4-Key 2.4G Mesh Rotary & Push Button Smart Dimmer

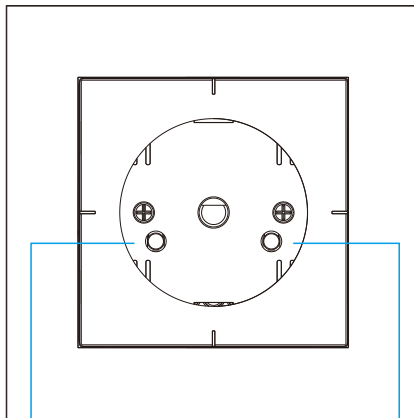PUSH CE FC ✓RoHS COMPLIANT

Important: Read All Instructions Prior to Installation

Function introduction

4 scene buttons, Press and hold for over 2 seconds to save a scene, short press to recall the saved scene
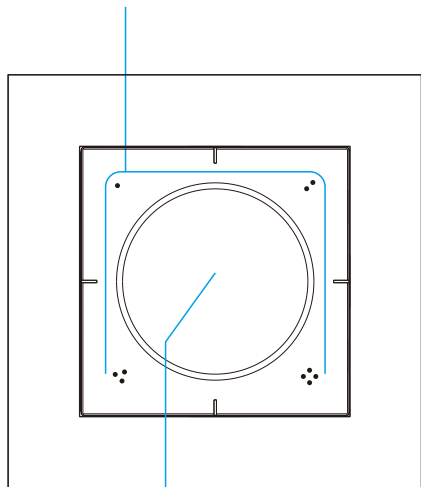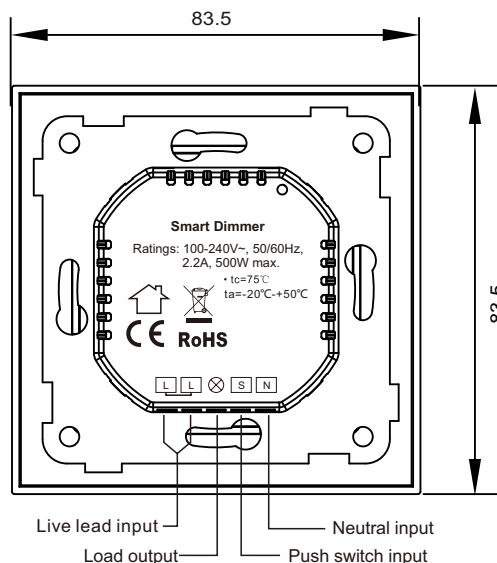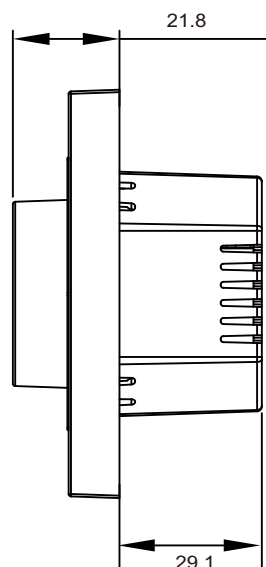

Rotary knob, short press to turn on/off, rotate clockwise to increase brightness, rotate counterclockwise to decrease brightness

"Min. Set" Key: for minimum brightness and startup brightness setting

"Reset" Key: for pairing and delete pairing with 2.4G mesh remotes

21.8

83.5

83.5

29.1

Smart Dimmer
Ratings: 100-240V~, 50/60Hz, 2.2A, 500W max.
• tc=75℃
ta=-20℃-+50℃
CE RoHS

L L ⊗ S N

Live lead input — Neutral input
Load output — Push switch input

Product Data

Input Voltage	Output Voltage	Output Current	Minimum Load	Max. Number of Parallel Connected Load	Size(LxWxH)
100-240VAC	100-240VAC	2.2A max.	7W LED(no neutral without bypass) 3W LED(no neutral with bypass) No minimum load requirement with neutral	9	83.5x83.5x50.9mm

Compatible Load Types			
Load Symbol	Load Type	Maximum Load	Remarks
	Dimmable LED lamps	250W @ 230V 125W @ 110V	Due to variety of LED lamp designs, maximum number of LED lamps is further dependent on power factor result when connected to dimmer.
	Dimmable LED drivers	250W @ 230V 125W @ 110V	Maximum permitted number of drivers is 250W divided by driver nameplate power rating.
	Incandescent lighting, HV Halogen lamps	500W @ 230V 250W @ 110V	
	Low voltage halogen lighting with electronic transformers	250W @ 230V 125W @ 110V	

• 100-240VAC wide input and output voltage, can work under no neutral wiring and with neutral wiring
• Supports resistive loads, capacitive loads or inductive loads
• Enables to set minimum brightness and startup brightness
• 1 channel output, up to 500W
• Both leading edge version and trailing edge versions are available for choosing, factory default is trailing edge
• Enables to control ON/OFF and light intensity of connected load
• Controlled through both smart App and remote controls, no gateway required
• Easy & quick pairing to the smart App by simply pushing the reset button, supports voice control through Alexa
• Mesh network, much longer control distance, transmits received signal to neighbor devices
• Up to 30m transmission distance between every two neighbor devices
• Encrypted two-way communication, quick status feedback, safe & reliable data transmission
• Compatible with universal 2.4G mesh remotes, each LED controller can pair to max. 8 remotes
• Cloud control is available for remote access, works with Amazon Alexa and Google Home
• With push switch input, can be controlled by universal AC push switches
• Standard size, can be compatible with existing EU standard frames, and installed into standard size wall box
• Radio Frequency : 2.4GHz

