

# Guangzhou Tantron Electronics Co., Ltd

# **User Manual**

T/N TC26L



**'ffg**<sup>®</sup> 2.6

# Home and building automation control

Tantron KNX 2.6" touch panel





Products

Programming

Monitoring

# About Version

Version	Revision description	Revised by	Date
V1.0	First draft	Zheng Liru	20190710
V1.1	Add 2 parameters for the curtain; add a stop button; modify the description of the air-conditioning function database;	Zheng Liru	20190802
V2.0	Added RGB dimming, fresh air, floor heating, Time, Alarm, Character display and other functions	Zheng Liru	20200427
V3. 0	Added Data value display, RGB dimming object length option, Thermostat temperature type optional (current/set), fan coil function added 2-step and PWM control	Zheng Liru	20210607
V4. 0	Database authentication modification	Zheng Liru	20210729

# Content

1.Summary
2.Technical performance
2.1 Technical Information
2.2 Appearance structure and installation drawing
2.3 Update
3. Functions
3.1 Overview
3.2 Parameter "General page"10
3.2.1 Parameter "Sleep page"13
3.2.2 Parameter "Laser detection"
3.2.3 Parameter "Thermostat"
3.2.4 Parameter "Music"
3.2.5 Parameter "Temperature page"
3.2.6 Parameter "Humidity page" 4:
3.2.7 Parameter "floor heating"43
3.2.8 Parameter "fresh air"
3.5 Parameter "Key page block x"
3.5.1 Parameter "key x_z dimmer page"5
3.5.2 Parameter "key x_z shutter page"
3.5.3 Parameter "key x_z Thermostat page"62
3.5.4 Parameter "key x_z music page"64
3.5.5 Parameter "key x_z scene page"6
3.5.6 Parameter "key x_z switch value page"68
3.5.7 Parameter "key x_z display page"70
3.5.8 Parameter "key x_z jump page"73
3.5.9 Parameter "key x_z floor heating page"
3.5.10 Parameter "key x_z fresh air page"74
4. Communication object
4.1 "General" communication object

 4.2 "Laser detection" communication object	. 76
4.3 "VRV" communication object	. 77
4.4 "Fan coil" communication object	78
4.5 "auto dehumidify" communication object	. 82
4.6 "Music" communication object	82
4.7 "Dimmer" communication object	. 83
4.8 "shutter" communication object	. 84
4.9 "scene" communication object	. 85
4.10 "switch value" communication object	86
4.11 "display" communication object	. 86
4.12 "Temperature/humidity alarm" communication object	88
4.13 "Timing" communication object	. 89
4.14 "Floor heating" communication object	. 89
4.15 "Fresh air" communication object	91

# 1.Summary

This manual provides you with technical information about the touch panel, as well as a detailed function introduction. The panel is an integral application module, suitable for installation in a flush-mounted box that complies with BS 4662:2006A1:2009.

The program tool software ETS5 can be used and operated in this system.

# 2. Technical performance

#### **2.1 Technical Information**

The following are some technical parameters of the touch panel:

- ♦ Working voltage: 21-30V DC powered by KNX bus
- ♦ Current consumption: <21mA@30V DC</p>
- ♦ Screen display mode: LCD size: 2.6 " resolution: 320\*240 dpi
- ♦ Operating temperature:  $-15^{\circ}$ C  $-45^{\circ}$ C Storage temperature:  $-25^{\circ}$ C  $-55^{\circ}$ C
- ♦ Environmental humidity:  $\leq 90\%$  (excluding water vapor condensation)
- ♦ Appearance material/shell and color:
- ♦ Protection grade: IP20 (IP protection grade is according to EN60529 standard)
- ♦ Appearance size: 102\*102\*38mm
- ♦ Installation method: wall-mounted embedded

#### 2.2 Appearance structure and installation drawing

#### Appearance

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# Appearance structure and size chart









- 1) KNX terminal block
   2) No
   3) Indicator
   4) Programming button
- ⑤USB interface

# Instructions



### 2.3 Update

📕 Tantron Tool(V5.0.221)		×
System About Windows	\$\$ \$\$ \$ <mark>\$</mark> \$ <b>\$</b> \$ <b>\$</b> \$ <b>\$</b> \$ <b>\$</b>	
Step 2: Selete File		
File Path : CPLec File Size : O File Bytes : O The file information Device ID: Hardware version: Program version:	se select the bin file>	
Step 3: Begin The Upgrad Update Progress: Send count: 0 Application address: Start (Hex) Application address: End (Hex)	le 8006000 File Max Size(KB): 480 807F800 □ split	

Step 1: Long press the panel programming button (or long press the "setting" on the panel, then programming operation page appears, long press "Updata program"), until the programming button flashes red, and the screen is black at the same time;

Step 2: Connect the panel and computer directly with a USB cable (you must enter the upgrade state before connecting to USB);

Step 3: Click the icon in the menu bar of the software to open the "USB Update" window;

Step 4: Click the button on/off to light up the icon to indicate that the device is connected;

Step 5: Click the button Browse... to open the upgrade file --bin file;

Step 6: Set "file max size (KB)", 480KB;

Step 7: Click Update to start the update process.

