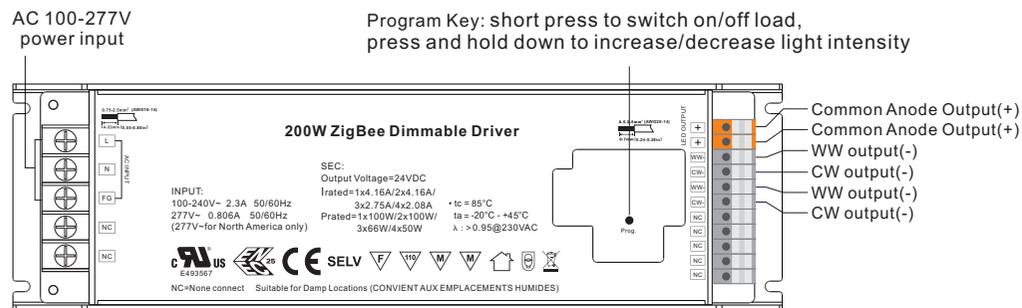


VaLO 200W CCT 24V ZigBee LED Driver



Important: Read All Instructions Prior to Installation

Function introduction



Product Data

Output	LED Channel	4	
	DC Voltage	12V DC	24V DC
	Max. Current	Max. 8.3A/ch, ch1+ch2+ch3+ch4=16.6A	Max. 4.1A/ch, ch1+ch2+ch3+ch4=8.4A
	Voltage Tolerance	± 1%	
	Rated Power	max. 200W	
Input	Voltage Range	100-277V AC	
	Frequency Range	50/60Hz	
	Power Factor (Typ.)	> 0.98 @ 230VAC	
	Total Harmonic Distortion	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		

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.	-20°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	UL8750, CAN/CSA C22.2 No. 250.13-14, 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°C ambient temperature

- 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 tunable white LED light device based on ZigBee 3.0 protocol, supports Touchlink commissioning
- Enables to control ON/OFF, light intensity and color temperature
- 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.

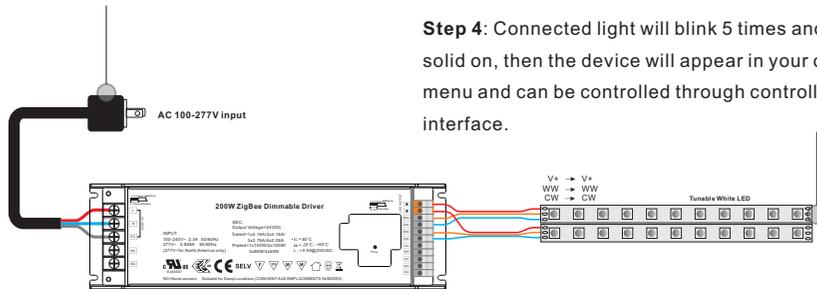
3. Zigbee Network Pairing through Coordinator or Hub (Added to a Zigbee Network)

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: Reset power of the device to set it into network pairing mode (connected light flashes twice slowly), 15 seconds timeout, repeat this step.

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.

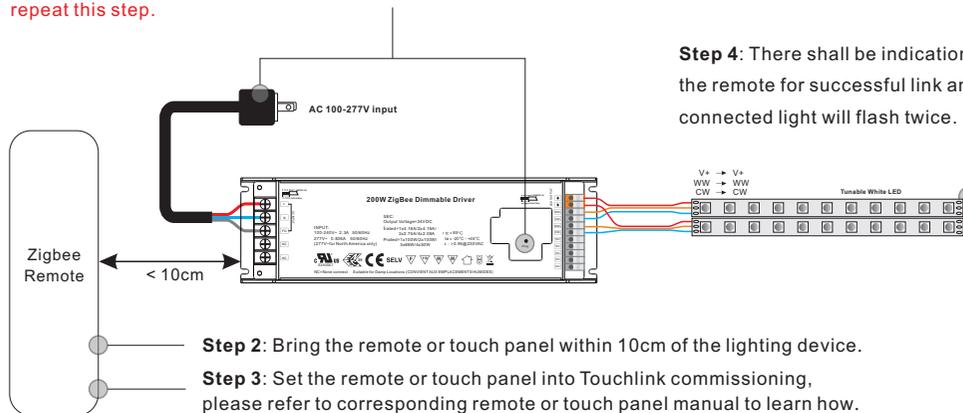


4. TouchLink to a Zigbee Remote

Step 1: Method 1: Short press "Prog" button 4 times (or reset power of the device 4 times) to start Touchlink commissioning immediately under any circumstances, 180S timeout, repeat this step.

Method 2: Reset power of 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 this step.

Step 4: There shall be indication on the remote for successful link and connected light will flash twice.

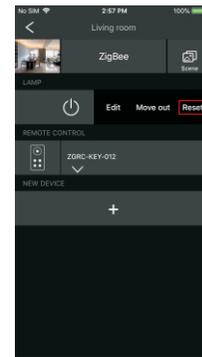


Step 2: Bring the remote or touch panel within 10cm of the lighting device.

