Appendix：
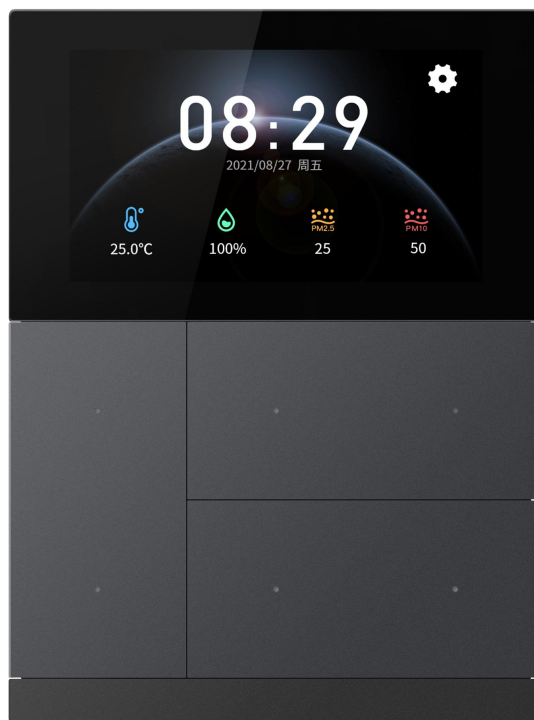
K-BUS® WALTZ series
KNX Smart Touch with push button,3-gang
UI Description_V1.4

Contents

Chapter 1   Introduction

This document is for the UI description of the KNX Smart Touch with push button,3-gang. 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:

- **Icons for function page can be replaced with customized icons;**
- **Album and background can be replaced with customized pictures;**
- **Home page can display date and time, which can be modified manually on the screen;**
- **Home page supports 2 display styles: Status+Scene, Status; Status can display: Temperature, Humidity, PM2.5, PM10, CO2, VOC, AQI, Wind Speed and Rain;**
- **Function page supports a 4/6 layout display, up to support 6 function pages;**
- **Dimming and curtain function pages are able to display status information in real time;**
- **Support screen locking and function page locking, and display the locking status;**
- **Support screen-saver and password assess function;**
- **Proximity sense can be manually adjusted or off;**
- **Support 2 display themes: Light, Dark;**
- **Support manually adjusting screen brightness and touch volume;**
- **System information of the device can be checked.**
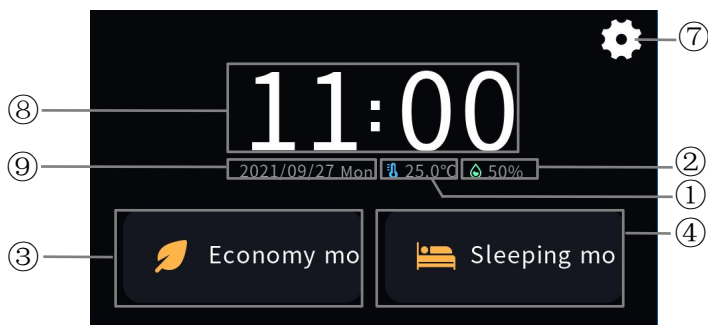
2.1. Home page interface
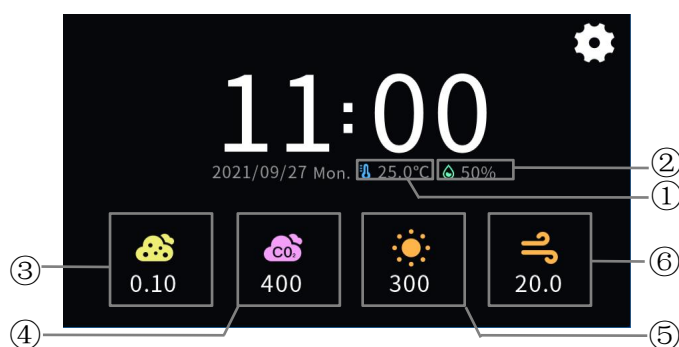

Fig.2.1.1 Home page Status+Scene

Fig.2.1.2 Home page Status

Home page supports 2 display styles: Status+Scene, Status, UI interfaces are shown as Fig.2.1.1, Fig.2.1.2. Interface style is set by the parameter. The number of icons to be displayed is also set by the parameter, up to display 6 icons. The placement principle of the function icon is from left to right and from top to bottom.

①~④: **Display style of Home page is Status+Scene. The serial number marked in Fig.2.2.1 is consistent with the sequence number of the function icon in the ETS.**

①~⑥: **Display style of Home page is Status. The serial number marked in Fig.2.2.2 is consistent with the sequence number of the function icon in the ETS.**

①② **display temperature/humidity information, display two icon status. And you can select internal or external sensor via the ETS configuration to display;**

③④ **is two scene control icons of Home page.**

Touch the scene control icon, the device will send corresponding telegram to the bus. If the parameter is set to long operation, that is, short press the icon to call scene, and long press to storage scene. Icon status will be updated according to the current calling scene.

③~⑥ **display air information, display four icon statuses. And you can select the type of air information via the ETS configuration to display, including Temperature, Humidity, PM2.5, PM10, CO2, VOC, AQI, Wind Speed and Rain. Shown as Fig.2.1.2.**

⑦ **The icon is setting icon, touch to enter the setting page, detail in chapter 2.3.**

⑧ **This area displays the current time.**

⑨ **This area displays the current date.**

The date and time can be modified on the setting page, or through the bus, see details in chapter 2.3.
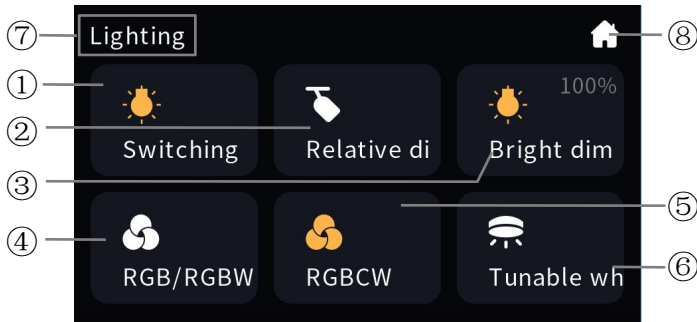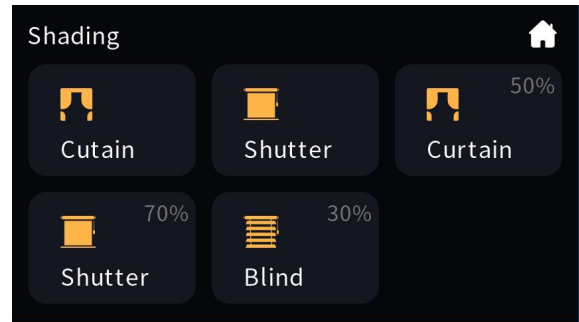
2.2. Function page

⑦ Lighting ⑧

① Switching ② Relative di ③ Bright dim 100%

④ RGB/RGBW RGBCW Tunable wh ⑤ ⑥

Fig.2.2.1

Shading

Cutain Shutter Curtain 50%

Shutter 70% Blind 30%

Fig.2.2.2

Scenario

① Go home Leave home ③

② Switch All on/off ④

Fig.2.2.3

Air quality

Temperatu Humidity CO2

VOC Brightness PM2.5

Fig.2.2.4

Climate

Air conditioner 25.0℃ Thermostat 25.0℃

Ventilation Low Audio system
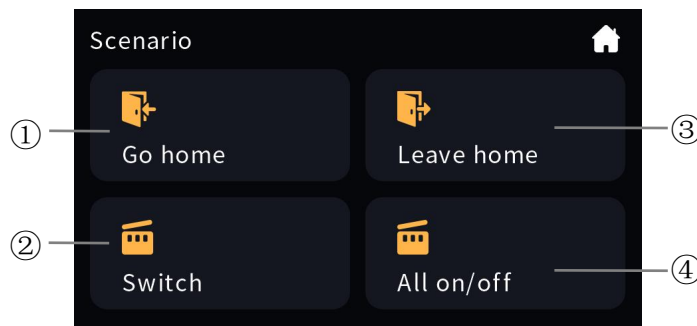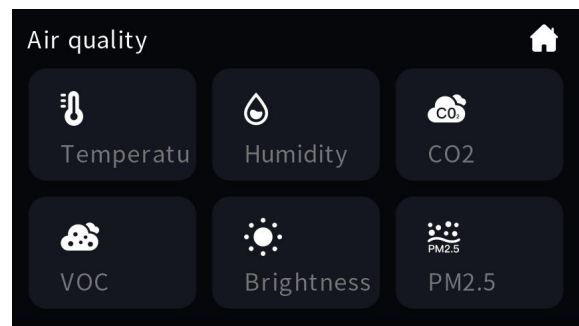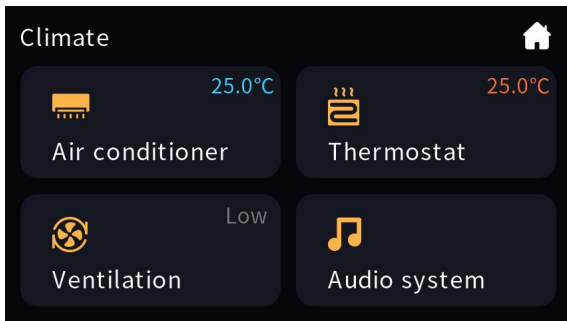
Fig.2.2.5

UI interface style of Function pages are shown as Fig.2.2.1-Fig.2.2.5, support the layout of 4 and 6 icons, the number of icons to be displayed is set by the parameter.

①~⑥: The layout shows the style of the selected 6 icons, shown as Fig.2.2.1 above. The marked serial number 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.

①~④: The layout shows the style of the selected 4 icons, shown as Fig.2.2.3 above. The marked serial number 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.

Function icons adopt the grid display style, 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; 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 curtain will show the position status.

⑦ **This area is the page description identification of the function page, user can define the description through ETS;**

⑧ **This icon is the main page icon, return to the home page by touching this icon.**

2.2.1. Switch function

Fig.2.2.1.1

Fig.2.2.1.2

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

Light theme is shown as Fig.2.2.1.1, dark theme is shown as Fig.2.2.1.2. 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.

2.2.2. Dimming function

The status of dimming function is similar to that of switch under different UI styles, shown as Fig.2.2.1.1, Fig.2.2.1.2, 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 via the bus to be display accurately. The relative and brightness dimming functions are described below.

