4 in 1 Universal Zigbee LED Controller

zigbee certified product CE RoHS COMPLIANT

Important: Read All Instructions Prior to Installation

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)

Program Key: for zigbee network pairing, touchlink and factory reset

Zigbee LED Controller
Uin:12-24V Iout:8Ax5ch Max:8A/ch Pout:96-192W/ch
Uin:36V Iout:6Ax5ch Max:6A/ch Pout:216W/ch
Uin:48V Iout:4Ax5ch Max:4A/ch Pout:192W/ch
• tc=75℃ ta=-20℃~+50℃

DC power input
Common Anode Output(+)
CH1:R/R/WW/1 output(-)
CH2:G/G/CW/2 output(-)
CH3:B/B/WW/3 output(-)
CH4:WW/W/CW/4 output(-)
CH5:CW/NC/NC/5 output(-)
NC = No Connection

Push switch input

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(LxWxH)	Ambient Temperature	Max. Casing Temperature
12-48VDC	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	0.05-3.3mm^2 (12-30AWG)	Constant voltage	170x59x29mm	-20℃ ~ +50℃	75℃

• 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

• Can be controlled by existing push switches

• 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: power on the device, it will be set into network pairing mode (connected light flashes twice slowly), the network pairing mode will last until the device is added to a zigbee network.

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.

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, once time out, repeat this step.
Method 2: Add the device to a Zigbee network, then it will be set into Touchlink commissioning immediately, Touchlink will last for 180S, once time out, reset power of the device to set it into touchlink commissioning again.

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

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.

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.
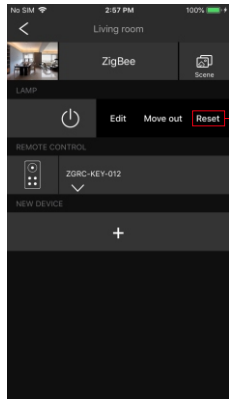
5. Removed from a Zigbee Network through Coordinator or Hub Interface

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.
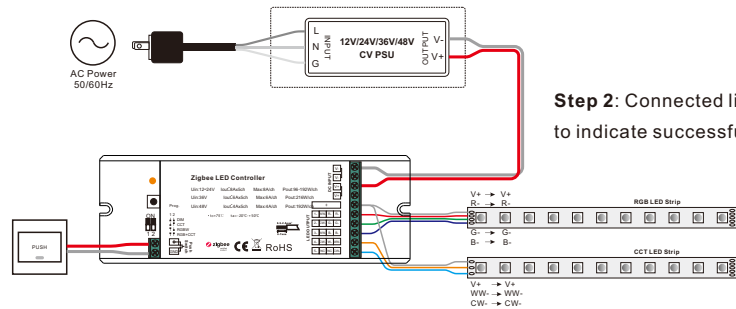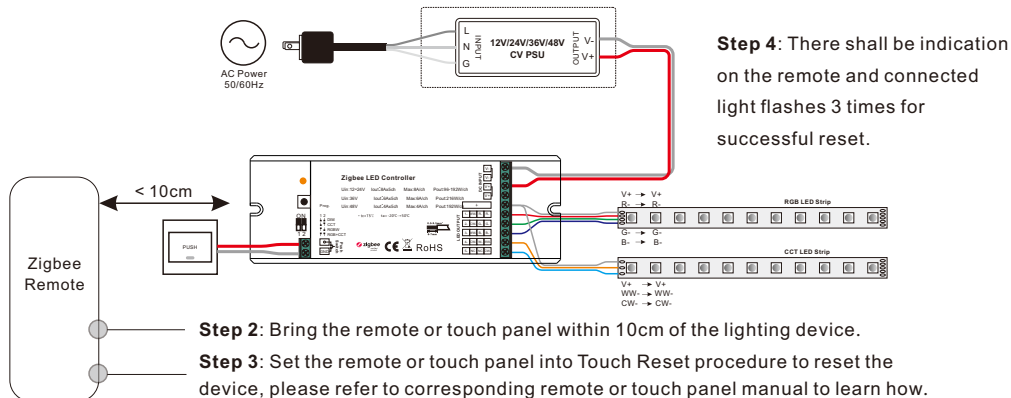

Step 2: Connected light will blink 3 times to indicate successful reset.

