Philio Smart Color Button User Guide

Philio Tech
Smart Color Button
SKU: PHIEPSR04

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Quickstart

This is a secure Wall Controller for Europe. To run this device please insert fresh 1 * 3,7 V Lithium batteries. Please make sure the internal battery is fully charged.
1. Have Z-Wave Controller entered inclusion mode.
2. Rotate to area A and then press the button three times within 1.5 seconds to enter the inclusion mode.
3. After adding successfully, the device will wake to receive the setting command from Z-Wave Controller for about 20 seconds.

Important safety information

Please read this manual carefully. Failure to follow the recommendations in this manual may be dangerous or may violate the law. The manufacturer, importer, distributor, and seller shall not be liable for any loss or damage resulting from failure to comply with the instructions in this manual or any other material. Use this equipment only for its intended purpose. Follow the disposal instructions. Do not dispose of electronic equipment or batteries in a fire or near open heat sources.

What is Z-Wave?

Z-Wave is the international wireless protocol for communication in the Smart Home. This device is suited for use in the region mentioned in the Quickstart section.
Z-Wave ensures reliable communication by reconfirming every message (two-way communication) and every mains-powered node can act as a repeater for other nodes (meshed network) in case the receiver is not in direct wireless range of the transmitter.
This device and every other certified Z-Wave device can be used together with any other certified ZWave device regardless of brand and origin as long as both are suited for the same frequency range.
If a device supports secure communication it will communicate with other devices secure as long as this device provides the same or a higher level of security. Otherwise, it will automatically turn into a lower level of security to maintain backward compatibility.
For more information about Z-Wave technology, devices, white papers, etc. please refer to **www.z-wave.info.**

Product Description

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.

Prepare for Installation / Reset

Please read the user manual before installing the product.

In order to include (add) a Z-Wave device to a network, it must be in the factory default state. Please make sure to reset the device into factory default. You can do this by performing an Exclusion operation as described below in the manual. Every Z-Wave controller is able to perform this operation however it is recommended to use the primary controller of the previous network to make sure the very device is excluded properly from this network.

Reset to factory default

This device also allows being reset without any involvement of a Z-Wave controller. This procedure should only be used when the primary controller is inoperable.

1. Rotate to area A and then press the button four times within 1.5 seconds and do not release the button in the 4 th pressed, and the red LED will light ON.

2. After the red LED goes out, release the button within 2 seconds. 3. IDs are removed and all settings will reset to factory default.

Safety Warning for Batteries

The product contains batteries. Please remove the batteries when the device is not used. Do not mix batteries of different charging levels or different brands.

Inclusion/Exclusion

On factory default, the device does not belong to any Z-Wave network. The device needs to be added to an existing wireless network to communicate with the devices of this network. This process is called Inclusion. Devices can also be removed from a network. This process is called Exclusion. Both processes are initiated by the primary controller of the Z-Wave network. This controller is turned into exclusion respective inclusion mode. Inclusion and Exclusion is then performed doing a special manual action right on the device.

Inclusion

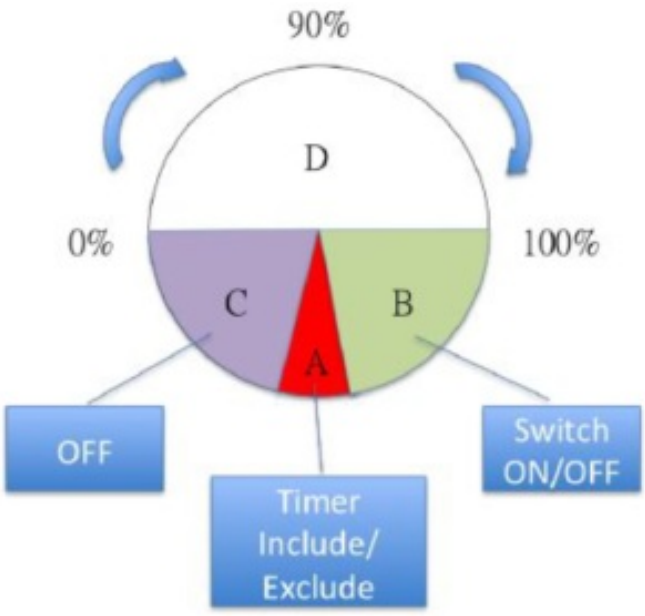
Rotate to area A and then press the button three times within 1.5 seconds to enter the inclusion mode. manual.zwave.eu/backend/make.php?lang=en&sku=PHIEPSR04

Exclusion

Rotate to area A and then press the button three times within 1.5 seconds to enter the exclusion mode. Node ID has been removed.

Product Usage

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.

