User manual

KNX Smart Touch S3

User Manual_V1.0

CHTF-3.3/3.1.01

Attentions

1. **Please keep devices away from strong magnetic field, high temperature, wet environment;**

2. **Do not fall the device to the ground or make them get hard impact;**

3. **Do not use wet cloth or volatile reagent to wipe the device;**

4. **Do not disassemble the devices.**

Contents

1. Function Overview

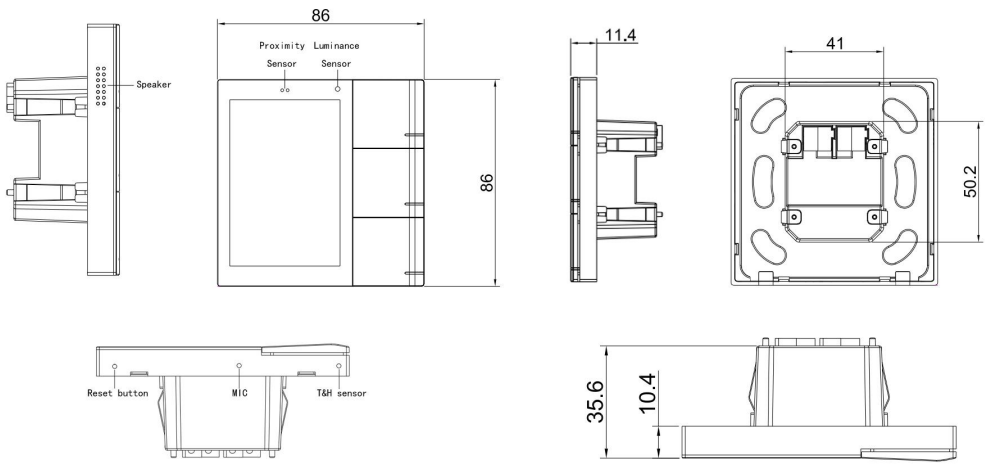
The S3 smart screen is a multi-functional IOT smart screen that integrates smart home central control, video intercom, and Main+Optional (Bluetooth) integrated network. Easy to operate and excellent in interaction, it truly realizes the intelligence and automation of the home and brings a new home life experience.

Designed with a 3.3-inch IPS screen
The structure and appearance feature a plastic frame and a surface with a multi-touch panel
Powered by DC 9V-36V
Supports SIP video intercom function
Supports KNX smart home function
Supports Bluetooth environmental sensors connection
Equipped with 3 physical buttons to control devices/scenes
Supports remote control via mobile phone
Supports customizing scenes on mobile phone
Indoor temperature and humidity detection
Human proximity sensing
Automatically adjusts screen brightness
Automatically adjusts button brightness

2. Product Description

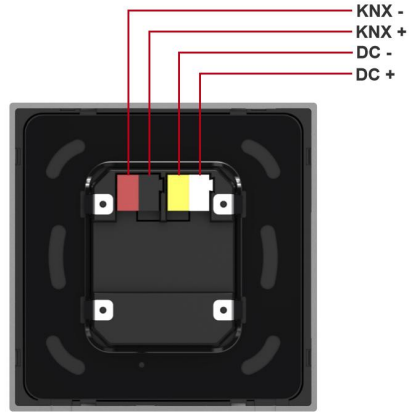
2.1 Appearance

2.2 Dimension



2.3 Interfaces

Front



Back

2.4 Parameters

Working voltage: DC, 9V-36V

Communication interface: 1-channel KNX

Display 3.3 inches

Resolution: 480*320

Wifi: Open field: 2.4G WiFi＞50 meters

Bluetooth: 4.2 ,open field: >10 meters

Microphone: single microphone

Speaker: 1 channel speaker, 8Ω 1W

Overall dimensions (L*W*D): 86*86*10.4mm

Installation 86 box size (L*W*D): 86×86×60mm

3. Initialization Setting

1) Start up and enter the initialization interface, select the language and click the "Next" button (Figure 3-1);

2) Enter the network configuration (Figure 3-2), select the desired hotspot to connect to;

3) After successful network connection, click the "Next" button (Figure 3-3);

4) Enter the account binding page (Figure 3-4), log in to the GVS Smart app, click the "Scan" function in the upper right corner of the app homepage (Figure 3-5), and scan the device QR code with the phone's camera (Figure 3-6);

5) Click on the scanned S3 smart screen device to add it (Figure 3-7). When adding, make sure the device is online. After confirming successful binding, the S3 device will prompt "Binding Successful" and automatically enter the homepage;

6) On the Vision Smart Home app, the system automatically reads the device and scene data configured on the S3 smart screen (Figure 3-8). After selecting the devices to be added, click "Synchronize" to complete.

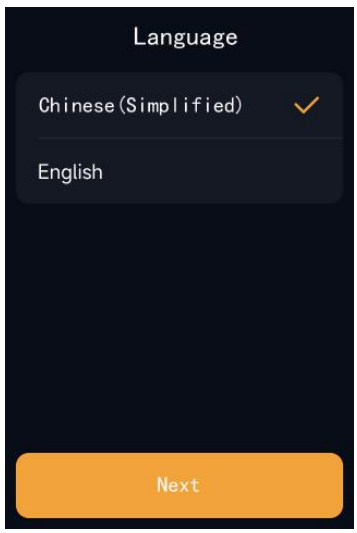


Fig. 3-1

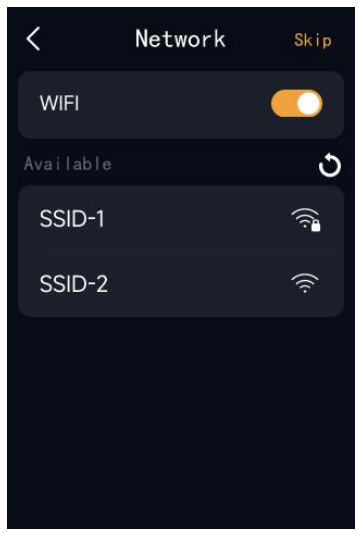


Fig. 3-2

Fig. 3-3

Fig. 3-4

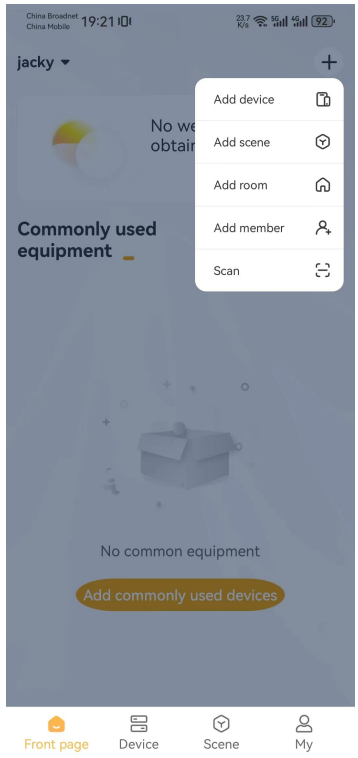


Fig. 3-5

Fig. 3-6

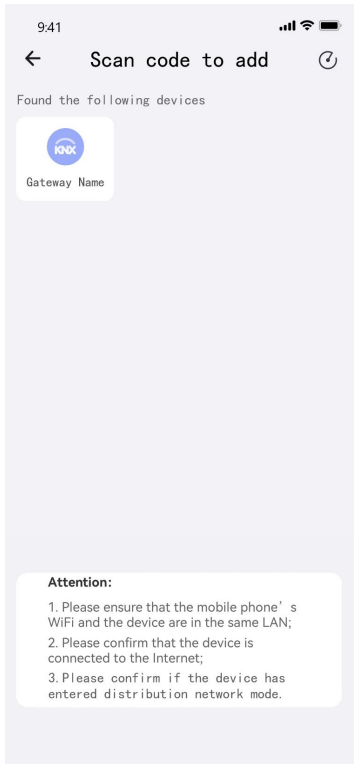


Fig. 3-7

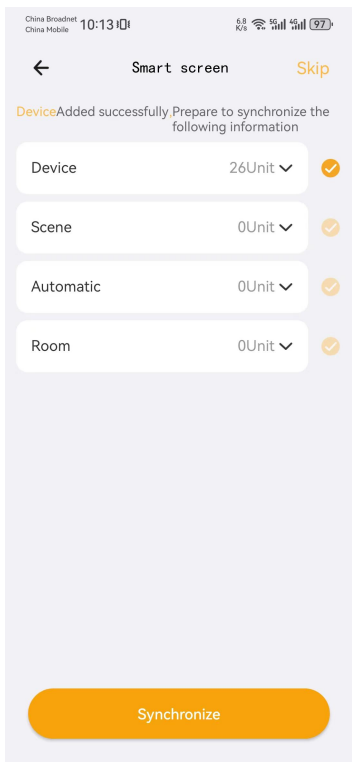


Fig. 3-8

4. Basic Functions

4.1 Main Page

4.1.1 Status Bar

Displays the status of wifi, Bluetooth, and mute.

4.1.2 Time and Inner Temperature & Humidity

Displays the current time and the temperature and humidity values detected by the device's built-in temperature and humidity sensor.

4.1.3 Local Weather

Displays the weather information of the area based on the device's IP location.

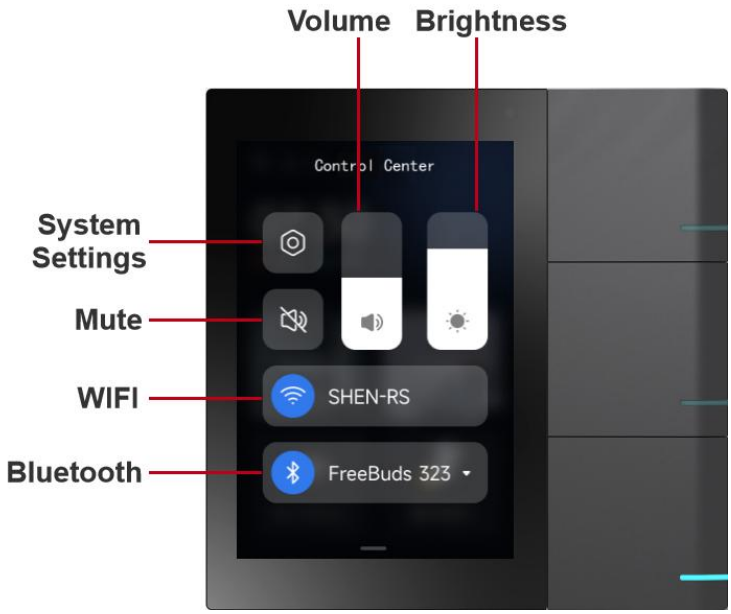
4.1.4 Scene/Device Control

The homepage supports quick access to scenes or devices added through ETS software or the app. The homepage allows up to 4 scene/device controls.

(1) Scene control: Links to configured scenes, displays the scene name and icon, and triggers the scene when clicked.

(2) Device control: Links to configured devices, displays the device name and icon, and allows for on/off operation when clicked. Long press it to access device details.

4.1.5 Drop-down Control Panel



- **System Settings**

Enter system settings to perform system-related operations on the device.

- **Mute**

When muted, incoming call ringtones and touch screen sounds are muted, but do not affect intercom call audio.

- **Volume**

Adjust the volume of incoming calls and touch screen sounds.

- **Brightness**

Adjust the screen brightness.

- **WIFI**

Turn on Wi-Fi and use GVS Smart app to connect the device to a Wi-Fi network.

- **Blue Tooth**

Turn on Bluetooth and use GVS Smart app to connect the device to Bluetooth environmental sensors.

4.2 Smart Home

Swipe left from the home page to access the smart home device list, which displays the smart home devices/scenes added to each function page.

4.2.1 Add function page

You can configure function pages (up to 6) using ETS software, or add custom function pages (up to 10) using the app. All pages can be hidden/shown through system settings or the app.

4.2.2 Add function icon

You can configure icons using the app or ETS, with a maximum of 6 smart home icons per function page.

Note: Scenes or devices not configured in ETS will be automatically assigned to the custom function page if the user has one. If the user does not have a custom function page, any non-ETS configured scenes or devices that are added will generate a custom function page automatically.

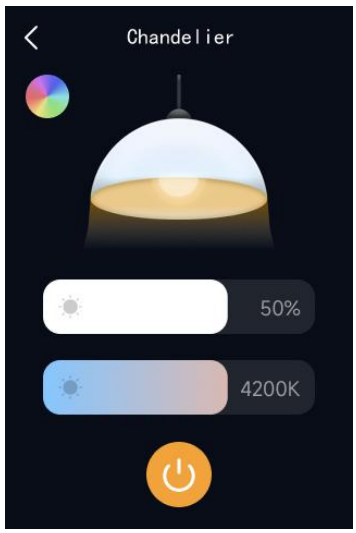
4.2.3 Lighting Control

- **Switch ON/OFF**

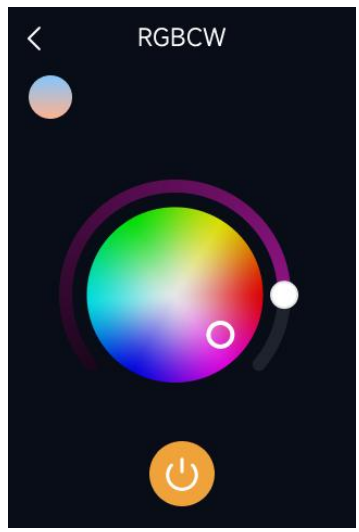
Tap the lighting device icon, and the color of the icon changes to indicate the switch status. Bright color represents on, while gray color represents off.

- **Dimming**

Long press the dimmable lighting device icon to adjust the brightness/color temperature of the light using the progress bar. Bright color represents on, while gray color represents off. Tap the top left corner to enter the RGB dimming interface, select a color, and adjust it using the progress bar.



