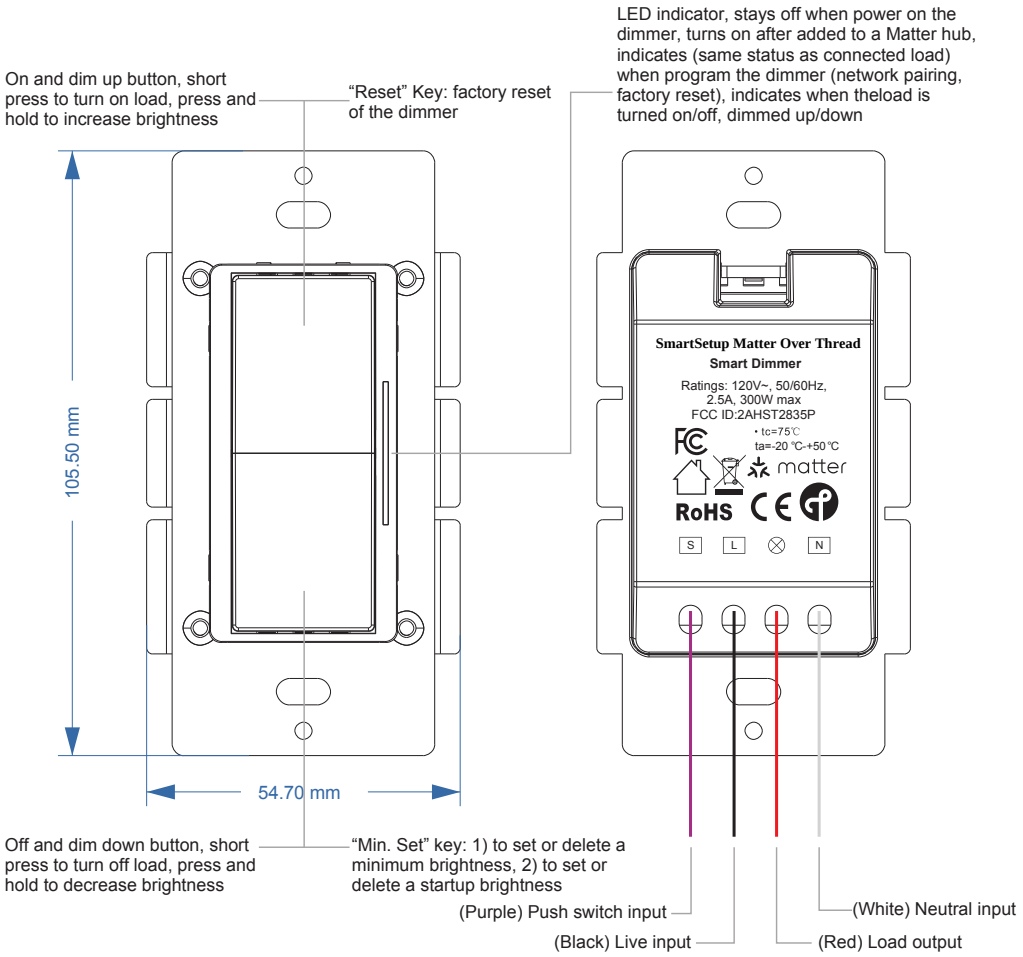
# SmartSetup Push Compatible Matter Keypad Smart Dimmer

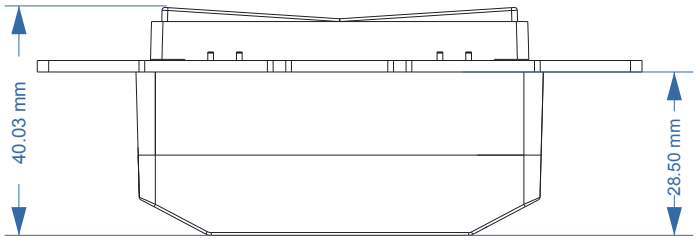
PUSH CE FC RoHS COMPLIANT matter

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

## Function introduction




**Front view** **Back view**




**Side view**

## Product Data

| Input Voltage | Output Voltage | Output Current | Size(LxWxH) | Ambient Temperature |
|---|---|---|---|---|
| 120VAC | 120VAC | 2.5A max | 105.5x54.7x40.03mm | -20℃ ~ + 50℃ |

