

INTELLIGENT ARLIGHT

ОПИСАНИЕ ПОЛЬЗОВАТЕЛЬСКОГО ИНТЕРФЕЙСА СЕНСОРНОЙ ПАНЕЛИ KNX-113-51-MULTI-V5-IN

CONTENTS

CHAPTER 1 INTRODUCTION	2
CHAPTER 2 UI DESCRIPTION	2
2.1 Home Page Navigation Interface.....	3
2.2 Multifunction Page.....	4
2.2.1 Switch Function	5
2.2.2 Switching/Dimming Function	6
2.2.3 Value Send Function.....	6
2.2.4 Blind Function	7
2.2.5 Scene Function.....	9
2.3 HVAC Function Page.....	10
2.4 Air-Conditioner Function Page.....	12
2.5 Floor Heating Function Page	14
2.6 Ventilation System Function Page	15
2.7 RGB Dimming Function Page	17
2.8 Energy Metering Display Function Page.....	19
2.9 Air Quality Display Function Page	20
2.10 Background Music Function Page.....	21
2.11 Setting Page	23
2.12 Screen-saver	27
2.13 Password.....	29
2.14 Panel Lock.....	29
2.15 Other Functions.....	30
CHAPTER 3 SCREEN BACKGROUND	31
CHAPTER 4 ICONS FOR FUNCTION PAGE.....	32
4.1 Icon List for Function Page.....	32
4.2 Icon Replacement for Function Page	34
CHAPTER 5 ICONS FOR HOME PAGE	36
5.1 Icon List for Home Page.....	36
5.2 Icon Replacement for Home Page	38



CHAPTER 1 INTRODUCTION

This document is for the UI description of the KNX-113-51-MULTI-V4-IN. As an appendix of this product, it is necessary to understand the UI function by the relevant description in the manual of this product. For example, users need to configure specific parameters for the UI interface to be presented. Therefore, please refer carefully to the relevant documents and function description before using the product.

CHAPTER 2 UI DESCRIPTION

This chapter mainly introduces the interactive application of each function interface of this product in detail.

The main functions of UI are summarized as follows:

- ▼ Album and background can be replaced with customized pictures;
- ▼ Icons for home page and function page can be replaced with customized icons;
- ▼ Home page can display date and time, which can be modified manually on the screen;
- ▼ Home page can display temperature and humidity;
- ▼ Home page support 1/2/3/4/6/8 layout display, up to 2 home pages can be created;
- ▼ Multifunction page support 1/2/3/4/6/8 layout display, and support 2 UI styles with windows tile and list tile;
- ▼ Icon status of Multifunction page can be indicated by icons or block;
- ▼ Dimming and blind function pages are able to display status information in real time;
- ▼ Support to manually enable/disable weekly timer, and Weekly timer can be temporarily inactive through holiday setting;
- ▼ Support screen locking and function page locking, and display the locking status.
- ▼ Support screen-saver and password function;
- ▼ Proximity sense can be manually adjusted or off;
- ▼ Enable/disable screen sliding and vibration;
- ▼ Support manually adjusting screen brightness;
- ▼ Support manually adjusting touch volume;
- ▼ System information of the device can be checked.



2.1 HOME PAGE NAVIGATION INTERFACE



Fig. 2.1

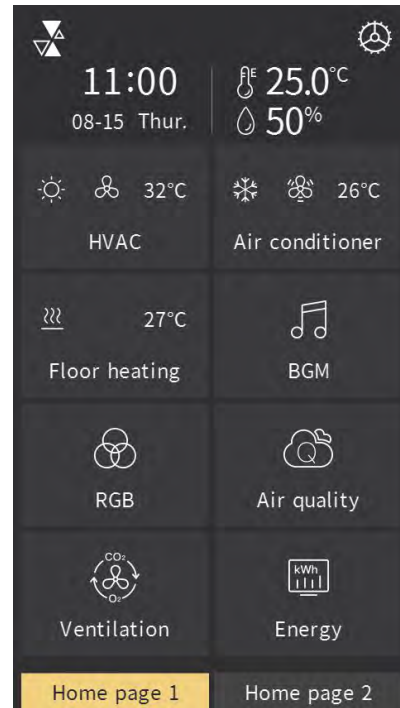


Fig. 2.2



Fig. 2.3



Fig. 2.6



Fig. 2.4



Fig. 2.7



Fig. 2.5

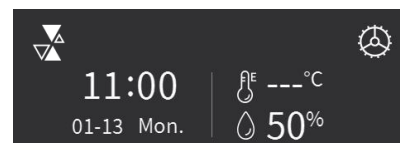


Fig. 2.8

① This area displays the logo of Intelligent Arlight;

② This icon is the setting icon, enter the setting page, see section 2.11 for details by touching this icon;

③ This area displays the current date and time;

The date and time can be modified on the setting page, or through the bus, see details in section 2.11.

④ When internal temperature is configured, there is no "E" at the upper right corner of the icon;

⑤ When external temperature is configured, there is an "E" at the upper right corner of the icon;

When the source of temperature display is external sensor but no valid value received, the data bit is displayed as "---", as shown in Fig.2.3. When temperature unit is set to degrees Celsius (°C) through ETS, temperature display as shown in Fig.2.1. When temperature unit is set to Fahrenheit(°F), temperature display as shown in Fig.2.4.

When disable temperature display in the ETS, there is no temperature display in the interface, as shown in Fig.2.5; when disable temperature display in the ETS and no humidity feedback is received from external sensor, as shown in Fig.2.6; when enable temperature display in the ETS but no humidity feedback is received from external sensor, as shown in Fig.2.7.

⑥ This area displays humidity, and the data is obtained from the external sensor;

When humidity from the external sensor feedback is received, interface as shown in Fig.2.5. When no humidity from the external sensor feedback is received, there is no humidity shown in the interface .



⑦ This area displays home page name, user can define the name by configuring the description in the ETS.

Home page navigation as shown in Fig.2.1, the number of home page navigation can be configured up to 2, to quickly jump to a function page or directly manipulate a function icon (switch, switch/dimming, blind, value send, scene).

If the association function of the shortcut, shown on the home page interface, link to a function page, its page icon can be configured in the ETS, and its description is the page description of the linked function page; where the HVAC, the air conditioner, the floor-heating default icon option is made up of individual sub-functional information (mode, fan speed, temperature setting, heating status), as shown in Fig.2.2; if the association function link to an icon function on a function page, the display effect is consistent with the icon configuration. If the linked page or icon does not exist, the corresponding location will be empty.

2.2 MULTIFUNCTION PAGE

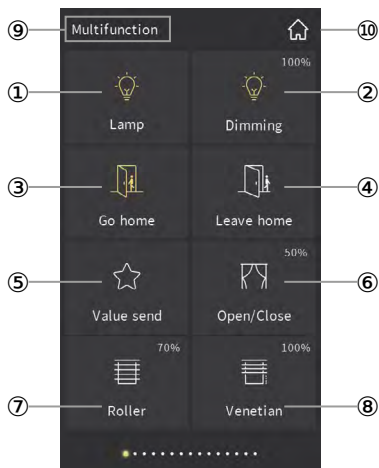


Fig.2.2.1

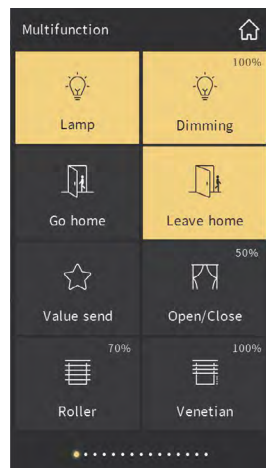


Fig.2.2.2

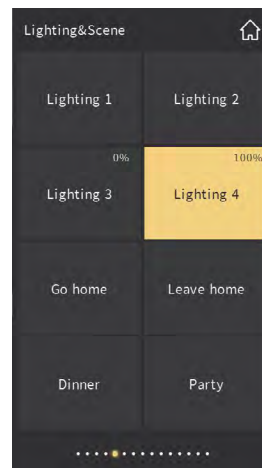


Fig.2.2.3

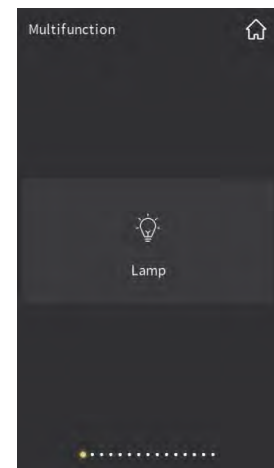


Fig.2.2.4

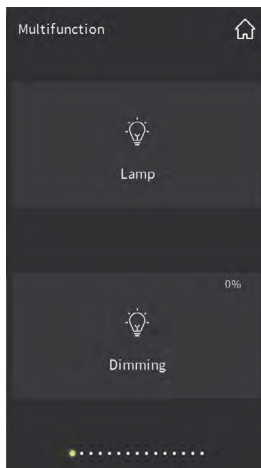


Fig.2.2.5

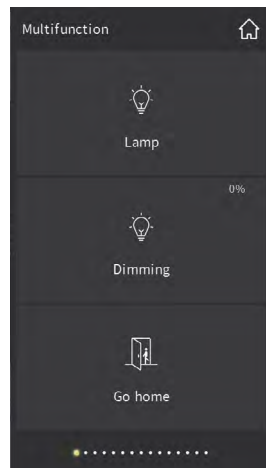


Fig.2.2.6

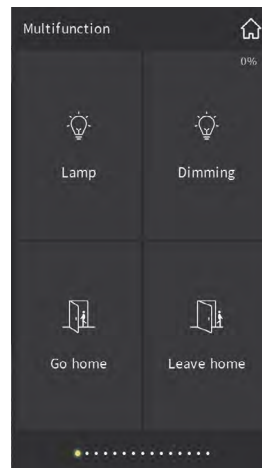


Fig.2.2.7

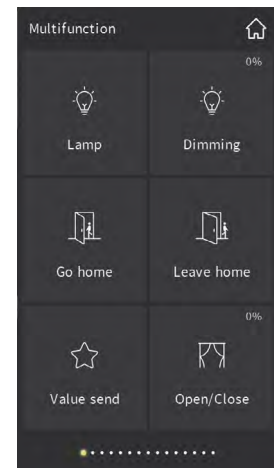


Fig.2.2.8

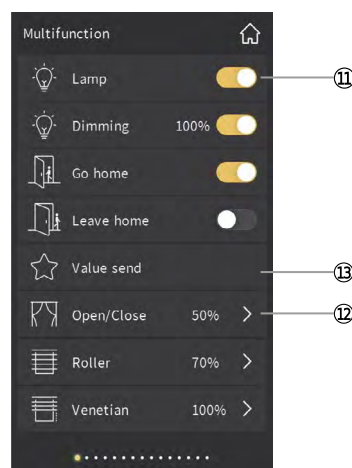


Fig.2.2.9



The interactive interface style of multifunction page is shown in Fig.2.2.1-Fig.2.2.9 above. The interface style, and the number of icons displayed, with a maximum of 8, can be set through parameters setting. The effects shown as Fig.2.2.4-Fig.2.2.8, the number of icons set to 1, 2, 3, 4, 6, respectively.

①-⑧ The serial number marked in Fig.2.2.1 above is consistent with the sequence number of the function icon in the ETS, that is, the placement principle of the function icon is from left to right and from top to bottom;

When multifunction icon is windows tile display, the function status is indicated by the icon in the block. For example, in Fig.2.2.1, the icon on indicates the lamp turn on and the icon off indicates the lamp turn off; in Fig.2.2.2, the icon block and icon on indicates the lamp turn on, and the icon block and icon off indicates the lamp turn off; in Fig.2.2.2, if the function is dimming, the upper right corner of the block displays the current brightness, which is from the output brightness feedback of the dimmer actuator. Except the light/off status display, the icon of value sending will shake when being manipulate and the icon of blind will show the position status; in Fig.2.2.3, the interface can set to display no icon but only text by parameter configuration, block on indicates the lamp turn on and block off indicates the lamp turn off.

⑨ This area is the page description identification of the multifunction page, user can define the description through ETS;

⑩ This icon is the main page icon, return to the home page by touching this icon;

When the multifunction icons are configured as list tile and display in the list, as shown in Fig. 2.2.9.

⑪ The status of button icon indicate the corresponding function;

⑫ Enter the control interface of the sub-function by touching this tile;

The operation effects of the same icon for the following curtain function are the same and will not be described again.

⑬ The function of this area is value sending.

Icons for different functions in list:

- (1) For switch function, click the button icon ⑩, the icon on indicates the lamp turn on and the icon off indicates the lamp turn off;
- (2) For switch/dimming function, click the button icon ⑩, the icon on indicates the lamp to turn on and the icon off indicates the lamp to turn off, enter the dimming operation sub-interface by touching the tile, and the area next to the button shows the brightness feedback of the lamp;
- (3) For curtain function, click area ⑩ to enter the control interface of the curtain function, and the area next to the button shows the position feedback of the curtain;
- (4) For value sending function, the icon wobbles according to when short pressing area ⑩, and the icon shake horizontally when long pressing area ⑩.
- (5) For scene function, click the button icon ⑩, the icon on indicates that the scene is successfully sent and called, the button status will be updated according to the scene currently called, the icon will shake when long pressing the button icon to saves the scene.
- (6) When on the function page, by clicking the homepage icon in the upper right corner to return to the home page.

2.2.1 SWITCH FUNCTION



Fig.2.2.1.1



Fig.2.2.1.2

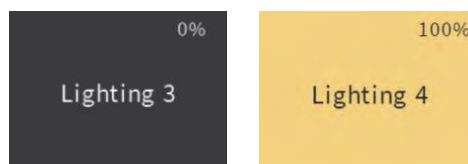


Fig.2.2.1.3

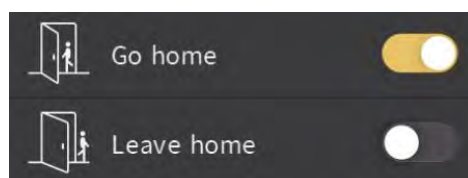


Fig.2.2.1.4



The status of the switch function in different UI styles is shown in the figure above.