Remarks: 1. Parameters not mentioned do not need to be modified; 2. Click "get" to get the device information. You can upgrade only when the device information is consistent with the bin file information.

# 3. Functions

## 3.1 Overview

The specific functions of the touch panel are as follows:

- -- Sleep function
- Laser inspection
- VRV air conditioning control
- Fan Coil air conditioning control
- Automatic dehumidification function
- Dimming: normal dimming, RGB dimming
- -- curtain
- -- Scenes
- -- Opening and closing
- Temperature and humidity detection
- Temperature and humidity alarm
- VOC/PM25/PM10/CO/CO gas function
- Music function
- page jump
- Free combination of page icons
- Language switch
- OLED display brightness adjustment
- Floor heating
- Fresh air
- Text display

# 3.2 Parameter "General page"

General page	Start the time delay after bus voltage recovery(0255/s)	0	
Kev page 1	Brightness of LCD is.(1100/%)	100	
	Dimmer time of LCD is if it is switched o (110s)	2	;
	Volume of OLED is.(1100/%)	100	;
	Lock panel device by telegram:	O Inactive Active	
	Show action of key in telegram	O Inactive O Active	
	Minimum interval of output telegram is (0 = unlimited. 1170/0.1s)	1	;
	Set the number of key pages	1	ţ
	Main page seeting	1	;
	Save data interval(1255 unit : 1min)	1	;
	Temperature detection	O Inactive O Active	
	Humidity detection	O Inactive O Active	
	Sleep function is	O Inactive Active	
	Laser detection function	O Inactive O Active	
	Thermostat function	O Inactive Active	
	Music function	O Inactive Active	
	Floor heating function	O Inactive O Active	
	Fresh air function	O Inactive Active	

## -.-- T/N TC26L/LCD display 2.6'/V3.0/3017/20210621 > General page

# Parameter "start the time delay after bus voltage recovery(0...255/s)"

This parameter sets the start-up delay time of the device. Range: 0...255, unit: second

# Parameter "Brightness of OLED is(1...100/%)"

This parameter sets the brightness value of the OLED screen. Range: 1...100, unit:%

# Parameter "Dimming time of OLED is, if it is switched on(1...10s)"

This parameter is used to set the dimming time of the OLED, that is, the time for the current state

of the OLED to reach the target state.

Range: 1...10, unit: second

# Parameter "volume of OLED is(1...100/%)"

This parameter sets the system volume.

Range: 1...100, unit:%

Note: The system volume is a backup function and cannot be used temporarily.

#### Parameter "Lock panel device by telegram"

This parameter sets whether to lock the device through the bus.

Options: inactive

active

Select "active" to unlock the device through the bus. The communication object is "Lock device". The communication object "Lock device" is sent 01 to lock the device through the bus, and the touch panel cannot be operated. Send 00 to unlock the device.

### Parameter "Show action of key in telegram"

This parameter sets whether to display the state of the button through the message.

**Options:** Inactive

Active

Select "active", the state of the button will be displayed through the message, the communication object is "Valid action of key", if the message of the communication object "Valid action of key" is 00, if a button is pressed, the communication object "Valid action of key" "key" sends data 01 means that there is a key press; if the message of the communication object "Valid action of key" is 01, if there is a key press, the communication object "Valid action of key" does not send data.

### Parameter "Minimum interval of output telegram is(0=unlimited,1...170(unit:0.1s))"

This parameter sets the minimum interval for message output.

Range: 1...170, 0 means unlimited, unit: 0.1 second

### Parameter "set the number of key pages"

This parameter is used to set the number of pages displayed on the panel. Range: 1...10

### Parameter "main page seeting"

Set which page among all pages of the panel is used as the home page. Range: 1…10

Parameter "save data interval(1...255 unit:1min)"

This parameter acts on all functional modules with saving function and is used to set the saving time of data.

Range 1...255, unit: minute

Remarks: Add power-down save, the original interval save is still valid; when the interval time is up, all saved data will be saved once; all saved data will be saved once at the moment of power-off; if the last power-off save fails, the last one will be recalled Data saved at intervals; re-downloading the database will clear all saved data.

#### Parameter "temperature detection"

Whether to open the temperature detection function.

**Options:** Inactive

Active

Select "Active" to turn on the temperature detection function. For the setting parameters of the temperature detection function, see "3.2.5 Parameter Setting Interface Temperature page"

#### Parameter "humidity detection"

Whether to enable the humidity detection function.

