

Source Mini

Datasheet



MGWSIPD4-LK.18



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Before using this product, please read this datasheet carefully and keep it properly!

Document Version: C

◆◆ Overview

Source Mini (hereinafter referred to as “the Product” or “the Device”) is a 4-inch smart center control panel with a screen resolution of 480*480. It is equipped with HDL LINK system and can be used with different protocol interfaces to integrate Buspro/KNX/Zigbee device control. This device integrates lighting(up to 64 devices), curtains/air conditioning/fresh air/underfloor heating/music control (each can control up to 8 devices), color control (RGB), color temperature, background and system control, and scene control (up to 64 scenes).

It not only supports the control status display of devices and scenes, but also supports a variety of sensors such as human proximity sensing, illumination detection, temperature and humidity detection, etc., to meet most of the daily applications. It supports wired and wireless network access, video intercom calls, screen-to-screen indoor voice calls and other common functions, and can also support screen saver, manual immediate sleep, home page favorites, card sorting and other functions. Note: The pictures and illustrations provided in this instruction manual are for reference purposes only, and the actual product may differ.



Key Functions:

1. 4-inch color IPS capacitive touch screen, anti-fingerprint screen, resolution 480x480
2. Home page function, support device and scene shortcut favorite card control, as well as weather and time display
3. Basic control functions, including switch, dimming, curtains, scenes, etc.; and other control functions, including color, color temperature, background music control, environmental control (air conditioning, floor heating, fresh air)
4. Gateway function, supports multi-gateway cross-drive control, mixed networking (when using the gateway function, you need to connect the device to a wired network)
5. Built-in temperature and humidity sensors, automatically detect the temperature and humidity of the current installation location of the device

6. Built-in human proximity sensor and light sensor, to realize automatic screen sleep, the human proximity wake-up and automatic screen brightness adjustment
7. This device must be used with the base, can be optional with one of the base, details are as follows:

| Name | Model No. | Functions |
|---|------------------|--|
| Source_Zigbee Power Interface (hereinafter referred to as "Zigbee interface") | MPWS2R1ETH-ZB.18 | Provides power for the whole device, built-in 2CH 10A relay circuit output, when the Zigbee interface is selected and connected to the network using the network port, the device is equipped with Zigbee gateway function. |
| Source_Buspro Power Interface (hereinafter referred to as "Buspro interface") | MPWS2R1ETH-BP.18 | Provides power for the whole device, built-in 2CH 10A relay circuit output, when the Buspro interface is selected and connected to the network using the network port, the device is equipped with Zigbee gateway function and Buspro gateway function, supporting Zigbee system and Buspro system mixed networking. |
| Source_KNX Power Interface (hereinafter referred to as "KNX interface") | MPWS2R1ETH-KT.18 | Provides power for the whole device, built-in 2CH 10A relay circuit output, when the KNX interface is selected and connected to the network using the network port, the device is equipped with Zigbee gateway function and KNX gateway function, supporting Zigbee system and KNX system mixed networking. |

