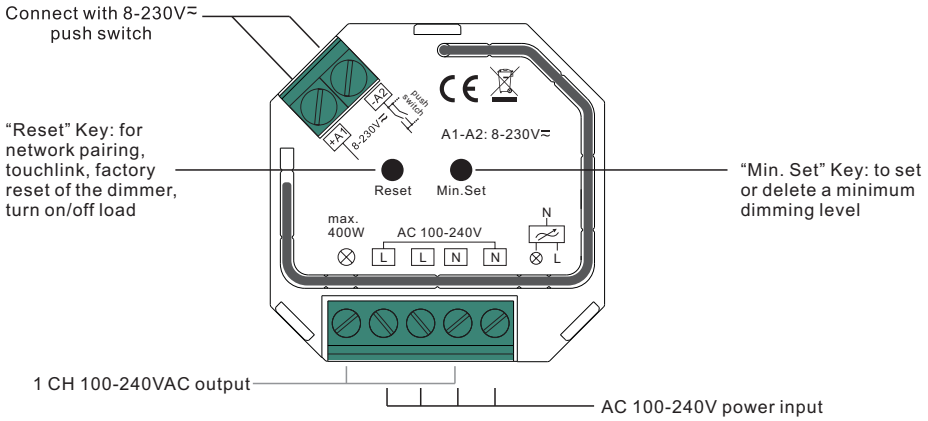
# HV9105-ZB-ACDIM

## AC Phase Cut ZigBee Dimmer

***Important:*** *Read All Instructions Prior to Installation*

### Function introduction




### Product Data

| Input Voltage | Output Voltage | Output Current | Size(LxWxH) |
|---|---|---|---|
| 100-240VAC | 100-240VAC | 1.5A max | 45.5x45x20.3mm |

| Compatible Load Types | | | |
|---|---|---|---|
| Load Symbol | Load Type | Maximum Load | Remarks |
| | Dimmable LED lamps | 200W @ 220V<br>100W @ 110V | Due to variety of LED lamp designs, maximum number of LED lamps is further dependent on power factor result when connected to dimmer. |
| | Dimmable LED drivers | 200W @ 220V<br>100W @ 110V | Maximum permitted number of drivers is 200W divided by driver nameplate power rating. |
| | Incandescent lighting, HV Halogen lamps | 400W @ 220V<br>200W @ 110V | |
| | Low voltage halogen lighting with electronic transformers | 200W @ 220V<br>100W @ 110V | |

- ZigBee AC phase cut dimmer based on latest ZigBee 3.0 protocol
- 100-240VAC Wide Input and Output Voltage
- Supports resistive loads and capacitive loads
- 1 Channel Output, Up to 400W
- Input and Output with Screw Terminals, Safe and Reliable
- Both leading edge version and trailing edge version are available for choosing
- Enables to control ON/OFF and light intensity of connected triac dimmable led light or led driver
- ZigBee end device that supports Touchlink commissioning
- Can directly pair to a compatible ZigBee remote via Touchlink without coordinator
- Supports self-forming zigbee network without coordinator and add other devices to the network
- 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
- Can be controlled by universal 8-230V input single wire push switch
- Mini Size, Easy to be Installed into a standard 86*86mm wall box
- Radio Frequency : 2.4GHz
- Waterproof grade: IP20

### Safety & Warnings

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

### 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

### Operation

**1.Do wiring according to connection diagram correctly.**

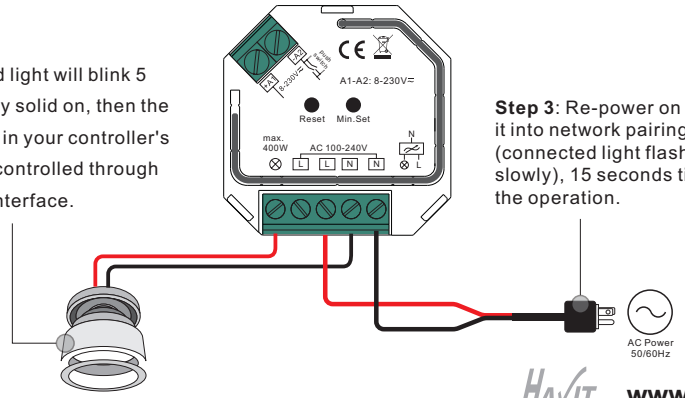
**2.This ZigBee device is a wireless receiver that communicates with a variety of ZigBee compatible systems. This receiver receives and is controlled by wireless radio signals from the compatible ZigBee system.**

