

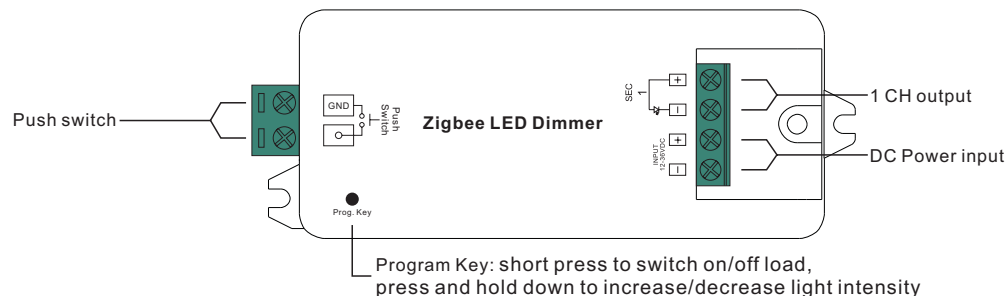
# Zigbee LED Dimmer

09.ZG901CS.04007



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

## Function Introduction



## Product Data

No.	Input Voltage	Output Current	Output Power	Remarks	Size(LxWxH)
1	12-36VDC	1x8A	1x(96-288)W	Constant voltage	95x37x20mm
2	12-36VDC	1x350mA	1x(4.2-12.6)W	Constant current	95x37x20mm
3	12-36VDC	1x700mA	1x(8.4-25.2)W	Constant current	95x37x20mm

- ZigBee LED dimming light device based on latest ZigBee 3.0 protocol
- Enables to control ON/OFF and light intensity of connected LED lights
- 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
- Enables to add devices to the self-formed zigbee network
- 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
- Waterproof grade: IP20

## Safety & Warnings

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

## Operation

1. Do wiring according to connection diagram correctly.

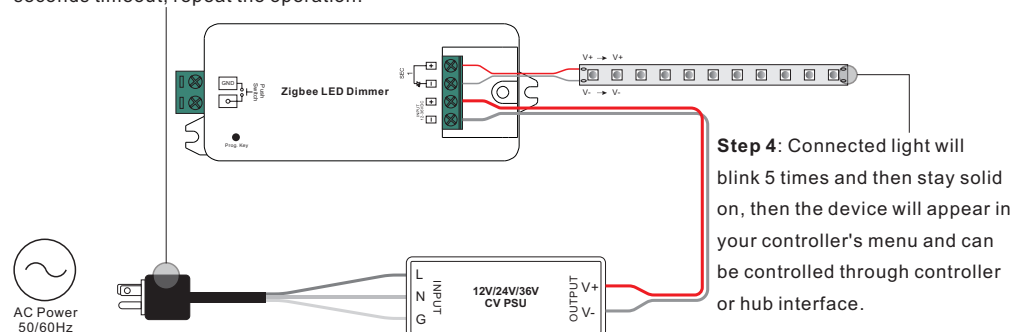
2. This ZigBee device is a wireless receiver that communicates with a variety of ZigBee compatible systems. This receiver receives and is controlled by wireless radio signals from the compatible ZigBee system.

### 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.

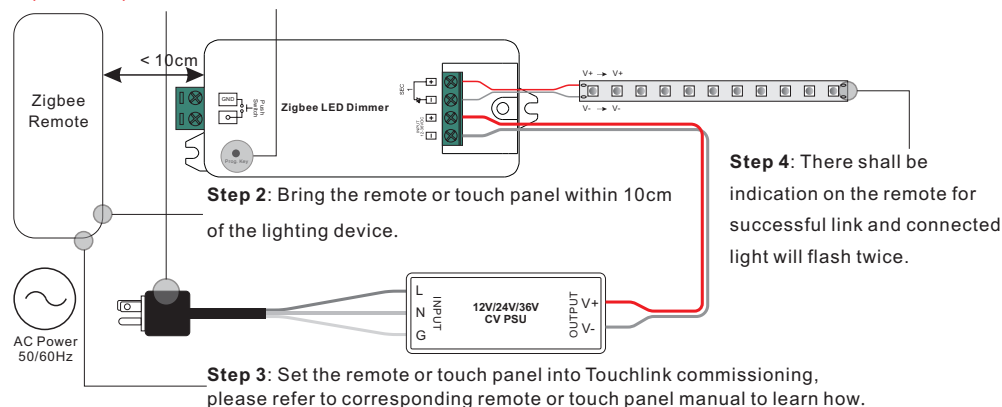
**Step 3:** Re-power on the device to set it into network pairing mode (connected light flashes twice slowly), 15 seconds timeout, repeat the operation.



