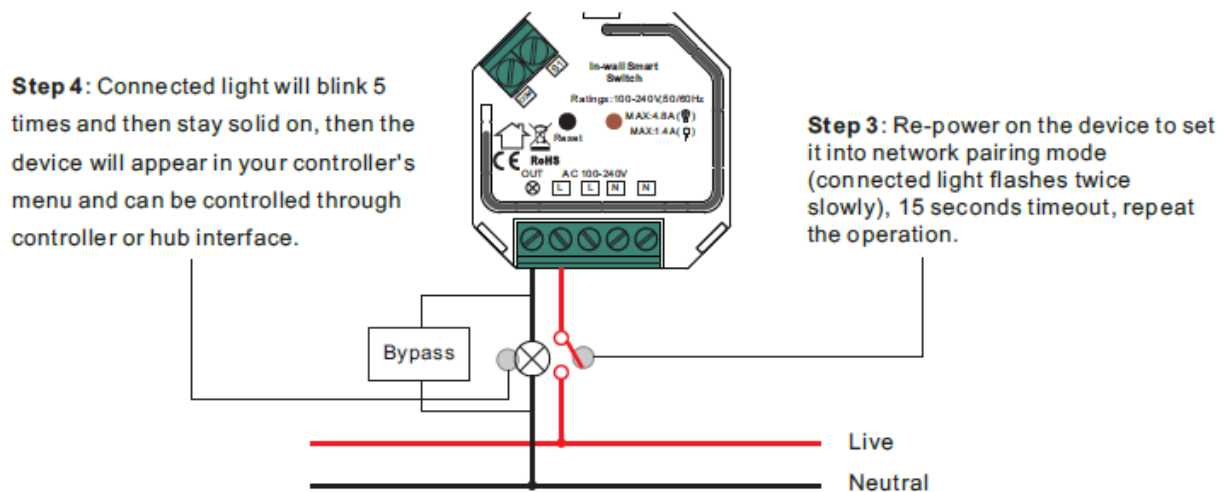- 0x0019: OTA

Safety & Warnings

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

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)
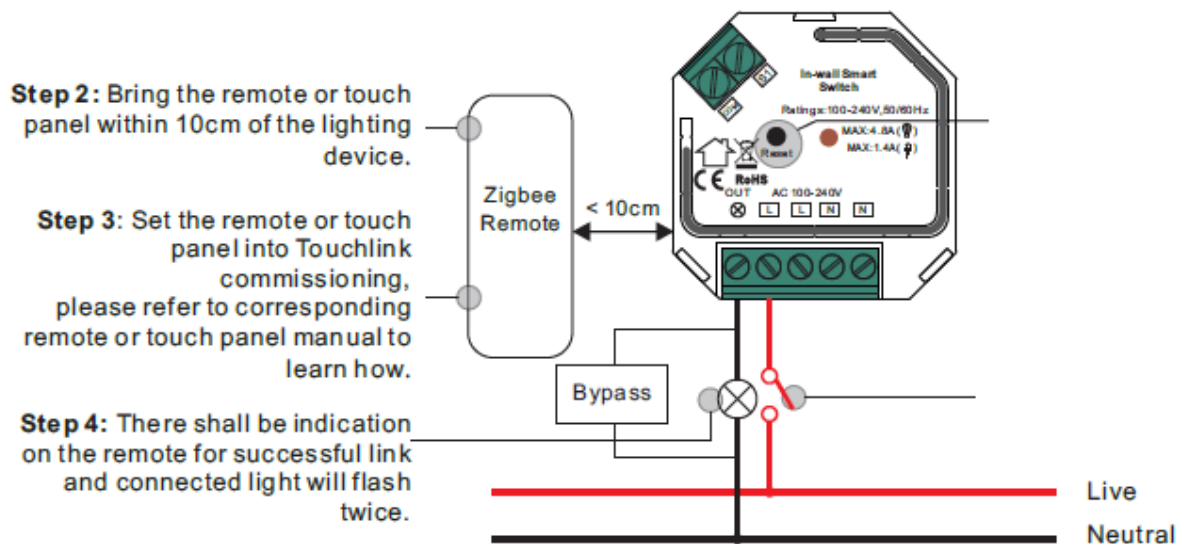
Step 1: Remove the device from previous zigbee network if it has already been added to, otherwise pairing will fail. Please refer to the part "Factory Reset Manually".
Step 2: From your ZigBee Controller or hub interface, choose to add lighting device and enter Pairing mode as instructed by the controller.