- (1) In Fig.2.2.1.1, the icon on (shown in the right figure) indicates the lamp to turn on and the icon off (shown in the left figure) indicates the lamp to turn off;
- (2) In Fig. 2.2.1.2, the block and icon on (shown in the right figure) indicates the lamp to turn on, the block and icon off (shown in the left figure) indicates the lamp to turn off;
- (3) In Fig. 2.2.1.3, the block on (shown in the right figure) indicates the lamp to turn on, and the block off (shown in the left figure) indicates the lamp to turn off;
- (4) In Fig.2.2.1.4, the switch button icon on (shown in the right figure) indicates the lamp to turn on, and the switch button icon off (shown in the left figure) indicates the lamp to turn off. At the same time, it can be updated and displayed according to the switch status of the bus feedback.

2.2.2 SWITCHING/DIMMING FUNCTION

The status of switching/dimming function is similar to that of switch under different UI styles, as figures shown above, the difference is that the current brightness status is displayed at the same time on the icon, which needs to receive brightness feedback from the dimming actuator from the bus to be displayed accurately.

Enter the dimming function control interface as shown in Fig. 2.2.2.1 below.

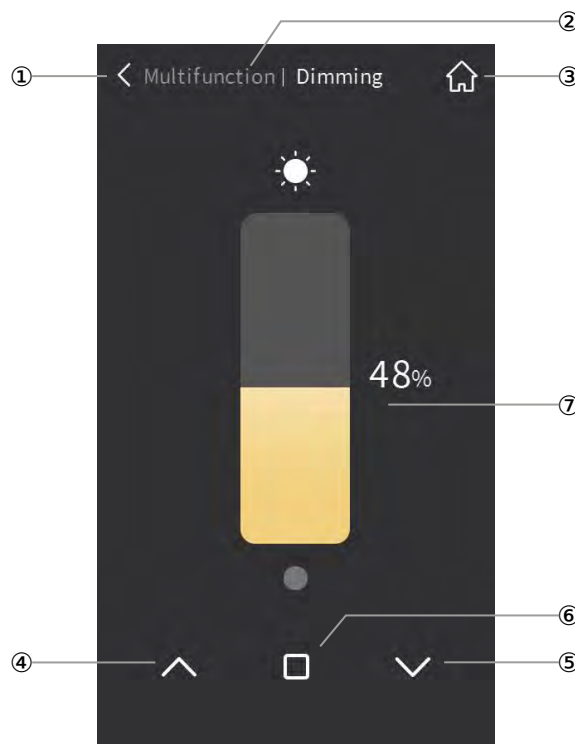


Fig.2.2.2.1

- ① Return to the previous level interface by touching this icon;
- ② This area displays the identification of page description, format as: page description of previous level page | description of functional icon currently manipulated;
- ③ Return to the home page by touching this icon;
- ④ Adjust the brightness in the way of relative dimming by touching this icon, with the target brightness 100%;
- ⑤ Adjust the brightness in the way of relative dimming by touching this icon, with the target brightness 0%;
- ⑥ Adjust the brightness in the way of relative dimming , and stop dimming by touching this icon;
- ⑦ Adjust the brightness in the way of percentage by sliding this slider.

At the same time, the slider status can also be updated according to the brightness feedback received from the bus.

2.2.3 VALUE SEND FUNCTION

By touching the icon, the device will send the corresponding telegram to the bus, and the icon will shake. If long operation is set, the long/ short operation of the icon will send the corresponding setting value. When in short press operation, the control telegram will be triggered when touch the icon, and if the long operation is enabled, only after the fixed time of the long operation (the default is 500ms) will the control telegram be triggered.

2.2.4 BLIND FUNCTION

Blind function including 3 types: Open/Close Blind, Roller Blind (without slat) and Venetian Blinds (with slat). Besides, in the UI interface, the current position status of the curtain is displayed on the icons of all 3 types of blinds, which needs to be accurately displayed based on the position of the blinds that is fed back from the curtain actuator received on the bus

OPEN/CLOSE BLIND

This type is for Open/Close Blind controlling, supporting to adjust the position of blind by sliding the slider in the form of percentage as well as to open the blind, close the blind and stop the blind from running by manipulating three controlling buttons. The control interface of Open/Close Blind function is shown in Fig.2.2.4.1 below.

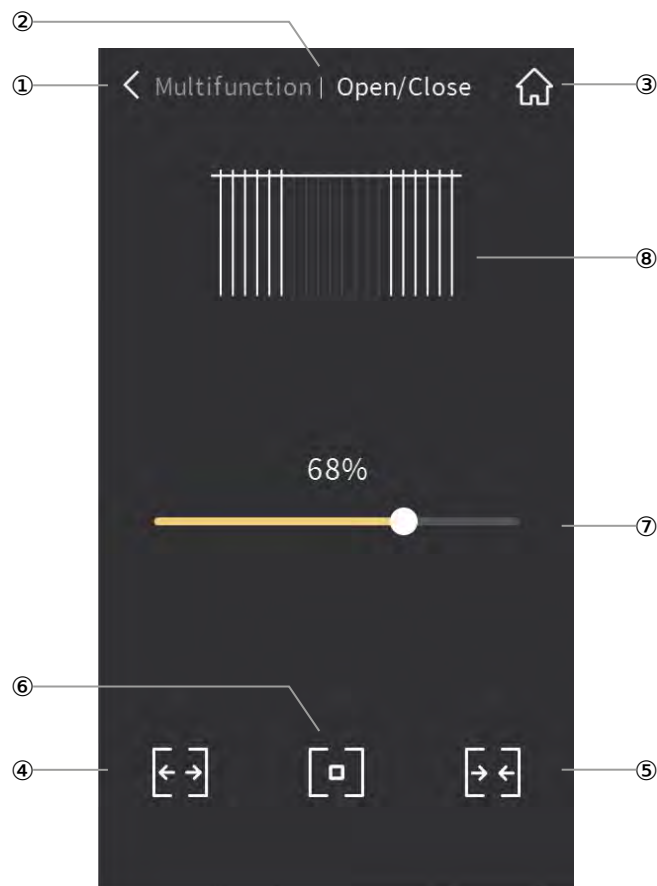


Fig.2.2.4.1

- ① Return to the previous level interface by touching this icon;
- ② This area displays the identification of the page description, format as: page description of previous level page | description of functional icon currently manipulated;
- ③ Return to the home page by touching this icon;
- ④ Open the blind by touching this icon;
- ⑤ Close the blind by touching this icon;
- ⑥ Stop the blind running by touching this icon;
- ⑦ This icon is the slider icon, adjust the position of blind in the form of percentage by sliding this slider;
- ⑧ This icon displays the simulation of blind position.

By sliding the slider ⑦ to adjust the position of blind in the form of percentage, during the sliding, icon ⑧ will dynamically simulate the opening and closing behavior of curtains.

At the same time, the status of slider ⑦ and icon ⑧ will also update according to the curtain position status feedback received from the bus.

ROLLER BLIND (WITHOUT SLAT)

This type is for Roller Blind (without slat) controlling, supporting to adjust the position of blinds by sliding the slider in the form of percentage as well as to open the blind, close the blind and stop the blind from running by manipulating three controlling buttons. The control interface of Roller Blind (without slat) function is shown in Fig. 2.2.4.2 below.

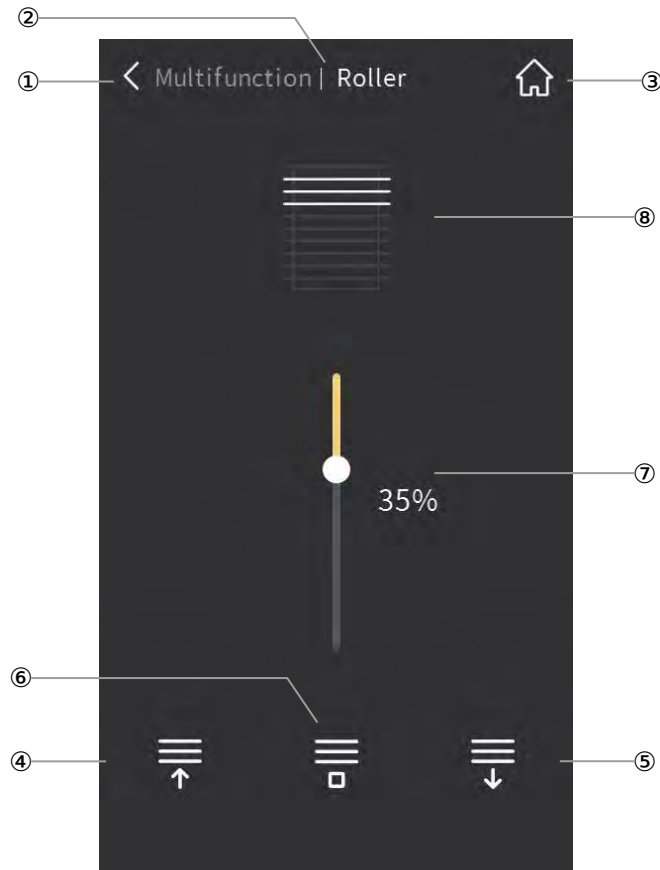


Fig.2.2.4.2

- ① Return to the previous level interface by touching this icon;
- ② This area displays the identification of the page description, format as: page description of previous level page | description of functional icon currently manipulated;
- ③ Return to the home page by touching this icon;
- ④ Run up the blind by touching this icon;
- ⑤ Run down the blind by touching this icon;
- ⑥ Stop the blind from running by touching this icon;
- ⑦ This icon is the slider icon, adjust the position of blind in the form of percentage by sliding this slider;
- ⑧ This icon displays the simulation of blind position.

By sliding the slider ⑦ to adjust the position of blind in the form of percentage, during the sliding, icon ⑧ will dynamically simulate the opening and closing behavior of curtains.

At the same time, the status of slider ⑦ and icon ⑧ will also be updated according to the curtain position status feedback received from the bus.

VENETIAN BLINDS (WITH SLAT)

This type is for Venetian Blind(with slat) controlling, supporting to adjust the position of blind and angle of louver by sliding the slider in the form of percentage as well as to open the blind, close the blind and stop the blind from running by manipulating three controlling buttons. The control interface of Roller Blind(without slat) function is shown in Fig.2.2.4.3 below.

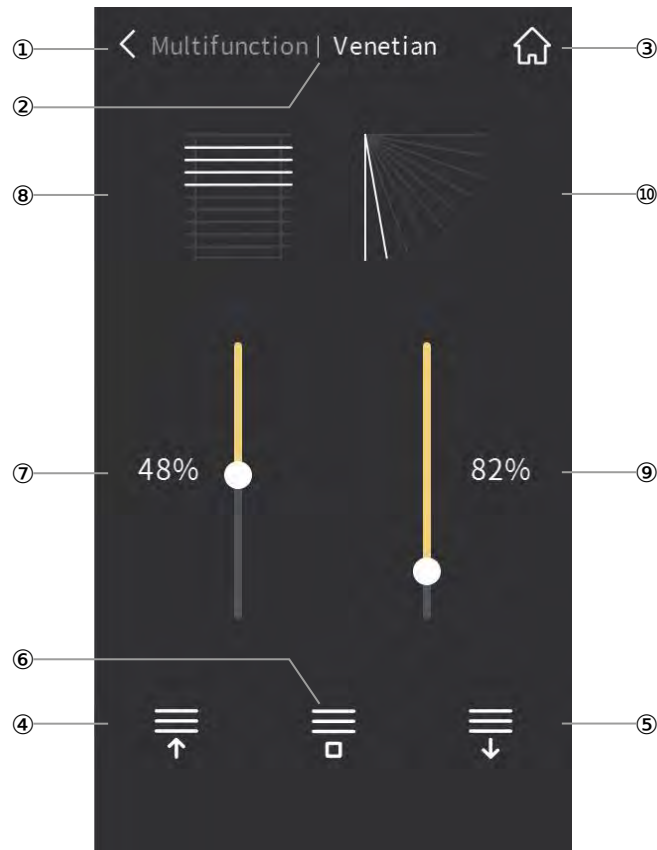


Fig.2.2.4.3

- ① Return to the previous level interface by touching this icon;
- ② This area displays the identification of the page description, format as: page description of previous level page | description of functional icon currently manipulated;
- ③ Return to the home page by touching this icon;
- ④ Run up the blind by touching this icon;
- ⑤ Run down the blind by touching this icon;
- ⑥ Stop the blind from running by touching this icon;
- ⑦ This icon is the slider icon of curtain position, adjust the position of blind in the form of percentage by sliding this slider;
- ⑧ This icon displays the simulation of blind position.
By sliding the slider⑦ to adjust the position of blind in the form of percentage, during the sliding, icon⑧ will dynamically simulate the opening and closing behavior of curtains.
- ⑨ This icon is the slider icon of louver angle,adjust the position of blind in the form of percentage by sliding this slider;
- ⑩ This icon displays the simulation of louver angle.
By sliding the slider⑨ to adjust the position of blind in the form of percentage, during the sliding, icon⑩ will dynamically simulate the changing behavior of louver angle.
At the same time, the status of slider⑦, icon⑨ and icon⑩ will also be updated according to the curtain position status feedback received from the bus.

2.2.5 SCENE FUNCTION

By touching the icon, the device sends the corresponding scene telegram to the bus. If long operation is set, short pressing the icon for the scene call, long pressing the icon for the scene store. The icon status is updated according to the scene currently called, and if the scene is saved, the icon will shake (horizontally).