Dimmable Interface



RGB Dimming Interface

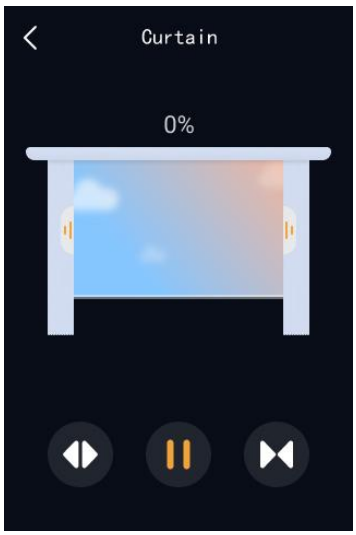
4.2.4 Curtain/Blinds Control

- **Curtain Open/Pause/Close**

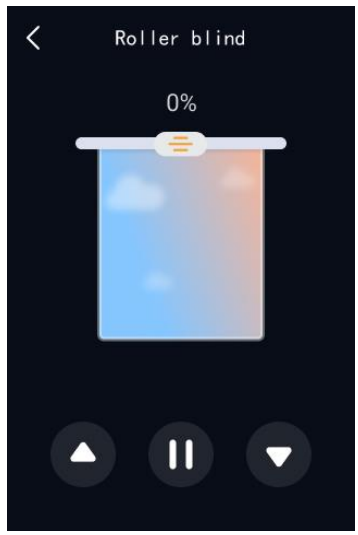
Tap the curtain device icon to enter the curtain control interface, where you can control the curtain to open, close, or pause.

- **Angle Adjustment**

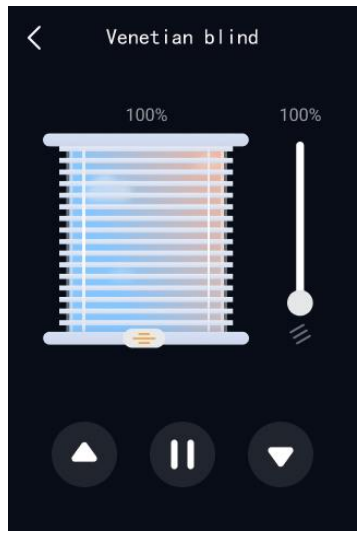
Swipe left/right or up/down to adjust the percentage of curtain closure.



Open Curtain Interface



Roller Curtain Interface



Venetian Blind Interface

4.2.5 AC Control

Tap the air conditioning device icon to enter the air conditioning control interface, with the following control functions:

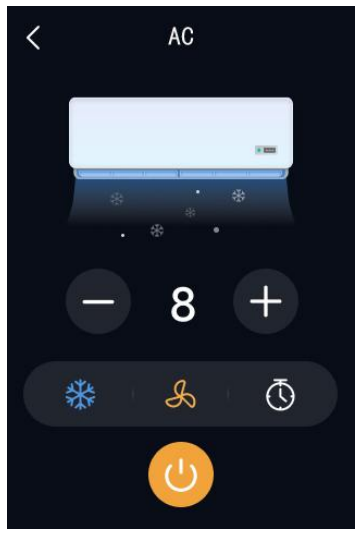
Power ON/OFF: Tap the power button, with bright color representing on and gray color representing off.

Temperature Setting: Tap the temperature increase/decrease icons to control the current temperature.

Mode Setting: Tap the mode setting icon to set cooling, heating, dehumidification, ventilation, or automatic mode.

Fan Speed Setting: Tap the fan speed setting icon to set low, medium, high, or automatic mode.

Timer Setting: Tap the timer setting icon to set a specific switch action at a certain day and time.



Air Conditioning Control Interface

4.2.6 Temperature Control

Tap the temperature control device icon to enter the room temperature control interface, with the following control functions:

Power ON/OFF: Tap the power button, with bright color representing on and gray color representing off.

Temperature Setting: Tap the temperature increase/decrease icons to control the current temperature.

Mode Setting: Tap the mode setting icon to set cooling or heating mode.

Fan Speed Setting: Tap the fan speed setting icon to set low, medium, high, automatic, or off mode.

Operation Mode: Tap the energy-saving setting icon to set energy-saving, comfort, standby, or protection mode.

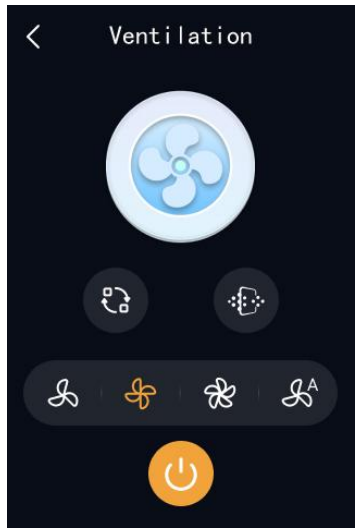
Timer Setting: Tap the timer setting icon to set a specific switch action at a certain day and time.

Room Temperature Control Interface

4.2.7 Ventilation Control

Click on the ventilation device icon to enter the ventilation control interface. The control functions are as follows:

- Power On/Off: Click the power button. The icon will be highlighted in color when turned on and grayed out when turned off.
- Heat Exchange Setting: Enable or disable the heat exchange function.
- Filter Life Display: After turning on the device, the filter life indicator icon will be highlighted, and the remaining life value will be displayed below the icon. Clicking the icon will reset the filter usage time. After confirming, the filter life will be reset to 100%.
- Fan Speed Setting: You can set low speed, medium speed, high speed, and automatic mode.。



Ventilation Control Interface

4.2.8 Background Music Control

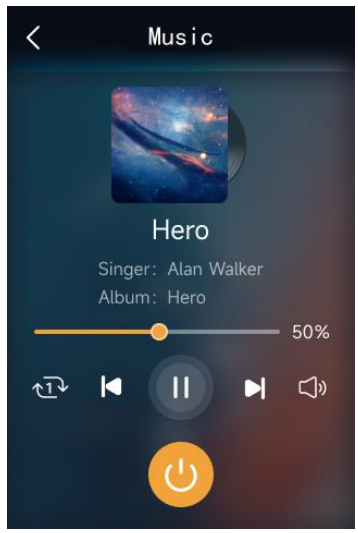
Click on the background music device icon to enter the background music control interface. The control functions are as follows:

Power On/Off: Click the power button. The icon will be highlighted in color when turned on and grayed out when turned off.

Play Mode: Click the play mode icon to set the playback mode to all loop, random, or single loop.

Playback Control: Click the playback control icon to control play/pause, previous track, and next track.

Volume Control: Click the music control icon to adjust the volume or mute.



Background Music Control Interface

4.2.9 Scene Control

Scene icons are divided into two types: manual execution scenes and automatic execution scenes. Clicking on a manual execution scene icon triggers the corresponding scene execution. Automatic execution scenes are indicated with the "AUTO" label and will be executed automatically when the conditions are met. They will not be executed when manually clicked.

4.2.10 BLE Sensor

The devices are connected to Xiaomi's Bluetooth environment sensors. The sensor icons display the monitored environmental Parameters. The added sensor icons are not displayed in the KNX function page but are shown separately in the custom page. If no custom function page is added to the screen, adding devices or scenes that are not ETS-configured will automatically generate a custom function page.

Sensor Environment Monitoring Interface

4.2.11 Button Control

The S3 smart screen is equipped with three physical buttons, which can be bound to specific devices or scenes through ETS or the app to control scenes or devices.

- Scene Control: If a scene is bound to a button, pressing the button will directly execute the scene.
- Device Control: If a button is bound to a device with only on/off functionality, pressing the button will directly turn it on or off. If the device has additional functionalities besides on/off, pressing the button will directly enter the details operation page of that device.

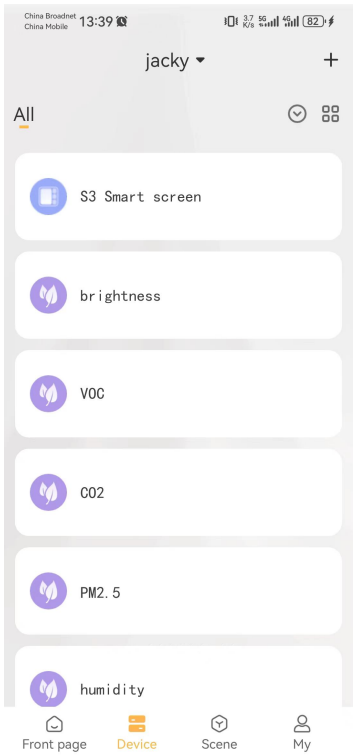
4.2.12 APP Remote Control

The S3 smart screen can be bound to GVS Smart app for remote control and system settings of the smart home.

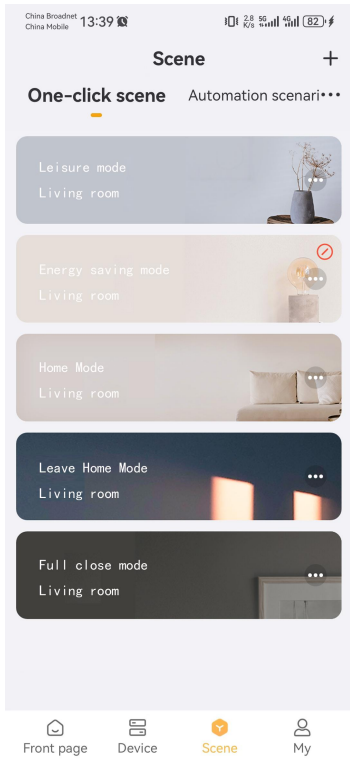
Note: Refer to section 4.4.1 for the account binding process.

- Smart Home Remote Control: After binding the account, the "Devices" tab in GVS Smart app will display the S3 smart screen and all its configured devices. The "Scenes" tab will display all the scenes configured on the S3 smart screen. Clicking on the corresponding device or scene allows for remote control.

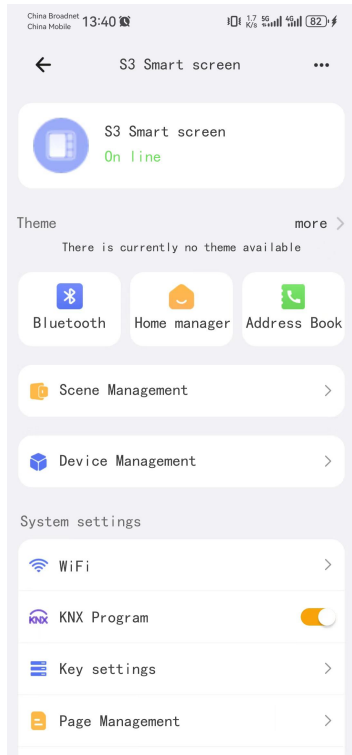
- System Settings: Select the "Devices" tab and click on the "3-inch Screen" device to enter the S3 smart screen settings interface. Here, you can configure system settings and smart home data for the device.



Device Tab Interface

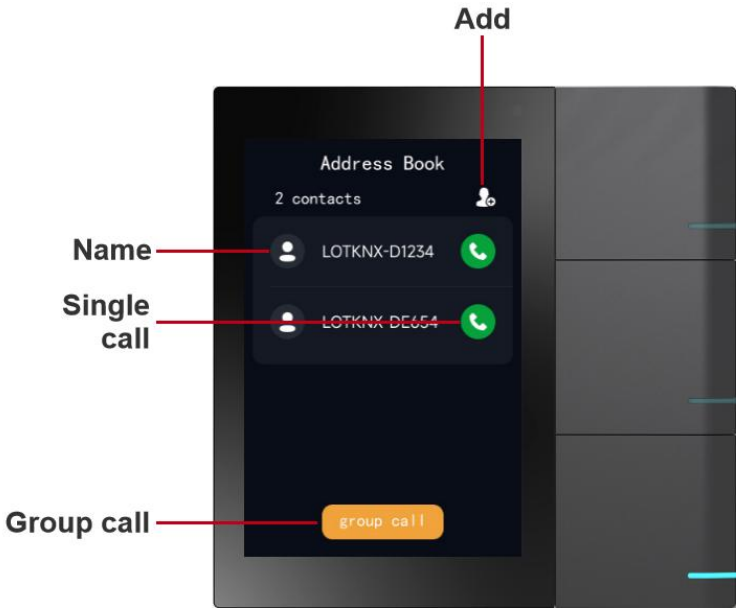


Scenes Tab Interface



Settings Interface

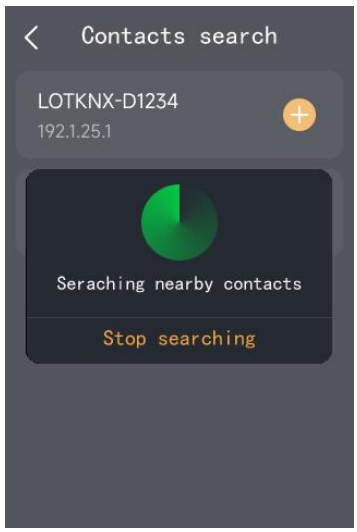
4.3 Video Intercom Function



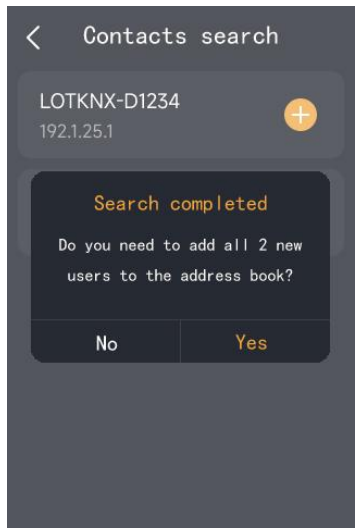
Swipe right from the homepage to enter the video intercom address book list, which displays the indoor units that have been added in the same LAN.