Step 3: Set the remote or touch panel into Touchlink commissioning, please refer to corresponding remote or touch panel manual to learn how.

- 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 remote & gateway, 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

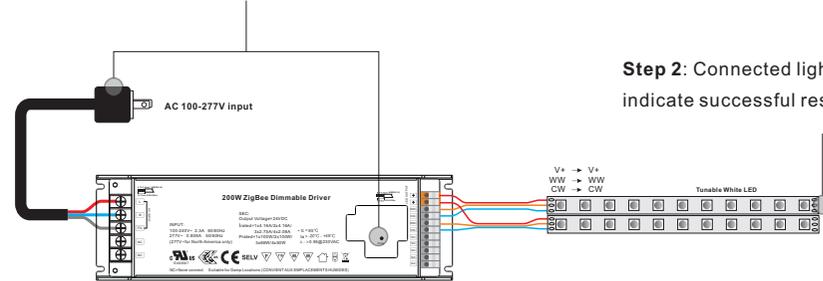


From your ZigBee controller or hub interface, choose to delete or reset the lighting device as instructed. The connected light blinks 3 times to indicate successful reset.

6. Factory Reset Manually

Step 1: Short press "Prog." key for 5 times continuously or reset power of 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.

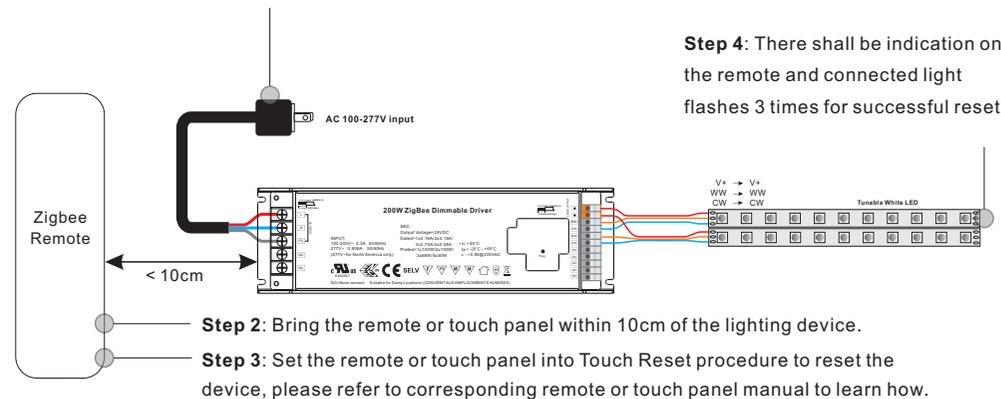
2) All configuration parameters will be reset after the device is reset or removed from the network.

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: Reset power of the device to start TouchLink Commissioning, 180 seconds timeout, repeat this step.

Step 4: There shall be indication on the remote and connected light flashes 3 times for successful reset.

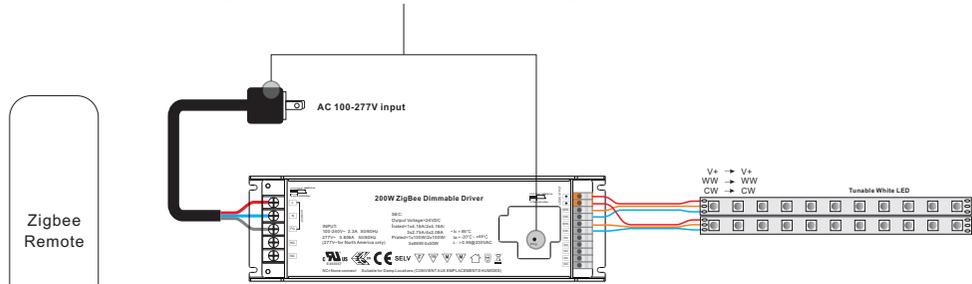


Step 2: Bring the remote or touch panel within 10cm of the lighting device.

Step 3: Set the remote or touch panel into Touch Reset procedure to reset the device, please refer to corresponding remote or touch panel manual to learn how.

8. Find and Bind Mode

Step 1: Short press “Prog.” button 3 times (Or reset power of 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 this step.

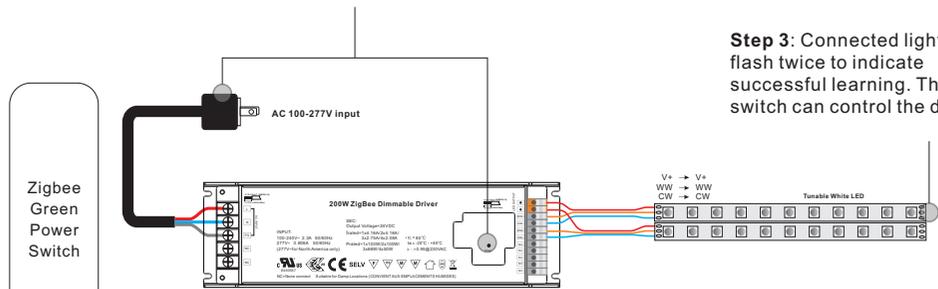


Step 2: Set the remote or touch panel (target node) into find and bind mode, and enable it to find and bind initiator, please refer to corresponding remote or touch panel manual.