2.3 HVAC FUNCTION PAGE

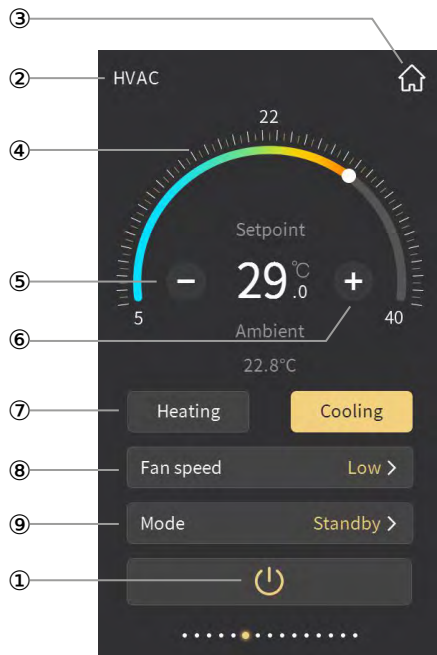


Fig.2.3.1

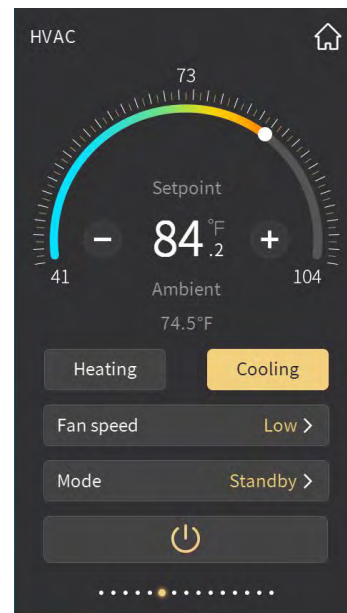


Fig.2.3.2

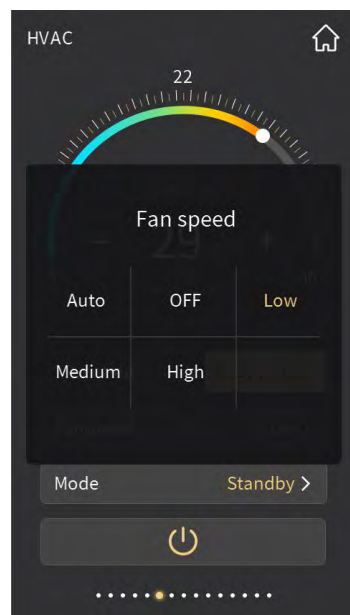


Fig.2.3.3

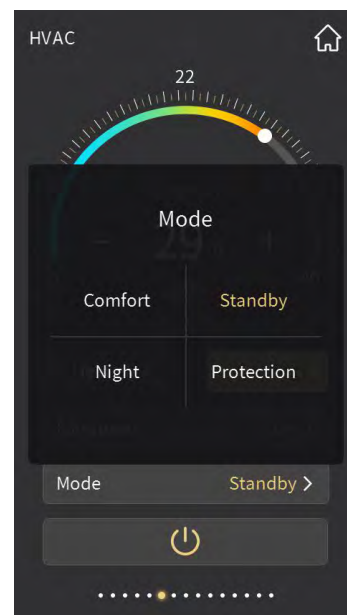


Fig.2.3.4

- ① This icon is ON/OFF button for the on/off of HVAC;
The initial state of power is defined according to the parameters, and it may also be in an uncertain state. When ON, the interface can be operated; when OFF, the other icons are not operable except the ON/OFF button.
- ② This area displays the page description identification of HVAC function page, user can define the description through ETS;
- ③ Return to the home page by touching this icon;
- ④ Sliding this ring slider to adjust the setting temperature;
- ⑤ The function of this icon is to decrease the temperature;
- ⑥ The function of this icon is to increase the temperature;
Adjusting the temperature by sliding the ring slider④ or touching the icon⑤ and icon⑥. For each touching of icon⑤ and icon⑥, the adjustment range is 0.5 degrees. When the setting temperature unit is set to degrees Celsius[°C], as shown in 2.3.1, adjustment range of the setting temperature is 5~40°C by default; when the setting temperature unit is set to Fahrenheit(°F), the current temperature value will automatically convert to Fahrenheit



value, as shown in Fig.2.3.2, adjustment range of the setting temperature is 41-104°F by default. The temperature adjustment range can be modified through parameter setting.

The ambient temperature is displayed according to the parameter configuration, whether it is detected by the internal sensor or the external sensor can be configured to be displayed.

⑦ This icon is the Heating/Cooling icon, for heating and cooling switching;

This icon can be displayed individually as heating or cooling by parameter configuration.

⑧ Enter the fan speed setting by touching this area, and will pop up a sub-window shown as Fig.2.3.3;

This window shows up to 5 options of fan speed: Auto, OFF, Low, Medium and High. Select one of these options then touch the area outside the sub-window to return the previous level function page. Under the auto fan speed, there would be no specific fan speed shown on the interface; the auto fan speed can be disable or enable by parameter configuration, when disable, there would be no Auto option on the window.

Fan speed adjustment of HVAC set to be disable or enable through parameter configuration. When disable, there would be no fan speed function shown on the interface; when enable, fan speed can be adjusted.

⑨ Enter the mode setting by touching this area, and will pop up a sub-window shown as figure 2.3.4.

This window shows up to 4 options of mode: Comfort, Standby, Night and Protection, select one of these options then touch the area outside the sub-window to return to the previous level function page.

Operation mode of HVAC set to be disable or enable through parameter configuration. When disable, there would be no mode option shown on the interface; when enable, operation mode can be selected.

Remarks:

① When the setting temperature for operation mode is configured as relative adjustment, the adjustment of setting temperature under the protection mode only acts on the protection mode, for other modes, relative change of temperature adjustment are able to act on all modes (except the setting temperature of protection mode).

② When the setting temperature for operation mode is configured as absolute adjustment, the adjustment of setting temperature only acts on the current operating mode.



2.4 AIR-CONDITIONER FUNCTION PAGE

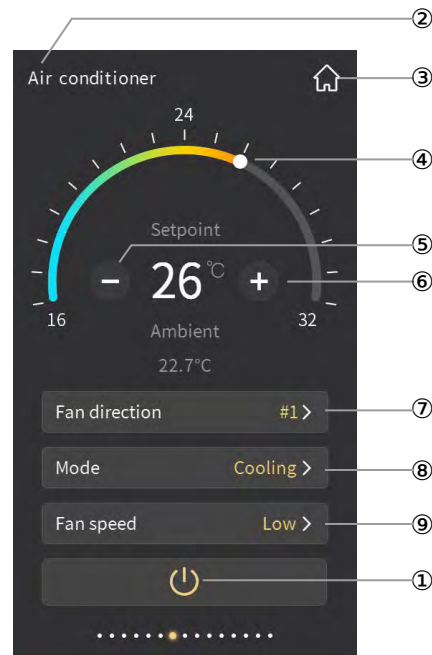


Fig.2.4.1

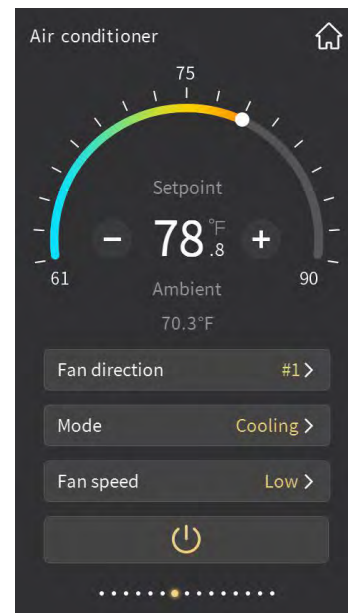


Fig.2.4.2

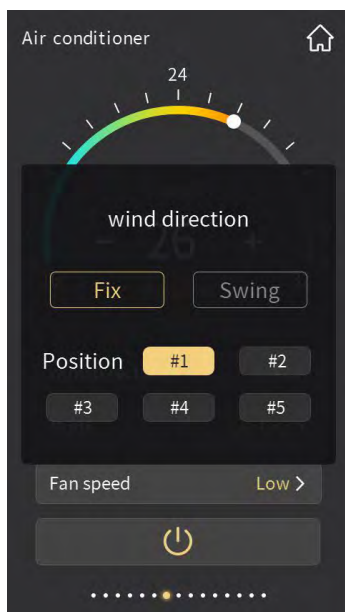


Fig.2.4.3

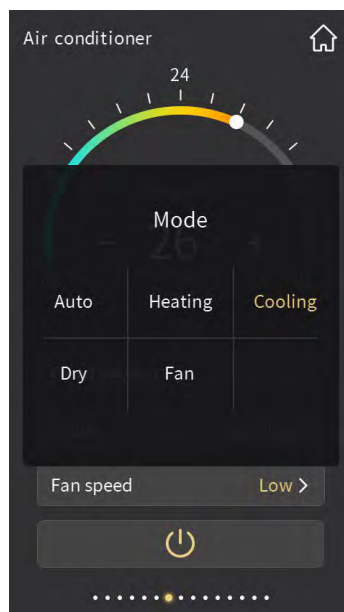


Fig.2.4.4

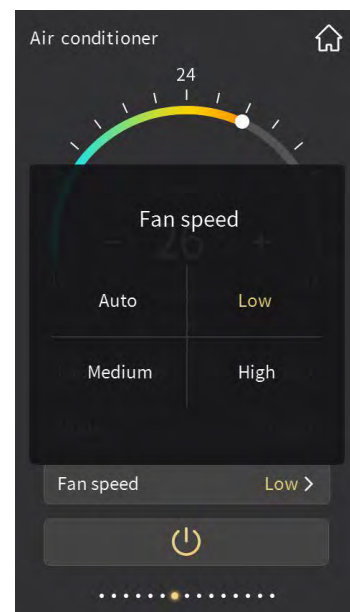


Fig.2.4.5

- ① This icon is ON/OFF button for the on/off of Air-Conditioner control;
When ON, the interface can be operated; when OFF, the other icons are not operable except the ON/OFF button.
Under the control mode of IR Split Unit, the mode of ON, Fan speed, and the setting temperature of Heating/Cooling can be configured through parameter; Under the control mode of Gateway Integrate, the status of ON mode, of Fan speed, and of Heating/Cooling setting temperature is the status before OFF. The Air-Conditioner control interface will recover to the status before power off.
- ② This area displays the page description identification of Air-Conditioner control, user can define the description through ETS;
- ③ Return to Home page by touching this icon;
- ④ Adjust the setting temperature by sliding this ring slider;
- ⑤ The function of this icon is to decrease the temperature;
- ⑥ The function of this icon is to increase the temperature.



Adjusting the temperature by sliding the ring slider④ or touching the icon⑤ and icon⑥. For each touching of icon⑤ and icon⑥, the adjustment range is 1.0 degrees. When the setting temperature unit is set to degrees Celsius(°C), as shown in Fig. 2.4.1, adjustment range of the setting temperature is 16~32°C by default; when the setting temperature unit is set to Fahrenheit(°F), the current temperature value will automatically convert to Fahrenheit value, as shown in Fig.2.4.2, adjustment range of the setting temperature is 61~90°F by default. The temperature adjustment range can be modified through parameter setting.

The ambient temperature is displayed according to the parameter configuration, it detected by the internal sensor or the external sensor can be configured to be displayed.

- ⑦ Enter to the fan direction setting by touching this tile, and will pop up a sub-window shown as Fig.2.4.3;
Fan direction setting is used to switch the working mode of fan direction, and there are two modes: fixed fan direction and swing fan direction. Select one of these options then touch the area outside the sub-window to return to the previous level function page.
Under fixed fan direction, select one of the 5 options (#1,#2,#3,#4,#5) for fan direction position, for instance, select #1, interface as shown in Fig.2.4.3, then touch the area outside the sub-window to return the previous level function page, the position selected will be shown on the fan direction area of the function page, as shown in Fig.2.4.1. For swing fan direction, because fan direction change all the time, there would be no fixed position, only display character "Swing" on the interface.
Fan speed adjustment of fan direction set to be disable or enable by parameter configuration. When disable, there will be no fan speed item shown on the interface, as shown in Fig.2.4.1; when enable, fan direction can be adjusted.
- ⑧ Enter the mode setting by touching this tile, and will pop up a sub-window shown as Fig.2.4.4;
This dialogue window shows up to 5 options of Air-Conditioner mode: Auto, Heat, Cool, Dry and Fan. Select one of these options then touch the area outside the sub-window to return to the previous level function page.
- ⑨ Enter the fan speed setting by touching this tile, and will pop up a sub-window shown as Fig.2.4.5;
This dialogue window shows up to 4 options of fan speed mode: Auto, Low, Medium and High. Select one of these options then touch the area outside the dialogue sub-window to return to the previous level function page.



2.5 FLOOR HEATING FUNCTION PAGE



Fig.2.5.1

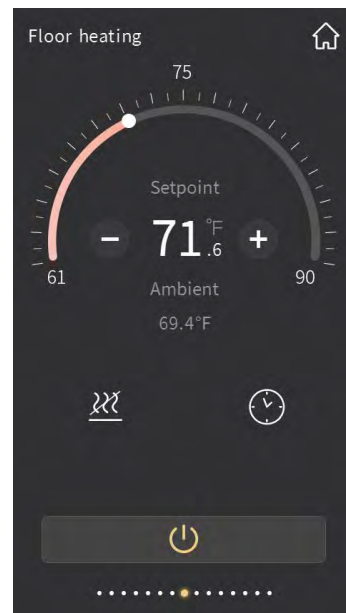


Fig.2.5.2

- ① This icon is ON/OFF button for the on/off of Floor Heating control;
When ON, the interface can be operated; when OFF, the other icons are not operable except the ON/OFF button.
- ② This area displays the page description identification of AC control, user can define the description through ETS;
- ③ Return to the home page by touching this icon;
- ④ Adjust the setting temperature by sliding this ring slider;
- ⑤ The function of this icon is to decrease the temperature;
- ⑥ The function of this icon is to increase the temperature;
Adjusting the temperature by sliding the ring slider④ or touching the icon⑤ and icon⑥. For each touching of icon⑤ and icon⑥, the adjustment range is 0.5 degrees. When the setting temperature unit is set to degrees Celsius(°C), as shown in 2.5.1, adjustment range of the setting temperature is 16~32°C by default; when the setting temperature unit is set to Fahrenheit(°F), the current temperature value will automatically convert to Fahrenheit value, as shown in Fig.2.5.2, adjustment range of the setting temperature is 61~90°F by default. The temperature adjustment range can be modified through parameter setting.
The ambient temperature is displayed according to the parameter configuration, it detected by the internal sensor or the external sensor can be configured to be displayed.
- ⑦ This is the heating status indication icon.
Icon⑦ on indicates the heating valve to be open; icon⑦ off indicates the heating valve to stop heating, at this time, floor heating would be in the unheated state.
Floor heating compares the setting temperature with actual temperature of current environment to define control value according to 2-point control or PI control mode, so that realizes the automatic opening or closing of the heating valve.
- ⑧ This icon is the indicate icon of timing, for ON/OFF timer function and timer status indication.
Icon⑧ on indicates timer on, icon⑧ off indicates timer off.
By touching this timer icon to turn on or off timer function. Timer function will turn off when floor heating OFF or when scene function of floor heating is recalled.

