



# SUNRICHER SR-ZG9101EA-5C 4-in-1 Universal Zigbee LED Controller Instruction Manual

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# SUNRICHER

4 in 1 Universal Zigbee LED Controller  
70110009

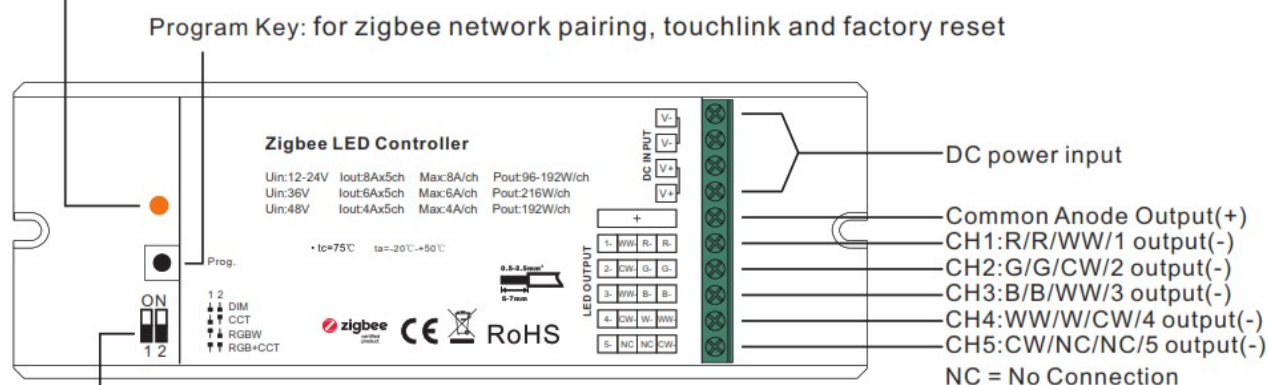
**Important:** Read All Instructions Prior to Installation

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## Function introduction

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



Dial switch for device mode selection, DIM, CCT, RGBW and RGB+CCT  
 4 modes are available, factory default is RGB+CCT mode

1. Under RGBW mode, W channel can be turned on through Gateway's color temperature control interface which will mix RGB channels as 1 channel white and then make color tuning with the 4th channel white. Once turned on, the brightness of white channel will be controlled together with RGB channels.
2. Under RGBW mode, W channel can be controlled separately from RGB channels through RGBW zigbee remote or touch panel's W button, please refer to their manuals.
3. Under RGB+CCT mode, RGB channels and tunable white channels are controlled separately, they can not be turned on and controlled at the same time.

## Product Data

Input Voltage	Output Current	Output Power	Connector Current Rating	Wire Size	Remarks	Size(LxW xH) Temperature	Ambient Temperature Max. Casing
12-48V DC	Max. 8A/CH@12V/24V Max. 6A/CH@36V Max. 4A/CH@48V	Max. 96W/CH @12V Max. 192W/CH @24V Max. 216W/CH @36V Max. 192W/CH @48V	Max. 20A (12-30AWG)	0.05-3.3mm <sup>2</sup>	Constant voltage	170x59x29mm 75°C	-20°C – +50°C

- 4 in 1 universal Zigbee LED controller based on latest ZigBee 3.0 protocol
- 4 different device modes DIM, CCT, RGBW and RGB+CCT in 1 controller, and selectable by dial switch
- Enables to control ON/OFF, light intensity, color temperature, RGB color of connected LED lights
- Can directly pair to a compatible ZigBee remote via Touchlink
- Supports self-forming zigbee network without coordinator
- 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 or hub products
- Compatible with universal Zigbee remotes

- Waterproof grade: IP20

## Safety & Warnings

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

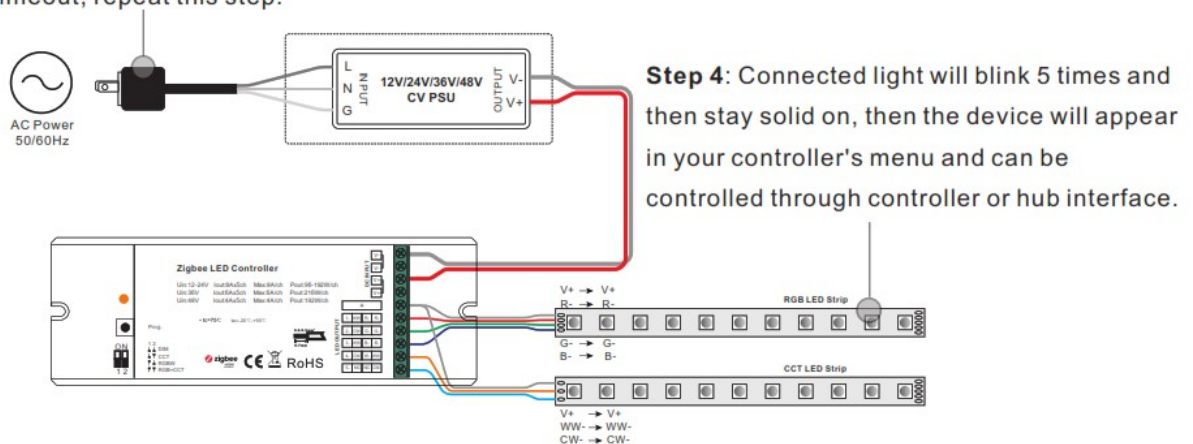
## Operation

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.