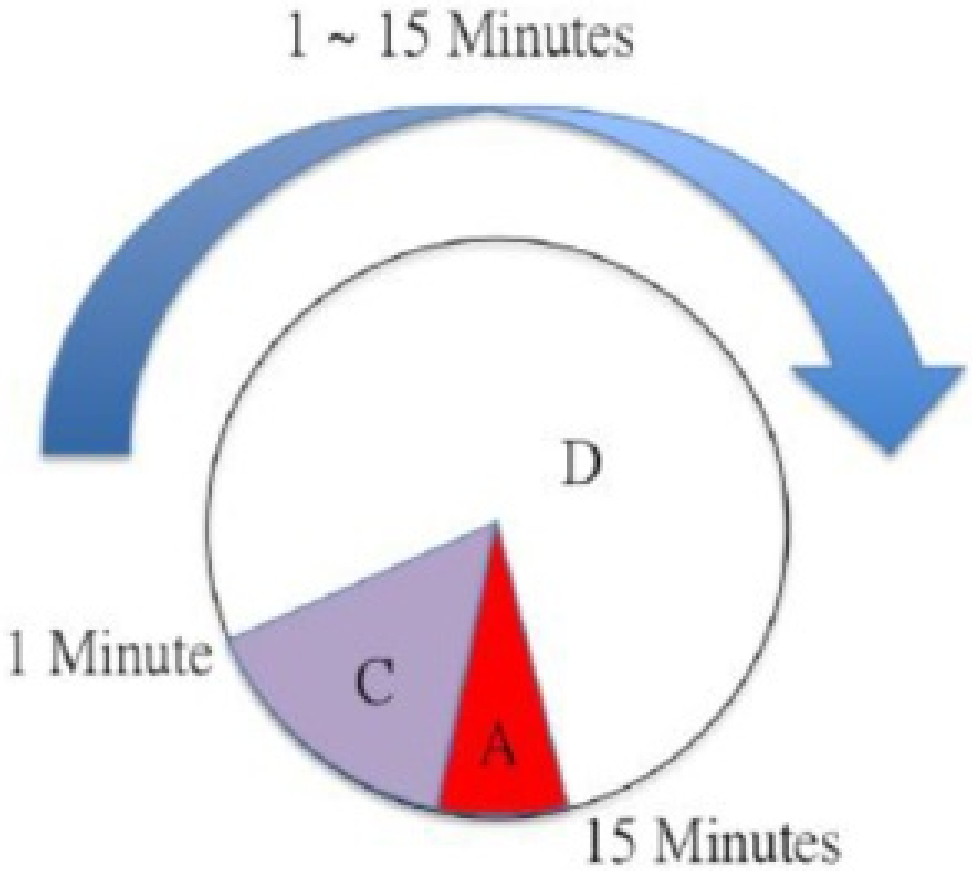


This device is able to set dimmer levels by rotating to different angles. When the status is Off, the surround LED will not work except in area A(shown in Fig. 1). Rotate the device to areas B, C, D(shown in Fig. 1) then touch the button can set the status to On. After a short beep, the surround LED 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

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.



Timer left	Flash color	Buzzer
1015 minutes	Cyan / 10 seconds	
5-10 minutes	Green / 10 seconds	
3,y5 minutes	Yellow / 10 seconds	
1/.3 minutes	Orange / 10 seconds	
30″60 seconds	Pink /10 seconds	
1030 seconds	Pink /10 seconds	1 beep / 10 seconds
1/.5 seconds	Pink / 1 second	1 beep / 1 second
Time' up	White / 1 second	4 beeps / 1 second

***On/Off Switch**

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

Communication to a Sleeping device (Wakeup)

This device is battery-operated and turned into a deep sleep state most of the time to save battery life. Communication with the device is limited. In order to communicate with the device, a static controller C is needed in the network. This controller will maintain a mailbox for the battery-operated devices and store commands that can not be received during a deep sleep state. Without such a controller, communication may become impossible, and/or the battery life is significantly decreased.
This device will wake up regularly and announce the wakeup state by sending out a so-called Wakeup Notification. The controller can then empty the mailbox. Therefore, the device needs to be configured with the desired wakeup interval and the node ID of the controller. If the device was included by a static controller this controller will usually perform all necessary configurations. The wakeup interval is a tradeoff between maximal battery lifetime and the desired responses of the device. To wake up the device please perform the following action: After the device adds to the network, it will wake up once per day in default. When it wake-up it will broadcast the â€œWake Up Notificationâ€ message to the network, and wake up 20 seconds for receiving the set 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 then press the button once. The device will wake up 10 seconds.

Quick troubleshooting

Here are a few hints for network installation if things don’t work as expected.