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.

Step 3: Re-power on the device to set it into network pairing mode (connected light flashes twice slowly), 15 seconds timeout, repeat the operation.

TouchLink to a Zigbee Remote

Step 1: Method 1: Short press "Reset" button (or re-power on the device) 4 times to start Touchlink commissioning immediately, 180S timeout, repeat the operation. Method 2: Re-power on the device, Touchlink commissioning will start after 15S if it's not added to a zigbee network, 165S timeout. Or start immediately if it's already added to a network, 180S timeout. Once timeout, repeat the operation.

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.

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

1. **Note:** 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. For Hue Bridge & Amazon Echo Plus, add remote and device to network first then TouchLink.
4. After TouchLink, the device can be controlled by the linked remotes.
5. 5. Removed from a Zigbee Network through Coordinator or Hub Interface
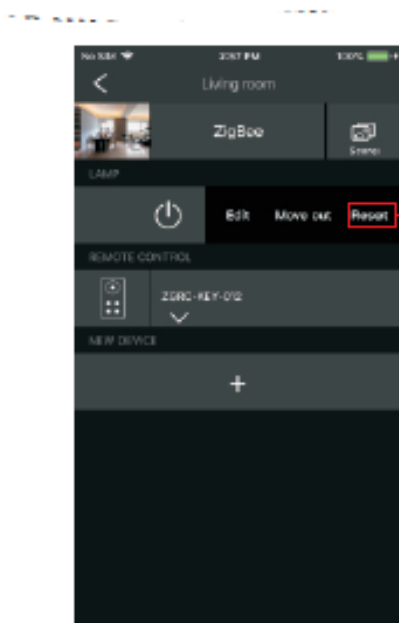
From your ZigBee controller or hub interface, choose to delete or reset the lighting device as instructed. The connected light blinks 3 times to indicate successful reset.
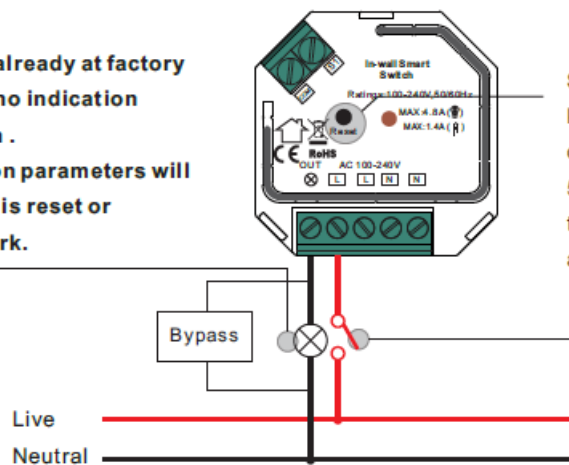
6. **Factory Reset Manually**

   1. **Note** 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

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.

Step 1: Short press "Reset." key for 5 times continuously or re-power on the device for 5 times continuously if the "Prog." key is not accessible.

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

Bypass

Live

Neutral

7. Factory Reset through a Zigbee Remote

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.