2.6 VENTILATION SYSTEM FUNCTION PAGE

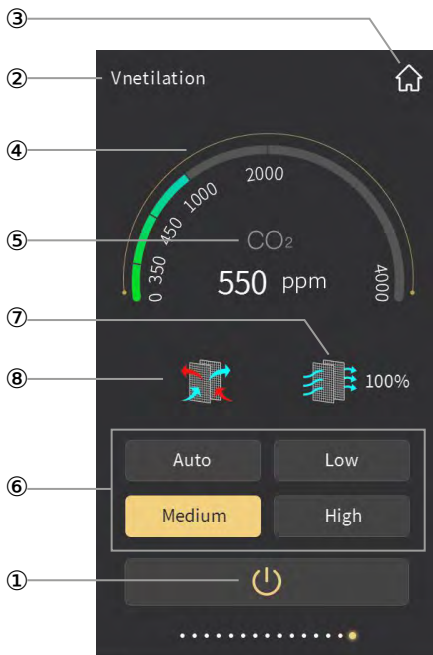


Fig.2.6.1

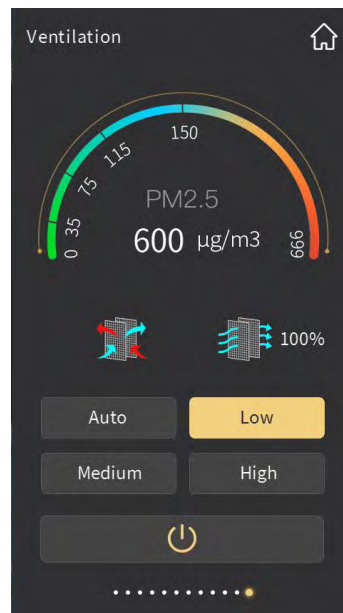


Fig.2.6.2

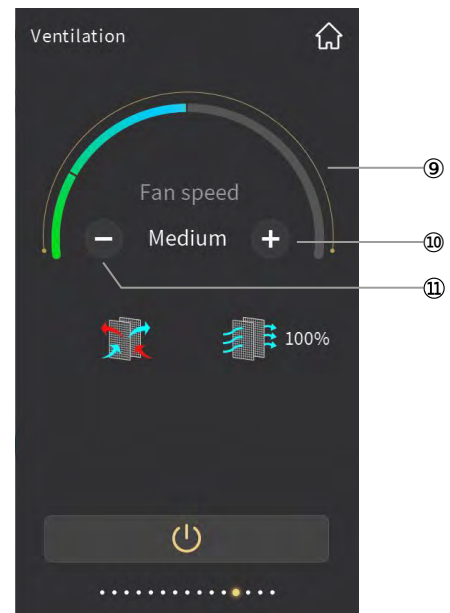


Fig.2.6.3

- ① This icon is ON/OFF button for the on/off of Ventilation System control;
The initial state of power is defined according to the parameters, and it may also be in an uncertain state. When ON, the interface can be operated; when OFF, the other icons are not operable except the ON/OFF button.
- ② This area displays the page description identification of Ventilation System, user can define the description through ETS;
- ③ Return to home page by touching this icon;
- ④ This ring bar displays the concentration value of CO₂/PM_{2.5} ;
- ⑤ This icon displays the concentration of CO₂/PM_{2.5};
Only when auto fan speed control of ventilation system is enable would this interface display, as shown in Fig.2.6.1 and Fig.2.6.2.
CO₂ concentration shown as Fig.2.6.1, according to the value received from the bus, range 0~4000ppm; if the data exceed 4000ppm, then the interface will display 4000ppm.
PM_{2.5} concentration shown as Fig.2.6.2, according to the value received from the bus, range 0~999ug/m³; if the data exceed 999ug/m³,then the interface will display 999ug/m³.
- ⑥ This icon is for fan speed setting;
There is up to 4 options for fan speed mode: Auto, Low, Medium and High. When fan speed auto control is enable, auto fan speed adjustment will be displayed on the interface, shown as Fig.2.6.1 and Fig.2.6.2. Whether fan speed auto control is enable or not is configured through parameter configuration.
When fan speed auto control is enable, fan speed level is calculated according to CO₂ or PM_{2.5} concentration. The interface displays only the auto icon, but no specific fan speed level.
- ⑦ This icon is the filter timer icon;
Whether the filter timer counter function is enable or not is configured through parameter configuration. When disable, there will be no display of filter timer counter function on the interface as shown in Fig.2.6.1; when enable, icon⑦ will be colorful after ventilation system ON, the remaining evaluation value will be displayed next to it. The value will be updated according to the use time, which will be updated through the bus.



The service life of the filter set by the parameter configuration. When the filter time reaches to the parameter setting value, the alarm state can be issued through the bus, and the remaining filter timer value can be displayed to be 0%. When touch icon ②, the filter time can be reset, as shown in Fig.2.6.4 below. After clicking "Confirm", the filter timer value can be reset to 100%.

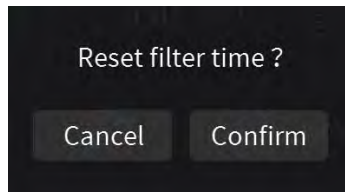


Fig.2.6.4

- ② This is the heat recovery icon, used to turn on or off heat recovery function;
Whether heat recovery function of ventilation system is enable or not is configured through parameter configuration. When disable, there will be no display of heat recovery function on the interface as shown in Fig.2.6.1; when enable, heat recovery function is turned on by default when ventilation system is ON, and the heat recovery function can be turned on or off by touching icon ②. The icon on indicates that the heat recovery is on; the icon off indicates that the heat recovery is off. In addition, heat recovery function can be turned on or off through the bus. And there would be no responding after enable heat recovery function.
 - ③ This ring bar displays specific fan speed level;
 - ④ To increase fan speed level by touching this icon ;
 - ⑤ To decrease fan speed level by touching this icon.
- When fan speed is not configured as auto, as shown in Fig.2.6.3, by touching icon ④ and icon ⑤ to adjust fan speed; for each touch of icon ④ and icon ⑤ to adjust one level, there is 3 modes of fan speed: Low, Medium and High. At this time, the adjustment is manually, not automatically according to the concentration of CO₂ or PM2.5.

2.7 RGB DIMMING FUNCTION PAGE

There are 3 control types of RGB dimming function: RGB, RGBW, RGBW+Color Temperature and Brightness+Color Temperature, are configured through parameter configuration. Among them, RGB is suitable for adjusting RGB lamp; RGBW is suitable for controlling RGBW strip; RGBW+Color Temperature is suitable for RGBW lamp, or RGB lamp and color temperature control; Brightness+Color Temperature is suitable for lamp color temperature control.

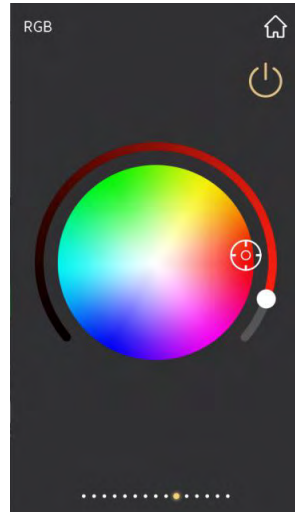


Fig.2.7.1



Fig.2.7.2

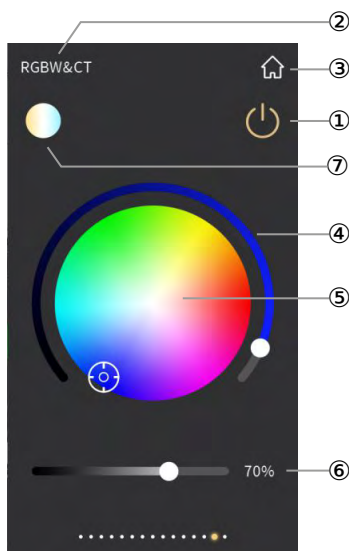


Fig.2.7.3



Fig.2.7.4

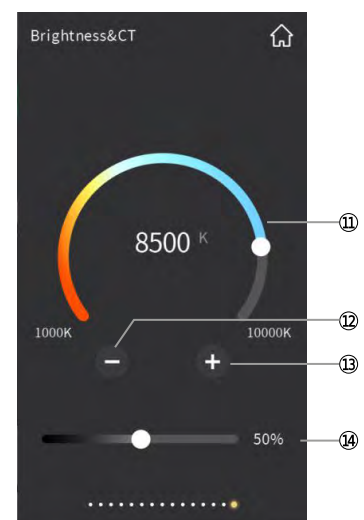


Fig.2.7.5

- ① This button-like icon is for RGB lamp off operation and status display.
When the icon on, touch this icon, the RGB color value will become 0, that is, the RGB lamp is turned off; when RGB color value is not 0 (i. e., ring slider④ is not slid to the left bottom), the icon will be on.
- ② This area displays the page description identification of RGB dimming function page, user can define the description through ETS.
- ③ Return to the home page by touching this icon;
- ④ This ring slider is used to adjust the color shade of the RGB lamp;
- ⑤ This icon is the color palette;
When RGB dimming function is configured as RGB, function page interface as shown in Fig. 2.7.1, sliding ring slider④ to adjust the color shade of RGB lamp, when ring slider④ is slid to the left bottom, RGB lamp is completely OFF, at this time, the button① become gray, and no reaction when operate the color palette⑤.
When brightness of RGB lamp is not 0, the circular color palette is for selecting color, when touch the button①, RGB lamp off, and ring slider④ automatically slides to the left bottom, button① become gray.
- When RGB dimming function is configured as RGBW, function page interface as shown in Fig. 2.7.2, RGBW function page interface is similar to RGB function page interface, which is no longer described herein.



- ⑥ This slider for adjusting the brightness of white light, sliding the slider to adjust the brightness effect of white light.
When RGB dimming is configured as RGBW+Color Temperature, function page interface is similar to RGB but more a slider⑥, as shown in Fig. 2.7.3 and Fig. 2.7.4. The adjustment of the white light is independent of the RGB type, RGB color adjustment refers to that of RGB type above, which is no longer described herein.
- ⑦ Enter the interface of color temperature controlling by touching this icon, shown as Fig. 2.7.4;
- ⑧ This ring slider is to adjust the color temperature of RGB lamp;
- ⑨ Decrease the color temperature value by touching this icon;
- ⑩ Increase the color temperature value by touching this icon;
Color temperature control interface shown as Fig. 2.7.4, by sliding the ring slider ⑧ or touching the icon ⑨ and icon ⑩ to control the color temperature of RGB lamp, the adjustment range for each touch of icon ⑨ or icon ⑩ is 100K. After finishing the adjustment, touch the area outside the sub-window to return to the previous level function page, as shown in Fig. 2.7.3.
- ⑪ This ring slider is to adjust the color temperature of RGB lamp;
- ⑫ Decrease the color temperature value by touching this icon;
- ⑬ Increase the color temperature value by touching this icon;
When RGB dimming is configured as Brightness+Color Temperature, function page interface shown as Fig. 2.7.5. Sliding the ring slider ⑪ or touching the icon ⑫ and icon ⑬ to change the color temperature value, the adjustment range for each touch of icon ⑫ or icon ⑬ is 100K.
- ⑭ Adjust the brightness of the lamp by sliding this slider.



2.8 ENERGY METERING DISPLAY FUNCTION PAGE

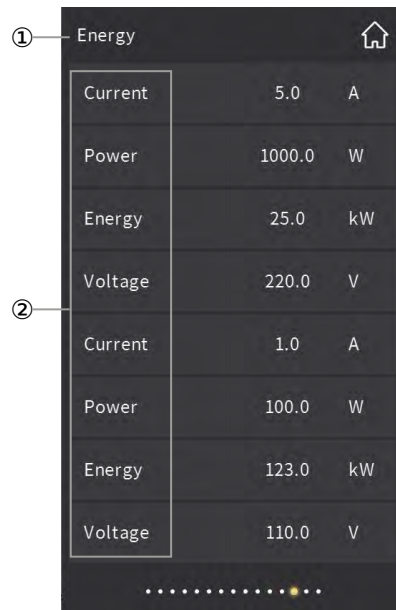


Fig. 2.8.1

- ① This area displays the page description identification of the Energy Metering Display Function Page, user can define the description through ETS;
 - ② This area displays the identification of data description, user can define the description through ETS;
- Energy Metering Display interface shown as Fig.2.8.1, current, voltage, power and energy consumption can be displayed through parameter configuration. There are up to 8 items displayed in the interface, these data can be updated and displayed through the bus, such as Switch Actuator with Current Detection can provide the present value of current, power or energy consumption.



2.9 AIR QUALITY DISPLAY FUNCTION PAGE



Fig.2.9.1

Fig.2.9.2

Fig.2.9.3

Fig.2.9.4

- ① This area displays the page description identification of Air Quality Display function page;
- ② Return to the home page by touching this icon;
- ③ This display area is the air quality parameter display list, can be configured through parameter configuration; AQI, temperature, humidity, PM2.5, PM10, VOC, CO₂, brightness and wind speed can displayed by parameter configuration, an interface can be configured with up to four displays.
- ④ This ring strip is used for displaying the air quality parameter value; Touch one of the items in the display list at the bottom of the interface, the pointer on the ring strip ④ will point to the corresponding scale, such as Fig.2.9.1 above is the display effect of CO₂, Fig.2.9.2 is the display effect of AQI, Fig.2.9.3 is the display effect of temperature and Fig.2.9.4 is the display effect of humidity.