Relative dimming

Relative dimming has no independent control interface, dimming by operating icons. When short pressing the icon toggle switch, icon on indicates the lamp to turn on and the icon off indicates the lamp to turn off. Long press the icon to send a command to increase or decrease 100% brightness, long release to send stop dimming command.

Brightness dimming

Long press the icon of brightness dimming function to enter control interface as shown in Fig.2.2.2.1 below.
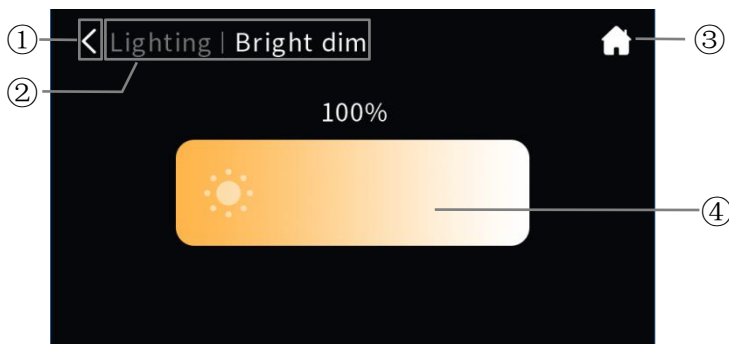

Fig.2.2.2.1

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 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.

Note: When there is a light-on operation or command from the screen or the bus, the brightness

value(slider ④) is not updated, only update the status of the function icon and switch value; when there is a light-off operation or command from the screen or the bus, the brightness value(slider ④) is updated to 0 at the same time.

2.2.3. RGB dimming function

There are 4 control types of RGB dimming function: RGB, RGBW, RGBCW and colour Temperature, are configured through parameter configuration. Among them, RGB is suitable for adjusting RGB lamp; RGBW is suitable for controlling RGBW strip; RGBCW is suitable for RGB lamp and colour temperature control; colour Temperature is suitable for lamp colour temperature control.
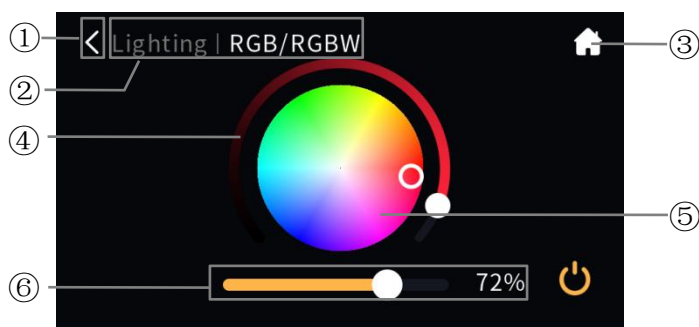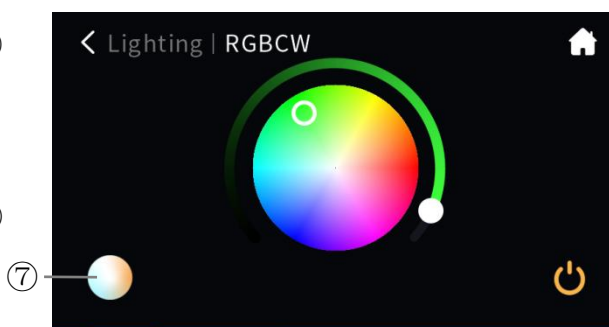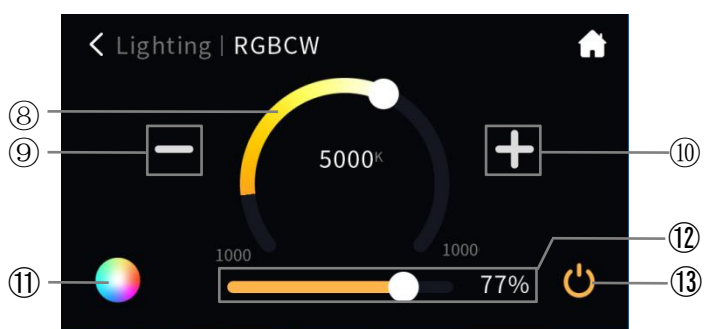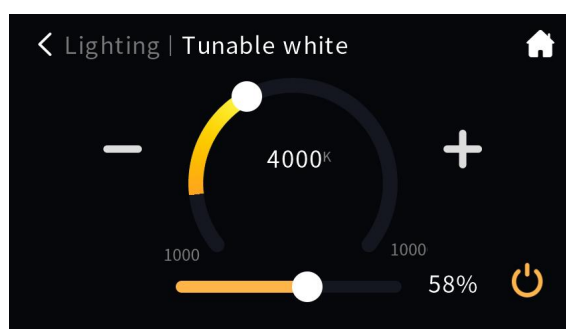
Fig.2.2.3.1

Fig.2.2.3.2

Fig.2.2.3.3

Fig.2.2.3.4

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 **This ring slider is used to adjust the colour shade of the RGB lamp;**

⑤ **This icon is the colour palette;**

When RGB dimming function is configured as RGB/RGBW, function page interface as shown in Fig.2.2.3.1. Sliding ring slider④ to adjust the colour shade of RGB lamp, when ring slider④ is slid to the left bottom, RGB lamp is completely OFF, at this time, the button⑬ become gray, and no reaction when operate the colour palette⑤.

When RGB value of ring slider④ is not 0, the circular colour palette is for selecting colour, when touch the button⑬, RGB lamp off, and ring slider④ automatically slides to the left bottom, button⑬ become gray.

When RGB dimming function is configured as RGBW, the function page interface is similar to RGB function page interface, which is no longer described herein, but more a slider⑥.

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, RGBCW or Colour Temperature, slide the slider⑥ to adjust the brightness of white light, and the operation is similar to the ring slider④ when slider⑥ is slid to the left, which is no longer described herein.

When RGB dimming is configured as RGBCW, the function page interface is similar to RGB function, shown as Fig.2.2.3.2, but more a button⑦ to switch between RGB control and colour temperature control.

⑦ **Switch to colour temperature control interface by touching the icon, shown as Fig2.2.3.3;**

⑧ **This ring slider is to adjust the colour temperature of RGB lamp, the bright colour section is the maximum threshold range with adjustable colour temperature, and the gray section is not adjustable;**

⑨ **Decrease the colour temperature value by touching this icon;**

⑩ **Increase the colour temperature value by touching this icon;**

colour temperature control interface shown as Fig.2.2.3.3, by sliding the ring slider⑧ or touching the icon⑨ and icon⑩ to control the colour temperature of RGB lamp; adjust the white brightness by the slider⑫, sliding the slider to adjust the brightness effect of white light. After finishing the adjustment, touch the icon⑪ to switch to RGB control interface, shown as in Fig.2.2.3.2.

The maximum threshold range of colour temperature slider⑧, and the adjustment range for each touch of icon⑨ or icon⑩ are configured via ETS. **Note: If the minimum value of the threshold range is greater than**

or equal to the maximum value, the setting is determined to be invalid.

⑪ **Switch to RGB control interface by touching the icon, shown as Fig2.2.3.2;**

When RGB dimming is configured as Colour Temperature, the function page interface is similar to RGBCW function page interface shown as Fig2.2.3.4, which is no longer described herein.

⑬ **This button-like icon is for lamp on/off operation and status display;**

Touch this icon to switch on/off, the RGB lamp is turned on or turn off;

Touch the icon to switch off, the status of different RGB lamps are as follow:

(1)RGB: Colour brightness value (ring slider④) is updated to 0, and the colour palette⑤ remains the same;

(2)RGBW: Colour brightness value (ring slider④) and white brightness value(slider⑥) are updated to 0, and the colour palette⑤ remains the same;

(3)RGBCW: Colour brightness value (ring slider④) and colour temperature brightness value(slider⑫) are updated to 0, and the colour palette⑤ and colour temperature value(ring slider⑧) remain the same;

(4)CW: Colour temperature brightness value(slider⑫) is updated to 0, colour temperature value(ring slider⑧) remains the same.

When RGB or W colour value is not 0 (i. e., ring slider④ is not slid to the left bottom or slider⑥ is not slid to the left), icon⑬ will be on.

2.2.4. Curtain function

Curtain function including 5 types: Curtain step/move, Roller blind step/move, Curtain position, Roller blind position and Venetian blind position and slat. Besides, in the UI interface, the current position status of the curtain with position adjustment is displayed on the icons, which needs to be accurately displayed based on the position of the curtains that is fed back from the curtain actuator received on the bus.

Curtain step/move

This type is for Curtain step/move control, supporting to operate by three control button: open curtain, close curtain, stop running. The control interface of Curtain step/move is shown in Fig.2.2.4.1 below.
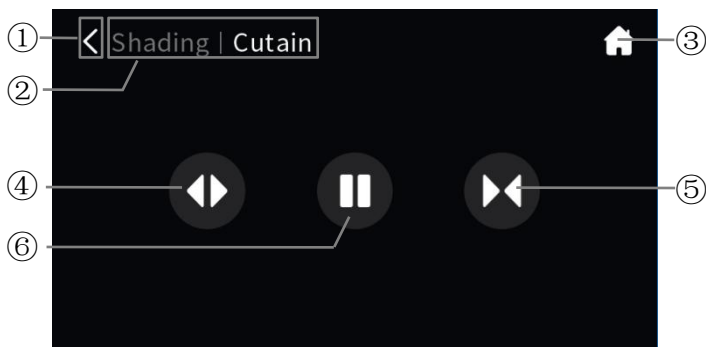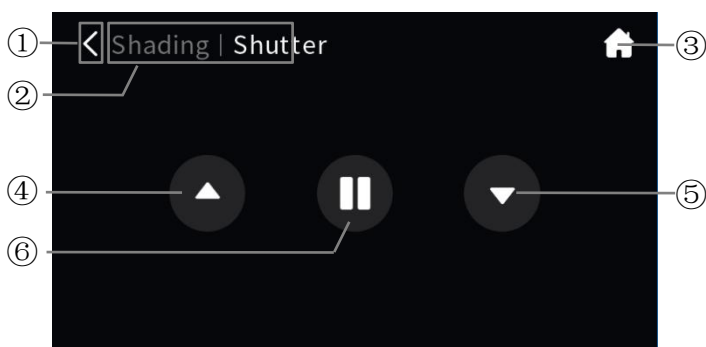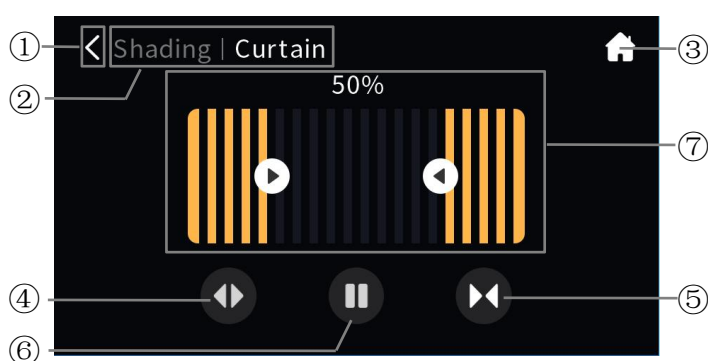