Note: 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.

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

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

Step 3: Set 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.

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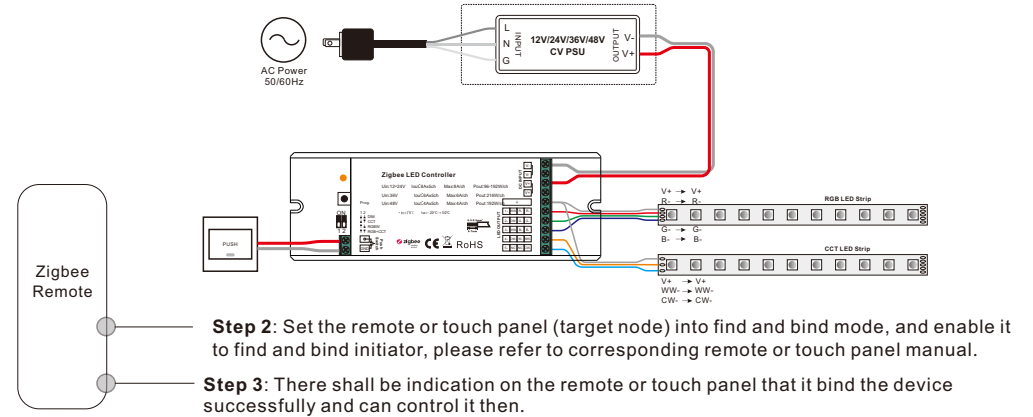
Step 2: Set the remote or touch panel (target node) into find and bind mode, and enable it to find and bind initiator, please refer to corresponding remote or touch panel manual.

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

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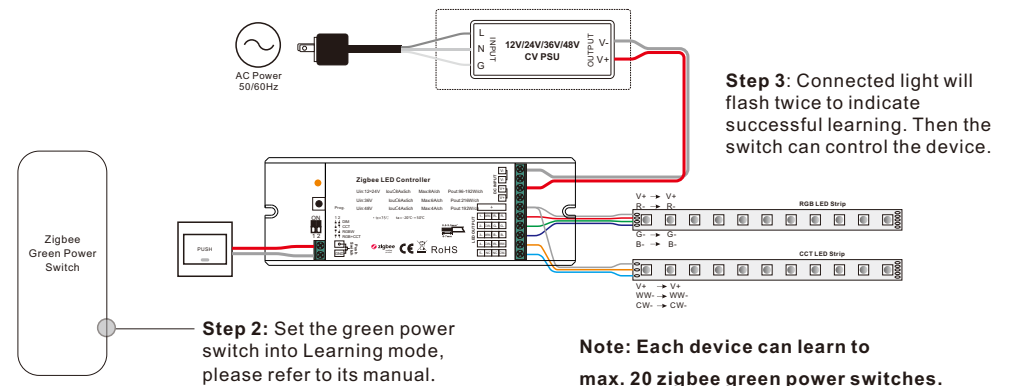
Step 3: Connected light will flash twice to indicate successful learning. Then the switch can control the device.

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

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

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.
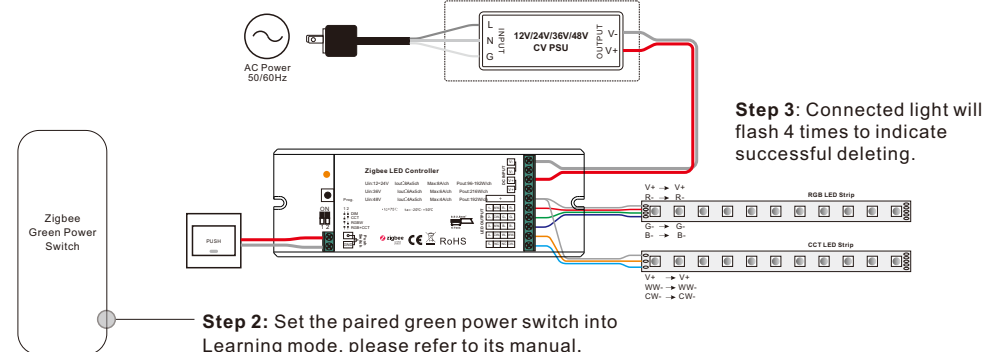

Step 3: Connected light will flash 4 times to indicate successful deleting.