### 4. TouchLink to a Zigbee Remote

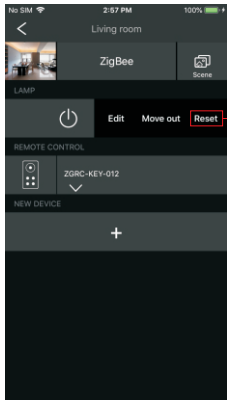
**Step 1: Method 1:** Short press "Prog" button (or re-power on the device) 4 times to start Touchlink commissioning immediately, 180S timeout, repeat the operation.

**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.

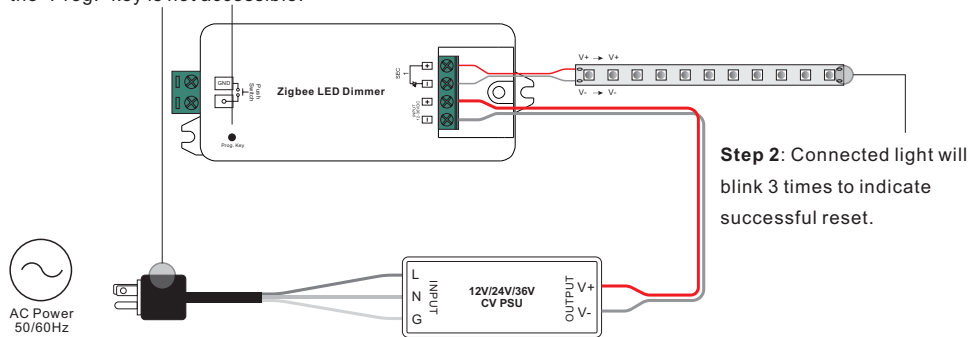
## 5. Removed from a Zigbee Network through Coordinator or Hub Interface



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

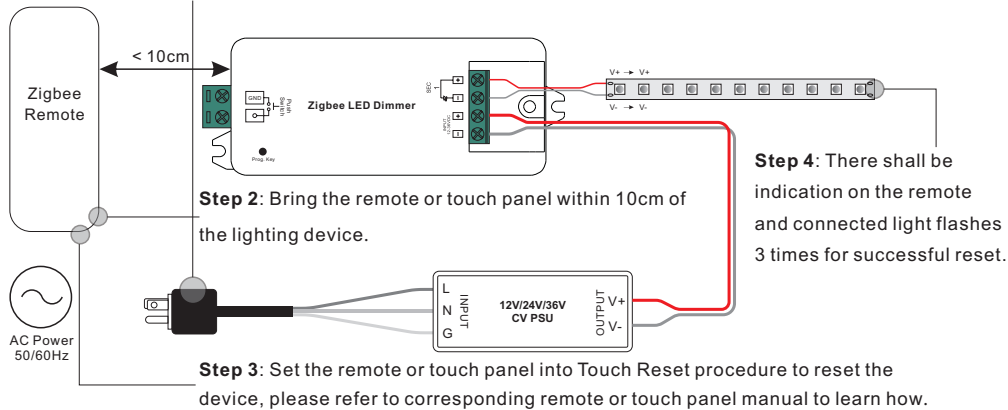
**Step 1:** Short press "Prog." key for 5 times continuously or re-power on the device for 5 times continuously if the "Prog." key is not accessible.



