SRPC 70260021-A 200W ZigBee LED Driver



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SRPC 70260021-A 200W ZigBee LED Driver



Product Specifications

• Product Name: 200W ZigBee LED Driver (Constant Voltage)

• Input Voltage: AC 100-277V

• Output Voltage: 24VDC

• Max. Power Output: 200W

• Dimming Range: 0.1% – 100%

· Control Method: ZigBee

• Working Temperature: -20°C to +45°C

• Working Humidity: 10% to 95% RH non-condensing

Product Usage Instructions

Function Introduction:

The LED driver allows for dimming and control of LED lighting. The program key can be used to switch on/off the load and adjust light intensity.

Wiring Instructions:

1. Ensure correct wiring according to the provided connection diagram.

ZigBee Network Pairing:

- 1. Remove the device from any previous ZigBee network to avoid pairing issues.
- 2. Using a ZigBee Controller or hub interface, select to add a lighting device and follow the pairing instructions provided.

Dimming Control:

The dimming range of the driver is from 0.1% to 100%. Dimming is achieved through Pulse Width Modulation control method.

Safety & Warnings:

- 1. Follow all safety standards and regulations during installation and use.
- 2. This ZigBee device operates as a wireless receiver and must communicate with ZigBee compatible systems only.

Frequently Asked Questions (FAQ):

Q: How do I reset the LED driver for ZigBee network pairing?

A: To reset the device for ZigBee network pairing, follow these steps:

- 1. If the device was previously connected to a ZigBee network, remove it from that network.
- 2. Proceed to pair the device with a new ZigBee network using the ZigBee Controller or hub interface.

Important: Read All Instructions Prior to Installation

Function introduction

Note:

- 1. 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. W channel can be controlled separately from RGB channels through RGBW zigbee remote or touch panel's W button, please refer to their manuals.

Product Data

	LED Channel	4		
	DC Voltage	12V DC	24V DC	
	Max. Current	Max. 8.3A/ch, ch1+ch2+ch3+ch4=1 6.6A	Max. 4.1A/ch, ch1+ch2+ch3+ch4=8.4A	
	Voltage Tolerance	±1%		
Output	Rated Power	max. 200W		
	Voltage Range	100-277V AC		
	Frequency Range	50/60Hz		
	Power Factor (Typ.)	> 0.98 @ 230VAC		
	Total Harmonic Disto rtion	THD ≤ 15% (@ full load / 230VAC)		
	Efficiency (Typ.)	93% @ 230VAC full load		
	AC Current (Typ.)	2.3A @ 100VAC, 1A @ 230VAC, 0.9A@277VAC		
	Inrush Current (Typ.)	Cold Start Max. 65A @ 230VAC		
	Leakage Current	< 0.5mA /230VAC		
	Standby Power Consumption	< 1W		

	Dimming Interface	ZigBee	
	Dimming Range	0.1%-100%	
Control	Dimming Method	Pulse Width Modulation	
	Over Current	Yes, recovers automatically after fault condition is removed	
Protection	Over Temperature	Yes, recovers automatically after fault condition is removed	
	Working Temp.	-20°C ~ +45°C	
	Max. Case Temp.	85°C (Ta="45°C")	
Environment	Working Humidity	10% ~ 95% RH non-condensing	
Environment	Storage Temp. & Hu midity	-40°C ~ +80°C, 10% ~ 95% RH	
	Safety Standards	UL8750, CAN/CSA C22.2 No. 250.13-14, ENEC EN61347-1, EN61347-2-13 approved	
	Withstand Voltage	I/P-O/P: 3.75KVAC	
Safety & EM C	Isolation Resistance	I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH	
	EMC Emission	EN55015, EN61000-3-2, EN61000-3-3	
	EMC Immunity	EN61547, EN61000-4-2,3,4,5,6,8,11, surge immunity Line-Line 1KV	
Others	MTBF	187100H, MIL-HDBK-217F @ 230VAC at full load and 25°C ambient tem perature	

- Dimmable LED driver with metal case, 4 channels 12/24VDC constant voltage output
- · Class 1 power supply, full isolated metal case
- Built-in two-stage active PFC function, PF > 0.98, Efficiency > 93%, low standby power < 1W
- Compliant with Safety Extra Low Voltage standard
- Over load, over temperature protection
- ZigBee RGBW LED light device based on ZigBee 3.0 protocol, supports Touchlink commissioning
- Enables to control ON/OFF, light intensity and RGB color
- W channel can be controlled through Gateway's color temperature control interface
- W channel can be controlled separately from RGB channels through RGBW zigbee remote or touch panel's W button
- Can directly pair to a compatible ZigBee remote via Touchlink
- Supports zigbee green power and can bind max. 20 zigbee green power remotes
- Compatible with universal ZigBee coordinator or gateway products
- IP20 rating, suitable for indoor LED lighting applications
- 5 years warranty