4.3.1 Add Contact

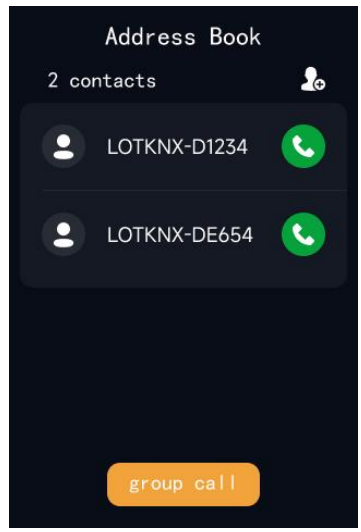
You can use the "Add" button to automatically search for indoor units within the same LAN and select the desired devices to add.。



Search Interface



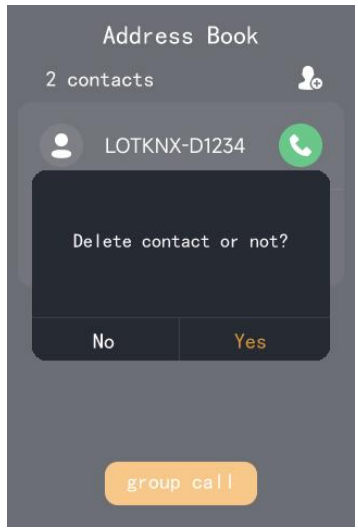
Discovery Interface



Add Interface

4.3.2 Delete Contact

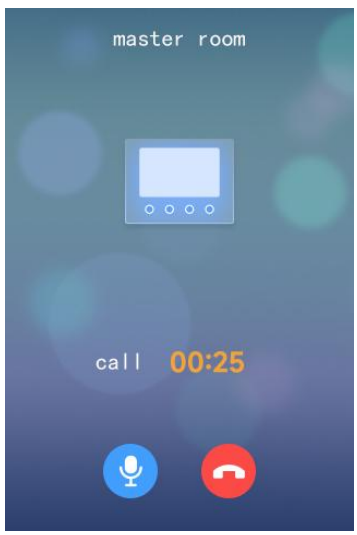
Long press on a single contact in the address book list to delete it.



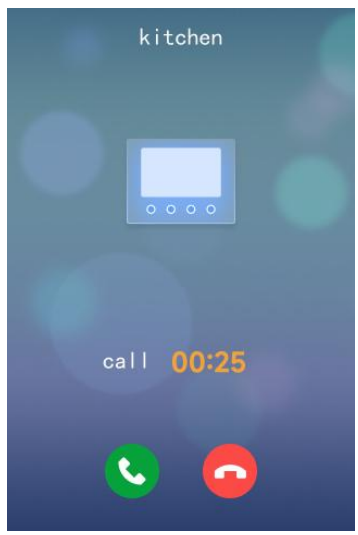
Delete Interface

4.3.3 Single Call to Indoor Monitor

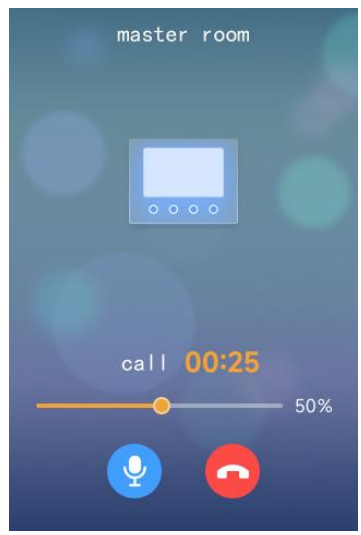
Select a contact, click the call button, and you can have a two-way voice call between indoor monitors. During the call, you can disable the microphone and adjust the intercom call volume.



Single Call Interface



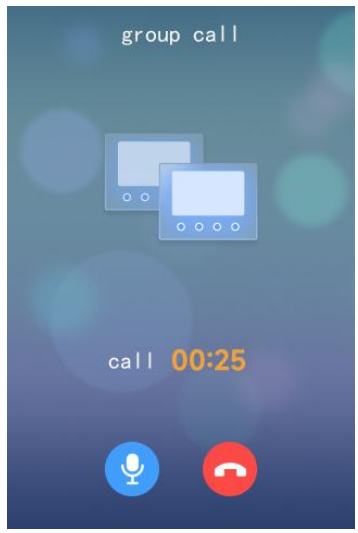
Incoming Call Interface



Answer Interface

4.3.4 Group Call to Indoor Monitors

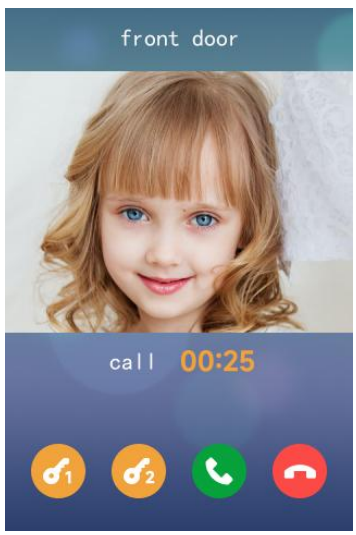
Click the "Group Call" button. If the number of contacts is within 16 (including 16), all contacts will be called by default. If the number of contacts exceeds 16, select the contacts before calling. If one party answers the call, the others will be disconnected.



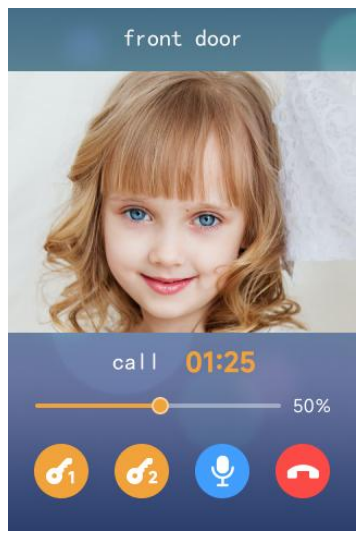
Group Call Interface

4.3.5 Call from Door Station

The S3 smart screen can answer calls from the door station, have video calls and unlock with the door station. During the call, you can disable the microphone and adjust the intercom call volume.



Incoming call interface



Response interface

4.4 System Setting

4.4.1 Bind An Account

1) Enter the system settings, select account binding, and a device QR code interface will pop up (Figure 4-1-1);

2) Use GVS Smart app, click on the "Scan" function in the upper right corner of the homepage (Figure 4-1-2);

3) Scan the QR code of the device with the phone's camera (Figure 4-1-3);

4) Click on the recognized S3 smart screen device to add it (Figure 4-1-4). Make sure the device is online when adding it. After confirming the successful binding, the S3 device will prompt "Binding successful";

5) On GVS Smart app, the system will automatically read the device and scene data configured on the S3 smart screen (Figure 4-1-5). After selecting the devices to be added, click "Synchronize" to complete.

Figure 4-1-1

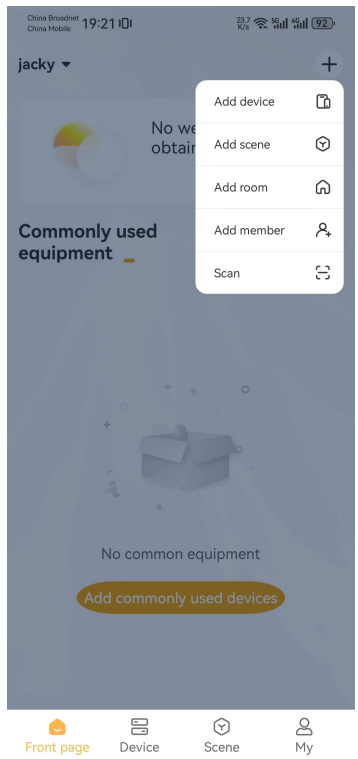


Figure 4-1-2

Figure 4-1-3

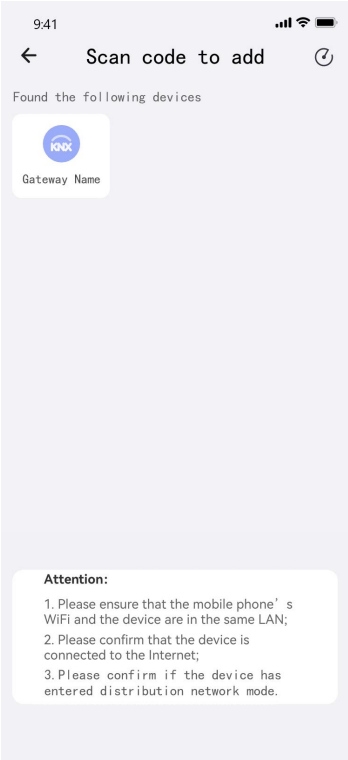


Figure 4-1-4

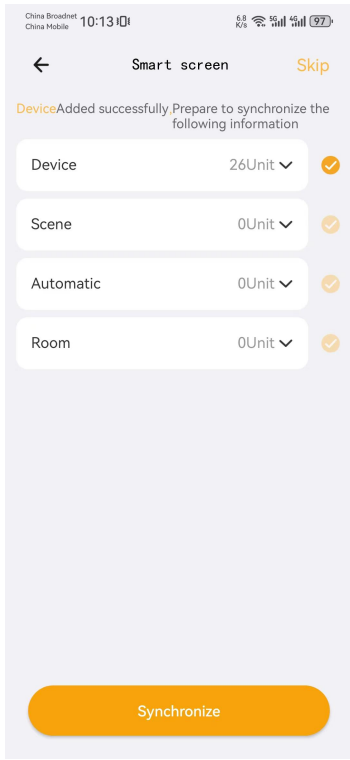


Figure 4-1-5

4.4.2 General Setting

Enter the system settings, select general settings, and enter the general settings interface (Figure 4-2-1):

- Page manager: control the hiding or displaying of configured function pages (Figure 4-2-2);
- KNX programming mode: enable KNX programming mode, at this time, the three physical buttons will be constantly lit in red;
- Always show key information: control the hiding or displaying of the labels of physical buttons;
- Constant LED of physical buttons: control the on or off state of the indicator lights of physical buttons;
- SIP server: display the configured SIP server address and registration status. To perform operations, use GVS Smart app.

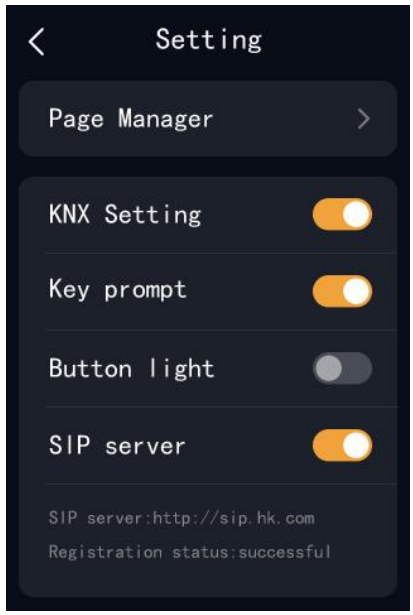


Figure 4-2-1

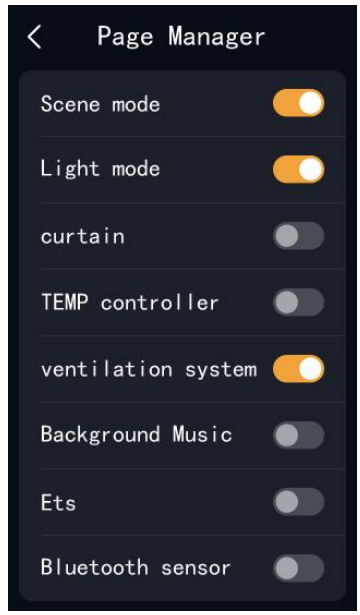


Figure 4-2-2

4.4.3 Network Setting

1) Go to system settings, select network settings, and turn on wifi. The device will automatically search for nearby hotspots (Figure 4-3-1).

2) Select the desired hotspot, enter the password (Figure 4-3-2), and connect (Figure 4-3-3).

Figure 4-3-1

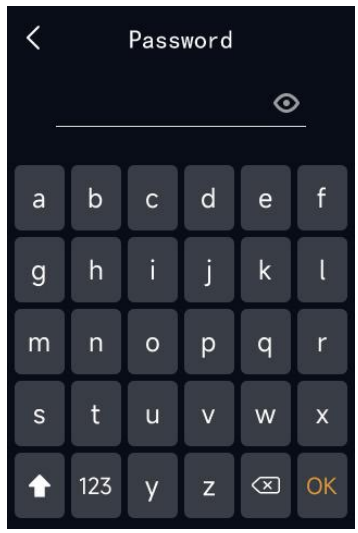


Figure 4-3-2

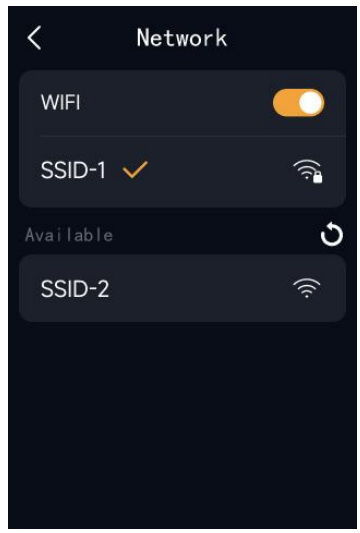


Figure 4-3-3

4.4.4 Sound Setting

Go to system settings, select sound settings, and enter the sound settings interface (Figure 4-4-1):

- Silent mode: When silent mode is enabled, incoming call sounds and touch screen sounds are muted. Timer activation needs to be done through the GVS Smart app.
- Volume adjustment: Can adjust the volume of incoming calls and intercom calls separately.
- Touch screen sound switch: Can control the sound switch for touch screen sounds.