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

Zigbee Remote   < 10cm
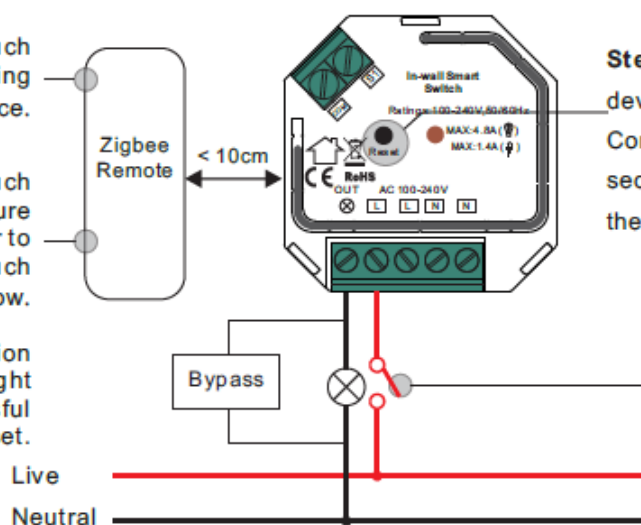
Step 1: Re-power on the device to start TouchLink Commissioning, 180 seconds timeout, repeat the operation.

Bypass

Live

Neutral

.

8. Find and Bind Mode

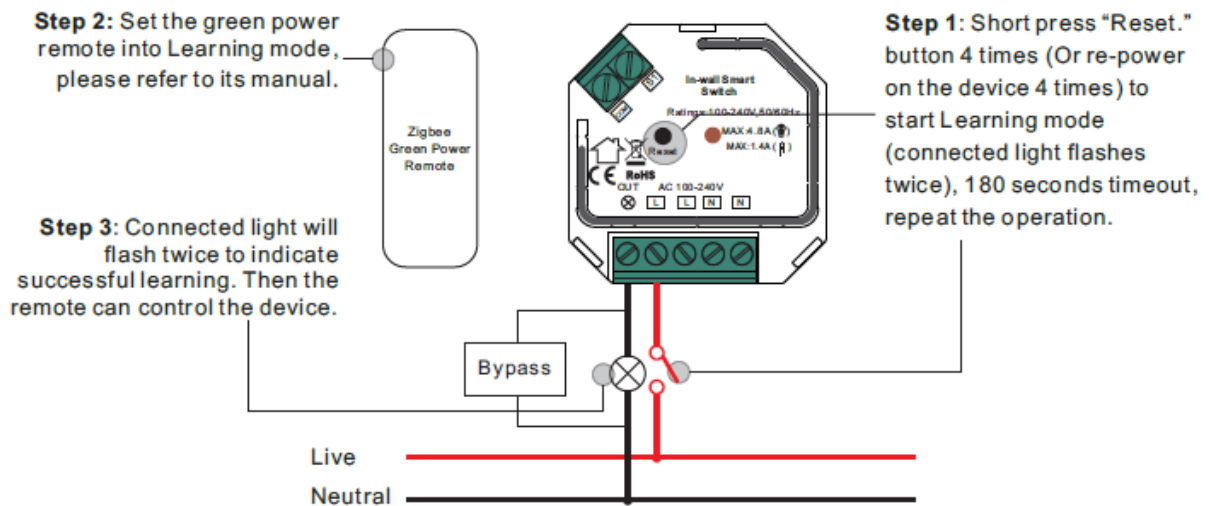**Note:** Make sure the device and remote already added to the same zigbee network.

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.