Step 3: There shall be indication on the remote or touch panel that it bind the device successfully and can control it then.

9. Learning to a Zigbee Green Power Switch

Step 1: Short press “Prog.” button 4 times (Or reset power of the device 4 times) to start Learning to GP switch mode (connected light flashes twice), 180 seconds timeout, repeat this step.



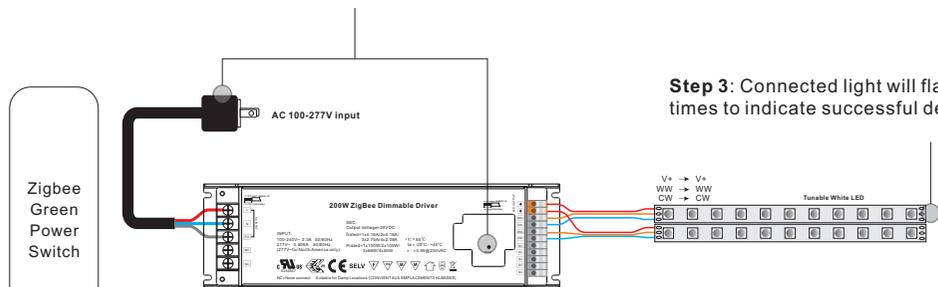
Step 3: Connected light will flash twice to indicate successful learning. Then the switch can control the device.

Step 2: Set the green power switch into Learning mode, please refer to its manual.

Note: Each device can learn to max. 20 zigbee green power switches.

10. Delete Learning to a Zigbee Green Power Switch

Step 1: Short press “Prog.” button 3 times (Or reset power of the device 3 times) to start delete Learning to GP switch mode (connected light flashes slowly), 180 seconds timeout, repeat this step.

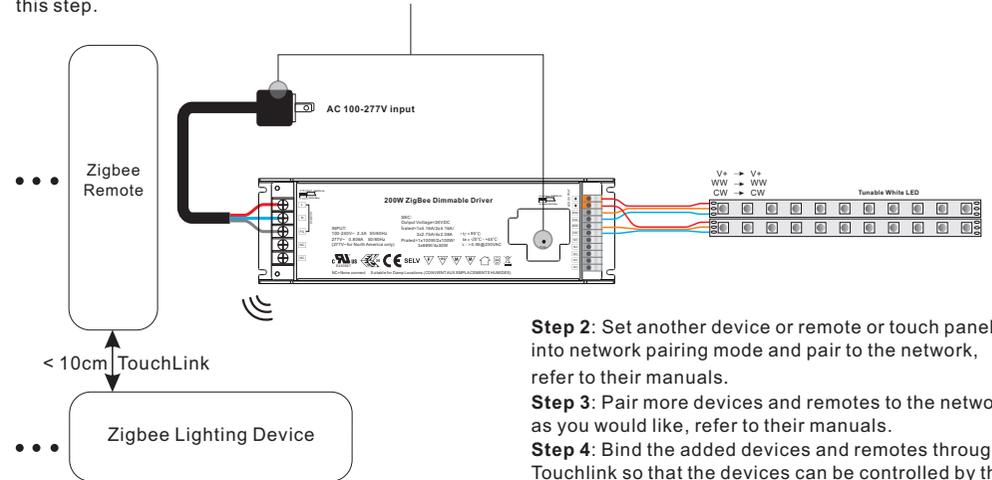


Step 3: Connected light will flash 4 times to indicate successful deleting.

Step 2: Set the paired green power switch into Learning mode, please refer to its manual.

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

Step 1: Short press “Prog.” button 4 times (Or reset power of 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 this step.



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

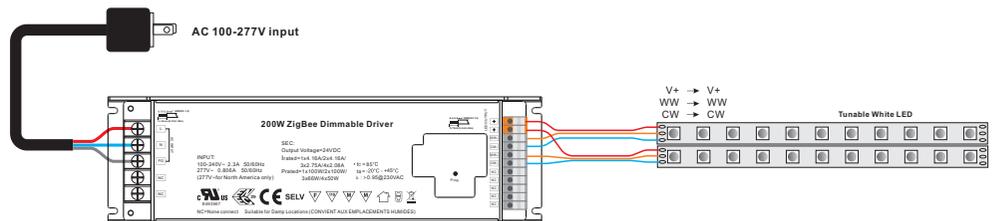
Output Clusters

- 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.

Wiring diagram



Product Dimension