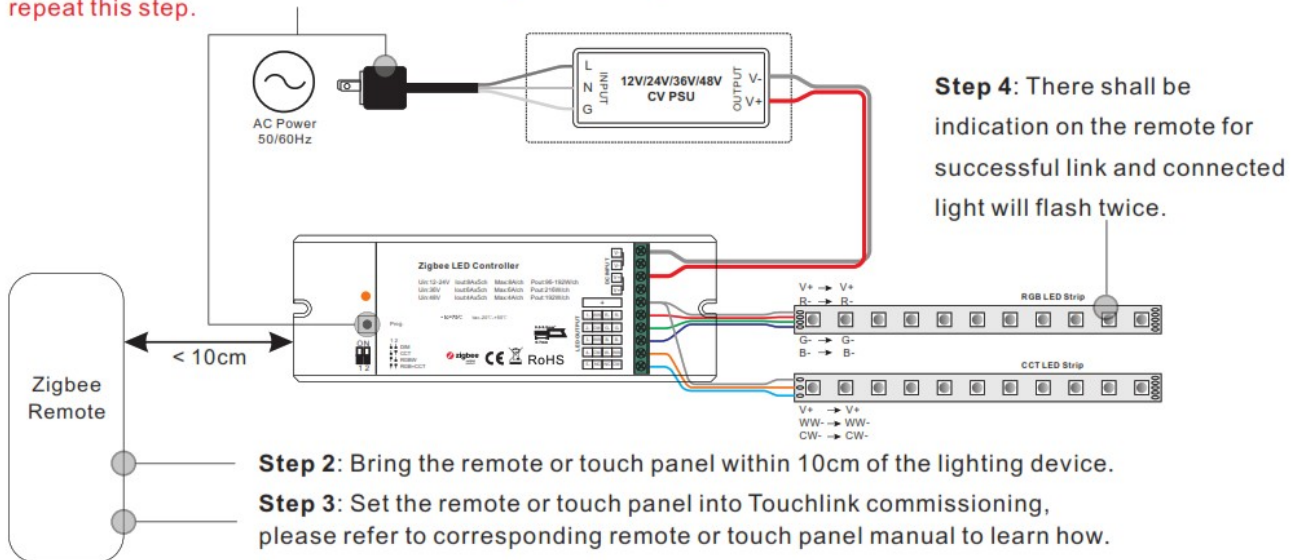
**Step 3:** Reset power of the device to set it into network pairing mode (connected light flashes twice slowly), 15 seconds timeout, repeat this step.



4. TouchLink to a Zigbee Remote

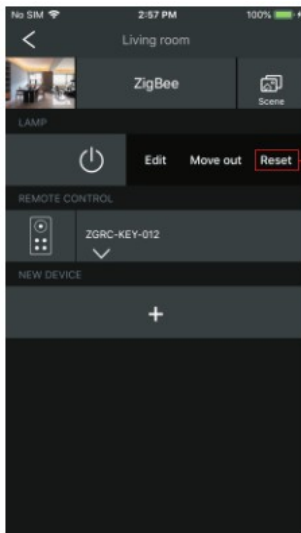
**Step 1:** Method 1: Short press “Prog” button 4 times (or reset power of the device 4 times) to start Touchlink commissioning immediately under any circumstances, 180S timeout, repeat this step.

**Method 2:** Reset power of 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 this step.



#### Note:

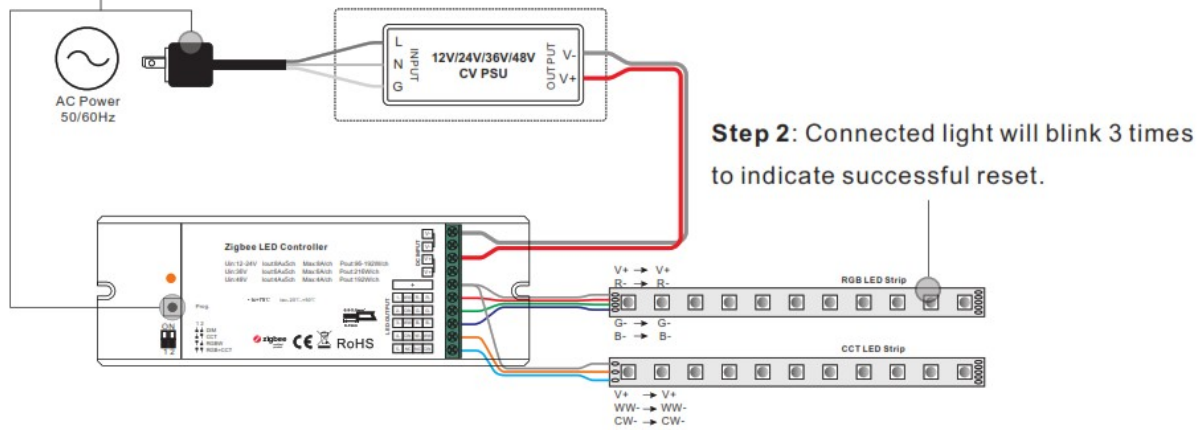
- 1) Directly TouchLink (both not added to a ZigBee network), each device can link with 1 remote.
  - 2) TouchLink after both added to a ZigBee network, each device can link with max. 30 remotes.
  - 3) To control by both hub and remote, add remote and device to hub network first then TouchLink.
  - 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