### 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 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.




**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.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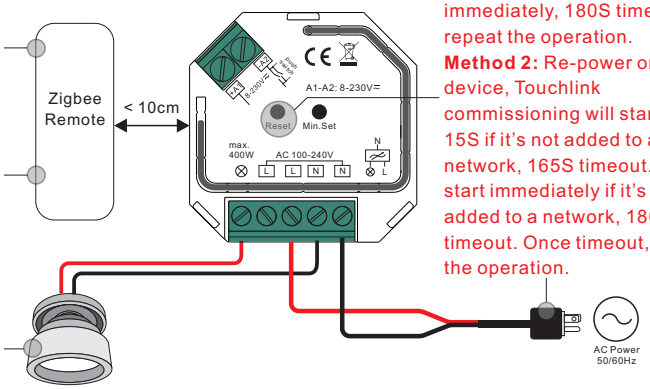
## 4. TouchLink to a Zigbee Remote

**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.

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




**Step 1: Method 1:** Short press "Reset" 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.

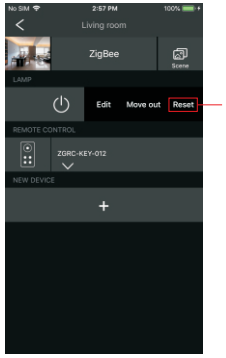
**Note: 1) Directly TouchLink (both not added to a ZigBee network), each device can link with 1 remote.**

**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



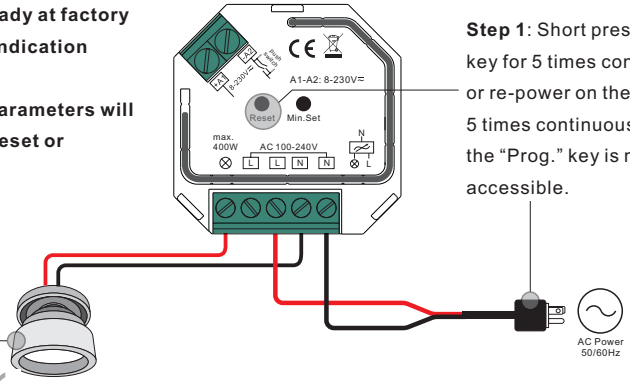

From your ZigBee controller or hub interface, choose to delete or reset the lighting device as instructed. The connected light blinks 3 times to indicate successful reset.

## 6. Factory Reset Manually

**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.**

**Step 2**: Connected light will blink 3 times to indicate successful reset.




**Step 1**: Short press "Reset." key for 5 times continuously or re-power on the device for 5 times continuously if the "Prog." key is not accessible.

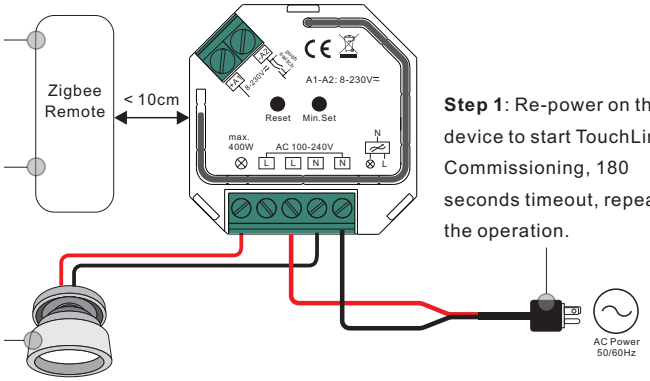
## 7. Factory Reset through a Zigbee Remote (Touch Reset)