Fig.2.2.4.1

① **Return to the previous level interface by touching this icon;**

② **This area displays the identification of 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 curtain by touching this icon;**

⑤ **Close the curtain by touching this icon;**

⑥ **Stop the curtain running by touching this icon.**

Roller blind step/move

This type is for Roller blind step/move control, supporting to operate by three control button: up move blind, down move blind, stop running. The control interface of Roller blind step/move 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 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.**

Curtain position

This type is for Curtain position control, supporting to adjust the position of curtain by sliding the icon block in the form of percentage as well as operate by three control button: open curtain, close curtain, stop running. The control interface of Curtain position 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 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 curtain by touching this icon;**

⑤ **Close the curtain by touching this icon;**

⑥ **Stop the curtain running by touching this icon;**

⑦ **This icon block displays the simulation of curtain position, slide left or right in this block to adjust the curtain position, and the arrow icon then has a dynamic simulation of the curtain adjustment direction; display the current curtain position in the form of percentage above the icon block as well as on the icon of function page.**

At the same time, the status of icon block⑦ will also update according to the curtain position status feedback received from the bus.

Roller blind position

This type is for Roller blind position control, supporting to adjust the position of blind by sliding the icon block in the form of percentage as well as operate by three control button: up move blind, down move blind, stop running. The control interface of Roller blind position is shown in Fig.2.2.4.4 below.
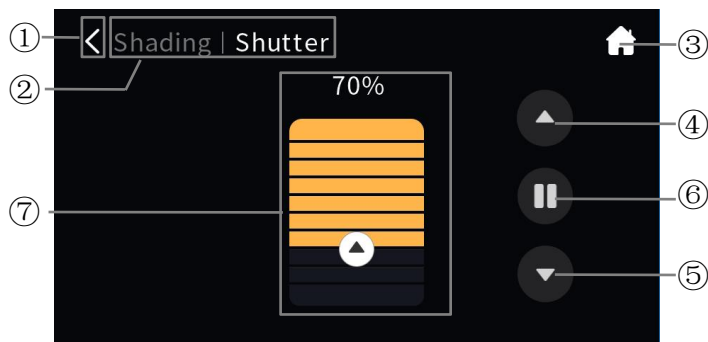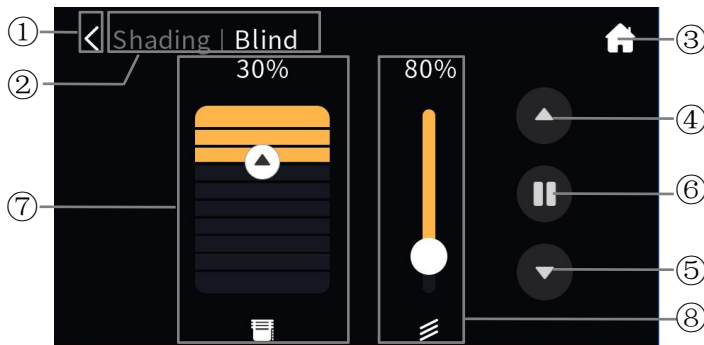

Fig.2.2.4.4

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 **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 block displays the simulation of blind position, slide left or right in this block to adjust the blind position, and the arrow icon then has a dynamic simulation of the blind adjustment direction; display the current blind position in the form of percentage above the icon block as well as on the icon of function page.**

At the same time, the status of icon block⑦ will also update according to the blind position status feedback received from the bus.

Venetian blind position and slat

This type is for Venetian blind position and slat control, supporting to adjust the position of blind and angle of louver by sliding the icon block in the form of percentage as well as operate by three control button: up move blind, down move blind, stop running. The control interface of Venetian blind position and slat is shown in Fig.2.2.4.5 below.
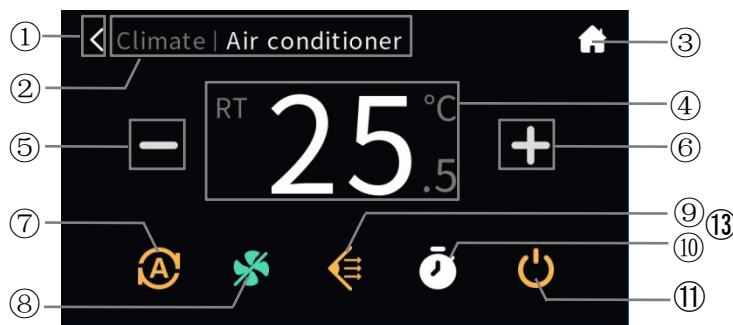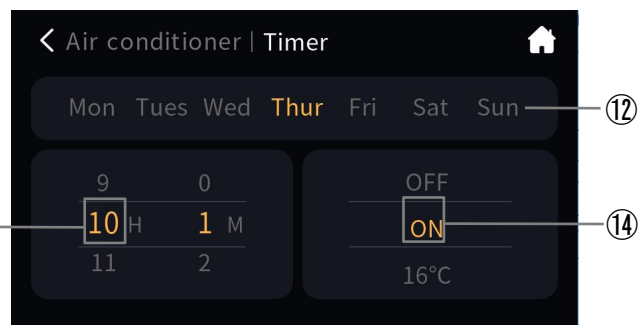

Fig.2.2.4.5

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 **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 block displays the simulation of blind position, slide left or right in this block to adjust the blind position, and the arrow icon then has a dynamic simulation of the blind adjustment direction; display the current blind position in the form of percentage above the icon block as well as on the icon of function page;**

⑧ **This icon is the slider icon of louver angle, adjust the position of blind in the form of percentage by sliding this slider.**

At the same time, the status of icon block⑦ and slider⑧ will also update according to the blind position status feedback received from the bus.

2.2.5. Value sender function

By touching the icon, the device will send the corresponding telegram to the bus. 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 trigger 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.

2.2.6. 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.

2.2.7. Status display function

The Status display is set by ETS, device sends corresponding status telegram to bus, and the icon status will be updated according to the receiving telegram. Set to display air quality as the figure below.
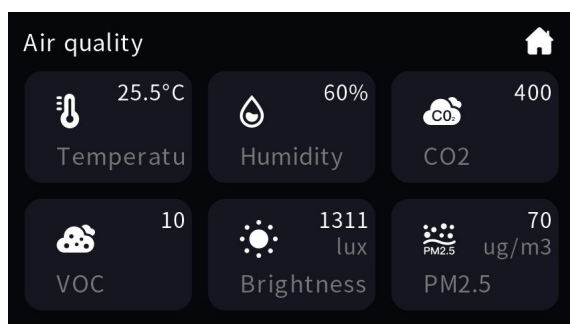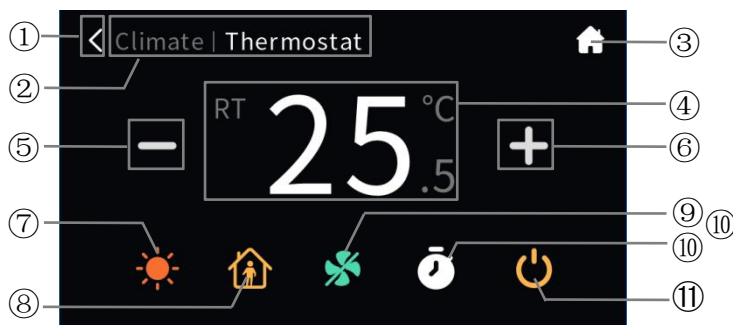
2.2.8. Air condition function
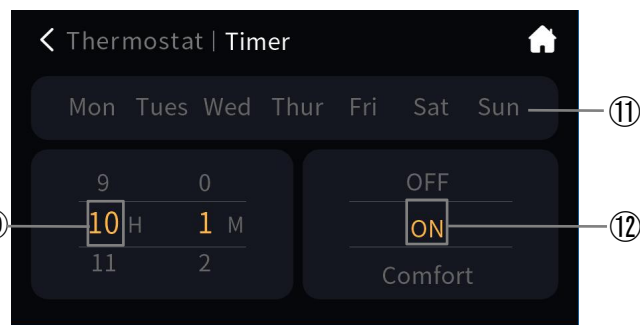

Fig.2.2.8.1

Fig.2.2.8.2

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 **This area displays room temperature or the setting temperature;**

The RT mark on the left of this area is the room temperature; increase and decrease the temperature is automatically switched to the setting temperature, and no RT identity at this time.

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 touching the icon⑤ and icon⑥. For each touching of icon⑤and icon⑥, the adjustment range is 0.5K or 1K. When the setting temperature unit is set to degrees Celsius(℃), as shown in Fig.2.2.8.1, adjustment range of the setting temperature is 16~32℃ by default; when the setting temperature unit is set to Fahrenheit(℉), the current temperature value will automatically convert to Fahrenheit value, adjustment range of the setting temperature is 60~89℉ by default. The temperature adjustment range can be modified through parameter setting.

The ambient temperature is displayed according to the parameter configuration. Temperature detected by internal sensor or external sensor can be displayed through configuration.

⑦ **Switch mode by touching this icon, 5 options of Air condition mode: Auto, Heating, Cooling, Dehumidification and Fan;**

Each mode can be configured independently by the parameters. When disable a mode, there will be no

corresponding item shown on the interface, as shown in Fig.2.2.8.1; when enable, interface supports the mode.

The function page shown as Fig.2.2.5, the colour of the setting temperature information in the top right corner of the Air condition icon follows the colour of the control mode icon.