**Options:** Inactive

Active

Select "Active" to turn on the humidity detection function. For the setting parameters of the humidity detection function, see "3.2.6 Parameter Setting Interface humidity page"

#### Parameter "sleep function"

Whether to enable the sleep function.

Options: inactive

Active

Select "Active" to turn on the sleep function. For the setting parameters of the sleep function, see "3.2.1 Parameter Setting Interface Sleep page"

#### Parameter "laser detection function"

Whether to activate the laser detection function.

Options: inactive

active

Select "Active" to activate the laser detection function. For the setting parameters of the laser detection function, please refer to "3.2.2 Parameter Setting Interface Laser detection"

#### Parameter "Thermostat function"

Whether to turn on the air conditioning adjustment function.

Options: inactive

active

Select "Active" to turn on the air conditioning adjustment function. For the setting parameters of the air conditioning adjustment function, see "3.2.3 Parameter Setting Interface Thermostat"

## Parameter "music function"

Whether to turn on the music function.

Options: inactive

active

Select "Active" to turn on the music function. For the setting parameters of the music function, see "3.2.4 Parameter Setting Interface Music page".

#### Parameter "floor heating function"

Whether to turn on the floor heating function.

Options: inactive

active

Select "Active" to turn on the floor heating function. For the setting parameters of the floor heating function, see "3.2.7 Parameter Setting Interface Floor Heating".

### Parameter "fresh air function"

Whether to open the fresh air function.

Options: inactive

active

Select "Active" to turn on the fresh air function. For the setting parameters of the fresh air function, see "3.2.8 Parameter Setting Interface Fresh Air".

3.2.1 Parameter "Sleep page"

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General page	Enter sleep after(1255/s)	60	
Temperature page	Sleep brightness of OLED(010 unit is 10%)	0	
Sleep page			
Key page 1			

# Parameter "enter sleep after(1...255/s)"

This parameter sets how long the device is idle to enter sleep mode.

Range: 1...255, time: seconds

### Parameter "—sleep brightness of OLED(0...10 unit is 10%)"

This parameter sets the brightness value of the OLED in sleep mode.

Range: 0...10, 0 means full dark, 10 means full bright, unit: 10%

## 3.2.2 Parameter "Laser detection"

General page	Group No.1 set:	O Inactive O Active
Temperature page Humidity page Sleep page	Group No.2 set:	O Inactive O Active
Laser detection		
Key page 1		

#### Parameter "Group No.1 set"

Whether to activate the first set of settings.

Options: inactive

active

Select "Active" to activate the first group of settings for laser detection, and 5 new parameters will appear, as shown in the figure below:

General page	Group No.1 set:	Inactive O Active	
Temperature page	Delay time for shut off backlight:	10	÷
Humidity page	Laser detection is triggered by telegram:		
Sleep page	If state changed.teleg No.1 is:	O Inactive Active	
Laser detection	Percent value of OLED is:	0%	•
Key page 1	Detection distance setting:	50cm	•
	Group No.2 set:	O Inactive Active	

#### Parameter "----delay time for shut off backlight"

The parameter setting adjusts the delay time of the backlight. It works when the laser detection distance is 0.

Range: 0...255, unit: second

### Parameter "laser detection is triggered by telegram"

Whether to trigger the laser detection function through the message.

Options: No

Yes

Selecting "Yes" means that the laser detection function is allowed to be activated or disabled through a message, the communication object "Laser detection trigger No1" appears, and a new parameter appears, as shown in the following figure:

General page	Group No.1 set:	Inactive O Active
Temperature page	Delay time for shut off backlight:	10
Humidity page	Laser detection is triggered by telegram:	NO O YES
Sleep page	Way of trigger by bus:	0=inactive.1=active     0=active.1=inactive
Laser detection	If state changed.teleg No.1 is:	O Inactive Active
Key page 1	Percent value of OLED is:	0%
	Detection distance setting:	50cm
	Group No.2 set:	O Inactive Active

### 

This parameter sets the way the bus triggers the laser detection function.

Options: 0=inactive, 1=active

0=active,1=inactive

Select "0=inactive, 1=active", it means that the communication target "Trigger No.1" receives a message value of 0, and the laser detection function is disabled, and the laser detection function is activated when a message value of 1 is received;

Select "0=active,1=inactive", the opposite is true.

Trigger No1Status No1

#### Parameter "----if state changed, teleg No.1 is"

This parameter sets whether to report to the bus when the status of the backlight is changed.

Options: inactive

Active

Select "Active" and the communication object "Status No.1" appears. When the laser detects a person (detection distance is not 0), the communication object "Status No.1" sends message 1, and when the laser detection distance is 0, wait for parameters After the time set by "—delay time for shut off backlight" is over, adjust the backlight (the brightness of the backlight adjustment is set according to the parameter " — percent value of OLED is"), and at the same time, the communication object "Status No.1" is sent to the bus Message 0;

Select "inactive" to not activate the communication object.