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

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

**Step 3**: SSet 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.

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



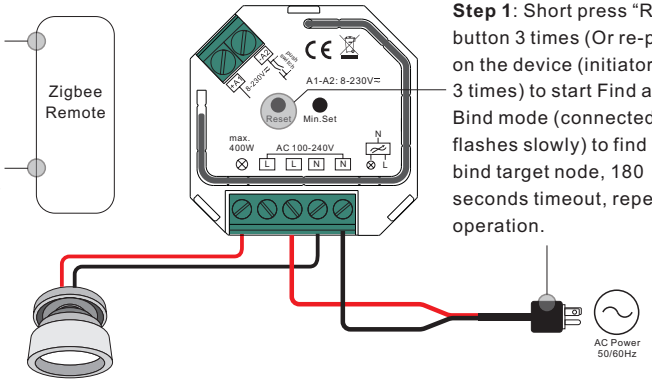

**Step 1**: Re-power on the device to start TouchLink Commissioning, 180 seconds timeout, repeat the operation.

## 8. Find and Bind Mode

**Note: Make sure the device and remote already added to the same zigbee network.**

**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.to learn how.

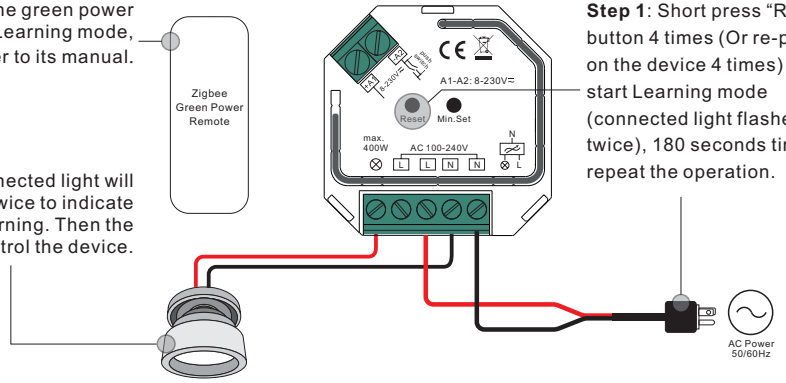



**Step 1**: Short press "Reset." button 3 times (Or re-power on the device (initiator node) 3 times) to start Find and Bind mode (connected light flashes slowly) to find and bind target node, 180 seconds timeout, repeat the operation.

## 9. Learning to a Zigbee Green Power Remote

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

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




**Step 1**: Short press "Reset." 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.

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



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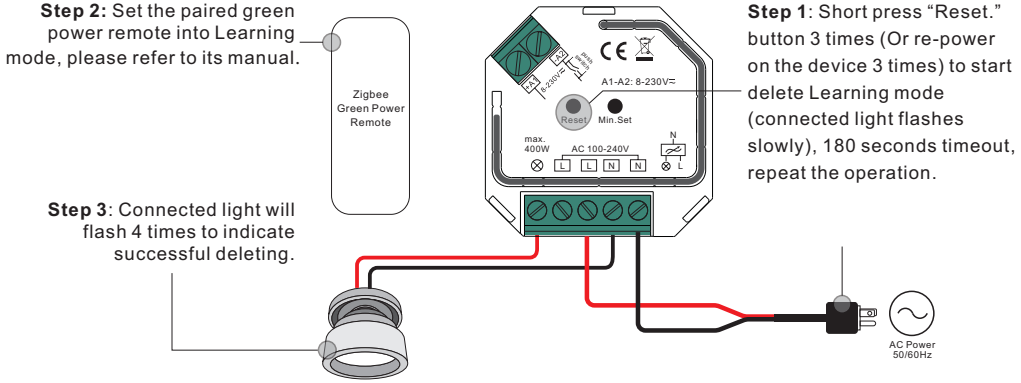
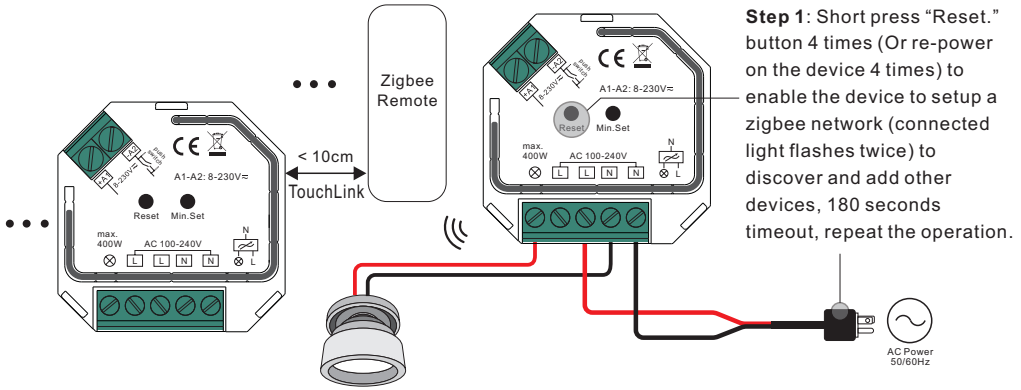
## 10. Delete Learning to a Zigbee Green Power Remote




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




**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. OTA

The device supports firmware updating through OTA, and will acquire new firmware from zigbee controller or hub every 10 minutes automatically.