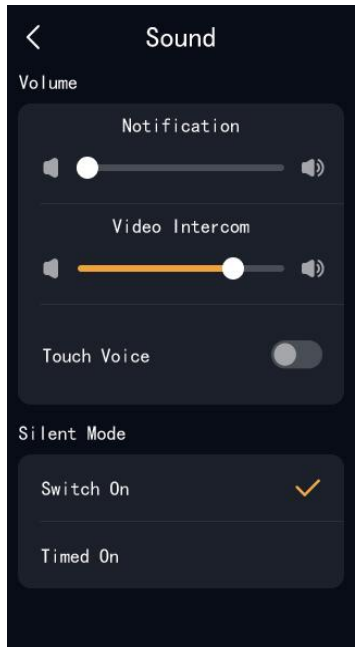


Figure 4-4-1

4.4.5 Language Setting

Go to system settings, select language settings, and enter the language settings interface (Figure 4-5-1). Select the corresponding language and the system will automatically switch to that language.

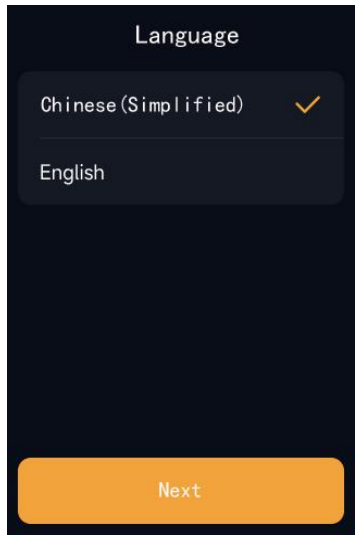


Figure 4-5-1

4.4.6 Time Setting

Go to system settings, select time settings, and enter the time settings interface (Figure 4-6-1). You can choose to automatically synchronize the network time or manually set the time.

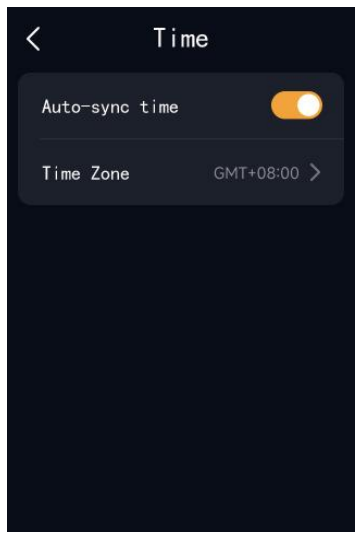


Figure 4-6-1

4.4.7 Brightness

Go to system settings, select screen brightness, and enter the screen brightness settings interface (Figure 4-7-1). You can choose to automatically adjust the screen brightness or manually adjust it.

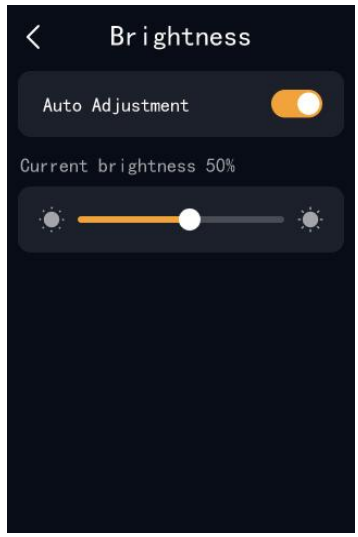


Figure 4-7-1

4.4.8 Password

Go to system settings, select device password, and enter the device password settings interface (Figure 4-8-1). You can choose to enable password verification for screen unlocking, device unbinding, and restoring to default settings.

Note: The initial password is set by ETS configuration. Users can change and reset the password through the app.

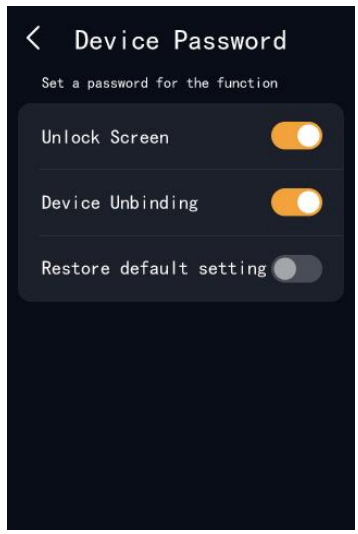


Figure 4-8-1

4.4.9 Device & System

Go to system settings, select device & system, and enter the device & system interface (Figure 4-9-1):

- View device information: Can view Device Name, Device Model, MAC Address, IP Address, PID, Device SN, Firmware Version, and Application Version.
- Device unbinding: Unbind the device from the app.
- Device reboot: Perform a soft reboot of the device.
- Restore to default settings: Restore the device to factory settings, clearing all data except for the KNX smart home system.

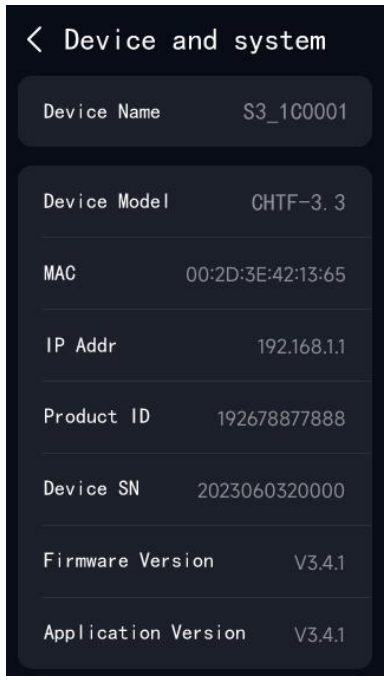
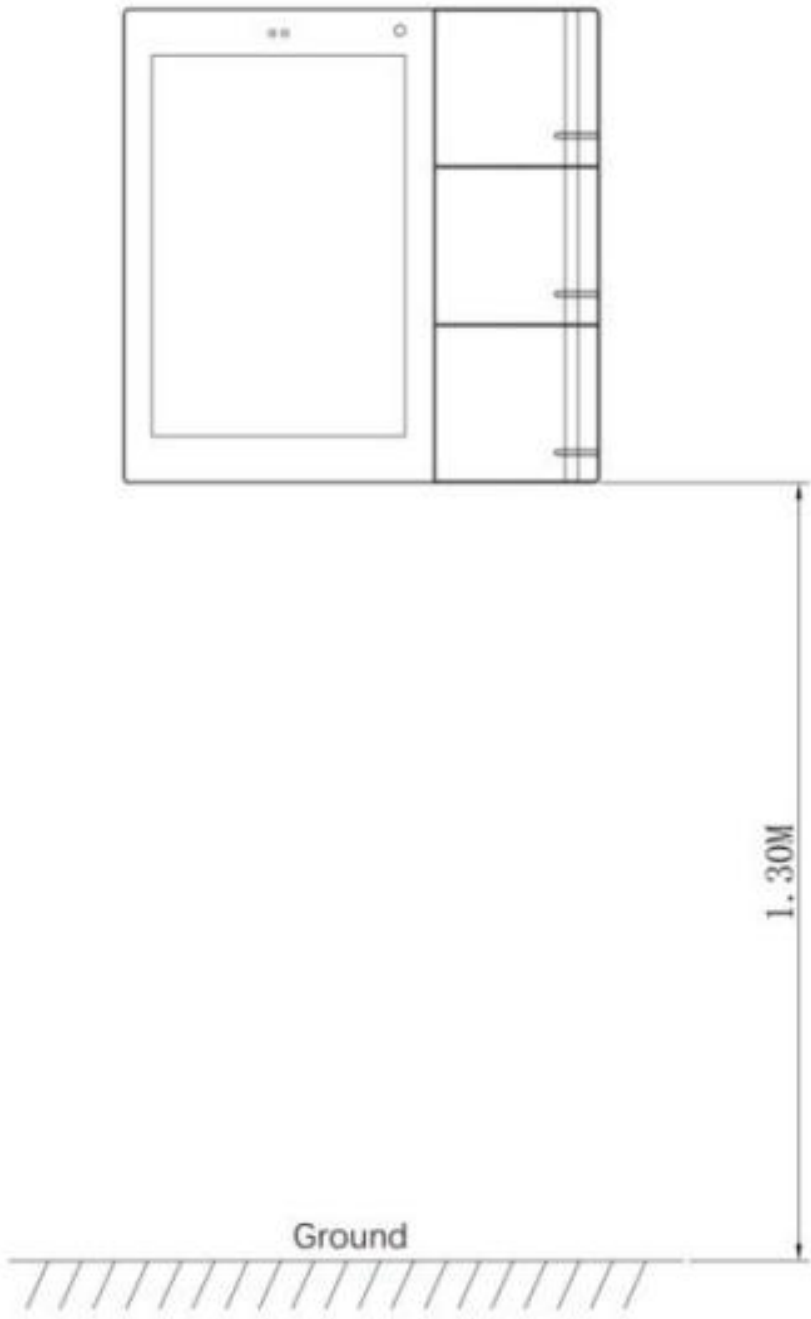


Figure 4-9-1

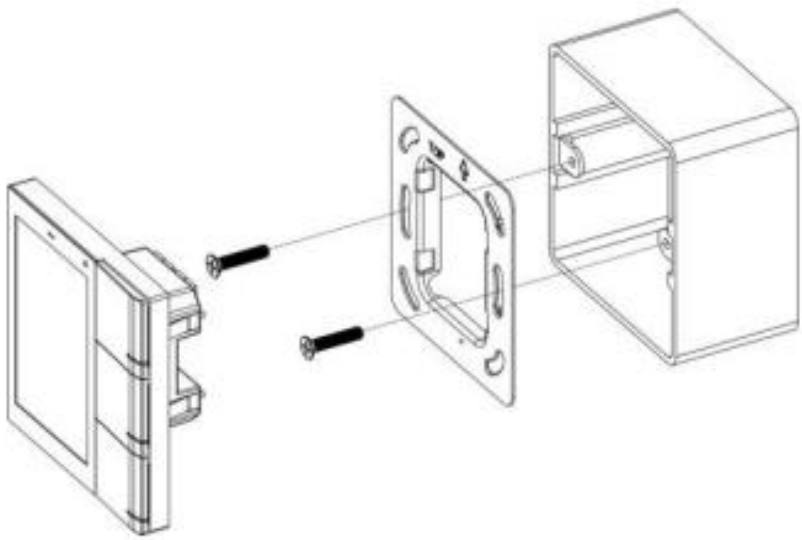
5. Installation

5.1 Installation Height



Suggested installation height 1.3m

5.2 Installation Instruction



Step 1: Fasten the metal bracket to the junction box (86mm, 60mm, 68mm) with screws.

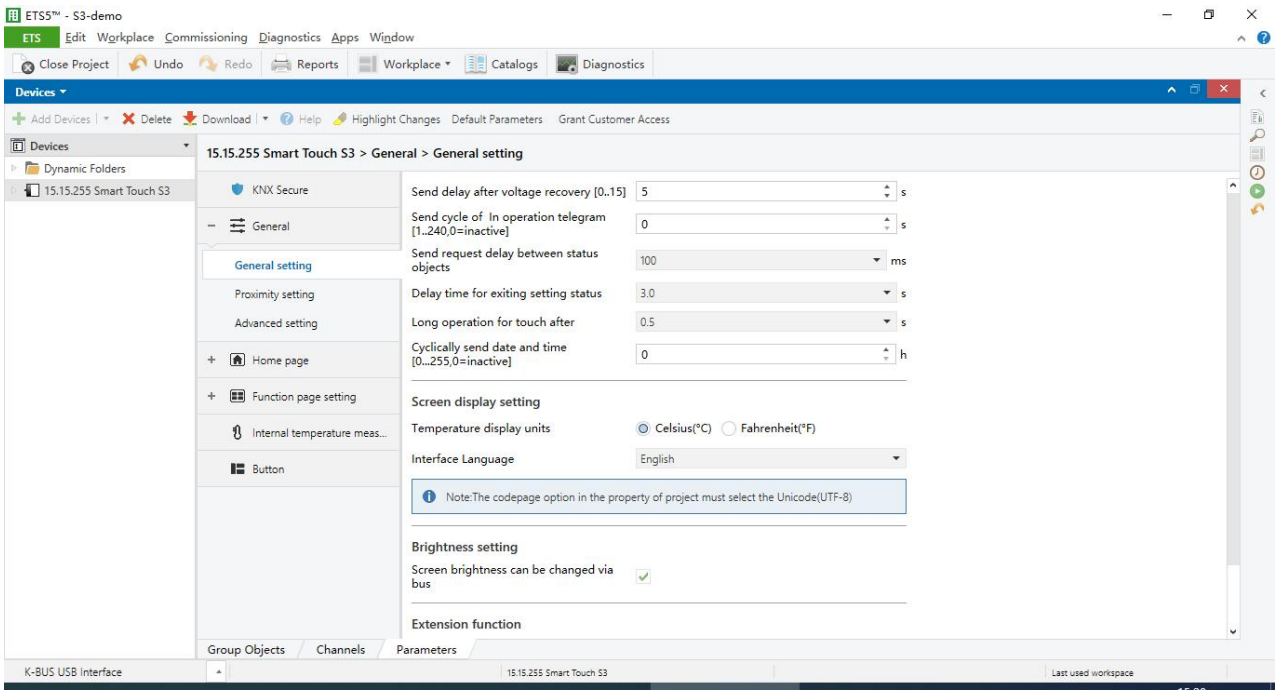
Step 2: Wire the device and fix the device to the bracket.

*DO NOT forcefully press the device when there's a problem in installation, check the bracket and adjust it flat to the wall and retry.

6. ETS Parameter Setting

6.1 General

6.1.1 General setting



Parameter "Send delay after voltage recovery [0..15]s"

This parameter is for setting the delay time to send to bus after the device voltage recovery. Options: **0..15**

The setting dose not contain the device initialization time, and bus telegrams received during delay time will be recorded.

Parameter "Send cycle of "Send cycle of "In operation" telegram [1..240,0=inactive]s"

This parameter is for setting the time interval when this device cycle send telegrams through the bus to indicate this module in normal operation. When set to “0”, the object “in operation” will not send a telegram. If the setting is not “0”, the object “In operation” will send a telegram according to the set period time with logic “1” to the bus. Options: **0...240s, 0= inactive**

As to reduce the bus load as much as possible, the maximum time interval should be selected according to actual needs.