| Compatible Load Types | | | |
|---|---|---|---|
| Load Symbol | Load Type | Maximum Load | Remarks |
| | Dimmable LED lamps | 150W @ 120V | 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 | 150W @ 120V | Maximum permitted number of drivers is 150W divided by driver nameplate power rating. |
| | Incandescent lighting, HV Halogen lamps | 300W @ 120V | |
| | Low voltage halogen lighting with electronic transformers | 300W @ 120V | |

## Status of Indication LEDs When the Load is Dimmed

| Load Brightness | Status of Indication LEDs |
|---|---|
| Turned on | All LEDs turn on |
| Turned off | All LEDs turn off |
| Dimmed to the range 81%-99% | 5 LEDs stay on |
| Dimmed to the range 61%-80% | 4 LEDs stay on |
| Dimmed to the range 41%-60% | 3 LEDs stay on |
| Dimmed to the range 21%-40% | 2 LEDs stay on |
| Dimmed to the range 1%-20% | 1 LED stays on |

- Matter keypad smart dimmer
- Can work under no neutral wiring and with neutral wiring, self-adaptive
- Supports resistive loads, capacitive loads or inductive loads
- Enables to set minimum brightness and startup brightness
- 1 channel output, up to 300W
- Both leading edge version and trailing edge versions are available for choosing, preset by factory setting
- Enables to control ON/OFF and light intensity of connected light source
- App control through Matter (e.g. Apple Home, Amazon Alexa, Google Home)
- Can be voice controlled through Apple Siri, Google Assistant, Amazon Alexa
- With push switch input, can be controlled by universal AC push switches
- Standard size, can be compatible with existing US standard frames, and installed into existing junction box
- Radio Frequency : 2.4GHz
- Waterproof grade: IP20

**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
- Active power and energy metering functionality
- 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 set 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 setting is trailing edge.**

## Safety & Warnings

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

## Operation

**1. Do wiring according to connection diagram correctly.**

**2. This Matter thread device is a wireless receiver that communicates with a variety of Matter compatible systems. This receiver receives and is controlled by wireless radio signals from the compatible Matter system.**

**3. Add to a Matter platform and control through the platform:**

**Note: An Apple HomePod mini is used as a Matter border router for adding and controlling the device. For other Matter border routers, please refer to their user manuals to learn how to add and control Matter devices.**

**Step 1:** Prepare an iPhone (iOS 16.2 or later) or iPad (iPadOS 16.2 or later) with the latest version firmware, and prepare an Apple HomePod mini with the latest version firmware.

**Step 2:** Connect the iPhone or iPad to your home WLAN network. Run the Apple Home app and set up the HomePod mini as instructed by Apple (as shown in **Figure 1** to **Figure 7**).