◆◆ Appearance

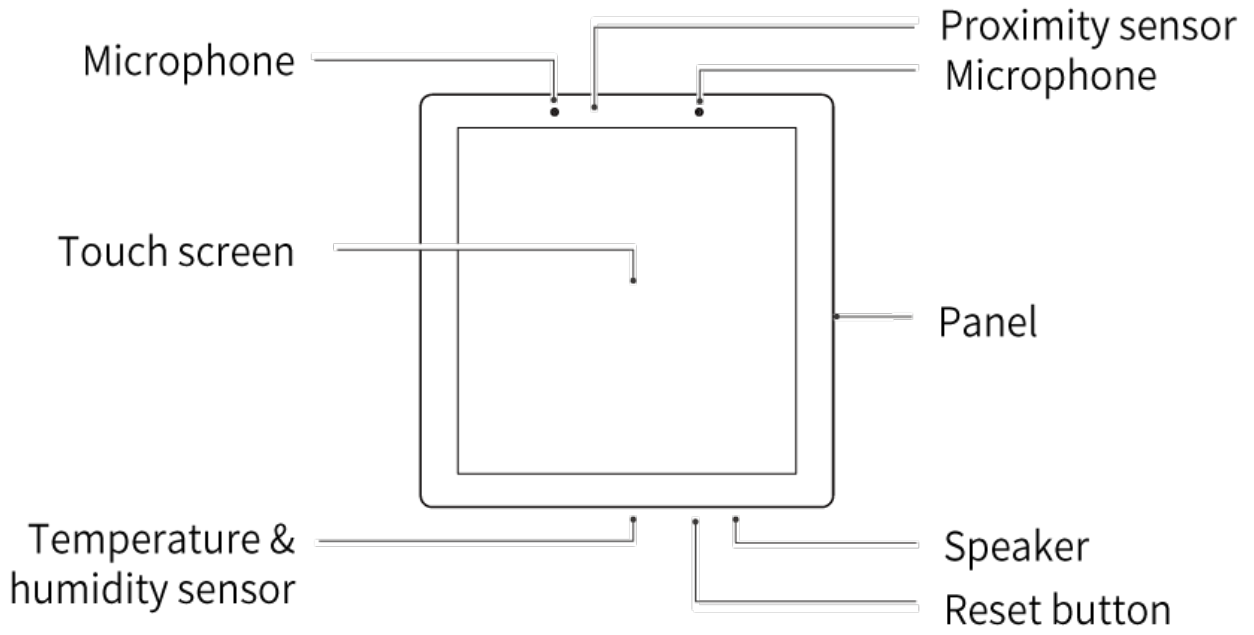


Figure 1

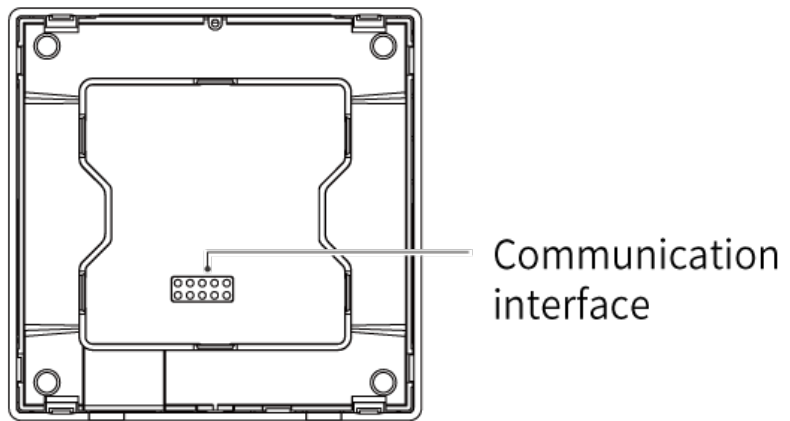


Figure 2

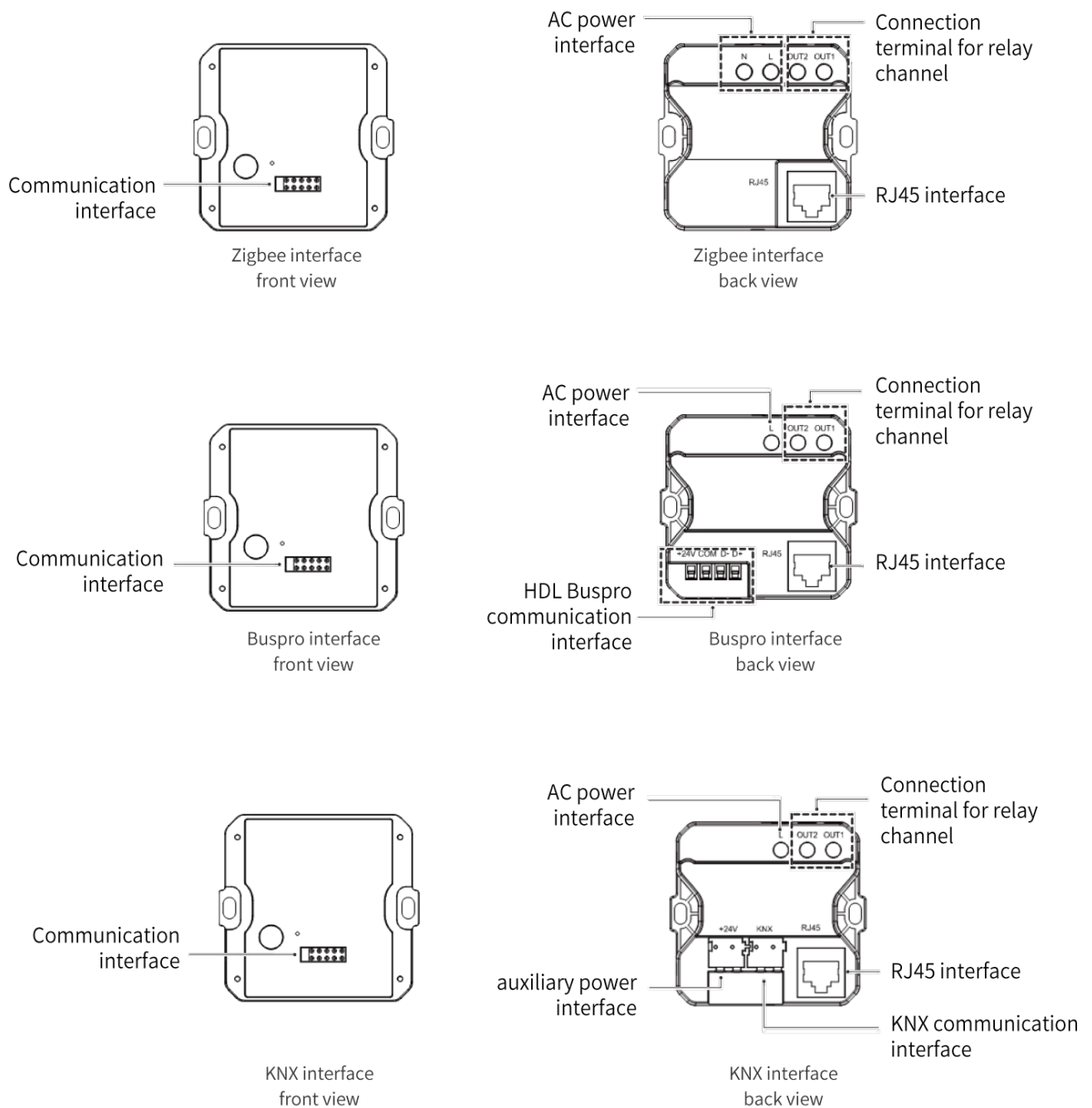


Figure 3

◆◆ Technical Data

- **Basic parameters:**

| Item | Parameter |
|---------------|--|
| Current | Current of power interface inputs into panel: $\leq 1000\text{mA}/5\text{V DC}$ Power of panel and power interface: $\leq 208\text{mA}/24\text{V DC}$; $\leq 167\text{mA}/30\text{V DC}$ |
| Input voltage | Zigbee interface: 100 - 240V AC, 50/60Hz Buspro interface: 18 - 28V DC KNX interface: 21 - 30V DC |

| | |
|---|--|
| KNX auxiliary voltage | 18 - 28V DC |
| Output channel | Zigbee / Buspro / KNX interface: 2CH, 5A/CH |
| Communication protocol | HDL LINK |
| Storage capacity | 256MB |
| Operating frequency | 2.4GHz |
| Wi-Fi transmit power | 12dBm±0.5 |
| Indoor communication distance(barrier-free) | ≤40m |
| Touch screen | 4-inch IPS screen, resolution: 480*480 |
| Operating system | Linux |
| Ethernet interface | RJ45 |
| Microphone | Signal-to-noise ratio: > 60 dB |
| Speaker | Maximum input power: 1W Sensitivity: 94±3dB |
| Proximity sensor | Supports wake-up from human body or hand proximity sensing when the screen is off. |
| Light Sensor | Automatically adjusts screen brightness according to light level |
| Temperature & humidity sensor | Monitor the temperature and humidity of the environment |
| Working temperature | -5°C ~ 45°C |
| Working relative humidity | ≤90%RH, non-condensed |
| Storage temperature | -20°C ~ 60°C |
| Storage relative humidity | ≤93%RH |

- **Network configuration requirements:**

| Networking | Network Requirement |
|--|---|
| KNX and Buspro system mixed networking | Must use wired network; Different gateway networking methods allowed |
| Zigbee networking | Must set master gateway and slave gateway |
| Not use as gateway | WLAN/Wired network |

◆◆ Specifications

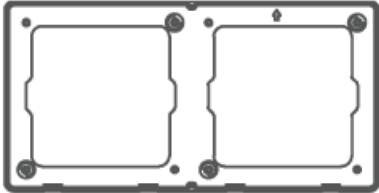
| | |
|------------------------|---|
| Dimensions (W X H X D) | 86×86×10.1mm (without power interface, see Figure 4 & 5) 86×86×39.3mm (with power interface) |
| Net weight | 90g (without bracket and power interface) |
| Housing material | PC |
| Installation | Wall box |

| | |
|-------------------------------------|------|
| IP degree (compliant with EN 60529) | IP20 |
|-------------------------------------|------|

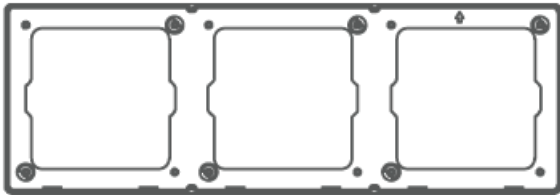
Note: Source Mini supports multi-gang installation (Optional).

| Frame Type | Gang | Dimensions (W X H X D) (See Figure 6) |
|---------------|--------|---------------------------------------|
| Plastic Frame | 2 gang | 176.5× 90.8×7mm |
| Plastic Frame | 3 gang | 262.5×90.8×7mm |
| Plastic Frame | 4 gang | 348.5×90.8×7mm |
| Plastic Frame | 5 gang | 434.5×90.8×7mm |

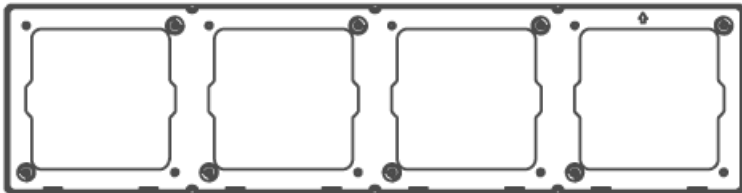
2-gang



3-gang



4-gang



5-gang

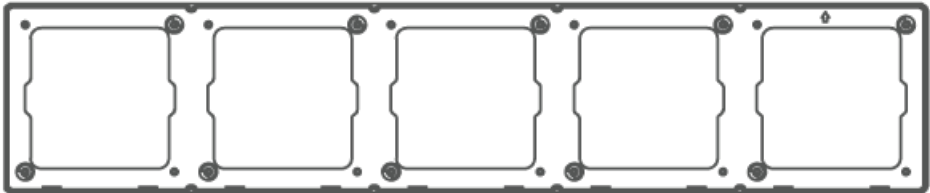


Figure 6

Danger:

Do not disassemble or replace parts without authorization, as this may result in mechanical failure, electric shock, fire, or body injury.

Warning:

- Installation and commissioning of this equipment must be carried out by us or by an organization appointed by us. The planning and construction of the electrical connection of this equipment must comply with the relevant local safety standards and regulations.
- Any consequences caused by failure to install and wire according to this instruction are not related to our company.
- Please refer all maintenance work to our after-sales department or designated organization, the warranty of this product does not apply to the failure caused by the user's disassembly of the product.

