

zigbee SR-ZG9041A-D Micro Smart Dimmer



# zigbee SR-ZG9041A-D Micro Smart Dimmer Instruction Manual

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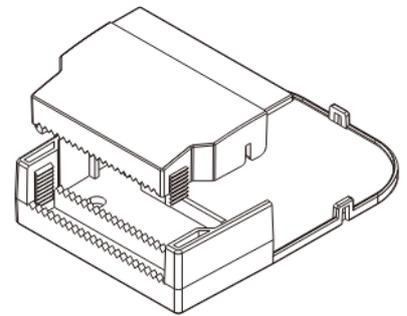
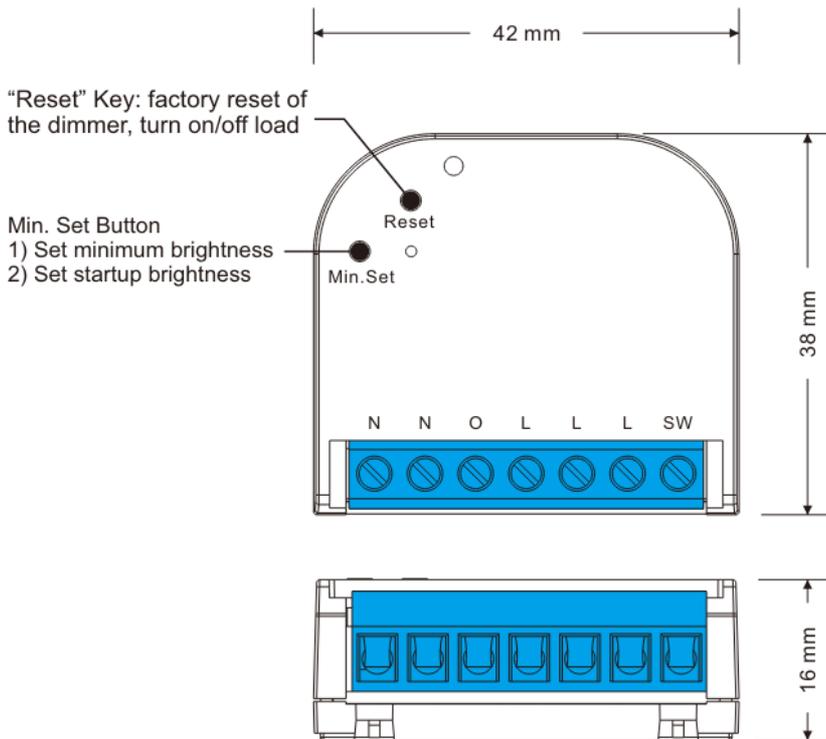
# ZigBee

zigbee SR-ZG9041A-D Micro Smart Dimmer

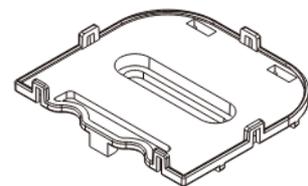


**Important:** Read All Instructions Prior to Installation

## Function introduction



Accessory 1: Wire clamp cover.  
Need to purchase separately.



Accessory 2: din rail bracket.  
Need to purchase separately.

## Product Data

Input Voltage	Output Voltage	Output Current	Size(LxWxH)
100-240VAC	100-240VAC	0.1-1.1A	42x38x16mm

Compatible Load Types			
Load Symbol	Load Type	Maximum Load	Remarks
	Dimmable LED lamps	200W @ 230V 100W @ 110V	Due to variety of LED lamp designs, maximum number of LED lamps is further dependent on power factor result when connected to dimmer.
	Dimmable LED drivers	200W @ 230V 100W @ 110V	Maximum permitted number of drivers is 200W divided by driver nameplate power rating.
	Incandescent lighting, HV Halogen lamps	250W @ 230V 125W @ 110V	
	Low voltage halogen lighting with electronic transformers	200W @ 230V 100W @ 110V	

### ZigBee Clusters the device supports are as follows: Input Clusters

- **0x0000:** Basic
- **0x0003:** Identify
- **0x0004:** Groups
- **0x0005:** Scenes
- **0x0006:** On/off
- **0x0702:** Simple Metering
- **0x0008:** Level Control
- **0x0b04:** Electrical Measurement
- **0x0b05:** Diagnostics