Zigbee Remote

Step 3: There shall be indication on the remote or touch panel that it bind the device successfully and can control it then.
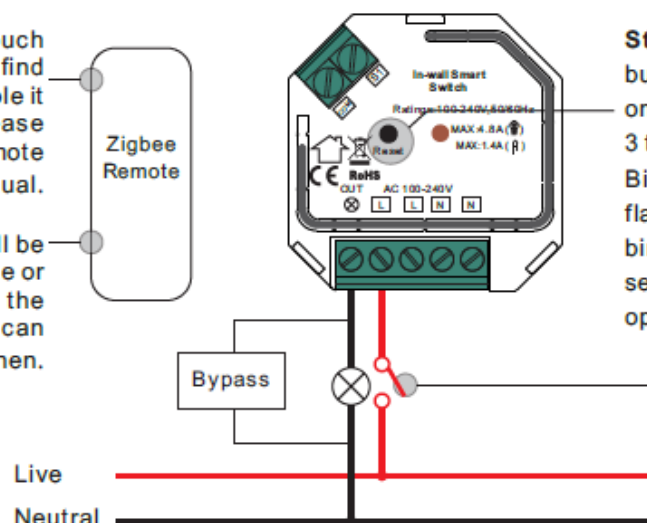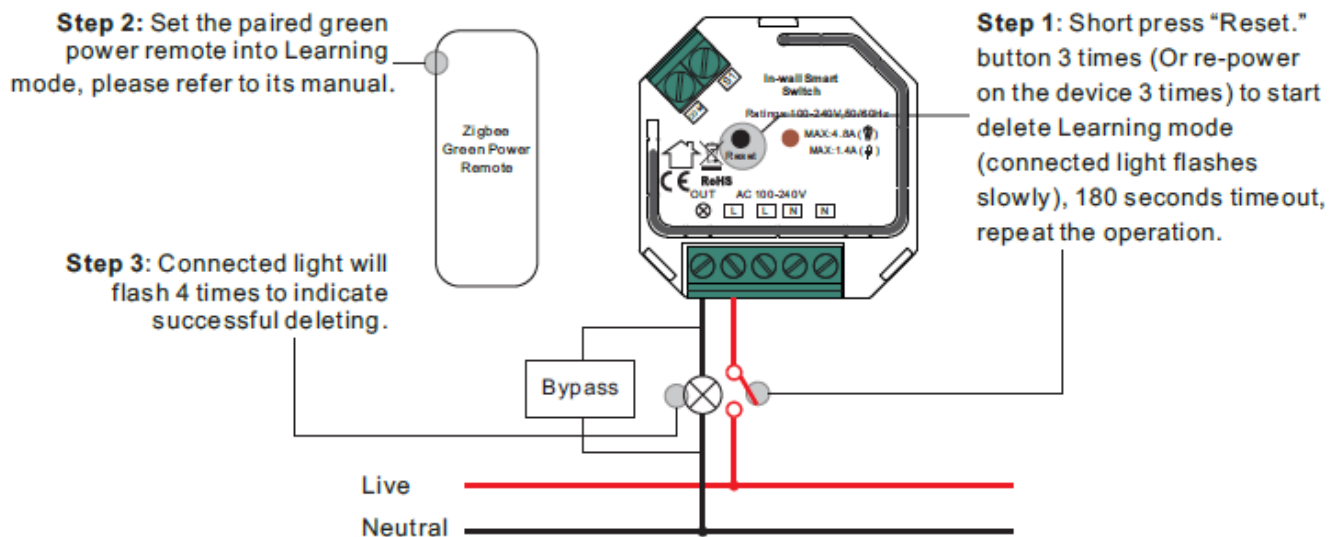
Step 1: Short press "Reset." button 3 times (Or re-power on the device (initiator node) 3 times) to start Find and Bind mode (connected light flashes slowly) to find and bind target node, 180 seconds timeout, repeat the operation.

Bypass

Live

Neutral

9. Learning to a Zigbee Green Power Remote

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

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

Step 1: Short press "Reset." button 4 times (Or re-power on the device 4 times) to start Learning mode (connected light flashes twice), 180 seconds timeout, repeat the operation.

Zigbee Green Power Remote

In-wall Smart Switch
Ratings:100-240V,50/60Hz
MAX:4.8A (💡)
MAX:1.4A (🔌)
Reset
RoHS
OUT   AC 100-240V
Ⓧ L L N N