**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)

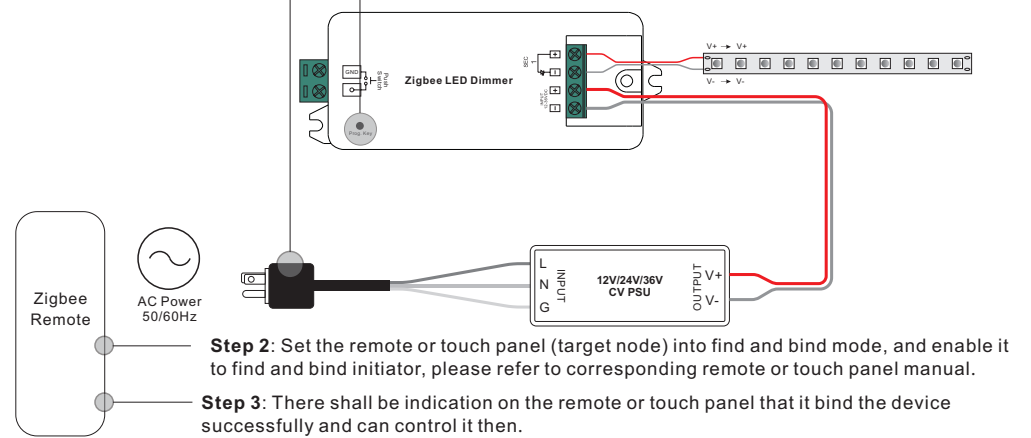
**Step 1:** Re-power on the device to start TouchLink Commissioning, 180 seconds timeout, repeat the operation.



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

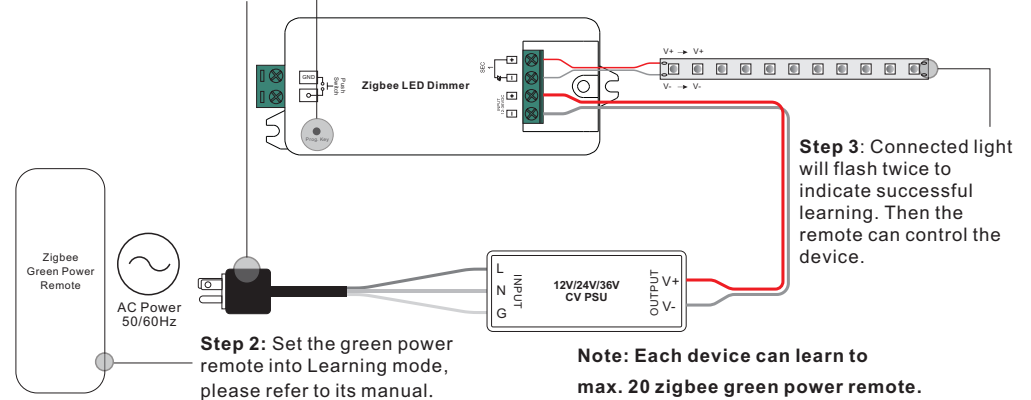
## 8. Find and Bind Mode

**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.



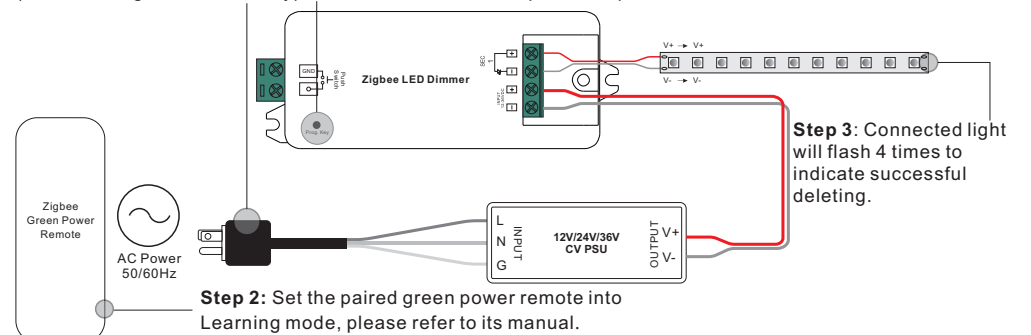
## 9. Learning to a Zigbee Green Power Remote

