

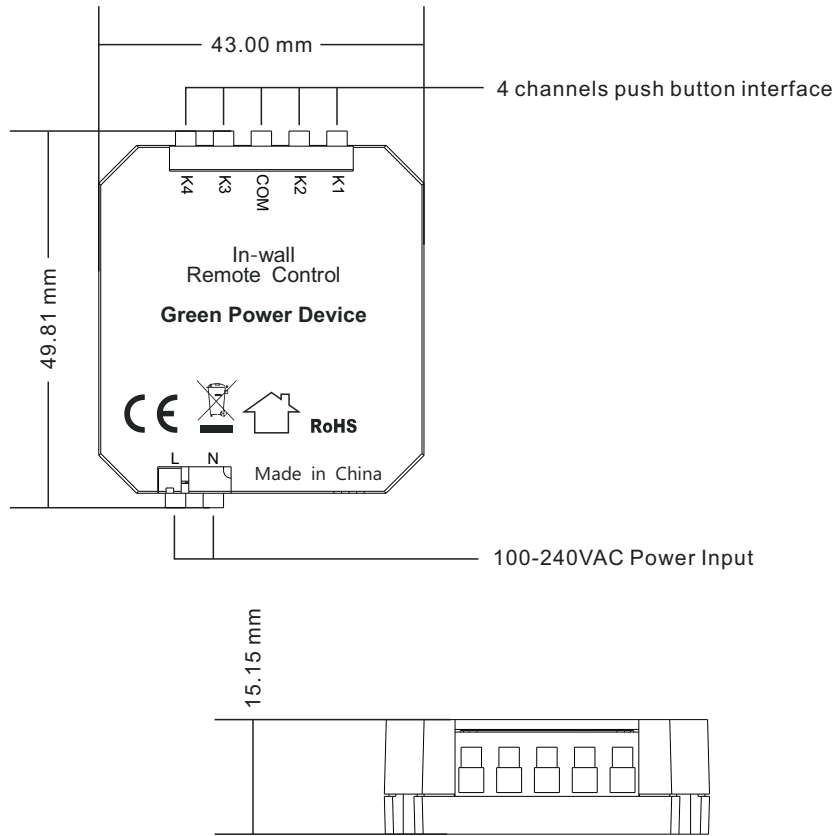
# DIM Zigbee Push-button Coupler

09.ZG2833PACDIMS2.04839



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

## Function introduction



## Product Description

The DIM Zigbee push-button coupler is a 4-channel push-button interface for simple wall/flush type box installation. You can continue to use existing switches, irrespective of the manufacturer. It is a wireless transmitter that communicates with Zigbee light device that supports Green Power feature. The coupler adopts AC100-240V power input to power a built-in transmitter. This transmitter sends wireless radio signals that are used to remotely control compatible devices.

It enables to learn and control dimmable Zigbee light devices that supports Green Power feature and save 2 scenes for the paired light devices with 4 push buttons.

## Compatible With

Zigbee Green Power (included in Zigbee 3.0)

## Safety & Warnings

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

## Product Data

Switch Type	DIM+Scene
Transmission Range	10-30m (typical)
Radio Frequency	2.4GHz
Power Supply	100-240VAC, 50/60Hz
Power Consumption	Less than 0.5W
Number of Push Buttons	4
Connector Type	Push-In
Wire Size	0.2 - 1.5mm <sup>2</sup> (AWG28 - AWG14)
Dimensions	49.8x43x15.1mm
Operating Temperature	-20 °C ~ +45 °C
Working Humidity	10% ~ 95% RH non-condensing
Waterproof Grade	IP20
Warranty	5 years

## Wiring Diagram

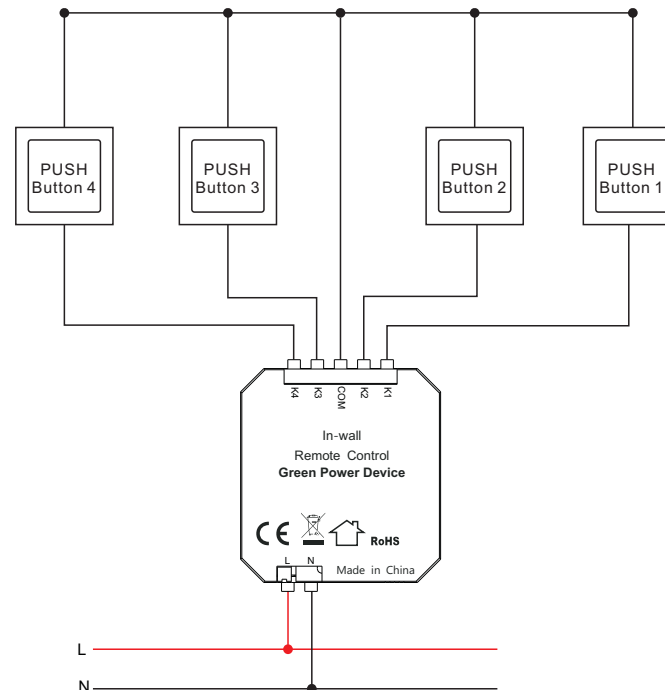
Notes for the diagrams:

**L** - terminal for live lead input

**N** - terminal for neutral lead input

**K1, K2, K3, K4** - terminals for push buttons

**COM** - common terminal for grounding to the push buttons connected to the coupler



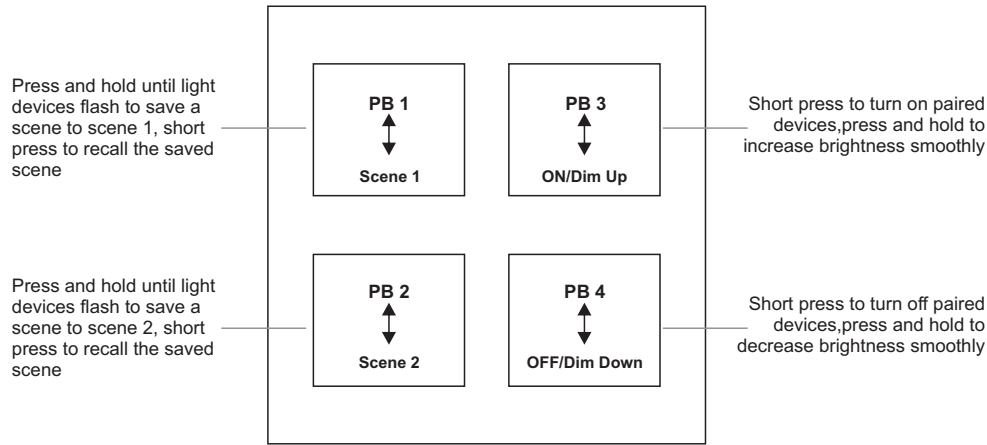
**Note: 1) Number of push buttons connected must be 4.**

**2) Supported switch types: 1-gang 1 way, 2-gang 1 way, 3-gang 1 way, 4-gang 1 way.**

## Corresponding button functions of the 4 connected push buttons

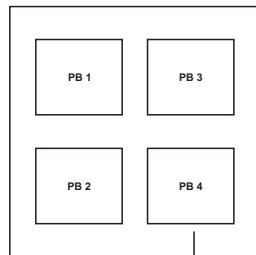
### Push button wiring as follows:

- Push Button 1 connecting to terminal K1
- Push Button 2 connecting to terminal K2
- Push Button 3 connecting to terminal K3
- Push Button 4 connecting to terminal K4



## Operations

### Pairing GP Switch to a Compatible Zigbee Light Device(Easy Mode):



**Step 1:** Do wiring the Zigbee light device according to wiring diagram (please refer to the instruction of the light device that you would like to pair to)

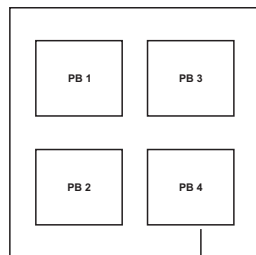


**Step 2:** Click the "Prog." or "Reset" button on the light device 4 times continuously to set it into pairing to GP switch mode

**Step 3:** Click any of the 4 buttons on the GP switch 4 times continuously, e.g. button PB 4. LED lights connected with the device flicker twice means the light device is paired to the GP switch successfully.

**Note:** one light device can be paired with max. 20 GP switches.

### Delete Pairing to a Paired Zigbee Light Device(Easy Mode):



**Step 1:** Click the "Prog." or "Reset" button on the light device 3 times continuously to set it into delete pairing to GP switch mode



**Step 2:** Click any of the 4 buttons of the paired switch 4 times continuously, e.g. button PB 4. LED lights connected with the device flicker 4 times means the pairing to the switch is deleted successfully.

### Pairing GP Switch to a Compatible Zigbee Light Device(Standard Mode):

**Step 1: activate learning to GP switch mode of the compatible light device** (generally our light devices will enter the mode by short pressing "prog." or "reset" button 4 times, or by resetting power 4 times), please refer to the manual of corresponding light device.

#### Step 2: put the GP switch into learning mode.

To enter into learning mode, start by selecting one button on the switch. (Use the same button for the entire sequence, pressing any other button will exit the learning mode.)

#### Next, execute the following sequence:

1. Press and hold the selected button for over 10 seconds, and then release it.
2. Short press the button once, and then release it.
3. Press and hold the button again for over 10 seconds, and then release it

#### The switch has now entered learning mode.

Wait for approximate 1 second to check whether there is indication on the light device for successful pairing, generally our light device will blink twice to indicate successful pairing.

**Exit learning mode on the switch by pressing any other button on the switch after pairing successfully. Just ignore step 3.**

**If there is no indication, please continue executing step 3.**

#### Step 3: Cycle through the sixteen Zigbee channels

A radio signal needs be sent from the switch to the compatible light device on the correct Zigbee channel, the light device uses one of the sixteen possible channels, automatically set the device. Using the switch, a signal will be sent on each channel until the channel used by the light device is found.

Upon entering learning mode, the signal will be sent by the switch on default channel 11. Please refer to the following chart of the Zigbee channels and the corresponding radio frequencies (in MHZ).

Channel ID	Lower Frequency	Center Frequency	Upper Frequency
11	2404	2405	2406
12	2409	2410	2411
13	2414	2415	2416
14	2419	2420	2421
15	2424	2425	2426
16	2429	2430	2431
17	2434	2435	2436
18	2439	2440	2441
19	2444	2445	2446
20	2449	2450	2451
21	2454	2455	2456
22	2459	2460	2461
23	2464	2465	2466
24	2469	2470	2471
25	2474	2475	2476
26	2479	2480	2481

If there is no indication on the light device for successful pairing, the signal sent by the switch is not on the correct channel, we need to change the switch's channel.

**To change the switch's channel, short press the selected button to move from default channel 11 to the next one.** For each such button press, the switch transmits on the next channel.

After each such button press, please wait for approximate 1 second to check whether there is indication on the light device for successful pairing.

If pairing successfully, please exit learning mode on the switch. If channel 26 has been reached, but there is still no indication, it might because the switch has not entered learning mode yet since the very start. We have to repeat the step 2 to put it into learning mode.

### Delete Pairing to a Paired Zigbee Light Device(Standard Mode):

**Step 1: activate delete learning to GP switch mode of the paired light device** (generally our light devices will enter the mode by short pressing "prog." or "reset" button 3 times, or by resetting power 3 times), please refer to the manual of corresponding light device.

#### Step 2: put the GP switch into learning mode.

To enter into learning mode, start by selecting one button on the switch. (Use the same button for the entire sequence, pressing any other button will exit the learning mode.)

#### Next, execute the following sequence:

1. Press and hold the selected button for over 10 seconds, and then release it.
2. Short press the button once, and then release it.
3. Press and hold the button again for over 10 seconds, and then release it

#### The switch has now entered learning mode.

Wait for approximate 1 second to check whether there is indication on the light device to indicate that pairing is deleted, generally our light device will blink 4 times, which means the pairing is deleted successfully.

**Exit learning mode on the switch by pressing any other button on the switch after pairing deleted. Just ignore step 3.**

**If there is no indication, please continue executing step 3.**

#### Step 3: Cycle through the sixteen Zigbee channels

If there is no indication on the light device to indicate that pairing is deleted, the signal sent by the switch is not on the correct channel, we need to change the switch's channel.

**To change the switch's channel, short press the selected button to move from default channel 11 to the next one.** For each such button press, the switch transmits on the next channel.

After each such button press, please wait for approximate 1 second to check whether there is indication on the light device to indicate that pairing is deleted.

If pairing deleted successfully, please exit learning mode on the switch. If channel 26 has been reached, but there is still no indication, it might because the switch has not entered learning mode yet since the very start. We have to repeat the step 2 to put it into learning mode.

### Signal Repeating Function of the Compatible Light Devices

The compatible light devices can repeat the received wireless signal from the switch, only when all light devices are added to the same Zigbee network can they repeat the received signal. There are 3 different situations as follows:

1. If you have a gateway controller and light devices, please add all light devices to the gateway first, then pair the GP switch to all light devices one by one.
2. If you have only light devices and battery/AC powered Zigbee remote, please set up a Zigbee network using the light devices and Zigbee remote, then pair the GP switch to all light devices one by one.
3. If you only have light devices, please use a light device to set up a Zigbee network first, then add other light devices to the network (please refer to the light device manual), then pair the GP switch to other light devices one by one.

## Installation