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

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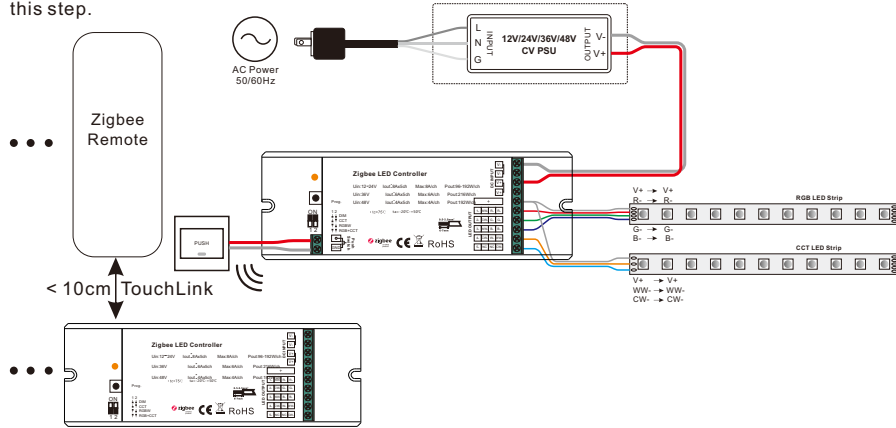
Step 2: Set another device or remote or touch panel into network pairing mode and pair to the network, refer to their manuals.

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.
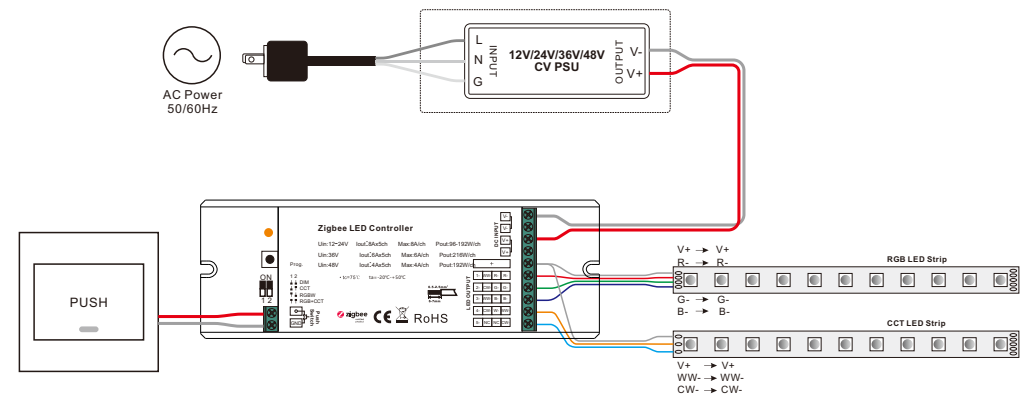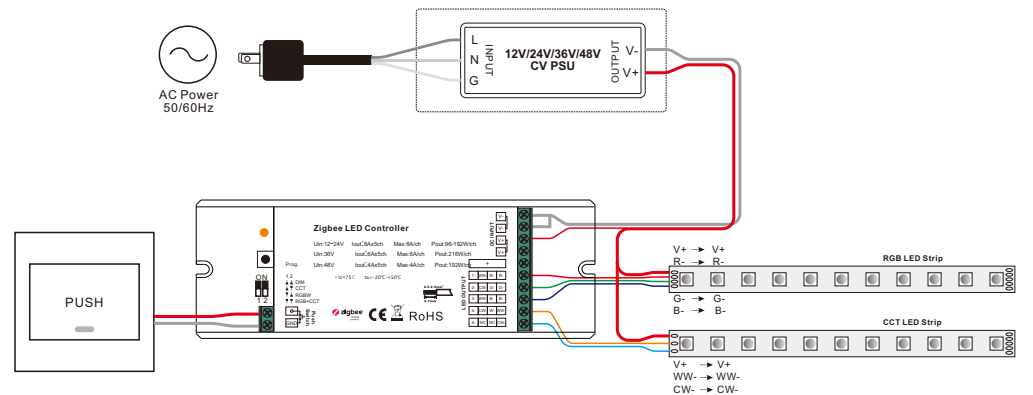
Product Dimension
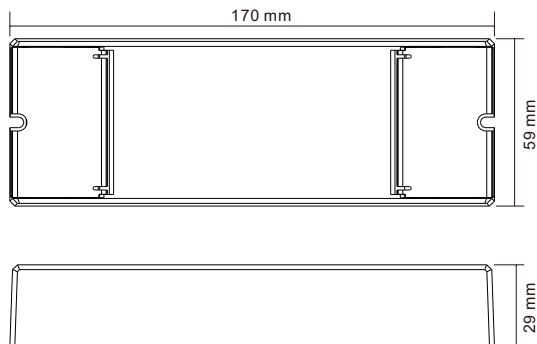
Wiring Diagram