**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.



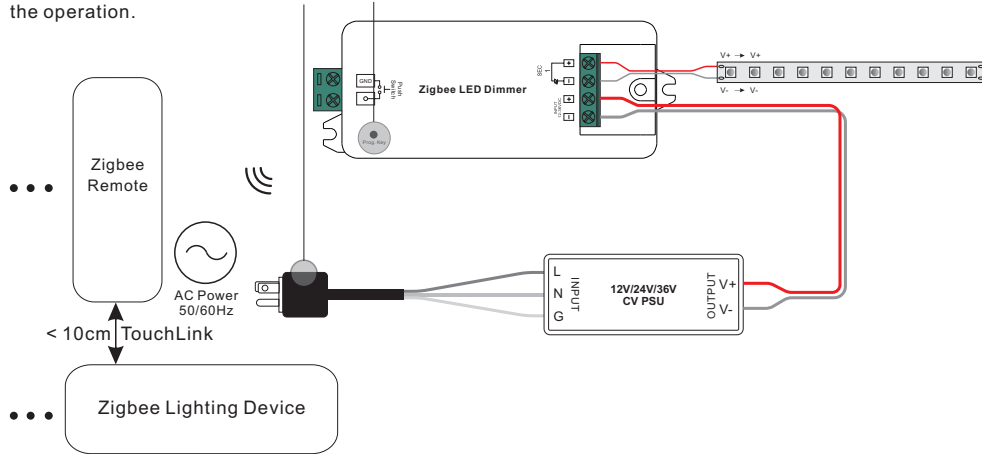
## 10. Delete Learning to a Zigbee Green Power Remote

**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

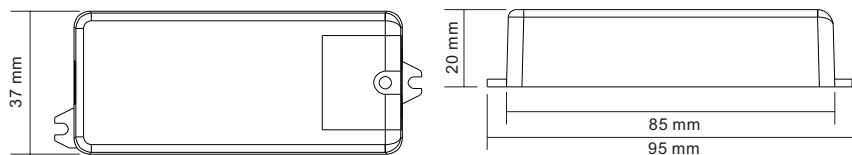
## 13. OTA

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

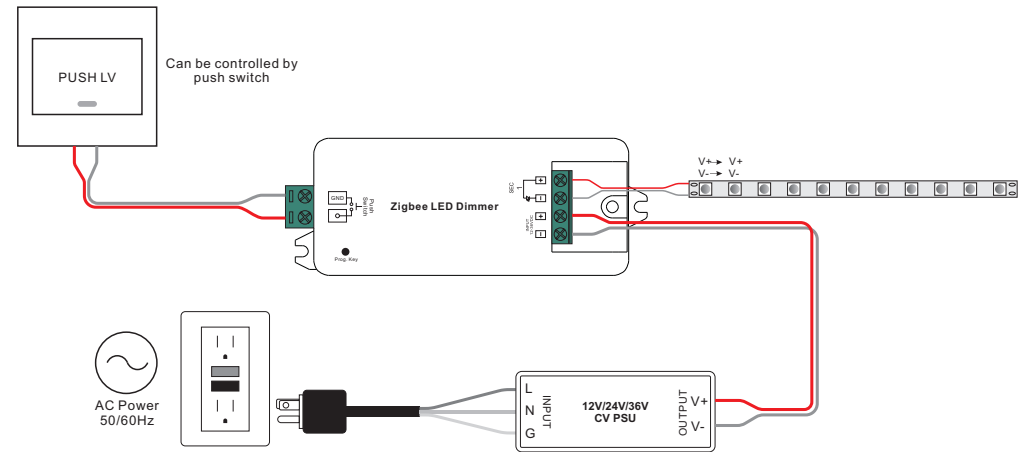
## 14. Controlled by a push switch:

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

## Product Dimension



## Wiring Diagram



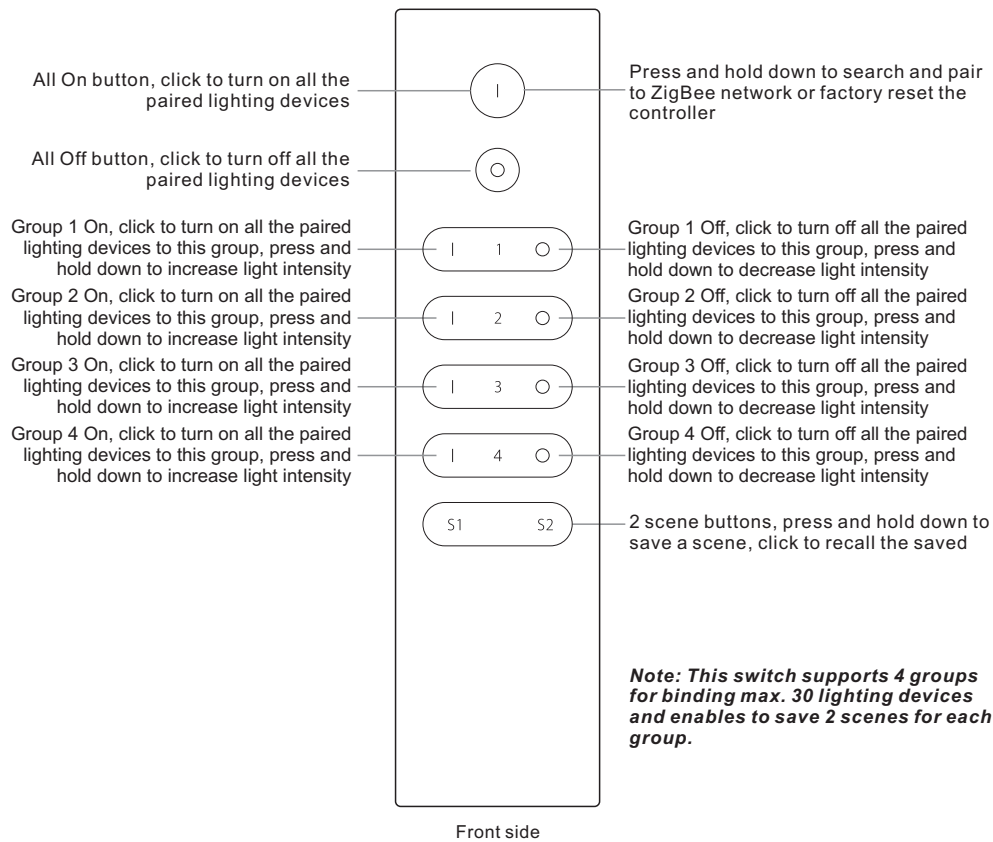
# ZigBee Wireless Dimmer Switch

09.ZG2TU.04841



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

## Function introduction

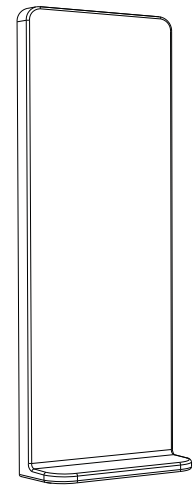


**Note:** Before the first use, please remove the protective film on the battery.

Back side

## Product Data

Protocol	ZigBee 3.0
Operation Voltage	3VDC (CR2032)
Transmission Frequency	2.4GHz
Transmission Range (free field)	30m
Protection Type	IP20
Dimming Range	0.1%-100%
Dimension	150x38.6x12mm
Protection Grade	IP20



Magnetic Bracket

- ZigBee dimmer switch based on ZigBee 3.0
- Enables to pair ZigBee lighting devices via touchlink commissioning without coordinator
- Supports find and bind mode to pair with ZigBee lighting devices in the same network
- Supports 4 groups for binding max. 30 lighting devices
- 2.4 GHz global operation
- Long battery life mesh technology
- Transmission range up to 30m
- Compatible with universal ZigBee Gateway products
- Compatible with universal single color ZigBee lighting devices

## ZigBee Clusters Supported by This Remote Are As Follows:

### Input clusters:

- Basic
- Power Configuration
- Identify
- Diagnostics

### Output clusters:

- Identify
- Scenes
- Group
- On/off
- Level control
- Ota

## Safety & Warnings

- This device contains a button lithium battery that shall be stored and disposed properly.
- DO NOT expose the device to moisture.

## Operation

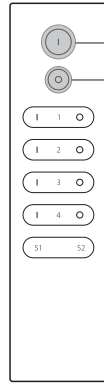
1. This ZigBee Dim remote is a wireless transmitter that communicates with a variety of ZigBee compatible systems. This transmitter sends wireless radio signals that are used to remotely control a compatible system.

2. This ZigBee remote supports 4 groups for binding max. 30 lighting devices and enables to control single color ZigBee lighting devices.

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

**Step 1:** Remove the remote from previous zigbee network if it has already been added to it, otherwise pairing will fail. Please refer to the part "Factory Reset Manually".