⑧ **Switch fan speed by touching this icon, 4 options of fan speed: Auto, Low speed, Medium speed, High speed;**

Auto fan speed can be configured independently by the parameter. When disable, there will be no auto fan speed shown on the interface, as shown in Fig.2.2.8.1; when enable, interface supports auto fan speed.

⑨ **Switch wind direction by touching this icon, 2 options of wind direction: Fixed, Swing;**

Wind direction can be configured independently by the parameter. When disable, there will be no wind direction adjustment shown on the interface, as shown in Fig.2.2.8.1; when enable, interface supports to adjust wind direction.

⑩ **Turn on timer function by touching this icon;**

Icon⑩ is timer indication, icon on indicates timer turn on; icon off indicates timer turn off. Used to on/off timer function and indicate timer status.

Touch timer icon to turn on or turn off timer function. Only support to one timer, you can set a time to power on/off or adjust to a setpoint temperature. Power on/off or call the scene function that configured by air condition, it can not turn off timer function.

Note: In the off status, if timer function is set to send a setpoint temperature, the temperature is sent along with a power on command to bus when the time reach.

⑪ **This icon is ON/OFF button for the on/off of Air condition control;**

When ON, the interface can be operated; when OFF, the other icons are not operable except the ON/OFF button.

The status of ON mode, Fan speed, Wind direction, Timer and setting temperature is the status before OFF. The Air condition control interface will recover to the status before power off.

⑫ **This area can choose from Monday to Sunday of the week for timing;**

⑬ **Sliding the number to choose the date and time for timing;**

⑭ **Sliding to choose the air condition status for timing, you can choose on, off or specific temperature;**

Long press icon⑩ in Fig.2.2.8.1 to enter the timer setting interface as shown in Fig.2.2.8.2. In this interface, select the number of days, time and air condition operation for timing. After the completion of the setting, touch the upper-left corner icon to return to the previous interface.

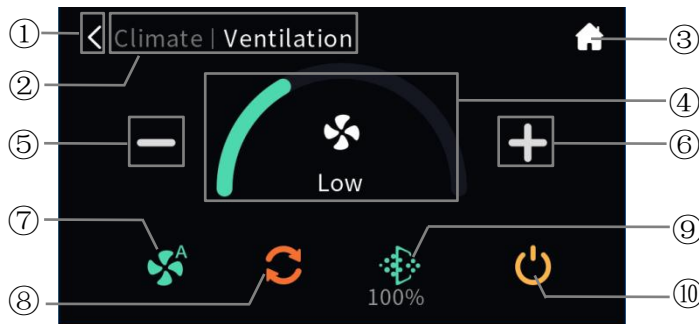### 2.2.9. Room temperature unit function

Fig.2.2.9.1   Fig.2.2.9.2

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 **This area displays room temperature or the setting temperature;**

The RT mark on the left of this area is the room temperature; increase and decrease the temperature is automatically switched to the setting temperature, and no RT identity at this time.

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 touching the icon⑤ and icon⑥. For each touching of icon⑤and icon⑥, the adjustment range is 0.5K or 1K. When the setting temperature unit is set to degrees Celsius(℃), as shown in Fig.2.2.9.1, adjustment range of the setting temperature is 5~37℃ by default; when the setting temperature unit is set to Fahrenheit(℉), the current temperature value will automatically convert to Fahrenheit value, adjustment range of the setting temperature is 41~98℉ by default. The temperature adjustment range can be modified through parameter setting.

The ambient temperature is displayed according to the parameter configuration. Temperature detected by internal sensor or external sensor can be displayed through configuration.

⑦ **Switch control mode by touching this icon, 2 options of control mode: Heating, Cooling;**

RTC control mode is set by ETS, the mode can be switched on the screen only when it is configured as

"Heating and Cooling", or fix the mode as heating or cooling. When mode is heating, it can be applied to floor heating device.

The function page shown as Fig.2.2.5, the colour of the setting temperature information in the top right corner of the Room temperature unit function icon follows the colour of the control mode icon.

⑧ **Switch operation mode by touching this icon, 4 options of operation mode: Comfort, Standby, Economy, Protection;**

⑨ **Switch fan speed by touching this icon, 5 options of fan speed: Low speed, Medium speed, High speed, Auto, Off;**

Auto fan speed can be configured independently by the parameter. When disable, there will be no auto fan speed shown on the interface, as shown in Fig.2.2.9.2; when enable, interface supports auto fan speed.

⑩ **Turn on timer function by touching this icon;**

Icon⑩ is timer indication, icon on indicates timer turn on; icon off indicates timer turn off. Used to on/off timer function and indicate timer status.

Touch timer icon to turn on or turn off timer function. Only support to one timer, you can set a time to power on/off, or adjust to a operation mode or setpoint temperature. Power on/off or call the scene function that configured by air condition, it can not turn off timer function.

Note: In the off status, if timer function is set to send a setpoint temperature, the temperature is sent along with a power on command to bus when the time reach.

⑪ **This icon is ON/OFF button for the on/off of RTC control;**

When ON, the interface can be operated; when OFF, the other icons are not operable except the ON/OFF button.

The status of ON mode, Operation mode, Timer, setting temperature and others is the status before OFF. The RTC control interface will recover to the status before power off.

⑫ **This area can choose from Monday to Sunday of the week for timing;**

⑬ **Sliding the number to choose the date and time for timing;**

⑭ **Sliding to choose the RTC status for timing, you can choose on, off, operation mode or specific temperature;**

Long press icon⑩ in Fig.2.2.9.1 to enter the timer setting interface as shown in Fig.2.2.9.2. In this interface, select the number of days, time and air condition operation for timing. After the completion of the setting, touch the upper-left corner icon to return to the previous interface.

2.2.10. Ventilation system function

Fig.2.2.10.1

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 **This icon is ring bar to display current fan speed level, divided into three sections: Low speed, Medium speed, and High speed;**

⑤ **To decrease fan speed level by touching this icon;**

⑥ **To increase fan speed level by touching this icon;**

Adjust fan speed by touching icon⑤ and icon⑥. For each touch of icon⑤ and icon⑥, the Adjustment range performed is Low, Medium and High.

⑦ **Turn on auto fan speed function by touching this icon;**

Auto fan speed can be configured independently by the parameter. When disable, there will be no auto fan speed shown on the interface, as shown in Fig.2.2.10.1; when enable, turn on or turn off the function by touching icon⑦. Icon on indicates turn on the auto fan speed; icon off indicates turn off auto fan speed. When enable, the fan speed level is calculated from the concentration of CO_2 or PM2.5, and updated to ring bar④ to display current fan speed. In addition, also you can enable or disable auto fan speed function by the bus, touch icon⑦ is no response when disable.

Note: when manually operate icon ⑤ and ⑥ to adjust fan speed level, it links to exit Auto function, that is the Auto icon should display Off status and the object should send a telegram to cancel auto.

⑧ **This is the heat recovery icon, used to turn on or off heat recovery function;**

Heat recovery of ventilation can be configured independently by the parameter. When disable, there will be no heat recovery function shown on the interface, as shown in Fig.2.2.10.1; when enable, turn on or turn off the function by touching icon⑧. The icon on indicates turn on heat recovery; the icon off indicates turn off heat recovery. In addition, also you can enable or disable heat recovery function by the bus, touch icon⑧ is no response when disable.

⑨ This icon is the filter timer icon;

Filter timer counter function of ventilation can be configured independently by the parameter. When disable, there will be no filter timer counter function shown on the interface, as shown in Fig.2.2.10.1; when enable, icon⑧ will be colourful after ventilation system ON, the remaining evaluation value will be displayed below 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 icon⑨, the filter time can be reset, as shown in Fig.2.2.10.2 below. After clicking "Confirm", the filter timer value can be reset to 100%.

Reset filter time?

Cancel   Confirm
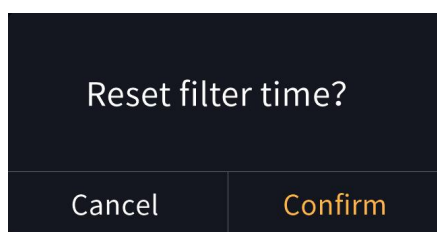
Fig.2.2.10.2

⑩ 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. When ON, the interface can be operated; when OFF, the other icons are not operable except the ON/OFF button.

2.2.11. Audio control function

Fig.2.2.11.1

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 **This area displays track name, modify the name by the bus;**

⑤ **This area displays artist name, modify the name by the bus;**

⑥ **Select previous song by touching this icon;**

⑦ **Select next song by touching this icon;**

⑧ **Play or pause song by touching this icon;**

⑨ **Switch to play mode by touching this icon, 3 options of play mode: list loop, single loop, random playback;**

⑩ **This icon is for volume decreasing;**

⑪ **This icon is for volume increasing;**

When adjustment volume is configured to be 1bit type, relative control volume by touching icon⑩ and icon⑪, to decrease or increase.

⑫ **Mute or exit mute by touching this icon;**

⑬ **This area displays album name, modify the name by the bus;**

⑭ **Adjust the volume in the form of percentage by sliding this slider;**

When adjustment volume is configured to be 1byte type, absolute control volume by sliding slider⑭.

⑮ **This icon is ON/OFF button for the power on/off of Audion control;**

When ON, the interface can be operated; when OFF, the other icons are not operable except the ON/OFF button.