Safety & Warnings

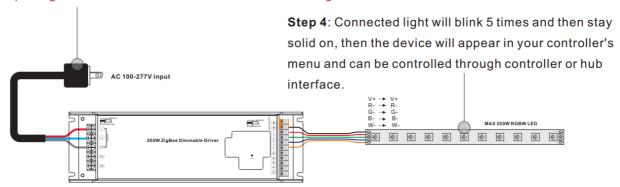
• DO NOT install with power applied to the device.

• 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.

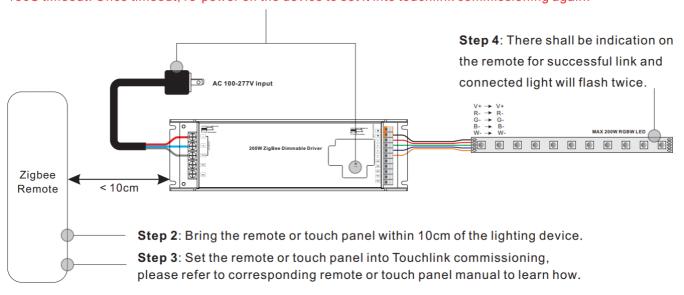
Step 3: power on the device, it will be set into network pairing mode (connected light flashes twice slowly), the network pairing mode will last until the device is added to a zigbee network.



4. TouchLink to a Zigbee Remote

Step 1: Method 1: Short press "Prog" button (or re-power on the device) 4 times to start Touchlink commissioning immediately, 180S timeout, repeat the operation.

Method 2: If the device is already added to a network, it will be set into Touchlink commissioning immediately, 180S timeout. Once timeout, re-power on the device to set it into touchlink commissioning again.

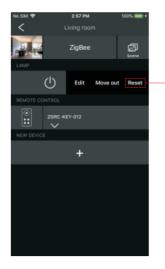


Note:

- 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. For Third-Party Automation Devices, add remote and device to network first then TouchLink.

4. After TouchLink, the device can be controlled by the linked remotes.

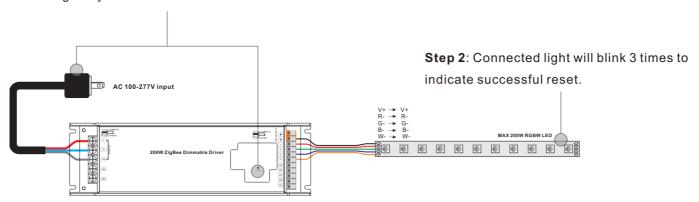
Removed from a Zigbee Network through Coordinator or Hub Interface



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.

Factory Reset Manually

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

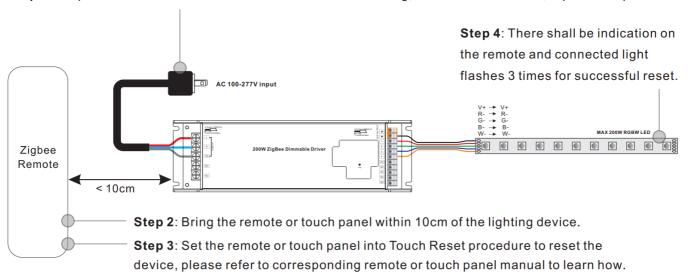


Note: All configuration parameters will be reset after the device is reset or removed from the network.

Factory Reset through a Zigbee Remote (Touch Reset)

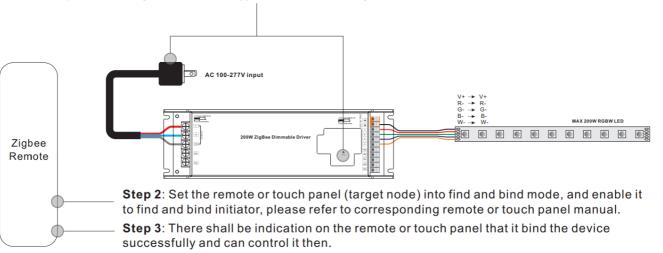
Note: Make sure the device already added to a network, the remote added to the same one or not added to any network.

