# 100W 24V Zigbee RGBW Constant Voltage Dimmable Driver











Important: Read All Instructions Prior to Installation

## **Function introduction**



Program Key: short press to switch on/off load, press and hold down to increase/decrease light intensity

#### **Product Data**

	LED Channel	4 Channel
Output	DC Voltage	24V DC
	Max. Current	Max. 4.17A
	Voltage Tolerance	±3%
	Rated Power	Max. 100W
Input	Voltage Range	220-240V AC
	Frequency Range	50/60Hz
	Power Factor (Typ.)	> 0.97 @ 230VAC
	Total Harmonic Distortion	THD ≤ 9% (@ full load / 230VAC)
	Efficiency (Typ.)	93% @ 230VAC full load
	AC Current (Typ.)	0.47A @ 230VAC
	Inrush Current (Typ.)	COLD START Max. 32A @ 230VAC
	Leakage Current	< 0.5mA /230VAC
	Standby Power Consumption	< 0.5W
	Anti Surge	L-N:2KV
Control	Dimming Interface	Zigbee
	Dimming Range	0.1%-100%
	Dimming Method	Pulse Width Modulation
	Dimming Curve	Linear/Logarithmic optional
Protection	Over Voltage	Yes, recovers automatically after fault condition is removed
	Over Load	Yes, recovers automatically after fault condition is removed
	Short Circuit	Yes, recovers automatically after fault condition is removed
	Over temperature	Yes, recovers automatically after temperature drop

Environment	Working Temp.	-25°C ~ +45°C
	Max. Case Temp.	85°C (Ta="45°C")
	Working Humidity	10% ~ 95% RH non-condensing
	Storage Temp. & Humidity	-40°C ~ +80°C, 10% ~ 95% RH
Safety & EMC	Safety Standards	IEC/EN61347-1, IEC/EN61347-2-13
	Withstand Voltage	I/P-O/P: 3.75KVAC
	Isolation Resistance	I/P-O/P: 100M Ohms / 500VDC / $25^{\circ}$ C / $70\%$ RH
	EMC Emission	EN55015, EN61000-3-2 Class C, EN61000-3-3
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11, EN614547
Others	MTBF	191500Н, MIL-HDBK-217F @ 230VAC full load and 25°C ambient temperature
	Dimension	306.6*43*30mm (L*W*H)
	Warranty	5 Years

- Dimmable LED driver, max. output power 100W total
- 4 channels DC 24V constant voltage output
- · High power factor and efficiency
- Deep and smooth dimming to 0.1%, flicker free
- Standby power consumption less than 0.5W, meet latest ERP requirements
- Enables to control ON/OFF, light intensity, CCT, RGBW LED lights
- ZigBee end device that supports Touchlink commissioning
- Can directly pair to a compatible ZigBee remote via Touchlink
- 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 products
- Compatible with universal RGBW ZigBee remotes
- Waterproof grade: IP20, 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

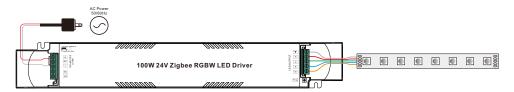
- 1.Do wiring according to connection diagram correctly.
- 2. This ZigBee device is a wireless receiver that communicates with a variety of ZigBee compatible systems. This receiver receives and is controlled by wireless radio signals from the compatible ZigBee system.

## 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.

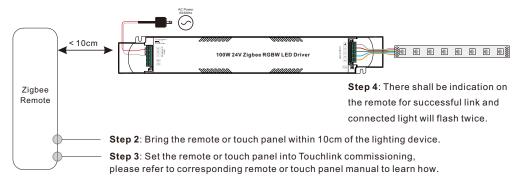


**Step 4**: Connected light will blink 5 times and then stay solid on, then the device will appear in your controller's menu and can be controlled through controller or hub interface.

### 4. TouchLink to a Zigbee Remote

**Step 1: Method 1:** Short press "Prog" button (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) 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.

## 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 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.

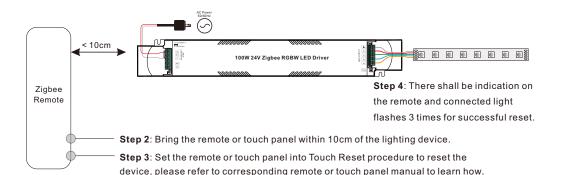
Note: 1) If the device is already at factory default setting, there is no indication when factory reset again .

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)

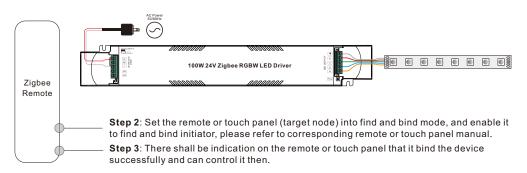
**Note**: Make sure the device already added to a network, the remote added to the same one or not added to any network.

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



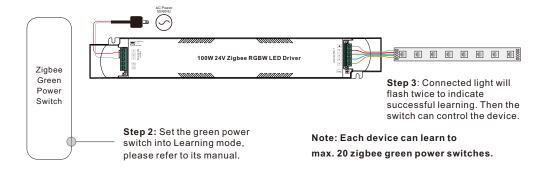
#### 8. Find and Bind Mode

**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.



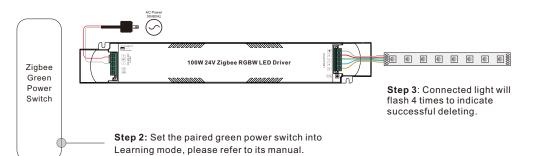
## 9. Learning to a Zigbee Green Power Switch

**Step 1**: Short press "Prog." button 4 times (Or re-power on the device 4 times) to start Learning to GP switch mode (connected light flashes twice), 180 seconds timeout, repeat the operation.



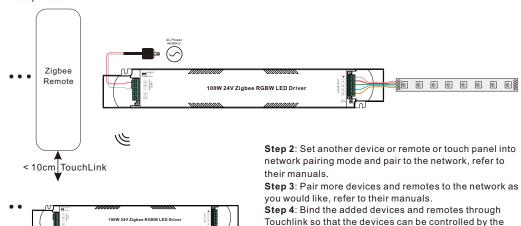
## 10. Delete Learning to a Zigbee Green Power Switch

**Step 1**: Short press "Prog." button 3 times (Or re-power on the device 3 times) to start delete Learning to GP switch mode (connected light flashes slowly), 180 seconds timeout, repeat the operation.



## 11. 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.



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.

## Wiring diagram



## **Product Dimension**