### Parameter "----delay time for shut off backlight"

When the laser detection distance is 0 and lasts for a period of time, adjust the brightness of the backlight, as to how much to reduce the brightness is set by this parameter.

Optional: 0%

10% ... 90% 100%

Choosing "0%" means to reduce the brightness of the backlight to 0, that is, completely dark; ...

Selecting "100%" means to maintain the current backlight brightness.

### Parameter "-Detection distance setting"

This parameter sets the laser detection distance.

Optional: 10cm 20cm ... 100cm More than 100cm

For example, selecting "50cm" means that the farthest distance that the laser can detect is 50cm. If no object is detected within 50cm, the detection distance will be displayed as 0; if "More than 100cm" is selected, the theoretically farthest detection distance can reach 150cm. , Affected by the environment.

Remarks: The second group of laser detection settings is similar to the first group and can be set according to the first group of parameters; the first group has a higher priority than the second group, that is, the two groups are activated at the same time, and the first group setting shall prevail; The sleep function and the laser detection function are activated at the same time, and the laser detection has a higher priority than the sleep function.

### 3.2.3 Parameter "Thermostat"

General page	The number of channel setting	1	-
Temperature page	Channel 1	VRV Function	•
Humidity page	Temperature display setting	Set temperature Current temperature	
Sleep page	Timing function is	O Inactive O Active	
Laser detection	Function automatically dehumidify is	O Inactive O Active	
Thermostat	Threshold of start dehumidity is (11000/0.1%)	800	4
VRV page 1	Threshold of stop dehumidity is	600	4
object value	(11000)01130		
Timing page 1			
Key page 1			

### Parameter "The number of channel setting"

This parameter is used to set the number of air conditioning channels. Range: 1...10

### Parameter "Thermostat func set"

Set the air conditioning control mode.

Options: inactive

**VRV** function

Fan coil function

Select "VRV function" to indicate that the air-conditioning control mode is VRV mode, and the specific parameter settings can be seen in "3.2.3.1 Air-conditioning control mode VRV page"; Select "Fan coil function" to indicate that the air-conditioning control mode is fan-coil mode. For specific parameter settings, please refer to "3.2.3.2 Air-conditioning Control Mode Fancoil page".

#### Parameter "Temperature display setting"

Set the type of temperature displayed on the Thermostat control. There are two types to choose from: set temperature/current temperature.

**Options: Set temperature** 

Current temperature

#### Parameter "Timing function is"

This parameter sets whether to enable the timing function.

Options: inactive

Active

Select "Active" to turn on the timing function. For the setting parameters of the timing function, see "3.2.3.3 Parameter Setting Interface Timing page".

#### Parameter "Function automatically dehumidity is"

Whether to turn on the automatic dehumidification function.

**Options:** Inactive

Active

Select "Active" to turn on the automatic dehumidification function, and 2 setting parameters appear:

Parameter "-threshold of start dehumidity is(1...1000/0.1%)"

Parameter "-threshold of stop dehumidity is(1...1000/0.1%)"

These two parameters set the humidity value at which automatic dehumidification starts and the humidity at which automatic dehumidification ends. It can be modified by the objects "start threshold of dehumidity" and "stop threshold of dehumidity".

Range: 1...1000, unit: 0.1%

Remarks: Automatic dehumidification process: write 00 to enable automatic dehumidification function through the communication object "Auto dehumidify status" (write 00 to enable automatic dehumidification, write 01 to exit automatic dehumidification), when the humidity exceeds the parameter "Threshold of start dehumidify is (1...1000; unit is 0.1%)" after setting the value to enter the automatic dehumidification function (if the mode is in non-dehumidification mode, it will enter the dehumidification mode; if the mode is in the dehumidification mode, it will maintain the original state), when the humidity is lower than After the parameter "Threshold of stop dehumidify is (1...1000; unit is 0.1%)" set the value, the automatic dehumidification function

will be exited (after exiting the automatic dehumidification function, the air conditioner display state will be the state saved by the feedback object).

#### 3.2.3.1 Air conditioning control mode "VRV page"

*Remarks:* The other channels of VRV air conditioner are the same as channel 1, please refer to the introduction of channel 1.

General page	The minimum temperature is(50400/0.1 centig.)	100	Å
Temperature page	The maximum temperature is(50400/0.1 centig.)	300	÷
Humidity page	After bus voltage recovery.setting is	Follow preset	-
Sleep page	Thermostat is switch	OFF ON	
Laser detection	Run mode is	Dehumidify	-
Thermostat	Target temperature is	260	
VRV page 1	(Min_TMax_T/0.1 centig.)	200	
obiect value	Speed is	Speed 1	-
Timing page 1	Set temperature increases or decreases value	1.0	
Key page 1			

# Parameter "The minimum temperature is" Parameter "The maximum temperature is"

This parameter is used to set the minimum and maximum values of the air-conditioning temperature.