2.3. Setting page
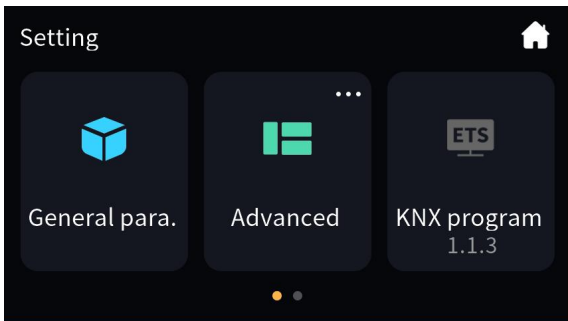
Fig.2.3.1
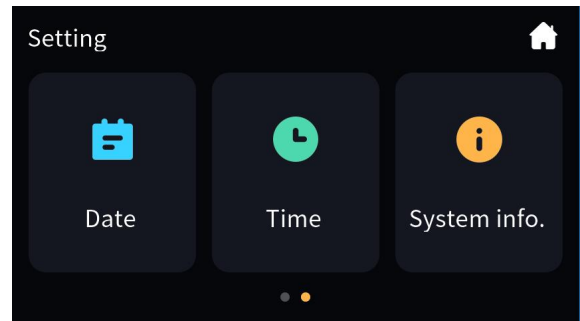
Fig.2.3.2
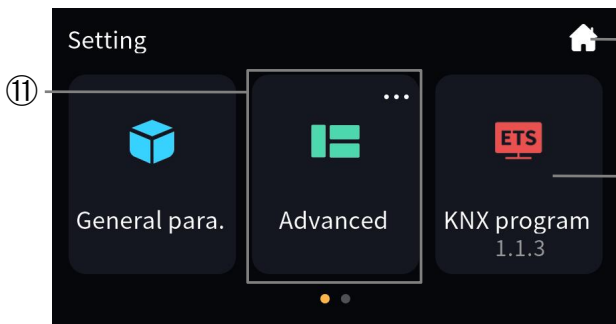
Fig.2.3.3

Fig.2.3.4
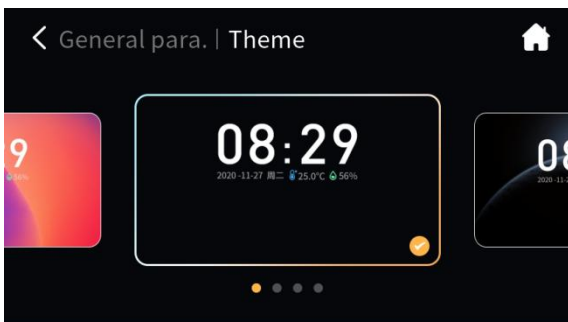
Fig.2.3.5

Fig.2.3.6

Fig.2.3.7
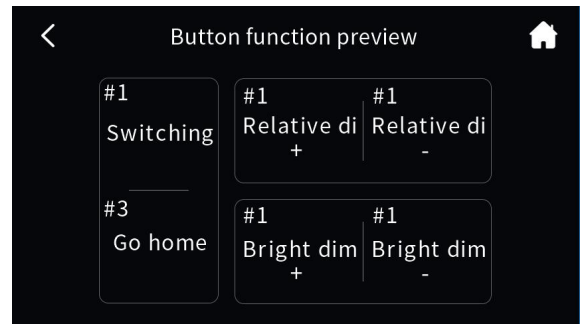
Fig.2.3.8
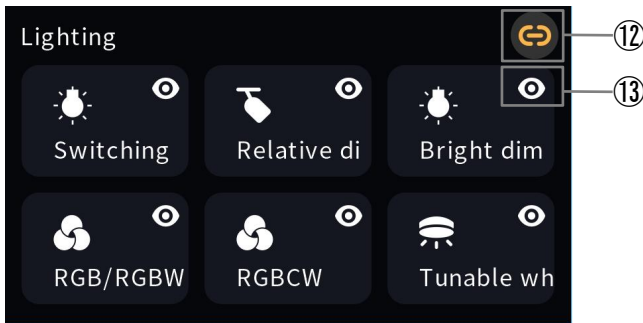
Fig.2.3.9
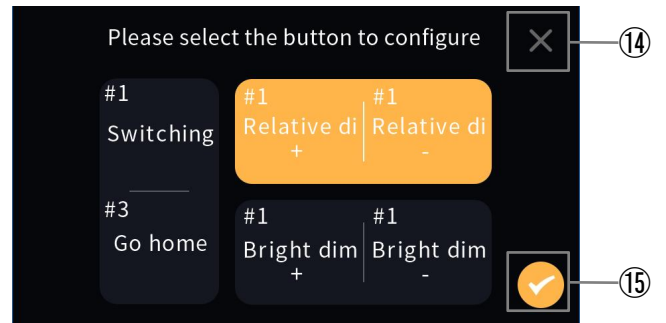
Fig.2.3.10
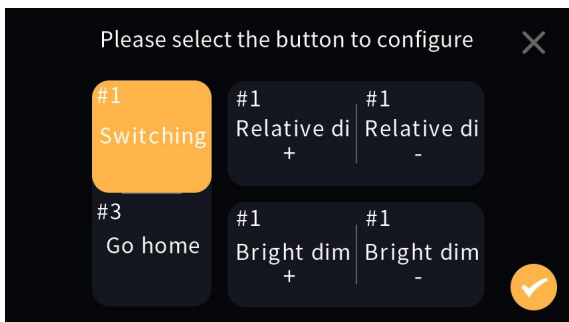
Fig.2.3.11
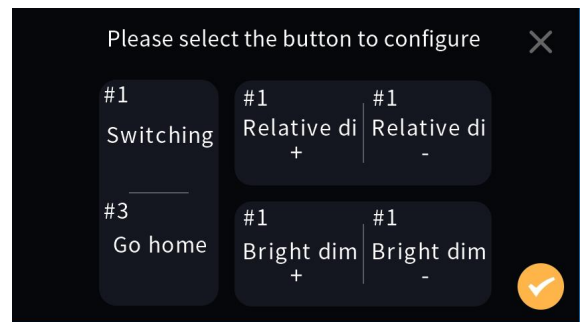
Fig.2.3.12
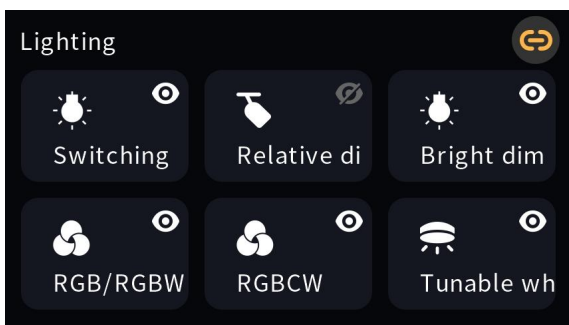
Fig.2.3.13
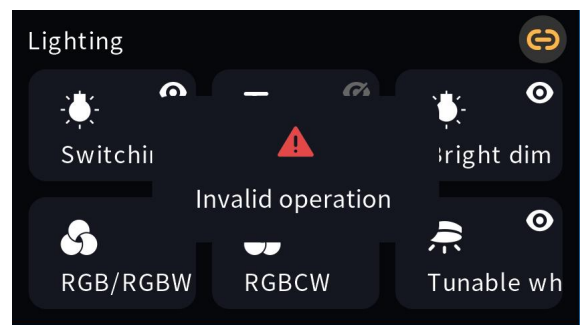
Fig.2.3.14
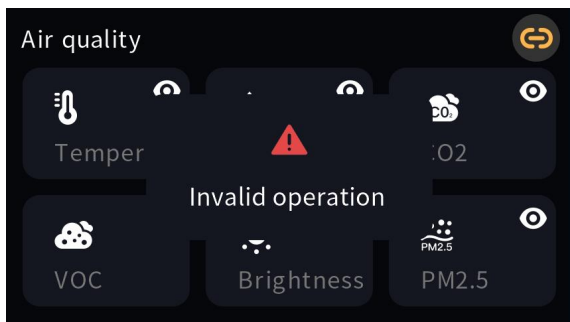
Fig.2.3.15
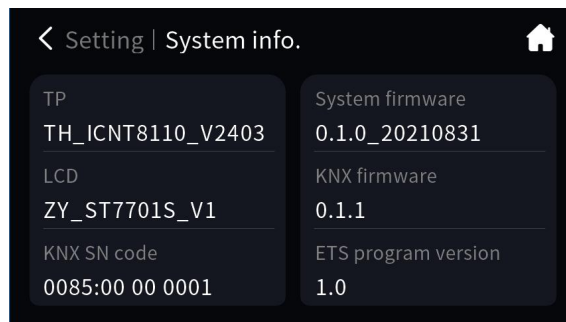
Fig.2.3.16

Click the setting icon in the upper-right corner of the home page to enter the setting page, as shown in Fig.2.3.1.

① **Return to the home page by touching this icon;**

② **This icon is KNX programming button, and display individual address of device below, which is set by ETS;**

Touch the button icon② to enter or exit the physical address programming mode. Under the programming mode, the icon turns red, as shown in Fig.2.3.3. After exiting the programming mode, the icon returns to the normal instruction, as shown in Fig.2.3.1.

③ **Return to the setting page by touching this icon;**

④ **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.

⑤ **This icon is to set the proximity sense;**

There are three levels: OFF, Normal and Enhance, indicating the distance near the sensor, "Normal" distance is about 15cm and "Enhance" distance is about 30cm. When the device senses the human body approaching, then wake up the device and enter the operation interface or password interface.

⑥ **This area is set to switch screen theme, 2 options of theme: Light, Dark;**

Click the button of dark and light themes, pop-up options for homepage background, each theme has 4 options, shown as Fig.2.3.5.

⑦ **This slider is used to set the screen brightness as a percentage;**

⑧ **This slider is used to set the screen volume as a percentage;**

⑨ **Sliding the number to choose the current date;**

Click "Time" in Fig.2.3.2 to enter the time setting interface as shown in Fig.2.3.6. In this interface, slide a number to select the current date. After the completion of the setting, touch the upper-left corner icon to return to the Setting page.

⑩ **Sliding the number to choose the current time;**

Click "Time" in Fig.2.3.2 to enter the time setting interface as shown in Fig.2.3.7. In this interface, slide a number to select the current time. After the completion of the setting, touch the upper-left corner icon to return to the Setting page.

⑪ **Touch the icon block to enter the interface of button function preview, as shown in Fig.2.3.8; Click the upper-right corner icon to enter the advanced setting interface, as shown in Fig.2.3.9;**

Advanced setting is used for display/hide the device function, and link the function on the screen to the button. Fig.2.3.9~Fig.2.3.12 are the operation procedure to customize the link. Add the customizing link as follows:

（1）Enter the customizing link configuration interface from the Advanced in Setting page, you can preview all the icon functions of function pages, as shown in Fig.2.3.9.

Touch Icon⑫ to return Home page; touch icon⑬ to hide the corresponding function.

The function will be not displayed in the function page after hided. If the hided function is already linked to the button, the button will unlink at the same time; if the function does not support linking, prompt an illegal operation. For example, hide the relative dimming function, click the function again it will prompt an illegal operation, as shown in Fig.2.3.13, Fig.2.3.14.

Note: The status display function has no the function to customize the link, prompt an illegal operation when click, as shown in Fig.2.3.15.

（2）Select the button linked to the icon function. Select anyone of the functions, enter the configuration interface of corresponding function, select the button, and the bright colour is selected for the current function. For example, the link selected for relative dimming as shown in Fig.2.3.10, the link selected for switch function as shown in Fig.2.3.11.