Bypass

Live

Neutral

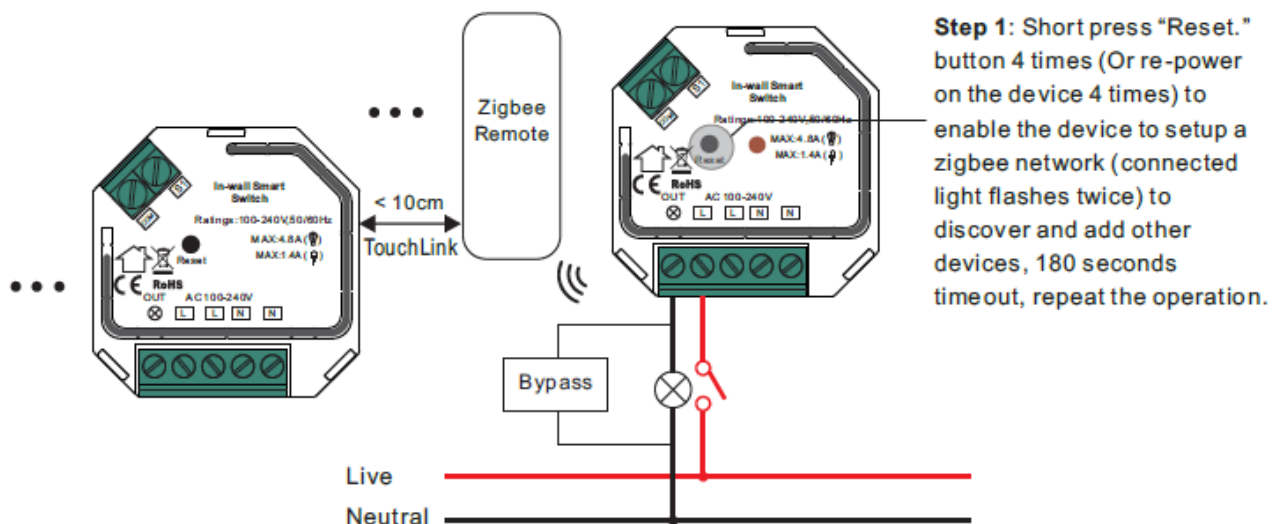**Note: Each device can learn to max. 20 zigbee green power remotes**

10. Delete Learning to a Zigbee Green Power Remote

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

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

Step 1: Short press "Reset." button 3 times (Or re-power on the device 3 times) to start delete Learning mode (connected light flashes slowly), 180 seconds timeout, repeat the operation.

Zigbee Green Power Remote

In-wall Smart Switch
Ratings:100-240V,50/60Hz
MAX:4.8A (💡)
MAX:1.4A (🔌)
Reset
RoHS
OUT   AC 100-240V
Ⓧ L L N N

Bypass

Live

Neutral

11. Setup a Zigbee Network & Add Other Devices to the Network

Step 1: Short press "Reset." button 4 times (Or re-power on 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 the operation.

Zigbee Remote

In-wall Smart Switch
Ratings:100-240V,50/60Hz
MAX:4.8A (💡)
MAX:1.4A (🔌)
Reset
RoHS
OUT   AC100-240V
Ⓧ L L N N

In-wall Smart Switch
Ratings:100-240V,50/60Hz
MAX:4.8A (💡)
MAX:1.4A (🔌)
Reset
RoHS
OUT   AC 100-240V
Ⓧ L L N N

< 10cm

TouchLink

Bypass

Live

Neutral

Wiring Diagram Compatible load types and recommended values of power for supported loads:

Supported load types		100-240V~	
	Resistive loads Conventional incandescent and halo gen light sources	20-1000W @ 230V 20-500W @ 110V	
	Capacitive loads Fluorescent tube lamp (compact / with electronic ballast), el ectronic transformer, LED	Using Bypass: 3-300W @ 230V 3-150W @ 110V	No Bypass Used: 20-300 W @ 230V 20-150W @ 110V
	Inductive loads Ferromagnetic transformers	20-300W @ 230V 20-150W @ 110V	

Notes for the diagrams:

- **L** – terminal for live lead
- **N** – terminal for neutral lead
- **Out** – output terminal of the switch (controlling connected light source)
- **S1** – terminal for switch (has the option of entering the device in inclusion/exclusion mode) COM – terminal for grounding to the switch connected to the switch