Range: 50 ··· 400, unit: 0.1 ℃

#### Parameter "After bus voltage recovery, setting is"

This parameter sets the state of the air conditioner after the device bus restores power.

Optional: follow preset

readed from air-conditioner

restored before power down

When "follow setting" is selected, the air conditioner will operate according to the preset state after the power supply of the device bus is restored, as shown in the figure above:

#### Parameter "--Air-conditioner is switch"

This parameter sets the on/off state of the air conditioner after the bus power is restored.

Options: off

on

Select "off", the switch state of the air conditioner is off;

Select "on", the switch state of the air conditioner is on, and 3 setting parameters appear:

## Parameter "--Run mode is"

The air conditioner preset operating mode. Optional: dehumidifying refrigeration ventilation Heating

They are dehumidification mode, cooling mode, ventilation mode, and heating mode.

### Parameter "Target temperature is(Min\_T...Max\_T: unit is 0.1centing)"

This parameter sets the preset temperature of the air conditioner.

Range: within the range set by Parameter "The minimum temperature is" and parameter "The maximum temperature is", unit: 0.1 °C

### Parameter "Air speed is"

This parameter sets the preset wind speed of the air conditioner.

Options: Sleep 1

Sleep 2 Sleep 3

#### Sleep auto

Selecting "Sleep 1/2/3/auto" means that the wind speed when turning on the air conditioner is 1/2/3/auto.

Select "readed from air-conditioner", and the state of the air conditioner will be read from the air conditioner after the power supply of the device bus is restored. As shown below:

The minimum temperature is(50400/0.1 centig.)	100	*
The maximum temperature is(50400/0.1 centig.)	300	÷
After bus voltage recovery.setting is	Readed from air conditioner	•
The interval of reading from AHU (1255/1s)	60	* *
The max count of reading AHU is	5	* *
Afer reading fail.value get from	Presetting	*
Thermostat is switch	OFF ON	
Run mode is	Dehumidify	•
Target temperature is (Min_TMax_T/0.1 centig.)	260	\$
Speed is	Speed 1	•
Set temperature increases or decreases value	1.0	•
	After bus voltage recovery.setting is The interval of reading from AHU (1255/1s) The max count of reading AHU is Afer reading fail.value get from Thermostat is switch Run mode is Target temperature is (Min_TMax_T/0.1 centig.) Speed is Set temperature increases or decreases value	Interminition temperature is (50400/0.1)       100         Interminition temperature is (50400/0.1)       300         Interminition temperature is (50400/0.1)       60         Interminition temperature increases or decreases (10       0

-.-.- T/N TC26L/LCD display 2.6'/V3.0/3017/20210621 > General page > Thermostat > VRV page 1

### Parameter "--The interval of reading from AHU(1...255;unit is 1s)"

This parameter sets the time interval for reading the status from the air conditioner after the device

bus restores power. Range: 1...255, unit: second

## Parameter "The max count of reading AHU is"

This parameter sets the maximum number of times to read the status from the air conditioner after the device bus restores power.

### Parameter "After reading fail, value get from"

This parameter sets the state of the air conditioner after the reading fails.

Options: none presetting

restore before power down

Select "none" to indicate that the air conditioner will not be set after the reading fails;

Selecting "restore before power down" means that the state of the air conditioner after the reading fails is the state before the power down;

Selecting "presetting" means that the air conditioner will activate 4 parameters according to the preset state after the reading fails:

### Parameter "--Air-conditioner is switch"

Parameter "--Run mode is"

Parameter "Target temperature is(Min\_T...Max\_T: unit is 0.1centing)"

#### Parameter "Air speed is"

After the reading of these 4 parameter settings fails, the on/off state, operating mode, set temperature, and wind speed of the air conditioner.

Select "restored before power down" to save the state of the air conditioner before power down after the power supply of the device bus is restored, and the state is read in the feedback object.

#### Parameter "set temperature increases or decreases value"

This parameter is used to set the increase or decrease of the set temperature through the touch screen.