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

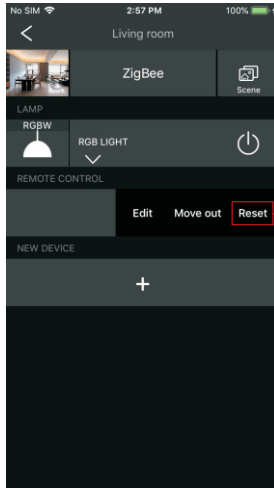


**Step 3:** Press and hold down until LED indicator turns on.

**Step 4:** Immediately short press to search nearby network, indicator flashes every 1 second, 20 seconds timeout if there is no network. Indicator will then blink 5 times quickly for successful pairing.

**Note:** 1) After pairing successfully, the remote information will appear on the controller or hub interface.  
2) No remote information will appear on the hub interface if pairing to Philips Hue Bridge.

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



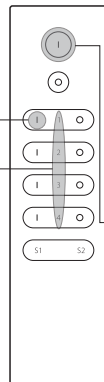
From your ZigBee controller or hub interface, choose to delete or reset the remote as instructed, indicator flashes 3 times quickly to indicate successful removing.

### 7. Remove a Touchlink Paired ZigBee Lighting Device

**Step 1:** Set the Touchlink paired zigbee device to start TouchLink commissioning, please refer to its manual to learn how.

**Step 3:** Short press ON button | of group 1/2/3/4 to choose a group that the device was linked to.

**Step 5:** Immediately short press twice to start TouchLink removing of the remote. LED indicator flashes fast for 3S, then flash 6 times slowly to indicate successful removing.



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



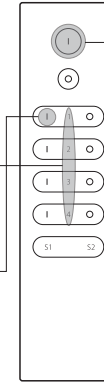
**Step 4:** Press and hold down until LED indicator turns on.

### 4. TouchLink to a Zigbee Lighting Device

**Step 1:** Set the zigbee lighting device to start TouchLink commissioning, please refer to its manual to learn how.

**Step 3:** Short press ON button | of group 1/2/3/4 to choose a group that you would like to pair the device to.

**Step 5:** Short press to start TouchLink pairing procedure of the remote. LED indicator will flash fast for 3s to start TouchLink and then flash 6 times slowly to indicate successful pairing to the device.



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



**Step 4:** Press and hold down until LED indicator turns on.

**Note:** 1) Directly TouchLink (both not added to a ZigBee network), each remote can link with 30 devices.  
2) TouchLink after both added to a ZigBee network, each remote can link with max. 30 devices.  
3) For Hue Bridge & Amazon Echo Plus, add remote and device to network first then TouchLink.  
4) After TouchLink, the remote can control the linked lighting devices.

### 6. Factory Reset Manually

**Step 1:** Press and hold down until LED indicator turns on.

**Step 2:** Immediately short press 5 times continuously, indicator flashes 3 times quickly to indicate successful reset.

**Note:** All configuration parameters will be reset after the remote is reset or removed from the network.



### 8. Factory Reset a Lighting Device (Touch Reset)

**Note:** the device shall be added to a network, the remote added to the same one or not added to any network.

**Step 1:** Set the zigbee device to start TouchLink commissioning, refer to its manual.

**Step 4:** Short press five times continuously to start Touch Reset of the remote. LED indicator will flash fast for 3s and then flash 3 times slowly to indicate successful reset of the device.



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



**Step 3:** Press and hold down until LED indicator turns on.

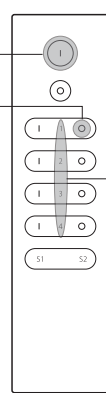
## 9. Find and Bind a Zigbee Lighting Device

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

**Step 1:** Start find and bind mode on the Zigbee lighting device (initiator node) and enable it to find and bind target, refer to its manual.

**Step 3:** Press and hold down until LED indicator turns on.

**Step 4:** Short press to enable the remote (target node) to find and bind initiator. LED indicator flashes 4 times for successful binding or twice if binding fails.