（3）Complete the customize link. Touch icon⑮ to complete the customize setting for button linking to the functions, then pop up the window as shown in Fig.2.3.17, save the setting after clicking "Confirm" and return the previous interview, the operated button functions will be updated immediately. If cancel current configuration, touch icon⑭ to exit the customize setting for button linking to the functions and return the previous interview.

The button function will be updated immediately,Confirm execution?

Cancel   Confirm
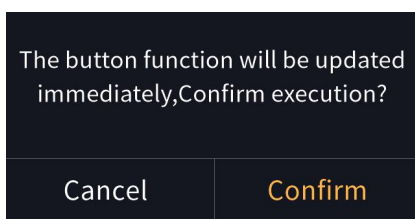
Fig.2.3.17

Note: Only the status display function does not support to customize button linking to touch; when dimming or curtain function links to the button , it occupies 2 button, while the other functions occupy 1 button.

For relative dimming and brightness dimming function, and curtain function, when it is configured as "Independent button" in ETS, re-downloading will lose the link.

Shortcut button operations for different functions after configuring a customize link:

1.For switch function, there is no distinction for the shortcut operation between short and long operation, press the button to turn on/off the lamp.

2.For relative dimming and brightness dimming function, the button configuration is shown as Fig.2.3.18, you can select ①② or ③④ or ⑤⑥. There is distinction for the shortcut operation between short and long operation, short press the button ①/③/⑤ to turn on the lamp, and long press to brighter the brightness. Short press the button ②/④/⑥ to turn off the lamp, and long press to darker the brightness.

3.For RGB, RGBW, RGBCW and colour temperature dimming function, there is distinction for the shortcut operation between short and long operation, short press the button to turn on/off the lamp, and long press to display the corresponding functional control interface.

4. For value sender function, if the touch icon function is set to no distinction between short and long operation, press the button to send the corresponding telegram to the bus; if long operation is set, the long/short operation of the button will send the corresponding setting value.

5.For scene function, if the touch icon function is set to no distinction between short and long operation, press the button to call scene; if long operation is set, short press to call scene, and long press to store scene.

6.For curtain function, the button configuration is shown as Fig.2.3.18, you can select ①② or ③④ or ⑤⑥. There is distinction for the shortcut operation between short and long operation, long press the button ①/③/⑤ to open the curtain, long press the button ②/④/⑥ to close the curtain; short press the buttons all to stop the curtain running.

7.For air condition, room temperature unit, ventilation system and audio control function, there is no distinction for the shortcut operation between short and long operation, press the button to display the corresponding functional control interface.
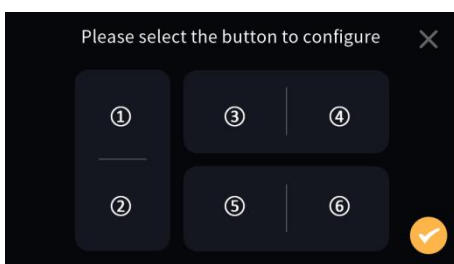
图 2.3.18

With the above settings complete, touch the icon⑫ in the top left corner back to the Settings page.

Click "System Info." in Fig.2.3.2 to enter the system information display interface as shown in Fig.2.3.16, you can view the system information of the device, including touch screen, LCD screen, KNX SN code, system firmware, KNX firmware and ETS program version

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

2.4. Screen saver
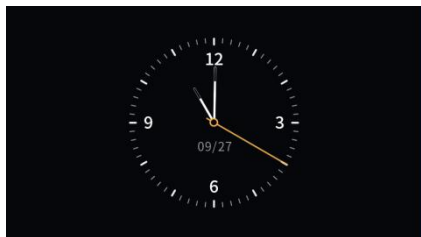
Fig.2.4.1
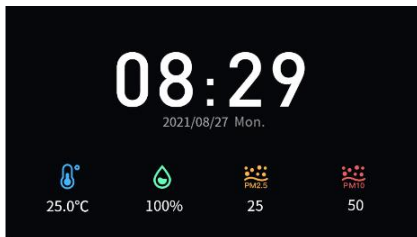
Fig.2.4.2

Fig.2.4.3

Fig.2.4.4

Fig.2.4.5
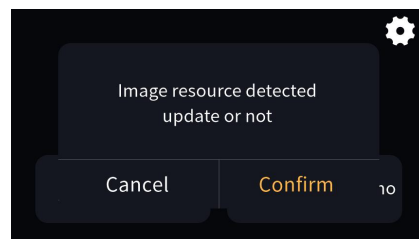
Fig.2.4.6
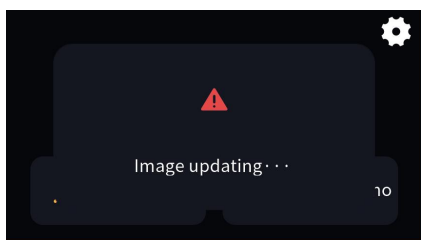
Fig.2.4.7
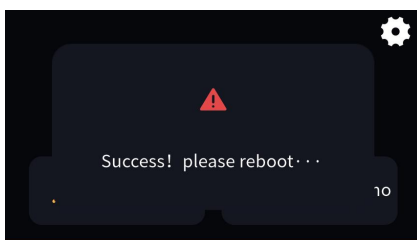
Fig.2.4.8
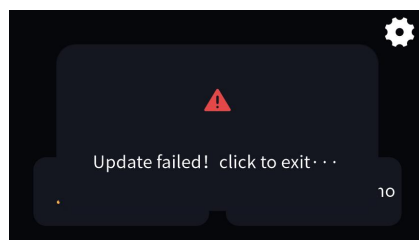
Fig.2.4.9
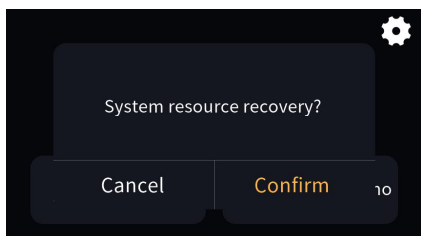
Fig.2.4.10
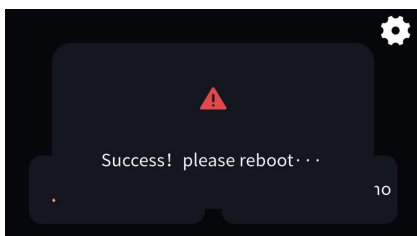
Fig.2.4.11

Screen-saver can be set as clock, digital clock with air quality or album that system comes with through ETS parameter configuration, or insert new pictures through the USB storage device.

(1)Clock screen-saver shown as Fig.2.4.1, displayed after entering the screen saver. Digital clock shown as Fig.2.4.2, the type and numbers of air quality information is configured by ETS, which is up to 4 items. The three default pictures in the program are shown as in Fig.2.4.3, Fig.2.4.4 and Fig.2.4.5. The album can choose 1 or 3pictures as the screensaver, display the fist picture when the number of pictures is 1; It will automatically switch picture in every 5s when the number of pictures is 3.

(2) Inserting new pictures through the USB storage devices, specific steps are as follow:

Note:①Only support USB storage devices that the format should be FAT32 (if the format is not FAT32, it need to be formatted as FAT32);

②Only support USB storage devices with capacity not greater than 32GB.

1. USB storage device setting: create a new folder named "picture" under the root directory of the USB storage device, place three pictures in the folder and name as "Album_1", "Album_2", "Album_3", the resolution must be 854*480. Supporting pictures with the suffix: jpg, bmp, tjpg, png (Among them, the background colour 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 USB storage device, 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 the USB storage device into the device, if the USB storage device 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.2.4.6;

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.2.4.7, Fig.2.4.8, Fig.2.4.9.

(3) Delete the customized picture that has already inserted through the USB storage device, specific steps are as follow:

When there is a folder named "picture" in the USB storage device but no picture in accordance with valid name and format, there will pop up a window "System resource recovery?", as shown in Fig.2.4.10, click "Confirm", then will delete the customized picture that has already inserted and pop up a window " Success! please reboot...", as shown in Fig.2.4.11, you need to reboot the device manually to recover the original album of

the system.

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.

2.5. Security setting

Enable or disable the password function through parameter configuring, if enable, the interface shown as Fig.2.5.1 below. According the parameters setting, you can select to input a password to operate when access the Setting page, Advanced setting, or to wake-up the screen from screensaver or the status of screen off. Password is 4 digit number, configured by parameter setting.
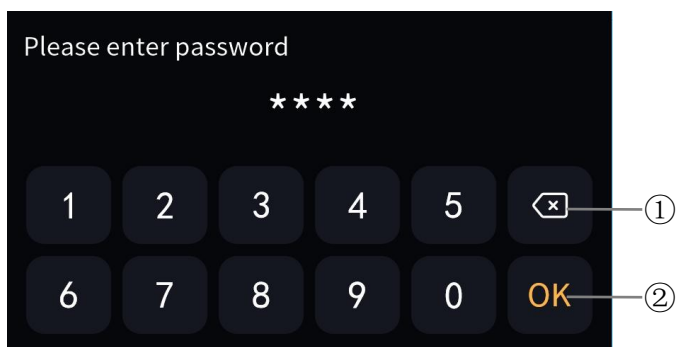
Fig.2.5.1

① **Delete the input by touching this icon;**

② **Confirm the input by touching this icon.**

2.6. Locking function
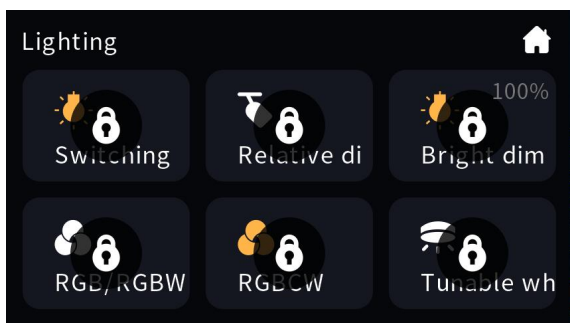
Fig.2.6.1
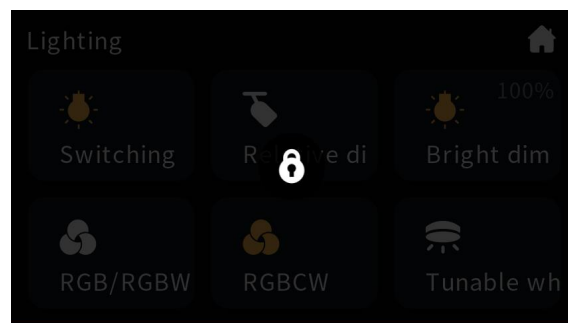
Fig.2.6.2

Function Locking

User can lock or unlock each function icon individually through the bus. After locking, interface shown as Fig.2.6.1, this interface cannot be operated except receiving telegram from the bus. Function locking only locks each function, and has no effect on switching between home page and each function page.

