# 96W ZigBee LED Driver(constant voltage)

( € FC ØRHS (FFEE) SELV ₹ © © C ₹

Important: Read All Instructions Prior to Installation Function introduction



AC 100-277V input

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

09.96ZG.04763

Note: W channel can only be controlled through color temperature control command since Zigbee only has tunable white control. Color temperature control will mix RGB channels as 1 channel white and then make color tuning with the 4th channel white.

# **Product Data**

	LED Channel	4				
Output	DC Voltage	24V DC				
	Max. Current	Max. 4A/CH, CH1+CH2+CH3+CH4=4A				
	Voltage Tolerance	±1%				
	Rated Power	max.96W				
Input	Voltage Range	100-277V AC				
	Frequency Range	50/60Hz				
	Power Factor (Typ.)	> 0.90 @ 230VAC				
	Total Harmonic Distortion	THD $\leq$ 15% (@ full load / 230VAC)				
	Efficiency (Typ.)	90% @ 230VAC full load				
	AC Current (Typ.)	1.2A @ 100VAC, 0.5A @ 230VAC				
	Inrush Current (Typ.)	Cold Start Max. 50A @ 230VAC				
	Leakage Current	< 0.5mA /230VAC				
Control	Dimming Interface	ZigBee				
	Dimming Range	0%-100%				
	Dimming Method	Pulse Width Modulation				
Protection	Short Circuit	Yes, recovers automatically after fault condition is removed				
	Over Current	Yes, recovers automatically after fault condition is removed				
	Over Temperature	Yes, recovers automatically after fault condition is removed				

	Working Temp.	-20℃ ~ +50℃				
Environment	Max. Case Temp.	75℃				
	Working Humidity	10% ~ 95% RH non-condensing				
	Storage Temp. & Humidity	-40°C ~ +80°C, 10% ~ 95% RH				
	Safety Standards	UL8750, CAN/CSA C22.2 No. 250.13-14, EN61347-1, EN61347-2-13 approved				
	Withstand Voltage	I/P-O/P: 3.75KVAC				
Safety & EMC	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 14				
Others	MTBF	193.6K hrs min. @ 230VAC full load and 25℃ ambient temperature				
	Dimension	244*64*32mm (L*W*H)				

• Dimmable LED driver with plastic case, ZigBee RGBW LED light device based on ZigBee 3.0 protocol

• 4 channels 24VDC constant voltage output

- Class  ${\rm I\!I}$  power supply, full isolated design
- Built-in two-stage active PFC function, PF > 0.90, Efficiency > 90%
- Compliant with Safety Extra Low Voltage standard
- Short circuit, over load, over temperature protection

• Enables to control ON/OFF, light intensity and RGB color, W channel can only be controlled through color temperature control command

Color temperature control will mix RGB channels as 1 channel white and then make color tuning with the 4th channel white

ZigBee end device that supports Touchlink commissioning

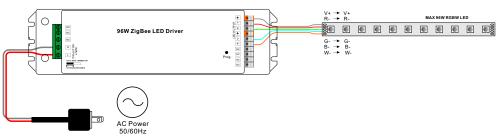
- Can directly pair to a compatible ZigBee remote via Touchlink
- Supports zigbee green power and can bind max. 20 zigbee green power remotes
- Compatible with universal ZigBee coordinator or gateway products
- · IP20 rating, suitable for indoor LED lighting applications
- 5 years warranty

# Safety & Warnings

• DO NOT install with power applied to the device.

• DO NOT expose the device to moisture.

# Wiring Diagram



### Operation

1.Do wiring according to connection diagram correctly.

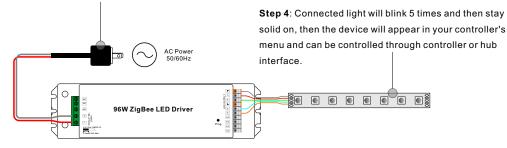
2. This ZigBee device is a wireless receiver that communicates with a variety of ZigBee compatible systems. This receiver receives and is controlled by wireless radio signals from the compatible ZigBee system.