### Output Clusters

- **0x0019:** OTA
- ZigBee AC phase cut dimmer 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, Up to 250W
- Input and Output with Screw Terminals, Safe and Reliable
- Both leading edge version and trailing edge versions are available for choosing, preset by factory setting
- Enables to control ON/OFF and light intensity of connected light source
- ZigBee end device that supports Touchlink commissioning
- Can directly pair to a compatible ZigBee remote via Touchlink without coordinator
- Compatible with universal ZigBee gateway products
- Support power metering
- Mini Size, Easy to be Installed into a standard 86\*86mm wall box

### Main Features

- Can operate under two-wire connection with no neutral lead or three-wire connection with neutral lead
- Advanced microprocessor control
- Implemented algorithm of smart light source detection

- Active power and energy metering functionality
- Soft start function
- Innovative minimum dimming level and startup brightness setting 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

### **As a dimmer it operates under the following loads**

- Conventional incandescent and HV halogen light sources
- ELV halogen lamps and dimmable LED bulbs (with electronic transformers)
- MLV halogen lamps (with ferromagnetic transformers)
- Dimmable LED bulbs
- Dimmable compact fluorescent CFL tube lamps
- Supported dimmable light sources (power factor > 0.5) with minimal power of 3VA using the Bypass (depending on the type of load)

Trailing edge or leading edge dimming mode can be preset by factory setting to control the following types of loads:

- “Trailing edge” for resistive loads
- “Trailing edge” for capacitive loads
- “Leading edge” for inductive loads

**Note:** factory default version is trailing edge.

### **Safety & Warnings**

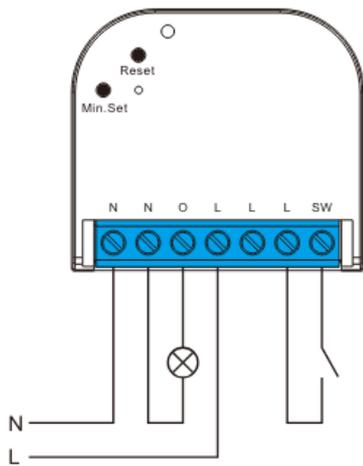
- DO NOT install with power applied to device.
- DO NOT expose the device to moisture.

### **Wiring Diagram**

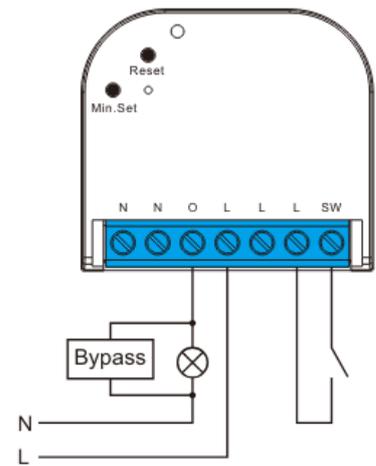
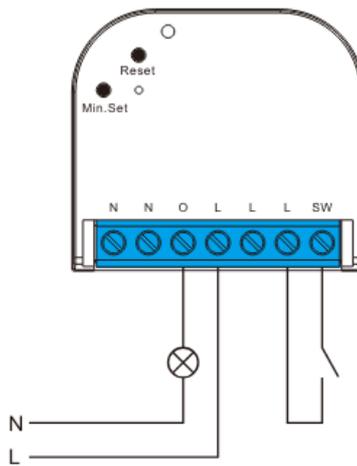
#### **Notes for the diagrams:**

- L – terminal for live lead
- N – terminal for neutral lead
- O – output terminal of the dimmer (controlling connected light source)
- **SW** – terminal for switch

