



# Prism Pro/Multi-function Touch Panel User Manual

(Applicable model: HDL-MPTFL11.46)

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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	Nov.22, 2019

## 1 Introduction

Prism Pro/Multi-function Touch Panel (Model: HDL-MPTFL11.46, hereinafter referred to as Prism Pro) is specially designed for high-end intelligent home automation. It can realize the control of lighting, curtain, scene, music, air conditioner, floor heating, etc. In addition, it can be woken by presence detection.

This user manual offers the information on the configuration of Prism Pro in Buspro Setup Tool 2. The following tools might be included:

- Prism Pro/Multi-function Touch Panel (Model: HDL-MPTFL11.46)
- Panel Power Interface (Model: HDL-MPLPI.46-A)
- A computer with Buspro Setup Tool 2
- 1-Port Programming Gate Way connected to the router
- Dedicated Buspro Cable(s)

### **Note:**

- ① Please refer to the datasheet 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.
- ③ Panel button introduction is as shown in Figure 1-1 (The six buttons under the panel respectively correspond to the six icons of each button page).

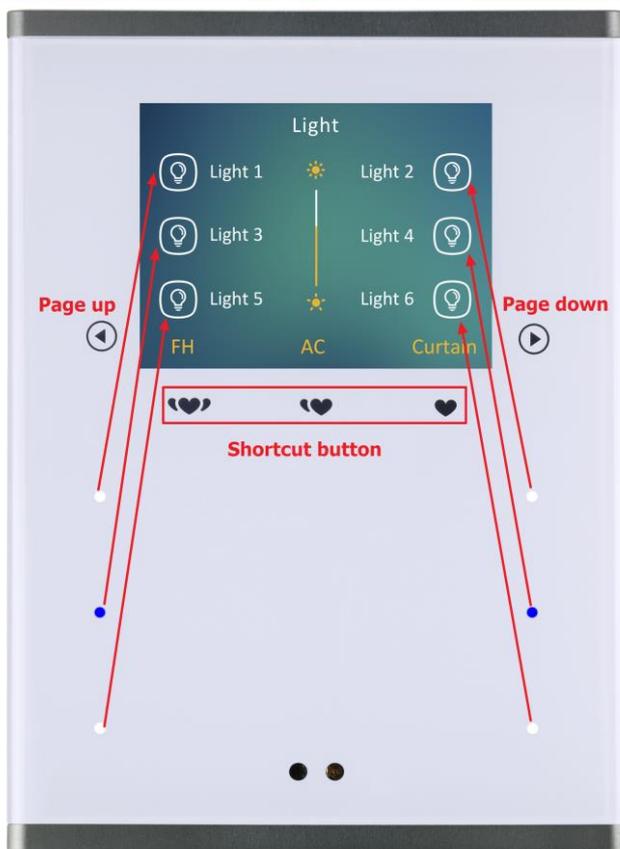


Figure 1-1 Panel button introduction

➤ **Open Configuration Page**

- ① Connect the panel to the system and open Buspro Setup Tool 2 in the computer.
- ② Click “Fast Search” to search for the devices.
- ③ Double click the “Model” or “Description” column to enter panel configuration page, as shown in Figure 1-2.

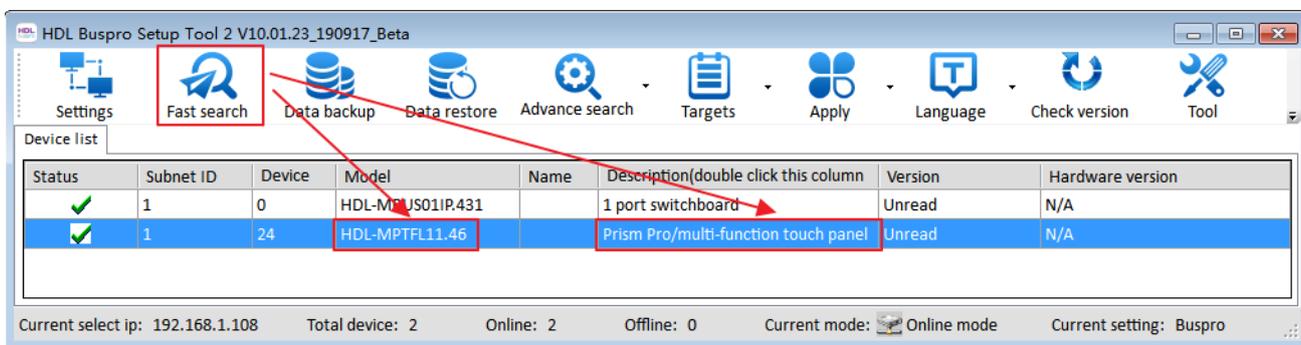


Figure 1-2 Open panel configuration page

## 2 Panel Setting

Default panel setting page appears as shown in Figure 2-1. The setting items include:

- ① Button page settings: to display/hide corresponding button pages.
- ② Return standby page: the panel can be set to return to a specific page after a period of time with no operation.
- ③ Temperature feedback: to enable broadcasting temperature.
- ④ Proximity sensor: to enable human body detection.
- ⑤ Indicator intensity: to set panel backlight and button indicator brightness.
- ⑥ Others: includes the time setting of long press and double click, the language selection and the minimum dimming value.
- ⑦ Time and date: to select time type and date format.

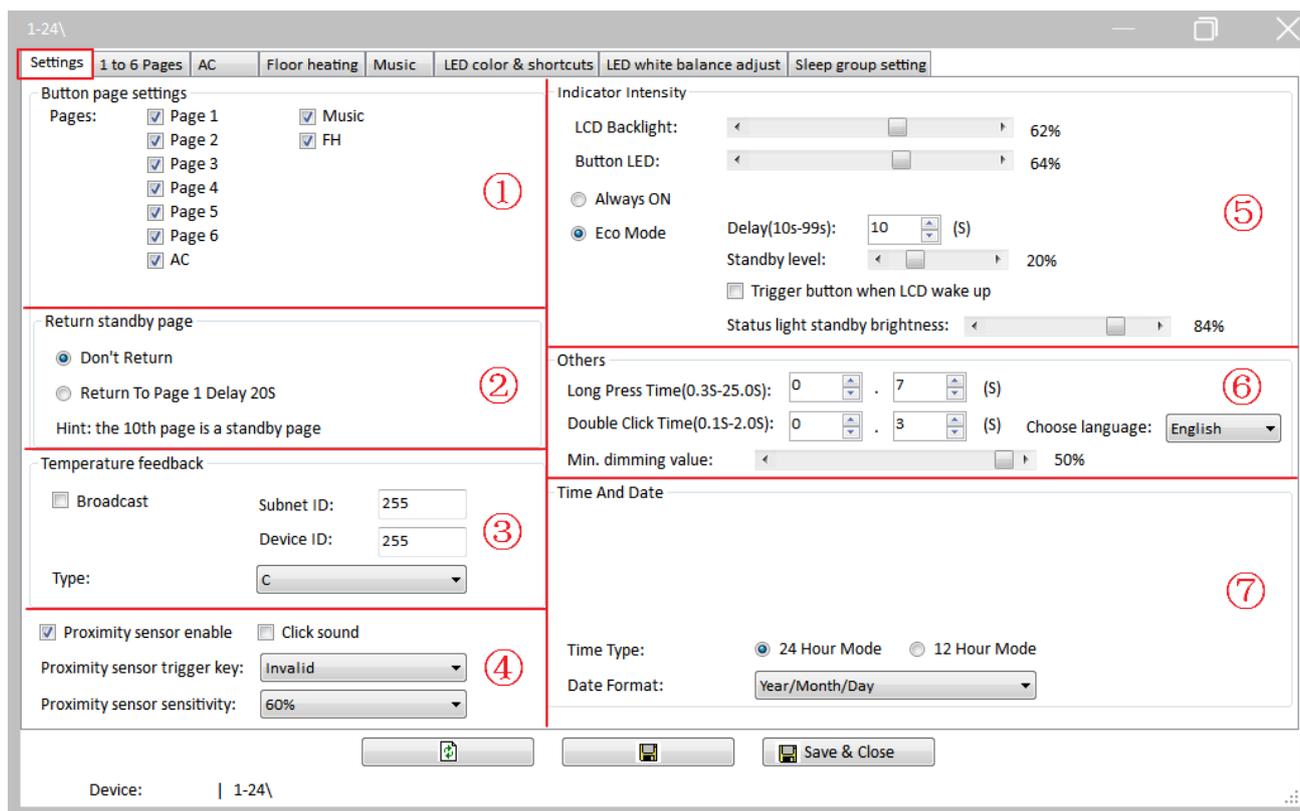


Figure 2-1 Panel setting

## 2.1 Button Page Display Setting

In “Button page settings” part (as shown in Figure 2-2), user may select/deselect corresponding button page to display/hide.

**Note:** user should at least display a button page instead of hiding all.

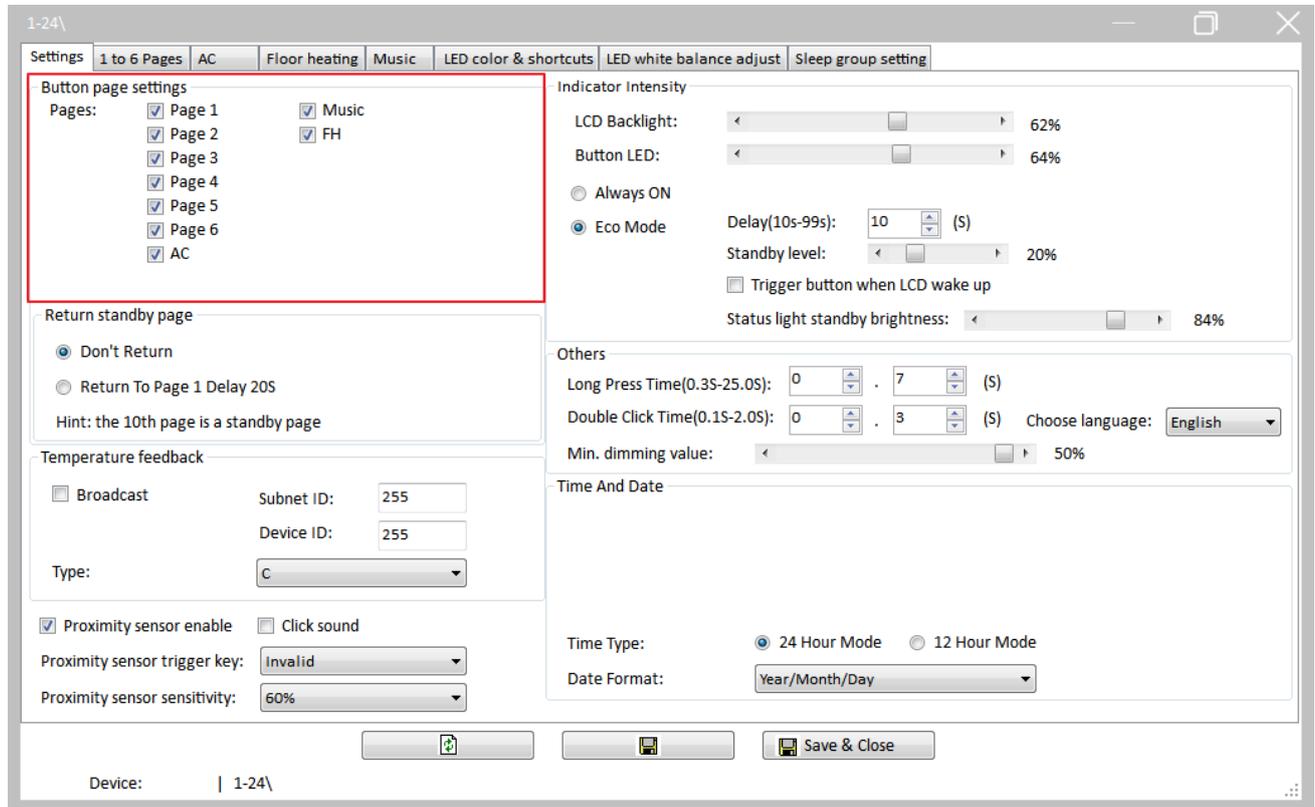


Figure 2-2 Button page setting

## 2.2 Return Standby Page Setting

In “Return standby page” setting part (as shown in Figure 2-3), the panel can be set to return to a specific page after a period of time with no operation.