Device Locking

User can lock or unlock the operating interface of the device via the bus. After locking, interface shown as Fig.2.6.2, the entire device cannot be operated, except receiving telegram from the bus.

2.7. Cleaning mode
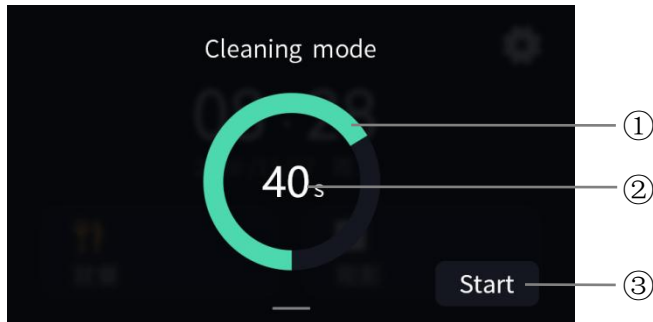
Fig.2.7.1
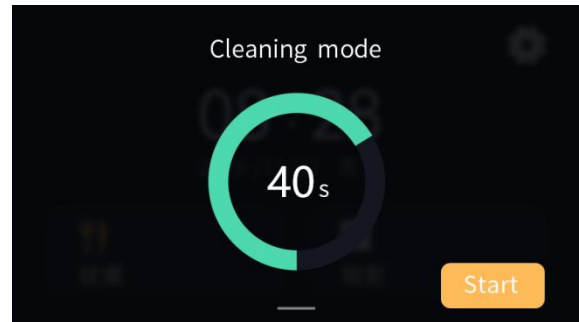
Fig.2.7.2

On the home page or function page, when pulling down the top of the screen, the setting and operation interface of the cleaning mode will appear as shown in Fig.2.7.1, and you can select a countdown time from 5 to 60s. Pull up from the bottom horizontal line to return.

① **This icon is a ring slider to adjust the countdown time of the cleaning mode, range is 5~60s;**

② **This area displays the time value of countdown.**

③ **Click this button to start the countdown. The Dark colour is to stop the countdown timing, and the bright colour is to start the countdown, as shown in Fig.2.7.1 and Fig.2.7.2.**

Note: Both the touch screen and the mechanical buttons are temporarily disabled and inoperable during the countdown.

2.8. Other functions
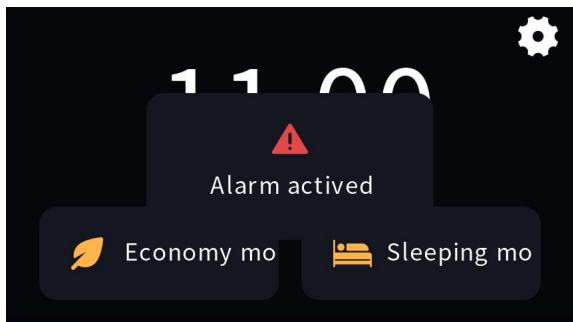
Fig.2.8.1

Fig.2.8.2

Fig.2.8.3
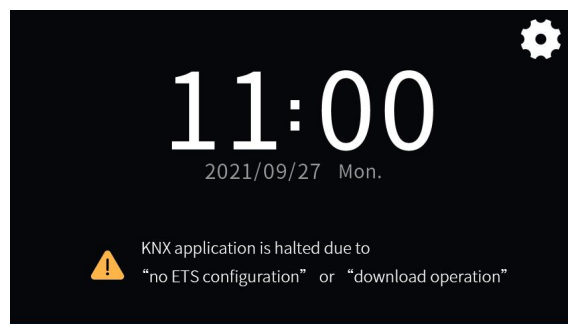
Fig.2.8.4

Alarm function is activated by the receiving telegram from the bus, pup up the window shown as Fig.2.8.1 when activated, and with the alarm sound. Indicate text, the alarm tone time period and the automatically repeate interval time are set by the parameters.

When the KNX bus connection of the device is abnormal, the "KNX Connect Failure" at the top of the interface shown as Fig.2.8.2 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.2.8.3 above.

When the device is not configured with the home page function or when the home page function is configured as an invalid page or as functional icon, the home page interface is shown in Fig.2.8.4 above.

Chapter 3 Screen Background
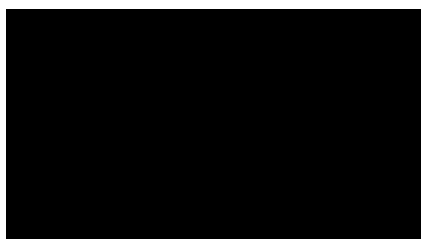
Fig.3.1
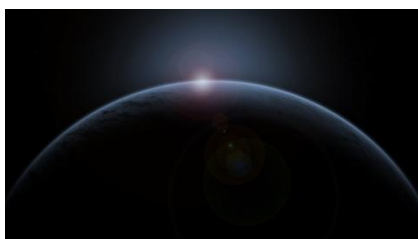
Fig.3.2
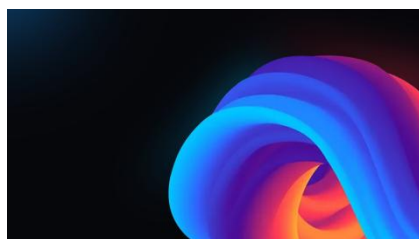
Fig.3.3
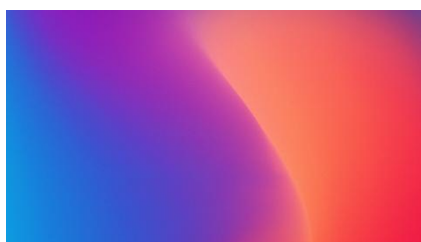
Fig.3.4
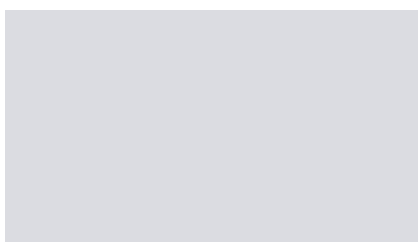
Fig.3.5

Fig.3.6
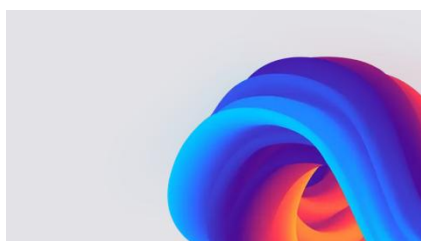
Fig.3.7

Fig.3.8
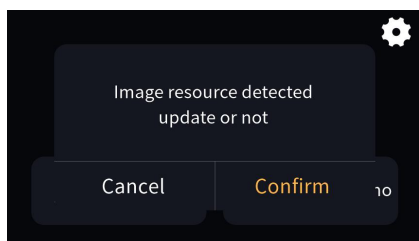
Fig.3.9
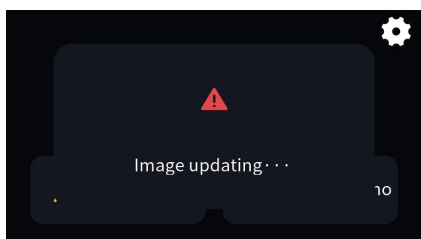
Fig.3.10
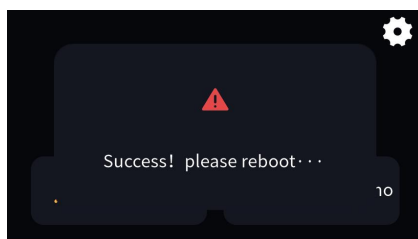
Fig.3.11
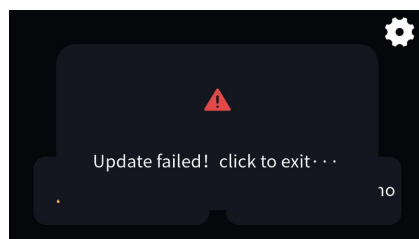
Fig.3.12
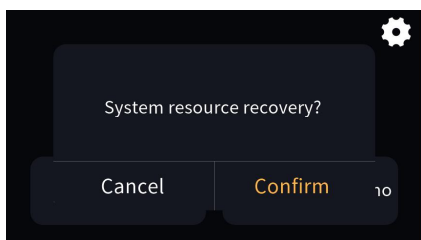
Fig.3.13
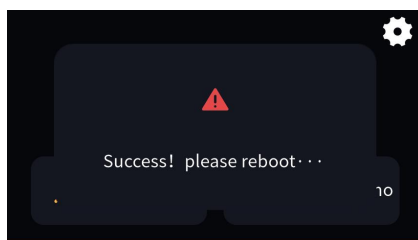
Fig.3.14

Screen background can be configured as the default background of the system through the setting page, or insert new pictures via the USB storage device.

(1) Configuring background through the setting page, there are 8 options according to the different themes: when dark theme is shown in Fig.3.1~Fig.3.4, and light theme is shown in Fig.3.5~3.8. Only select the themes, it is default to display the pure colour background as shown as Fig.3.1 or Fig.3.5.

(2) Inserting new background through the USB storage device, specific steps are as follows:

Note: ①Only support USB storage devices that the format should be FAT32 (if the format is not FAT32, it need to be formatted as FAT32);

②Only support USB storage devices with capacity not greater than 32GB.

1.USB storage device setting: create a new folder named "background" under the root directory of the USB storage device, place pictures and the dark theme is named as "main_bg_d", the light theme is named as "main_bg_l", the resolution must be 854*480.

Note: Supporting pictures with the suffix: jpg, bmp, tjpg, png (Among them, the background colour of the "png" picture must be opaque.)

2. Insert the USB storage device into the device, if the USB storage device meet the above settings, and valid pictures are detected, then will pop up a request window to confirm update, as shown in Fig.3.9;
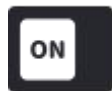
3. Click "Confirm" to update picture; after upgrade, there will pop up a window of the result, if upgrade is successful, then reboot the device manually to apply the new background to the system; if upgrade is failed, click any area outside the window to return to the page, as shown in Fig.3.10, Fig.3.11 and Fig.3.12.