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

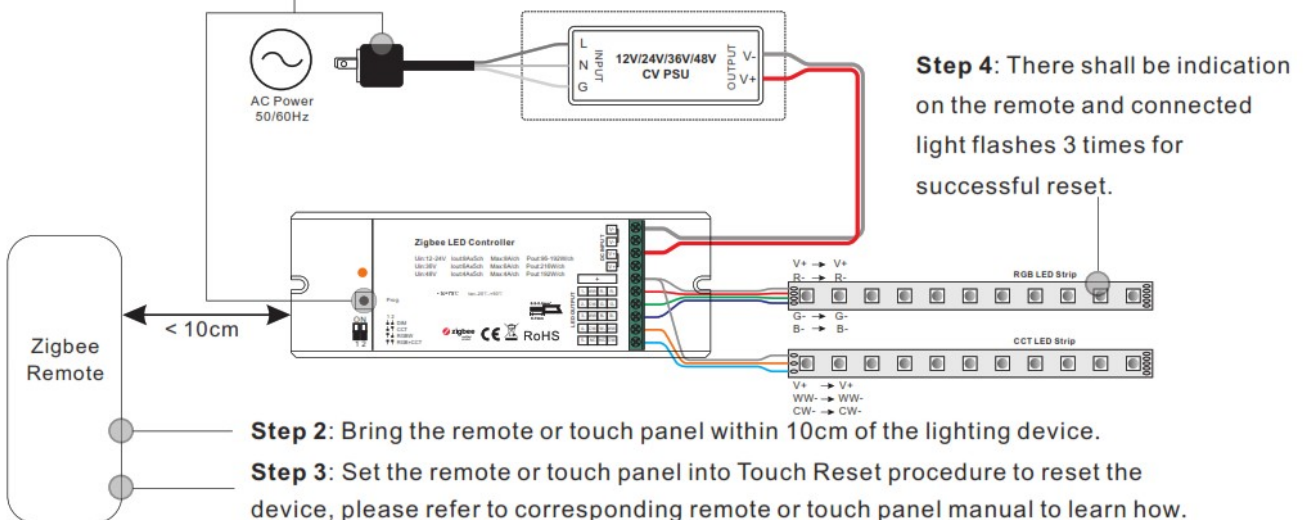


#### Note:

- 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.

### 7. Factory Reset through a Zigbee Remote (Touch Reset)

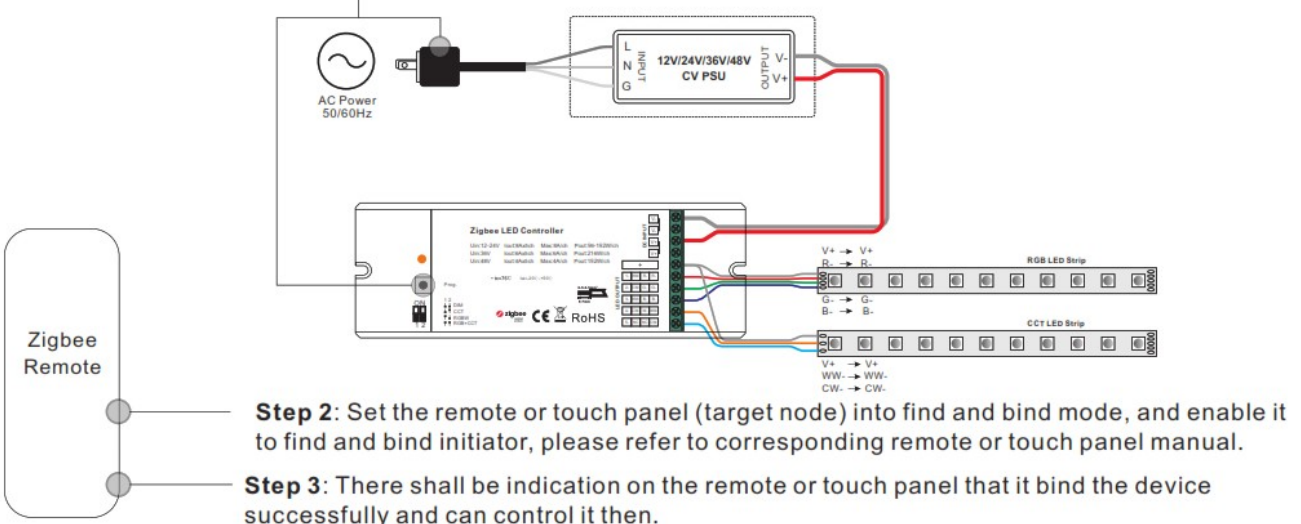
**Step 1:** Reset power of the device to start TouchLink Commissioning, 180 seconds timeout, repeat this step.



