



philo PSR04 Smart Color Button User Manual

[Home](#) » [philo](#) » philo PSR04 Smart Color Button User Manual 

philo

PSR04 Smart Color Button
User Manual



This device is a multiple functions button switch. It is able to switch the appliances on/off or adjust the percentage of dimmer. It can also work as a timer. The well-designed wall bracket and magnetic back let the switch can be fixed on the wall. This product can be included and operated in any Z-Wave™ network with other Z-Wave™ certified devices from other manufacturers and/or other applications.

Note:

Please provide a 5 VDC voltage through a Micro USB Port to wake the device up before the first use.

The rotation function and timer functions work only when the device is fitted upright or stuck on the wall or the

device will only work as an on/off switch when fitted horizontal.

CAUTION

- replacement of a battery with an incorrect type that can defeat a safeguard (for example, in the case of some lithium battery types);
- disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery, that can result in an explosion;
- leaving a battery in an extremely high temperature surrounding an environment that can result in an explosion or the leakage of flammable liquid or gas;
- a battery subjected to the extremely low air pressure that may result in an explosion or the leakage of flammable liquid or gas

The marking information is located at the bottom of the apparatus.

Contents

- [1 Specification](#)
- [2 Troubleshooting](#)
- [3 Overview](#)
- [4 Z-Wave Network Setting Up](#)
- [5 Function](#)
- [6 Z-Wave™ Notification](#)
- [7 Installation](#)
- [8 Documents / Resources](#)
- [9 Related Posts](#)

Specification

Operating Voltage	3.7 V (Lithium Polymer Battery)
Battery Charge Voltage	5 VDC @ Micro USB Port
Range	Minimum 40 m indoor, 100m outdoor line of sight
Frequency Range	868.40 MHz, 869.85 MHz (EU) 908.40 MHz, 916.00 MHz (US) 920.9MHz, 921.7MHz, 923.1MHz (TW/KR/Thai/SG)
RF Maximum Power	+SdBm
Location	Indoor use only
Operation temperature	-10 to 45° C
Humidity	95%RH max
FCC ID	RHHPSR04
Marking	CE/NCC

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

Troubleshooting

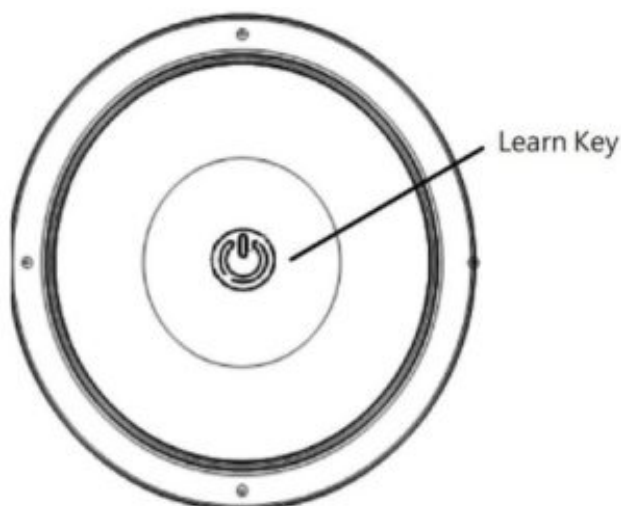
Symptom	Cause of Failure	Recommendation
The switch on/off function not working and the LED off	1. Battery is running out of power 2. Wrong function mode	1. Charging the battery by Micro USB. 2. Point the arrowhead to area B and press the touch button. 3. If the device still can work, don't open up the Switch and send it for repair.
Can not adjust the percentage of dimmer	1. The device may not be placed upright. 2. The device is in the off state.	1. Check if the device is placed upright. 2. Rotate to the percentage you want then press the touch button. Or pointing the arrowhead to area B and press the touch button to turn the lamp on then adjust the percentage.
The device can not join to Z-Wave network	1. The device may be in a Z-Wave network. 2. The arrowhead points to the wrong area.	1. Exclude the device then include it again. 2. Pointing the arrowhead to area A then include again.
Button no response	1. The button will not respond when LED is flashing.	Wait for the LED to go out and try again.

For Instruction to <http://www.philio-tech.com>



http://tiny.cc/philio_manual_PSR04

Overview



Z-Wave Network Setting Up

In the first time, add the device into the Z-Wave” network. Make sure the primary controller is in the add mode. And then power on the device through micro USB. The device will auto-start the NWI (Network Wide Inclusion). Red LED will flash every second and continue for 30 seconds. And it should be included in 5 seconds. Red LED will light ON one second. Rotating to area A(shown in Fig. 1) and touching 3 times can abort NWI mode.