RGB+CCT Mode

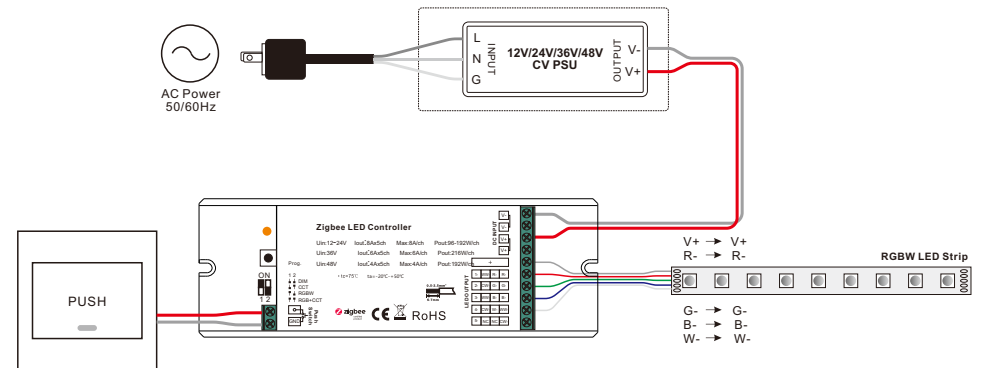**1) When total load of each receiver is not over 20A**

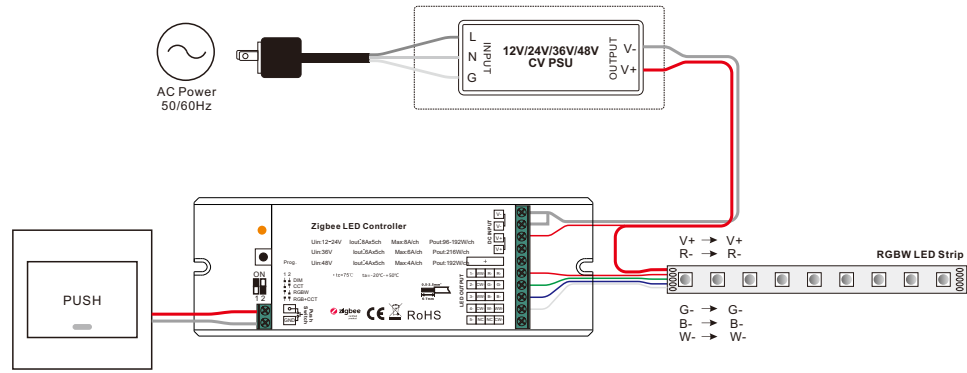**2) When total load of each receiver is over 20A**

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

AC Power 50/60Hz

L N G INPUT 12V/24V/36V/48V CV PSU OUTPUT V- V+

Zigbee LED Controller
Uin:12~24V Iout:C8A5ch Max:8A/ch Pout:96-192W/ch
Uin:36V Iout:C6A4ch Max:6A/ch Pout:216W/ch
Uin:48V Iout:C4A4ch Max:4A/ch Pout:192W/ch