**Note:** Make sure the device already added to a network, the remote added to the same one or not added to any network.

### 8. Find and Bind Mode

**Step 1:** Short press "Prog." 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.

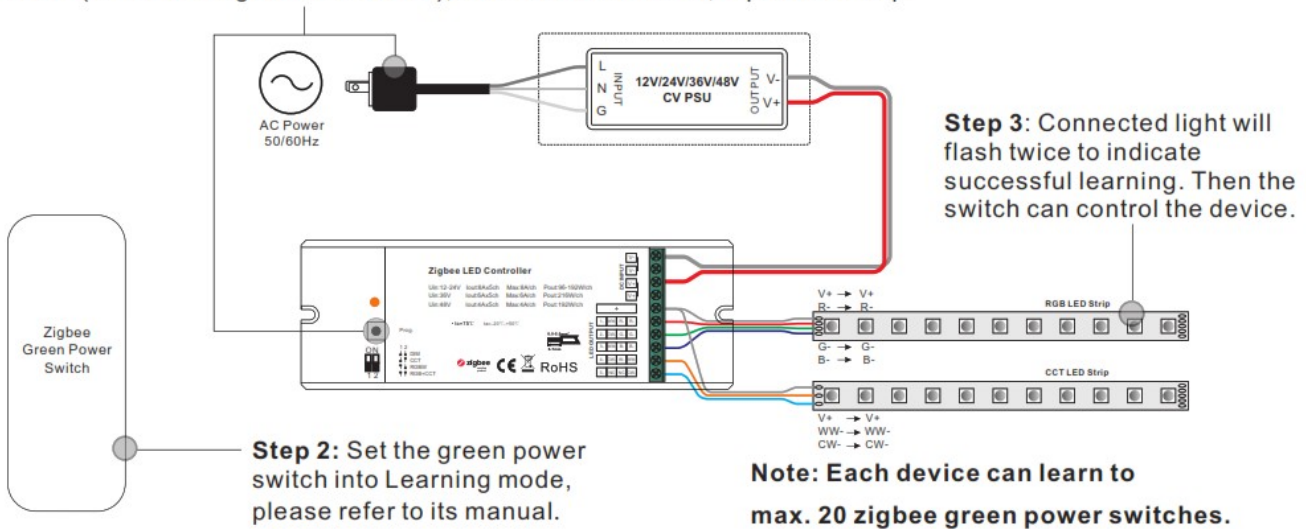




**Note:** Make sure the device and the remote or touch panel already added to the same Zigbee hub.

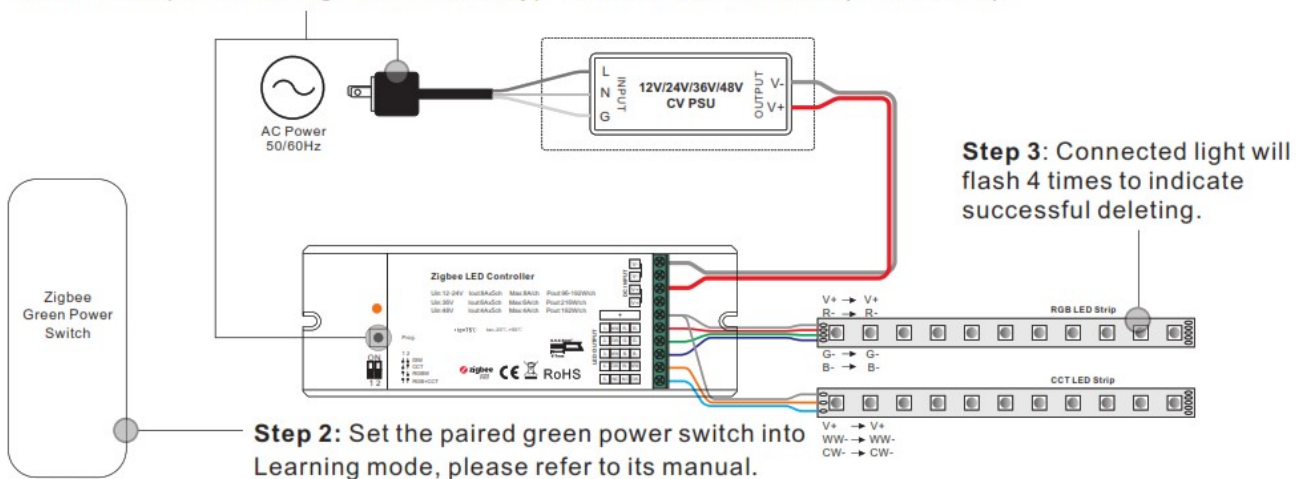
## 9. Learning to a Zigbee Green Power Switch

**Step 1:** Short press "Prog." 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.



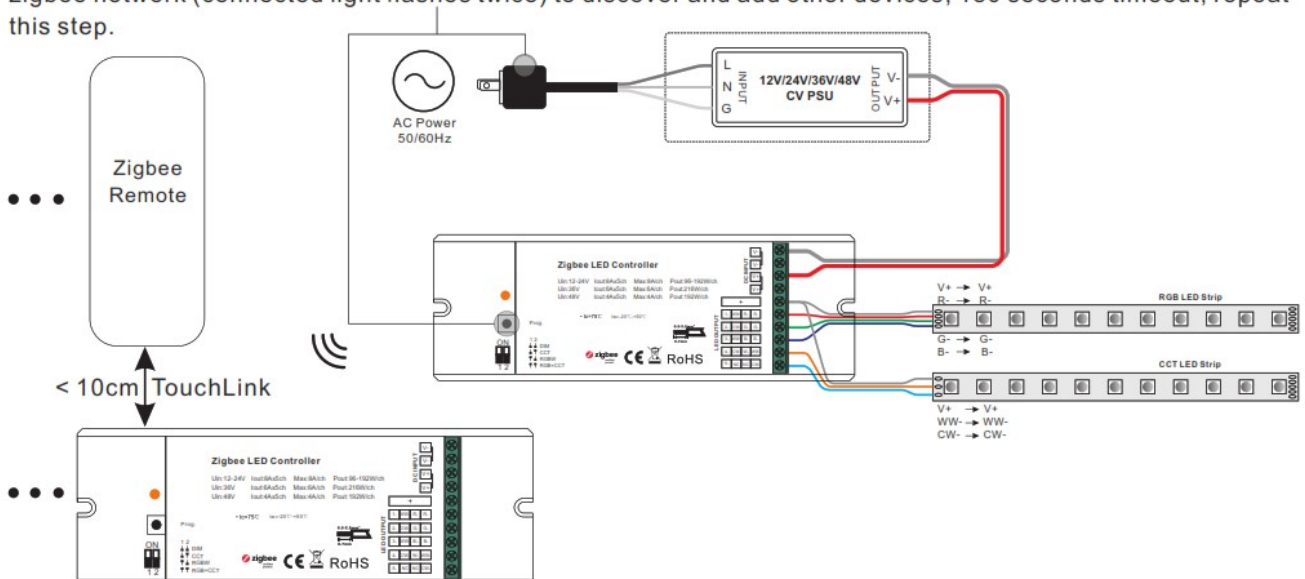
## 10. Delete Learning to a Zigbee Green Power Switch

**Step 1:** Short press "Prog." 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.



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

**Step 1:** Short press "Prog." 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.



**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. ZigBee Clusters the device supports are as follows:**

**Input Clusters**

- 0x0000: Basic
- 0x0003: Identify
- 0x0004: Groups
- 0x0005: Scenes
- 0x0006: On/off
- 0x0008: Level Control
- 0x0300: Color Control
- 0x0b05: Diagnostics