1. Don't return: the panel stays in the current page after a period of time with no operation.
2. Return to page\* delay \*s: to set return page number and delay time after a period of time with no operation. For example, when “return to page 2 delay 20s” is set, the panel will return to button page 2 after a period of time with no operation for 20s.

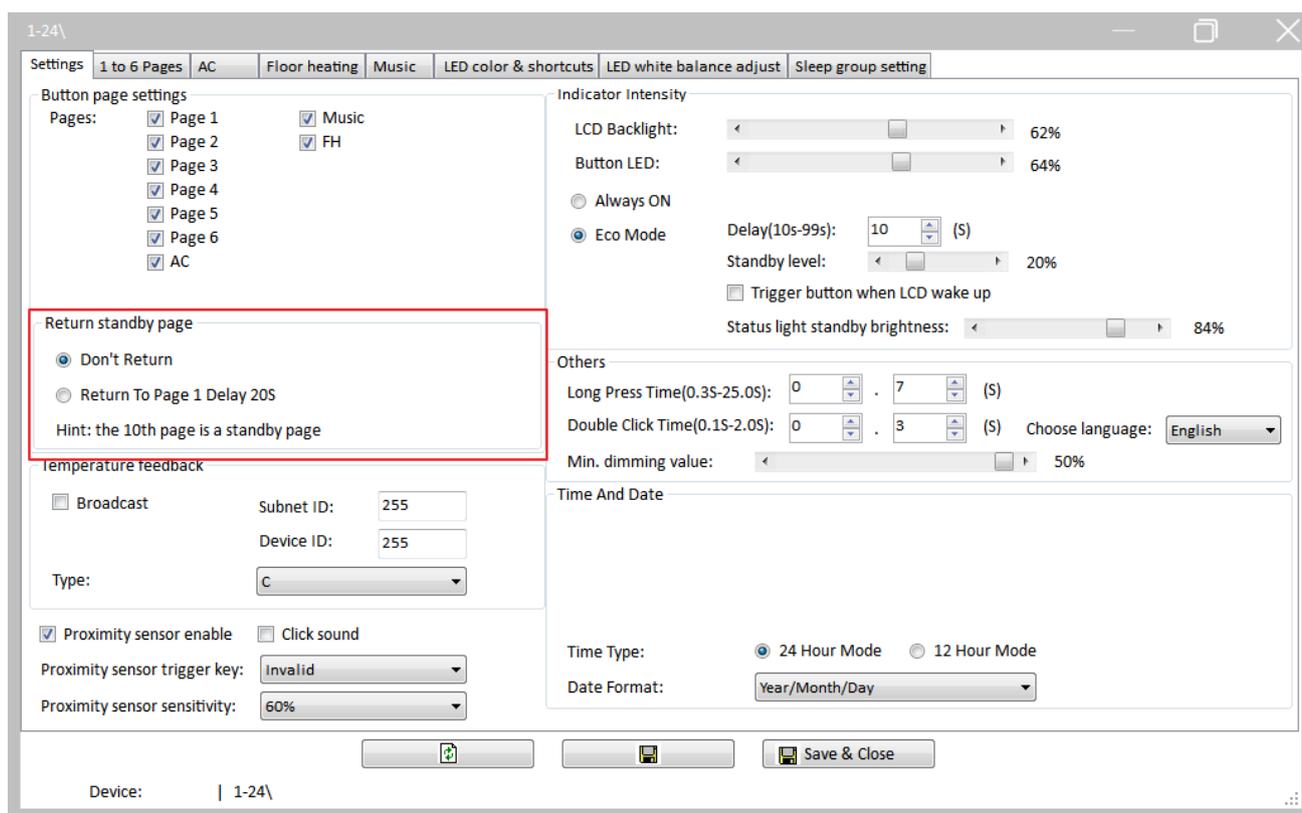


Figure 2-3 Return standby page setting

### 2.3 Temperature Feedback Setting

After Prism Pro detects temperature via built-in temperature sensor, temperature broadcasting can be enabled/disabled in “Temperature feedback” setting part (as shown in Figure 2-4).

1. Broadcast: to enable/disable temperature broadcasting.
2. Subnet/Device ID: to set device information for receiving temperature data.
3. Type: to select temperature unit, including C (°C) and F (°F).

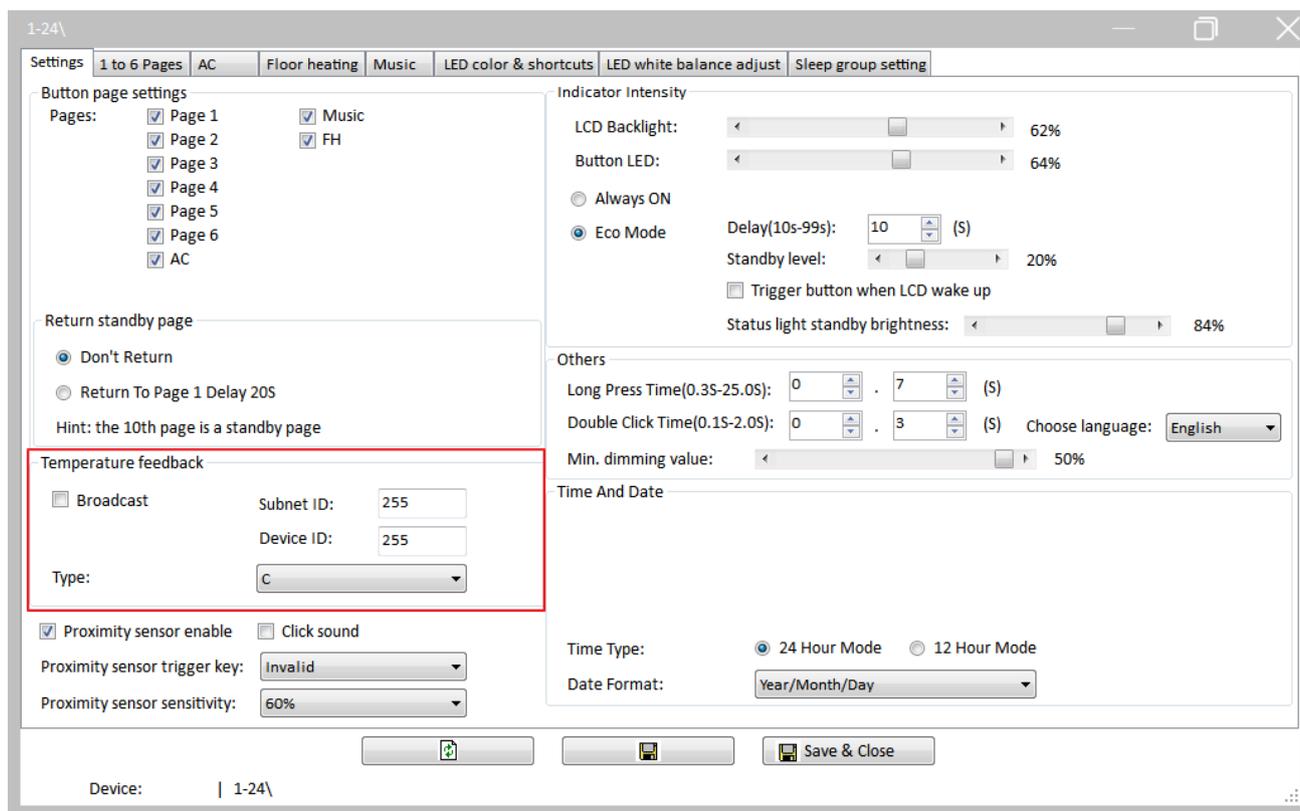


Figure 2-4 Temperature feedback setting

## 2.4 Proximity Sensor Setting

In “Proximity sensor” setting part (as shown in Figure 2-5), user may set proximity sensor.

1. Proximity sensor enable: to enable proximity sensor, namely the panel will be woken up by detecting human body.
2. Click sound: to enable the click sound of corresponding button.
3. Proximity sensor trigger key: to select the button triggered after the panel detects human body, which ranges from 1 to 36.
4. Proximity sensor sensitivity: higher sensitivity means longer distance for the panel to detect human body.