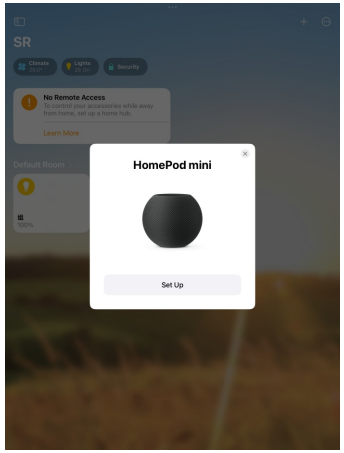



**Figure 1**

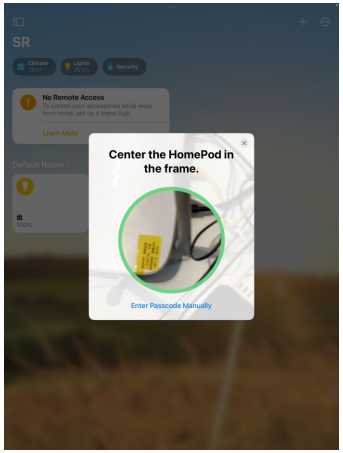



**Figure 2**

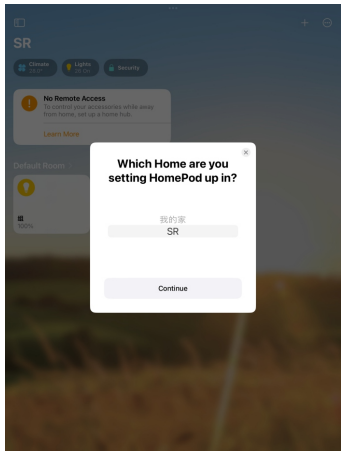



**Figure 3**

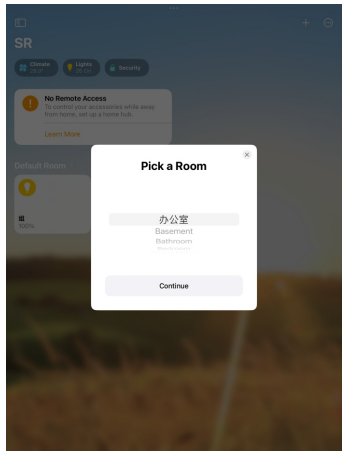



**Figure 4**

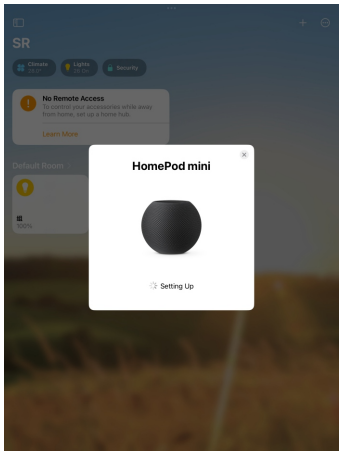



**Figure 5**

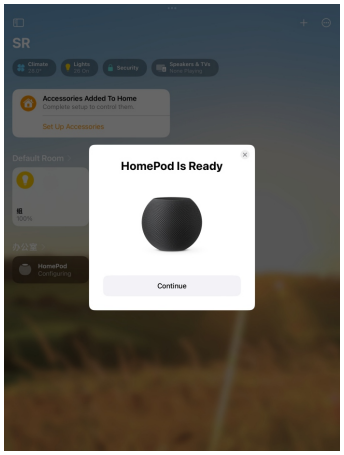



**Figure 6**

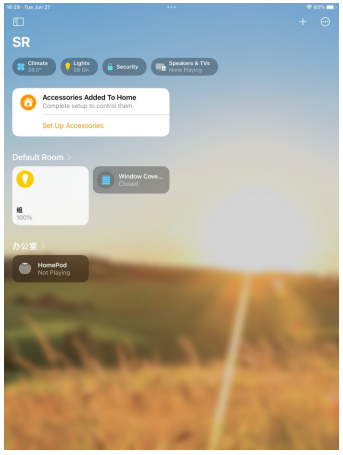



**Figure 7**

**Step 3:** Do wiring of the Matter thread dimmer according to the wiring diagram and power on it.

**Step 4:** Add the Matter thread dimmer to the Apple Home app by scanning the QR code sticker on the dimmer as shown in **Figure 8** to **Figure 15**.

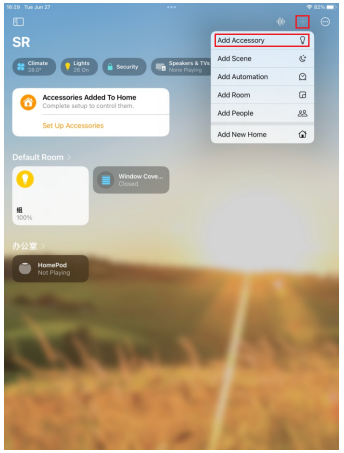



Figure 8

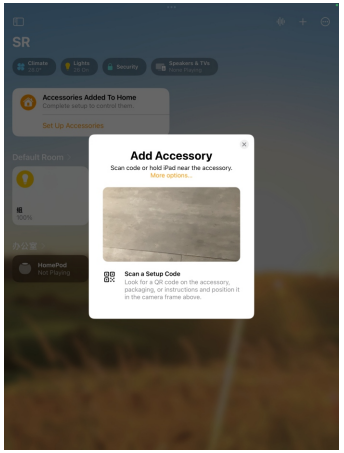



Figure 9

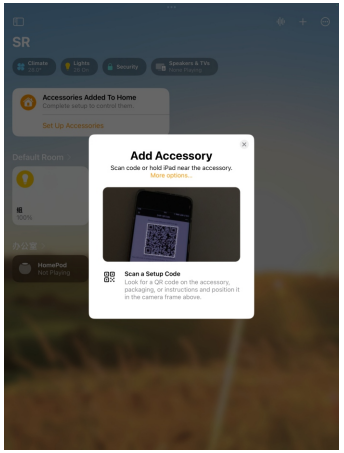



Figure 10

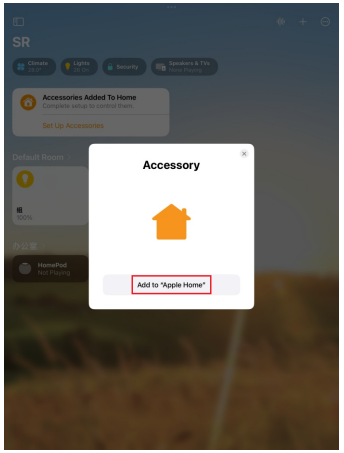



Figure 11

**Note: Before scanning the QR coder sticker on the dimmer as shown in Figure 10, short press the reset button 5 times continuously then within 2 seconds press and hold it for over 5 seconds to reset the dimmer so that it can be discovered by the Apple Home app. Otherwise if it has already been added to another gateway, current gateway can not discover and add it.**

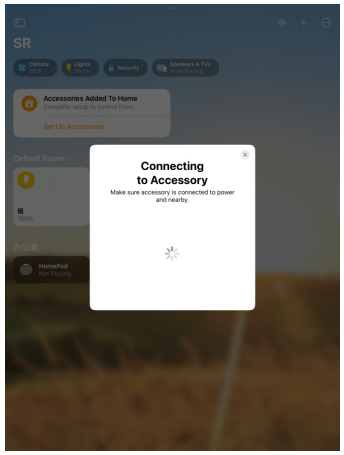



Figure 12

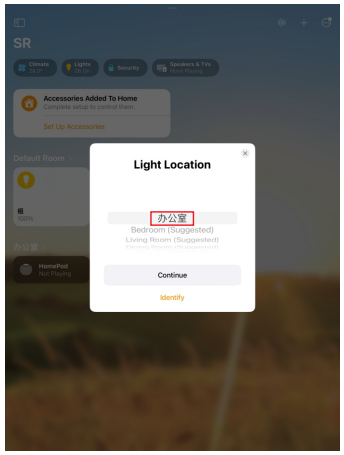



Figure 13

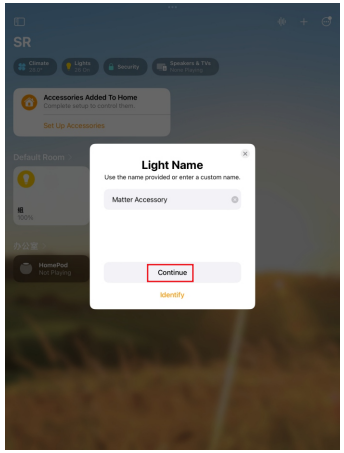



Figure 14

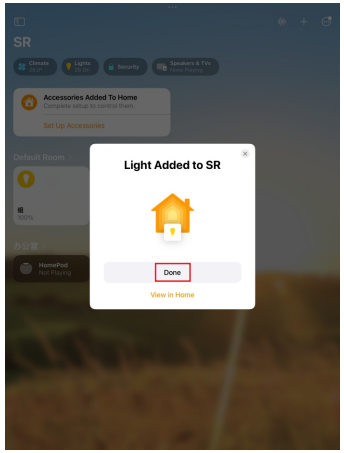



Figure 15

**Note: When choose the room that you would like to add the dimmer to, please make sure to choose the same room that the HomePod mini is located as shown in Figure 13.**

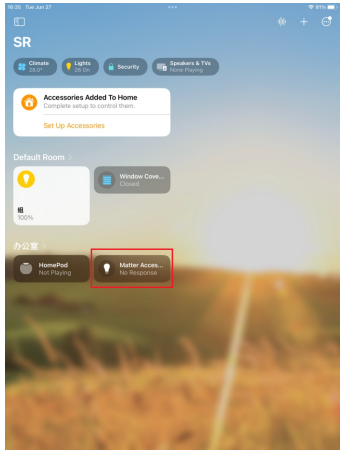



Figure 16

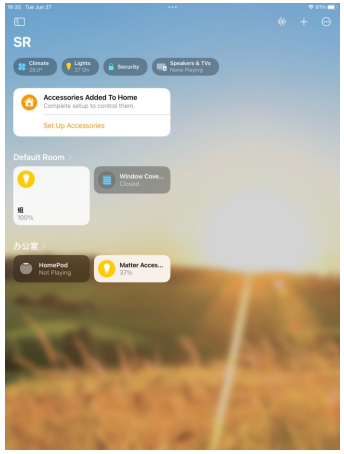



Figure 17

**Step 5:** once the dimmer is added to the gateway successfully, tap on the device to control on/off and brightness of the dimmer as shown in **Figure 16** to **Figure 18**.

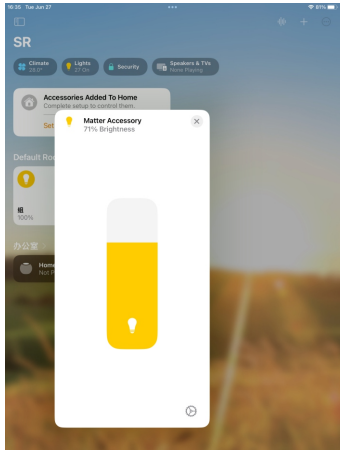
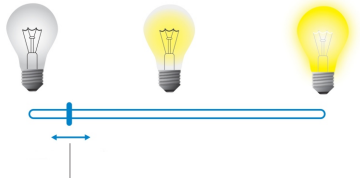


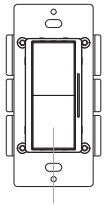

Figure 18

#### 4. Minimum Brightness Setting

**Set Minimum Brightness**

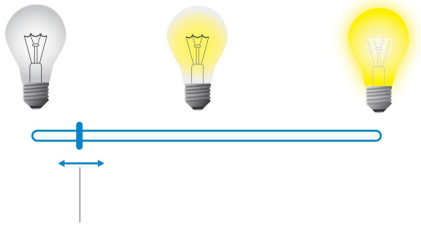


**Step 1**: adjust the brightness of connected load to a desired level between 1%-50%.

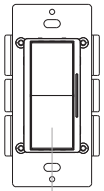


**Step 2**: short press “Min. Set” key 3 times continuously and then within 2 seconds press and hold it for over 5 seconds until connected load blinks to set the brightness adjusted in step 1 as minimum brightness, then the load can not be dimmed below this level.

**Delete Minimum Brightness**



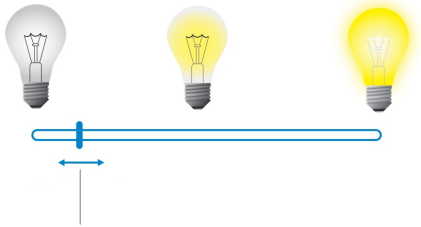
**Step 1**: adjust the brightness of connected load to 100%.



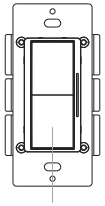
**Step 2**: short press “Min. Set” key 3 times continuously and then within 2 seconds press and hold it for over 5 seconds until connected load blinks to delete the previously set minimum brightness.

#### 5. Startup Brightness Setting

**Set Startup Brightness**



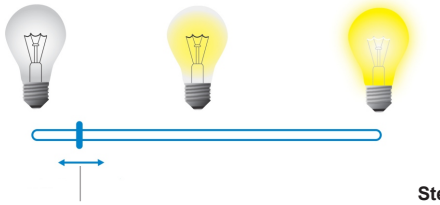
**Step 1**: adjust the brightness of connected load to a desired level between 1%-50%.



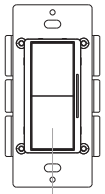
**Step 2**: short press “Min. Set” key 6 times continuously and then within 2 seconds press and hold it for over 5 seconds until connected load blinks to set the brightness adjusted in step 1 as startup brightness, then the load will first go to startup brightness when turned on every time, then drop 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%.



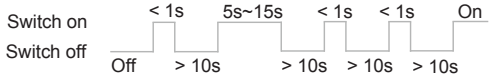
**Step 2**: short press “Min. Set” key 6 times continuously and then within 2 seconds press and hold it for over 5 seconds until connected load blinks to delete the previously set startup brightness.

#### 6.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.

#### 7. Restore factory settings

To restore the factory settings, short press the “Reset” button 5 times continuously and then within 2 seconds press and hold it for over 5 seconds or switch the device power on and off in the following sequence. If the device is successfully reset, the connected light will blink 3 times to indicate successful reset.

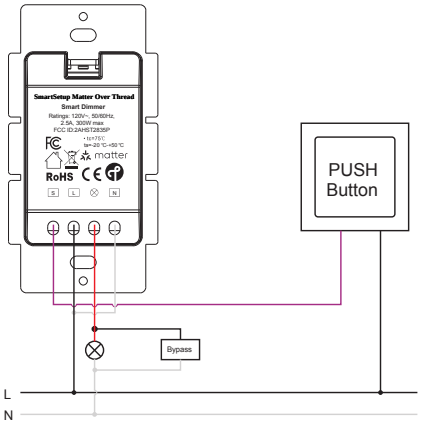


## Wiring Diagram

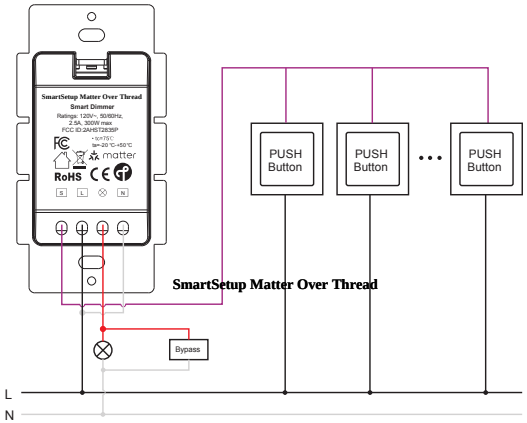
**Notes for the diagrams:**
**L** - terminal for live lead
**N** - terminal for neutral lead
⊗ - output terminal of the dimmer (controlling connected light source)
**S** - terminal for push switch

### (1) 2-Wire Connection With No Neutral Lead

**Single push switch wiring**



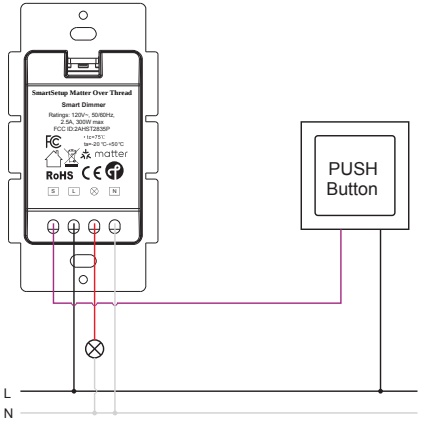

**Multiple push switches wiring for multiple control points**



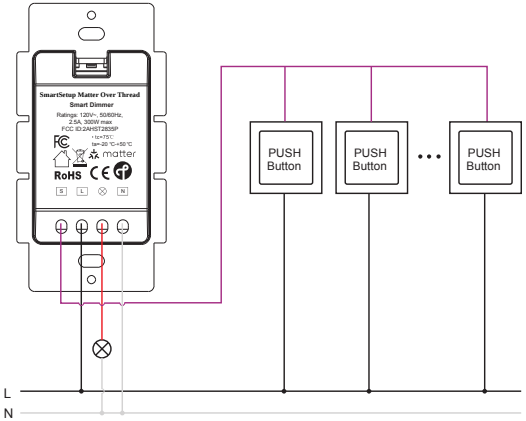

The Bypass is a device designed to work with the smart dimmer. It should be used in case of connecting LED bulbs or energy saving compact fluorescent lamps. The Bypass prevents flickering of the LED lights and glowing of the turned off compact fluorescent lamps. In the case of 2-wire connection, the Bypass allows to reduce minimum power of load required by the dimmer for correct operation. The Bypass provides powering of the dimmer in case of controlling the low loads of minimum power down to 3W (for cosφ>0.5).

### (2) 3-Wire Connection With Neutral Lead

**Single push switch wiring**

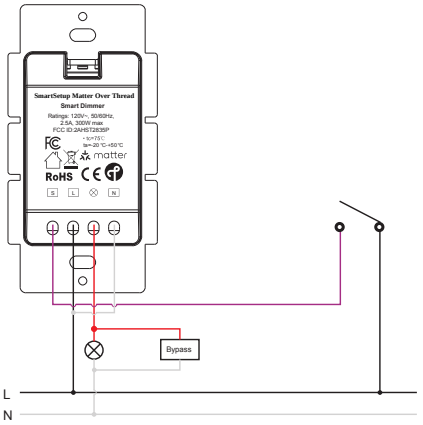



**Multiple push switches wiring for multiple control points**

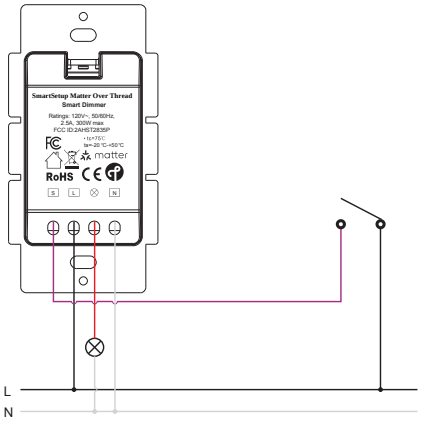



### (3) With toggle on/off switch

**2-Wire connection without neutral lead**



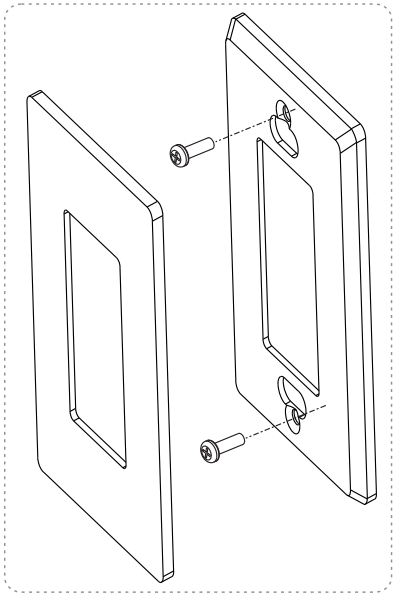

**3-Wire connection with neutral lead**

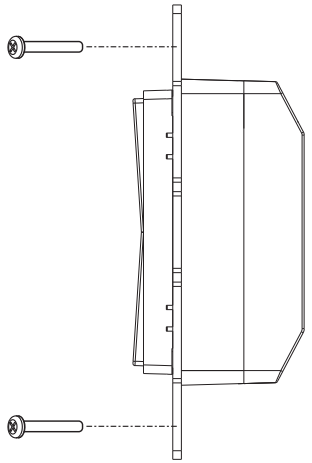



**Supported Switch Types:**
**The switch types this device supports can be configured by factory setting:**
**1. Push Switch (factory default setting)**
**2. Toggle On/Off Switch (can be configured by factory setting upon request)**

This phase dimmer adopts leading edge dimming (forward phase control) or trailing edge dimming (reverse phase control), two versions are available for choosing, factory default version is trailing edge. Please make sure the connected loads support the control type you choose. Please refer to the user manual of the load or consult the supplier of the load.

## Installation





⇦ Wallplate/Adapter included