

# In-Wall Relay Switch (Zigbee)

### Instruction Manual

Rev. 072823 v1.0a

P/N SRB01 SS01

# Smart Relay Switch Wire Double Sided Foam Pad Instruction Manual Fixing Screw Instruction Manual

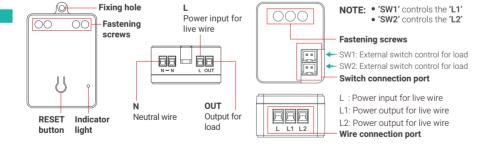
## Product Introduction

**Smart Relay** uses Zigbee wireless technology and can be used in different loads, including incandescent lamps, halogen lamps, LED lamps and fluorescent lamps. It could be installed near the light or light fixture itself. This device is compatible with standard Zigbee 3.0 gateway or devices for remote control and inter-operation.

Smart Switch Sub-Assembly is an optional component of the In-Wall Relay Switch. The Smart Switch Sub-Assembly is designed to allow mechanical switch to work with switch commands from the network. For example, after turning off the lights with a mechanical switch, you can turn on the lights through network commands.

One **Smart Relay** can be connected to one or a series **Smart Switch Sub-Assemblies** (Multiple-point control). One **Smart Switch Sub-Assembly** can be connected to two circuits of loads, each of which must use one **Smart Relay**.

TECHNICAL SPECIFICATIONS		
Model	SRB01/SRB01A	SS01
Input Voltage	AC 85V~245V	AC 85V~245V
Max. Load Power	AC 110V/300W AC 220V/600W	AC 110V/300W (2-gang in total) AC 220V/600W
Min. Load Power	No limit	No limit
Applicable to	Light Fixtures	Toggle, Momentary Switch
Operating Temperature	0~40°C (32°~104°F)	0~40°C (32°~104°F)
Operating Humidity	5~85% RH	5~85% RH
Product Size (L*W*H)	59.4mm * 39.3mm * 21.2mm (2.34in. x 1.55in. x 0.83in.)	33.5mm * 28.2mm * 17.3mm (1.32in. x 1.11in. x 0.68in.)
Wireless Connectivity	Zigbee 2.4GHz IEEE 802.15.4	
Wireless Profile	Zigbee 3.0	
RF Characteristics	Operating frequency: 2.4GHz Range: 30m~60m Internal antenna	



#### Installation Instructions

**Caution:** Read this manual before attempting to install the device! Using this product in a manner other than intended voids your warranty. Further, EVVR ApS is NOT liable for any damage incurred with the misuse of this product.

**Caution:** All installations of this device should be performed by a qualified or licensed electrician!

**Caution:** Metal casings, mirrors, electrical appliances, etc., may affect, reduce, or interfere with wireless communication

Caution: Use this product in an indoor environment



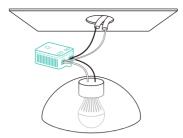
Caution: Product must be installed on a 10A line.

# 1 Turn off the power

**Warning:** Turn OFF electrical power from the breaker box or electrical service panel before installing or servicing this product. Improper use or installation can cause SERIOUS INJURY, DEATH, or LOSS/DAMAGE OF PROPERTY.

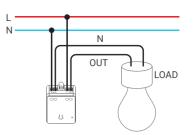


# Connect the Smart Relay to the load



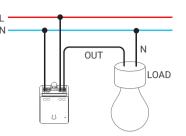
It is recommended to install **Smart Relay** near the lamp.

You can choose one of the two diagrams below to connect the wires according to your installation environment.



NOTES FOR THE DIAGRAM:

N - neutral wire L - live wire

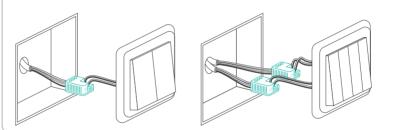


OUT - output live wire

# 3 Connect the Smart Switch Sub-Assembly to the traditional switch

With Smart Switch Sub-Assembly you can control Smart Relay using traditional switch.

 $\label{lem:sub-Assembly} Smart Switch Sub-Assembly is compatible with 1/2 gang switch, and two Smart Switch Sub-Assemblies can be installed to support 3/4 gang switch.$ 



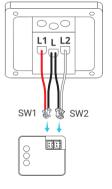
#### Not

One end of the **Switch Wire** should be inserted into the "**SW1**" and "**SW2**" jacks on the **Smart Switch** 

Sub-Assembly and the other end can only be connected to a traditional switch. Do not connect the wire to the live, neutral, or load wires, or else it will damage the device.

#### Note:

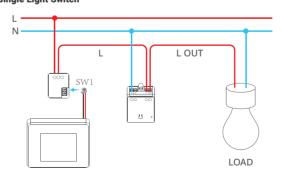
The black wires of the **Switch Wire** must connect to the common terminal of the traditional switch.

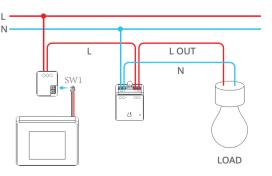


# 4 Overall diagram

If the Smart Switch Sub-Assembly and Smart Relay are connected correctly, it should look like one of the diagrams below.