Prog. ON 1 2 1 2 DIM CCT RGBW RGB+CCT

PUSH

zigbee CE RoHS

V+ → V+
R- → R-
G- → G-
B- → B-
W- → W-

RGBW LED Strip

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

CCT Mode

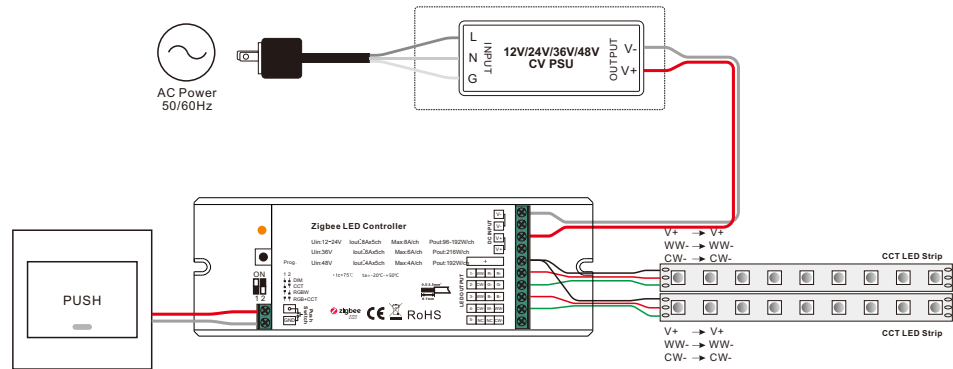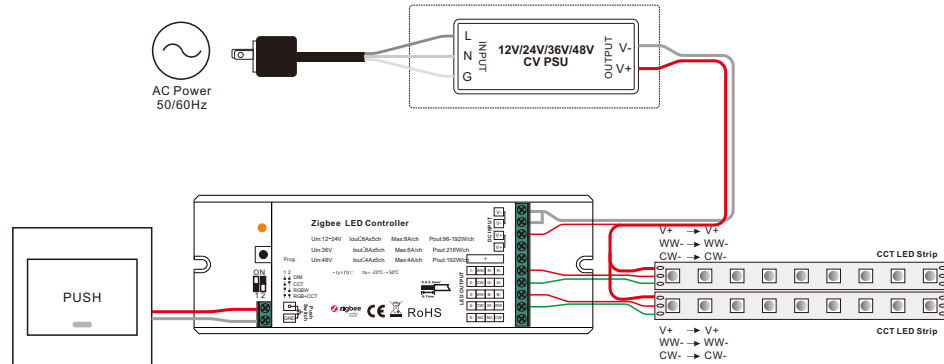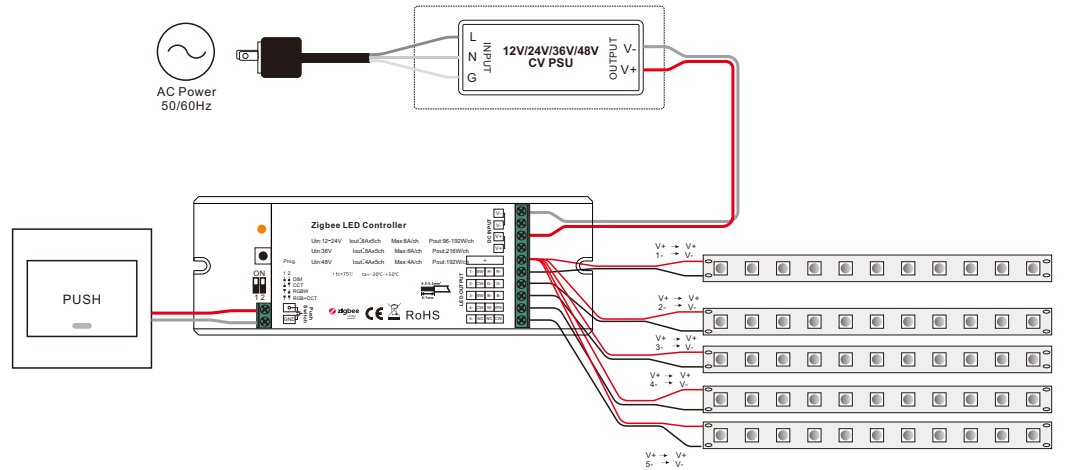**1) When total load of each receiver is not over 20A**