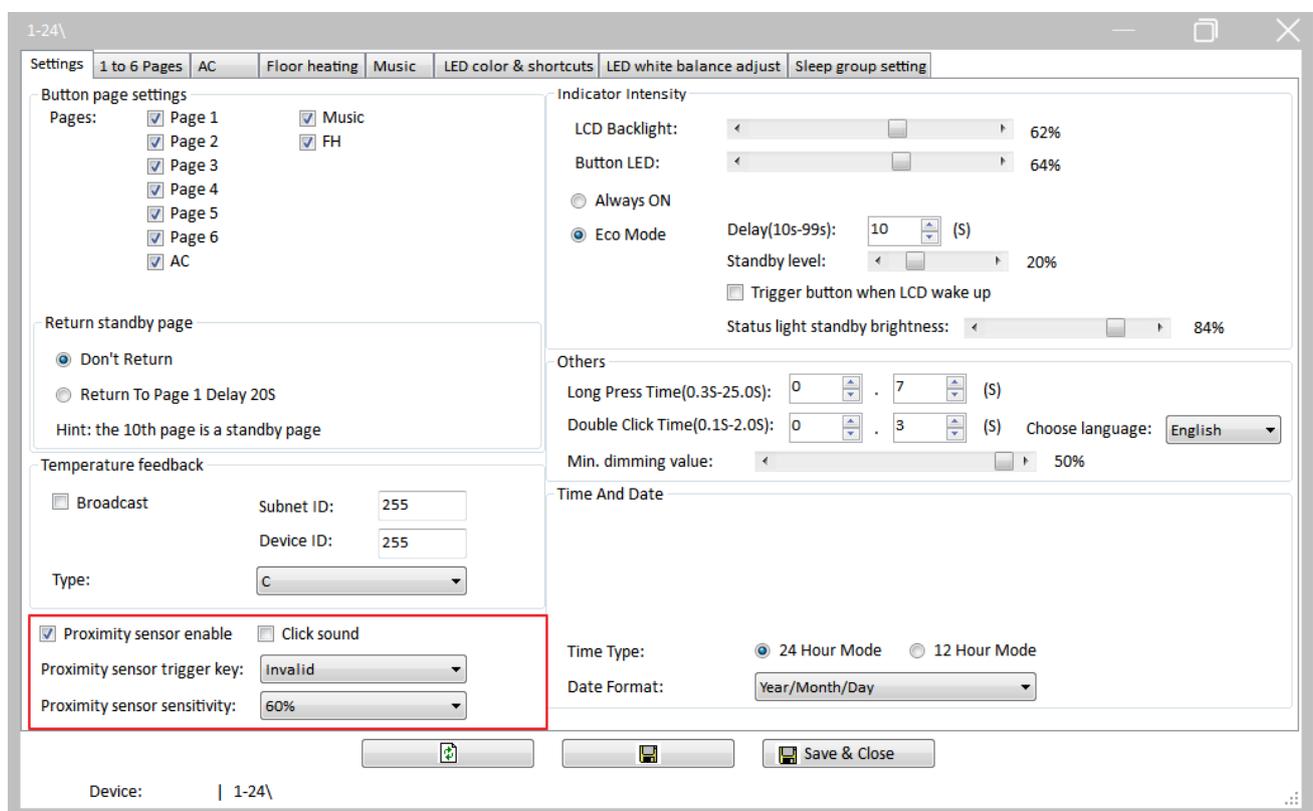


Figure 2-5 Proximity sensor setting

## 2.5 Indicator Intensity Setting

In “Indicator intensity” setting part (as shown in Figure 2-6), user may set indicator brightness.

1. LCD backlight: to set panel backlight brightness.
2. Button LED: to set button indicator brightness.
3. Always ON: after selecting the option, the panel will be in working mode all the time, whose panel backlight and button indicator brightness are the set value.
4. Eco mode: after a period of time with no operation, panel backlight and button indicator brightness will be automatically the set value.
  - Delay (10s-99s): to set the delay time between no operation and enabling eco mode.
  - Standby level: to set panel backlight brightness in standby mode.
  - Trigger button when LCD wake up: when the panel is in eco mode, if the option is selected, button will be triggered when the panel is woken up. If the option is deselected, the first press is to wake up panel while the second press is to trigger button object.
  - Status light standby brightness: to set button indicator brightness in standby mode.

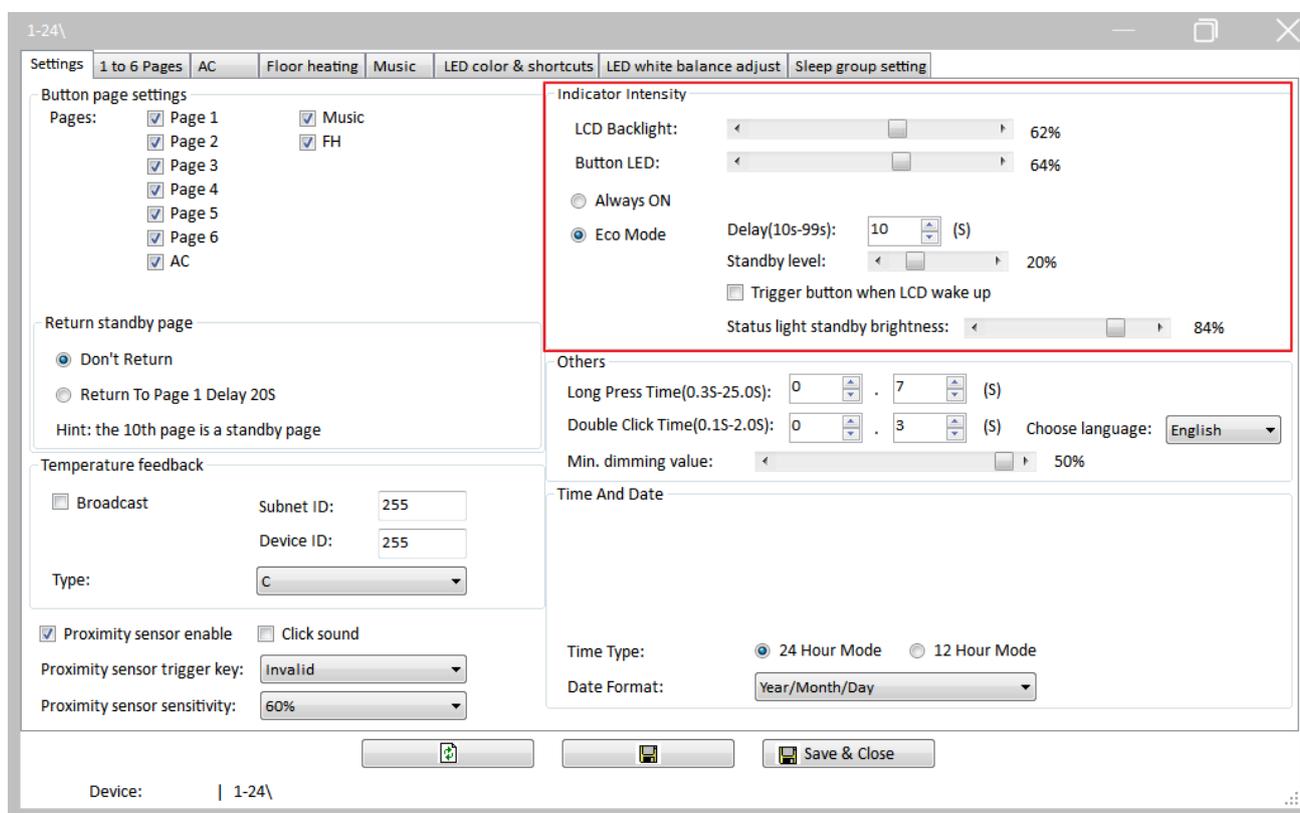


Figure 2-6 Indicator intensity setting

## 2.6 Other Settings (Button Valid Status)

In “Others” setting part (as shown in Figure 2-7), user may set button valid status.

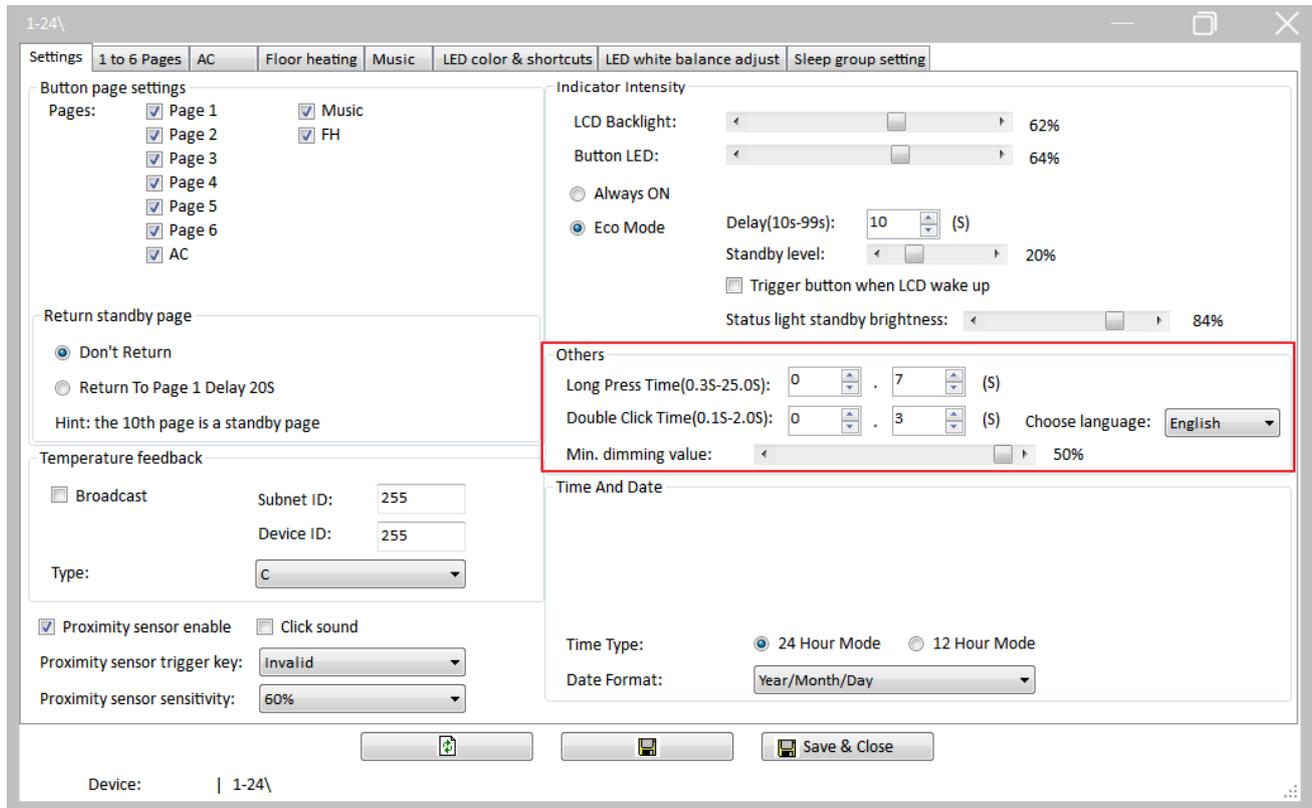


Figure 2-7 Others setting (button valid status)