### 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"**.

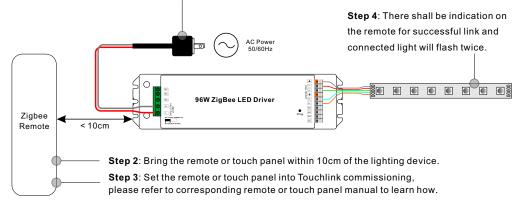
**Step 2**: From your ZigBee Controller or hub interface, choose to add lighting device and enter Pairing mode as instructed by the controller.

Step 3: Re-power on the device to set it into network pairing mode (connected light flashes twice slowly), 15 seconds timeout, repeat the operation.



# 4. TouchLink to a Zigbee Remote

**Step 1**: Re-power on the device, Touchlink commissioning will start after 15S if it's not added to a network, 165S timeout. Or start immediately if it's already added to a network, 180S timeout. Once timeout, repeat the operation.



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 Hue Bridge & Amazon Echo Plus, add remote and device to network first then TouchLink.
4) After TouchLink, the device can be controlled by the linked remotes.

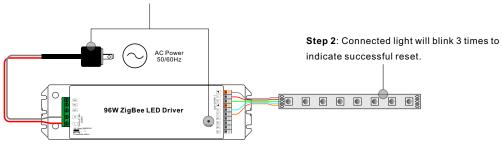
#### 5. Removed from a Zigbee Network through Coordinator or Hub Interface



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.

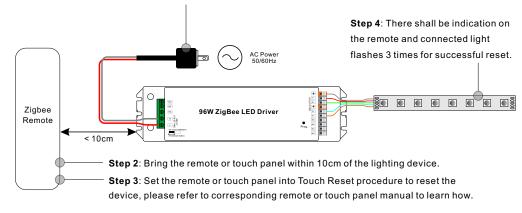


Note: 1) If the device is already at factory default setting, there is no indication when factory reset again . 2) All configuration parameters will be reset after the device is reset or removed from the network.

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

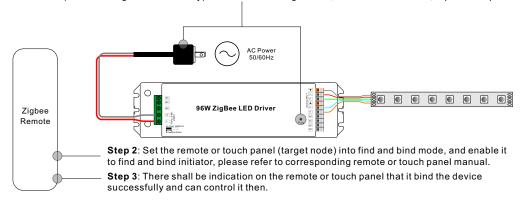
Note: Make sure the device already added to a network, the remote added to the same one or not added to any network.

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



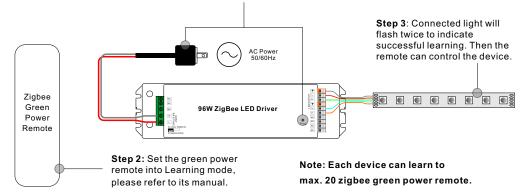
# 8. Find and Bind Mode

**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.



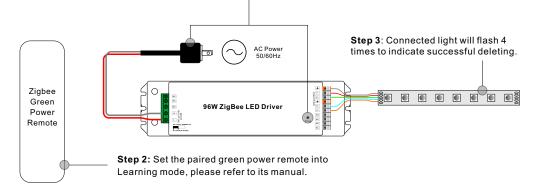
# 9. Learning to a Zigbee Green Power Remote

**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.



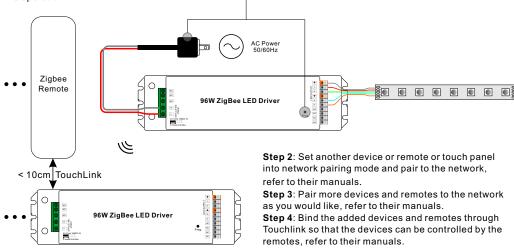
#### 10. Delete Learning to a Zigbee Green Power Remote

**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.



# 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.



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	• 0x000	3: Identify	• 0x0004: Gro	oups	• 0x0005: Scene	es •	0x0006: On/off
0x0008: Level Co	ntrol	• 0x0300: Cold	or Control	• 0x0b05	: Diagnostics		
Dutput 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**

