

## PSR04 Smart Color Button



**Fig. 1 Assembling**

This round device is a flexible and multi functions button switch. It is able to switch the appliances on/off or activate the scenes and macros which are preset already. The rotation sensor make it possible to adjust the percentage of dimmer or thermostat. It can also work as a timer. The well designed wall bracket and magnetic back let the switch can be fixed on the wall, Plus™ enabled device and is fully compatible with any Z-Wave™ enabled network.

### **Note:**

**Please provide a 5 DVC voltage to wake the device up before the first using.**

**The rotation function and timer functions work only when the device is fitted upright or stick on the wall or the device will only work as an on/off switch when fitted horizontal.**

### **LED indicators**

1. LED type and locations  
There are two sets of LED embedded in the device.
  - A. Set 1: Two full color LED lights round the device.
  - B. Set 2: One red LED under the arrowhead on at the front side.
2. Low battery  
The device will enter low battery mode when the battery power is under 20%. The red LED flashes three times every one minute.
3. NWI Auto Inclusion  
The red LED will flash quickly for 30 seconds when device entering in NWI mode.
4. Percentage adjustment mode  
The full color LED will turn from green to red according to the percentage from 0% to 100%. (shown in Fig 3.)
5. Timer mode
  - A. The red LED will flash once when device entering/exiting the timer mode..
  - B. The full color LED will flash once every 10 seconds and the color will depend on time table (shown in Fig 3.)

- C. The full color LED will flash once with pink every 10 second when countdown from 30.
- D. The full color LED will flash with pink light every 1 second when countdown from 5.
- E. The red LED will flash 6 times with white when time's up.

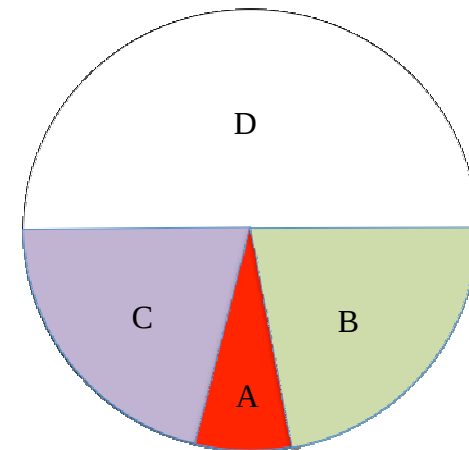
## Z-Wave Network Setting Up

There is a touch button on the front side. The button carry out inclusion, exclusion and reset to default.

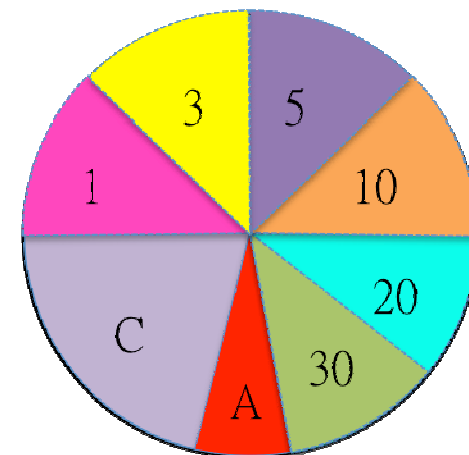
1. Include: Pointing the arrowhead to area A first (shown in Fig. 2). Pressing the button three times within 1.5 seconds. The red LED will light up for 1 second if succeed.
2. Exclude: Pointing the arrowhead to area A first (shown in Fig. 2). Pressing the button three times within 1.5 seconds.
3. Reset to default: Pointing the arrowhead to area A first ((shown in Fig. 2)). Pressing button four times within 2 seconds and hold at fourth. The red LED will light for 3 seconds, release the button within 2 seconds while the LED go out. The LED will flash for 1 second if reset succeed, or LED will flash once

## Build-in Buzzer

1. Turn light on: Beep once.
2. Turn light off: Long beep once.
3. Timer:
  - A. Beep once for setting up the timer.
  - B. Long beep once for stop counting down.
  - C. Beep once every ten seconds for countdown from thirty.
  - D. Beep once every per second for countdown from five. Four times beep and repeat six times when time's up.



**Fig. 2 Control Area**



**Fig. 3 Timer Table**

## Timer

1. Entering the timer mode:
  - A. Pointing the arrowhead to area A.
  - B. Pressing and hold the button about three to five seconds. The red LED will light then go out. Release the button when the light goes out and the buzzer will sound long beep once.
2. Exit the timer mode:
  - A. Pointing the arrowhead to area A.
  - B. Pressing and hold the button about three to five seconds. The red LED will light then go out. Release the button when the light goes out and the buzzer will sound beep twice.
3. Setting up timer: Pointing the arrowhead to the zone you want to count down (shown in Fig. 3). The countdown will begin after you pressing the button and sound beep.

## Choosing a Suitable Location

1. Do not locate the Switch facing direct sunlight, humid or dusty place.
2. The suitable ambient temperature for the Switch is -10°C~40°C.
3. Do not locate the Switch where exists combustible substances or any source of heat, e.g. fires, radiators, boiler etc.

## Z-Wave's Groups (Association Command Class Version 2)

The Switch can be set to send reports to control associated Z-Wave devices. It supports 2 association groups which every group has eight node support.

For group 1, the Switch will report event to Z-Wave Controller. Eg. Battery state

For group 2, the Switch can control ON/OFF status of lamps

### 1. Firmware update over the air (OTA)

PSR04 is based on 500 series SoC and supports Firmware Update Command

Class, it can receives the updated firmware image sent by controller via the Z-wave RF media. It is a helpful and convenient way to improve some function if needed.

### 2. Command Classes

The Switch supports Command Classes including...

- \* COMMAND\_CLASS\_ZWAVEPLUS\_INFO\_V2
- \* COMMAND\_CLASS\_BATTERY
- \* COMMAND\_CLASS\_CENTRAL\_SCENE\_V1
- \* COMMAND\_CLASS\_VERSION\_V2
- \* COMMAND\_CLASS\_MANUFACTURER\_SPECIFIC\_V2
- \* COMMAND\_CLASS\_DEVICE\_RESET\_LOCALLY
- \* COMMAND\_CLASS\_ASSOCIATION\_V2
- \* COMMAND\_CLASS\_WAKE\_UP\_V2
- \* COMMAND\_CLASS\_ASSOCIATION\_GRP\_INFO
- \* COMMAND\_CLASS\_POWERLEVEL
- \* COMMAND\_CLASS\_MULTI\_CMD
- \* COMMAND\_CLASS\_SECURITY
- \* COMMAND\_CLASS\_MARK
- \* COMMAND\_CLASS\_BASIC
- \* COMMAND\_CLASS\_FIRMWARE\_UPDATE\_MD\_V2
- \* COMMAND\_CLASS\_CONFIGURATION

## Troubleshooting

| Symptom                                               | Cause of Failure                                 | Recommendation                                                                               |
|-------------------------------------------------------|--------------------------------------------------|----------------------------------------------------------------------------------------------|
| The Switch not working and LED off                    | 1. Battery dead<br>2. Device break               | 1. Charging the battery by Micro USB.<br>2. Don't open up the Switch and send it for repair. |
| Can not adjust the percentage of dimmer or thermostat | The device may not be placed upright.            | Check if the device is placed upright.                                                       |
| The device can not join to Z-Wave network             | The device may has joined to a network.          | 1. Exclude the device then include again.                                                    |
| Button no response                                    | The button will no response when LED is flashing | Wait for the LED go out and try again.                                                       |

## Specification

|                       |                                                                                                                                         |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Operating Voltage     | 3.7 V (Lithium Polymer Battery)                                                                                                         |
| Low Battery Voltage   | 3.6 V                                                                                                                                   |
| Range                 | Minimum 40 m in door, 100m outdoor line of sight                                                                                        |
| Operating Temperature | -10℃ ~ 45℃                                                                                                                              |
| Frequency Range       | PSR04-1: 868.40MHz; 869.85MHz(EU) /<br>PSR04-2: 908.40MHz; 916.00MHz(USA/Canada) /<br>PSR04-3: 922.5MHz/ 923.9MHz/ 926.3MHz (Taiwan/JP) |

\*\* Specifications are subject to change and improvement without notice.



**FCC ID : RHHP SR04**

### Warning:

1. Plug out to disconnect from power supply; Do not plug in line.
2. Do not exceed the max rating

## Disposal



This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

Company of License Holder : Philio Technology Corporation

Address of License Holder : 8F.,No.653-2,Zhongzheng Rd., Xinzhuang Dist.,

New Taipei City 24257,Taiwan(R.O.C)

## FCC Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.