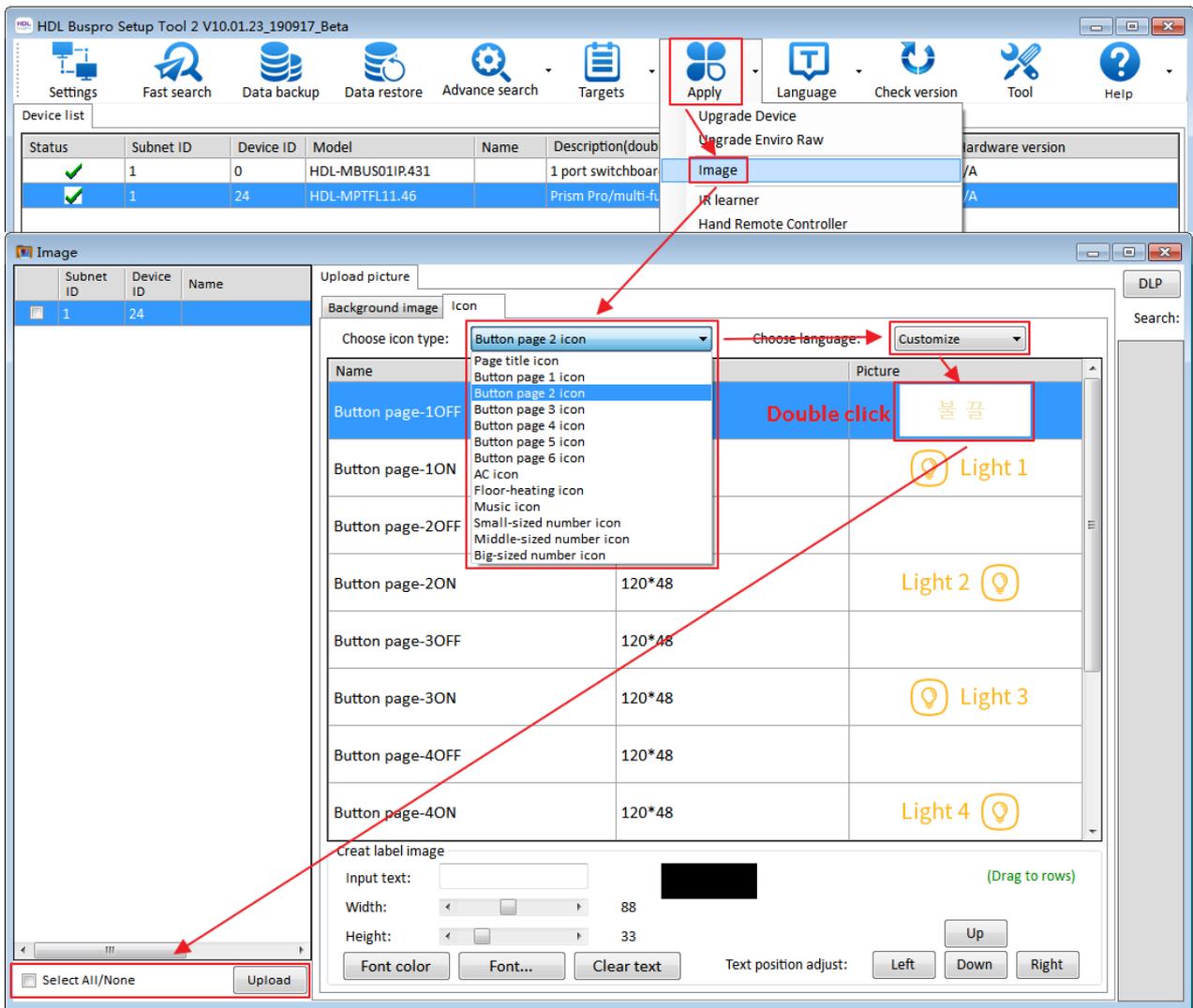
The setting items are explained below:

1. Long press time (0.3s-25s): to set the time of long press, which ranges from 0.3s to 25s. When the button is pressed longer than the set time, the object will be triggered.
2. Double click time (0.1s-2s): to set the time of double click, which ranges from 0.1s to 2s. The time interval between two clicks shorter than the set time will be identified as “Double click” to trigger objects.
3. Choose language: user may select Chinese, English or customized language (please refer to "[Customized Language Setting](#)").
4. Min. dimming value: to set the minimum dimming value, which ranges from 0 to 50%. For example, when the minimum dimming value is set to 20%, after object brightness is lowered to 20%, it is invalid to lower object brightness again.

➤ **Customized Language Setting**

User may customize language by uploading premade icons to replace default panel icons, as shown in Figure 2-8.

- ① Click “Apply” button in Buspro Setup Tool 2
- ② Select “Image” label
- ③ Select object icon in “Choose icon type” (This part takes “Button page 2 icon” as an example)
- ④ Select “Customize” in “Choose language”
- ⑤ Double click “Picture” column corresponding to object icon. Then select the customized icon and click “open” button.
- ⑥ Select “Select All/None” and click “Upload” button. When the process bar shows 100%, user may check whether Light P2-Light 1 has been “불 끌”.



**Figure 2-8 Customized language setting**

## 2.7 Time and Date Setting

In “Time and date” setting part (as shown in Figure 2-9), user may select time type and date format.

Because time and date only appear in the standby page, the panel can be set to return to page 10 after a period of time with no operation (the standby page number is 10) in “[Return Standby Page Setting](#)”. So that time and date will appear.

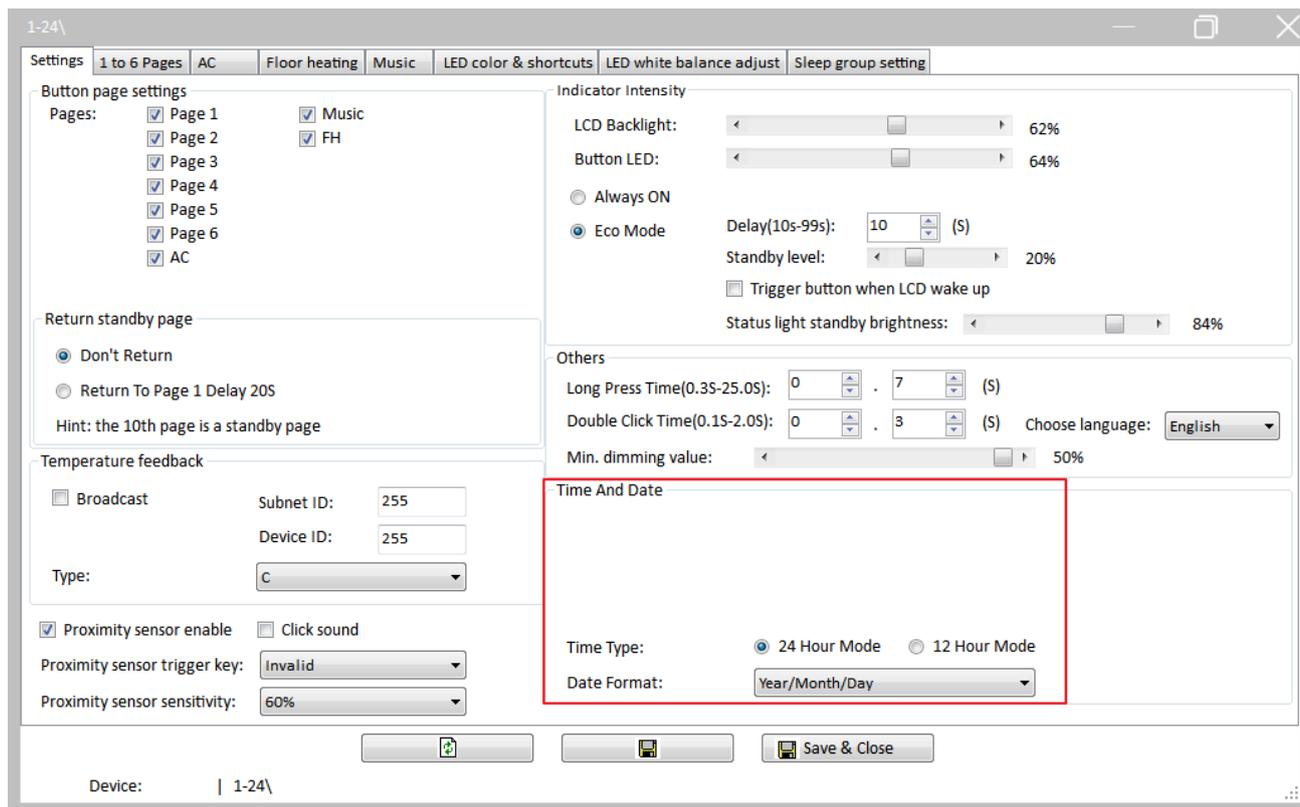


Figure 2-9 Time and date setting

### 3 Button Setting

#### 3.1 Button Objects Setting

Select “1 to 6 Pages” label in the panel configuration page and select buttons to be set at the top. Click “Targets setting” button on the right, as shown in Figure 3-1.

**Note:**

The number of objects depends on the button mode. For example, “Combination ON”, “Combination OFF”, “Combination ON/OFF”, “Dbclick/Combined”, “Short/Long Press”, “Short Press/Long Jog” and “Clock” can control up to 99 objects, while “Single ON/OFF”, “Single ON” and “Single OFF” only control 1 object.

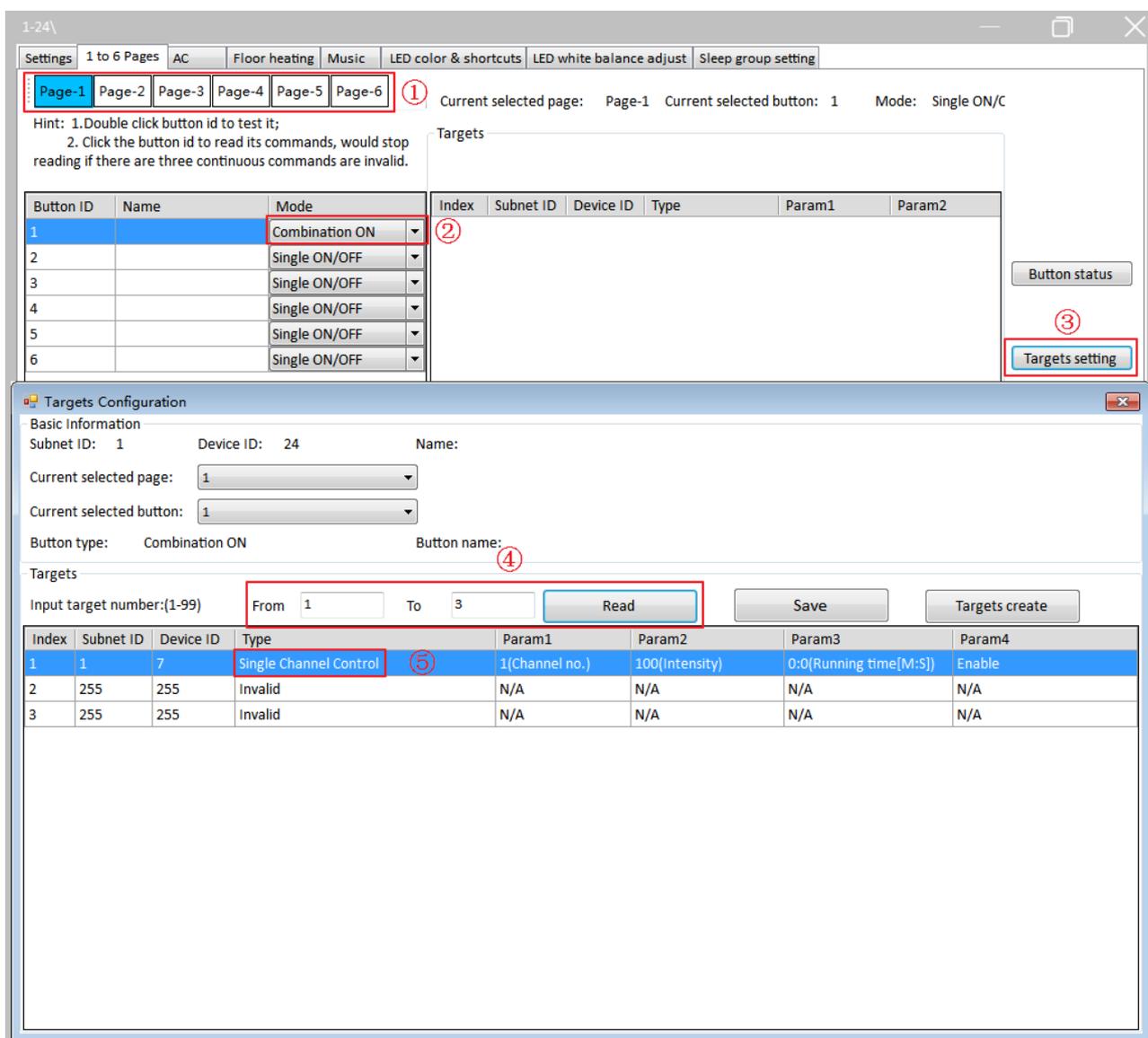


Figure 3-1 Button objects setting

### 3.1.1 Add Objects

User should select the button mode of controlling several objects to add objects. For example, several objects can be controlled by “Combination ON”, “Combination OFF”, “Combination ON/OFF”, “Dbclick/Combined”, “Short/Long Press” or “Short Press/Long Jog”. This part takes adding 3 objects to “Combination ON” mode of Button Page-1-Button 1 as an example.