Caution:

- Before use, please tear off the protective film of the touch screen of this device, so as not to affect the effect of use.
- Before installation, please cut off the power supply, it is strictly prohibited to operate with electricity.
- It is a MUST to install the device with wall box.
- It is a MUST to use the device with power interfaces. The optional power interfaces include Source_Zigbee power interface, Source_Buspro power interface and Source_KNX power interface. Please select according to actual needs.
- The maximum distance for wireless transmission is 40 meters. Since obstacles can shorten the wireless transmission distance, to ensure a stable and reliable communication, it is imperative to install the device in an open area, away from large metallic objects.
- Do not use corrosive liquid to wipe the device body and the interface, so to avoid damage to the interface. Simply use a dry rag to wipe away dust from the device.
- Prior to performing maintenance or cleaning on the device, disconnect the device from all voltage sources, to avoid electric leakage and electric shock.
- This unit is for indoor use only, do not use in wet environments or outdoors.



This symbol indicates that: The device is only available for use at an altitude of below 2000 meters.

◆◆ Wiring

It is a MUST to make the device connect with power interface. The wiring for the optional power interfaces are as below.

Wiring for Zigbee interface

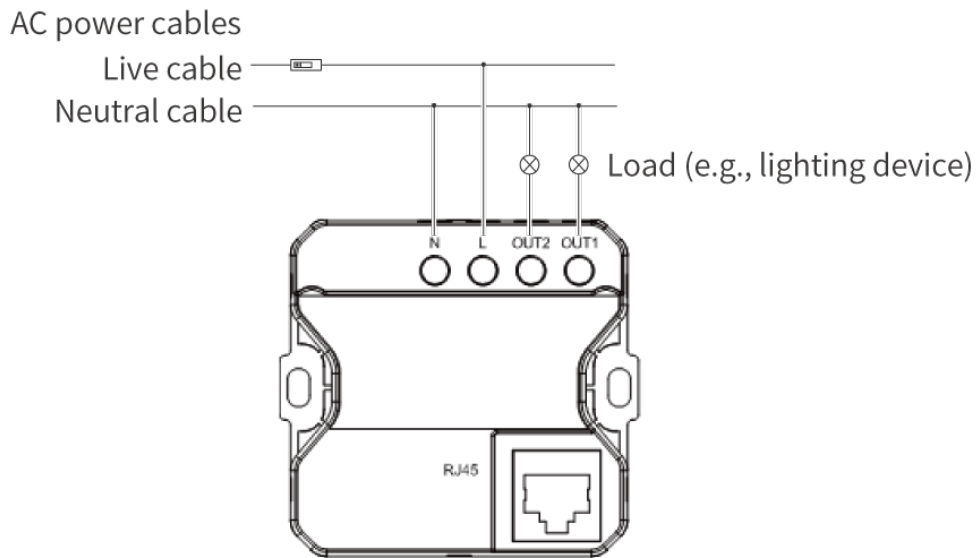


Figure 7

- Wiring for Buspro interface

Tips: For Buspro connection, a hand-in-hand connection is recommended.

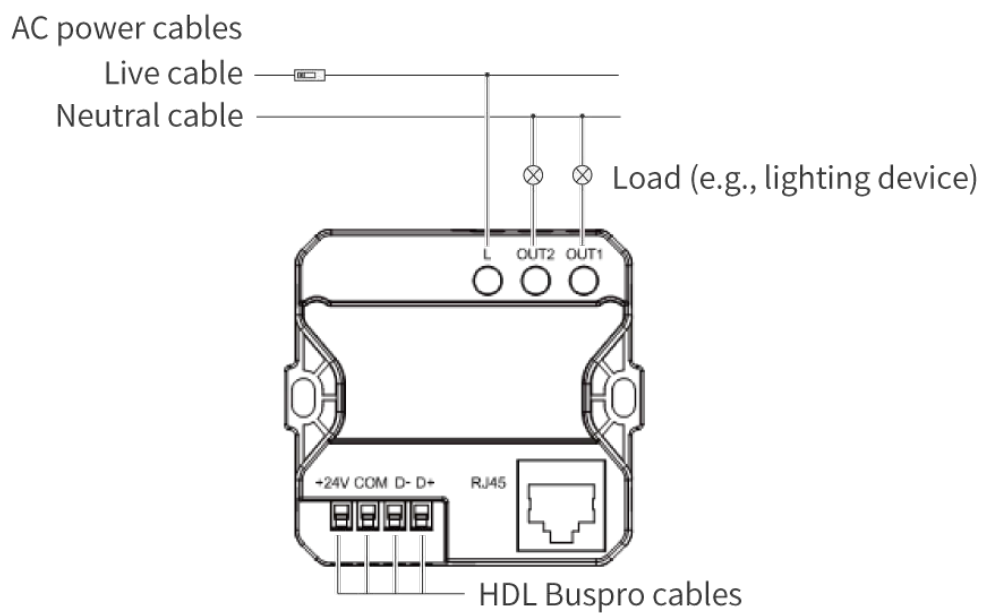


Figure 8

HDL Buspro Cable Guide

| HDL Buspro | HDL Buspro Cable | CAT5 / CAT5E |
|------------|------------------|------------------------|
| DATA+ | Yellow | Blue/Green |
| DATA- | White | Blue white/Green white |

| | | |
|--------|-------|--------------------------|
| COM | Black | Brown white/Orange white |
| 24V DC | Red | Brown/Orange |

- Wiring for KNX interface

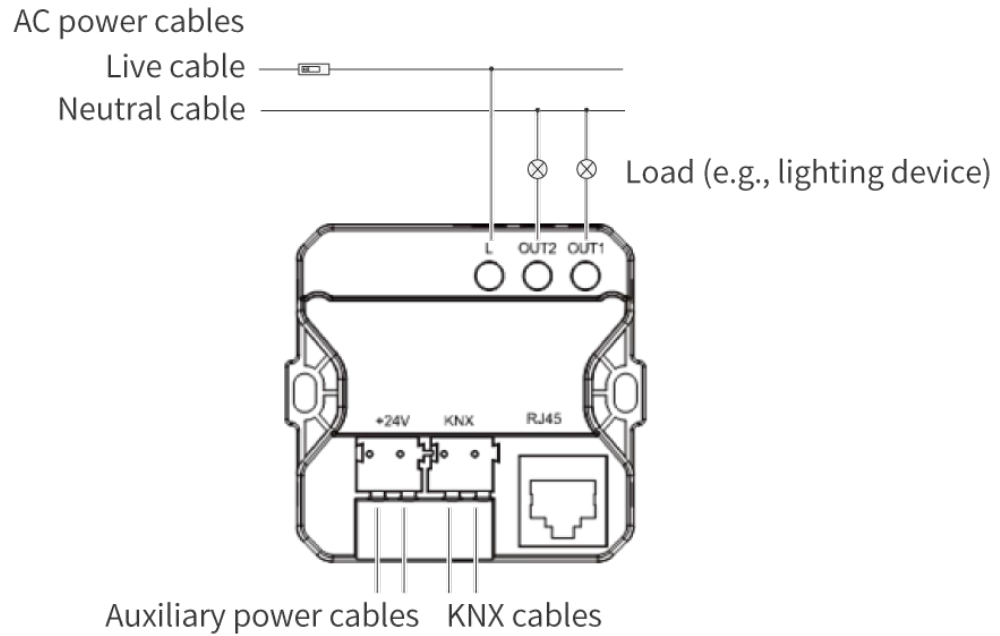


Figure 9

KNX Cable Guide

| KNX | KNX Cable |
|-----|-----------|
| - | Black |
| + | Red |

◆◆ Installation

This section mainly introduces Source Mini single/multi-gang panel installation, please select the installation method according to actual needs.

Warning: Before performing any installation procedures on the device, it is crucial to disconnect the device from all voltage sources. This step is necessary to ensure the safety of the technician and prevent any potential damage to the device.

Note: Please refer to the following for the conditions of gasket selection:

1. When this device is installed in line with Spring series panels (supporting multi-gang installation), or when this device is installed separately, there is no need to add gaskets;

2. In addition to the above point, if the device is installed in line with other panels (not supporting multi-gang installation), please choose whether to add gaskets or not according to the height of the panels, as follows:

- a. The height of other panels is 10mm, no gaskets are required;
- b. The height of other panels is 11mm, additional gaskets are required.