Parameter "Delay time for exiting setting status"

This parameter is for setting the delay time to auto-exit setting status, mainly used for the sub function settings of RTC, Air-condition and Audio control. Telegrams are sent immediately, such as setpoint temperature, specific definition is according to the UI. Options:

0.5s

1.0s

2.0s

3.0s

Parameter "Long operation for touch after"

This parameter is for setting the trigger time of the long operation for touch on the screen. Options:

0.5s

1.0s

2.0s

3.0s

Screen display setting

Parameter "Temperature display units"

This parameter is for setting display units of temperature, optional Celsius and Fahrenheit. Options:

Celsius(°C)

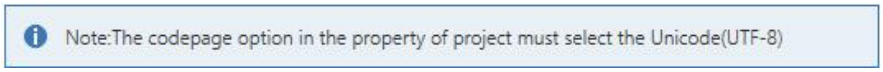
Fahrenheit(°F)

Parameter "Interface Language"

This parameter is for setting interface language of screen. Options:

Chinese(Simplified)	**Spanish**
Chinese(Traditional)	**Russian**
English	**Italian**
German	**Greek**
French	**Other**

Display the note when select non-Chinese:



Screen display setting

Parameter"Screen brightness can be changed via bus"

Optional support for bus modification of brightness values. When the brightness is manually adjusted, the bus modifies the brightness value.

Extension function

Parameter"Proximity function"

Setting interface of proximity function will be visible when the parameter enabled.

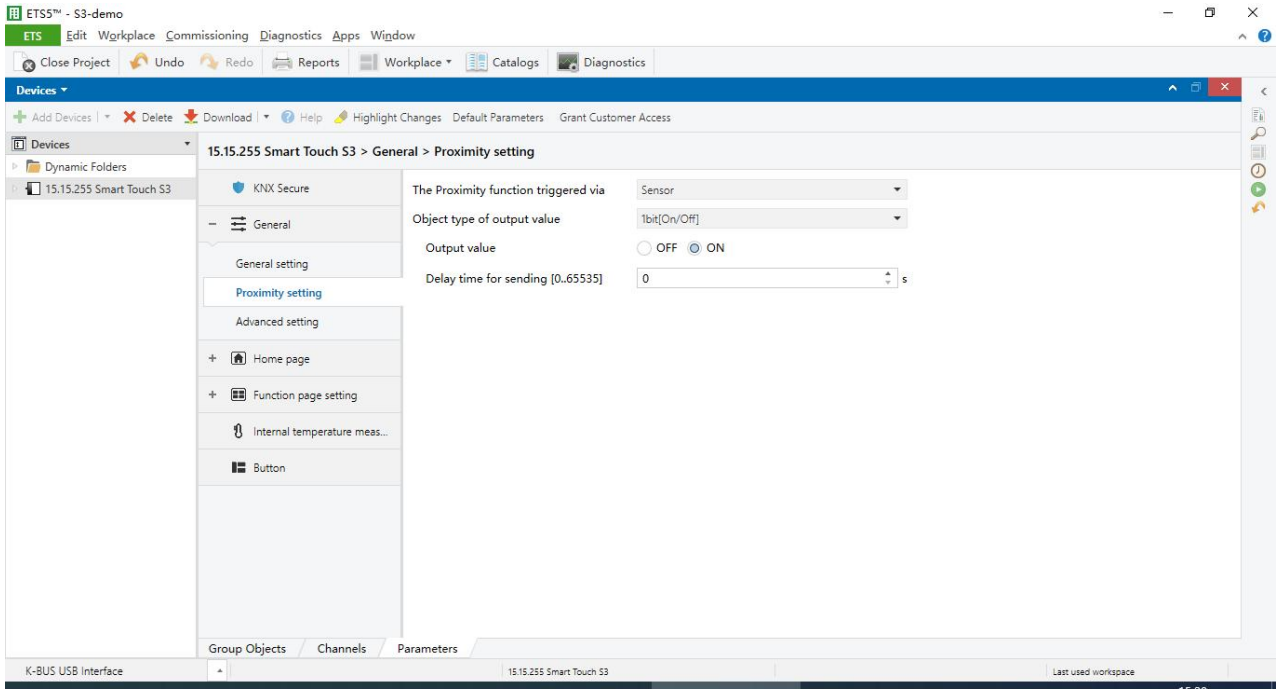
Parameter"Security pin code"

Set whether the screen enables access passwords. When the access password is enabled, the lock screen defaults to password verification, but account unbinding and factory reset are not initially associated with a password. Password verification needs to be enabled on the app or device to be associated with a password.

Parameter"Initial pin code"

Set the initial user password, which can be changed later on the device or app.

6.1.2 Proximity setting



Parameter"The Proximity function triggered via"

This parameter is for setting the trigger way of proximity function. Options:

Sensor

Proximity object

Sensor or Proximity object

When "Sensor or Proximity object" is selected, not send output value when proximity triggered via object.

Parameters as follow are visible when "Sensor" or "Sensor or Proximity object" is selected.

Parameter"Object type of output value"

This parameter is for setting the object type of output value to the bus when proximity approaching or leaving. Options:

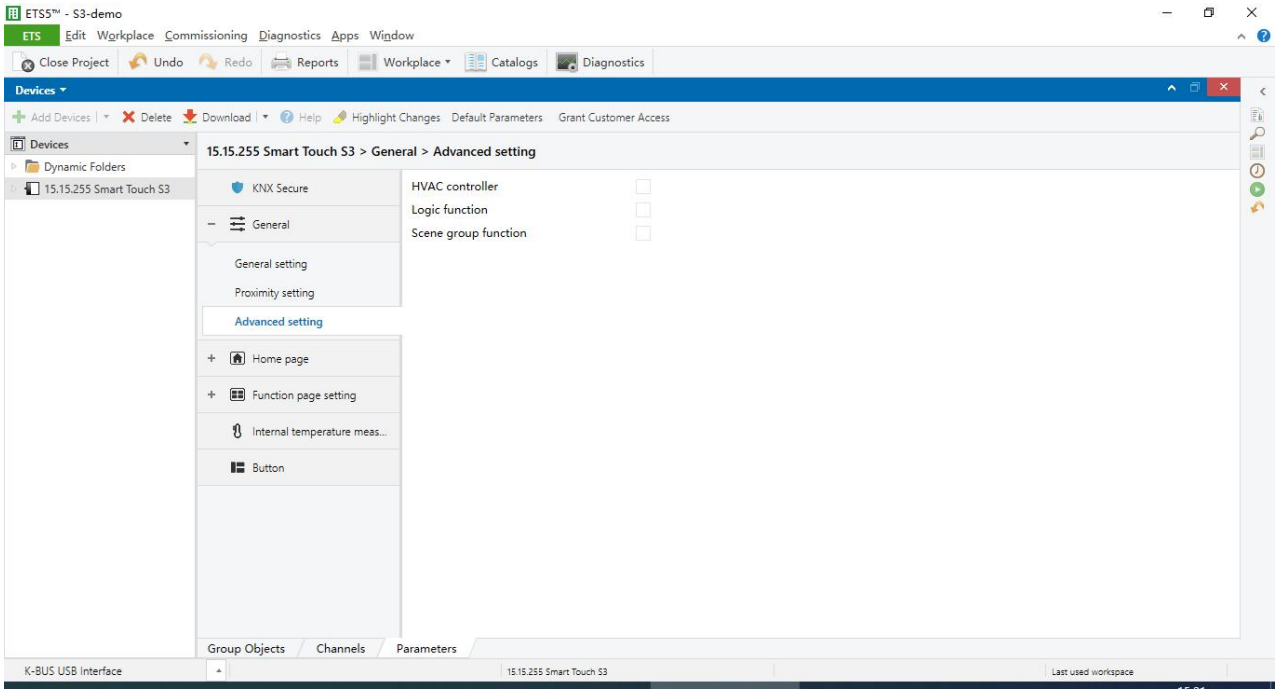
1bit[On/Off]

1byte[scene control]

1byte[0..255]

1byte[0..100%]

6.1.3 Advanced setting



Parameter"HVAC controller"

Setting page of HVAC controller is visible after this parameter enabled.

Parameter"Logic function"

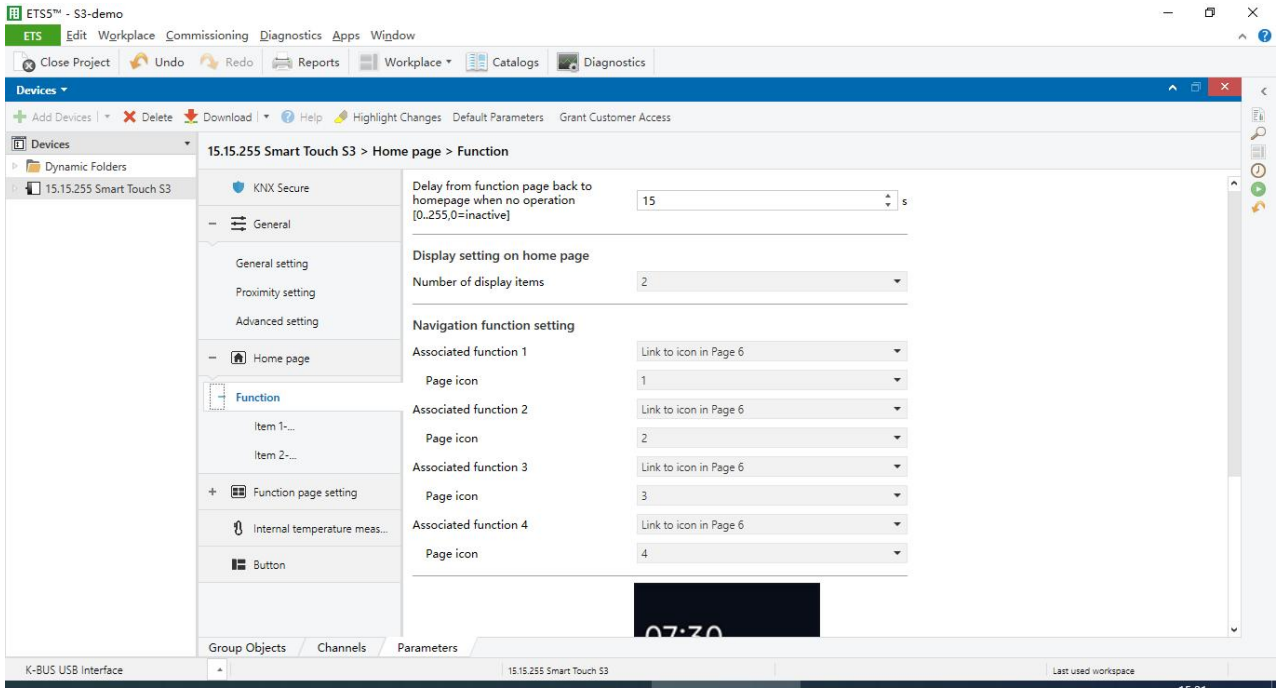
Setting page of logic function is visible after this parameter enabled.

Parameter"Scene group function"

Setting page of scene group function is visible after this parameter enabled.

6.2 Home page

6.2.1 Function



Parameter"Delay from function page back to homepage when no operation [0..255,0=inactive]s"

This parameter is for setting the delay time for function page back to homepage when no operation. Do not automatically return when value is 0. Options: **0..255**

Parameters as follow are visible when home page disabled.

Display setting on home page

Parameter"Number of display items"

The environmental information displayed on the screen homepage can display up to 2 indicators, including temperature, humidity, PM2.5, PM10, CO2, VOC, illumination, wind speed, AQI, Rain.

Navigation function setting

Parameter"Associated function 1"

The homepage supports adding shortcut keys for devices or scenes through ETS software or APP, and the homepage allows up to 4 scene/device shortcut cards. Support deleting cards through the app. If the card is not configured, the user will be prompted "Please use the GVS Smart app to add

device/scene shortcuts".

Parameter"Page icon"

test>0,and the options are displayed based on the number of icons on the page.

Parameter"Display function"

Item 1The default value is internal temperature,

Item2The default value is internal humidity.

Parameter"Function description"

In the database, the description of the icon is displayed on the left, and {{Icon 3}} is displayed by default, meaning that the object and icon page title names change with the description.

Parameter"Time period for request external sensor [0..255]min"

This parameter is visible when external sensor is selected. Set the time period for device to send a control value read request to external sensor after bus recovery or finish programming. Not send when value is 0.

Options: **0..255**

Parameter"Object datatype of display PM2.5"

Set the data point type for PM2.5.

Parameter"Object datatype of display PM10"

Set the data point type for PM2.5.

Parameter"Object datatype of display VOC"

Set the data point type for VOC.

Parameter"Object datatype of display CO2"

Set the data point type for CO2.

Parameter"Object datatype of display brightness"

Set the data point type for brightness.

Parameter"Object datatype of display wind speed"

Set the data point type for wind speed.