You can see the display range of the corresponding item on the interface ring strip ④:

Temperature: -40~40 °C

Humidity: 0~100 %

PM2.5: 0~999 ug/m³

PM10: 0~999 ug/m³

CO₂: 0~4000 ppm

VOC: 0~9.99 mg/m³ or 0~4000 ppm

AQI: 0~500

Brightness: 0~5000 lux

Wind speed: 0~50 m/s

The displayed data are usually provided by other external sensors on the system.



2.10 BACKGROUND MUSIC FUNCTION PAGE



Fig.2.10.1

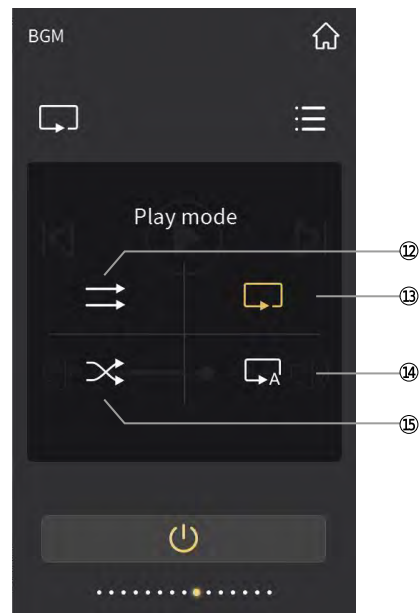


Fig.2.10.2

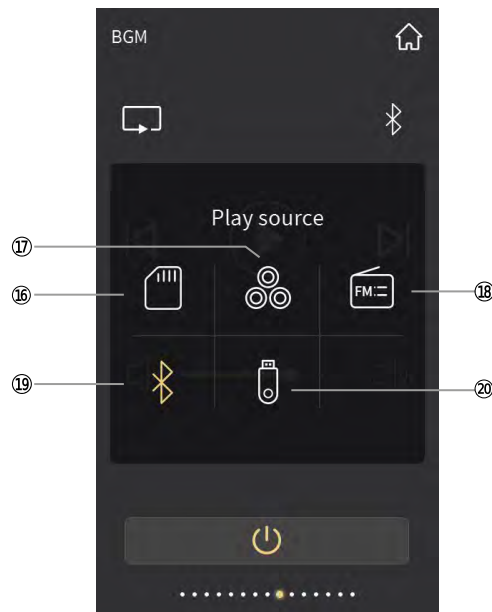


Fig.2.10.3

- ① This icon is ON/OFF button for the power on/off of Background Music;
As shown in Fig.2.10.1,when ON, the interface can be operated; when OFF, the other icons are not operable except the ON/OFF button.
- ② This area displays the page description identification of Background Music function page, user can define the description through ETS.
- ③ Return to the home page by touching this icon;
- ④ Select previous song by touching this icon;
- ⑤ Select next song by touching this icon;
- ⑥ Play or pause song by touching this icon;
- ⑦ This icon is for volume decreasing;
- ⑧ This icon is for volume increasing;



⑨ This slider is to adjust volume;

By sliding the slider ⑨ or touching the icon ㉗ or ㉘ to adjust volume.

Note: there will be a percentage value display above the slider ⑨ during sliding, the value will be hidden in 3 seconds after sliding.

⑩ This icon is for the play mode selection;

⑪ Set the play mode as sequential playback by touching this icon;

⑫ Set the play mode as single loop by touching this icon;

⑬ Set the play mode as random playback by touching this icon;

⑭ Set the play mode as list loop by touching this icon;

As shown in Fig.2.10.2, select one of these play modes then touch the area outside the sub-window to return the previous level function page.

⑮ This icon is for the Music source selection;

⑯ Set the music source as SD card by touching this icon;

⑰ Set the music source as AUX audio by touching this icon;

⑱ Set the music source as FM radio by touching this icon;

⑲ Set the music source as blue teeth by touching this icon;

⑳ Set the music source as USB flash disk by touching this icon.

As shown in Fig.2.10.3, select one of these music sources then touch the area outside the sub-window to return the previous level function page.



2.11 SETTING PAGE

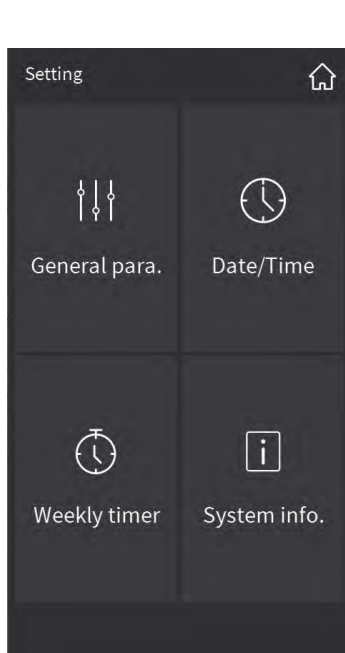


Fig.2.11.1

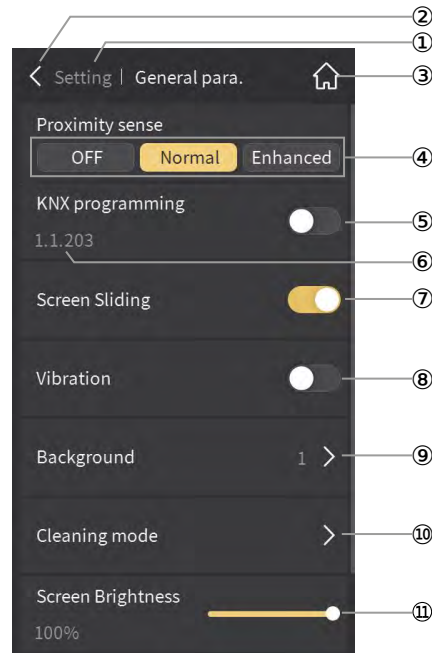


Fig.2.11.2

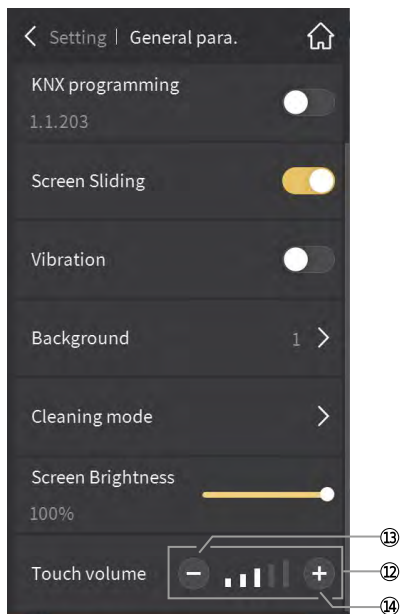


Fig.2.11.3

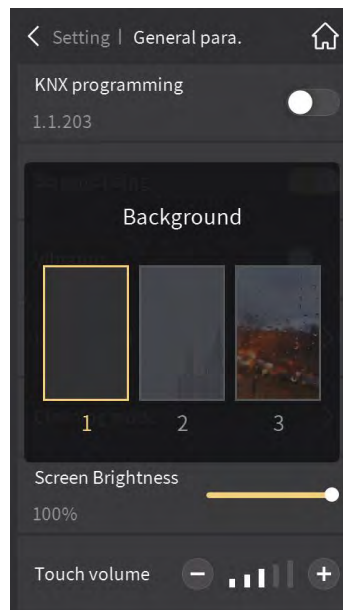


Fig.2.11.4

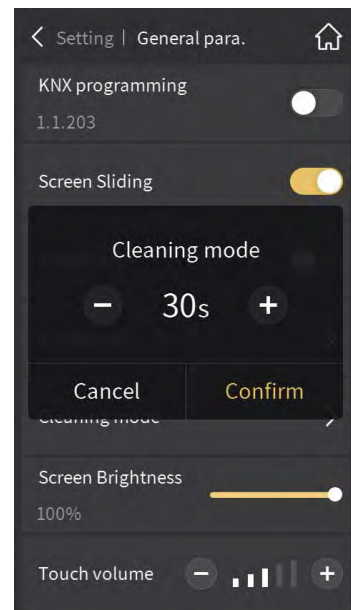


Fig.2.11.5



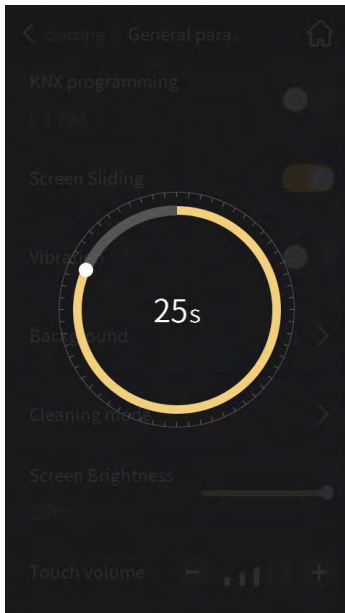


Fig.2.11.6

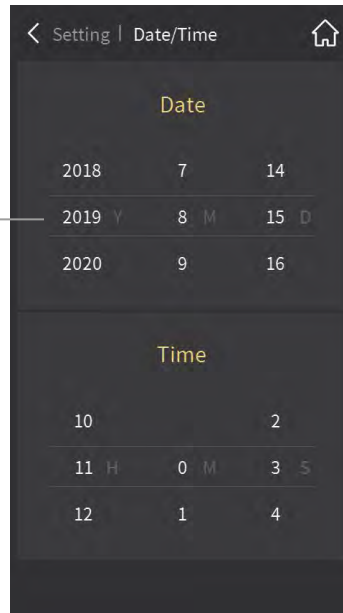


Fig.2.11.7



Fig.2.11.8

Click the setting icon in the upper-right corner of the main page to enter the setting page, as shown in Fig.2.11.1.

- ① This area displays the page description identification of Setting page, format as: setting| description of function page currently manipulated;
The sub-interface with the same area format are the same, no longer do the following description.
 - ② Return to the setting page by touching this icon;
 - ③ Return to the home page by touching this icon;
 - ④ This icon is to set the distance near the induction;
There are three settings: OFF, Normal and Enhance, indicating the distance near the sensor, "Normal" distance is exceed 15cm and "Enhance" distance is exceed 30cm. When the device senses the human body approaching, then wake up the device and enter the operation interface or password interface.
 - ⑤ This icon is KNX programming button;
 - ⑥ This area displays the physical address of the device, the physical address can be set through ETS;
Touch the button icon on the right to enter or exit the physical address programming mode. In the programming mode, the device programming indicator light turns red, that is, the color light strip turns red. After exiting the programming mode, the color light strip returns to the normal instruction.
 - ⑦ This icon is the screen-sliding enable button:
Touch the button icon on the right to disable or enable the screen-sliding function. If enable, you can switch multifunction pages by sliding screen. When disable, you cannot switch multifunction pages by sliding screen but by touching the previous-page icon or the next-page icon at the bottom of the control page.
 - ⑧ This icon is a vibration-enabled button:
Touch the button icon on the right to disable or enable the vibration function. When enable, the device has a sense of vibration when operate the screen. When disable, there is no vibration.
 - ⑨ This icon is used to set the screen background manually;
Touch the button icon, the pop-up window as shown in Fig.2.11.4, there are 3 pictures for selecting.
 - ⑩ By touching this icon to enter the cleaning mode;
The pop-up window for setting the cleaning mode countdown as shown in Fig.2.11.5. The time increase/decrease in every 5 seconds when operating, the minimum setting time is 5s and the maximum is 60s, the default setting time is 30s; click "Confirm" to enter the cleaning mode countdown interface, as shown in Fig.2.11.6, it will return to the setting page when finish countdown, operation of interface is invalid during countdown; click "Cancel" return to the setting page.
 - ⑪ This slider is used to set the screen brightness as a percentage;
 - ⑫ This icon is the keystroke volume setting icon, which is used to increase/decrease keystroke volume;
 - ⑬ This icon for keystroke volume decreasing;
 - ⑭ This icon for keystroke volume increasing;
By touching icon ⑬ and icon ⑭ to increase/decrease keystroke volume, the volume is displayed by the proportion on the volume bar of 5 blocks, shown as icon ⑯.
- After the above setting, touch the icon (top-left corner) to return to the Setting page.



⑮ Sliding the number to choose the current date and time;

Click "Date/Time" in Fig.2.11.1 to enter the date/time setting interface as shown in Fig.2.11.7. In this interface, slide a number to select the current date and time. After the completion of the setting, touch the upper-left corner icon @ to return to the Setting page.

Click "System Info." in Fig.2.11.1 to enter the system information display interface as shown in Fig.2.11.8. You can view the system information of the device, including name code, internal code, LCD screen, touch screen, interface language, system platform, system version , KNX version and program version.

[Note: only when program version is the same as database version in the ETS, the device is allowed to be downloaded in the ETS.]

Click "Weekly Timer" in Fig.2.11.1 to enter the weekly timer display interface as shown in Fig.2.11.9. The weekly timer needs to be enabled through parameter configuration. Weekly timer before being configured is not operable. In the case of configuration, click "weekly timer" in Fig.2.11.1 to enter the weekly timer setting interface as shown in Fig.2.11.9.