Method 1: With neutral



Method 2: Without neutral

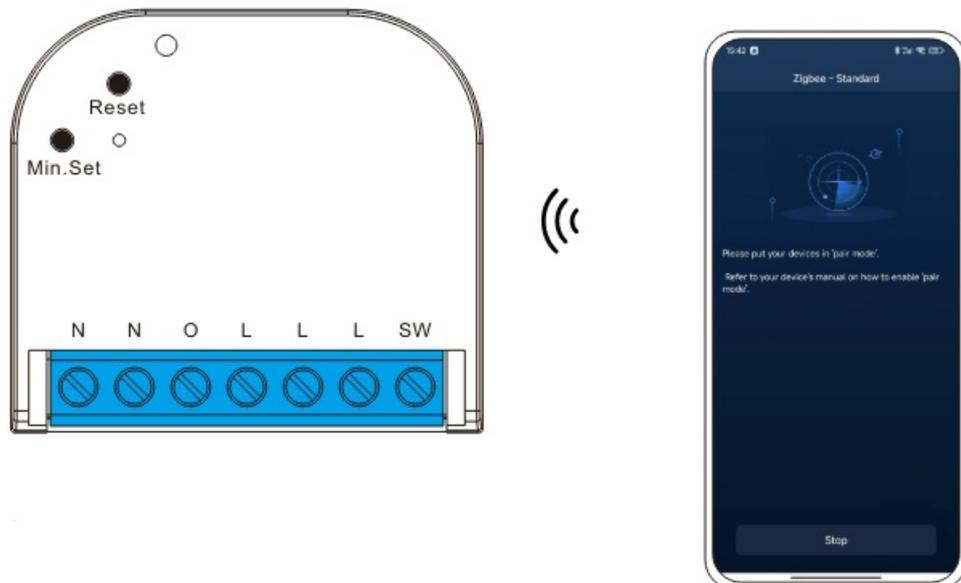


When using the device without neutral, the smart dimmer requires at least 20W @ 240 VAC of power consumption to operate. If the connected light has a smaller power consumption, then Bypass is needed for the device to work.

## Operation

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

- **Step 1:** From your ZigBee Controller or hub interface, choose to add a lighting device and enter Pairing mode as instructed by the controller.
- **Step 2:** Reset the power of the device to set it into network pairing mode (connected light flashes twice slowly), 15 seconds timeout, repeat this step.
- **Step 3:** 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 the controller or hub interface.

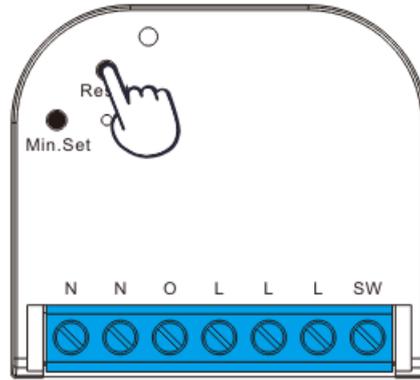


If the device had been added to the other ZigBee network, please reset it first

### Factory Reset Manually

- **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.

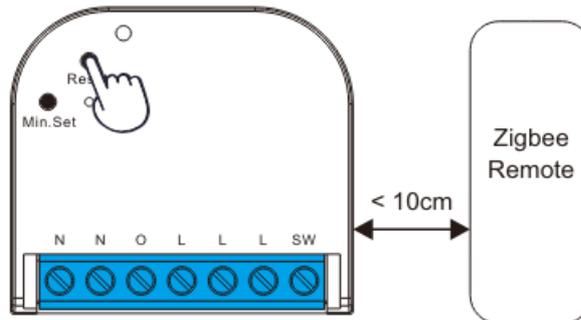


**Note**

1. If the device is already at the factory default setting, there is no indication when the factory is reset again.
2. All configuration parameters will be reset after the device is reset or removed from the network.

**TouchLink to a Zigbee Remote**

- **Step 1:** Short press the “Reset” button (or re-power on the device) 4 times to start Touchlink commissioning immediately, 180S timeout, and 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 the corresponding remote or touch panel manual to learn how.
- **Step 4:** There shall be an indication on the remote for the successful link and the connected light will flash twice.



**Note**

1. Directly TouchLink (both not added to a ZigBee network), each device can link with 1 remote.
2. TouchLink after both are added to a ZigBee network, each device can link with max. 30 remotes.
3. To control by both gateway and remote, add remote and device to network first then TouchLink.
4. After TouchLink, the device can be controlled by the linked remotes.