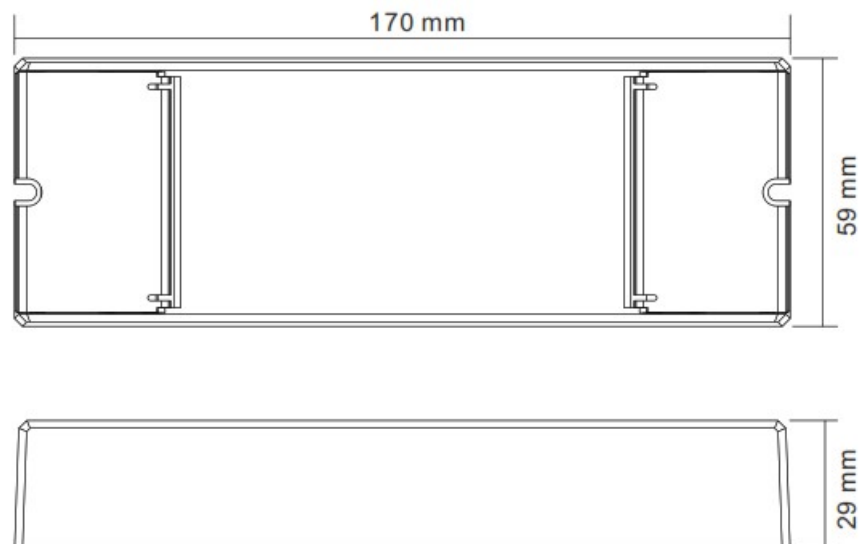
**Output Clusters**

- 0x0019: OTA

**13. OTA**

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

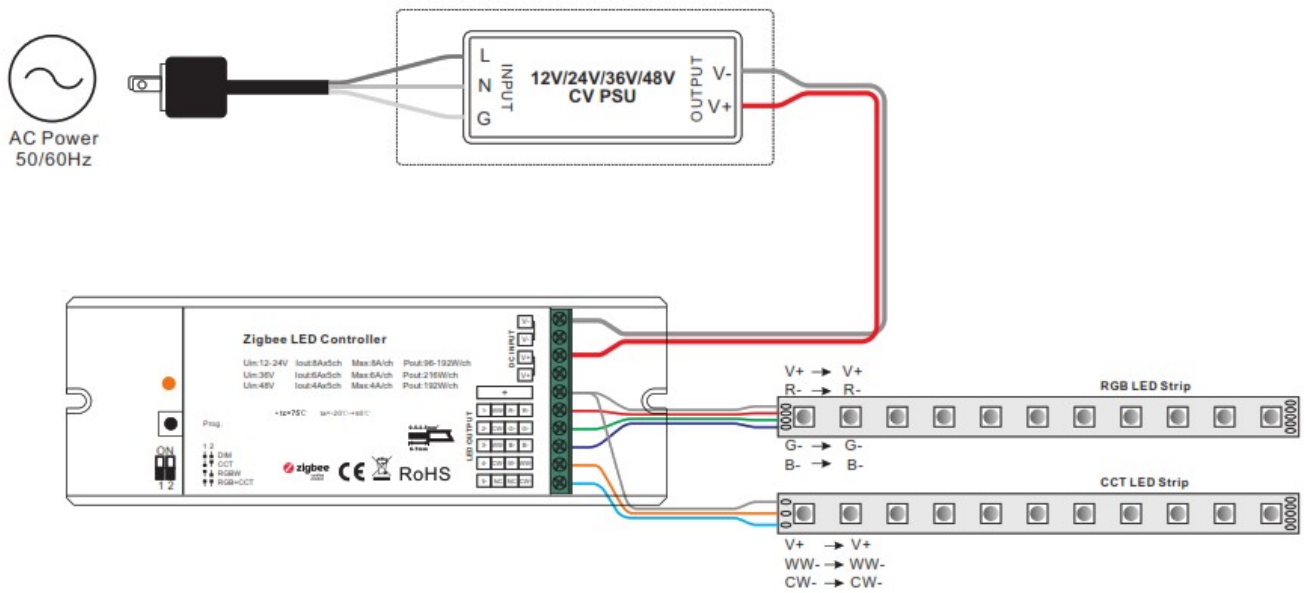