Main Features:
• Can operate under two-wire connection with no neutral lead or three-wire connection with neutral lead
• Advanced microprocessor control
• Implemented algorithm of smart light source detection
• Soft start function
• Innovative minimum dimming level and startup brightness setting functions
• The Bypass is an extension unit

As a dimmer it operates under the following loads:
• Conventional incandescent and HV halogen light sources
• ELV halogen lamps and dimmable LED bulbs (with electronic transformers)
• MLV halogen lamps (with ferromagnetic transformers)
• Dimmable LED bulbs
• Dimmable compact fluorescent CFL tube lamps
• Supported dimmable light sources (power factor > 0.5) with minimal power of 3VA using the Bypass (depending on the type of load)

Trailing edge or leading edge dimming mode can be preset by factory setting to control following types of loads:
• "Trailing edge" for resistive loads
• "Trailing edge" for capacitive loads
• "Leading edge" for inductive loads
Note: factory default version is trailing edge.

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 between 1% to 100%.
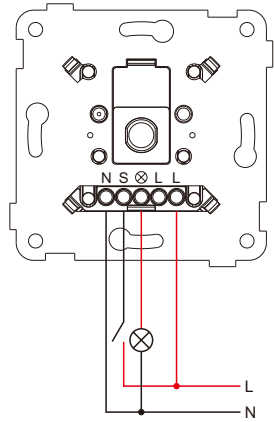
Safety & Warnings

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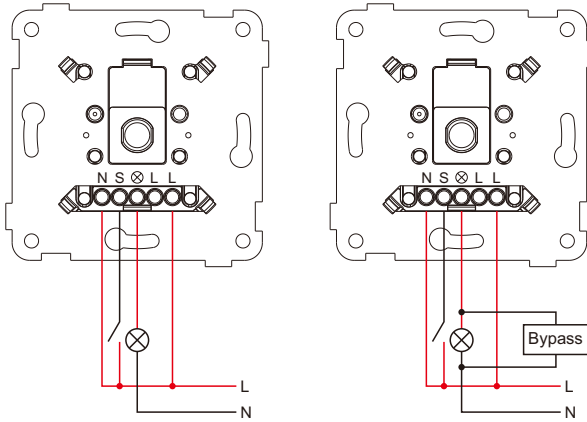• DO NOT expose the device to moisture.

Wiring Diagram

Notes for the diagrams:
L - terminal for live lead
N - terminal for neutral lead
$\otimes$ - output terminal of the dimmer (controlling connected light source)
**S** - terminal for push switch

Method 1: With neutral   Method 2: Without neutral

N S ⊗ L L   N S ⊗ L L   N S ⊗ L L

⊗   ⊗   ⊗   Bypass

L   L   L
N   N   N

* When using the device without neutral, the smart dimmer requires at least 20W @ 240 VAC of power consumption to operate. If the connected light has a smaller power consumption, then Bypass is needed for the device to work.
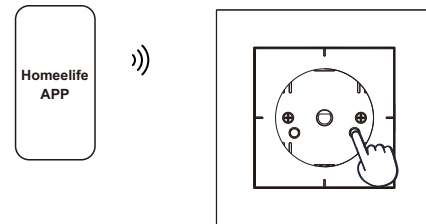
Operation

Set LED controller into pairing with 2.4G mesh remote mode

○
○
○

RF 2.4G remote
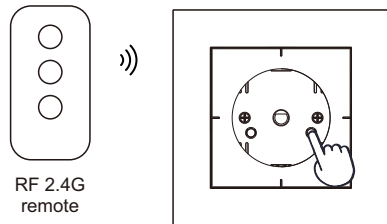
Click the reset button once, or reset power of the controller 3 times continuously
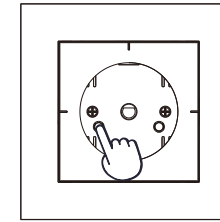
Set LED controller into pairing with Homeelife APP

Homeelife APP

Double click the reset button, or reset power of the controller 2 times continuously

Set Minimum Brightness

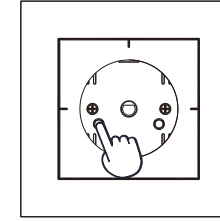**Step 1**: adjust the brightness of connected load to a desired level between 1%-50%.

Step 2: press and hold down "Min. set" key for 3 seconds until connected load blinks to set the brightness adjusted in step 1 as minimum brightness, then the load can not be dimmed below this level.

Delete Minimum Brightness

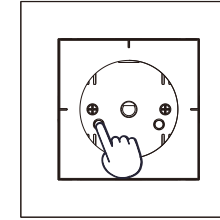**Step 1**: adjust the brightness of connected load to a desired level between 100%

Step 2: press and hold down "Min. set" key for 3 seconds until connected load blinks to delete the previously set minimum brightness.

Set Startup Brightness

**Step 1**: adjust the brightness of connected load to a desired level between 1%-50%.

Step 2: double click "Min. set" key to set the brightness adjusted in step 1 as startup brightness, then the load will first go to startup brightness when turned on every time, then drop down to the brightness before last time turned off.

Note: startup brightness setting function is to avoid the phenomenon that some dimmable LED drivers can not be turned on after turned off at a very low brightness level. Once setting a startup brightness, if the startup brightness is higher than the brightness before turned off, the driver will first go to the startup brightness after turned on then drop down to the level before turned off. If the startup brightness is lower than the brightness before tured off, the driver will directly go to the brightness before turned off.

Delete Startup Brightness

Step 1: adjust the brightness of connected load to 0%.
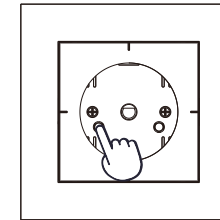
Step 2: double click "Min. set" key to delete the previously set startup brightness.

Installation

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