# VaLO 75W 24V CCT ZigBee LED Driver

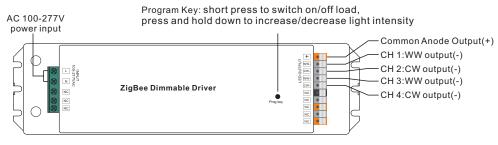


Important: Read All Instructions Prior to Installation

## •

**Function introduction** 





#### **Product Data**

Output	LED Channel	4
	DC Voltage	24V DC
	Max. Current	Max. 3.12A/ch, ch1+ch2+ch3+ch4=3.12A
	Voltage Tolerance	±1%
	Rated Power	max. 75W
Input	Voltage Range	100-277V AC
	Frequency Range	50/60Hz
	Power Factor (Typ.)	> 0.99 @ 100VAC, > 0.95 @ 230VAC
	Total Harmonic Distortion	THD ≤ 15% (@ full load / 230VAC)
	Efficiency (Typ.)	86% @ 230VAC full load
	AC Current (Typ.)	0.9A @ 100VAC, 0.39A @ 230VAC, 0.34A@277VAC
	Inrush Current (Typ.)	COLD START Max. 2A at 230VAC
	Leakage Current	< 0.5mA/230VAC
	Standby Power Consumption	< 1W
Control	Dimming Interface	ZigBee
	Dimming Range	0.1%-100%
	Dimming Method	Pulse Width Modulation

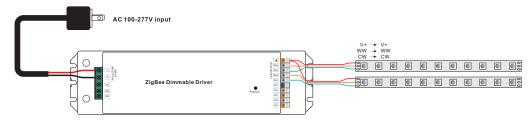
Protection	Over Current	Yes, recovers automatically after fault condition is removed
	Over Temperature	Yes, recovers automatically after fault condition is removed
Environment	Working Temp.	-25℃ ~ +45℃
	Max. Case Temp.	85°C (Ta="45°C")
	Working Humidity	10% ~ 95% RH non-condensing
	Storage Temp. & Humidity	-40°C ~ +80°C, 10% ~ 95% RH
Safety & EMC	Safety Standards	UL8750, CAN/CSA C22.2 No. 250.13-14, ENEC EN61347-1, EN61347-2-13 approved
	Withstand Voltage	I/P-O/P: 3.75KVAC
	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	188300H, MIL-HDBK-217F @ 230VAC at full load and 25℃ ambient temperature
	Dimension	244*64*32mm (L*W*H)

- Dimmable LED driver based on ZigBee 3.0 protocol
- Max. output power 75W total, 4 channels constant voltage output, 24VDC output
- Class II power supply, full isolated plastic case
- High power factor and efficiency
- Enables to control ON/OFF, light intensity and color temperature of connected LED lights
- Can directly pair to a compatible ZigBee remote via Touchlink
- Supports zigbee green power feature and can bind max. 20 zigbee green power remotes
- Compatible with universal ZigBee gateway products
- Compatible with universal ZigBee CCT remotes
- IP20 rating, suitable for indoor LED lighting applications
- 5 years warranty

## Safety & Warnings

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

## Wiring diagram

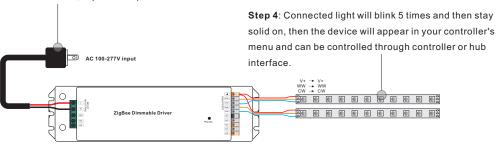


## Operation

- 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.

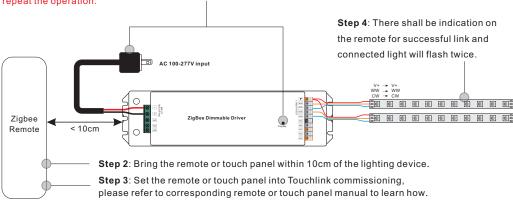
### 3. Zigbee Network Pairing through Coordinator or Hub (Added to a Zigbee Network)

- **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.



**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.

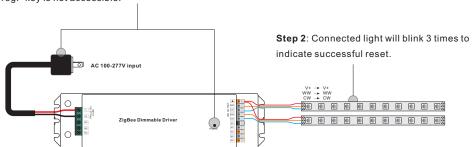
## 5. Removed from a Zigbee Network through Coordinator or Hub Interface



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.



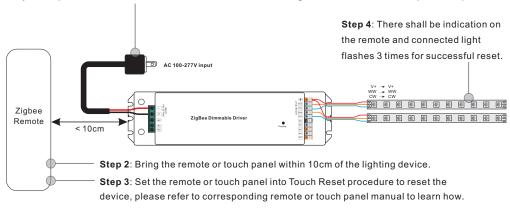
Note: 1) If the device is already at factory default setting, there is no indication when factory reset again .

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)

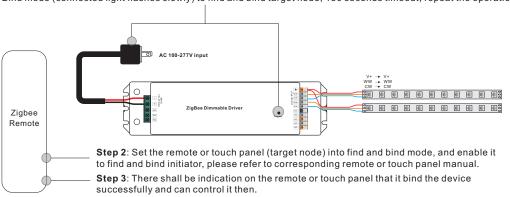
**Note**: Make sure the device already added to a network, the remote added to the same one or not added to any network.

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



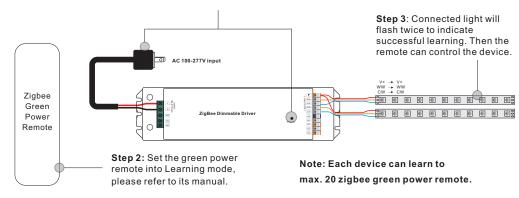
#### 8. Find and Bind Mode

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.



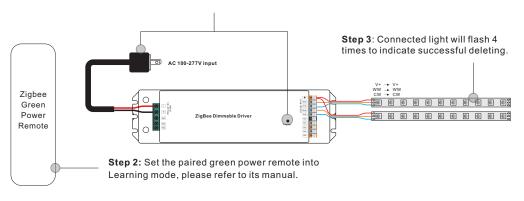
## 9. Learning to a Zigbee Green Power Remote

**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.



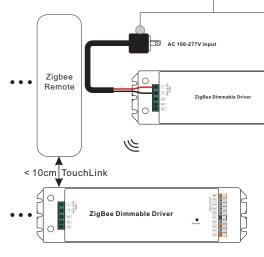
## 10. Delete Learning to a Zigbee Green Power Remote

**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 • 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**