Supported external switch types (should be configured by factory setting):
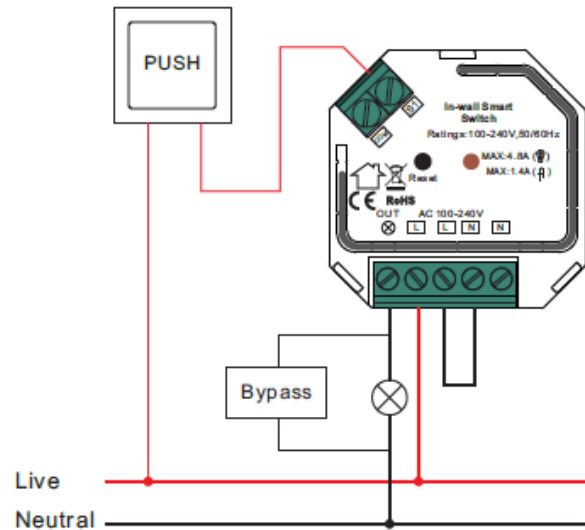
1. Push switch (default factory setting)
2. Normal On/Off switch (should be configured by factory setting upon request)

1. (1) 2-Wire Connection With No Neutral Lead With PUSH LV
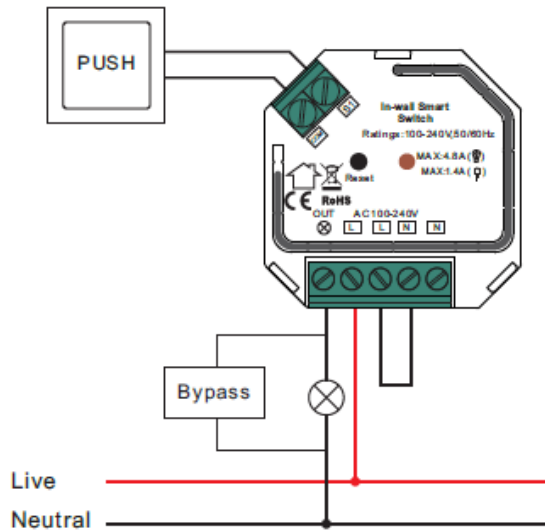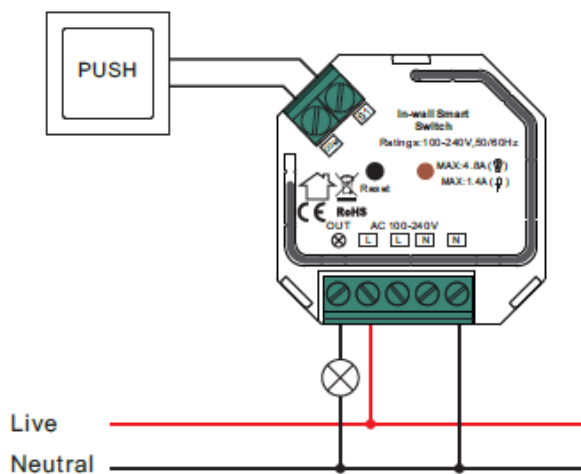
With PUSH LV

With PUSH

NOTE: Switch connected to the S1 terminal activates the basic functionality of the dimmer (turning the light on/off).

The Bypass is a device designed to work with the micro smart dimmer. It should be used in case of connecting LED bulbs or energy saving compact fluorescent lamps. The Bypass prevents flickering of the LED lights and glowing of the turned off compact fluorescent lamps. In the case of 2-wire connection, the Bypass allows to reduce minimum power of load required by the dimmer for correct operation. The Bypass provides powering of the dimmer in case of controlling the low loads of minimum power down to 3W (for cosφ>0.5).