1. Select button in mark ① of Figure 3-1.
2. Set the button mode of button 1 to “Combination ON” in the button list on the left (Mark ② of Figure 3-1).
3. Click “Targets setting” button to open the page (Mark ③ of Figure 3-1).
4. Input “from 1 to 3” in “Input target number” and click “Read” button (Mark ④ of Figure 3-1).

**Note:** inputting “from 1 to 3” represents adding 3 objects (object 1/2/3), the number represents object number. In the same way, inputting “from 2 to 4” represents adding 3 objects (object 2/3/4), and inputting “from 3 to 5” represents adding 3 objects (object 3/4/5).

5. Then 3 objects will appear in the object list below, and click “Save”.

### 3.1.2 Edit Objects

Add objects in [Add Objects](#) and configure objects (Continued from the preceding part).

Select objects in object list to change “Subnet ID”, “Device ID”, “Type” (Mark ⑤ of Figure 3-1), and other parameters (on the basis of the selected type). Click “Save” to save changes.

## 3.2 Button Status Setting

Select “1 to 6 Pages” label in the panel configuration page and click “Button status” button on the right, as shown in Figure 3-2. The setting items are explained as follows:

- ① Status indicator: to switch on/off button indicator.
- ② Dimming: to enable/disable button dimming.
- ③ Dimming value: to enable/disable buttons to save dimming value. If dimming value is enabled, the panel will save the dimming value of the preceding operation as the initial dimming value of objects.
- ④ Mutual: When a button LED is on, other button LEDs excluding the button will be off (Only

combination mode supports mutual exclusive function).

- ⑤ Double key: to select whether continuous two buttons are combined as a button to use, the objects of combined button are those of smaller button. For example, after combining button 1 with button 2, the objects of combined button are those of button 1.

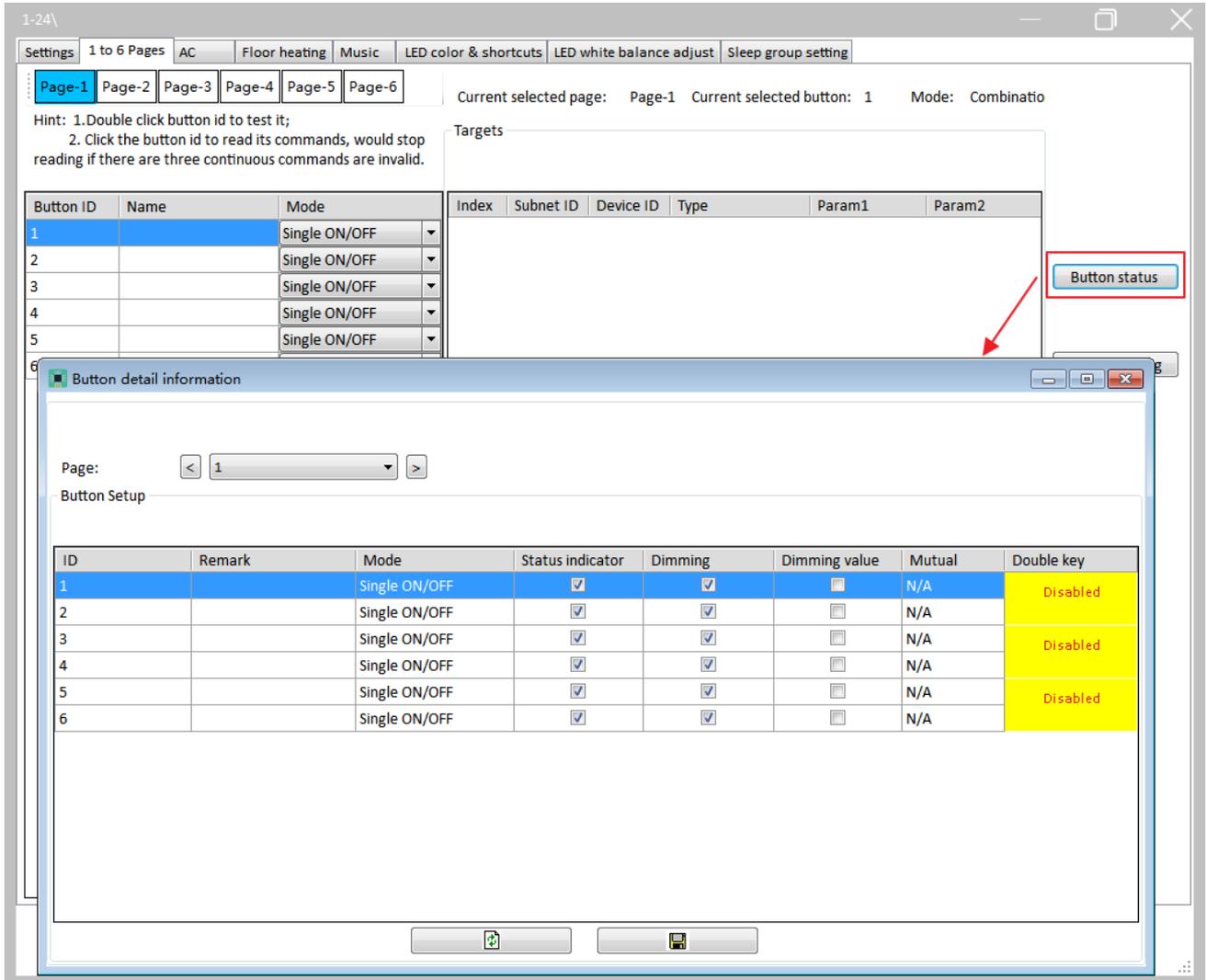


Figure 3-2 Button status setting

## 4 AC Setting

Select “AC” label in the panel configuration page, as shown in Figure 4-1.

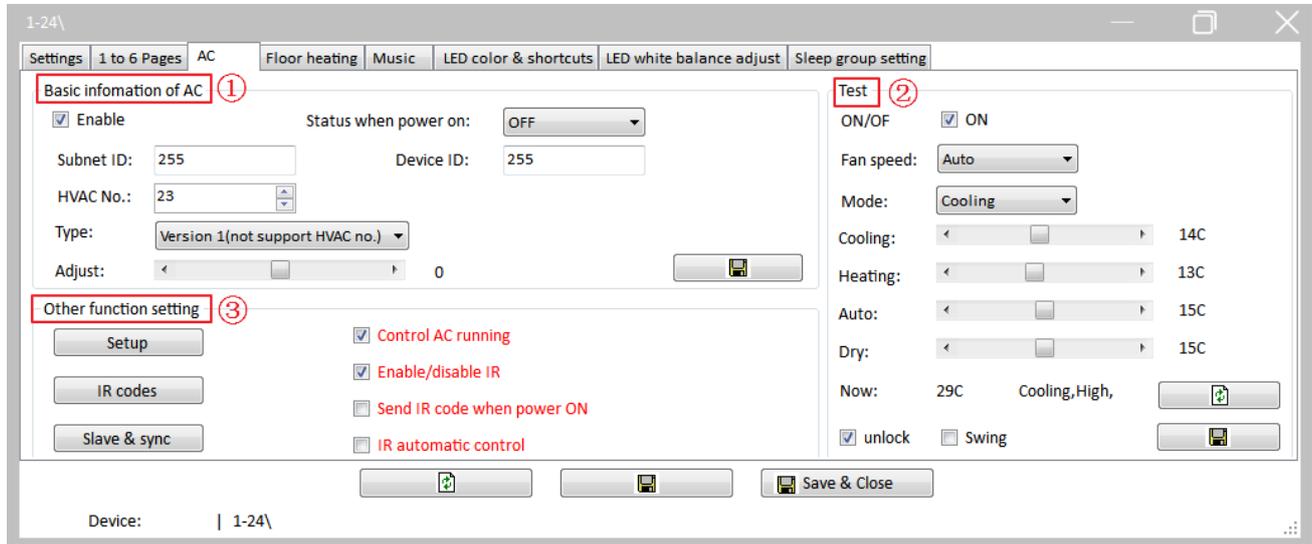


Figure 4-1 AC setting

### 4.1 General Setting

Select “Enable” at the top of AC setting part (Mark ① of Figure 4-1) to enable AC.

- Subnet ID
- Device ID
- Status when power on: when “OFF” is selected, AC will be OFF when the panel is powered on. When “Last status” is selected, AC will be in the status before the last power off when the panel is powered on.
- HVAC No.: to enter corresponding AC number to control, which ranges from 1 to 128, the default number is 1.
- Type: Version 1 (not support HVAC no.) and Version 2 (support HVAC no.).
- Adjust: to set temperature compensation for correcting temperature data detected by the panel, which ranges from -8 to 8. For example, when the standard thermometer shows 20°C while the panel shows 22°C, the temperature compensation should be set to -2°C.

## 4.2 Test

Set AC ON/OFF, fan speed, mode (cooling, heating, auto and dry), unlock and swing (Mark ② of Figure 4-1).

For example, select “ON” to enable AC, set fan speed to “High”, set mode to “Heating” and the temperature to 28°C, and save. If configured successfully, the AC page should display “High/Heating/28°C”.

## 4.3 Other Function Setting

In other function setting part (Mark ③ of Figure 4-1), user may configure AC setting, IR codes and Slave & sync.

### 4.3.1 AC Setting

Click “Setup” button in AC setting page, user may set temperature model, temperature range and temperature sensor, as shown in Figure 4-2.

#### 4.3.1.1 Temperature Model Setting

Figure 4-2 shows the setting items below:

- FAN: to enable 4 fan modes.
- Mode: to enable 5 working modes.
- Eco mode: to enable/disable eco mode. If eco mode is enabled, when ambient temperature is to the specific temperature, the panel will automatically turn off fan to save energy.

**Note:** eco mode is invalid for fan/dehumidify mode.

- Swing: to enable/disable swing. After enabling swing, swing status can be switched.