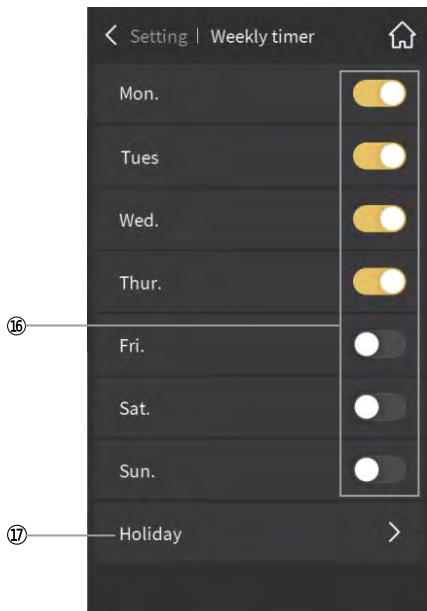


Fig.2.11.9

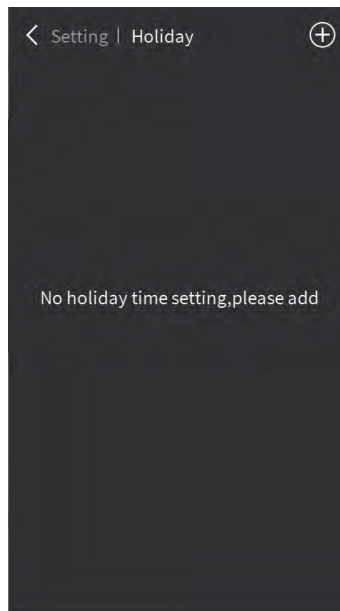


Fig.2.11.10

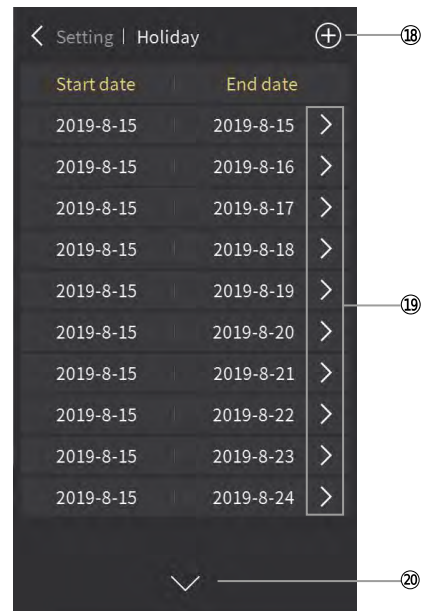


Fig.2.11.11

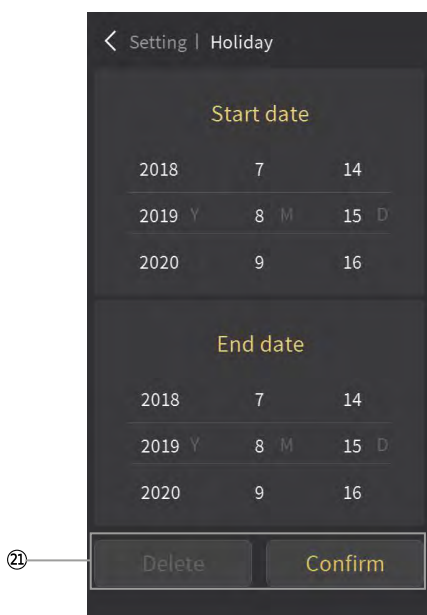


Fig.2.11.12

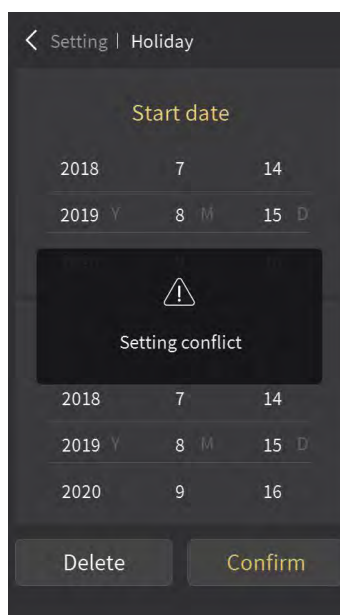


Fig.2.11.13

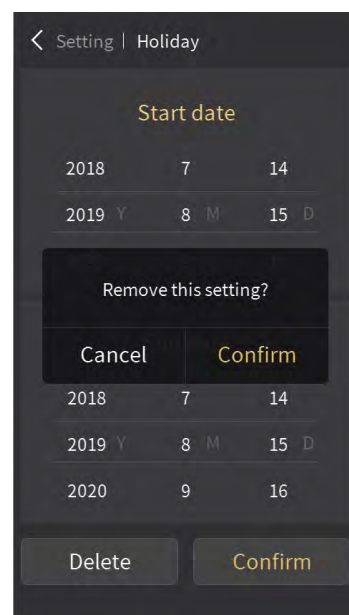


Fig.2.11.14

⑯ Manually enable/disable the time function of every day in a week by touching this icon;

Weekly timer is enabled by default if the parameters are configured. If the timer of the day is turned on, corresponding actions will be performed when the timer is up. Specific timer and actions are configured by parameters. If timer is not required on the day, manually close it. The button on the right side of the interface is used to manually switch the timer of the day.



- ⑰ Enter the holiday setting interface by touching this area;
As shown in Fig.2.11.10, when there is no holiday added, the interface displays “No holiday timing setting, please add”.
- ⑱ Add holidays by touching the icon;
Timing is off during holidays.
- ⑲ Enter the holiday time setting by touching the icon;
Touch icon ⑲, enter the interface as shown in Fig.2.11.12, set the period of holiday, here set up after the start time and end time of the holiday, click “Confirm” to finish the setting. If the holiday time is repeated when setting, then will pop up a window as shown in Fig.2.11.13; touch the area outside the window to return to the setting page.
- ⑳ Drop down the list of holiday time by touching the icon;
- ㉑ This icon is to confirm and delete setting.
If it is to be modified or deleted the setting time, touch this time period to the right of the icon ㉑, then re-enter Fig.2.11.12 interface, in this period of time to modify or delete, click “Delete” as shown in Fig.2.11.14 pop-up window. In the pop-up window, click “Cancel” to return to the setting page, and click “Confirm” to delete it. If no modification or deletion is needed, the icon in the upper left corner of the touch interface returns to the holiday interface.



2.12 SCREEN-SAVER



Fig.2.12.1

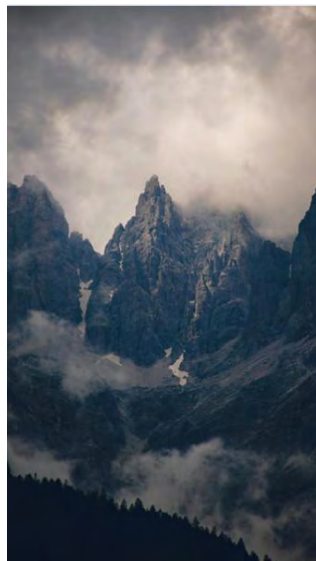


Fig.2.12.2

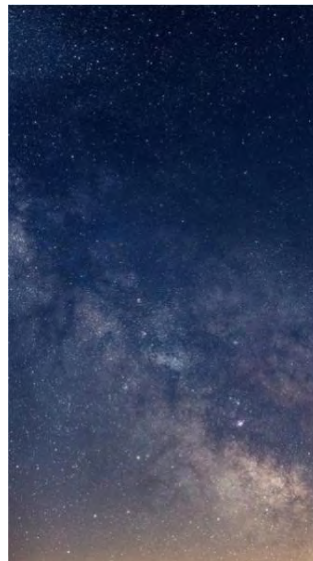


Fig.2.12.3

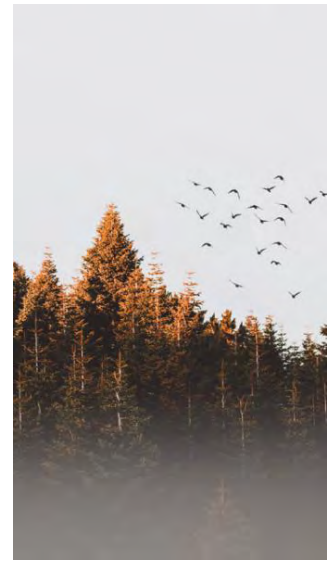


Fig.2.12.4

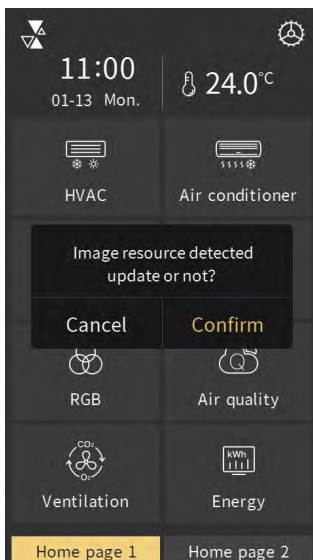


Fig.2.12.5

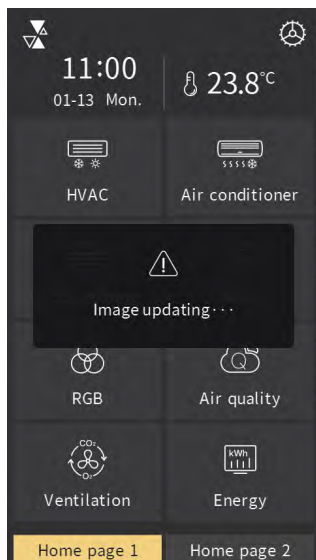


Fig.2.12.6



Fig.2.12.7

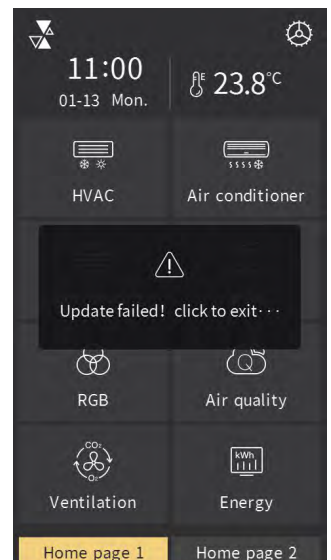


Fig.2.12.8

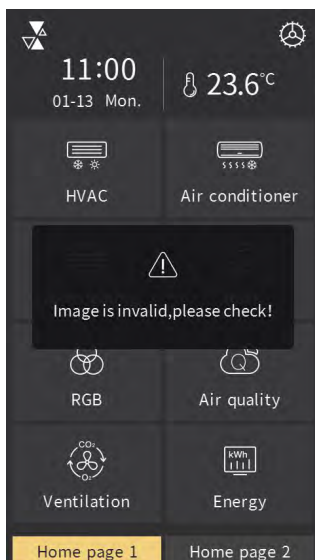


Fig.2.12.9

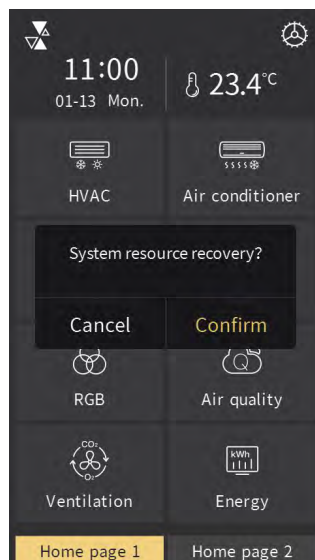


Fig.2.12.10



Fig.2.12.11



Screen-saver can be set as clock and album that system comes with through ETS parameter configuration, or insert new pictures through Micro SD card.

Clock screen-saver shown as Fig.2.12.1, three pictures of album screen-saver shown as Fig.2.12.2, Fig.2.12.3 and Fig.2.12.4. It will automatically switch picture in every 5 seconds.

Inserting new pictures through Micro SD card, specific steps are as follow:

Note: ① Only support SDHC card and the format should be FAT32 (if the format is not FAT32, it need to be formatted as FAT32); ② Only support Micro SD cards with capacity not greater than 32GB.

Micro SD card setting: create a new folder named "picture" under the root directory of Micro SD card, place three pictures in the folder and name as "Album_1", "Album_2", "Album_3", the resolution must be 480*854. Supporting pictures with the suffix: jpg, bmp, tjpg, png (Among them, the background color of the "png" picture must be opaque.)

Note: ① Replacing pictures according to the name suffix of the new picture corresponding to the original album number of the system: for example, placing "Album_1" in the folder "picture", it will replace the first one of the system album; another example as, place "Album_1" and "Album_3", it will replace the first one and the third one of the system album.

② Update pictures: when there is a folder named "picture" in the Micro SD card, and there is a picture in accordance with valid name and format, then it will update and store (even if the picture is the same as the last saved).

2. Insert Micro SD card into the device, if Micro SD card meet the above settings, and valid pictures are detected to be there, then will pop up a request window to confirm update, as shown in Fig.2.12.5;

3. Click "Confirm" to update picture; after upgrade, there will pop up a window of the result, if upgrade is successful, then reboot the device manually to apply the new picture to the album; if upgrade is failed, click any area outside the window to return to the page, as shown in Fig.2.12.6, Fig.2.12.7, Fig.2.12.8 and Fig.2.12.9.

{3} Delete the customized picture that has already inserted through Micro SD card, specific steps are as follow:

When there is a folder named "picture" in the Micro SD card but no picture in accordance with valid name and format, there will pop up a window "System resource recovery?", as shown in Fig.2.12.10, click "Confirm", then will delete the customized picture that has already inserted and pop up a window "Success! please reboot...", as shown in Fig.2.12.11, you need to reboot the device manually to recover the original album of the system.

Note: If the total size of the valid picture in the Micro SD card is greater than 3.8MB in the same time, then will prompt that picture is invalid; if the single picture is larger than the remaining storage space of the device (the total size of the device picture storage disc is about 4 MB), the remaining valid pictures shall be stopped updating.

When no operation on the screen and the screen-saver set by parameter is over the delay time, screen will enter the screen-saver state; once an operation happened, it will exit screen-saver.



2.13 PASSWORD

Enable or disable the password function through parameter configuring, if enable, the interface shown as Fig.2.13.1, when the screen is in the state of screen-saver or screen-off, re-enter screen need to input password. Password only allow 4 digit number, configured by parameter setting.



Fig.2.13.1

- ① Delete password by touching this icon;
- ② Display or hide the password by touching this icon.