**Step 2:** Short press ON button 1 of group 1/2/3/4 to choose a group that you would like to bind the device to.



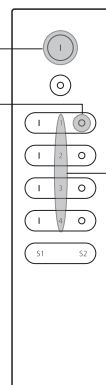
**Note:** Each remote can bind max. 30 lighting devices.

## 10. Find and Unbind a Zigbee Lighting Device

**Step 1:** Start find and bind mode on the ZigBee lighting device (initiator node) and enable it to find and unbind target, refer to its manual.

**Step 3:** Press and hold down until LED indicator turns on.

**Step 4:** Short press twice to enable the remote (target node) to find and unbind initiator. LED indicator flashes 4 times for successful unbinding or twice if unbinding fails.



**Step 2:** Short press ON button 1 of group 1/2/3/4 to choose a group that the device already bound to.

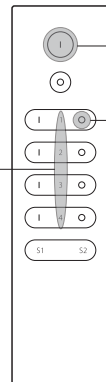


## 11. Clear All Find and Bind Mode Paired Lighting Devices of a Group

**Step 1:** Short press ON button 1 of group 1/2/3/4 to choose the group that you would like to unbind all devices.

**Step 2:** Press and hold down until LED indicator turns on.

**Step 3:** Short press 5 times continuously to clear all bound lighting devices with this group. LED indicator flashes 4 times for successful unbinding.



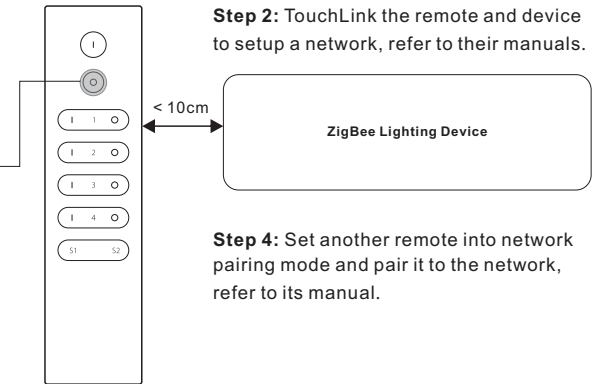
## 12. Setup a Network & Add Devices to the Network (No Coordinator or Hub Required)

**Step 1:** Factory reset the remote and the lighting device, refer to their manuals.

**Step 3:** Short press to enable the remote to discover and add devices, LED indicator will flash twice. 180 seconds timeout, repeat the operation.

**Step 2:** TouchLink the remote and device to setup a network, refer to their manuals.

**Step 4:** Set another remote into network pairing mode and pair it to the network, refer to its manual.



**Step 5:** Add more remotes to the network as you would like.

**Step 6:** Factory reset the lighting devices that you would like to add to the network, refer to their manuals.

**Step 7:** Touchlink to pair the added remotes and lighting devices you would like to add, the devices will be added to the network through Touchlink, refer to their manuals.

## 13. How to Save and Recall Scenes

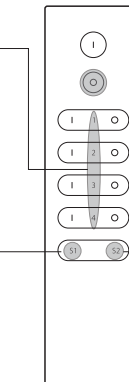
### 1) Save Scenes

**Step 1:** Make sure that lighting devices have already been paired to the 4 groups that you would like to save scenes for.

**Step 2:** Press and hold 1 or 2 button of the 4 groups to adjust a desired brightness for each individual group.

**Step 3:** Press and hold down a scene button (e.g. S1) until LED lights blink to save the brightness for each individual group at the same time.

**Step 4:** Repeat above 3 steps, and adjust another brightness for each individual group, then press and hold the other scene button (e.g. S2) to save the brightness for each individual group at the same time.



### 2) Recall the Saved Scenes

**Step 1:** Short press button S1/S2 to recall a saved scene for each individual group at the same time.

## 14. OTA

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

## 15. How to Check Whether the Remote Belongs to a Network or not

Activate the remote by clicking All On/Off button (indicator on), then short press any other buttons except group buttons, indicator blinking 3 times means the remote does not belong to any network, blinking once or twice means it has already been added to a network.

## 16. Battery Power Monitor Function

The remote will report battery power value to the coordinator under following situations:

- When powered on.
- When short pressing both | and ○ buttons of group 1 simultaneously.
- When operating the switch to send data packets (over 4 hours since last operation).
- When added to the network by a coordinator.