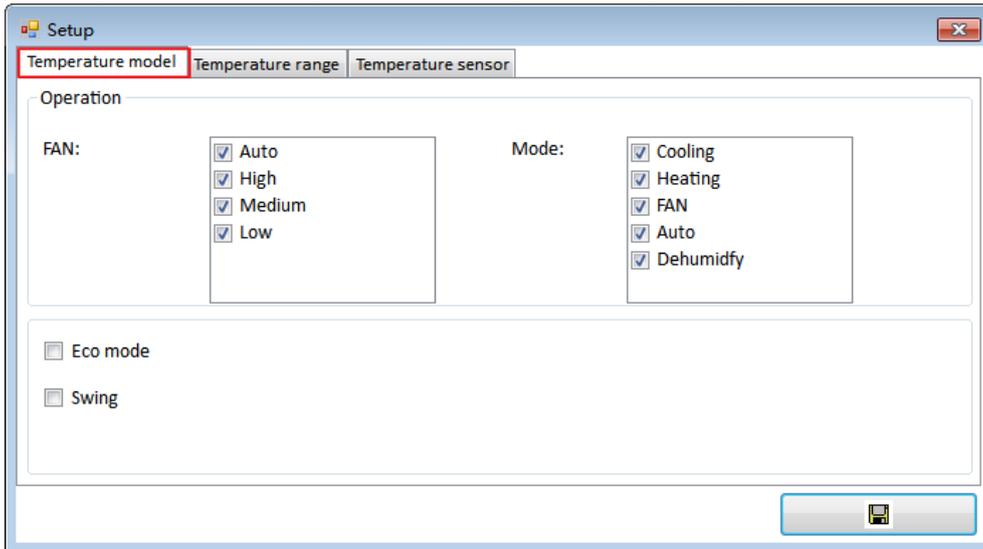


Figure 4-2 Temperature model setting

### 4.3.1.2 AC Temperature Range Setting

As shown in Figure 4-3, the minimum/maximum temperature in 4 work modes can be set in “Temperature range” page, whose ranges are both from 0 to 30°C.

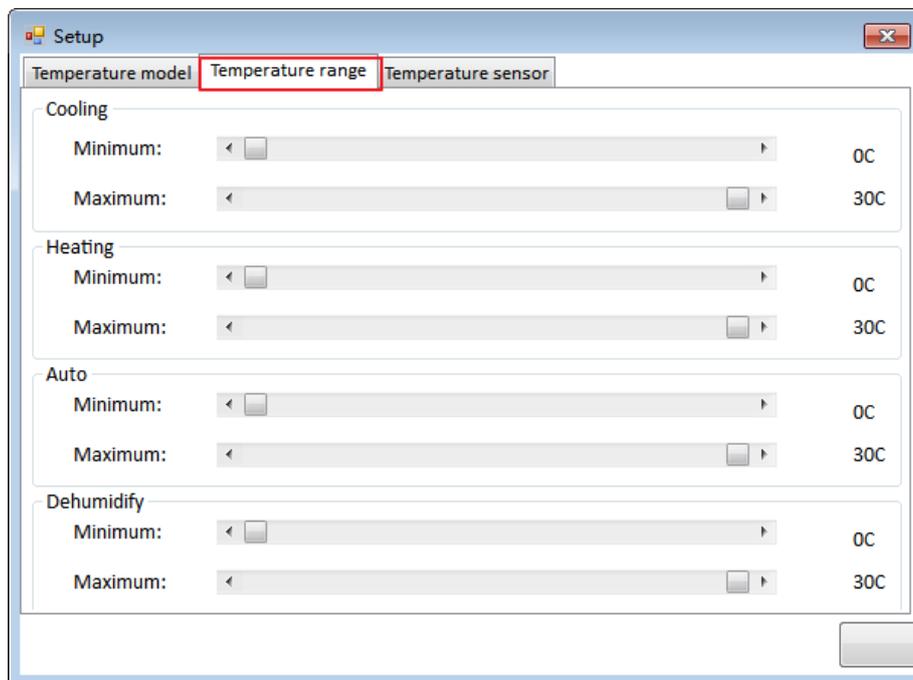


Figure 4-3 Temperature range setting

### 4.3.1.3 Temperature Sensor Setting

Figure 4-4 shows the setting items below:

- Internal: the panel refers to the temperature data obtained by built-in temperature sensor.
- External: the panel refers to the temperature data obtained by external temperature sensor. If selecting “Receive Feedback” or “Ask Feedback”, user may set the subnet ID, device ID and channel of external sensor.
- Average of internal and external: the panel refers to the average of temperature from external and internal sensor.

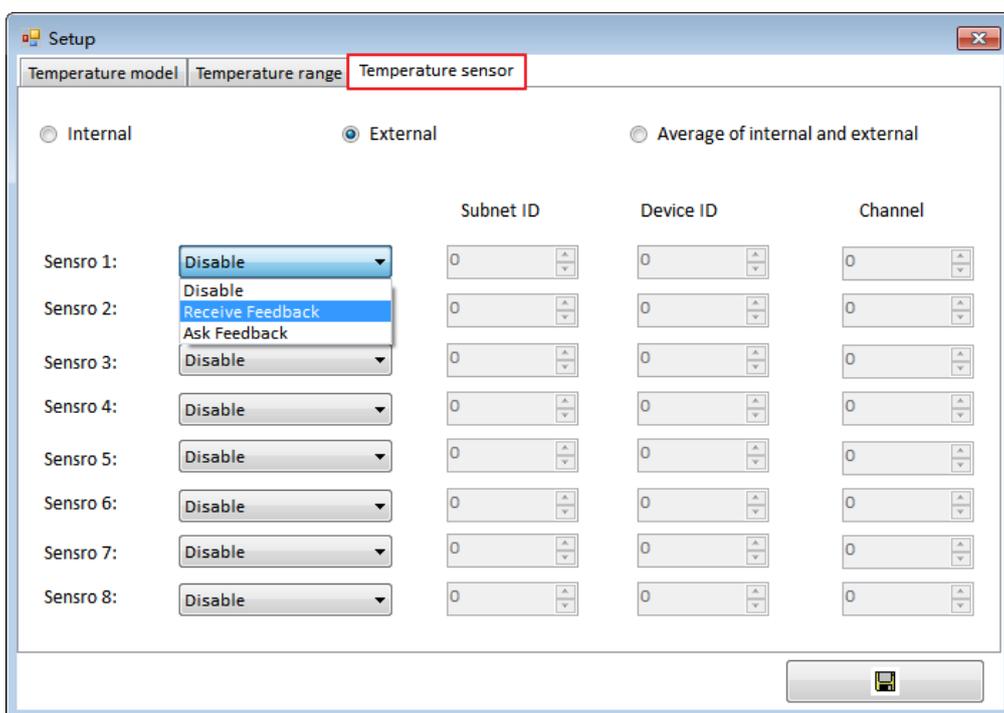


Figure 4-4 Temperature sensor setting

### 4.3.2 IR Codes Setting

IR control is that IR transmission module sends IR codes to indirectly control AC devices. Click “IR codes” button to set, as shown in Figure 4-5.

- ① Select function in “Function”
- ② To select objects to be configured:
  - Subnet ID: the subnet ID of AC

- Device ID: the device ID of AC
- Type: to select “Scene”, “Universal Switch” or “Single Channel Control”
- Parameter: the contents and number of parameters depend on the selected device type.

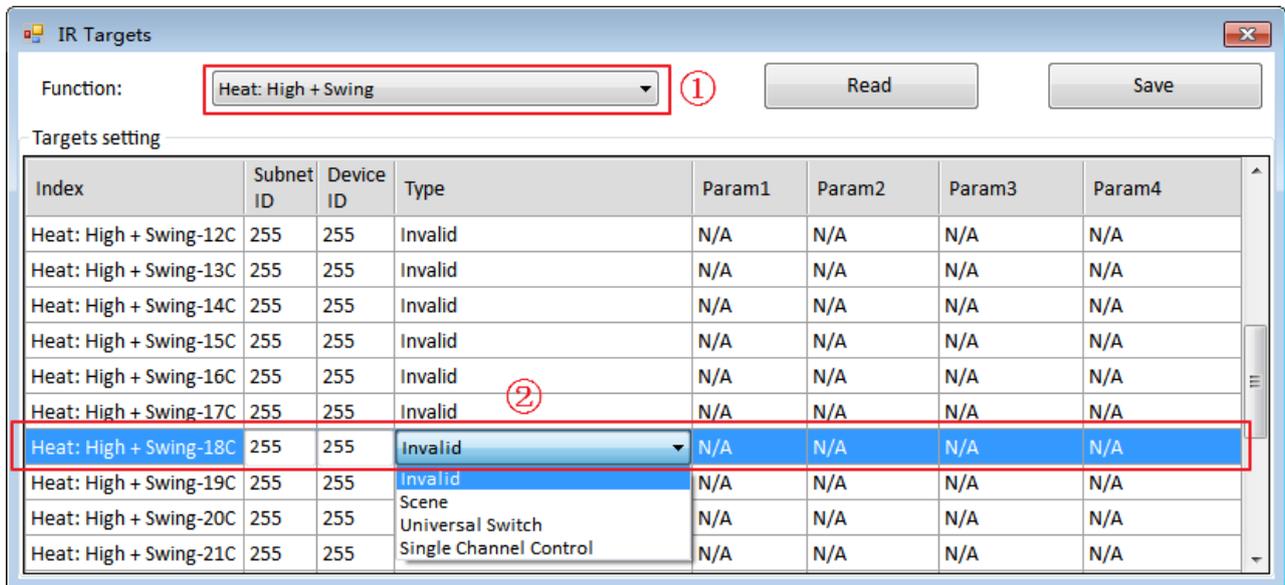


Figure 4-5 IR codes setting

### 4.3.3 Slave & Sync (Invalid for Slave)

#### ➤ Synchronous Control (Invalid for Additional AC Page)

When several panels control the same AC, user need to set synchronized panel information before synchronizing other panels. Prism Pro can synchronize the AC information of up to 8 panels.

Click “Slave & Sync” button in AC setting page and select “Synchronous Control” label, as shown in Figure 4-6.

- ① Enable/Disable Sync: select to enable synchronizing other panels.
- ② Synchronized panel subnet ID/device ID: for example, if panel 1 is required to be synchronized, enter the subnet ID and device ID of panel 1 in “Subnet ID” and “Device ID”.

