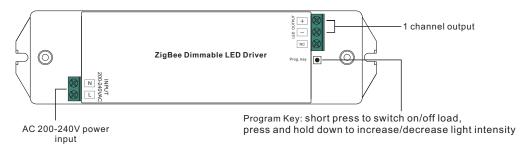
# 15W ZigBee LED Driver(constant current)

09.ZG9105C.04021



Important: Read All Instructions Prior to Installation

## **Function introduction**



## **Product Data**

| Output      | Selectable Current           | Adjustable by factory setting, 350mA by default |
|-------------|------------------------------|---|
|             |                              | 100-350mA                                       |
|             | DC Voltage Range             | 6-52V DC  |
|             | Rated Power                  | 15W max.  |
| Input       | Voltage Range                | 200-240V AC                                     |
|             | Frequency Range              | 50/60Hz   |
|             | Power Factor (Typ.)          | > 0.9 @ 230VAC                                  |
|             | Total Harmonic<br>Distortion | THD ≤ 15% (@ full load / 230VAC)                |
|             | Efficiency (Typ.)            | 85% @ 230VAC full load                          |
|             | AC Current (Typ.)            | 0.09A @ 230VAC                                  |
|             | Inrush Current (Typ.)        | COLD START 2A max. at 230VAC                    |
|             | Leakage Current              | < 0.5mA /230VAC                                 |
| Protection  | Short Circuit                | Yes, auto recovery after fault removed          |
|             | Over Voltage                 | Yes, auto recovery after fault removed          |
|             | Over Temperature             | Yes, auto recovery after fault removed          |
| Environment | Working Temp.                | -20℃ ~ +45℃                                     |
|             | Max. Case Temp.              | 85°C (Ta="45°C")                                |
|             | Working Humidity             | 10% ~ 95% RH non-condensing                     |
|             | Storage Temp. &<br>Humidity  | -40°C ~ +80°C, 10% <b>~</b> 95% RH              |

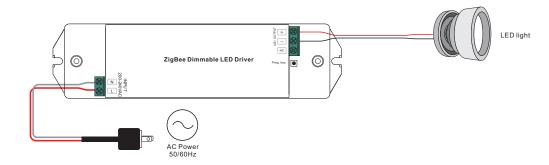
| Safety&EMC | Safety Standards  | ENEC EN61347-1, EN61347-2-13 approved                                     |
|------------|-------------------|---|
|            | Withstand Voltage | I/P-O/P: 3.75KVAC   |
|            | EMC Emission      | EN55015, EN61000-3-2, EN61000-3-3   |
|            | EMC Immunity      | EN61547, EN61000-4-2,3,4,5,6,8,11, surge immunity Line-Line 0.5KV         |
| Others     | MTBF              | 193600H, MIL-HDBK-217F @ 230VAC at full load and 25°C ambient temperature |
|            | Dimension         | 178*46*22 mm (L*W*H)  |

- · Dimmable LED driver
- ZigBee dimmable LED light device based on ZigBee 3.0 protocol
- Max. output power 15W total
- 1 channels 350mA constant current output
- Output current 100-350mA adjustable by factory preset
- ullet Class  ${f II}$  power supply, full isolated plastic case
- Built-in active PFC function
- High power factor and efficiency
- Deep and smooth dimming to 1%
- Suitable for indoor LED lighting applications
- Enables to control ON/OFF, light intensity of connected 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 remotes
- Compatible with universal ZigBee gateway products
- Compatible with universal ZigBee remotes
- Waterproof grade: IP20
- 5 years warranty

## Safety & Warnings

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

# **Wiring Diagram**



## Operation

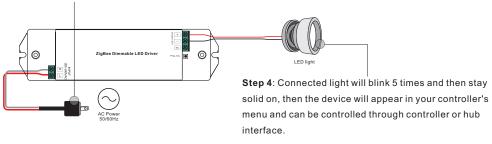
- 1.Do wiring according to connection diagram correctly.
- 2. This ZigBee device is a wireless receiver that communicates with a variety of ZigBee compatible systems. This receiver receives and is controlled by wireless radio signals from the compatible ZigBee system.

#### 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.

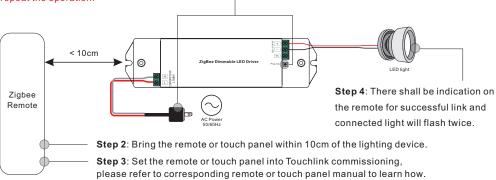
**Step 3**: Re-power on the device to set it into network pairing mode (connected light flashes twice slowly), 15 seconds timeout, repeat the operation.



## 4. TouchLink to a Zigbee Remote

**Step 1: 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**: Re-power on 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 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.

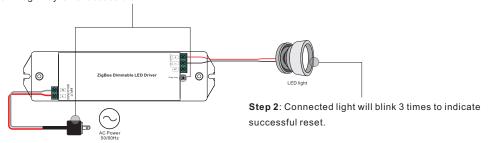
## 5. Removed from a Zigbee Network through Coordinator or Hub Interface



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.



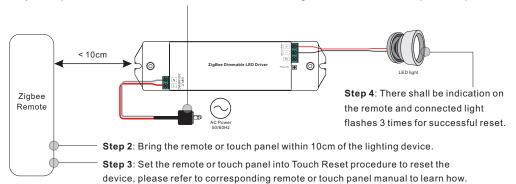
Note: 1) If the device is already at factory default setting, there is no indication when factory reset again .

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)

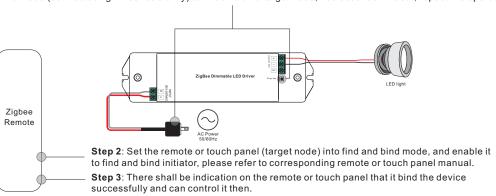
**Note**: Make sure the device already added to a network, the remote added to the same one or not added to any network.

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



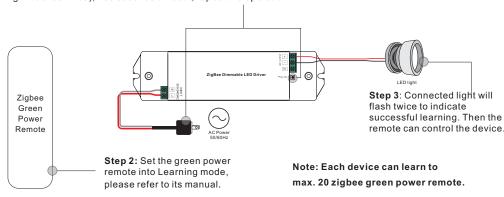
#### 8. Find and Bind Mode

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.



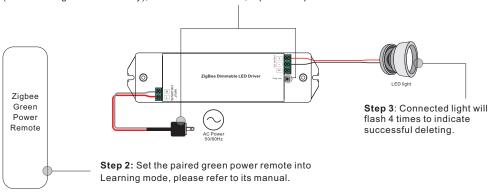
## 9. Learning to a Zigbee Green Power Remote

**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.



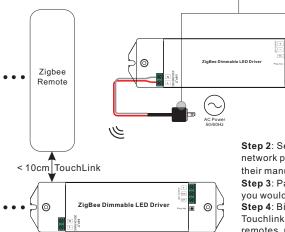
## 10. Delete Learning to a Zigbee Green Power Remote

**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.



**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 • 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**