**Product Dimension**



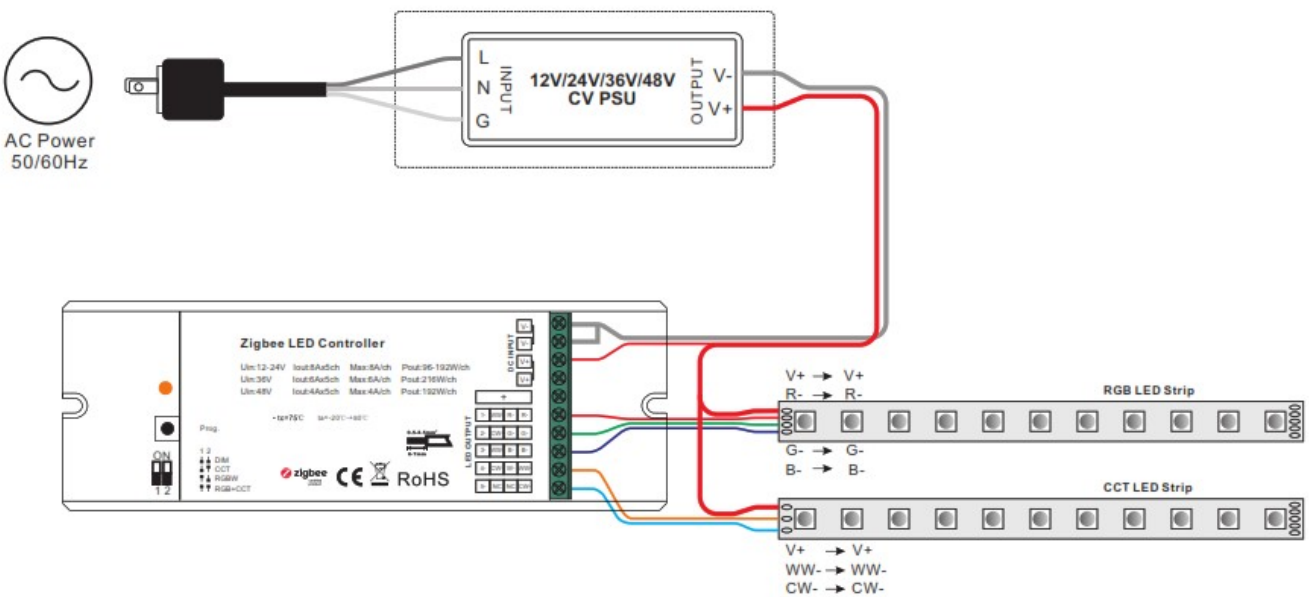
**Wiring Diagram**

**RGB+CCT Mode**

1) When total load of each receiver is not over 20A



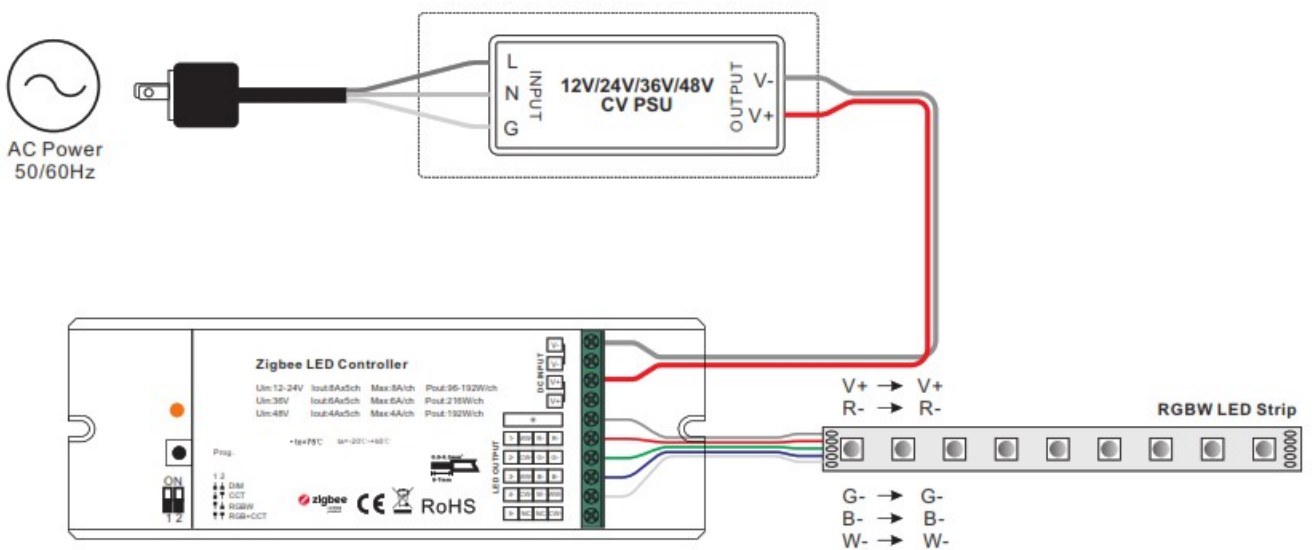
2) When total load of each receiver is over 20A