There is a touch button on the front side. The button carries out manual inclusion, exclusion, and resets to default.

1. Include: Pointing the arrowhead to area A first (shown in Fig.

1). 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. Press the button three times within 1.5 seconds.

3. Reset to default: Pointing the arrowhead to area A first.

Press the 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 goes out. The LED will flash for 1 second if the reset succeeds, or LED will flash once.

Notice: Including a node ID allocated by Z-Wave” Controller means “**Add**” or “**Inclusion**”. Excluding a node ID allocated by Z Wave™ Controller means “**Remove**” or “**Exclusion**”.

Function

This device can control dimmers in group 2 using three ways:

Dimmer, Timer, and On/Off Switch. Point the arrowhead to area A(shown in Fig. 1 and Fig. 2) then hold the button, release it after the red LED goes out. One beep means entering Timer mode or two beeps means entering Dimmer mode. The device can switch to On/Off Switch mode automatically when fitting horizontal.

*Dimmer

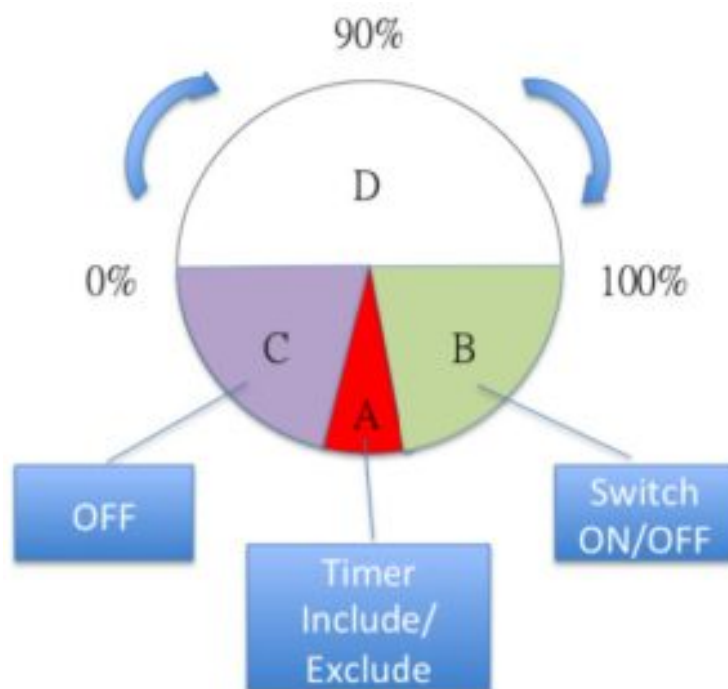


Figure 1

This device is able to set dimmer levels by rotating to different angles.

When the status is Off, the surround LED will not work except in area A(shown in Fig. 1). Rotate the device to areas B, C, D(shown in Fig.

1) then touching the button can set the status to On. After a short beep, the surround LED will change gradually from blue to red in area D. It will send the Basic set command automatically 1 second after the rotating stop. To turn Off the device in group 2, you can rotate PSR04 to area C or touch the button again.

*Timer

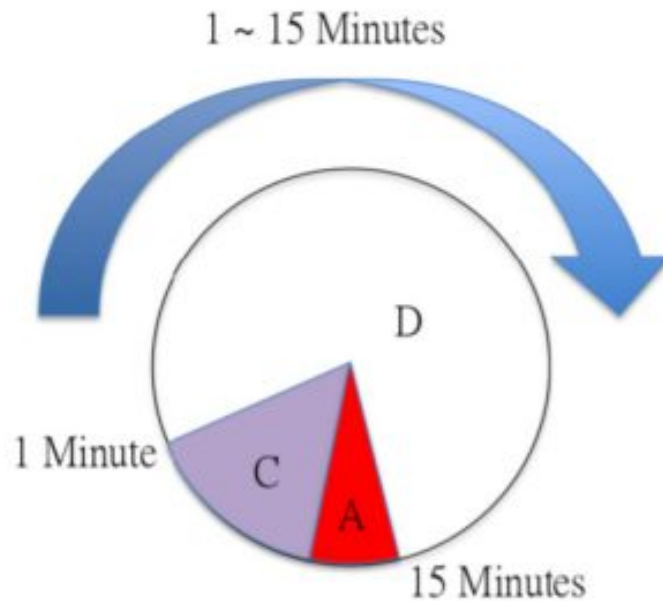


Figure 2

This mode can time the length of turning Off the light. The length is up to 15 minutes. When counting down starts, the surround LED will flash and the buzzer will sound according to the remaining time. Rotating to area C can cancel counting down directly.

Note: Buzzer in timer mode can be disabled by setting Configuration NO. 25 bit 1 to 1.