2.14 PANEL LOCK

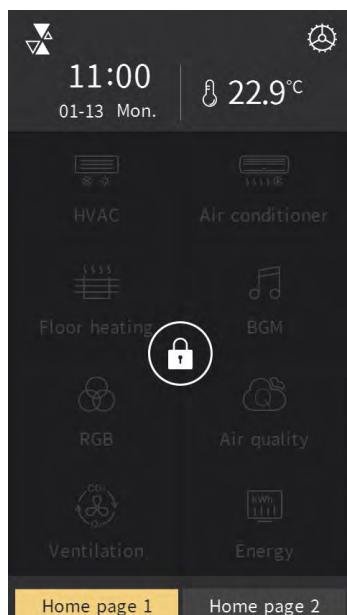


Fig.2.14.1

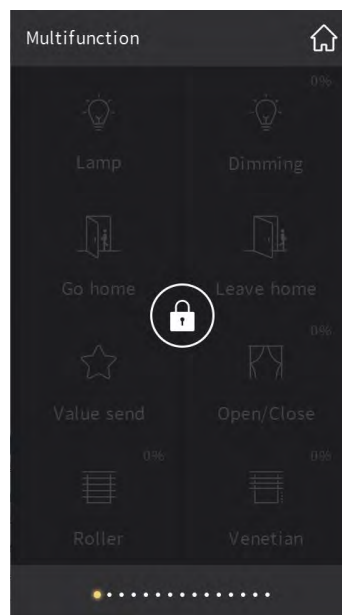


Fig.2.14.2

DEVICE LOCKING

User can lock or unlock the operating interface of the device via the bus. After locking, interface shown as Fig.2.14.1, the entire device cannot be operated, except receiving telegram from the bus. User can unlock the device via the bus.

FUNCTION PAGE LOCKING

User can lock or unlock each function page individually through the bus. After locking, interface shown as Fig.2.14.2, this interface cannot be operated except receiving telegram from the bus. Function page locking only locks each function page, and has no effect on switching between home page and each function page.



2.15 OTHER FUNCTIONS

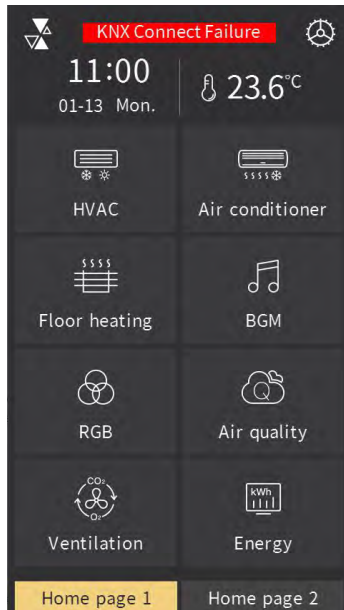


Fig.2.15.1

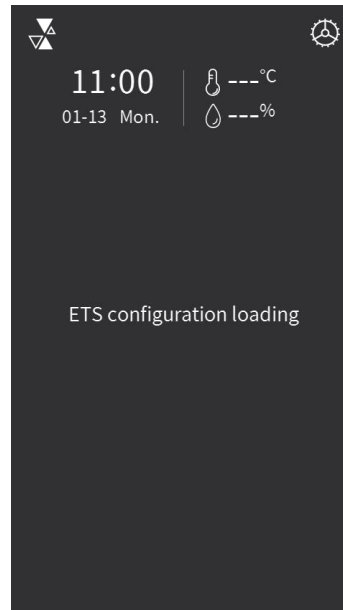


Fig.2.15.2

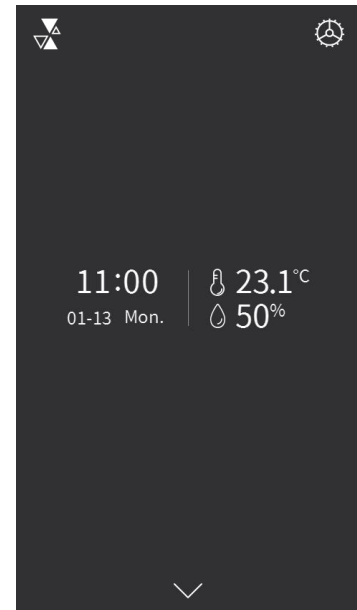


Fig.2.15.3

When the KNX bus connection of the device is abnormal, the "KNX Connect Failure" at the top of the interface shown as Fig.2.15.1 above, there is no prompt when the connection is normal.

When the application download of the device is completed or the device power recover, the device will initialize and load the parameter configuration of ETS, the interface as shown in Fig.2.15.2 below.

When the device is not configured with the home page navigation function or when the home page navigation function is configured as an invalid page or as functional icon, the home page interface is shown in Fig.2.15.3 above.



CHAPTER 3 SCREEN BACKGROUND

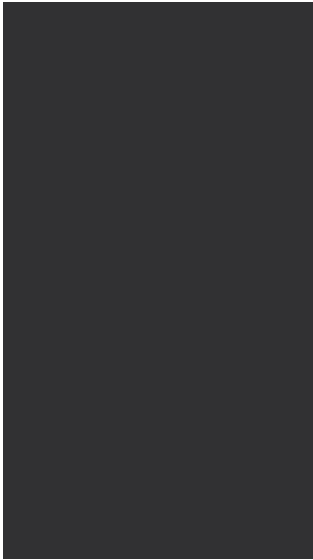


Fig.3.1 Default

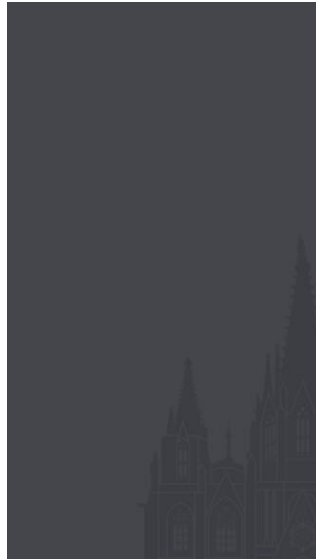


Fig.3.2 Church

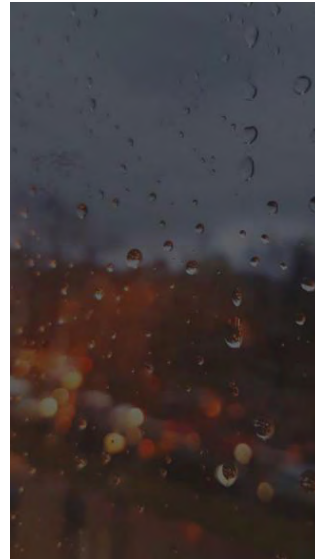


Fig.3.3 Water Droplets

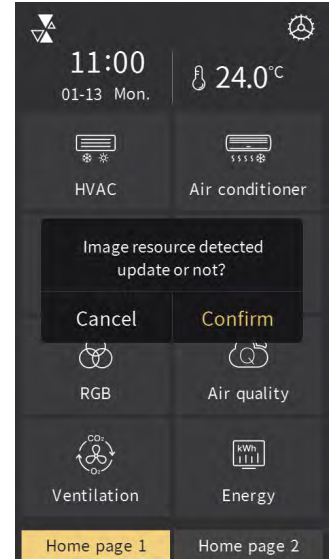


Fig.3.4

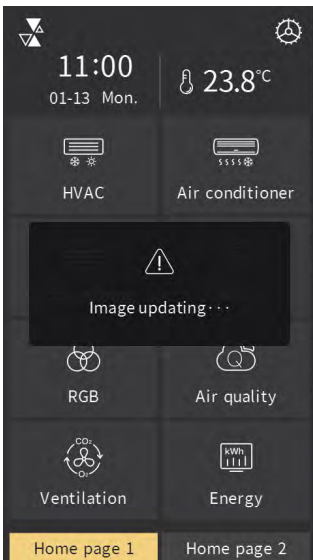


Fig.3.5

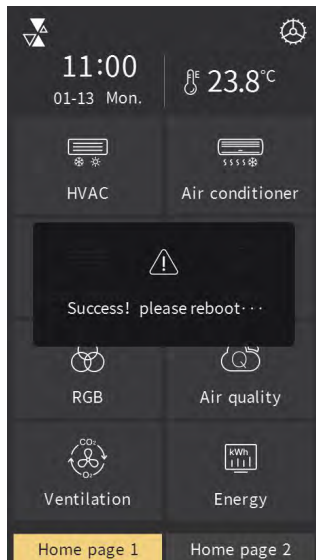


Fig.3.6

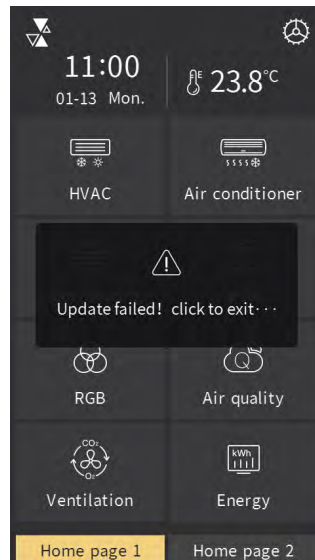


Fig.3.7

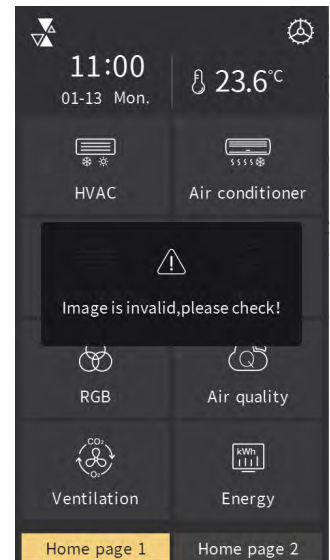


Fig.3.8

Screen background can be configured as the default background of the system through ETS parameter setting, or insert new pictures via Micro SD card.

(1) Configuring background through ETS configuration, there are 3 options: Default, Church and Water droplets, as shown in Fig.3.1, Fig.3.2 and Fig.3.3.

(2) Inserting new background through Micro SD card, specific steps are as follows:

Note: ① Only support SDHC card and the format should be FAT32 (if the format is not FAT32, it need to be formatted as FAT32); ② Only support Micro SD cards with capacity not greater than 32GB.

Micro SD card setting: placing the pictures in the root directory of the Micro SD card and name as "main_bg". The resolution must be 480*854.

Note: ① Supporting pictures with the suffix: jpg, bmp, tjpg, png (Among them, the background color of the "png" picture must be opaque.) ② New pictures take effect only when the parameter "Screen background setting" in the ETS is selected as "Default".

2. Insert Micro SD card into the device, if Micro SD card meet the above settings, and valid pictures are detected, then will pop up a request window to confirm update, as shown in Fig.3.4;






























3. Click "Confirm" to update picture; after upgrade, there will pop up a window of the result, if upgrade is successful, then reboot the device manually to apply the new background to the system; if upgrade is failed, click any area outside the window to return to the page, as shown in Fig.3.5, Fig.3.6, Fig.3.7 and Fig.3.8.

Note: If the total size of the valid picture in the Micro SD card is greater than 3.8MB in the same time, then will prompt that picture is invalid; if the single picture is larger than the remaining storage space of the device (the total size of the device picture storage disc is about 4 MB), the remaining valid pictures shall be stopped updating.

























CHAPTER 4 ICONS FOR FUNCTION PAGE

4.1 ICON LIST FOR FUNCTION PAGE

Replacing ID NO.	0	0	1	2	3	4
Icon						
ETS options	Switch_default	Switch/ Dimming_default	Value send_default	Scene control_default	Open/Close curtain_default	Roller blind_default
Replacing ID NO.	5	11	12	13	14	15
Icon		No specific icon, only display text				
ETS options	Venetian blind_default	No icon, only text	Ceiling light	Downlight	Wall light	Spotlight
Replacing ID NO.	16	17	18	19	20	21
Icon						
ETS options	Chandelier	Stairway lamp	Garage lamp	Blind(open/close)	Blind (up/down)	Blind (with slat)
Replacing ID NO.	22	23	24	25	26	27
Icon						
ETS options	All on	All off	Go home 1	Leave home 1	Go home 2	Leave home 2
Replacing ID NO.	28	29	30	31	32	33
Icon						
ETS options	Welcome	Meeting (guest)	Dinner	Party	Conference	Sleeping



Replacing ID NO.	34	35	36	37	38	39
Icon						
ETS options	Reading	Media	Cleaning	TV	Audio	Socket (CHN)
Replacing ID NO.	40	41	42	43	44	45
Icon						
ETS options	Socket (EU)	Fan	Door lock	Door access	Power supply	Window 1
Replacing ID NO.	46	47	48	49	50	51
Icon						
ETS options	Window 2	Alarm	Timer	Projector	Multimedia	Electronic heating
Replacing ID NO.	52	53	54	55		
Icon						
ETS options	Air conditioner 1	Air conditioner 2	Air fresh	Customize 1		