(2) 3-Wire Connection With Neutral Lead With PUSH LV
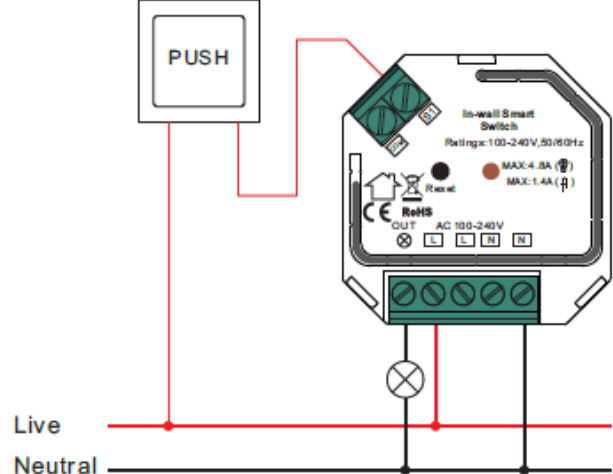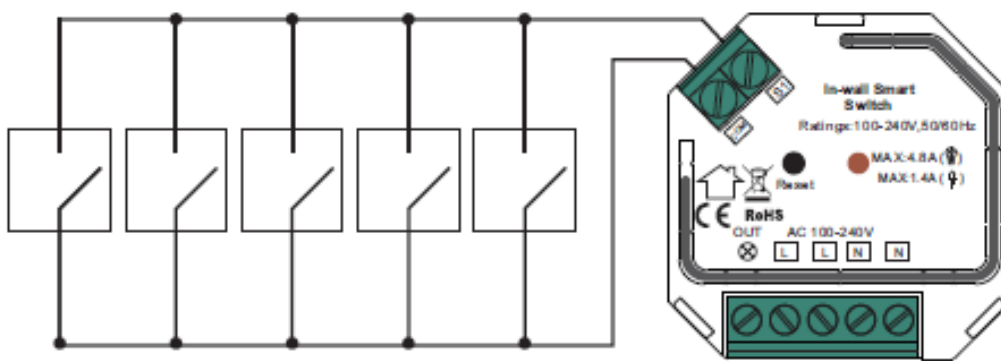

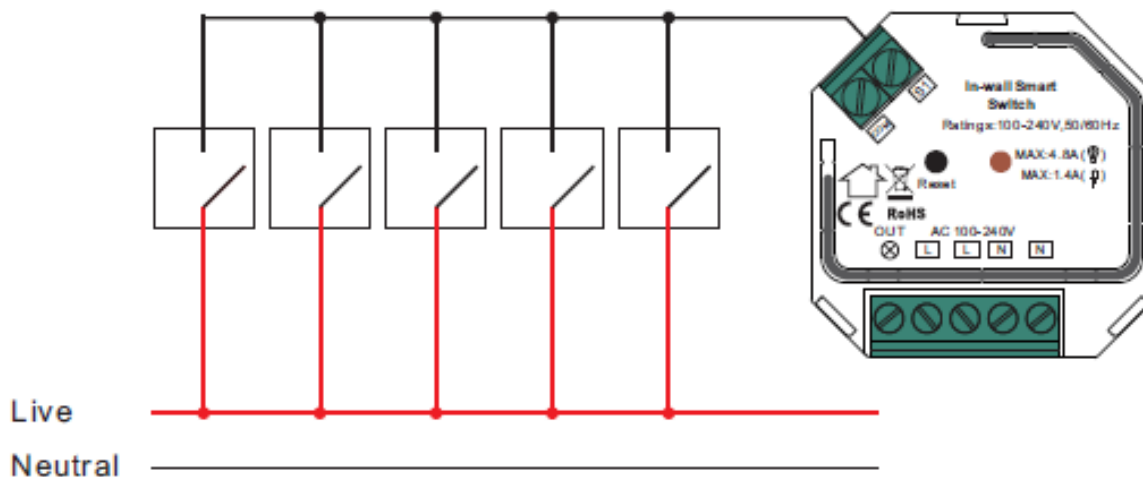**With PUSH LV**

With PUSH

NOTE: Switch connected to the S1 terminal activates the basic functionality of the dimmer (turning the light on/off).
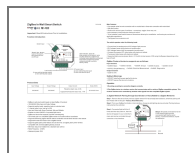
(3) Multiple Momentary or Push Switches Connection With PUSH LV

With PUSH

Live

Neutral

Documents / Resources

SUNRICHER SR-ZG9100A-S ZigBee In Wall Smart Switch [pdf] Instructions
SR-ZG9100A-S, ZigBee In Wall Smart Switch, SR-ZG9100A-S ZigBee In Wall Smart Switch