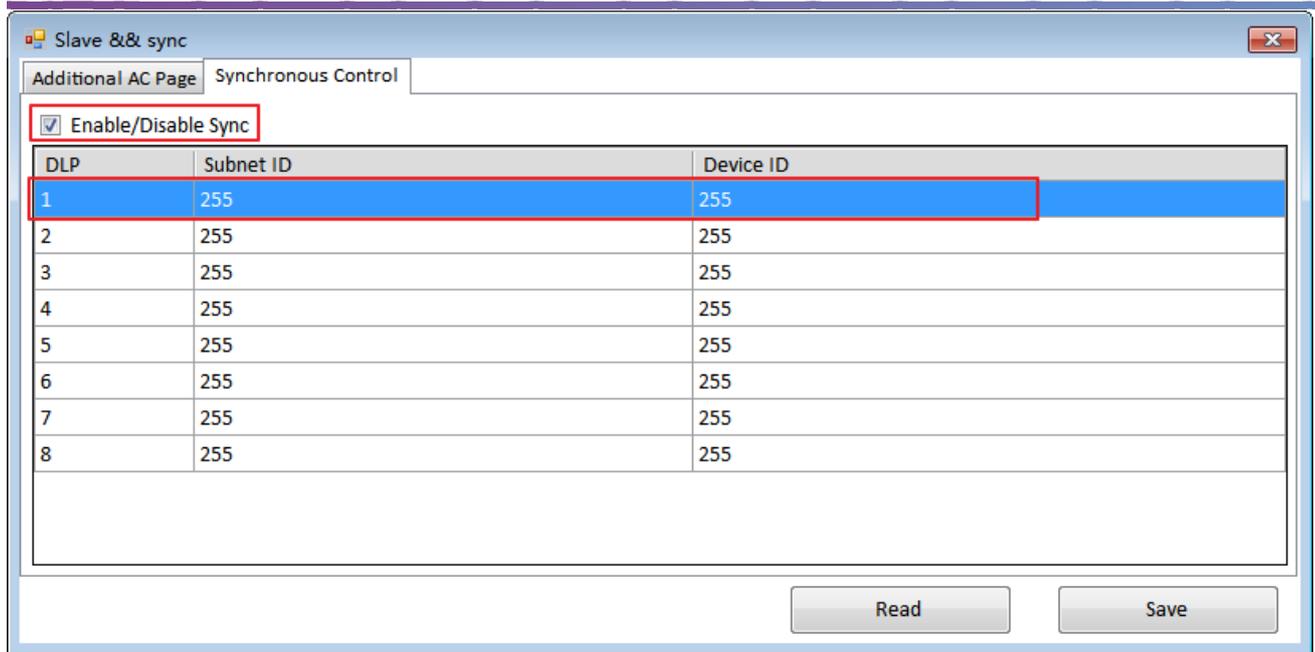


Figure 4-6 Synchronous control setting

## 5 Floor Heating Setting

Select “Floor heating” label in the panel configuration page, as shown in Figure 5-1.

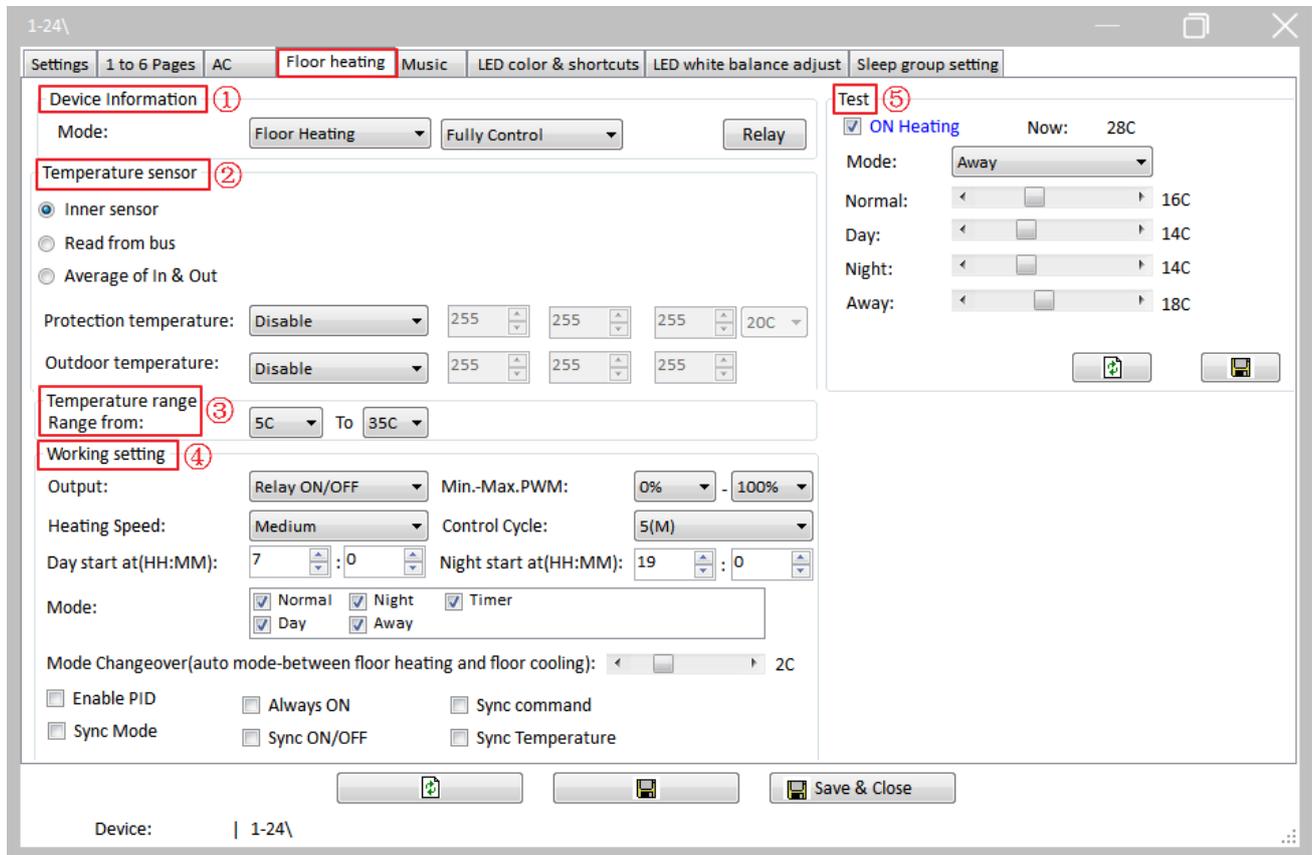


Figure 5-1 Floor heating setting

The setting items are explained below:

- ① Device information: to select the working mode and control mode of floor heating. Working mode includes “Floor Heating/Floor Cooling/Auto” and control mode includes “Slave Control” and “Fully control”.
  - Slave control: to control up to 6 objects via switching objects.
  - Fully control: fully control can set up to 4 floor heating channels and 4 floor cooling channels.
- ② Temperature sensor: when “Fully control” is selected, the actual working modes should depend on the temperature.
  - Inner sensor: the panel refers to temperature data from internal sensor.
  - Read from bus: the panel refers to external temperature. If selecting “Receive

Feedback” or “Ask Feedback”, user may set the subnet ID, device ID and channel of external sensor.

- Average of In & Out: the panel refers to the average of temperature from internal and external sensor, the temperature of up to 2 external sensor can be referred to at a time.
- Protection temperature: when the temperature exceeds the preset protection value, the panel will turn off floor heating. The protection temperature ranges from 5 to 80°C.
- Outdoor temperature: to set temperature source for obtaining temperature. If selecting “Receive Feedback” or “Ask Feedback”, user may set the subnet ID, device ID and channel of external sensor.

③ Temperature range from: user may customize the working temperature range of floor heating, the default range is from 5°C to 35°C.

④ Working setting:

- Output: to select “Relay ON/OFF” or “PWM Value”.
- Min.-Max. PWM: to set PWM value range.
- Heating speed: to set the heating speed of floor heating.
- Control cycle: to set the control period of the relay and PWM, whose ranges both are from 1 to 20 minutes.
- Day/Night start at: timer mode includes Day/Night mode, floor heating automatically enters Day/Night mode at the set time in “Day/Night start at”.
- Mode: to enable 5 work modes.
- Mode changeover (auto mode-between floor heating and floor cooling):

1. Auto mode triggering temperature deviant value: after auto mode is selected, user may set temperature deviant value to enable switching between floor heating/cooling. Temperature deviant value ranges from 1°C to 5°C.

For example, set the temperature in auto mode to 20°C and temperature deviant value to 2°C, when the ambient temperature exceeds 22°C, floor cooling will be activated. When the ambient temperature is under 18°C, floor heating will be activated.

2. Enable PID: select to enable PID.
3. Always ON: select to lock floor heating running, floor heating will keep on all the time.
4. Sync command: to enable/disable broadcasting. After selecting the option, other panels can synchronize the panel information after reception.

5. Sync mode: to select to synchronize the floor heating working mode of other panels.
  6. Sync ON/OFF: to select to synchronize the floor heating ON/OFF status of other panels.
  7. Sync temperature: to synchronize the floor heating temperature of other panels.
- ⑤ Test: to set floor heating ON/OFF and mode (Normal, Day, Night and Away).

For example, select “ON Heating” to enable floor heating, set mode to “Heating” and the temperature to 20°C, and save. If configured successfully, floor heating page should display “Normal/20°C”.

## 6 Music Setting

Select “Music” label in the panel configuration page, as shown in Figure 6-1.

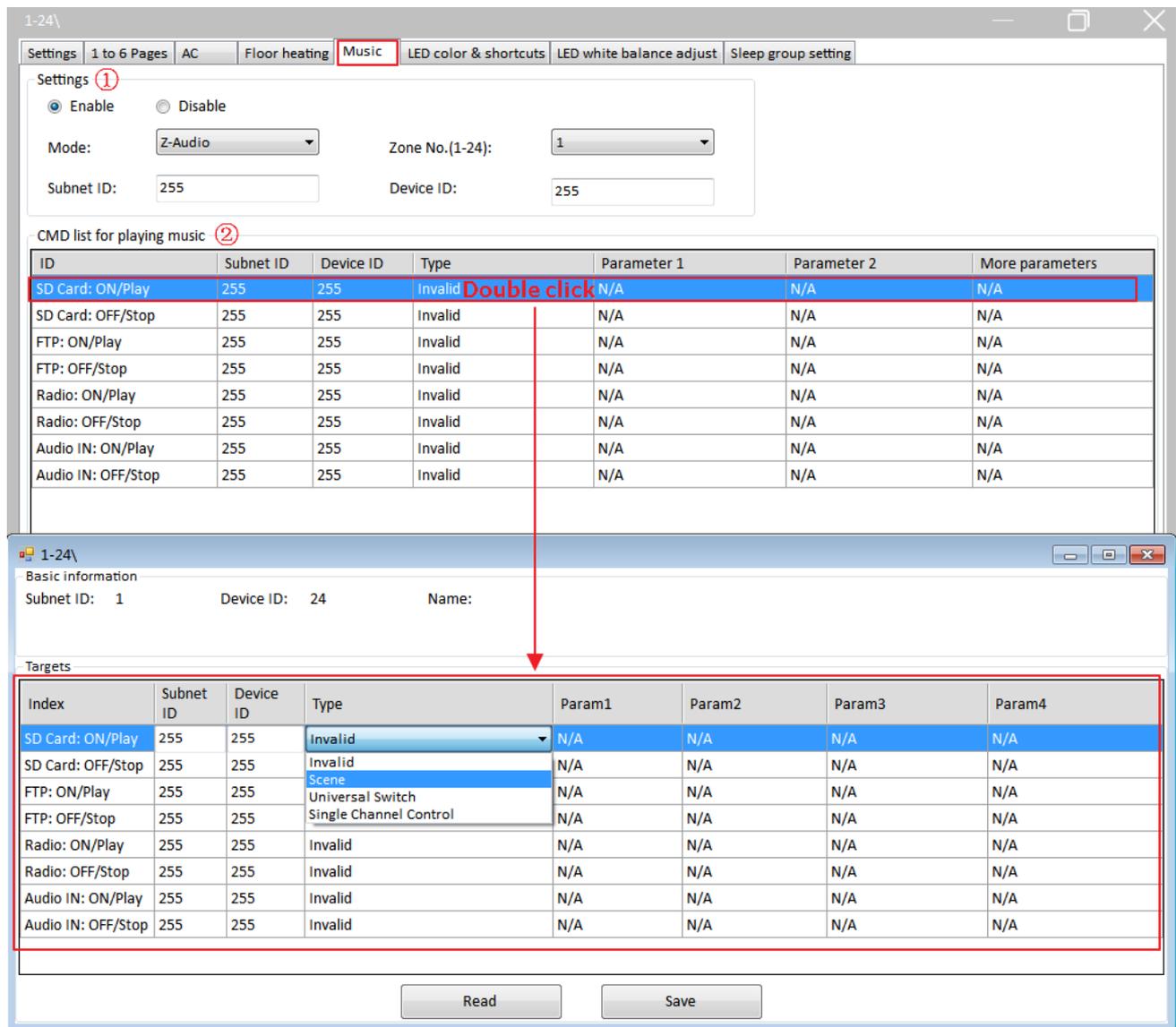


Figure 6-1 Music setting

The setting items are explained below:

- ① Settings:
  - Enable/Disable: to enable/disable music function.
  - Mode: to select music device type, including “Z-Audio”, “NUVO” and “Casatunes”. Z-Audio directly receives music control commands, while other device types need to convert control commands by RS232 module.

- Zone No. (1-24): to select music device zone number, which ranges from 1 to 24, the default value is 1.
  - Subnet ID: the subnet ID of music device.
  - Device ID: the device ID of music device.
- ② CMD list for playing music: to double click object ID column to open configuration page. An object can be respectively set by 0-6 music source switch for now, user can set objects on the basis of requests.
- Subnet ID: the subnet ID of music source.
  - Device ID: the device ID of music source.
  - Type: to select “Scene”, “Universal switch” or “Single channel control”.
  - Parameter: the type and data of parameters depend on the selected types.

## 7 LED Setting

### 7.1 LED Color & Shortcuts Setting

Select “LED color & shortcuts” label in the panel configuration page, as shown in Figure 7-1.

- ① LED color: to set button LED color in on/off state.
- ② Shortcut: to set the page appearing after clicking/clicking again the shortcut button, which ranges from 1 to 9.

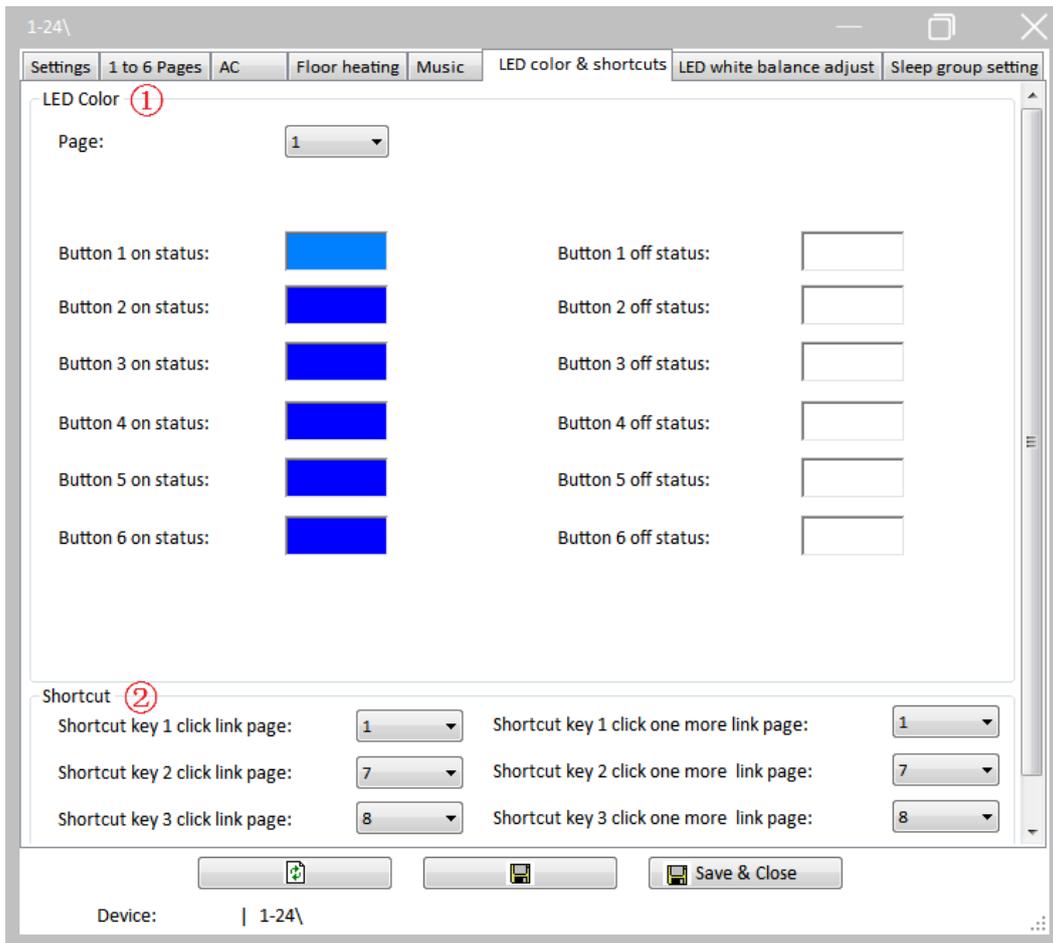


Figure 7-1 LED Color & Shortcuts Setting

## 7.2 LED White Balance Adjustment

Select “LED white balance adjust” label in the panel configuration page, as shown in Figure 7-2.

When button LED color differentiates from standard white, user need to set button LED color to standard white in “LED color & shortcuts”, and correct white via changing the RGB value of “LED white balance adjust”, which ranges from 0 to 100.

For example, when button LED color is set to white, if the color shows a little red, the R value need to be lowered until the color shows standard white.

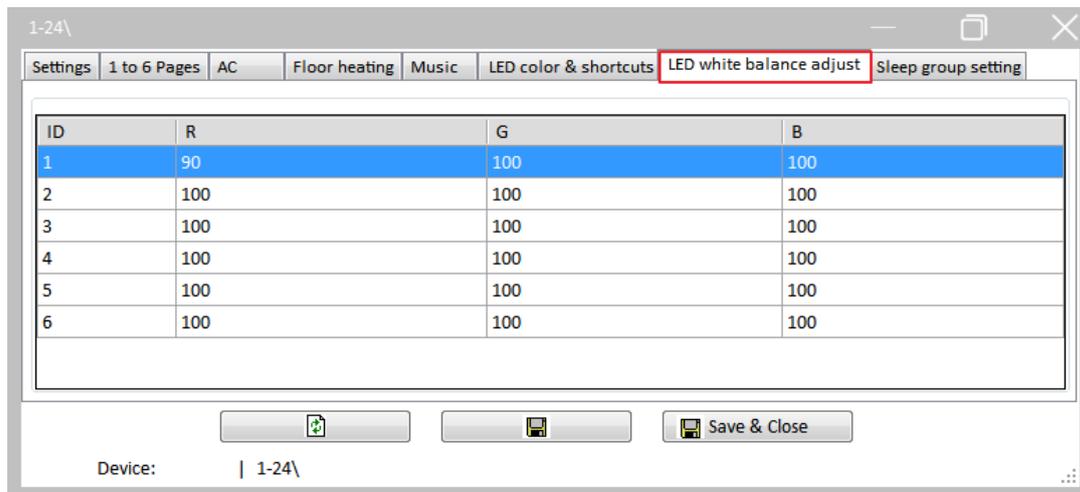


Figure 7-2 LED white balance adjustment

## 8 Sleep Group Setting

Select “Sleep group setting” label in the panel configuration page, as shown in Figure 8-1.

Sleep control: after the panel receives sleep command, the panel LED and LCD will enter/exit sleep status. Sleep control includes group ID and sleep brightness. After the panel enables sleeping and the sleep group is selected, sleep control command can be received.

This chapter takes “When panel A enters sleep status, panel B and C will enter at the same time” as an example.

User may select “Allow sleep” and sleep group 1 in the sleep group setting of panel A/B/C. Panel A/B/C will belong to sleep group 1 and click “save”. When panel A enters sleep status, other panels in the same group will enter sleep status as the same time (here refers to panel B and panel C).

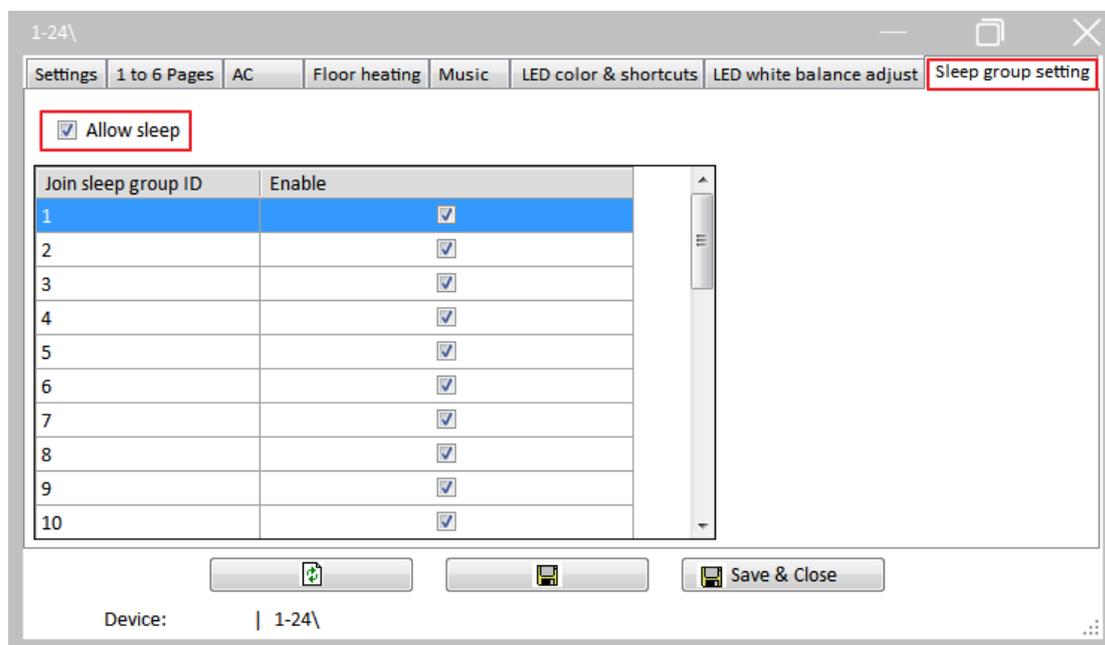


Figure 8-1 Sleep group setting