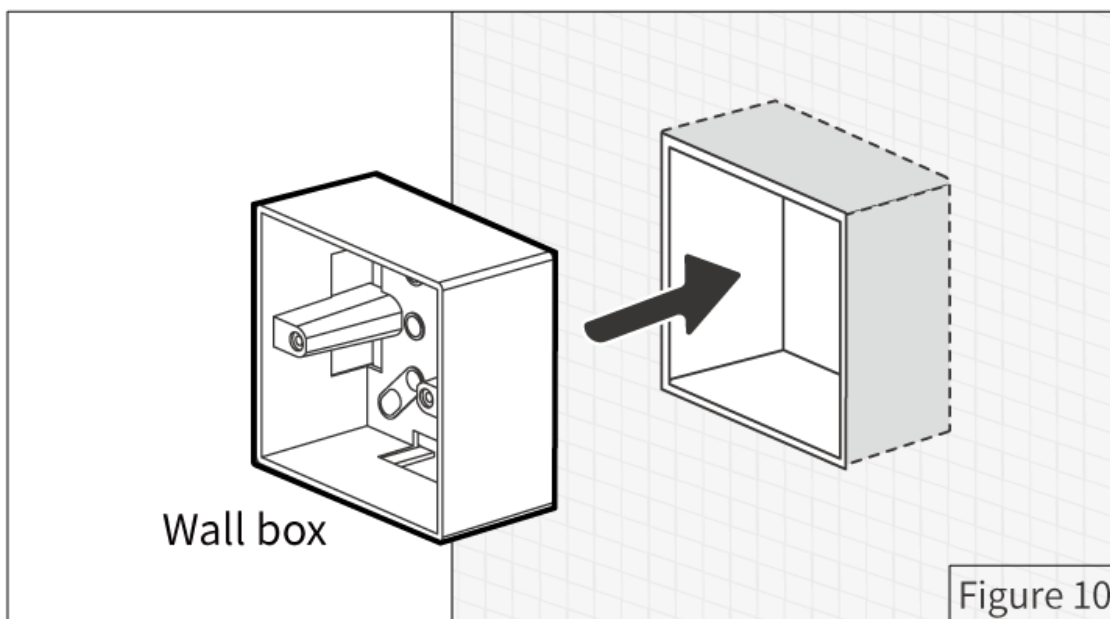
Source Mini One-Gang Installation

Step 1. Select a suitable wall opening.

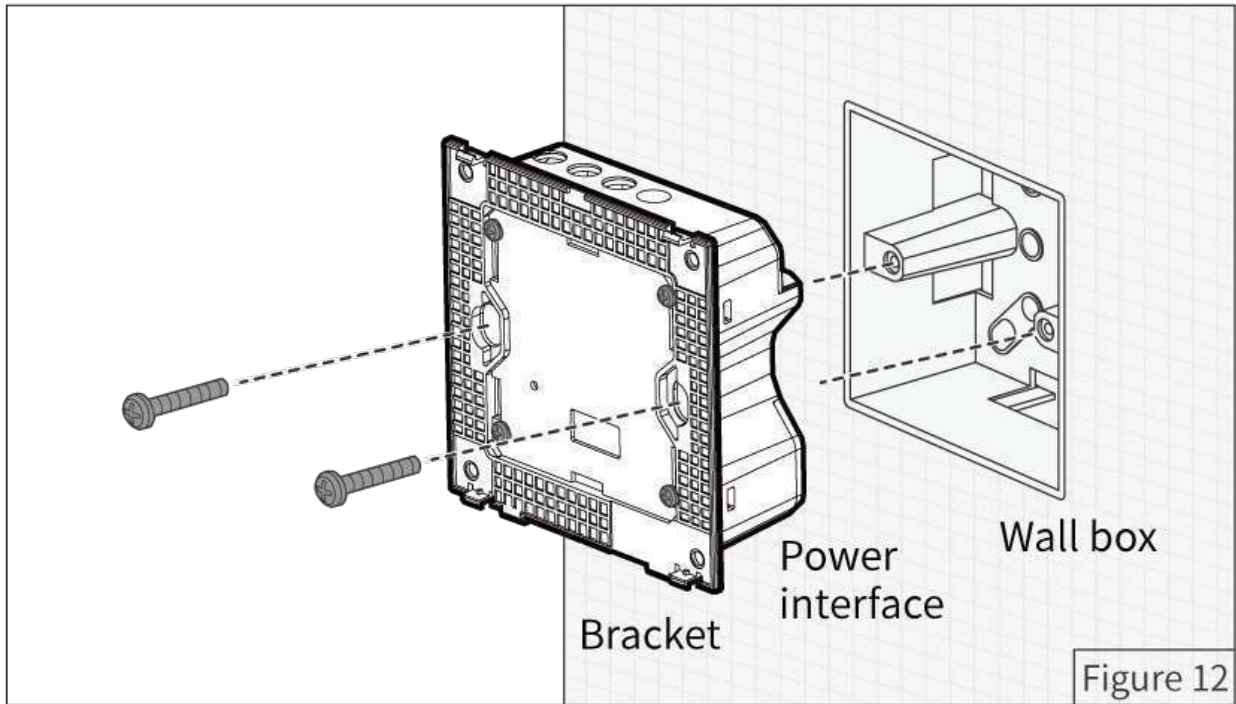
Note: To facilitate the routing of cables, bury the live wire and neutral wire into the wall before installation.

Step 2: Place the box into the wall.

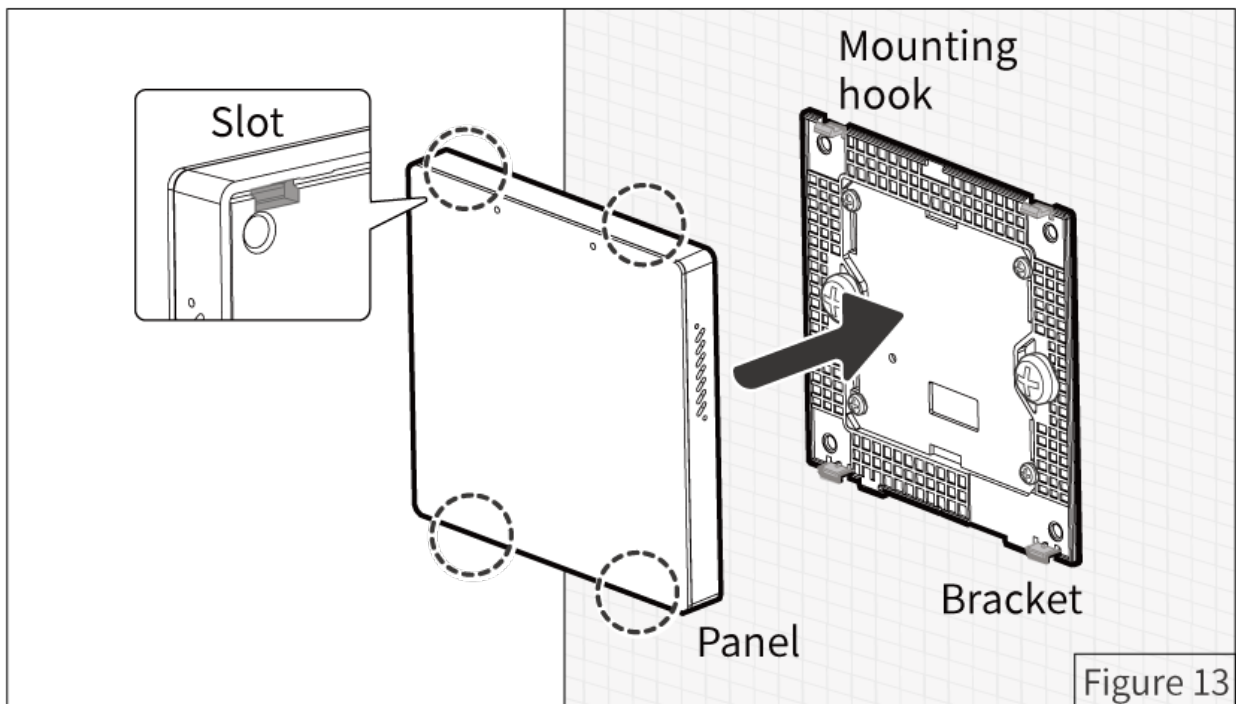
Note: Only 86-type wall box with depth $\geq 60\text{mm}$ is available for installation.



Step 3. Fix the power interface (already with bracket) into the wall box with screws.



Step 4. Align the mounting hooks with the slots, then assemble the panel onto the bracket.



Note: Before powering on, please ensure the device is tightly on the wall body.

Source Mini Multi-Gang Installation

Step 1. Select a suitable wall opening. Note: To facilitate wiring, bury the neutral and live wires into the wall before installation.

Step 2. Place the box into the wall. Note: Only 86-type concealed box with depth $\geq 60\text{mm}$ is available for installation.

Tips: If you need to add gaskets, please perform step 3 first; if you don't need to add gaskets, please skip to step 4.

Step 3. Snap the bracket onto the gasket.

Step 4. Secure the bracket to the base with screws, and secure the base with the added bracket to the wall box with screws.

Step 5. Place the base with the added bracket on the frame.

Step 6. Secure the frame with screws to the wall box.

Step 7. Align the slot with the mounting hook and attach the panel to the bracket.

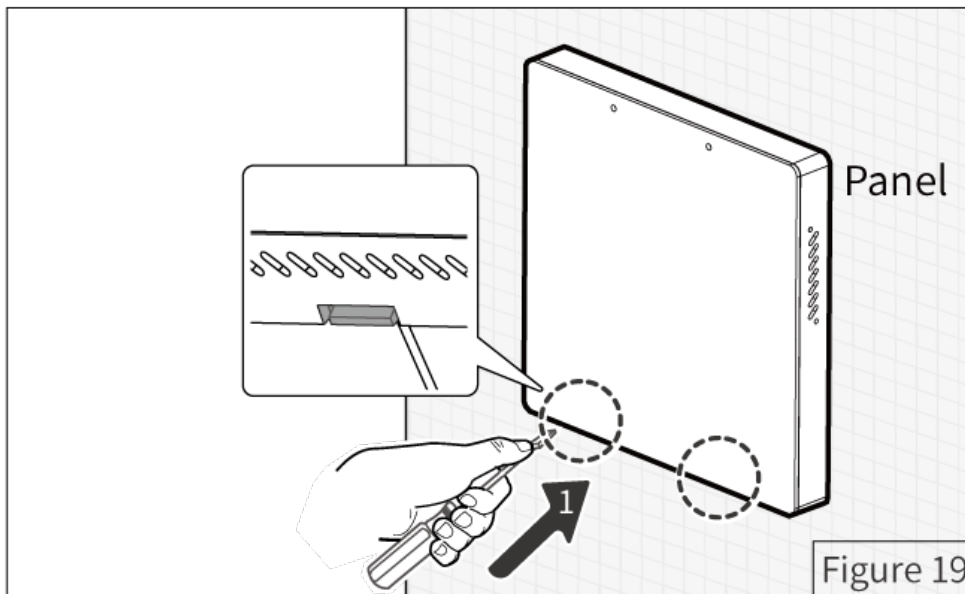
Note: Before powering on, please ensure the device is tightly on the wall body.

◆◆ Disassembly

Warning: Before performing any disassembly procedures on the device, it is crucial to disconnect the device from all voltage sources. This step is necessary to ensure the safety of the technician and prevent any potential damage to the device.

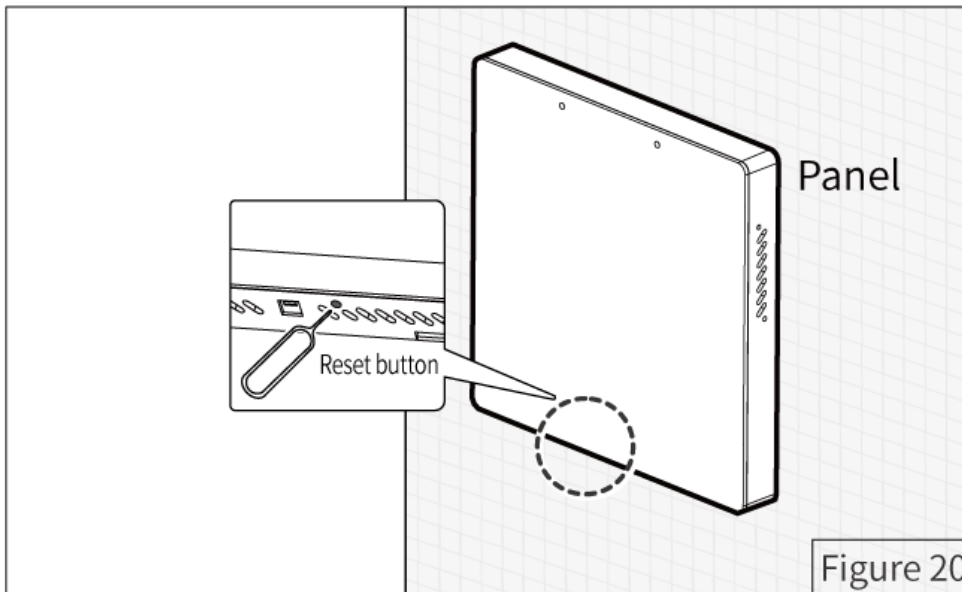
Step 1. It is recommended to use a screwdriver to loosen the screw at the bottom of the panel, then loosen the panel.

Step 2. To remove the panel and power interface, please refer to the reverse steps in the section Installation.



◆◆ Operation

The device is configured with one reset button and one touch screen, as described below.



- Reset Button

Note: It is recommended to use an eject pin to press reset button.

| Operation | Result |
|----------------------------|---|
| Short press | Device restarts. |
| Long press for ten seconds | APP restores factory settings, LINK gateway data remains unchanged. |

- Touch Screen

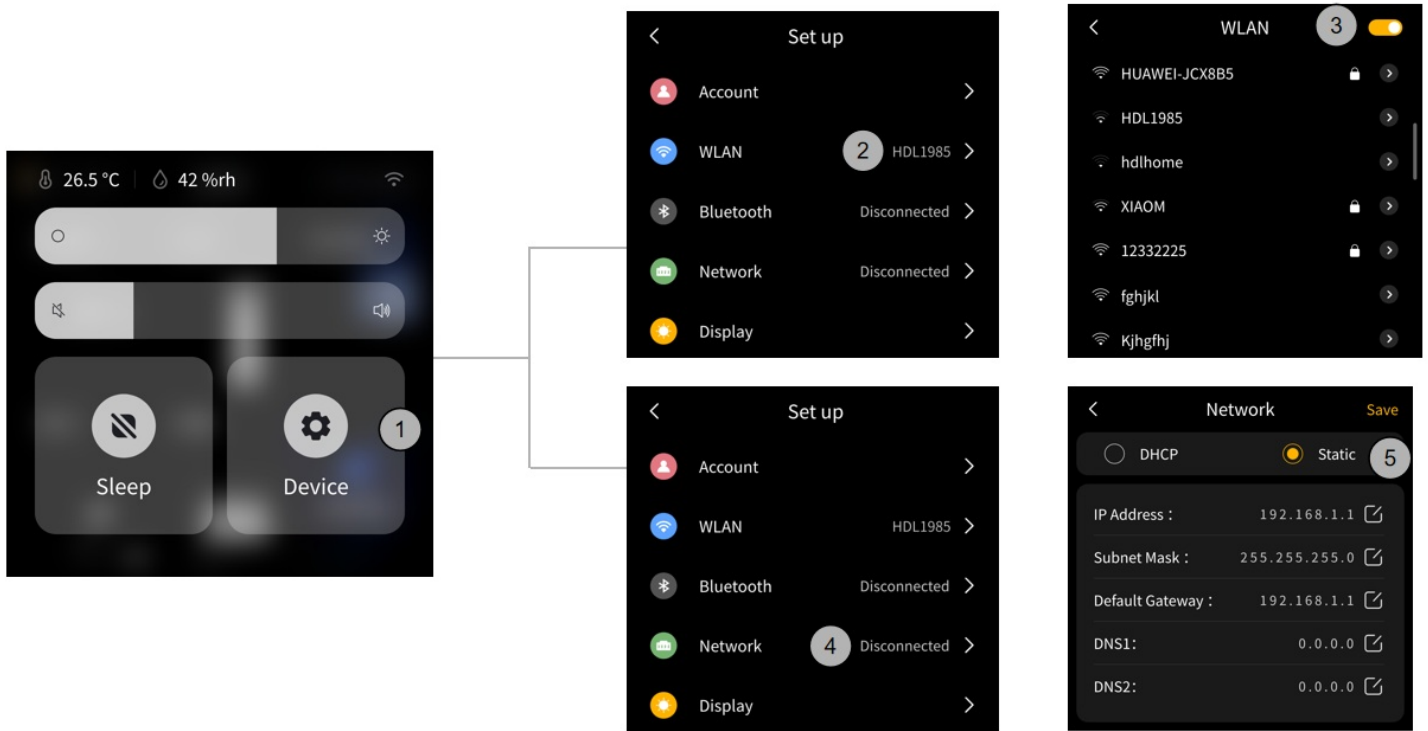
This chapter offers interactive information about the user interface that Source Mini has.

Tips: Before operation, please bind the required residence project through On Pro APP. For details, please refer to the section On Pro APP in the chapter Commissioning.

1. Network Setting

Scene ① WLAN Setting: Scroll down the screen, click “Device”, enter the settings interface --> Click “WLAN” --> Enable the wireless network, follow the prompts to configure the user name and password.

Scene ② Wired Network Setting: Scroll down the screen, click “Device”, enter the setting interface --> select “Network” --> select “DHCP” or “Static”.

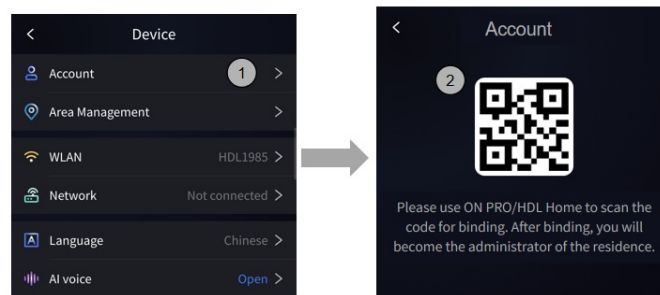


2. Load gateway data

Click on "Account", scan the QR code to bind the project, and read the data;

Note: When scanning and loading gateway data for the first time, it is necessary to connect to the external network;

The loading time takes about 1-3 minutes, and the gateway automatically synchronizes data every 10 minutes. If immediate synchronization is required, it is necessary to re scan and bind the code.



3. Home

Home page contains all favorites, such as device function, scenes, automation and so on.

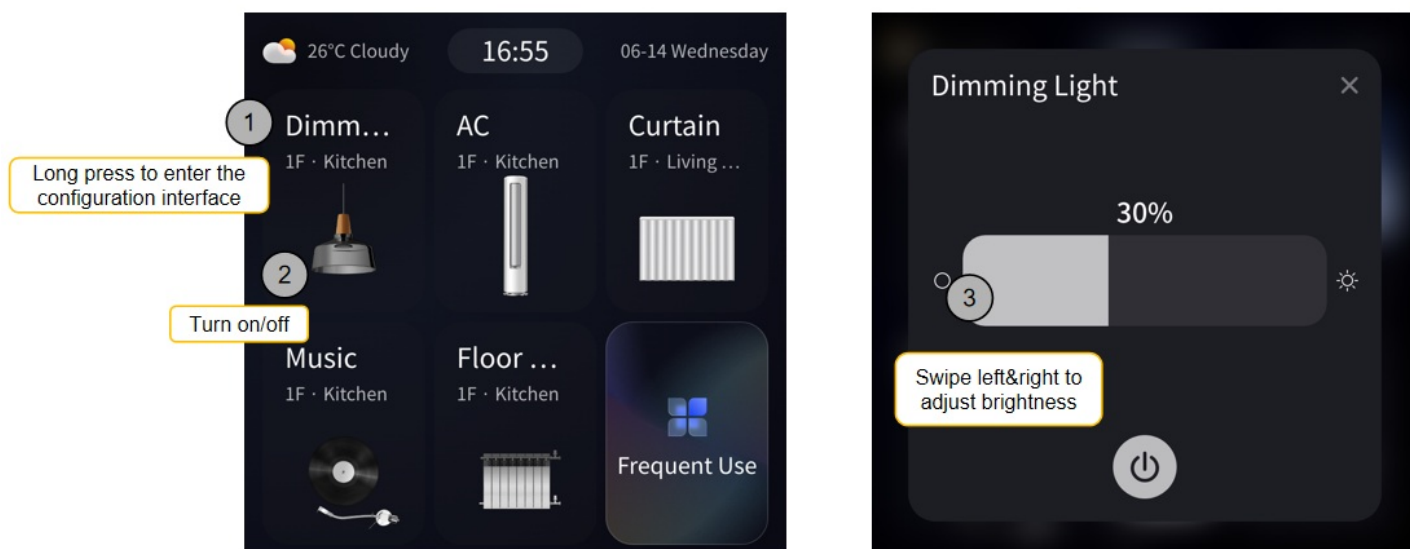
3.1 Add to/remove from favorites

You can bookmark frequently used device functions and scenes to the home page for quick control or more configurations as follows:

Scroll down the screen, click "Device" or "Scene"; take "Device" as an example, enter the device list --> If you need to switch the sub-area under the current area (such as room, floor), please click the icon to switch --> Click the icon to add to/remove from the object. Please click the icon to switch --> Click the icon to add to/remove from the object.

3.2 Quick Control of Device Functions and Scenes

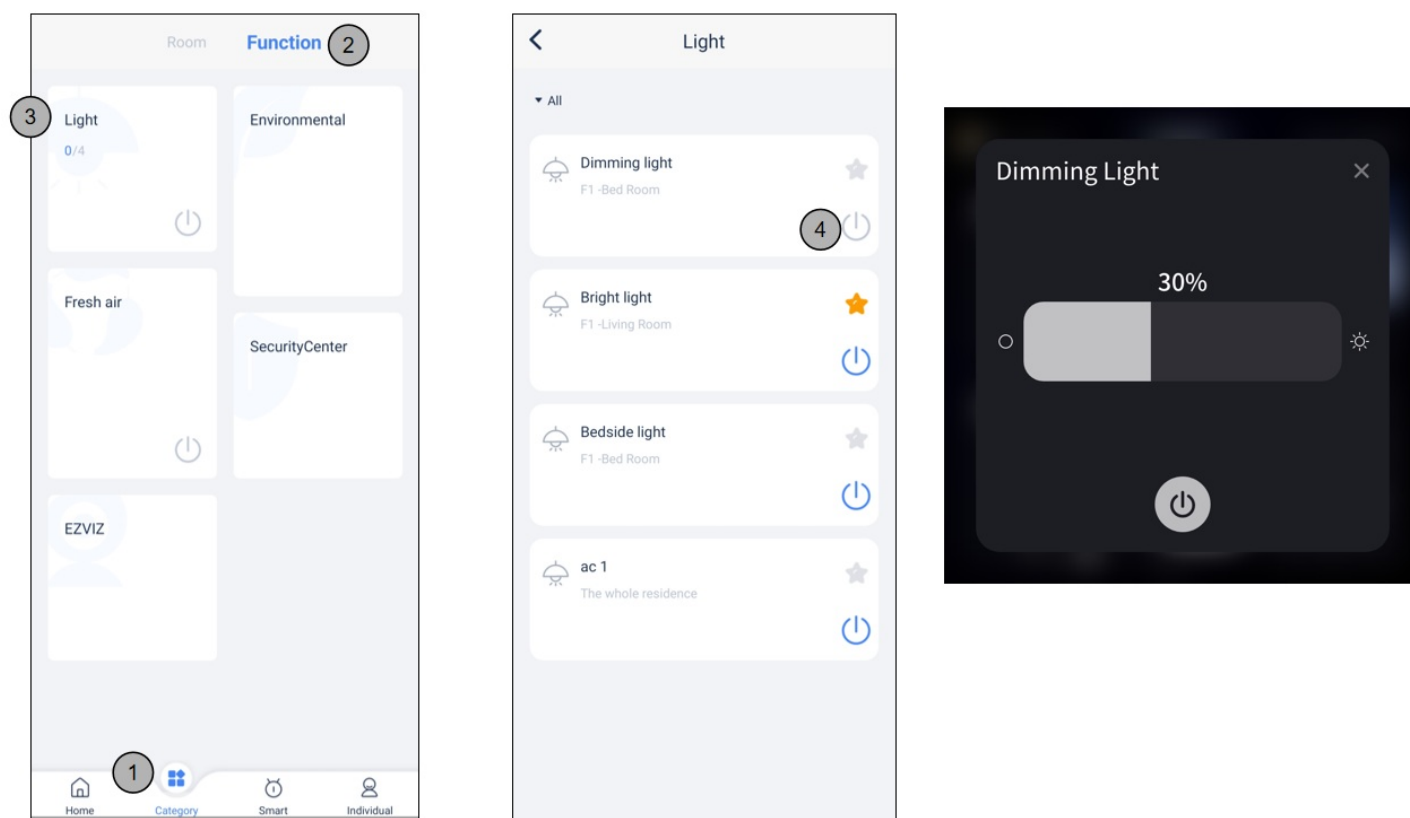
Scene ① You can realize quick control in this page after bookmarking frequently used device functions and scenes to the home page.



Scene ② Quick control through On Pro. Here we only take lighting as an example, the operation is as follows:

Click "Category" --> Click "Function", it shows the configured functions of the current project --> Click "Light" to enter the configuration interface --> Click the icon to turn on/off the desired function.

Tip: The function icons are different for different devices, so we won't talk about them in detail in this section.



4. Devices/Scenes

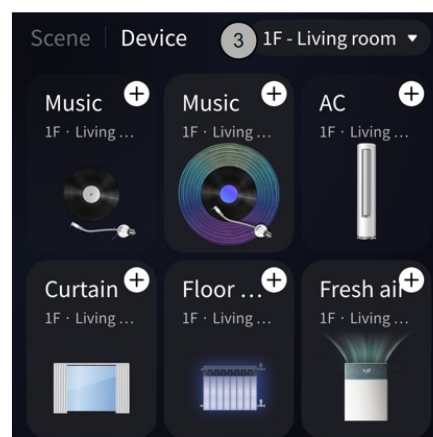
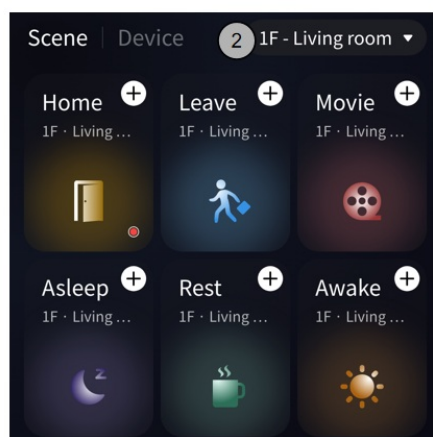
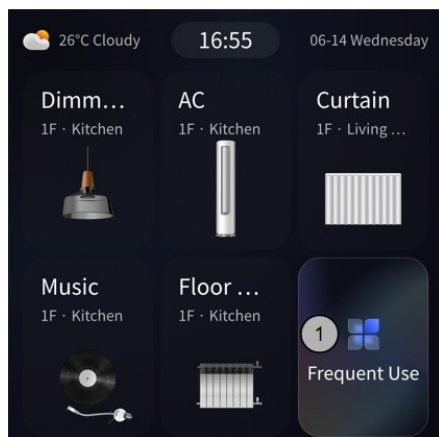
The "Device" page displays the configured device functions for the current zone. The "Scene" page shows the scenes that have been configured in the current area. In this page, you can perform quick controls or more configurations for the objects (as described in the previous section).

4.1. Switching areas

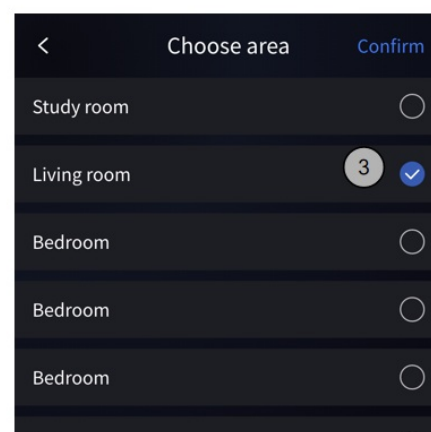
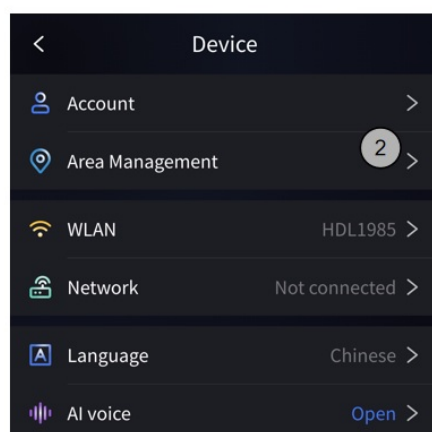
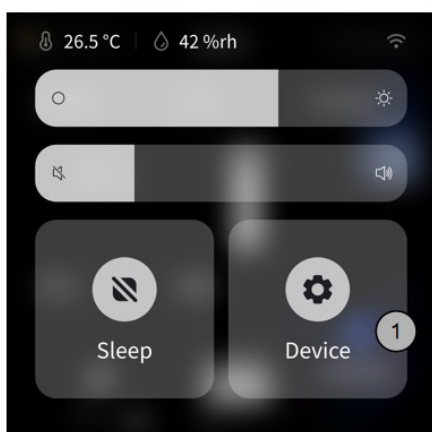
Scene ① To switch sub-areas (e.g. rooms, floors) under the current area, click the icon to switch.

Scene ② If you want to reset the current area, please scroll down the screen and click “Device” to enter the settings interface -> click “Area Management” --> check the area.

Scene 1



Scene 2



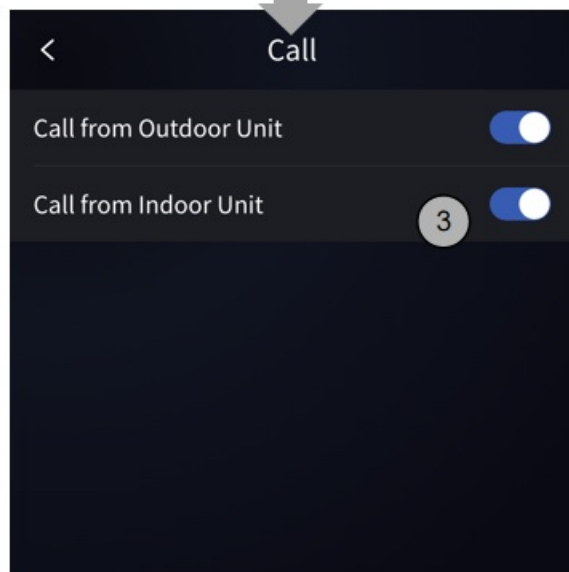
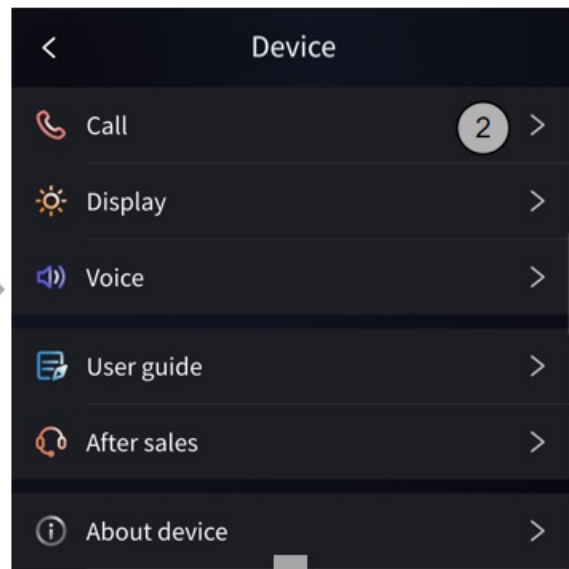
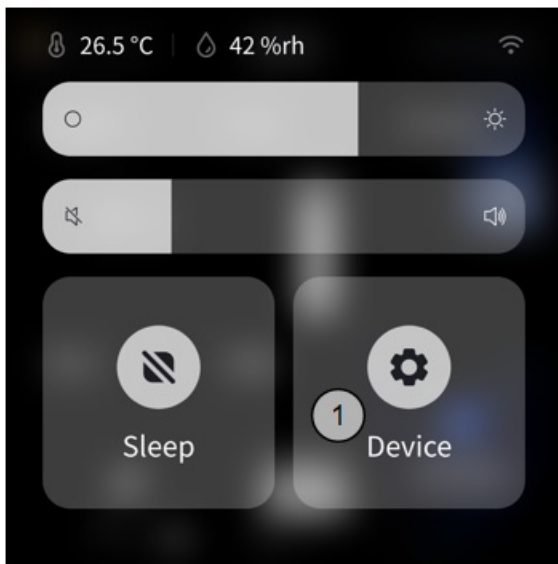
5. Calls

5.1. Call from Indoor Unit

Note: Please make sure that other Source Mini and Source 7 are also bound to the current residential project before users can refer to the following scenes to make a call between Source devices.

Enable the function of “Call from Indoor Unit”: Pull down the screen, click “Device”, enter the device page--> Select “Call” -->

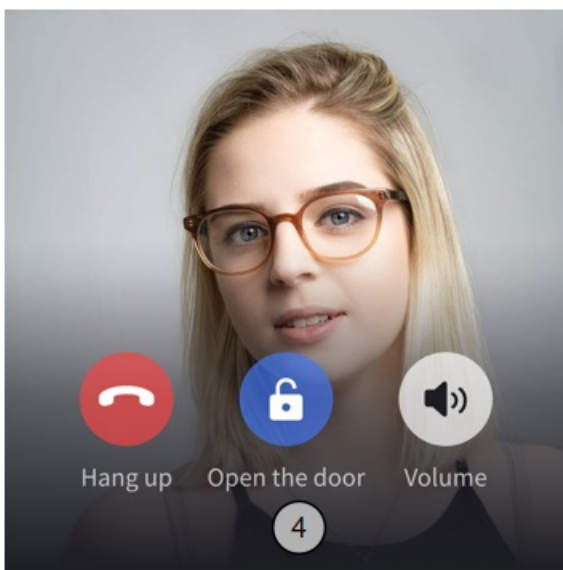
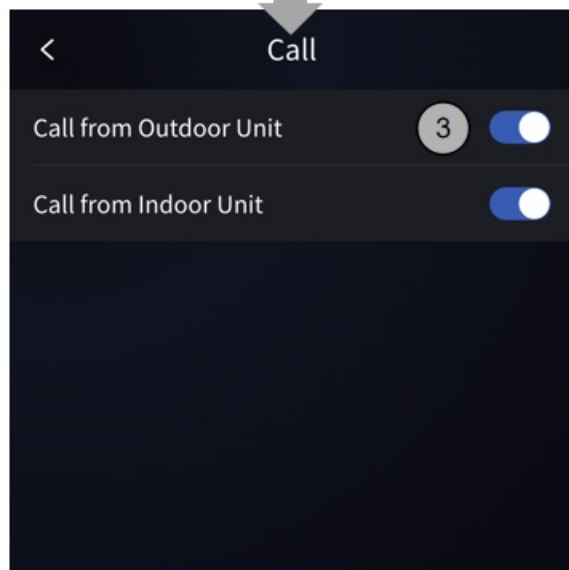
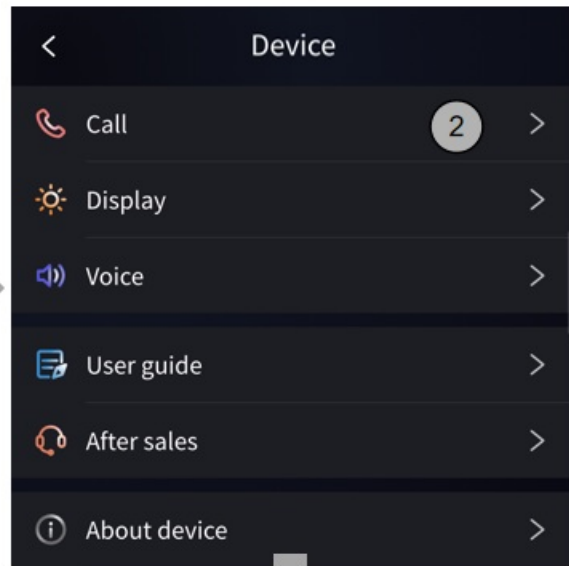
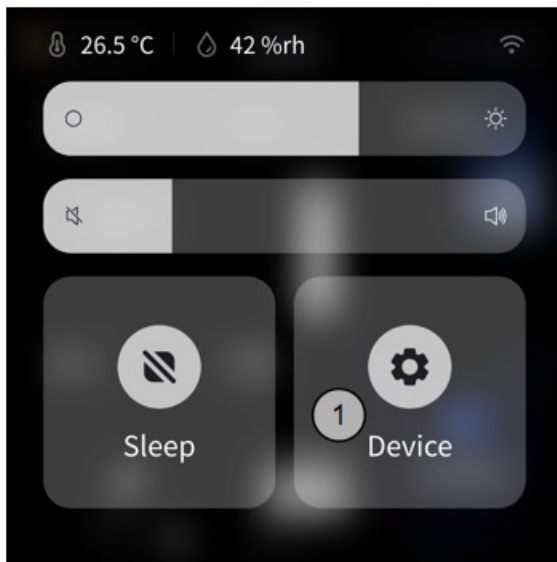
Click on the icon to enable “Call from Indoor Unit”, then you can answer incoming calls from other Source devices.



5.2 Video Intercom

By enabling the video intercom function, you can check the situation of outdoor visitors, talk with them by voice, and open the door remotely with one key. The operation is as follows:

Scroll down the screen, click "Device", enter the setting interface --> select "Call from outdoor unit" --> click "Enable" so that if a visitor comes to your door, you can open the door or talk to him/her through this function.



◆◆ Packing List

- Source Mini*1
- Eject pin*1
- Gasket*1
- Bracket*1

Note: After unpacking, please check if the product and the parts are complete.

◆◆ Warranty

Warranty period (five years from the date of invoice), if the product fails in normal use, the user can go to the nearest authorized institution with a valid warranty card to obtain free maintenance.

In the following cases, HDL regards the user as giving up the relevant services promised under the warranty and the user shall bear the corresponding responsibility and shall not be entitled to the free warranty:

- Failure of the device caused by force majeure factors.
- The user has placed the device in a transportation or use environment that does not comply with the statements in the product instructions or technical manuals.
- Unauthorized disassembly of the product by the user.
- Promises not made officially by HDL to the user that are beyond the scope of the warranty are the responsibility of the promisor.

HDL reserves the right to update or change the product without prior notice to the user, please visit the HDL website for answers to your questions and the latest product information.

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The form below contains the information of every update. The latest version contains all the updates of all former versions.

| Version | Update Information | Date |
|---------|--|-----------------|
| V1.0 | Initial release | August 30, 2023 |
| V1.1 | Revision of overview, operating instructions | June 7, 2024 |
| | | |
| | | |

◆◆ Technical Support

E-mail: hdtickets@hdlautomation.com

Website: <https://www.hdlautomation.com>

◆◆ Troubleshooting

E-mail: hdtickets@hdlautomation.com

Website: <https://www.hdlautomation.com>