Options: 0.1

0.5

1.0

3.2.3.1.1 Parameter "object value"

General page	Dehumidify mode active	Inactive O Active
T	'Mode' object value(0255)	0
lemperature page	'Mode feedback' object value(0255)	0
Humidity page	Cooling mode active	Inactive O Active
Sleep page	'Mode' object value(0255)	1
Laser detection	'Mode feedback' object value(0255)	1
- Thermostat	Ventilation mode active	Inactive O Active
vitiv page 1	'Mode' object value(0255)	2
Timing page 1	'Mode feedback' object value(0255)	2
Tilling page 1	Heating mode active	Inactive O Active
Key page 1	'Mode' object value(0255)	3
	'Mode feedback' object value(0255)	3
	Speed 1 active	Inactive O Active
	'Speed' object value(0255)	0
	'Speed feedback' object value(0255)	0
	Speed 2 active	Inactive O Active
	'Speed' object value(0255)	1
	'Speed feedback' object value(0255)	1
	Speed 3 active	Inactive O Active
	'Speed' object value(0255)	2
	'Speed feedback' object value(0255)	2
	Automatic speed active	Inactive O Active
	'Speed' object value(0255)	3
	'Speed feedback' object value(0255)	3
	Object value'Switch ON/OFF'	◎ 0 = OFF:1 = ON ○ 0 = ON:1 = OFF
	Object value'Switch status feedback'	$\bigcirc 0 = OFF = ON \bigcirc 0 = ON = OFF$

## -.-.- T/N TC26L/LCD display 2.6'/V3.0/3017/20210621 > General page > Thermostat > --object value

#### Parameter "dehumidification/refrigeration/ventilation/heating mode active"

These parameters are used to disable or activate the dehumidification/cooling/ventilation/heating mode.

Options: inactive

Active

Select "inactive" to deactivate, select "Active" to activate.

#### Parameter "- 'Mode' object value(0..255)"

The control value of the air-conditioning operation mode "dehumidification/cooling/ventilation/heating" can be modified by clicking the display screen, and the communication object "Mode" will send out the set value in the corresponding mode. Range: 0...255

#### Parameter "-'Mode' feedback object value(0...255)"

The feedback value of the air conditioning mode "dehumidification/cooling/ventilation/heating", the communication object "Mode feedback" receives the corresponding message value and enters the corresponding mode.

Range: 0...255

#### Parameter "speed 1/2/3/auto active"

These parameters are used to disable or activate the wind speed. Select "inactive" to deactivate, select "Active" to activate.

#### Parameter "- 'Speed' object value(0..255)"

The control value of air-conditioning wind speed "1/2/3/auto", by clicking on the display to modify the air-conditioning mode, the communication object "Speed" will send out the setting value of the corresponding wind speed.

Range: 0...255

#### 参数"—'Speed' feedback object value(0...255)"

The feedback value of the air-conditioning wind speed "1/2/3/auto", the communication object "Speed feedback" receives the corresponding message value and enters the corresponding wind speed.

Range: 0...255

#### Parameter "Object value 'Switch ON/OFF'"

The control value of the air conditioner switch.

Options: 0 = OFF; 1 = ON

0 = ON; 1 = OFF

Select "0=OFF; 1=ON", the communication object "Switch ON/OFF" will emit 1 when the air conditioner is turned on by clicking on the display, and the communication object "Switch ON/OFF" will emit 0 when the air conditioner is turned off;

Select "0=ON; 1=OFF", which is the opposite of the previous one.

### Parameter "Object value 'Switch status feedback'"

The feedback value of the air conditioner switch.

Options: 0 = OFF; 1 = ON

0 = ON; 1 = OFF

Select "0=OFF; 1=ON", when the message received by the communication object "Switch status feedback" is 0, the air conditioner state is off, and when the message received is 1, the air conditioner state is on;

Select "0=ON; 1=OFF", the opposite is true.

#### 3.2.3.2 Air conditioning control mode "Fancoil page"

Remarks: The other channels of the fan coil unit are the same as channel 1, please refer to the

introduction of channel 1.

General page	Control mode	Fan coil	
Temperature page	Heating: Minimum temperature is (Min_T:50400/0.1 centig.)	100	;
Humidity page	Heating: Maximum temperature is (Min_T:50400/0.1 centig.)	300	
Sleep page	Heating: Minimum control value:	0%	
Laser detection	Heating: Maximum control value:	100%	•
Thermostat	Cooling: Minimum temperature is (Min T:50400/0.1 centig.)	100	;
- Fancoil page 1	Cooling: Maximum temperature is	300	
object value	(Min_1:50400/0.1 centig.)	0%	
Timing page 1	Cooling: Maximum control value.	1009/	
Key page 1	Control value cond when changes	10076 E9/	
Key page block 1		2/6	
key page block i	Cycle send control value(0255/min)		
	Number of output channels	<ul> <li>2 channel(4 pipe) for heat/cool</li> <li>1 channel(2 pipe) for heat/cool</li> </ul>	
	After bus voltage recovery.setting is	<ul> <li>Follow preset</li> <li>Restored before power down</li> </ul>	
	Switch is	OFF ON	
	Run mode is	Dehumidify	,
	Speed is	OFF	
	Set temperature is(Min_TMax_T/0.1 centig.)	260	
	Current temperature of the source	O Local O External	
	Set temperature increases or decreases value	1.0	

-.-- T/N TC26L/LCD display 2.6'/V3.0/3017/20210621 > General page > Thermostat > Fancoil page 1

#### Parameter "Control mode"

This parameter sets the control mode of the fan-coil unit, including 2-point control, PWM control, and fan-coil unit control.