AC Power 50/60Hz

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Prog. ON 1 2 1 2 DIM CCT RGBW RGB+CCT

PUSH

zigbee CE RoHS

V+ → V+
WW- → WW-
CW- → CW-

CCT LED Strip

V+ → V+
WW- → WW-
CW- → CW-

CCT LED Strip

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

AC Power 50/60Hz

L N G INPUT 12V/24V/36V/48V CV PSU OUTPUT V- V+

Zigbee LED Controller
Uin:12~24V Iout:C8A5ch Max:8A/ch Pout:96-192W/ch
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Uin:48V Iout:C4A4ch Max:4A/ch Pout:192W/ch

Prog. ON 1 2 1 2 DIM CCT RGBW RGB+CCT

PUSH

zigbee CE RoHS

V+ → V+
WW- → WW-
CW- → CW-

CCT LED Strip

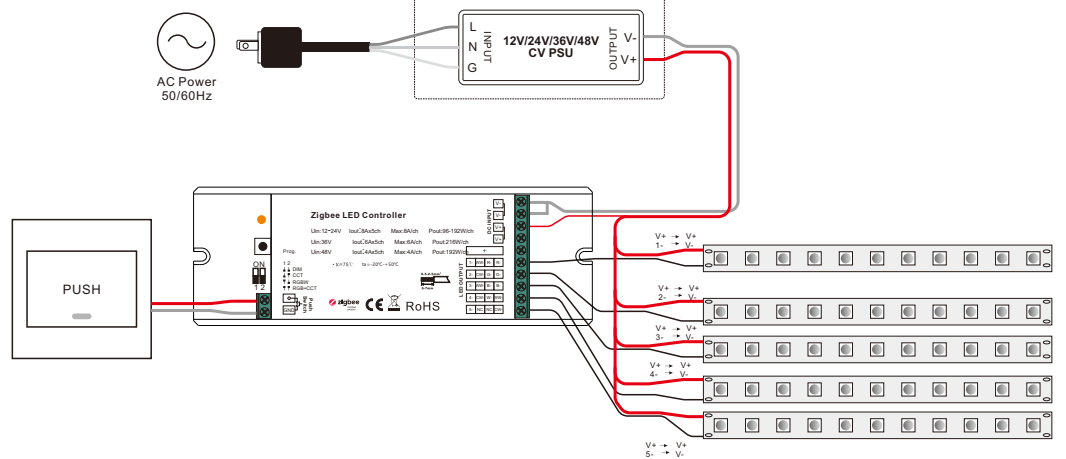V+ → V+
WW- → WW-
CW- → CW-

CCT LED Strip

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

AC Power 50/60Hz

L N G INPUT 12V/24V/36V/48V CV PSU OUTPUT V- V+

Zigbee LED Controller
Uin:12~24V Iout:C8A5ch Max:8A/ch Pout:96-192W/ch
Uin:36V Iout:C6A4ch Max:6A/ch Pout:216W/ch
Uin:48V Iout:C4A4ch Max:4A/ch Pout:192W/ch

Prog. ON 1 2 1 2 DIM CCT RGBW RGB+CCT

PUSH

zigbee CE RoHS

V+ → V+
1- → V-

V+ → V+
2- → V-

V+ → V+
3- → V-

V+ → V+
4- → V-

V+ → V+
5- → V-

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

AC Power 50/60Hz

L N G INPUT 12V/24V/36V/48V CV PSU OUTPUT V- V+

Zigbee LED Controller
Uin:12~24V Iout:C8A5ch Max:8A/ch Pout:96-192W/ch
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Uin:48V Iout:C4A4ch Max:4A/ch Pout:192W/ch

Prog. ON 1 2 1 2 DIM CCT RGBW RGB+CCT

PUSH

zigbee CE RoHS

V+ → V+
1- → V-

V+ → V+
2- → V-

V+ → V+
3- → V-

V+ → V+
4- → V-

V+ → V+
5- → V-

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

PUSH DIM:
While connected with a push switch, click the button to switch ON/OFF lights. Press and hold down the button to increase/decrease light intensity.