Parameter"Status text for rain (1-ON)"

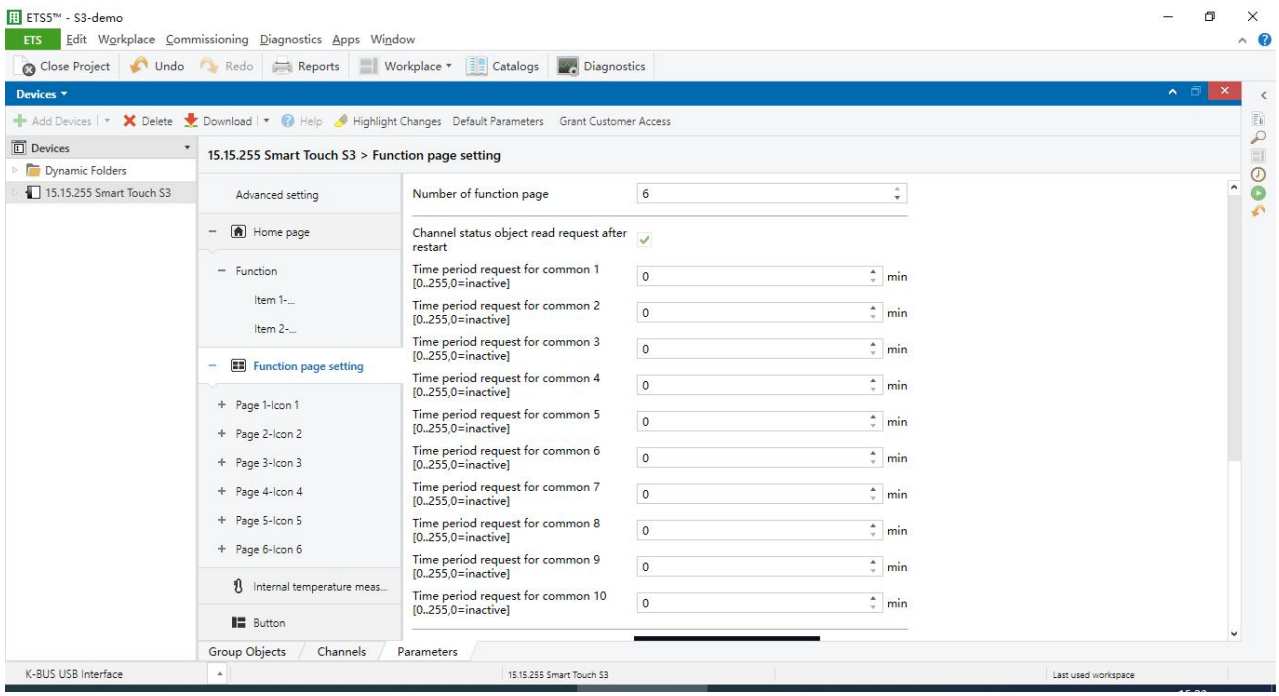
Parameter"Status text for no rain (0-OFF)"

This parameter is for setting the status text for rain and no rain, and display the dynamic icon at the same time.

Parameter"Text for unit"

The default value is empty, and the unit is determined by the data point type.

6.3 Function page setting



Parameter"Number of function page"

This parameter is for setting the number of function page. Up to support 6 function pages.

Parameter"Channel status object read request after restart"

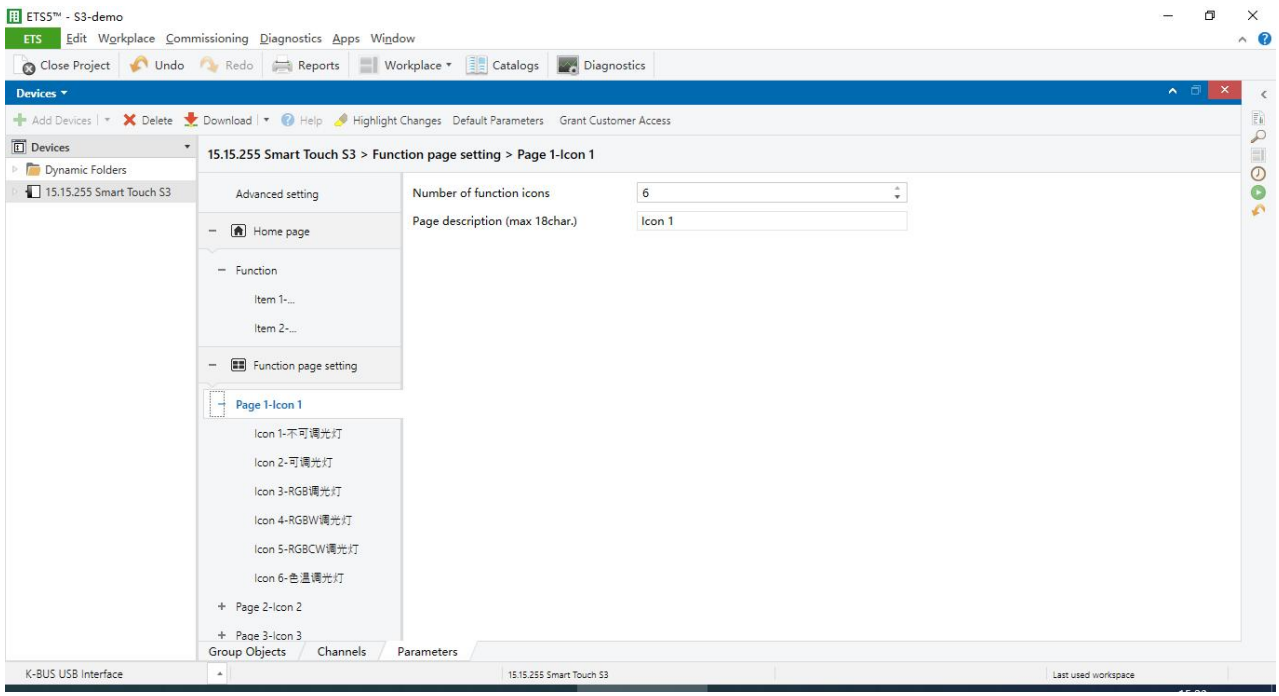
When restarting this device, do you want to send a device status read request message to query the current status of each device and update the display. The sensor class does not belong to the

device state, and restarting this device will send a sensor read request by default.

Parameter"Time period request for common 1 [0..255,0=inactive]"

Set the request cycle for querying the online status of general devices here. The interval time for sending read requests can be set. 0 indicates that the query function is not enabled. This function is mainly used to query the online status of KNX devices. The online status request starts after the delay time for powering on this device is completed. The download does not require a delay, and will be sent once the device initialization is completed. Whether to send a read request after device restart is configured by the previous parameter.

6.3.1 Page



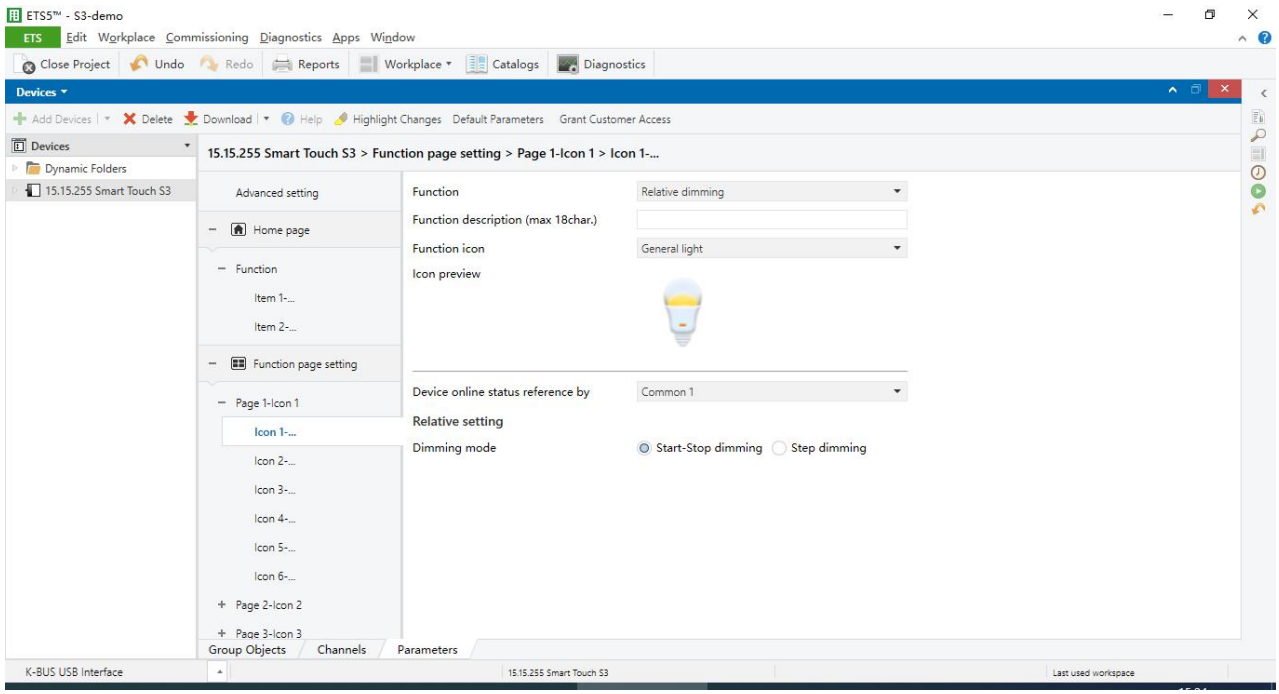
Parameter"Number of function icons"

This parameter is for setting the number of icons for current function page, each page up to support 6 icons.

Parameter"Page description "

This parameter is for setting the description of home page function icons. Up to input 15 characters, actually up to display 6 Chinese characters.

6.3.2 Icon



Parameter"Function"

This parameter is for setting the function of the icons in function page. Options:

Switch
Press/Release switch
Relative dimming
Brightness dimming
RGB dimming
RGBW dimming
RGBCW dimming
Colour temperature dimming
Curtain step/move
Roller blind step/move
Curtain position
Roller blind position
Venetian blind position and slat
Value sender
Scene
Status display
Air conditioner
Room temperature unit
Ventilation system
Audio control

Parameter"Function description"

This parameter is for setting the description of home page function icons. Up to input 10 characters, actually up to display 5 Chinese characters.

Parameter"Function icon"

This parameter is for setting the icon for function page using. Options:

01-General light

02-Ceiling light

...

80-Floor light

The default icons corresponding to the function and the icons corresponding to the options are described in the appendix.

Parameter"Icon preview"

Icon preview.

Chapters as follow explain the icon functions in function pages separately.

6.3.2.1. Parameter of basic function

This chapter explains the basic functions, including switch, dimming, curtain/blind, colour, colour temperature, value sender and scene.

（1）Switch function

Parameter"Device online status reference by"

Set the reference type for sending read requests to bus KNX devices, whether it is for a single device request or a universal device request. There are 10 universal device requests to choose from.

Parameter"Period for request device online status [1..255]"

Set the time period for individual device online status requests here.

Applicable to a single channel control of a KNX device on a certain bus.

（2）Press/Release switch function

Parameter" Work mode"

This parameter is for setting the On/Off value to send for press and release switch. Options:

Press - ON / Release - OFF

Press - OFF / Release - ON

（3）Relative dimming function

Parameter"Dimming mode"

This parameter is for setting the way of relative dimming. Options:

Start-Stop dimming

Step dimming

Start-stop dimming: The dimming mode will be start-stop, i.e. a dimming up or down telegram will be sent when the dimming starts, and a stop telegram will be sent when dimming ends. Here the dimming telegram will not be sent cyclically.

Steps dimming: The dimming mode will be a step one and the dimming telegram will be sent cyclically. When dimming ends, a stop dimming telegram will be sent immediately.

——Parameter " Step size"

This parameter is visible when "Step dimming" is selected. Set a cyclically sending dimming telegram which changes the brightness percentage. Options:

100%

50%

...

1.56%

——Parameter " Interval of tele. cyclic send [0..25,0=send once]*0.1s"

This parameter is visible when "Step dimming" is selected. Set intervals of cyclically sending dimming telegram. Options: **0..25, 0= Only send once**

These parameters used for ON/OFF dynamic setting of relative / brightness dimming function is the same as the switch function, here is no longer to repeat.

These three parameters used for Dimming Brighter/Darker dynamic setting of relative /brightness dimming function.

（4）RGB / RGBW / RGBCW　dinming

Parameter"Reaction on "off "operation"

This parameter is for setting whether send switch telegram 0 when the switch button is operated off, or whether send brightness telegram 0. Options:

Only switch object send value 0

Brightness objects send value 0

Parameter "Object datatype"/"RGB object datatype"

This parameter is visible when "RGB dimming" or "RGBW dimming" or "RGBCW dimming" is selected. Set the object datatype of RGB or RGBW. Options:

Suitable for RGB type:

1x3byte

3x1byte

Suitable for RGBW type:

1x6byte

4x1byte

Parameters as follow are visible when "RGBCW dimming" or "Colour temperature dimming" is selected, used for setting colour temperature dimming.

Parameter "Colour temperature control type"

This parameter is for setting the control type of colour temperature. Options:

Normal

Directly(with warm/cool white algorithm)

Normal: Send value of 1byte brightness and 2 byte colour temperature;

Directly(with warm/cool white algorithm): Directly control, the has been built-in "Brightness + Colour Temperature"and Warm/cool white brightness, that is 2 objects of 1 byte, which is used for output brightness adjustment to control warm white LED and cool white LED.

——Parameter "Status feedback object"

This parameter is visible when previous parameter is selected “Directly(with warm/cool white algorithm)”. Set the status feedback object. Options:

Brightness+Colour Temperature

Warm/cool white brightness

Brightness+Colour Temperature: Feedback of Brightness+Colour Temperature is to communicate accurately with the data from the other panels.

Warm/cool white brightness: Feedback of Warm/cool white brightness is to communicate with actuator.

Parameter “Increase/Decrease step width*K”

This parameter is for setting the adjustment step value for the colour temperature icon to increase/decrease.

Options:

100

200

500

1000

Parameter “Min. colour temperature [2000..7000]K”

Parameter “Max. colour temperature [2000..7000]K”

These parameters are for setting the upper and lower limit threshold of colour temperature.

Options: **2000..7000**

These parameters used for ON/OFF dynamic setting of RGB / RGBW / RGBCW / colour temperature dimming function is the same as the switch function, here is no longer to repeat.

（5）Value sender function

Parameter “Object type short operation”

Parameter “Object type long operation”

These two parameters are for setting the sending datatype when the button is in a short / long operation.