### 13.Setting minimum brightness:

Adjust brightness to a desired level from zigbee hub or controller interface or a remote, then short press “Min. Set ” key, then the connected load can only be dimmable between this minimum brightness and 100% brightness.
The dimming range of this dimmer is 1%-100%, but some load types may flicker when dimmed to 1%, thus a minimum brightness shall be set higher than 1% to avoid flickering during dimming process.

### 14.Delete the minimum brightness:

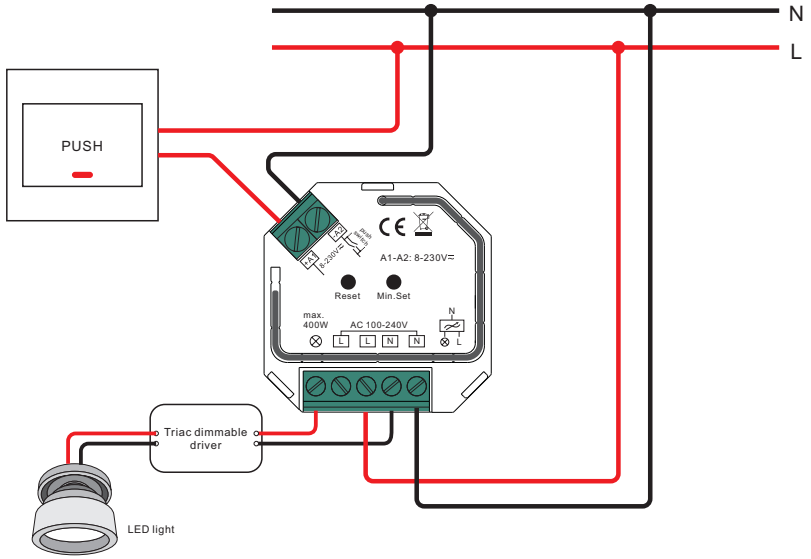
Adjust the brightness to 100% from zigbee hub or controller interface or a remote, then press and hold down the “Min. Set” key on the dimmer for over 3s to delete the minimum brightness.

### 15.Controlled by a push switch:

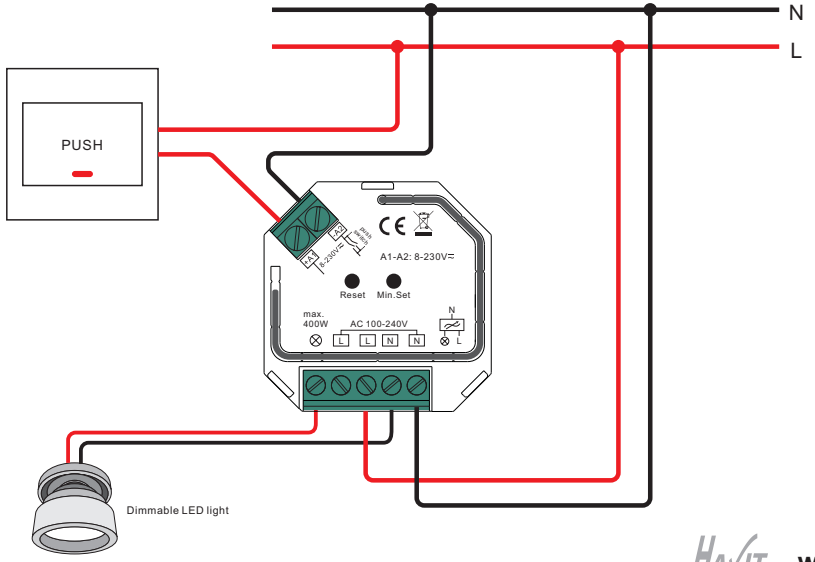
Once connected with a push switch, click the push switch to switch ON/OFF, press and hold down it to increase/decrease light intensity.

## Wiring diagram

(1)With triac dimmable driver




(2)With dimmable LED light





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