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



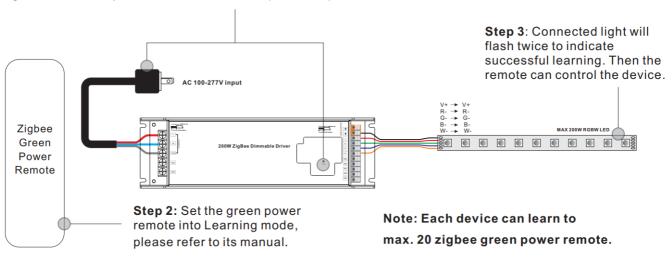
Find and Bind Mode

Step 1: Short press "Prog." 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.



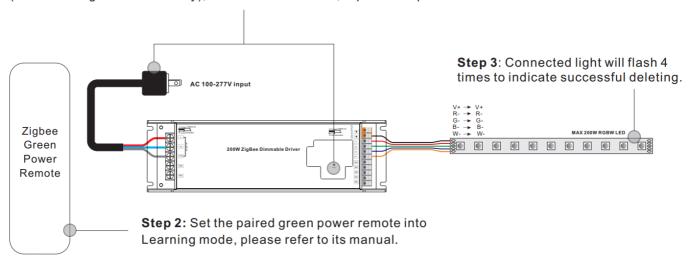
Learning to a Zigbee Green Power Remote

Step 1: Short press "Prog." 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.



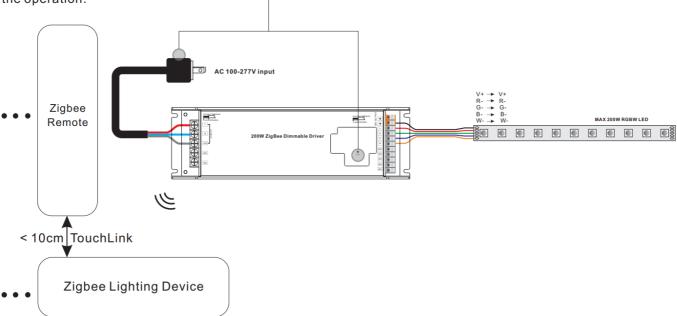
Delete Learning to a Zigbee Green Power Remote

Step 1: Short press "Prog." 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.



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

Step 1: Short press "Prog." 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.



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.

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

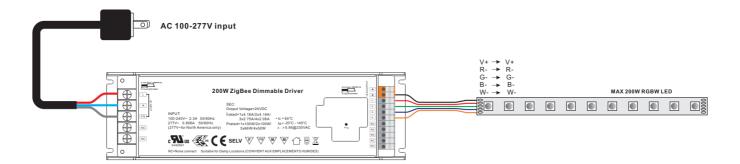
Output Clusters

• 0x0019: OTA

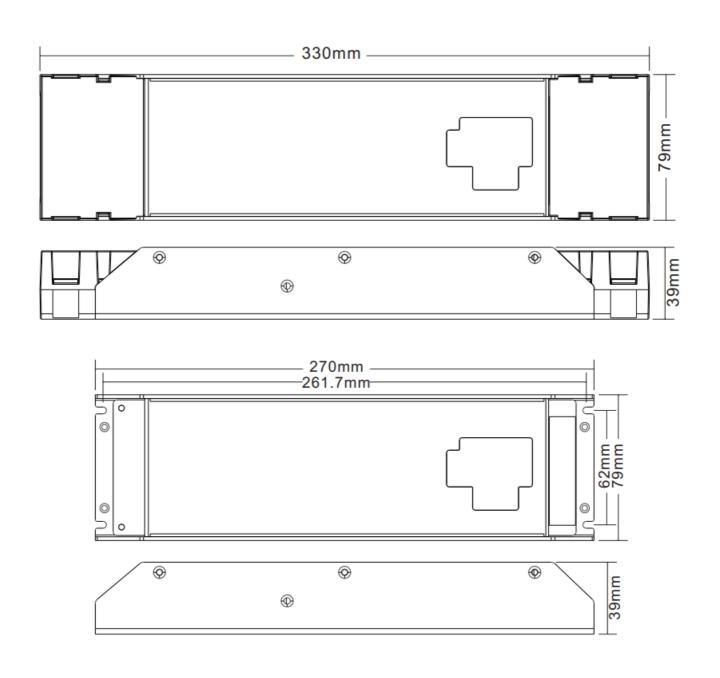
OTA

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

Wiring diagram



Product Dimension



Documents / Resources



SRPC 70260021-A 200W ZigBee LED Driver [pdf] Instruction Manual 70260021-A, SRPCZG910524200CVF, 70260021-A 200W ZigBee LED Driver, 200W ZigBee LED Driver, LED Driver, Driver

References

• User Manual

Manuals+, Privacy Policy

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