Options:

None

1bit value[ON/OFF]

2bit/4bit value

1byte value[0..255]

2byte value[0..65535]

2byte float value

4byte value[0..4294967295]

4byte float value

——Parameter "Object datatype"

This parameter is visible when select "2bit/4bit value". Set the datatype 2bit or 4bit. Options:

2bit value[0..3]

4bit value[0..15]

Parameter"Reaction on short operation"

Parameter"Reaction on long operation"

These two parameters are for setting the sending data value when perform short/long operation. Value range is according to the datatype selected by previous parameter.

When select 1 bit, options:

OFF

ON

TOGGLE

When select 2bit/4bit/1byte/2byte/4byte, options:

Value 1

Alternating Value1/Value2

——Parameter "Value 1"

This parameter is visible when 2bit/4bit/1byte/2byte is selected. Set the sending value 1 when perform short/long operation. Options are according to the object datatype: **0~3 / 0..15 / 0..255 / 0..65535 / -670760~670760 / 0~4294967295 / -3.40...~3.40...**

——Parameter "Value 2"

This parameter is visible when 2bit/4bit/1byte/2byte/4byte is selected, and "Alternating Value1/Value2". Set the sending value 2 when perform short/long operation. Options are according to the object datatype: **0~3 / 0..15 / 0..255 / 0..65535 / -670760~670760 / 0~4294967295 / -3.40...~3.40...**

（6）Scene function

Parameter"Scene number [1..64]"

This parameter is for setting the scene number. Options: **1..64**

Parameter"Storage scene via long operation"

This parameter is for setting whether to storage scene via long operation.

Short press to recall scene, long operation optionally determines whether to storage the scene, only occupy 1 button when link to the Mechanical key.

（7）Status display function

Parameter"Display function"

This parameter is for setting the object datatype for status display function. Options:

Int. temperature value (DPT 9.001)

Int. humidity value (DPT 9.007)

Ext. temperature value (DPT 9.001)

Ext. humidity value (DPT 9.007)

1bit value (DPT 1.001)

1byte percent value (DPT 5.001)

1byte unsigned value (DPT 5.010)

2byte unsigned value (DPT 7.001)

2byte lux value (DPT 9.004)

2byte float value (DPT 9.x)

——Parameter"Status text for 1-ON"

——Parameter“Status text for 0-OFF”

These parameters are visible when 1 bit is selected. Set the status text for ON and OFF.

——Parameter “Text for unit”

This parameter is visible when 1byte unsigned value or 2byte is selected. Set the text for display unit.

Parameter“Time period for request external value [0...255]min”

This parameter is visible when external sensor is selected. Set the time period for device to send a control value read request to external sensor after bus recovery or finish programming. Options: **0..255**

6.3.2.2. Parameter of air condition

Parameter“Room temperature reference from”

This parameter is for setting the resource of the air condition function temperature reference. Options:

Internal sensor

External sensor

——Parameter “Time period for request room temperature sensor [0...255]min”

This parameter is visible when “External sensor” is selected. Set the time period for read request external temperature sensor. Options: **0..255**

Note: Send read request as default when the device voltage recovery.

Parameter“Object datatype of setpoint”

This parameter is for setting the object datatype of setpoint temperature. Options:

Value in °C (DPT_5.010) **Int, data of actual temperature**

Float value in °C (DPT_9.001) **Float,,data of standard KNX temperature**

Parameter“Setpoint temperature adjustment step”

This parameter is for setting step value of setpoint temperature. Options display according to datatype:

0.5K

1K

When select “Value in °C (DPT_5.010)”, only **1K**

Parameter“Min./Max. setpoint temperature [16..32]°C”

These parameters are for setting the adjustable range of the setpoint temperature, the minimum value should be less than the maximum value. If the setpoint temperature beyond the limited range, the will output the limited temperature. Options:

16°C

17°C

...

32°C

Parameter“Vanes swing”

This parameter is for setting whether to enable vanes swing function, display corresponding object when enable.

Parameter“Timer”

This parameter is for setting whether to enable timer function, display corresponding object when enable. User can set the time on the screen.

Note: The bus only disable timer function temporarily.

Parameter“Scene”

This parameter is for setting whether to enable scene function, display corresponding object and setting window when enable. Link to power on/off, mode, fan speed, setpoint temperature.

——Parameter “Send delay between telegrams”

This parameter is visible when scene function enabled. Set the delay time between the sending telegrams. Options:

Disable

100ms

300ms

500ms

Protection setting

Parameter"ON/OFF protection"

Parameter"Setpoint protection"

Parameter"Mode protection"

Parameter"Fan protection"

Parameter"Vanes swing protection"

These parameters are for setting to whether to enable protection function, that is some functions only display and disable user to operate. Protection function support to ON/OFF, setpoint value, mode, fan speed control, swing control.

For protection function, user can not operate screen or shortcut button, but still process received status.

（1）Setting window of air condition mode

Parameter"Auto/Heating/Cooling/Fan/Dehumidification mode"

Corresponding setting parameters are visible when this parameter enabled.

Parameter"Output value for auto/heating/cooling/fan/dehumidification [0..255]"

These parameters are visible when modes enabled. Set the output value of each mode. Options: **0..255**

Parameter"Status value for auto/heating/cooling/fan/dehumidification [0..255]"

These parameters are visible when modes enabled. Set the status feedback value of each mode.

Options: **0..255**

（2）Setting window of air condition fan speed

Parameter"Object datatype of 1byte fan speed"

This parameter is for setting the object datatype of 1 byte fan speed. Options:

Fan stage (DPT 5.100)

Percentage (DPT 5.001)

Parameter"Fan speed auto function"

This parameter is for setting whether to enable fan speed auto function, display corresponding object and parameter when enable.

Output value for fan speed

——Parameter"Output value for fan speed auto/low/medium/high"

These parameters are for setting the value sent for each fan speed switchover, support 4 fan speeds auto, low, medium, high. Options according to fan object datatype: **0..255/0..100**

Status feedback for fan speed

——Parameter"Status value for fan speed auto/low/medium/high"

These parameters are for setting the status feedback value for each fan speed, support 4 fan speeds auto, low, medium, high. Device updates display according to feedback value. Options according to fan object datatype: **0..255/0..100**

（3）Setting window of air condition scene, visible when scene function enabled

Parameter"x->Assign scene NO.[1..64,0=inactive]"(x=1~5)

This parameter is for setting the triggered scene number. Up to support 5 triggered scenes. Options: **0..64, 0=inactive**

——Parameter"ON/OFF"

This parameter is for setting status of ON/OFF. Options:

Unchange

OFF

ON

Three parameters as follow are not visible when OFF is selected.

——Parameter"Temperature"

This parameter is for setting the status of setpoint temperature. Options:

Unchange

16°C

17°C

..

32°C

——Parameter"Mode"

This parameter is for setting the status of mode. Options:

Unchange

Auto

Heating

Cooling

Fan

Temperature

——Parameter"Fan"

This parameter is for setting the status of fan speed. Options:

Unchange

Auto

Low

Medium

High

Note: ON/OFF, temperature, mode and fan speed send in order. If not finish during delay time and have a new command, perform the new one. Unperformed operations are ignored.

6.3.2.3. Parameter of room temperature unit

Parameter"Controller from"

This parameter is for setting the controller is from the local or bus. If select the local controller, it no need to send the read request of the setting temperature, control mode and operation mode when power on or bus recovery (because the device cannot respond to its own request). Options:

Local

Bus

Parameter"Interface display temperature"

This parameter is for setting the interface display temperature under the normal status. Options:

Setpoint temperature

Actual temperature

Note: If display room temperature, only switch to display setpoint temperature when firstly operate temperature increase/decrease button, and not send telegram.

Parameter"Room temperature reference from"

This parameter is for setting the resource of the temperature reference. Options:

Internal sensor

External sensor

——Parameter "Time period for request room temperature sensor [0...255]min"

This parameter is visible when "External sensor" is selected. Set the time period for read request external temperature sensor. Options: **0..255**

Note: Send read request as default when the device voltage recovery.

Parameter"Power on/off after download"

This parameter is for setting the power on/off status of RTC interface after download. Options:

OFF

ON

Parameter"Power on/off after voltage recovery"

This parameter is for setting the power on/off status of RTC interface after device voltage

recovery. Options:

OFF

ON

Before voltage failure

On: Device will power on when voltage recovery, this interface can be operated;

Off: Device will power off when voltage recovery, this interface can not be operated;

Before voltage failure: Device will return to the power status as before voltage failure when voltage recovery.

Parameter"Object datatype of setpoint"

This parameter is for setting the object datatype of setpoint temperature. Options:

1bit (DPT_1.007)

Float value in °C (DPT_9.001)

Parameter"Setpoint temperature adjustment step"

This parameter is visible when "Value in °C (DPT_5.010) " is selected. Set the step value of setpoint temperature. Options:

0.5K

1K

Parameter"Min. /Max. setpoint temperature [5..37]°C"

These parameters are for setting the adjustable range of the setpoint temperature, the minimum value should be less than the maximum value. If the setpoint temperature beyond the limited range, the will output the limited temperature.

Parameter"Control mode"

This parameter is for setting the RTC control mode. Options:

Heating

Cooling

Heating and Cooling

Parameter"Operation mode"

This parameter is for setting whether to enable room operation mode, display corresponding

objects when enable. Support 4 modes comfort, standby, economy, protection.

Parameter"Fan "

This parameter is for setting whether to enable fan control, display corresponding objects and the setting window when enable.

Parameter"Timer"

This parameter is for setting whether to enable timer function, display corresponding object when enable. User can set the time on the screen.

Note: The bus only disable timer function temporarily.

Parameter"Scene"

This parameter is for setting whether to enable scene function, display corresponding object and setting window when enable. Link to power on/off, operate mode, setpoint temperature.

Protection setting

Parameter "ON/OFF protection"

Parameter "Setpoint protection"

Parameter "Control mode protection"

Parameter "Operation mode protection"

Parameter "Fan protection"

These parameters are for setting to whether to enable protection function, that is some functions only display and disable user to operate. Protection function support to ON/OFF, setpoint value, control mode, operation mode, fan speed control.

For protection function, user can not operate screen or shortcut button, but still process received data.

（1）Setting window of RTC fan speed, visible when fan speed function enabled

Parameter "Object datatype of 1byte fan speed"

This parameter is for setting the object datatype of 1 byte fan speed. Options:

Fan stage (DPT 5.100)

Percentage (DPT 5.001)

Output value for fan speed

——Parameter "Output value for fan speed low/medium/high"

These three parameters are for setting the value sent for each fan speed switchover, support 3 fan speeds low, medium, high. Options according to fan object datatype: **0..255/0..100**

Status feedback for fan speed

——Parameter "Status value for fan speed low/medium/high"

These parameters are for setting the status feedback value for each fan speed, support 3 fan speeds low, medium, high. Device updates display according to feedback value. Options according to fan object datatype: **0..255/0..100**

Parameter "Automatic operation function"

This parameter is for setting whether to enable fan speed auto function, display corresponding object when enable.

（2）Setting window of RTC scene, visible when scene function enabled

Parameter"x->Assign scene NO.[1..64,0=inactive]"(x=1~5)

This parameter is for setting the triggered scene number. Up to support 5 triggered scenes. Options: **0..64, 0=inactive**

——Parameter"ON/OFF"

This parameter is for setting status of ON/OFF. Options:

Unchange

OFF

ON

——Parameter"Temperature"

This parameter is visible when operation mode disabled. Set the status of setpoint temperature. Options:

Unchange=0

5°C

6°C

..

37°C

—Parameter"Operation mode"

This parameter is visible when operation mode enabled. Set the status of operation mode. Option:

Unchange

Comfort mode

Standby mode

Economy mode

Frost/heat protection

6.3.2.4. Parameter of ventilation system

Parameter"Power on/off after download "

This parameter is for setting the power on/off status of ventilation system interface after download. Options:

OFF

ON

Parameter"Power on/off after voltage recovery"

This parameter is for setting the power on/off status of ventilation system interface after device voltage recovery. Options:

OFF

ON

Before voltage failure

On: Device will power on when voltage recovery, this interface can be operated;

Off: Device will power off when voltage recovery, this interface can not be operated, except for the icons of filter reset and power ON/OFF;

Before voltage failure: Device will return to the power status as before voltage failure when voltage recovery.

Parameter"Default fan speed after ventilation on"

This parameter is for setting the initial fan speed after power on. Options:

Low

Medium

High

Last status

Parameter"Object datatype of 1byte fan speed"

This parameter is for setting the object datatype of 1 byte fan speed. Options:

Fan stage (DPT 5.100)

Percentage (DPT 5.001)

Output value for fan speed

——Parameter"Output value for fan speed low/medium/high"

These three parameters are for setting the value sent for each fan speed switchover, support 3 fan speeds low, medium, high. Options according to fan object datatype: **0..255/0..100**

Status feedback for fan speed

——Parameter"Status value for fan speed low/medium/high"

These parameters are for setting the status feedback value for each fan speed, support 3 fan speeds low, medium, high. Device updates display according to feedback value. Options according to fan object datatype: **0..255/0..100**

Parameter"Automatic operation function"

This parameter is for setting whether to enable fan speed auto function, display corresponding object when enable.

Parameter"Heat recovery function"

This parameter is for setting whether to enable heat recovery function, display corresponding

object when enable.

Parameter"Filter timer counter"

This parameter is for setting whether to enable heat recovery function, display corresponding object and parameter when enable.

——Parameter "Evaluation time [100..10000]h"

This parameter is for setting the service life of the filter. Options: **100..10000**

If the filter takes longer than the setting time, the filter will send an alarm and prompt to clean the filter.

The life length of the filter can be reset through the object "Filter timer reset".

The life length of the filter can be counted by the object "Filter timer counter". The counting duration is in hours. The counting value will be sent to the bus when it has changed, and the counting duration of filter can be modified by object "Filter timer counter change" through the bus.