(3) Delete the customized picture that has already inserted through the USB storage device, specific steps are as follow:

When there is a folder named "background" in the USB storage device but no picture in accordance with valid name and format, there will pop up a window "System resource recovery?", as shown in Fig.3.13, click "Confirm", then will delete the customized background picture that has already inserted and pop up a window "Success! please reboot...", as shown in Fig.3.14, you need to reboot the device manually to recover the default background of the system.

Chapter 4   Icons for Function Page

4.1. Icon List for Function Page

Replacing ID NO.	ETS options	Icon	Replacing ID NO.	ETS options	Icon
1	**General light**		12	**General scene 1**	
2	**Ceiling light**		13	**General scene 2**	
3	**Downlight**		14	**General scene 3**	
4	**Walllight**		15	**All on**	
5	**Spotlight**		16	**All off**	
6	**Chandelier**		17	**Go home 1**	
7	**LED strip**		18	**Leave home 1**	
8	**RGB light**		19	**Go home 2**	
9	**Curtain**		20	**Leave home 2**	
10	**Roller blind**		21	**Welcome**	
11	**Venetian blind**		22	**Meeting(guest)**	

Replacing ID NO.	ETS options	Icon	Replacing ID NO.	ETS options	Icon
23	**Dinner**		35	TV	
24	**Party**		36	**Audio**	
25	Sleeping		37	**Socket(CHN)**	
26	Reading		38	**Socket(EU)**	
27	Media		39	**Fan**	
28	Cleaning		40	**Lock 1**	
29	Economy		41	**Lock 2**	
30	Security		42	**Power 1**	
31	Conference		43	**Power 2**	
32	Relax		44	**Window 1**	
33	Romantic		45	**Window 2**	
34	Play		46	**Alarm**	

Replacing ID NO.	ETS options	Icon	Replacing ID NO.	ETS options	Icon
47	Projector		59	Rain	
48	Multimedia		60	Current	
49	Presence		61	Voltage	
50	Temperature 1		62	Power	
51	Temperature 2		63	I/O signal	
52	Humidity		64	Electronic heating	
53	PM2.5		65	Water heating	
54	PM10		66	Air conditioner 1	
55	CO2		67	Air conditioner 2	
56	VOC		68	Air conditioner 3	
57	Brightness		69	Heating	
58	Wind speed		70	Cooling	

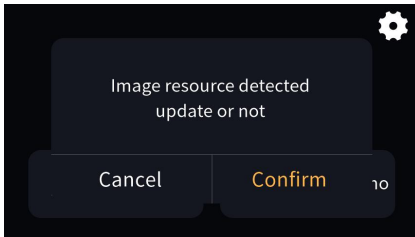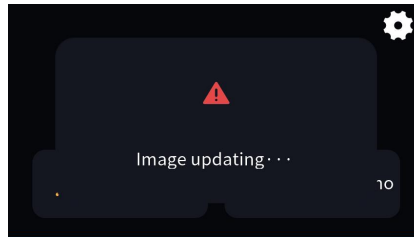| Replacing ID NO.	ETS options	Icon	Replacing ID NO.	ETS options	Icon
71	Heating/Cooling		76	Charge	
72	Music 1		77	Mute	
73	Music 2		78	Day/Night	
74	Ventilation		79	Key	
75	AQI		80	Floor light	

4.2. Icon Replacement for Function Page
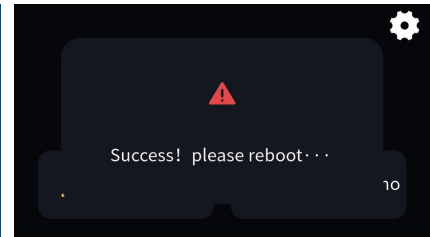

Fig.4.2.1
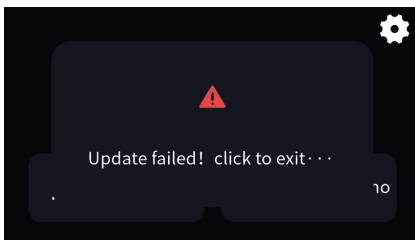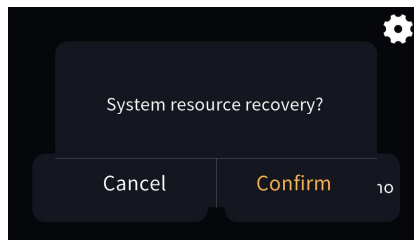

Fig.4.2.2

Fig.4.2.3
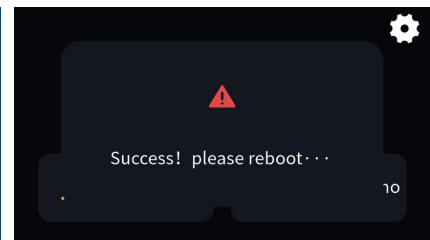

Fig.4.2.4

Fig.4.2.5

Fig.4.2.6

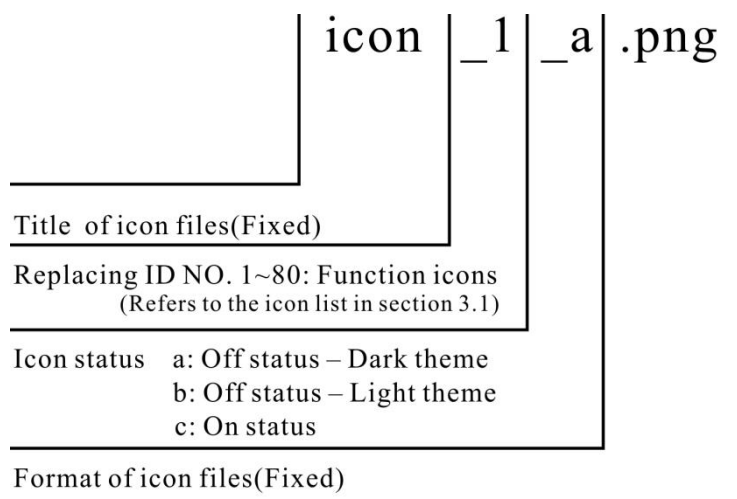icon_1_a.png icon_1_b.png icon_1_c.png

Fig.4.2.7

Insert customized icons to replace the original icons of the system through the USB storage device, specific steps as follows:

Note: ①Only support USB storage devices that the format should be FAT32 (if the format is not FAT32, it need to be formatted as FAT32);

②Only support USB storage devices with capacity not greater than 32GB.

1. USB storage device setting: create a new folder named "Functionicon" under the root directory of the USB storage device, place icon files to be replaced and name them, specific naming rule refers to the note; the resolution should be 64*64. Only support "png" picture format.

Note: naming rule of the icon files in the USB storage device as follows:

$$\text{icon} \mid \_1 \mid \_a \mid .png$$

Title of icon files(Fixed)

Replacing ID NO. 1~80: Function icons
(Refers to the icon list in section 3.1)

Icon status   a: Off status – Dark theme
b: Off status – Light theme
c: On status

Format of icon files(Fixed)

According to the naming rule in the figure above, for examples, icon in the Fig.4.2.7 is the default icon of which replacing ID number is 1, "icon_1_a.png"/"icon_1_b.png" is off status icon,"icon_1_c.png" is on status icons.

2. Insert the USB storage device into the device, if the USB storage device meet the above settings, and there are valid pictures, then pop up a window to request update, as shown in Fig.4.2.1;

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 USB storage device, 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.4.2.2, Fig.4.2.3 and Fig.4.2.4.

4. Delete the customized function page icons that has already inserted through the USB storage device, specific steps are as follow:

When there is a folder named "Functionicon" in the USB storage device but no picture in accordance with valid name and format, there will pop up a window "System resource recovery?", as shown in Fig.4.2.5, click "Confirm", then will delete the customized icons that has already inserted and pop up a window " Success! please reboot...", as shown in Fig.4.2.6, then you need to reboot the device manually to recover the original function icons of the system.

Chapter 5　Icons for Dynamic Effect

Replacing ID NO.	ETS options	Icon	Replacing ID NO.	ETS options	Icon
1	**Lighting switch**		8	**Welcome**	
2	**Lighting dim**		9	**Dinner**	
3	**Curtain**		10	**Party**	
4	**Blind**		11	**Sleeping**	
5	**Scene mode**		12	**Reading**	
6	**Go home**		13	**Media**	
7	**Leave home**		14	**Play**	

Note：Icons for dynamic effect can not be replaced with customized icons.

Chapter 6 Firmware upgrade

The chapter is mainly used to explain the attention of KNX Smart Touch with push button,3-gang update firmware process, in order to use corresponding software correctly and avoid the exception, please be sure to understand the relevant attention details before operating, if you have any question, you can contact our related sales personnel to communicate.

1. The operation process:

There are two types of firmware upgrades: normal upgrade and forced upgrade.

① Normal upgrade: put the upgrade package **.fwp** file of corresponding version in the root directory of the USB storage device, then insert the USB storage device into the device, a pop-up window will appear as shown below, select the button to the right of "Upgrade application" and click "Confirm" to start upgrading the firmware, click "Cancel" to exit the window. The device will automatically reboot when the upgrade complete, please pull out the USB storage device. After upgrade finished , it will restart automatically, then please remove the USB storage device.
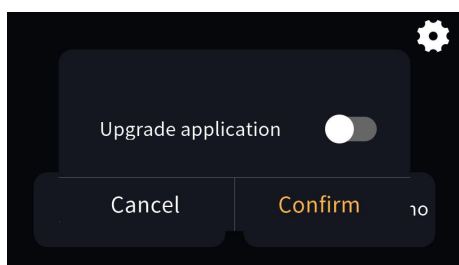
② Forced upgrade: when the upgrade package file is named "ForceUpgradeSoftware.fwp", put the file into the root directory of the USB storage device, then insert the USB storage device into the device, and the upgrade will take place automatically.

2. Note:

① Only support to update via USB storage devices with software package, the type file system of the USB storage device is FAT32, and capacity does not exceed 32G; do not support via bus upgrade package.

② During updating process, the power cannot be cut off, the power failure may cause missing UI source files. If the screen shows red after startup, a forced upgrade recovery is required.

③ After the upgrade finished, it will display the corresponding UI interface, please refer to the above UI document to understand UI interface design better.

④ After the upgrade finished, you can refer to product manual to understand more use details.