**Note:** please make sure the dial switches are at position for RGB+CCT mode as shown in above diagram.

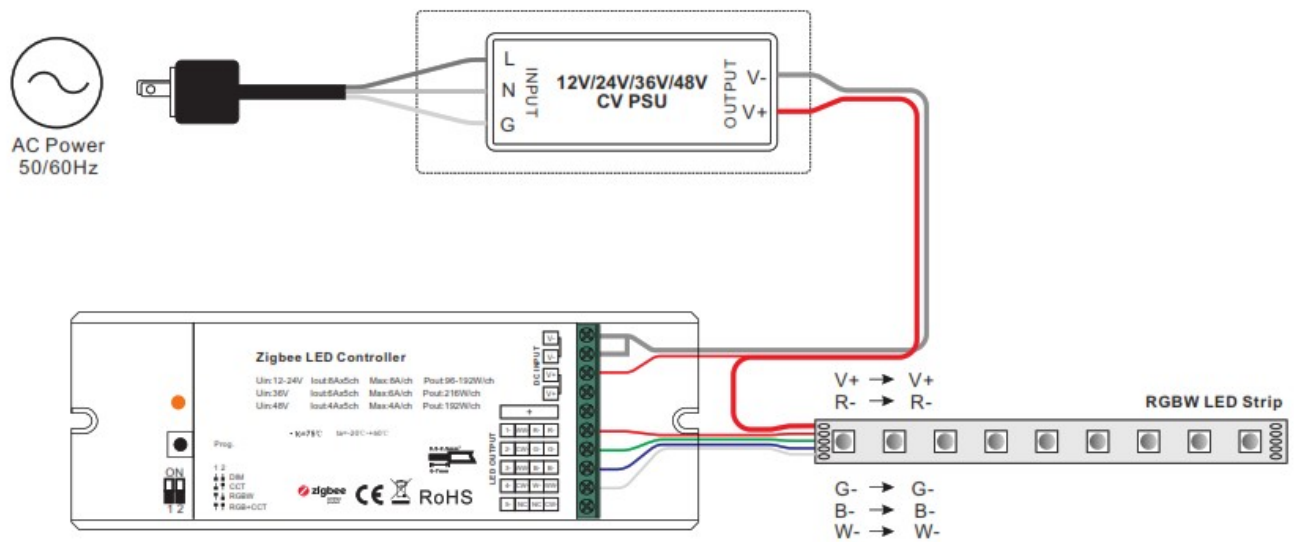
## RGBW Mode

1) When total load of each receiver is not over 20A



2) When total load of each receiver is over 20A

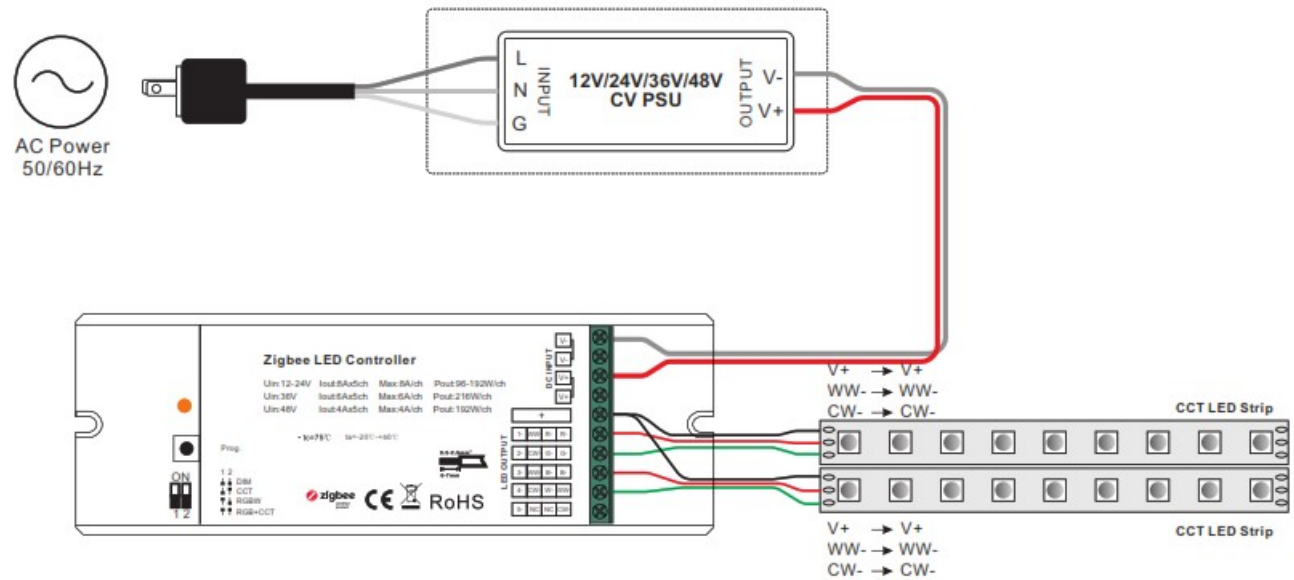




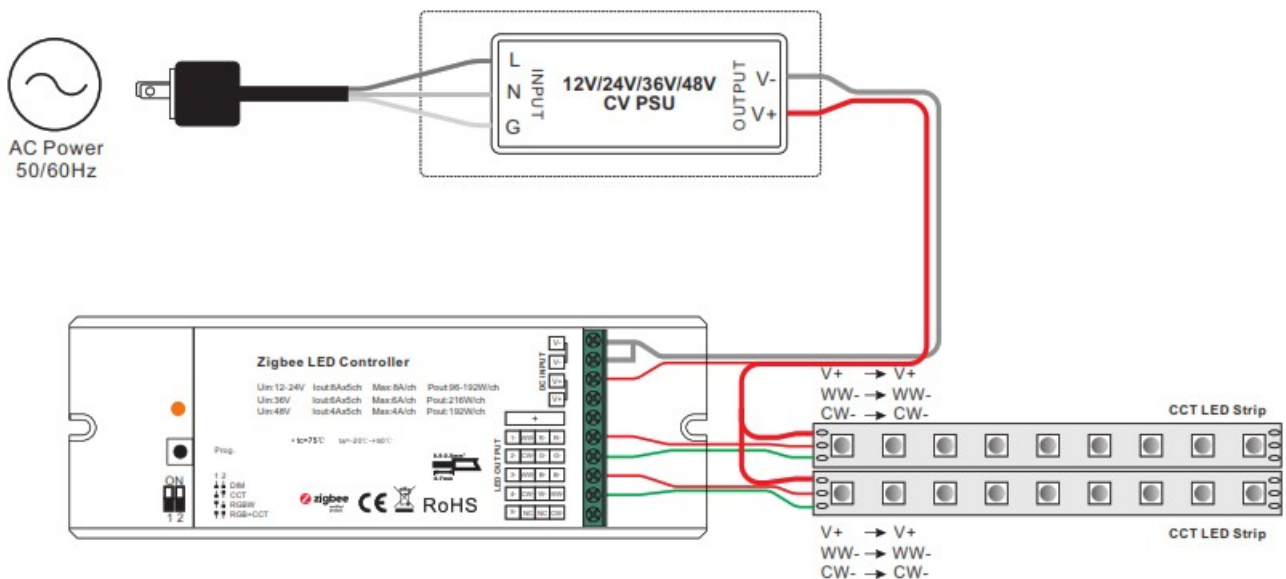
**Note:** please make sure the dial switches are at position for RGBW mode as shown in above diagram.