Options: 2 step

PWM

Fan coil

Select "2 step", the 2-point control has two output states, which can be switched according to the current temperature. As shown in the figure below, in heating mode, if the current temperature is higher than the set temperature (current temperature  $22^{\circ}$  C, set temperature  $21^{\circ}$  C), send the control value OFF to the bus. If the current temperature is lower than the set temperature (the current temperature is  $21^{\circ}$  C), the set temperature is  $21^{\circ}$  C), the control value ON is sent. As for the message 0 or 1 sent when the control value is ON, it is controlled by the parameter "Control value' object set".

The 2-point control has a hysteresis, which changes around the set temperature to prevent rapid

oscillation of the output state.

Hysteresis can be set by the parameter "Hysteresis". For example, in the heating mode, the set temperature is  $21^{\circ}$  C and the hysteresis is 1K. When the temperature is lower than  $20^{\circ}$  C, the controller opens, and when the temperature exceeds  $22^{\circ}$  C, the controller closes. The hysteresis parameter depends on the rate at which heating increases the temperature of the room and the rate at which cooling decreases the temperature of the room, as well as the sensitivity to the temperature of the people in the room.

Hysteresis cannot be set too small, otherwise the switch actuator will frequently open and close. The hysteresis should not be too large, otherwise the indoor temperature will change too much.



Select "PWM", PWM control is similar to Fan coil control. PWM control converts the 1byte control value (0...255) of Fan coil control into on/off ratio (0 and 1). For example, if the cycle time is 10 minutes, if the control output value is 70%, the on time is 7 minutes, and the off time is 3 minutes.

Note: 1) Calculation method of control value (K: set by parameter "Proportional range")
Heating mode: control value = (set temperature-current temperature)/K\*100%
Refrigeration/dehumidification mode: control value = (current temperature-set temperature)/K\*100%
Ventilation mode: both cold and heat control values are 0, no need to calculate
The calculated control value is lower than the parameter "Minimum control value" setting value is 0%
The setting value higher than the parameter "Maximum control value" is fixed to this setting value
2) Calculation method of valve opening/closing time (T: set by parameter "Readjust time (10..255/min)")
Turn on time=Control value\*T
Closing time = T-opening time
3) The set temperature is changed, and the control value calculation is performed again

Select "Fan coil", Fan coil control has a continuously changing control value, the value is between 0-100%. Use KNX to convert the control value signal to a value of 1 byte, that is, 0% of the control value corresponds to a value of 0, and 100% of the control value corresponds to a value of 255.

Note: The calculation method of the control value

Heating mode: control value = (set temperature-current temperature)/1.6\*100% Refrigeration/dehumidification mode: control value = (current temperature-set temperature)/1.6\*100% Ventilation mode: both cold and heat control values are 0, no need to calculate The calculated control value is lower than the parameter "Minimum control value" setting value is 0% The setting value higher than the parameter "Maximum control value" is fixed to this setting value

#### Parameter "Heating/Cooling: Minimum temperature is(Min\_T: 50...400; unit is 0.1centing)"

This parameter sets the minimum temperature value of the set temperature in heating/cooling mode.

Range: 50 ··· 400, unit: 0.1 ℃

#### Parameter "Heating/Cooling: Maximum temperature is(Min\_T: 50...400; unit is 0.1centing)"

This parameter sets the maximum temperature value of the set temperature in heating/cooling mode.

Range: 50 ··· 400, unit: 0.1 ℃

#### Parameter "Heating/Cooling: Minimum control value"

This parameter is valid when the parameter "Control mode" selects "PWM/Fan coil", and is used to set the minimum control value in heating/cooling mode.

Optional: 0%

5% 10% 15% 20% 25% 30%

For example, selecting "5%" means that the minimum control value is 5%. If the actual control value is lower than 5%, 0% will be sent directly.

### Parameter "Heating/Cooling: Maximum control value"

This parameter is valid when the parameter "Control mode" selects "PWM/Fan coil", and is used to set the maximum control value in heating/cooling mode.

Optional: 70%

75% 80% 85%

90% 95%

100%

For example, if "70%" is selected, the maximum control value in heating/cooling mode is 70%. If the actual control value is greater than 70%, only 70% can be issued.

### Parameter "Control value send when change"

This parameter is valid when the parameter "Control mode" selects "Fan coil". When the control value change range is greater than the set range, the current control value will be sent to the bus. Optional: 0%

1% ... 14% 15%

For example, select "5%", then when the control value change range is greater than 5%, the current control value can be sent to the bus.

### Parameter "Cycle send control value (0...255/min)"

This parameter is valid when "Fan coil" is selected in the parameter "Control mode". This parameter sets the cycle of transmitting the control value to the bus. Range: 0...255, unit: minute (0 does not work)

#### Parameter "Number of output channels"

This parameter sets the number of output pipes of the fan coil.