Wiring a Single Light Switch

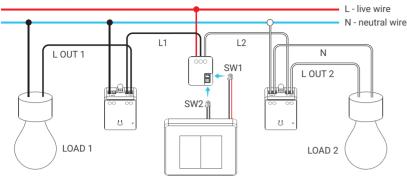




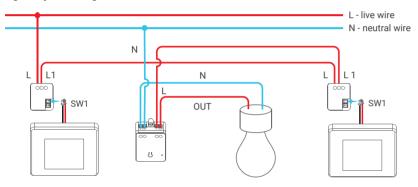
**Note:** When **Smart Switch Sub-Assembly** is connected to a 1-gang switch, the switch must be connected to SW1 external switch jack (not SW2). Please choose one of the installation methods to connect the N line according to your actual installation environment.

# Overall diagram

#### Wiring a Double Light Switch



#### Wiring 3-Way Control Light Switches



**Note:** Only one of the traveler wires is needed. Please insulate the other one and put it back into the electric box.

For more wiring diagrams such as group lights, multi-control, double light switch 3-way control, etc., please visit docs.evvr.io to view the support documents.

## Paste the device for auxiliary heat dissipation



Turn ON the electrical power and check if the wires are connected correctly. If wires are properly connected, the indicator light will come on while the light(s) connected to the switch are turned on.

Stick the foam pad to the recommended position on the Smart Relay and then place the relay on a flat,

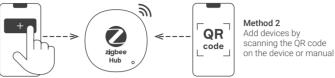
Peel off the paper from the adhesive and affix the **Smart Switch Sub-Assembly** to the switch box.

Note: When powered on for the first time, the Smart Relay will automatically go into inclusion mode. The inclusion mode will exit if there is no action performed in 1 minute. If you want to set up the Smart Relay again, please reset it or power cycle it to put it into inclusion mode once again.

#### 1. Set your Zigbee hub into inclusion mode with either method

#### Method 1

Add devices and manually select the device type



#### 2. Set the Smart Relay into inclusion mode



The indicator light will flash blue. wait until pairing is successful or 60 seconds timeout.



If the Smart Relay is successfully paired, the indicator will show BLUE when the load light is on. If not, the indicator will show RED when the load light is on.

Note: All operations require a 5-second wait after the Smart Relay power up before use.

## Set the Smart Relay into inclusion mode with Smart Switch Sub-Assembly

Short press the RESET button

to reboot it.

#### Working with toggle/momentary switch

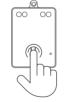
Quickly toggle/click the switch button 10 times. The load will be on/off twice indicating a successful operation.





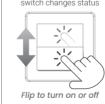
Momentary Switch

#### **Type of Connected** Switch



Double-click the RESET button to switch between the three switching modes.

# 1 Toggle Switch - DEFAULT Device changes status when switch changes status







2 Toggle Switch (Sync)

Contact closed - ON,

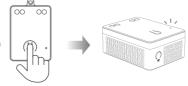
Contact opened - OFF

Indicator blink purple twice

Rebound after release Indicator blink purple three times

#### **Restore Smart Relay** to factory settings

Press and hold the RESET button for more than 5 seconds. The red indicator will flash twice to indicate a successful operation.



If the Smart Relay is successfully restored to factory settings, the relay will go into inclusion mode automatically

#### 01 Smart Relay pairing failed.

- The device may be too far from the Wi-Fi router, or there may be interference in the current network environment. Please try to bring devices closer to the Wi-Fi router.
- The device may be already paired. Please return the device to factory defaults if you want to pair again.

#### Cannot be controlled by gateway/coordinator or other Zigbee devices.

The device may be installed in an unreasonable location, too far from the gateway or routing device, or there may be signal interference.

Please check whether there is strong electromagnetic field equipment near the wireless switch and check whether the equipment is installed in a closed metal housing or in a closed concrete wall. Add routing devices or bring devices closer to the gateway/coordinator.

#### The light turns off automatically after a short period of time (approximately 30 seconds).

The power of the light may exceed the maximum power (AC 110V/300W, AC 220V/600W), Please check whether the power of the light exceeds the maximum power.

This device complies with part 15 of the FCC rules. Operation is

subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the ECC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures

- Reorient or relocate the receiving antenna

that may cause undesired operation

- Consult the dealer or an experienced technician for help.

#### Important Announcement Important Note Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

# 06 Cannot switch lights on and off normally.

after the device is powered off, re-powering will

In case of power loss while the lights were on.

the light status is on when power is restored?

Yes. The device will record the status of the light, and

restore the state before the device was powered off.

The Switch Wire from switch to Smart Switch Sub-Assembly is not properly connected or the wiring of the switch is not correct.

- 1. Check whether the Smart Relay blue/red LED is on when the load light is on. If the blue/red LED is not on, it may be that the 'live IN wire' and 'live OUT wire' of the main's power line are not connected properly.
- 2. If the Smart Relay blue/red LED is on, check whether the terminal is properly connected.
- Please refer to the installation instructions section. to check for proper wiring.
- 4. If only one load is connected to the Smart Switch Sub-Assembly, please check whether the 'power output for live of the Smart Switch Sub-Assembly is connected to 'L1'.
- Mechanical switch type identification error. (Please refer to "Type of Connected Switch")

#### **Disposal Instructions**

This product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

#### Warranty Policy

For warranty information, please visit https://www.evvr.io/warranty

> Please contact us for any technical issue support@evvr.io

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