## CCT Mode

### 1) When total load of each receiver is not over 20A



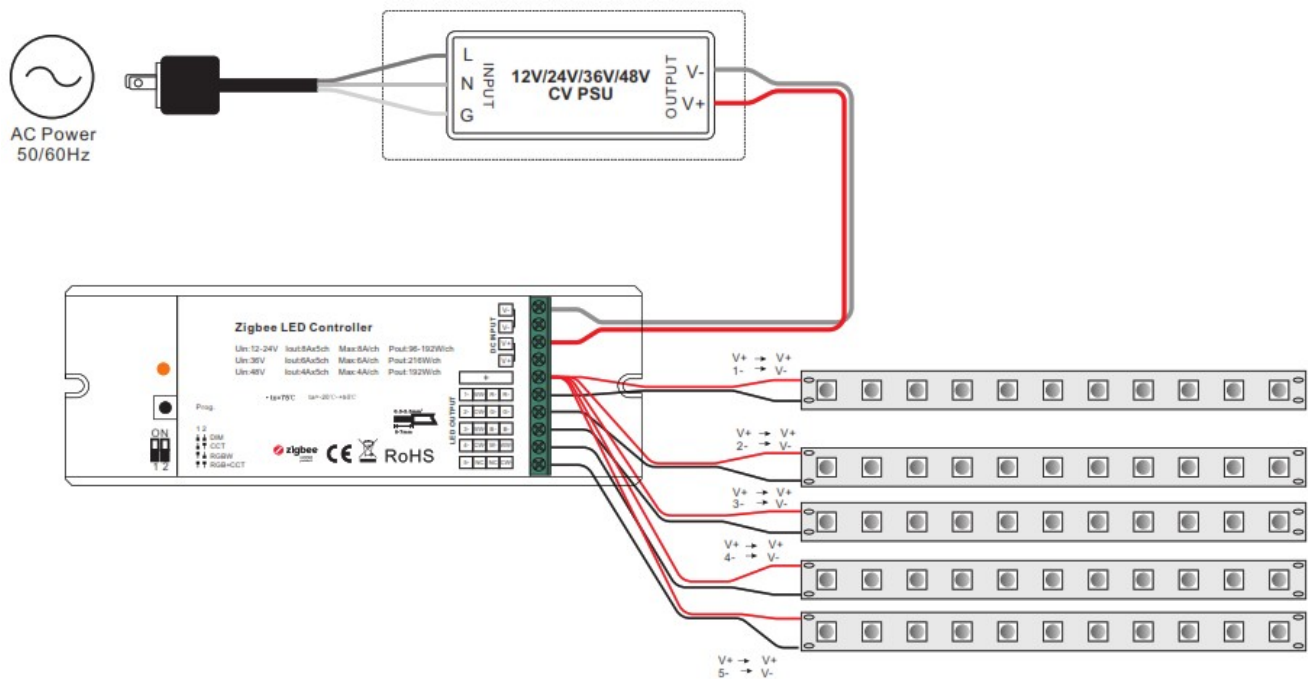
### 2) When total load of each receiver is over 20A



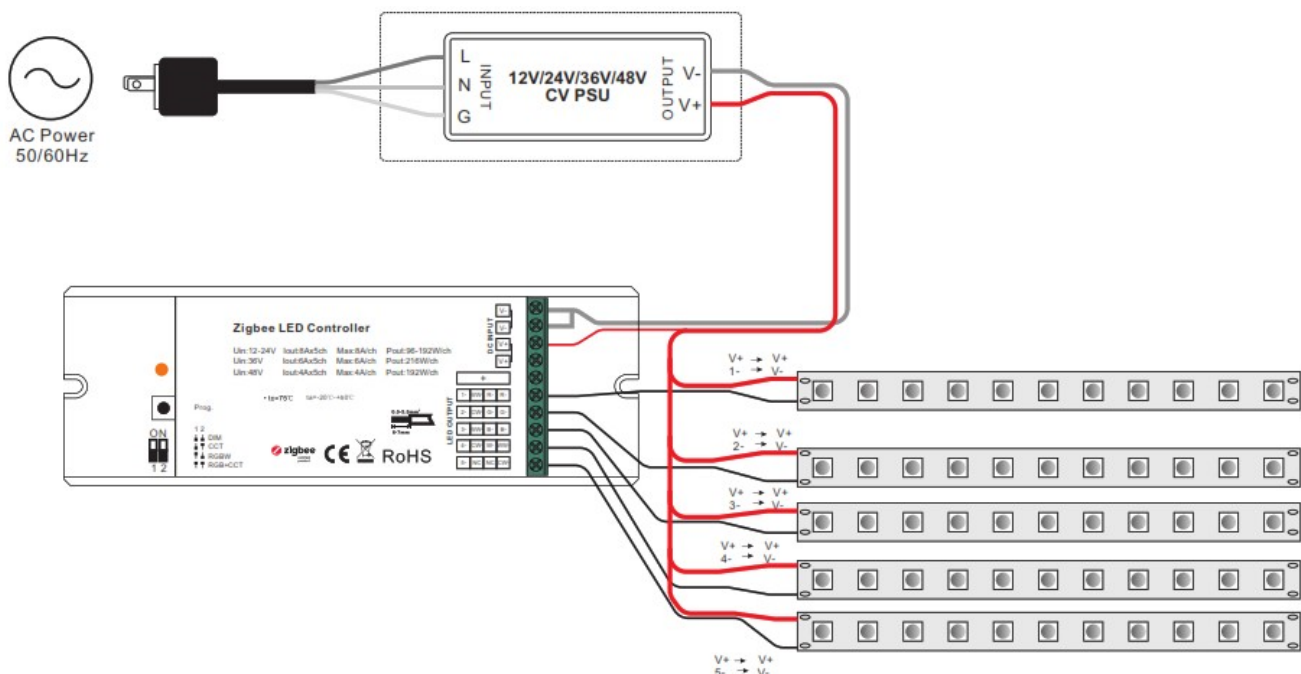
**Note:** please make sure the dial switches are at position for CCT mode as shown in above diagram.

## DIM Mode

### 1) When total load of each receiver is not over 20A



2) When total load of each receiver is over 20A



**Note:** please make sure the dial switches are at position for DIM mode as shown in above diagram.

## Documents / Resources

	<p><a href="#">SUNRICHER SR-ZG9101EA-5C 4-in-1 Universal Zigbee LED Controller</a> [pdf] Instruction Manual</p> <p>SR-ZG9101EA-5C, 4-in-1 Universal Zigbee LED Controller, SR-ZG9101EA-5C 4-in-1 Universal Zigbee LED Controller</p>
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