Options: 2 channel (4 pipe) for heat/cool

1 channel (2 pipe) for heat/cool

Select "2 channel (4 pipe) for heat/cool" and set the number of output pipes of the fan coil unit to 4 pipes, that is, the fan coil unit can have cooling and heating at the same time, and activate the two communication objects "Heating value" and " Refrigeration value";

Select "1 channel (2 pipe) for heat/cool", set the number of output channels of the fan coil to 2 pipes, then only one of the cooling and heating in the fan coil can exist, and the two communication objects "Control value" are activated , "Switch cooling/heating", when the mode is cooling, the communication object "Switch cooling/heating" will send 0 or 1, which is set by the parameter "Switch cooling/heating'object value".

#### Parameter "After bus voltage recovery, setting is"

This parameter is used to set the status of the fan coil unit after the power supply of the device bus is restored.

Optional: follow preset

restored before power down

Select "follow preset", the state of the fan coil unit is preset by the following 4 parameters after the power supply of the device bus is restored, as shown in the figure above:

#### Parameter "--Switch is"

This parameter sets the switch state of the fan coil unit.

Options: off

on

Select "off", the switch state of the fan coil is off;

Select "on", the switch state of the fan coil is on.

#### Parameter "--Run mode is"

This parameter is used to set the operating mode of the fan coil unit.

Optional: dehumidifying

refrigeration ventilation

Heating

Select "dehumidifying", the operation mode of the fan coil is dehumidification;

Select "refrigeration", the operation mode of the fan coil unit is refrigeration;

Select "ventilation", the operation mode of the fan coil is ventilation;

Select "Heating", the operation mode of the fan coil is heating.

#### Parameter "--Air speed is"

This parameter is used to set the wind speed of the fan disc.

Options: off

speed 1 speed 2 speed 3 speed auto

Select "off" to indicate that the wind speed of the fan coil is off;

Select "speed 1" to indicate that the wind speed of the fan coil unit is 1st class wind; Select "speed 2" to indicate that the wind speed of the fan coil unit is 2nd class wind;



Select "speed 3", which means that the wind speed of the fan coil is 3rd class wind; Select "speed auto" to set the wind speed of the fan disc to automatic wind speed. This option only appears when the parameter "Control mode" is selected as "Fan coil".

#### Parameter "--Set temperature is(Min\_T...Max\_T: unit is 0.1centing)"

This parameter is used to set the set temperature of the fan coil.

Range: in Parameter "Heating/Cooling: Minimum temperature is(Min\_T: 50...400; unit is 0.1centing)" and Parameter "Heating/Cooling: Maximum temperature is(Min\_T: 50...400; unit is 0.1centing))" within the setting range, unit: 0.1°C

Select "restored before power down", the state of the fan coil unit will be saved as the state before power down after the power supply of the device bus is restored.

#### Parameter "Current temperature of the source"

This parameter is used to set the current temperature source.

Options: Local

External

Selecting "local" means that the temperature uses the local device to detect the temperature; Selecting "External" means that the temperature adopts the external temperature, and the parameter "External temperature" is activated.

#### Parameter "set temperature increases or decreases value"

This parameter is used to set the increase or decrease of the rated temperature through the touch screen.

Options: 0.1

0.5

1.0

#### 3.2.3.2.1 Parameter "object value"

# **TANTRON**<sup>®</sup> ermostat > Fancoil page 1 > --object value

General page	Dehumidify mode active	Inactive O Active	
Temperature page	Cooling mode active	Inactive O Active	
Humidity page	Ventilation mode active	Inactive O Active	
Sleep page	Heating mode active	O Inactive O Active	
Laser detection	Speed object set:	0 1 bit 1 byte	
Thermostat	Speed off active	Inactive O Active	
<ul> <li>Fancoil page 1</li> </ul>	Speed 1 active	Inactive O Active	
object value	Speed 2 active	Inactive O Active	
Timing page 1	Speed 3 active	Inactive O Active	
Key page 1	Automatic speed active	Inactive O Active	
Key page block 1	Threshold ON-> fan speed 1(1100%)	10	
	Threshold ON-> fan speed 2(1100%)	40	
	Threshold ON-> fan speed 3(1100%)	70	
	Auto speed send object	Manual/auto object O Speed object	
	Auto/manual speed set	🔘 0=manual.1=auto 🔵 0=auto.1=man	ual
	Remote control object	O Inactive O Active	
	Object value'Remote control switch'	◎ 0 = OFF:1 = ON ○ 0 = ON:1 = OFF	
	Object value'Remote control mode': Dehumidify (0255)	0	
	Cooling (0255)	1	
	Ventilation (0255)	2	
	Heating (0255)	3	
	Object value'Remote control speed': