Granite 4.3"

User Manual

(Applicable model: HDL-MPL43C.46)

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Update History

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

No.	Version	Update Information	Date
1	V1.0.0	Initial release	Oct 22, 2020
2	V1.0.1	Corrected model description.	Dec. 14, 2021
3	V2.0.0	Supported either landscape mode or portrait mode, so updated function-related contents (see page 5~8); Updated HDL logo shown in cover page	April 14, 2022

1 Introduction

Granite Display (Model: HDL-MPL43C.46) is a high-end multi-function control panel specially designed for home automation, with which the user may control lighting, curtain, scene, AC, floor heating, music or ventilation system.

This manual offers the information on the configuration process of Granite Display done on HDL Buspro Setup Tool 2, and the following tools might be included:

- Granite Display (Model: HDL-MPL43C.46)
- A computer with HDL Buspro Setup Tool 2
- 1-Port Programming Gateway connected to the router
- Dedicated Buspro cables

Notice:

① Please refer to the data sheet attached to the product for the information of installation, wiring, specifications, etc.

② The pictures in this user manual are for reference only and the actual product should prevail.

1.1 Interface

Figure 1-1 shows the main page of Granite Display (landscape mode / portrait mode), which includes the following parts:

① Scene shortcut button: up to 3 available

② Date/time/air quality (humidity/temperature included) display: click to switch between time/date display and air quality/temperature/humidity display.

③ Control shortcut button: click Home button to enter control page, as shown in Figure 1-2.

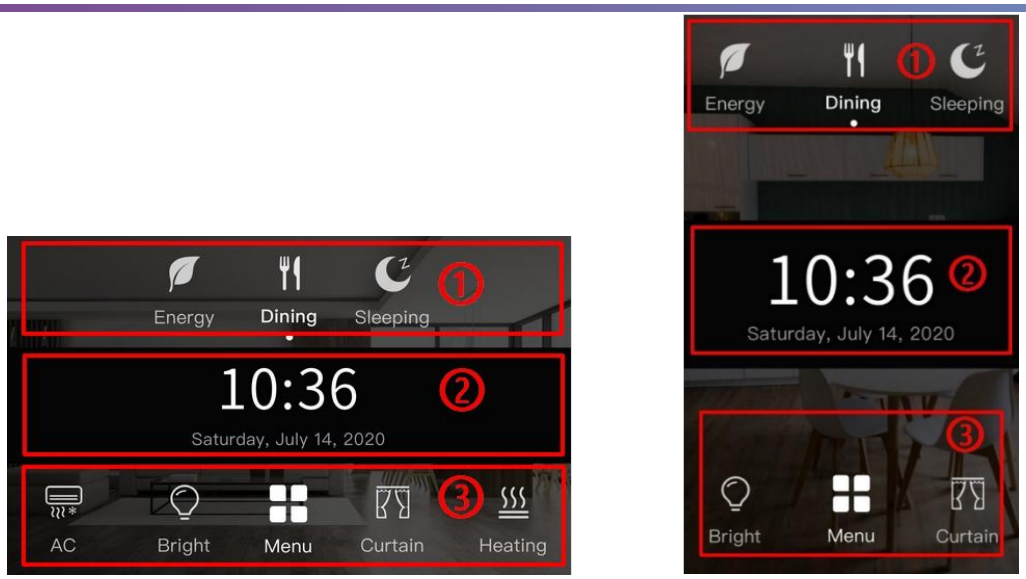

Figure 1-1 Main page (landscape mode / portrait mode)

Figure 1-2 shows the main page of Granite (landscape mode / portrait mode), which includes the following parts:

① Setting button: click to enter Setting page.

② Control button: click to enter corresponding control page.

Notice: Click the power button at the top right corner of lighting or curtain page to turn on/off all lights or open/close all curtains. Keep pressing the power button at the top right corner of AC or floor heating page to turn on/off all ACs or all floor heating.

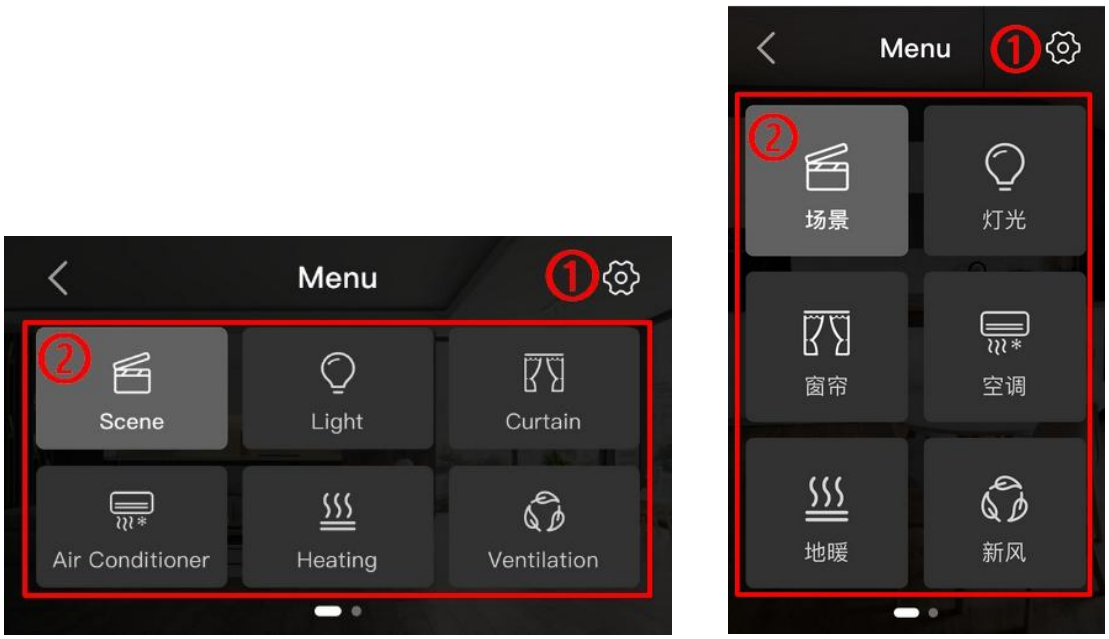

Figure 1-2 Main menu (landscape mode / portrait mode)

Figure 1-3 shows the Setting page (part of portrait mode), which includes the following setting options:

① System language: user may set panel system language, such as Simplified Chinese, Traditional Chinese, English, English (uppercase), etc.

② Screen Luminance

③ Sleep Time: four levels for selection, i.e., 15s, 1min, 5min, never

④ Sleep Luminance: to set the screen brightness in sleep mode (0, 10%, 20%)

⑤ Password Protection: to set the password to wake up the panel from sleep mode (Universal password: 1985, which can be disabled/enabled in HDL Buspro Setup Tool 2).

⑥ Icon Remark: to display/hide icon name

⑦ Font Size: to adjust the font size of the panel

⑧ Date Format: to set the date display mode

⑨ Time Format: to select 12/24-hour clock as the time display mode

⑩ Temperature Unit: to set the temperature display accuracy to 0.5℃ or 1℃

⑪ Background Picture: user may select one picture from the photo gallery as the wallpaper.

⑫ Device Address: to set the subnet ID and device ID of the panel

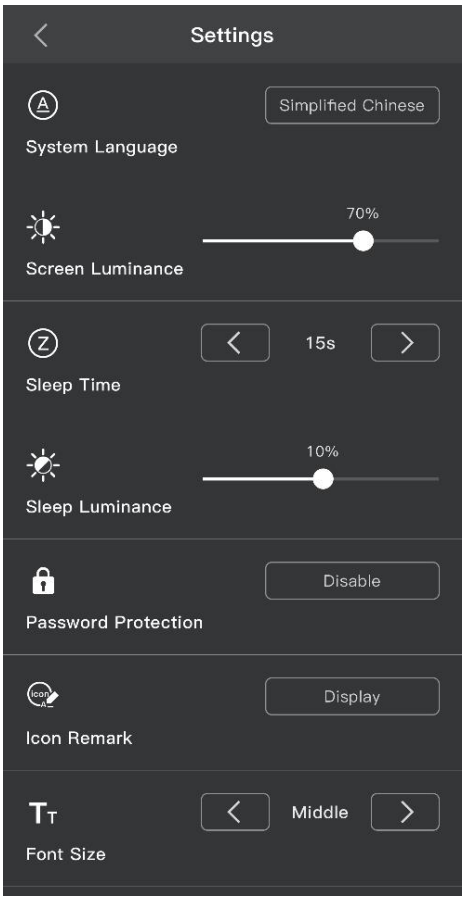

Figure 1-3 Setting page (part of portrait mode)

The panel is in portrait mode by default. If needed, re-set it into landscape mode as the followings:

As shown in Figure 1-4, click “Menu” →“Setting” button → Slide to the bottom → Click to “landscape”

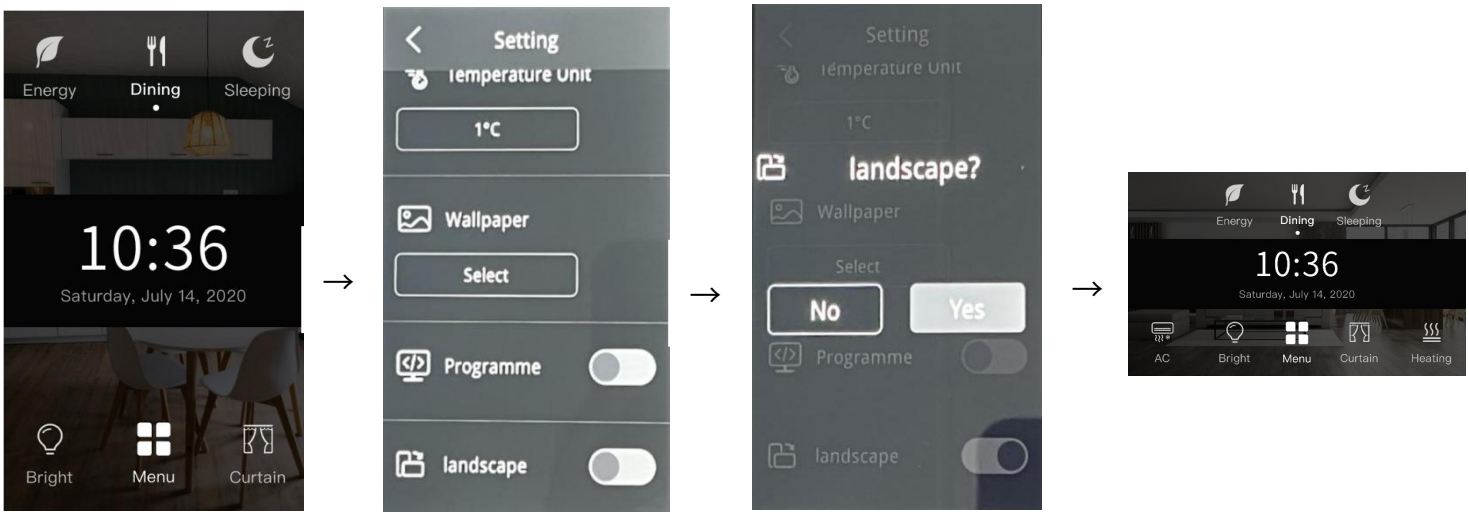

Figure 1-4 Main menu (from portrait mode to landscape mode)

Or, you may re-set display mode in HDL Buspro Setup Tool 2 as well, please see Page 7 for more details.

1.2 Open Configuration Page

1. Connect the panel to the system, and open HDL Buspro Setup Tool 2 in the computer.
2. Click “Fast Search”.
3. Double click the “Model” or “Description” column to enter configuration page, as shown in Figure 1-5, Figure 1-6. The following items can be configured in this page: basic information, lighting, curtain, scene, AC, floor heating, music, ventilation system.

Figure 1-5 Open configuration page

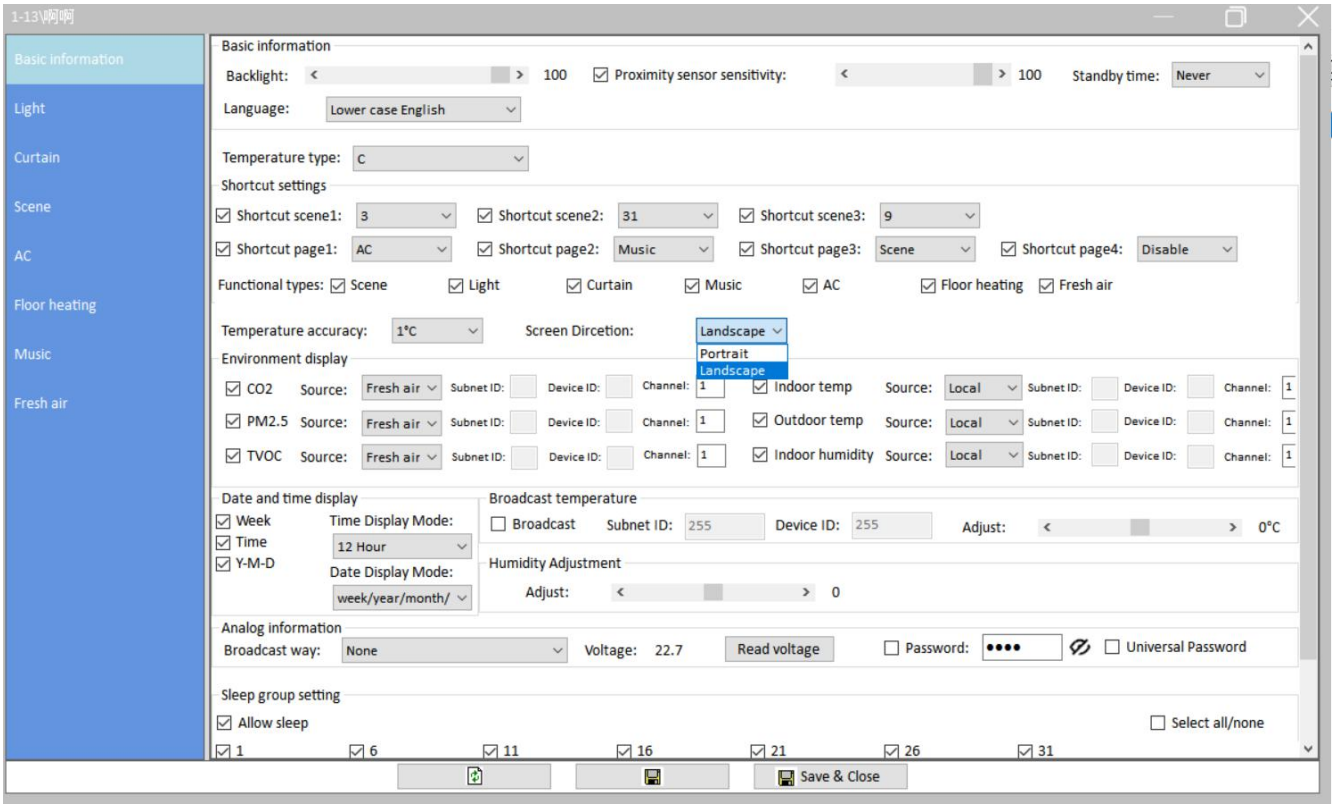

Figure 1-6 Configuration page

2 Basic Information Setting

Open configuration page, and basic information setting page is shown by default, as shown in Figure 2-1. The following items can be changed in this page:

① Basic Information: includes backlight brightness, proximity sensor sensitivity, standby time, language setting, screen brightness in sleep mode, etc.

② Shortcut settings: includes scene shortcut button setting and control page shortcut button setting.

③ Page display setting

④ Temperature accuracy setting; environment data display and data source setting; Screen direction setting: landscape or portrait

⑤ Date/time display setting

⑥ Broadcast temperature setting and temperature/humidity adjustment setting

⑦ Analog information setting, read panel voltage, panel password setting, disable/enable universal password (1985).

⑧ Sleep group setting

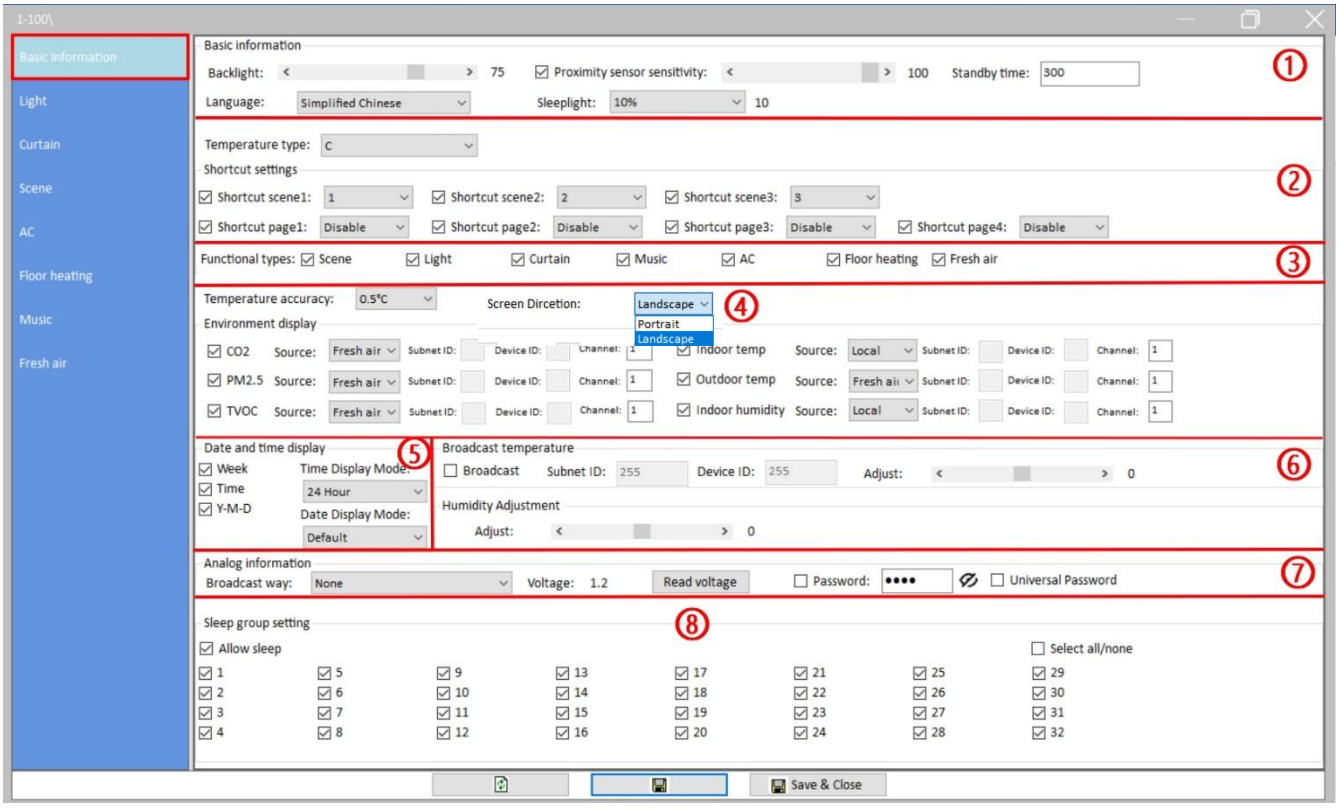

Figure 2-1 Basic information setting

2.1 Basic Setting

Basic setting includes backlight brightness adjustment, panel proximity sensor sensitivity setting, standby time setting, language setting, screen brightness in sleep mode (0, 10%, 20%). After setting, click “Save” to save changes.

Notice:

1. “Sleeplight” refers to the ratio of screen brightness to that in normal mode. For example, 10% means when the panel is in sleep mode, its brightness is 10% of the brightness in normal mode; 0 means the screen is totally off in sleep mode.
2. If proximity sensor sensitivity is deselected, the panel will be woken up by touching the screen ONLY, instead of human detection. Higher sensitivity means longer distance for the panel to detect human body.

2.2 Shortcut Button Setting

Shortcut buttons include scene shortcut button and control page shortcut button.

Scene shortcut button means the scene shortcut buttons at the top of the main page, as Mark ① in Figure 1-1, and up to 3 are available.

Control page shortcut button refers to the shortcut buttons on the left/right sides of Home button at the bottom of the main page, as Mark ③ in Figure 1-1. Up to 4 are available for landscape mode; Up to 2 for portrait mode.

2.2.1 Scene Shortcut Button Setting

After new scenes are added (please refer to Scene Setting for the information on scene configuration), the scenes are numbered from 1-n (n means the total number of scenes) from top to bottom in scene configuration page.

In the scene shortcut button setting part of basic information setting page (as shown in Figure 2-2), user may enable/disable scene shortcut button, or select the scene number from the menu behind (1-n). Click “Save” to save the changes.

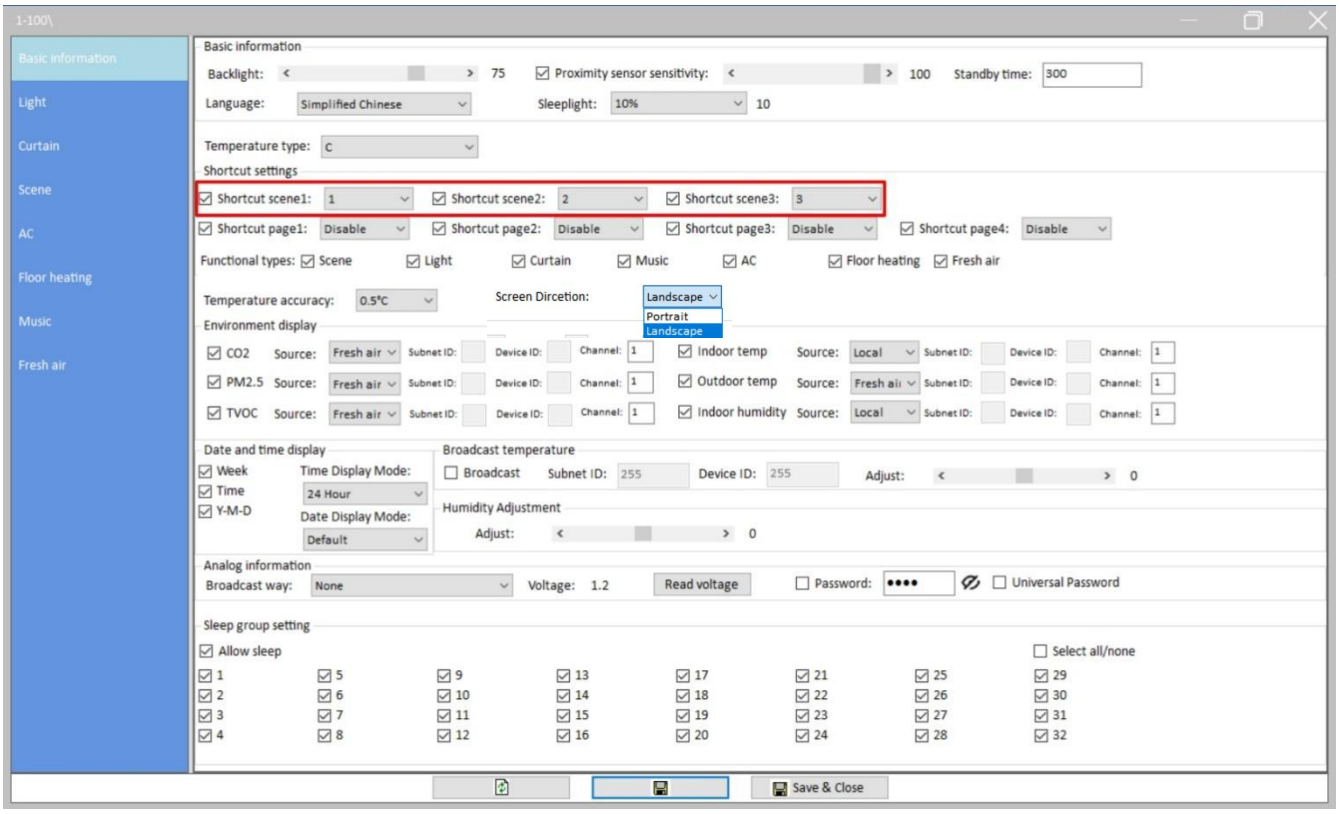

Figure 2- 2 Scene shortcut button setting

2.2.2 Control Page Shortcut Button Setting

In the control page shortcut button setting part of basic information setting page (as shown in Figure 2- 3), user may enable/disable page shortcut button, or select corresponding control page from the menu behind. Click “Save” to save the changes.

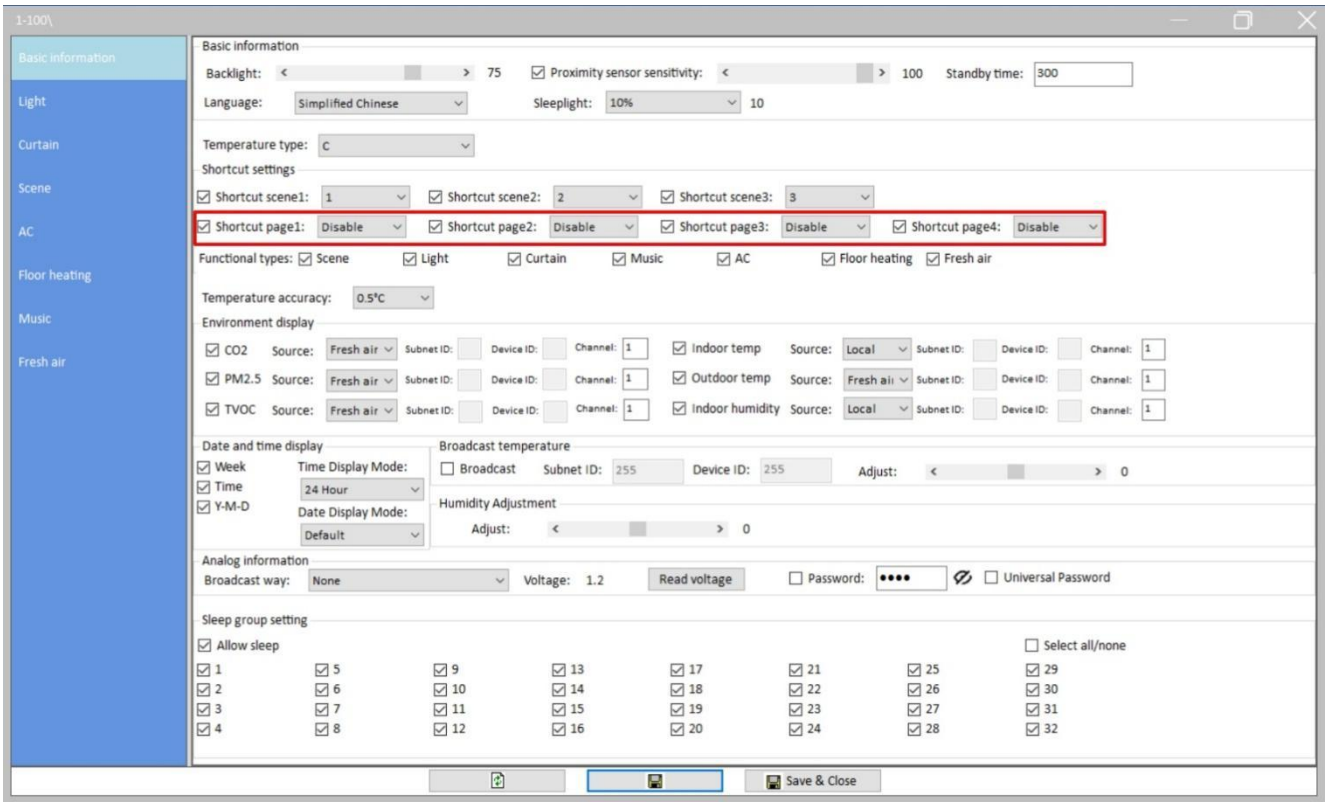

Figure 2-3 Scene shortcut button setting

2.3 Page Display Setting

Granite includes 7 control pages by default, which are shown after user pressing Home button. User may enable/disable the control pages in shortcut setting part of basic information setting (as shown in Figure 2-4).

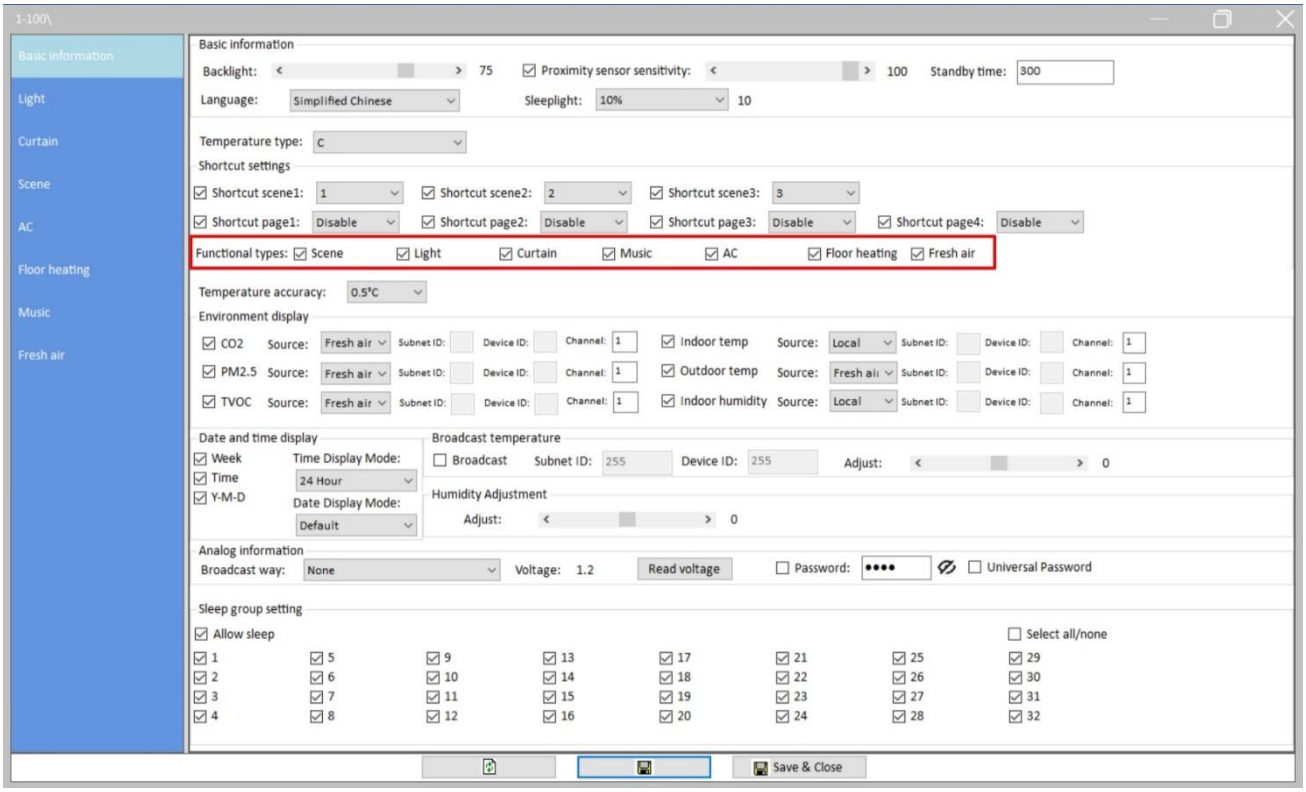

Figure 2-4 Shortcut page setting

2.4 Environment Data Display and Data Source Setting

Click the time/date display zone to switch to environment data display.

In “Environment display” (as shown in Figure 2-5), user may select/deselect the environment data to show/hide the data, select the accuracy of temperature display (1℃ or 0.5℃), and select the source in the menu behind.

When the number of source devices is more than 2, user may enter the channel number to select channel.

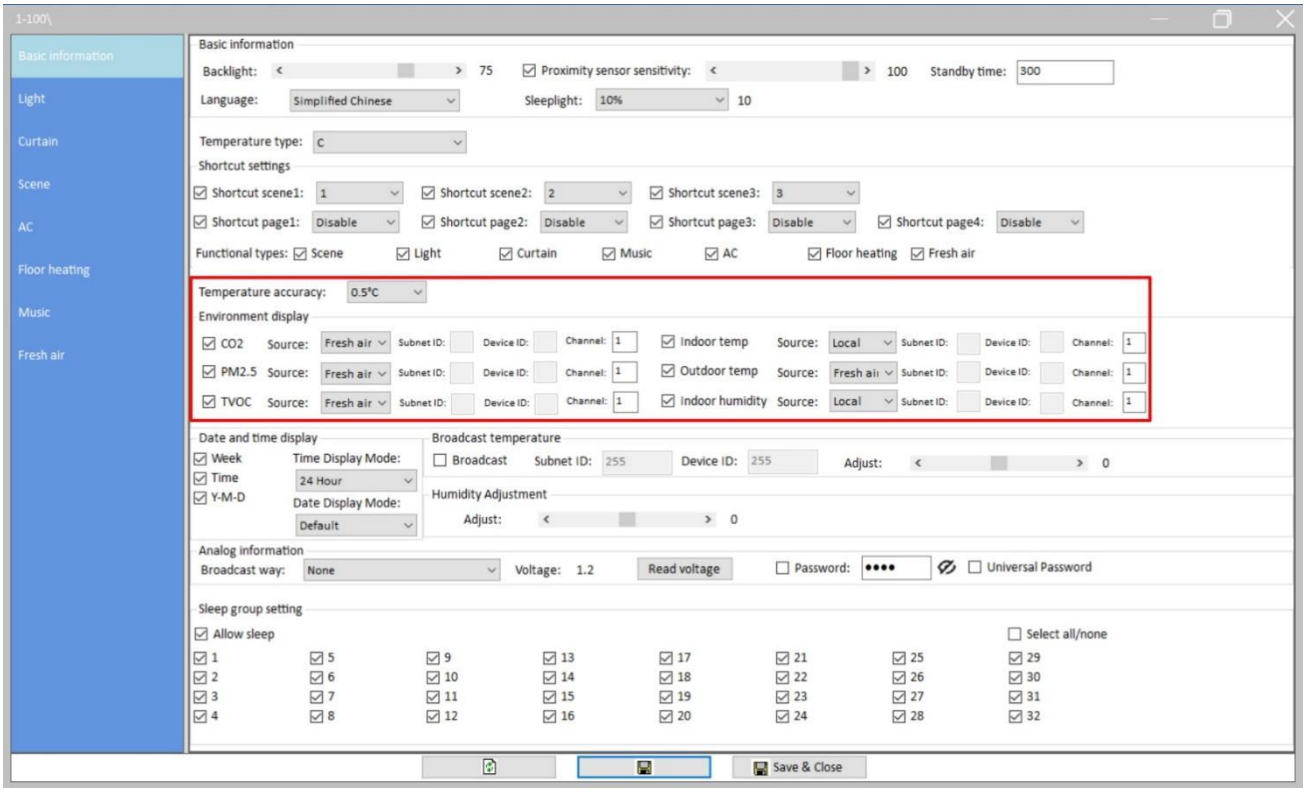

Figure 2-5 Environment data display and data source setting

2.5 Date/time Display Setting

Granite shows the date, day of the week, and time in main page by default. User may set the display content, date/time display mode in “Date and time” part of Basic information setting window, as shown in Figure 2-6.

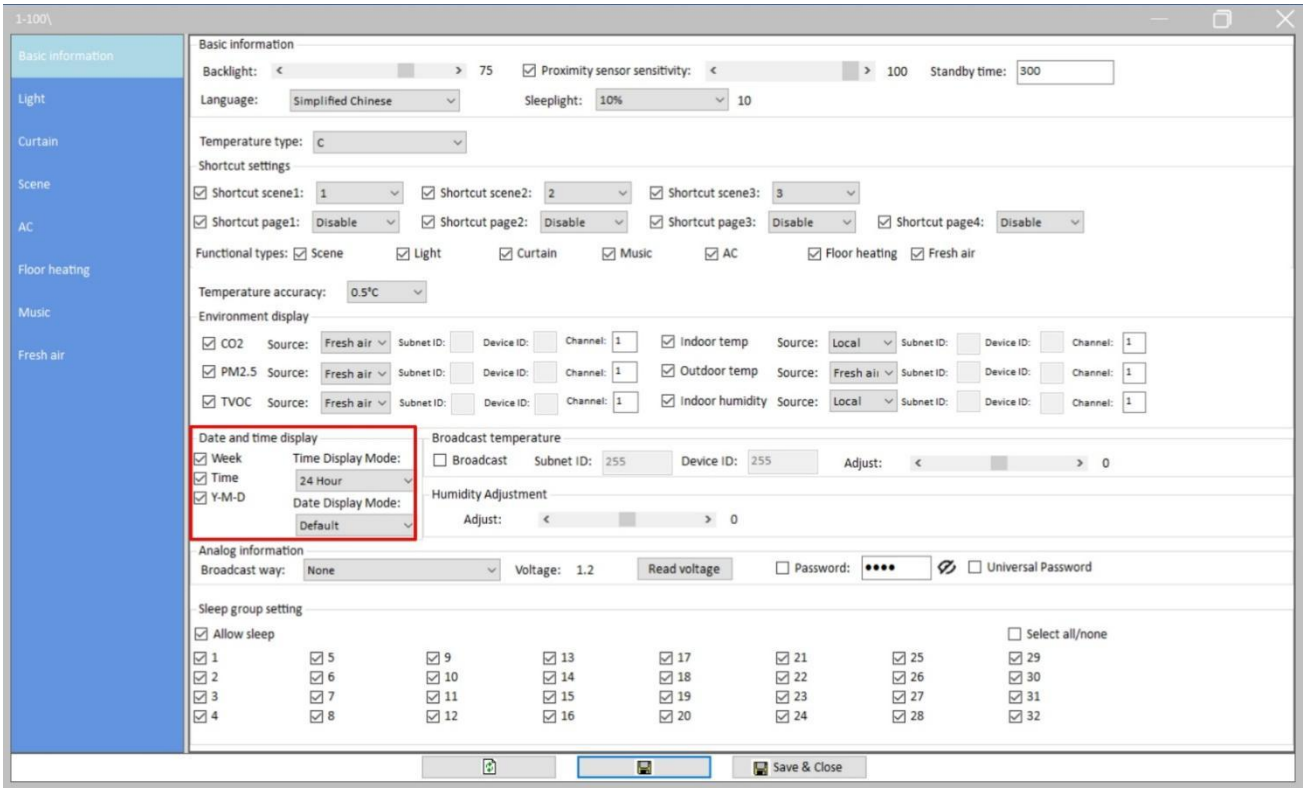

Figure 2-6 Date/time display setting

2.6 Broadcast Temperature Setting

With built-in temperature sensor, Granite is able to detect the temperature and broadcast it to other devices.

In “Broadcast temperature” part (as shown in Figure 2-7), user may enable/disable broadcast temperature function.

Enter “Subnet ID” and “Device ID” to set the device to receive temperature broadcast.

User may adjust the temperature data via the slider below, which ranges from -8℃ to 8℃.

Humidity: adjust the humidity data of the panel, which ranges from -10% to 10%.

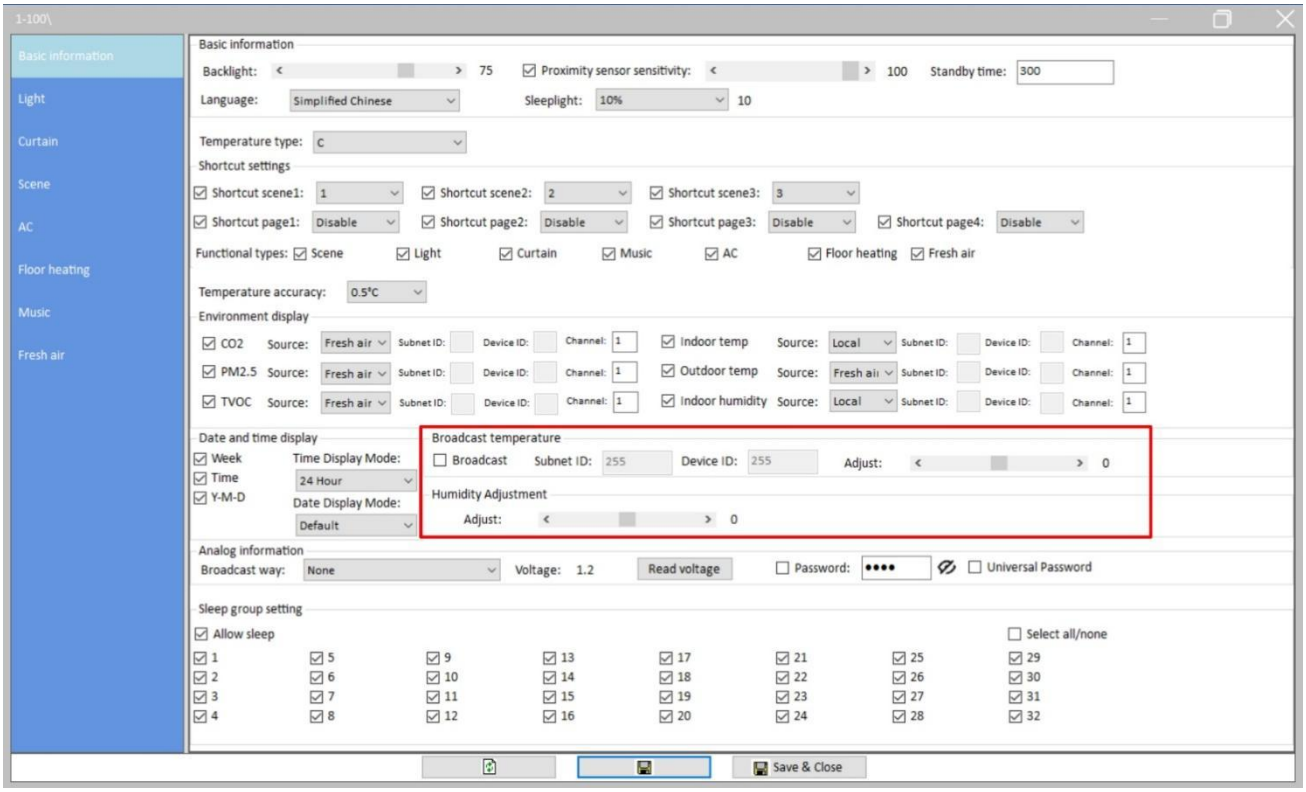

Figure 2-7 Broadcast temperature setting

2.7 Analog Information Setting/Read Panel Voltage/Unlock Password Setting

User may enable/disable analog data timing broadcast function in “Analog information” area (as shown in Figure 2-8).

Click the “Read” button to check current voltage of Granite.

Select “Password” to set the password to wake up the panel from sleep mode.

Select “Universal password”, then the user password and universal password (1985) can both be used to unlock the panel.

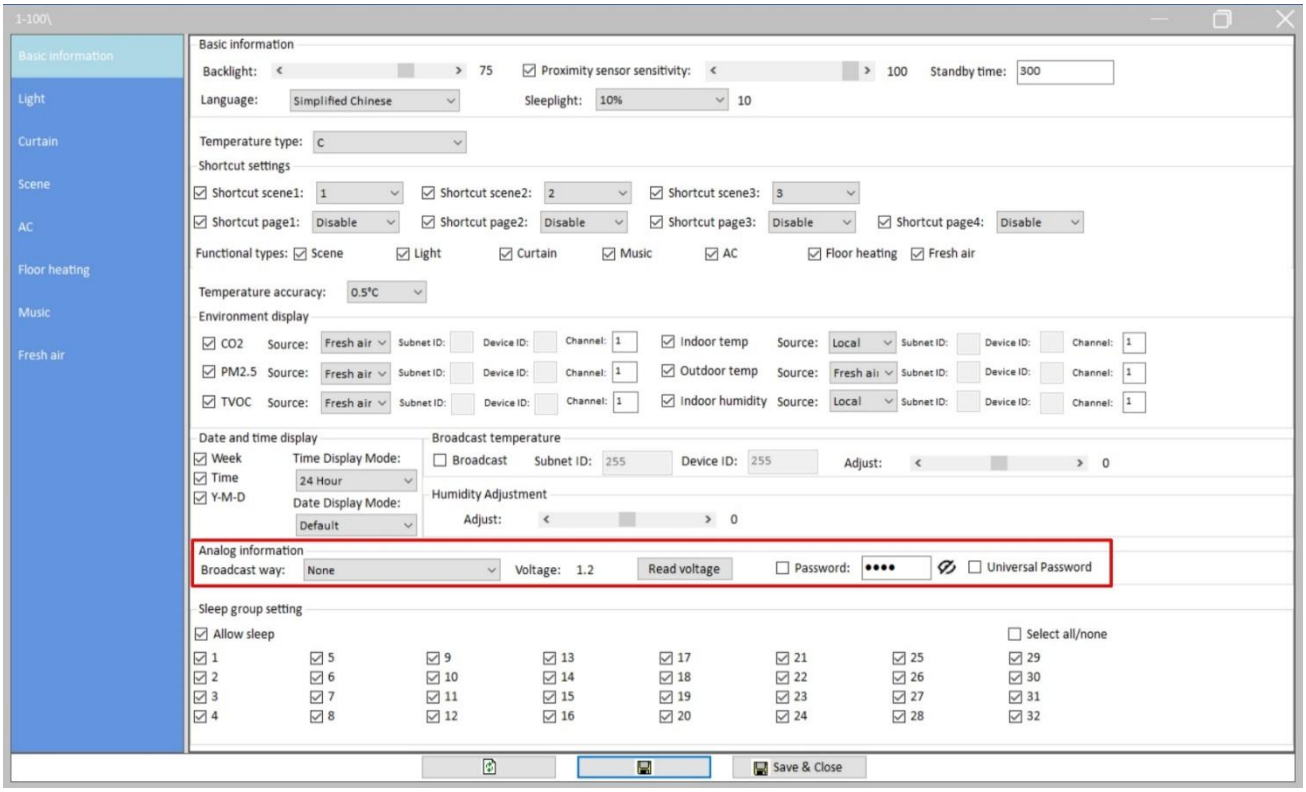

Figure 2- 8 Analog information setting/read panel voltage

2.8 Sleep Group Setting

Sleep Group Setting is to wake up panels in group. For example, when Panel A is woken up, Panel B is woken up automatically.

Take the above-mentioned “Panel B is woken up automatically when Panel A is woken up” as an example:

In “Sleep group setting” part (as shown in Figure 2- 9), select “Allow sleep” and “1” to include Panel A and B into Group 1, then click “Save”. Thus when Panel A is woken up, other panels (refers to Panel B in this example) will be woken up automatically.

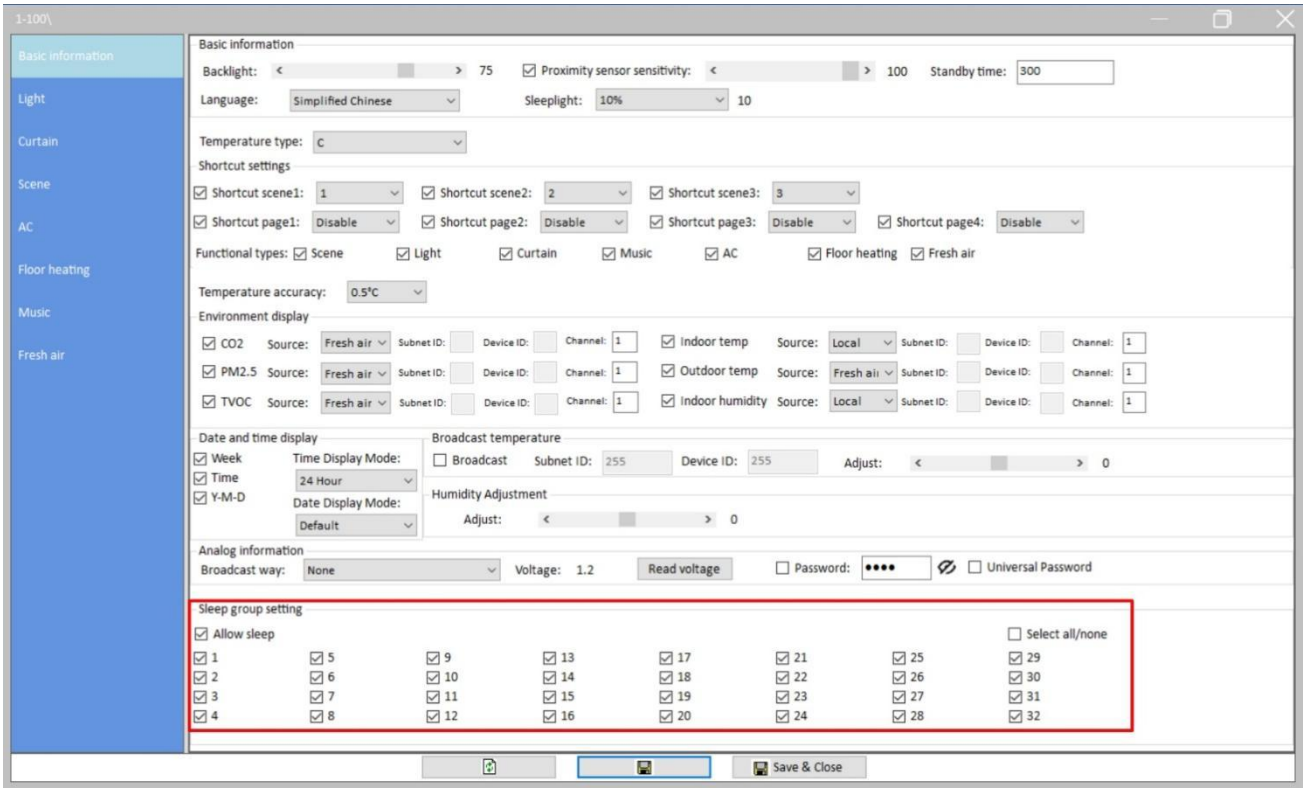

Figure 2-9 Sleep group setting

3 Lighting Setting

Click “Light” in configuration page, as shown in Figure 3-1.

Notice: click the power button of lighting page on the panel to turn on/off all lights.

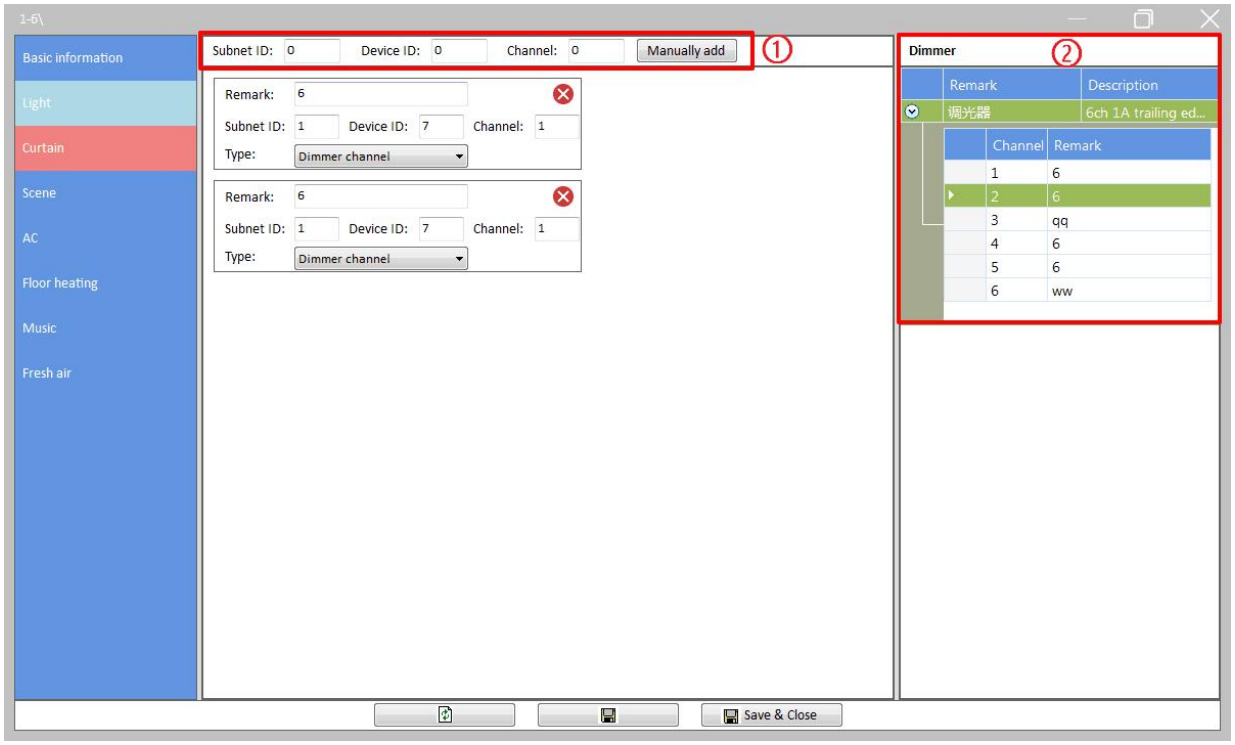

Figure 3-1 Lighting setting

3.1 Lighting setting

1. Add lighting: user may add lighting via the following two ways (as shown in Figure 3-1):

   ① Add manually: enter the “Subnet ID”, “Device ID” and “Channel” at the top of the window, then click “Manually add”.

   ② Fast add: the devices that are already added to the system (click “Fast search” in the main page of HDL Buspro Setup Tool 2 to search for all added devices) will be shown in the right side of the window. Drag the device from right to left will add the device to Granite.

2. Edit lighting:

   - Remark: enter lighting name
   - Subnet ID, device ID, channel: change lighting information

- Type: select lighting type

  Dimmer channel: select to adjust lighting brightness on the panel.

  Switch channel: select to turn on/off lighting on the panel.

  CCT: select to adjust lighting color temperature and brightness on the panel.

  RGB: select to adjust lighting color and brightness on the panel.

- Icon: set the lighting icon displayed on the panel.

3. Click “Save” to upload the configuration to the panel.

3.2 Delete Lights

In lighting list, click “Delete” button at the top right side of the light to delete.

4 Curtain Setting

Click “Curtain” in configuration page, as shown in Figure 4-1.

Notice: click the power button of the curtain page on the panel to open/close all curtains.

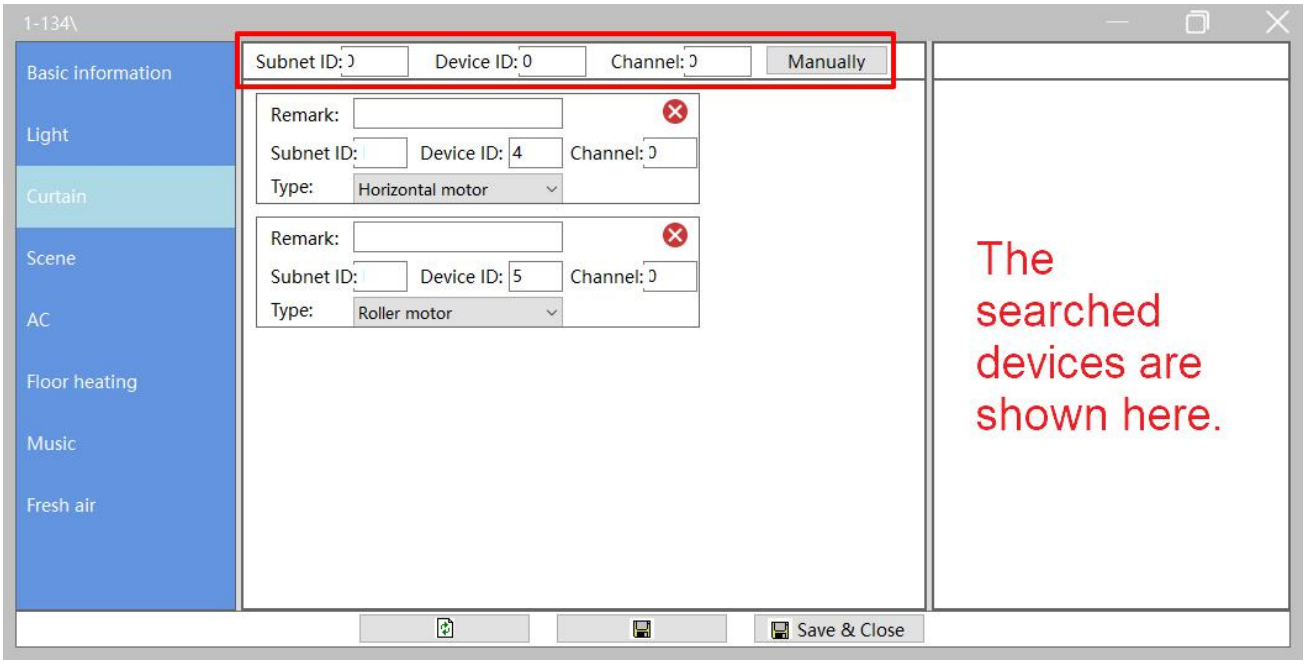

Figure 4-1 Curtain setting

4.1 Curtain setting

1. Add curtain: user may add curtain via the following two ways (Please refer to Lighting setting for reference.):

   ① Add manually: enter the “Subnet ID”, “Device ID” and “Channel” at the top of the window, then click “Manually”.

   ② Fast add: the devices that are already added to the system (click “Fast search” in the main page of HDL Buspro Setup Tool 2 to search for all added devices) will be shown in the right side of the window. Drag the device from right to left will add the device to Granite.

2. Edit curtain:

   - Remark: enter curtain name
   - Subnet ID, device ID, channel: change curtain information.

- Type: select curtain type.

  Horizontal motor, Roller motor, Normal curtain module: select to open/close/stop the curtain.

  Shutter: select to open/close/stop the curtain and set the shutter angle on the panel.

3. Click “Save” to upload the configuration to the panel.

4.2 Delete Curtain

In curtain list, click “Delete” button at the top right side of the curtain to delete.

5 Scene Setting

Click “Scene” in configuration page, as shown in Figure 5-1.

User may enable/disable the scene, or edit the remark/icon for the scene in this page.

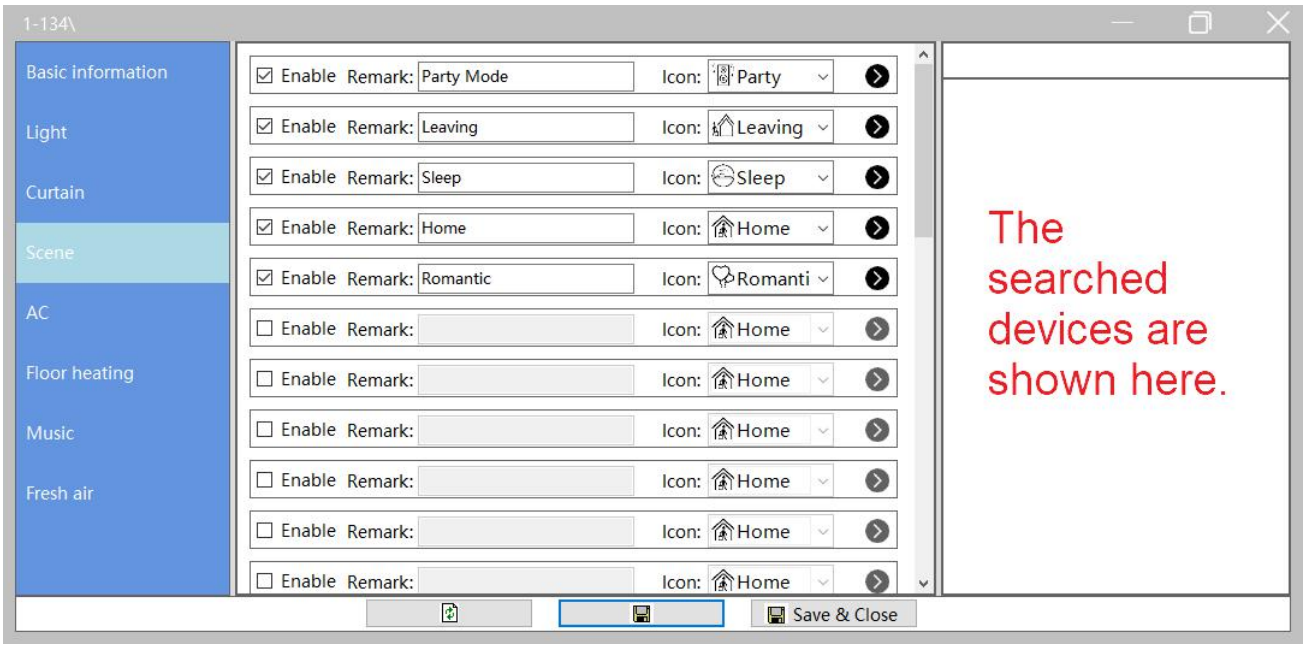

Figure 5-1 Scene setting

5.1 Add Target to Scene

Click “>” at the end of the scene to show all the targets in the scene, as shown in Figure 5-2.

The scene in the figure already includes one target. If the user wants another 4 targets (which means the total target number will be 5), then the user should enter “from 1 to 5” in “Target No.”, and click “Read target” to add another 4 targets to the scene.

Notice: one scene supports up to 99 targets.

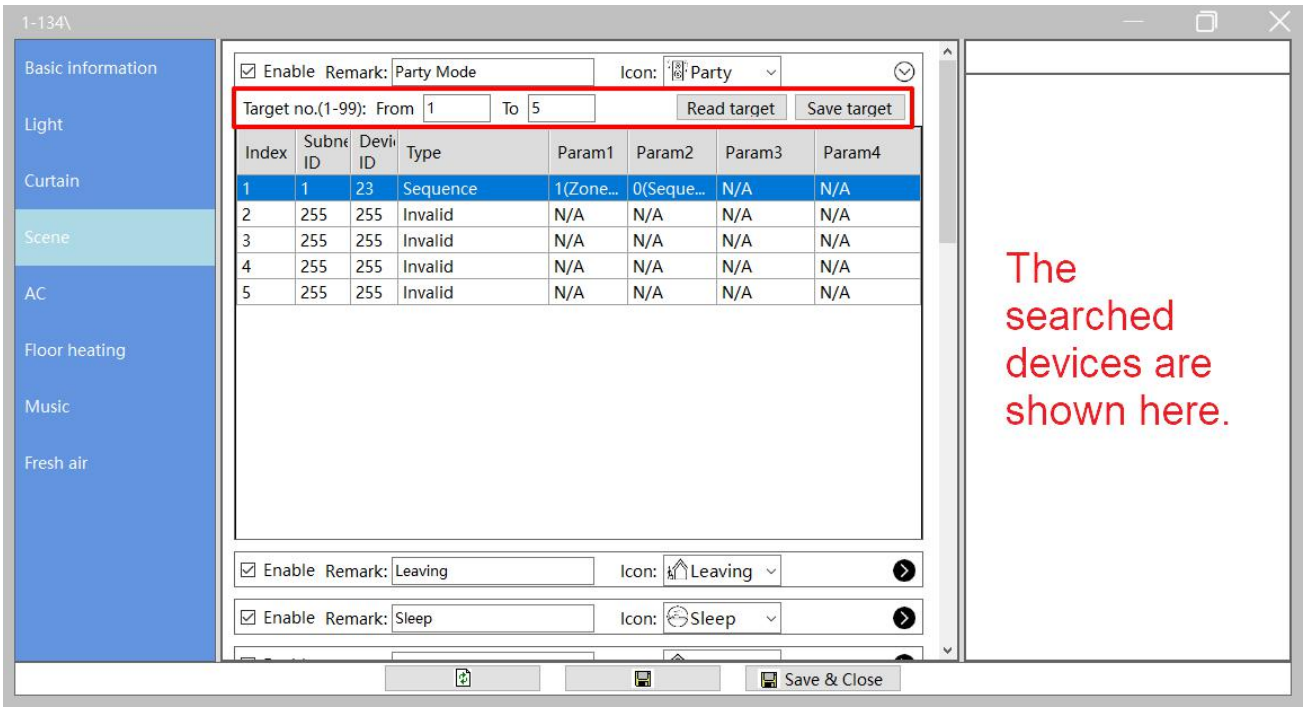

Figure 5-2 Scene target

5.2 Edit Scene Target

Click “>” at the end of the scene to show all the targets in the scene, as shown in Figure 5-2.

Edit the “Subnet ID”, “Device ID” and “Type” in the target list. The list on the right shows all the added devices (click “Fast search” in the main page of HDL Buspro Setup Tool 2 to search for all added devices), drag the target from right to the left can also add the target to the scene (Please refer to Lighting setting for reference). Param 1 to 4 defers from the type selected.

For example, if “Universal switch” is selected, Param 1 refers to “Switch No.”, and Param 2 refers to “Switch Status”, as shown in Figure 5-3.

Click “Save target” after editing all targets. Click “Save” button after editing all scenes.

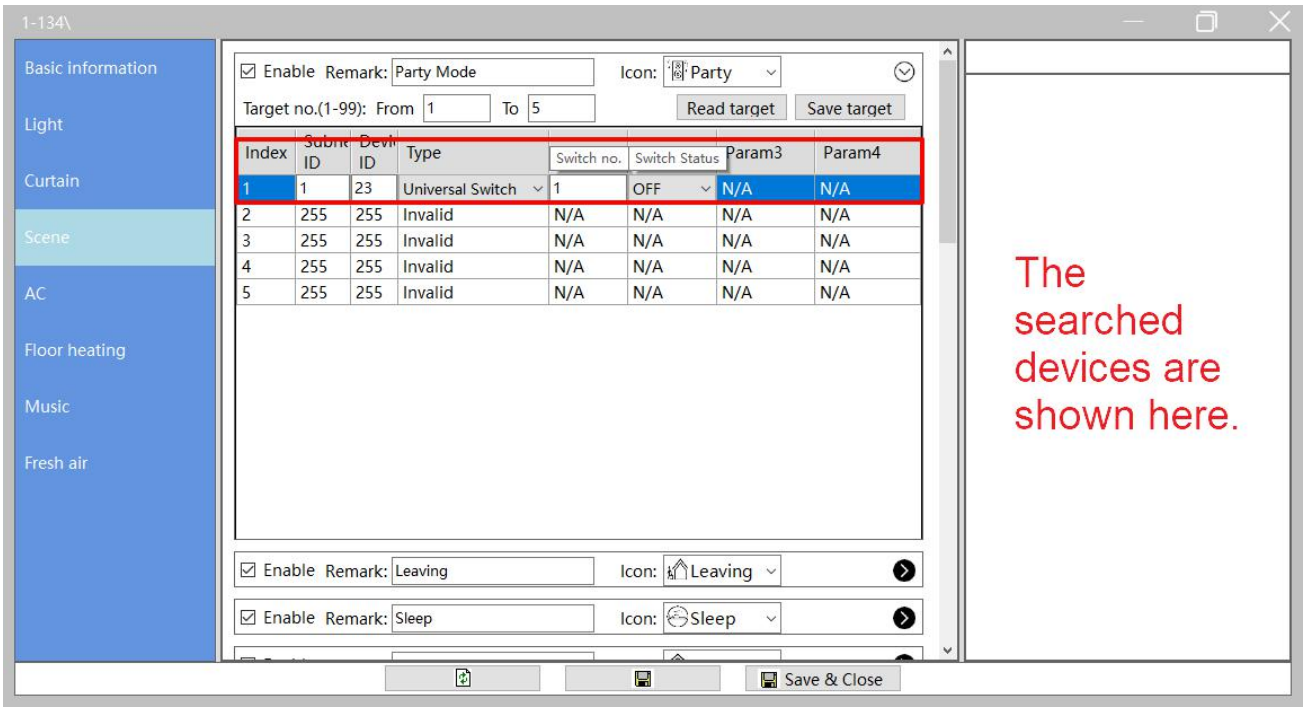

Figure 5- 3 Edit scene target

6 AC Setting

Up to 8 ACs are supported by Granite, and each AC can be configured independently.

Click “AC” in configuration page, as shown in Figure 6-1. This page includes the following setting items for AC:

① AC information setting: enable/disable the AC, edit the remark/operation ways.

② Fan speed/mode selection: select the fan speed, enable/disable mode button.

③ HVAC setting: edit the information, including Subnet ID, Device ID and AC No. of the corresponding HVAC. (Drag the AC in the list of added devices on the right can add AC as well. Please refer to Lighting setting for reference.

④ Temperature range: to set the temperature adjustment range, the minimum and maximum value can both be set between 0-30℃.

⑤ Temperature source: to select the source of the temperature data. Edit the information of external device if “external” is selected.

⑥ Others: to enable/disable Eco mode and indoor temperature display.

Notice: keep pressing the power button of the AC page on the panel to turn on/off all ACs. After turning on all ACs, all ACs recover the status before power down.

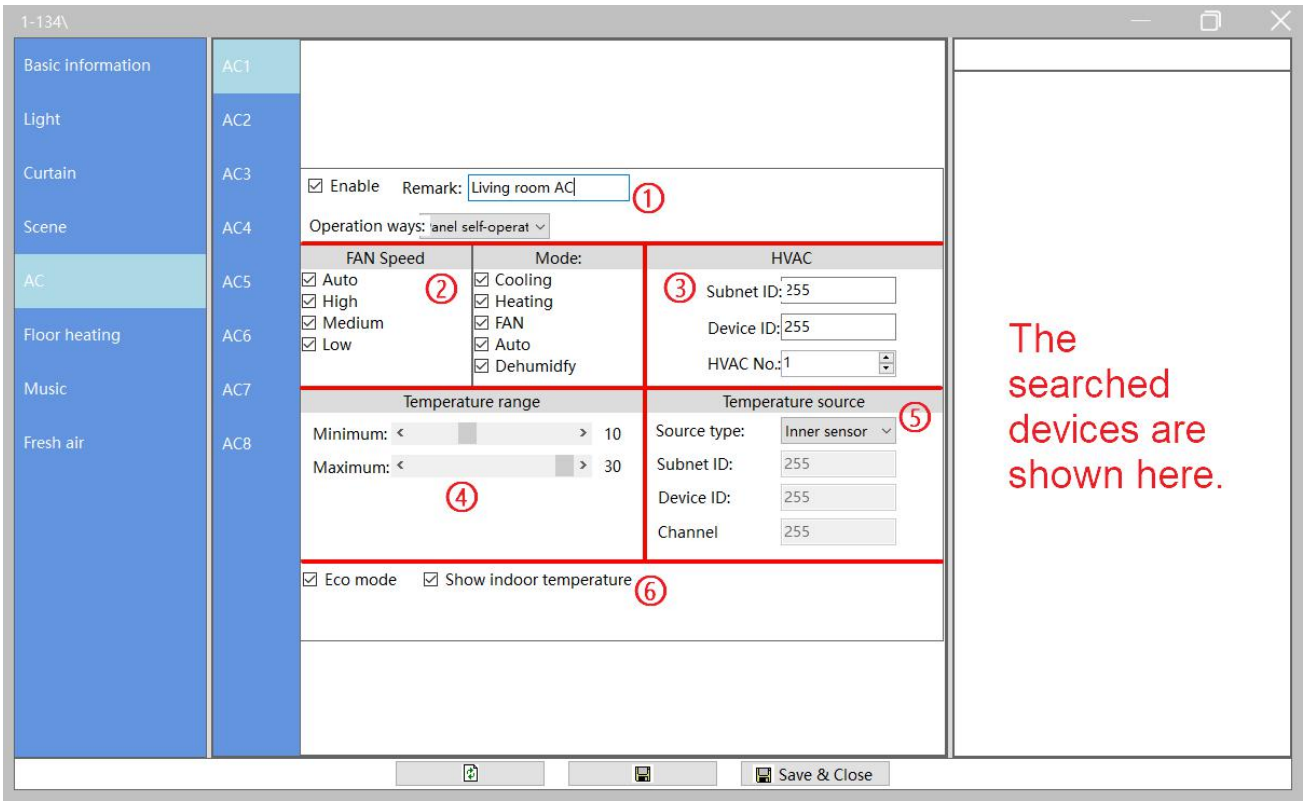

Figure 6-1 AC setting

7 Floor Heating/Cooling Setting

Click “Floor heating” in configuration page, as shown in Figure 7-1. This page includes the following setting items for floor heating/cooling:

Notice: keep pressing the power button of the floor heating/cooling page on the panel to turn on/off all floor heating/cooling. After turning on all floor heating/cooling, all floor heating/cooling recover the status, which is saved before power down.

① Basic information: edit the remark, type, control type and temperature display of floor heating/cooling.

② Mode: enable/disable modes, and edit the temperature for corresponding mode. User may select the default mode when power on at the bottom of this part.

③ Floor heating module setting: to set the information of the floor heating module (Drag the device in the list of added devices on the right can add AC as well. Please refer to Lighting setting for reference).

④ Temperature range: to set the temperature adjustment range, the minimum and maximum value can both be set between 5-35℃.

⑤ Relay parameter setting: to set the parameters of floor heating controlled by relay.

⑥ Temperature source: to select the source of the temperature data for floor heating/cooling. Edit the information of external device if “external” is selected.

⑦ Relay channel setting (Drag the AC in the list of added devices on the right can add floor heating/cooling as well. Please refer to Lighting setting for reference.

Notice:

Some of the setting items can be invalid according to the “Control type” selected:

- If “Relay” is selected, Mark ③ is invalid;
- If “Floor heating module” is selected, Mark ② (only enable/disable modes is valid, the mode details are done on the floor heating module.), ⑤⑥(temperature source can only be floor heating module)⑦ are invalid.

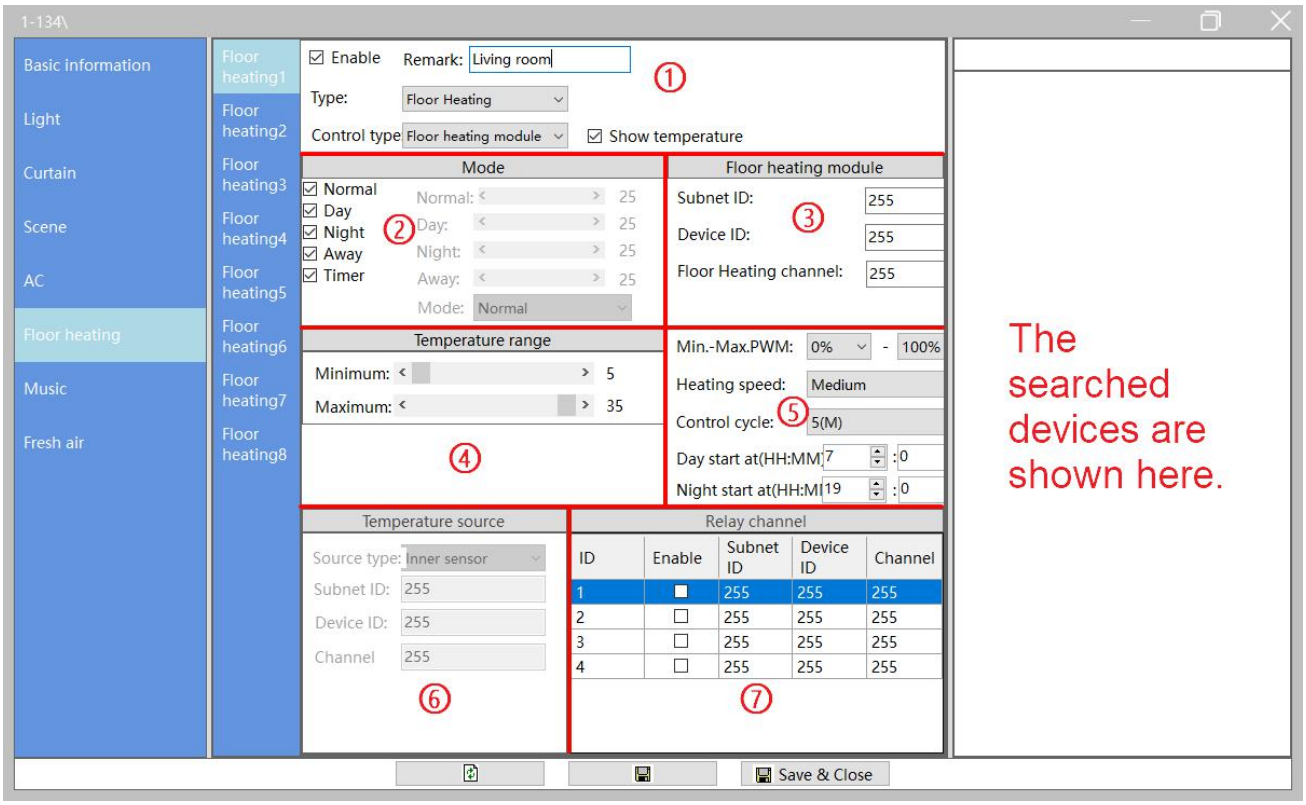

Figure 7-1 Floor Heating/Cooling Setting

8 Music Player Setting

Up to 8 music players are supported by Granite, and each music player can be configured independently.

Click “Music” in configuration page, as shown in Figure 8-1. The following setting items are included:

① Basic information: to enable/disable or rename the music player

② Music source selection

③ Music module setting (Drag the music player in the list of added devices on the right can add music player as well. Please refer to Lighting setting for reference.)

④ Player setting: set the stopping way of the music player (play/pause, play/stop).

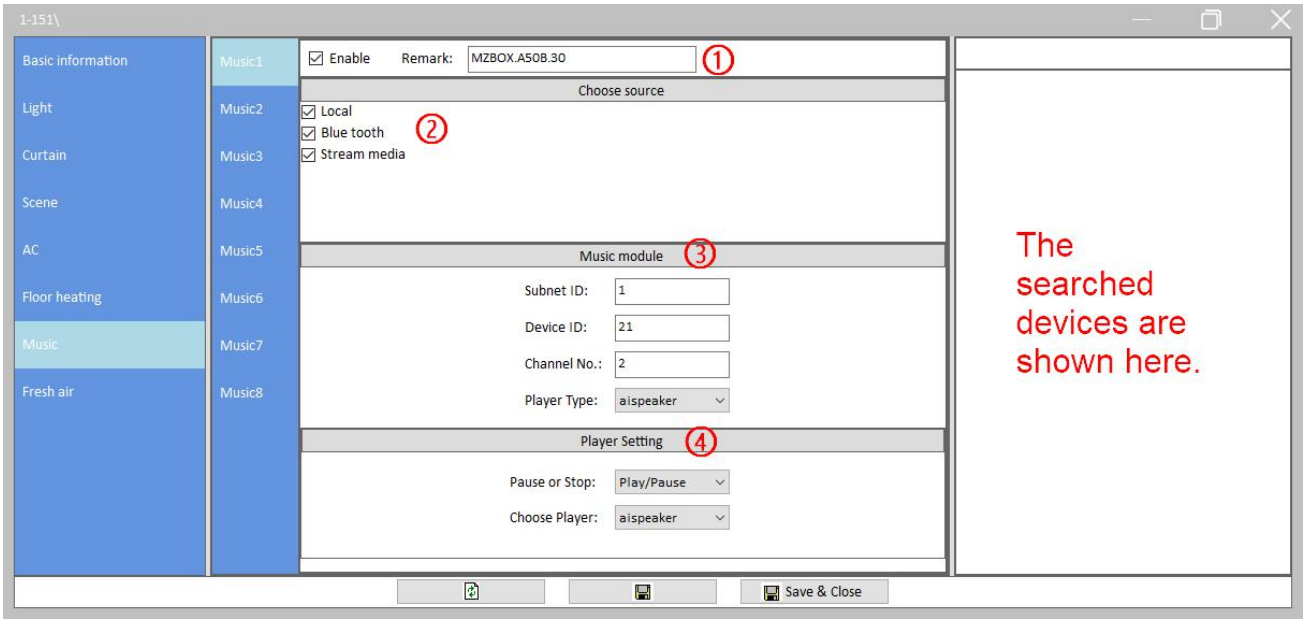

Figure 8-1 Music player setting

9 Fresh Air Setting

Up to 8 Fresh Airs are supported by Granite, and each ventilation system can be configured independently.

Click “Fresh air” in configuration page, as shown in Figure 9-1. The following setting items are included:

① Basic information: to enable/disable or rename the ventilation system “Query enable” means to enable the panel to receive the environment parameter from fresh air device actively.

② Fan speed setting: to select the fan speed levels

③ Mode setting: to select the modes

④ Fresh Air Information Setting

⑤ Fresh Air data display setting: Fresh Air data includes air quality, temperature and humidity. User may enable/disable corresponding data display.

⑥ Air quality sensor information configuration

⑦ Environment display: to select the source of the environment data

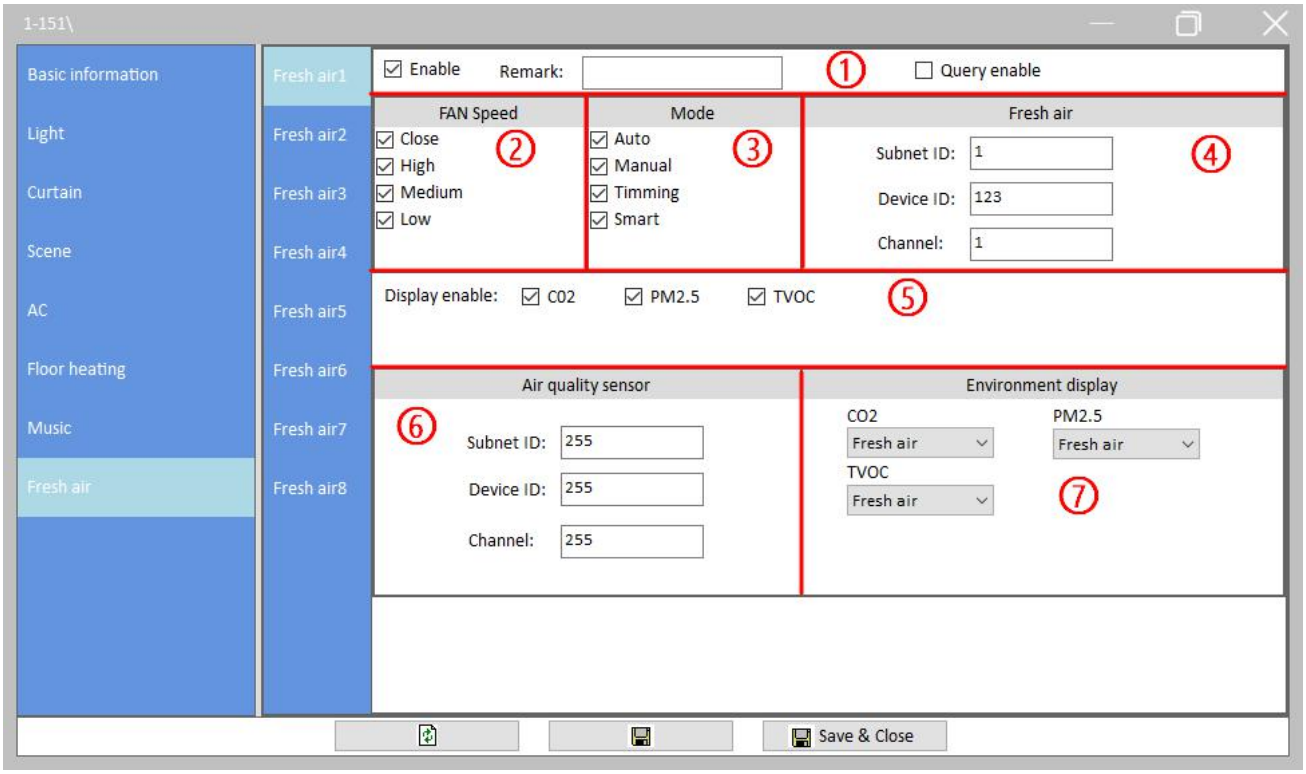

Figure 9-1 Fresh Air setting