4.2 ICON REPLACEMENT FOR FUNCTION PAGE

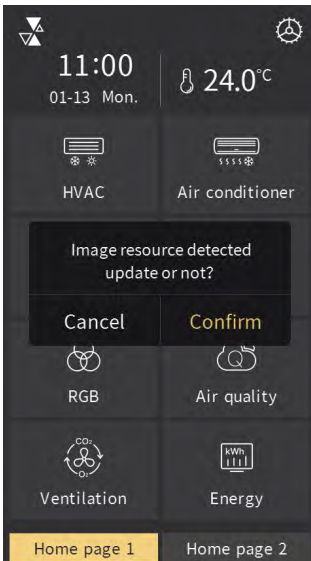


Fig.4.1

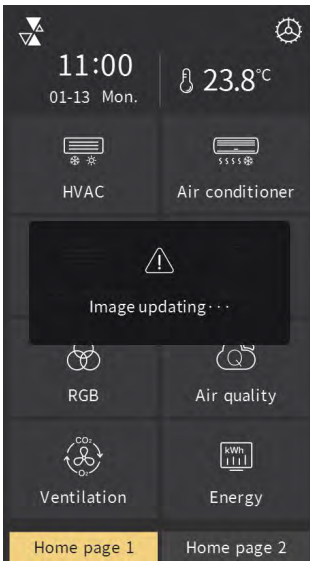


Fig.4.2



Fig.4.3

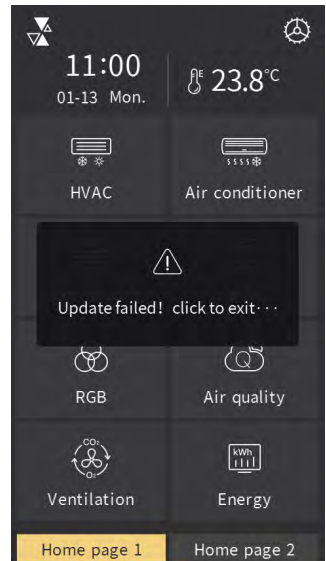


Fig.4.4

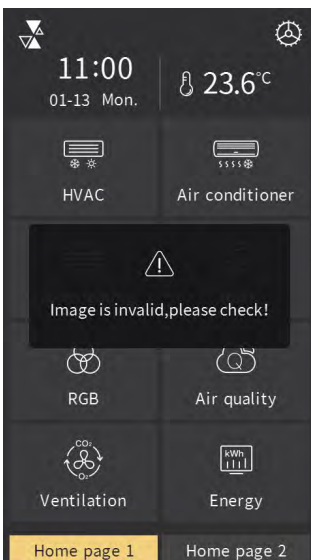


Fig.4.5

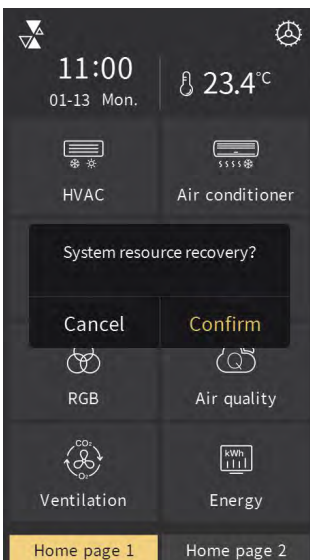


Fig.4.6



Fig.4.7

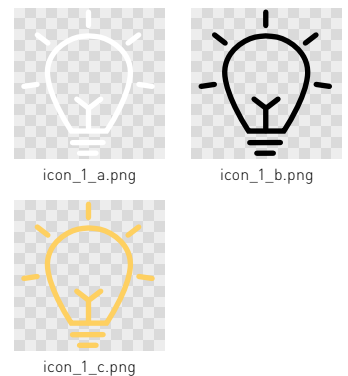


Fig.4.8

Insert customized icons to replace the original icons of the system through Micro SD card, specific steps as follows:

Note: ① Only support SDHC card and the format should be FAT32 (if the format is not FAT32, it need to be formatted as FAT32); ② Only support Micro SD cards with capacity not greater than 32GB.

Micro SD card setting: create a new folder named "Functionicon" under the root directory of Micro SD card, place icon files to be replaced and name them, specific naming rule refers to the note; the resolution should be 80*80. Only support "png" picture format.

Note: naming rule of the icon files in the Micro SD card as follows:

	icon	_1	_a	.png
Title of icon files (Fixed)				
Replacing ID NO.	0-5, 12-55: Function page icons (Refers to the icon list in section 4.1)			
Icon status	a: Off status b: On status (both the bottom and icon are on) c: On status (only the icon is on)			
Format of icon files (Fixed)				



According to the naming rule in the figure above, for examples, icon in the Fig.4.8 is the default icon of which replacing ID number is 1, "icon_1_a.png" is off status icon, "icon_1_b.png" and "icon_1_c.png" are on status icons.

2. Insert Micro SD card into the device, if Micro SD card meet the above settings, and there are valid pictures, then pop up a window to request update, as shown in Fig.4.1;

Note: ① Replacing pictures according to the icon number of the new picture corresponding to the replacing ID number: for example, placing "icon_1_a.png", "icon_1_b.png" and "icon_1_c.png" in the folder named "Functionicon", it will replace the original icon with ID NO.1; if there is no "icon_1_a.png", which is necessary, then will not replace the icon with ID NO. 1. If there are only "icon_1_a.png" and "icon_1_b.png" or only "icon_1_a.png" in the folder, the default icon will be supplemented with "icon_1_a.png". The rest customized icon ID are the same principle.

② Update pictures: when there is a folder named "Functionicon" in the Micro SD card, and there is a picture in accordance with valid name and format, then it will update and store (even if the picture is the same as the last saved).

3. Click "Confirm" to update picture; after upgrade, there will pop up a window of the result, if upgrade is successful, then reboot the device manually to apply the new function icons to the system; if upgrade is failed, click any area outside the window to return to the page, as shown in Fig.4.2, Fig.4.3, Fig.4.4 and Fig.4.5.

4. Delete the customized function page icons that has already inserted through Micro SD card, specific steps are as follow:


























When there is a folder named "Functionicon" in the Micro SD card but no picture in accordance with valid name and format, there will pop up a window "System resource recovery?", as shown in Fig.4.6, click "Confirm", then will delete the customized icons that has already inserted and pop up a window "Success! please reboot...", as shown in Fig.4.7, then you need to reboot the device manually to recover the original function icons of the system.

Note: If the total size of the valid picture in the Micro SD card is greater than 3.8MB in the same time, then will prompt that picture is invalid; if the single picture is larger than the remaining storage space of the device (the total size of the device picture storage disc is about 4 MB), the remaining valid pictures shall be stopped updating.






















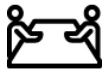


CHAPTER 5 ICONS FOR HOME PAGE

5.1 ICON LIST FOR HOME PAGE

Replacing ID NO.	70	71	72	73		
Icon		No specific icon Display specific function information, such as Heating/Cooling, Fan speed, Temperature setting	No specific icon Display specific function information , such as Mode, Fan speed, Temperature setting	No specific icon Display specific function information , such as Heating status, Temperature setting		
ETS options	Multifunction_default	HVAC_default	Air Conditioner_default	Floor heating_default		
Replacing ID NO.	74	75	76	77	78	91
Icon						
ETS options	Background Music_default	Air Quality_default	RGB dimming_default	Ventilation system_default	Energy display_default	Lighting
Replacing ID NO.	92	93	94	95	96	97
Icon						
ETS options	Scenario 1	Scenario 2	Shading 1	Shading 2	HVAC system 1	HVAC system 2
Replacing ID NO.	98	99	100	101	102	103
Icon						
ETS options	Split unit(AC) 1	Split unit(AC) 2	Floor heating	Water heating	Music	Air quality info
Replacing ID NO.	104	105	106	107	108	109
Icon						
ETS options	RGB lamp	RGBW	Ventilation system	Power meter	Current monitor	Heating



Replacing ID NO.	110	111	112	113	114	115
Icon						
ETS options	Cooling	Heating Cooling system	Temperature	AV system	Security	Bedroom 1
Replacing ID NO.	116	117	118	119	120	121
Icon						
ETS options	Bedroom 2	Living room 1	Living room 2	Dinner room 1	Dinner room 2	Study room
Replacing ID NO.	122	123	124	125	126	127
Icon						
ETS options	Gym	Basement	Office	Conference room	Exhibition hall	Training room
Replacing ID NO.	128	129	130	131		
Icon						
ETS options	Warehouse	Building	Recreation	Reception		

5.2 ICON REPLACEMENT FOR HOME PAGE

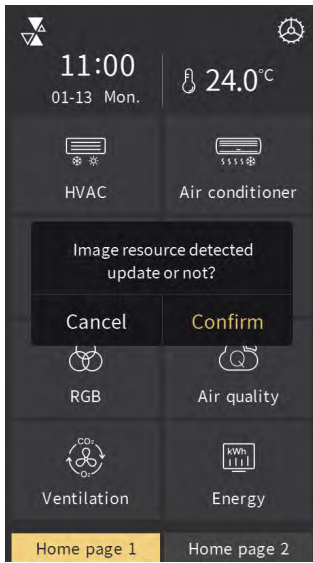


Fig.5.1

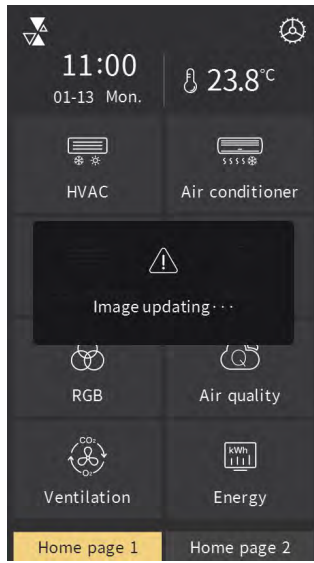


Fig.5.2



Fig.5.3

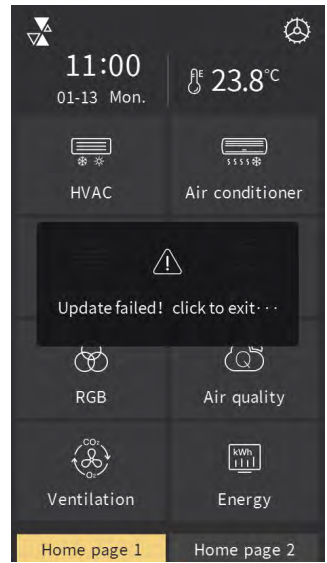


Fig.5.4

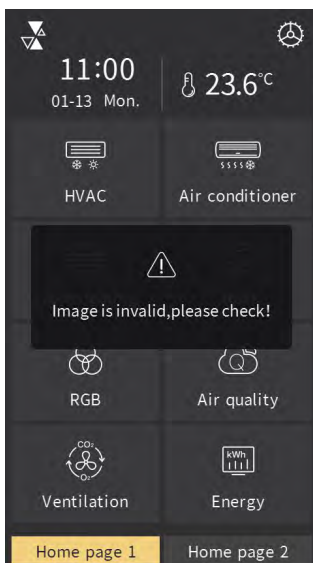


Fig.5.5

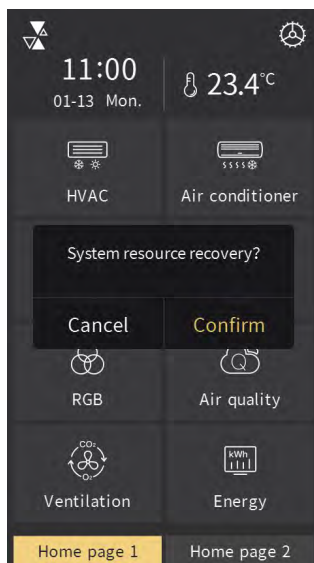


Fig.5.6

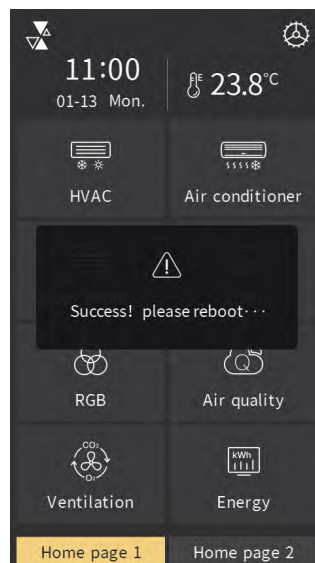


Fig.5.7

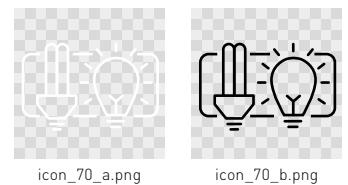


Fig.5.8

Insert customized icon to replace the original icons of the system through Micro SD card, specific steps as follows:

Note: ① Only support SDHC card and the format should be FAT32 (if the format is not FAT32, it need to be formatted as FAT32); ② Only support Micro SD cards with capacity not greater than 32GB.

1. Micro SD card setting: create a new folder named "Pageicon" under the root directory of Micro SD card, place icon files to be replaced and name them, specific naming rule refers to the note; the resolution should be 80*80. Only support "png" picture format.

Note: naming rule of the icon files in the Micro SD card as follows:

	icon	_70	_a	.png
Title of icon files (Fixed)				
Replacing ID NO.	70~78, 91~131: Home page icons (Refers to the icon list in section 5.1)			
Icon status	a: Off status b: On status (both the bottom and icon are on)			
Format of icon files (Fixed)				



According to the naming rule in the figure above, for examples, icon in the Fig.5.8 is the default icon with replacing ID NO. 70, "icon_70_a.png" is off status icon, "icon_70_b.png" is on status icons.

2. Insert Micro SD card into the device, if Micro SD card meet the above settings, and there are valid pictures, then pop up a window to request update, as shown in Fig.5.1;

Note: ① Replacing icons according to the icon number of the new picture corresponding to the replacing ID number: for example, placing "icon_70_a.png" and "icon_70_b.png" in the folder named "Pageicon", it will replace the original icon with ID NO.70; If there is only "icon_70_a.png" in the folder, the icons of on status and off status are the same. The rest customized icon ID are the same principle.

② Update pictures: when there is a folder named "Pageicon" in the Micro SD card, and there is a picture in accordance with valid name and format, then it will update and store (even if the picture is the same as the last saved).

3. Click "Confirm" to update picture; after upgrade, there will pop up a window of the result, if upgrade is successful, reboot the device manually to apply the new page icons to the system; if upgrade is failed, click any area outside the window to return to the page, as shown in Fig.5.2, Fig.5.3, Fig.5.4 and Fig.5.5.

4. Delete the customized homepage icons that has already inserted through Micro SD card, specific steps are as follow:

When there is a folder named "Pageicon" in the Micro SD card but no picture in accordance with valid name and format, there will pop up a window "System resource recovery?", as shown in Fig.5.6, click "Confirm", then will delete the customized icons that has already inserted and pop up a window " Success! please reboot...", as shown in Fig.5.7, reboot the device manually, after reboot, it will recover the original icons of the system.

Note: If the total size of the valid picture in the Micro SD card is greater than 3.8MB in the same time, then will prompt that picture is invalid; if the single picture is larger than the remaining storage space of the device (the total size of the device picture storage disc is about 4 MB), the remaining valid pictures shall be stopped updating.