1. Make sure a device is in a factory reset state before including it. In doubt exclude before include.
2. If inclusion still fails, check if both devices use the same frequency.
3. Remove all dead devices from associations. Otherwise, you will see severe delays.
4. Never use sleeping battery devices without a central controller.
5. Don’t poll FLIRS devices.
6. Make sure to have enough mains powered devices to benefit from the meshing

Association – one device controls another device

Z-Wave devices control other Z-Wave devices. The relationship between one device controlling another device is called association. In order to control a different device, the controlling device needs to maintain a list of devices that will receive controlling commands. These lists are called association groups and they are always related to certain events (e.g. button pressed, sensor triggers, …). In case the event happens all devices stored in the respective association group will receive the same wireless command, typically a ‘Basic Set’ Command.
Association Groups:

Group Number	Maximum Nodes	Description
1	8	Z-Wave Plus Lifeline. Group 1 is for receiving the report mess age, like triggered event, temperature, humidity, etc.
2	8	Lighting control group

Configuration Parameters

Z-Wave products are supposed to work out of the box after inclusion, however, certain configurations can adapt the function better to user needs or unlock further enhanced features.
IMPORTANT: Controllers may only allow configuring signed values. In order to set values in the range 128 … 255 the value sent in the application shall be the desired value minus 256. For example: To set a parameter to 200 it may be needed to set a value of 200 minus 256 = minus 56. In the case of a two-byte value, the same logic

applies: Values greater than 32768 may be needed to be given as negative values too.

Parameter 1: Basic Set OFF level

Control the value represented by the left-side in area D. E.g. Setting this configuration to 16 means range of Command Basic Set value starts from 16 Size: 1 Byte, Default Value: 0

Setting	Description
0 – 99	Control the value represented by the left-side in area D .

Parameter 2: Basic Set ON level

Control the value represented by the right-side in area D. E.g. Setting this configuration to 30 means range of Command Basic Set value starts from 30 Size: 1 Byte, Default Value: 99

Setting	Description
0 – 99	Control the value represented by the left-side in area D .

Parameter 10: Auto Report Battery Time

The interval time for auto report the battery level. 0 means turn off the auto-report battery. The default value is 12. The value is in minutes. Each unit means 30 minutes Size: 1 Byte, Default Value: 12

Setting	Description
0 – 127	The interval time for auto report the battery level.

Parameter 25: Customer Function
Customer defined function Bitset: 1 + 2 = 3
Size: 1 Byte, Default Value: 0

Setting	Description
1	Dimmer setting method. 0: Auto send Command Basic Set after rotating. 1: Send Com mand Basic Set by touching key after rotating
2	Disable buzzer in timer mode. 0: Enable. 1: Disable.

Parameter 26: Disable Scene Holding report

Send Central Scene Holding when the button is held.
Size: 1 Byte, Default Value: 0

Setting	Description
0	Enable
1	Disable

Technical Data

Dimensions	71×17 mm
Weight	52 gr
Hardware Platform	SD3502
EAN	4.71E+12
IP Class	IP 20
Battery Type	1 * 3,7 V Lithium
Device Type	Wall Controller
Network Operation	Portable Slave
Firmware Version	1.07
Z-Wave Version	4.05
Certification ID	ZC10-15090007
Z-Wave Product Id	0x013c.0x0009.0x0022
Frequency	Europe – 868,4 Mhz
Maximum transmission power	5 mW

Supported Command Classes

- Basic
- Association Grp Info
- Device Reset Locally
- Central Scene
- Zwaveplus Info
- Configuration
- Manufacturer Specific
- Powerlevel
- Firmware Update Md
- Battery
- Wake Up
- Association
- Version
- Multi Cmd
- Security

Controlled Command Classes

- Basic

Explanation of Z-Wave specific terms

- Controller — is a Z-Wave device with capabilities to manage the network. Controllers are typically Gateways, Remote Controls, or battery-operated wall controllers.
- Slave — is a Z-Wave device without capabilities to manage the network. Slaves can be sensors, actuators, and even remote controls.
- Primary Controller — is the central organizer of the network. It must be a controller. There can be only one primary controller in a Z-Wave network.
- Inclusion — is the process of adding new Z-Wave devices into a network.
- Exclusion — is the process of removing Z-Wave devices from the network.
- Association — is a control relationship between a controlling device and a controlled device.
- Wakeup Notification — is a special wireless message issued by a Z-Wave device to announce that is able to communicate.
- Node Information Frame — is a special wireless message issued by a Z-Wave device to announce its capabilities and functions.

Documents / Resources

	**Philio Smart Color Button** [pdf] User Guide Philio, Smart, Color, Button, PHIEPSR04, Z-Wave