Timer left	Flash color	Buzzer
1015 minutes	Cyan / 10 seconds	
510 minutes	Green/ 10 seconds	
35 minutes	Yellow / 10 seconds	
13 minutes	Orange/ 10 seconds	
3060 seconds	Pink /10 seconds	
1030 seconds	Pink /10 seconds	1 beep / 10 seconds
15 seconds	Pink/ 1 second	1 beep / 1 seconds
Time' up	White/ 1 second	4 beep / 4 seconds

***On/Off Switch**

This device is able to work as an On/Off switch by sending a Basic set according to configuration NO.1 and NO.2 when fitting horizontal.

Association

This device supports 2 association groups which every group has eight-node support. To build/disable association between devices,

1. Have the Z-Wave controller entered association mode?
2. Rotate PSR04 to area A then press the button three times within 1. 5 seconds.

Group 1 is for receiving the report message, like the battery level.

Group 2 is for light control, the device will send the Basic Set command to this group.

Timing Report

The device supports the timing unsolicited report of the status.

- Battery level report: Every 6 hours report once in default.
It could be changed by setting the configuration NO. 10.
- Low battery report: When the battery level is too low, every 30 minutes will report once.

Z-Wave™ Notification

After the device adding to the network, it will wake up once per day in default. When it wake-up it will broadcast the “Wake Up Notification” message to the network, and wake up 10 seconds to receive the setting commands. The wake-up interval minimum setting is 30 minutes, and the maximum setting is 120 hours. And the interval step is 30 minutes. If the user wants to wake up the device immediately, please rotate to area A and press the touch button once. The device will wake up for 10 seconds every single time.

Configuration

*** The configuration mark with star(*), means after the remove the setting still keep, don't reset to factory default. Unless the user executes the “RESET” procedure.**

N O .	Name	Size (Byte)	Def.	Valid Values	Description
1	Basic Set OFF level	1	0x00	0x00 ~ 0x63	Control the value represented by the left-side in area D. E.g. Setting this configuration to 0x0F means a range of Command Basic Set value start from 0x0F
2	Basic Set ON level	1	0x63	0x00 ~ 0x63	Control the value represented by the right-side in area D. E.g. Setting this configuration to 0x1E means the range of Command Basic Set value start from 0x1E
10	Auto Report Battery Time	1	12	1 ~ 127	The interval time for auto reporting the Battery level. 0 means turn off the auto-report battery. The default value is 12.

					Bit 0: Dimmer setting method. 0: Auto send Command Ba-
25	Customer Function	1	0x00~0x03	0x00	sic Set after rotating. 1: Send Command Basic Set by touching key after rotating Bit 1: Disable buzzer in timer mode. 0: Enable. 1: Disable. Bit 2: Disable timer mode. 0: Disable. 1: Enable. Bit 3: Disable buzzer in all mode. 0: Enable. 1: Disable.
*26	Disable Scene Holding report	1	0x00, 0x01	0x00, 0x01	Send Central Scene Holding when the button is held. 0x00: Enable. 0x01: Disable.

Installation

1. Fix the bracket on the wall.
2. There's a magnet on the backside of this device. It can stick to the bracket.

Notice: Do not install the bracket on the unstable wall, this may cause miscarriage to control lights.

Firmware update over the air (OTA)

This device supports the Z-Wave firmware update via OTA. Let the controller into the firmware update mode, rotate to area A then touch the button once to start the update. After finishing the firmware download, the red LED will start to flash every 0.5 seconds. Please don't remove the battery before the LED stops flashing.

Notice: recommend using OTA when the device is charging.

Supported Z-Wave Command Classes

- 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_FIRMWARE_UPDATE_MD_V2
- COMMAND_CLASS_CONFIGURATION

Security Network

The device supports the security function. When the device is included with a security controller, the device will auto switch to the security mode. In the security mode, the following commands need using Security CC wrapped to communicate, otherwise it will not respond.

COMMAND_CLASS_BATTERY

COMMAND_CLASS_ASSOCIATION_V2

COMMAND_CLASS_CONFIGURATION

COMMAND_CLASS_WAKE_UP_V2

COMMAND_CLASS_CENTRAL_SCENE

Disposal



This marking indicates that this product should not be disposed of 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 environmentally safe recycling.

Philio Technology Corporation 8F., No.653-2, Zhongzheng Rd., Xinzhuang Dist., New Taipei City 24257, Taiwan(R.O.C) www.philio-tech.com

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.

Documents / Resources

	<p>philips PSR04 Smart Color Button [pdf] User Manual PSR04, Smart Color Button, PSR04 Smart Color Button</p>
---	---

[Manuals+](#).