**Learning to a Zigbee Green Power Remote**

- **Step 1:** Short press the “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. Step 2: Set the green power remote

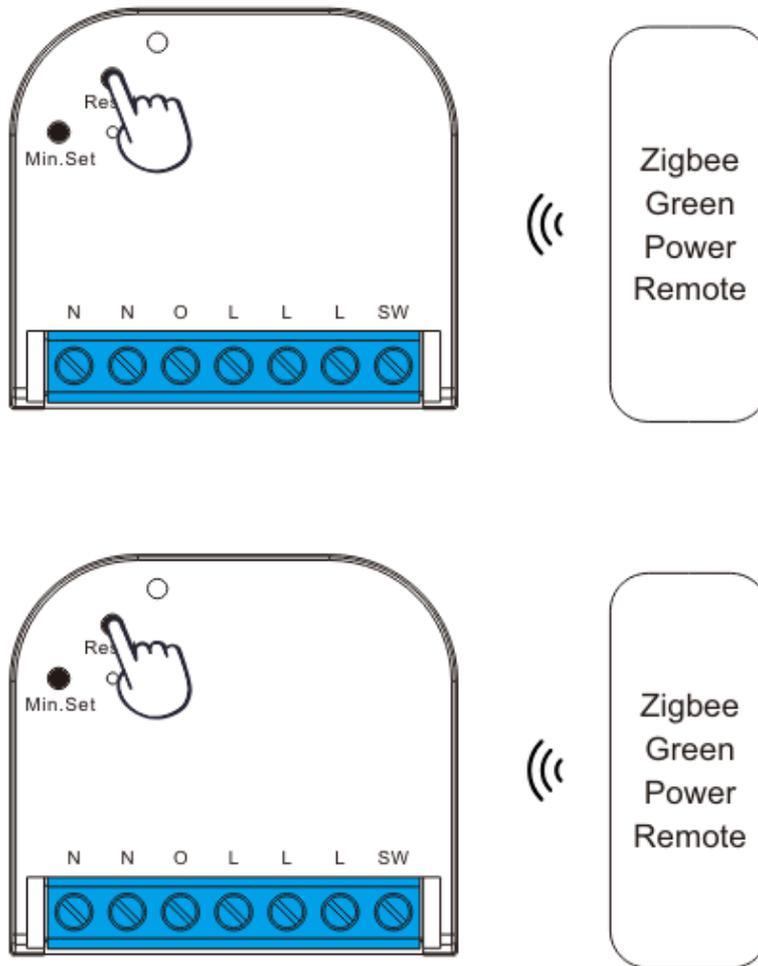
into Learning mode, please refer to its manual.

- **Step 3:** The connected light will flash twice to indicate successful learning. Then the remote can control the device.

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

### Delete Learning to a Zigbee Green Power Remote

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



### Minimum and Startup Brightness Setting Button

**Set minimum brightness:** Adjust brightness to a desired level, press and hold down the button for 3 seconds to set it as minimum brightness, the connected load will flash to confirm the successful setting, and then the dimming range is between this minimum brightness and 100%. **Delete minimum brightness:** Adjust brightness to 100%, press and hold down the button for 3 seconds to delete the previously set minimum brightness, the connected load will flash to confirm successful deleting, and then the dimming range is between 1% and 100%. **Set Startup Brightness:** adjust the brightness of the connected load to a desired level between 1%-50%, then double click the “Min. set” key to set the brightness adjusted as startup brightness, then the load will first go to startup brightness when turned on every time, then drop down to the brightness before last time turned off. **Delete Startup Brightness:** adjust the brightness of the connected load to 0%, then double-click “Min. set” key to delete the previously set startup brightness.

**Note:** The startup brightness setting function is to avoid the phenomenon that some dimmable LED drivers can

not be turned on after being dimmed to a low level and turned off. Once setting a startup brightness, if the startup brightness is higher than the dimmed level before being turned off, the driver will first go to the startup brightness after turned on and then drop down to the dimmed level. If the startup brightness is lower than the dimmed level before being turned off, the driver will directly go to the dimmed level after being turned on.

### **Controlled by a push switch**

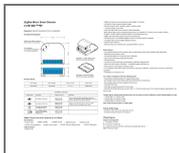
Once connected with a push switch, click the push switch to switch ON/OFF, and press and hold down it to increase/decrease light intensity.

### **OTA**

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

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## **Documents / Resources**



[zigbee SR-ZG9041A-D Micro Smart Dimmer](#) [pdf] Instruction Manual  
SR-ZG9041A-D Micro Smart Dimmer, SR-ZG9041A-D, Micro Smart Dimmer, Smart Dimmer, Dimmer

## **References**

- [User Manual](#)

[Manuals+.](#) [Privacy Policy](#)

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