Parameter"Scene function"

This parameter is for setting whether to enable scene function, display corresponding object and setting window when enable. Link to fan speed, heat recovery.

Setting window of ventilation system scene, visible when scene function enabled

Parameter "x->Assign scene NO.[1..64,0=inactive]"(x=1~5)

This parameter is for setting the triggered scene number. Up to support 5 triggered scenes. Options: **0..64, 0=inactive**

——Parameter "Fan"

This parameter is for setting status of fan speed. Options:

Unchange

OFF

Low

Medium

High

Parameter as follow is not visible when OFF is selected.

——Parameter "Heat recovery"

This parameter is visible when heat recovery function enabled. Set status of heat recovery. Options:

Unchange

OFF

ON

6.3.2.5. Parameter of audio control

Parameter "Power on/off"

This parameter is for setting whether to activate the function to power on/off. Icon of power on/off on the screen is not visible when disabled.

Parameter "Power on/off after download "

This parameter is for setting the power on/off status of audio control interface after download. Options:

OFF

ON

Parameter "Power on/off after voltage recovery"

This parameter is for setting the power on/off status of audio control interface after device voltage recovery. Options:

OFF

ON

Before voltage failure

On: Device will power on when voltage recovery, this interface can be operated;

Off: Device will power off when voltage recovery, this interface can not be operated;

Before voltage failure: Device will return to the power status as before voltage failure when voltage recovery.

Parameter "Number of object for play/pause control"

This parameter is for setting the number of objects that control play/pause, 1 common object or 2 separate objects. Options:

One object

Two objects

Parameter "Control mode of volume adjustment"

This parameter is for setting the datatype of volume adjustment. Options:

1Bit (relative control)

1Byte (absolute control)

When select 1 bit, support to increase/decrease and mute volume function; When select 1 byte, only support to 1 byte object to adjust volume, and set the maximum volume.

——Parameter "Object datatype"

This parameter is visible when 1 byte is selected. Set the datatype of 1 byte object. Options:

Percentage (DPT 5.001)

Percentage (DPT 5.004)

——Parameter "Max. volume value [10..100]%"

This parameter is visible when 1 byte is selected. Set the maximum volume value. Options: **10..100**

Parameter "Mute"

This parameter is visible when 1 bit is selected. Set whether to enable mute function.

Parameter "Track name"

This parameter is for setting whether to display the track name.

Note: The encode data of track name telegram is associated with interface language, when it is selected Simplified Chinese, use UTF-8; while other languages, use ISO8859. The telegrams of artist name and album name are the same.

Parameter "Artist name"

This parameter is for setting whether to display the artist name.

Parameter "Album name"

This parameter is for setting whether to display the album name.

Parameter "Play mode"

This parameter is for setting whether to enable play mode, display the parameters as follow when enable.

——Parameter "Play in single cycle mode"

This parameter is for setting whether to enable play in single cycle mode. Display two parameters as follow when enable.

——Parameter "Output value for play in single cycle"

This parameter is for setting the output value for play in single cycle. Options: **0..255**

——Parameter "Status value for play in single cycle"

This parameter is for setting the status value for play in single cycle. Device will update the play mode displayed on the screen according to the feedback value. Options: **0..255**

——Parameter "Play in order mode"

This parameter is for setting whether to enable play in order mode. Display two parameters as follow when enable.

——Parameter "Output value for play in order"

This parameter is for setting the output value for play in order. Options: **0..255**

——Parameter "Status value for play in order"

This parameter is for setting the status value for play in order. Device will update the play mode displayed on the screen according to the feedback value. Options: **0..255**

——Parameter "Play in random mode"

This parameter is for setting whether to enable play in random mode. Display two parameters as follow when enable.

——Parameter "Output value for play in random"

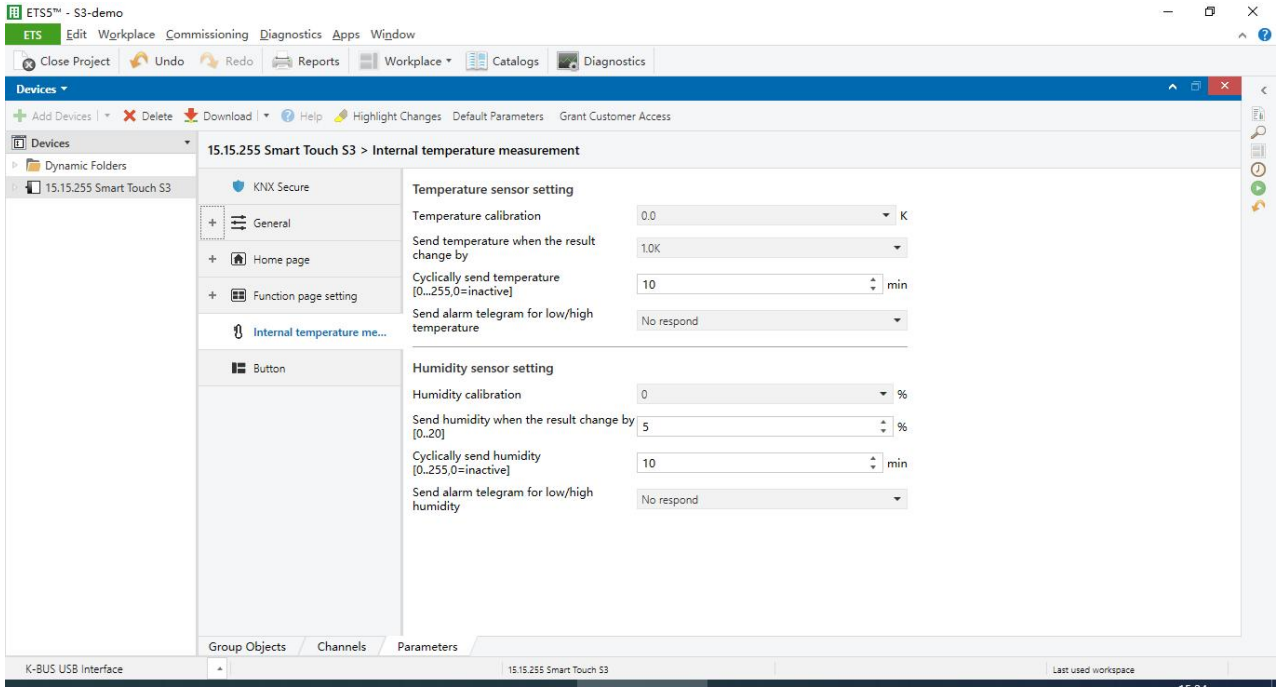
This parameter is for setting the output value for play in random. Options: **0..255**

——Parameter "Status value for play in random"

This parameter is for setting the status value for play in random. Device will update the play mode

displayed on the screen according to the feedback value. Options: **0..255**

6.4 Internal temperature measurement



Temperature sensor setting

Parameter"Temperature calibration"

This parameter is for setting the temperature calibration value of the internal sensor, that is, to calibrate the measured value of internal sensor to make it closer to the current ambient temperature. Options:

-5K

...

0K

...

5K

Note: after the device is powered on, the stability time of internal sensor detection will take 30 minutes, therefore, the detected temperature value in the early stage of device work may be inaccurate.

Parameter"Send temperature when the result change by"

This parameter is for setting when temperature turns to a certain value, whether to enable to send the current temperature value to the bus. Not send when disable. Options:

Disable

0.5K

1.0K

...

10K

Parameter"Cyclically send temperature [0...255,0=inactive]min"

Setting the time for cyclically sending the temperature detection value to the bus. Options: **0..255**

This period is independent and starts time counting after programming completion or reset. Transmission change has no affect on this period.

Parameter"Send alarm telegram for low/high temperature"

This parameter is for setting condition of sending telegram when low/high temperature alarm. Options:

No respond

Respond after read only

Respond after change

Respond after read only: Only when the device receives a read alarm from other bus device or bus will the object "Low temperature alarm"/" High temperature alarm" send the alarm status to the bus;

Respond after change: the object " Low temperature alarm"/" High temperature alarm" will immediately send the telegram to the bus to report the alarm value when the alarm status has changed.

These two parameters as follow are visible when "Respond after read only" or "Respond after change" are selected.

——Parameter "Threshold value for low temperature alarm [0..15]°C"

This parameter is for setting the threshold value for low temperature alarm. When the temperature lower than low threshold, low temperature alarm object will send telegram. Options:

0°C

1°C

...

15°C

——Parameter "Threshold value for high temperature alarm [30..45]°C"

This parameter is for setting the threshold value for high temperature alarm. When the temperature higher than high threshold, high temperature alarm object will send telegram. Options:

30°C

31°C

...

45°C

Humidity sensor setting

Parameter"Humidity calibration"

This parameter is for setting the humidity calibration value of the internal sensor, that is, to calibrate the measured value of internal sensor to make it closer to the current ambient humidity.

Options: **-20% / -15% / -10% / -5% / -3% / -1% / 0% / 1% / 3% / 5% / 10% / 15% / 20%**

Parameter"Send humidity when the result change by [0..20]%"

This parameter is for setting when humidity turns to a certain value, whether to enable to send the current humidity value to the bus. Not send when value is 0. Options: **0..20**

Parameter"Cyclically send humidity [0..255,0=inactive]min"

Setting the time for cyclically sending the humidity detection value to the bus. Options: **0..255**

This period is independent and starts time counting after programming completion or reset. Transmission change has no affect on this period.

Parameter"Send alarm telegram for low/high humidity"

This parameter is for setting condition of sending telegram when low/high humidity alarm. Options:

No respond

Respond after read only

Respond after change

Respond after read only: Only when the device receives a read alarm from other bus device or bus will the object " Low humidity alarm"/" High humidity alarm" send the alarm status to the bus;

Respond after change: the object " Low humidity alarm"/" High humidity alarm" will immediately send the telegram to the bus to report the alarm value when the alarm status has changed.

These two parameters as follow are visible when "Respond after read only" or "Respond after change" are selected.

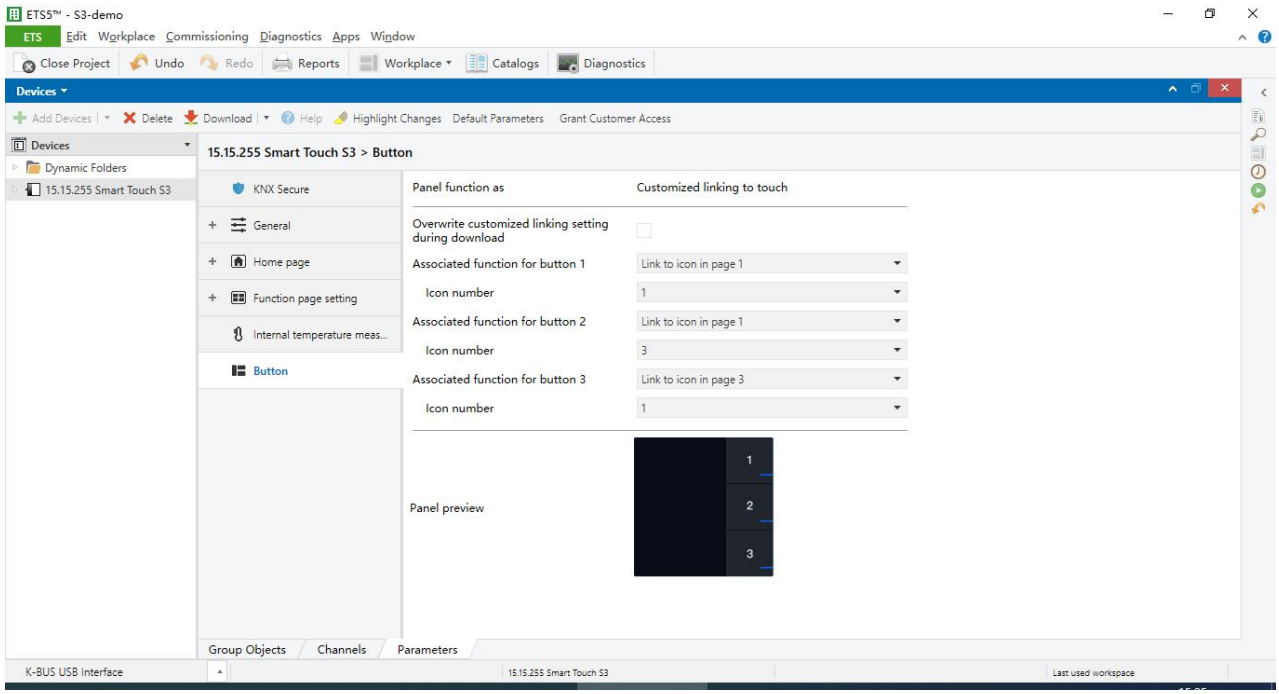
——Parameter "Threshold value for low humidity alarm [5..20]%"

This parameter is for setting the threshold value for low humidity alarm. When the humidity lower than low threshold, low humidity alarm object will send telegram. Options: **5..20**

——Parameter "Threshold value for high humidity alarm [70..85]%"

This parameter is for setting the threshold value for high humidity alarm. When the humidity higher than high threshold, high humidity alarm object will send telegram. Options: **70..85**

6.5 Button



Parameter"Overwrite customized linking setting during download"

Choose whether to clear saved shortcut links after downloading ETS. If not saved, it will return to the parameter settings.

① If the Parameter is enabled, the shortcut function link on the screen will be pre configured by the database every time the parameter content in the database memory changes. If it is only an address download, it is not necessary, and this difference is very important;

② If the Parameter is not selected, it is necessary to poll the key configuration. If each key has already been configured with shortcut links, there is no need to change it. If shortcut links are not configured, the pre configured database needs to be used as the initial key link function. If the database is uninstalled, the pre configured key shortcuts also need to be cleared at the same time.

Parameter"Associated function for button"

The serial number of the function page.

Parameter"Icon number"

The device serial number of the current function page.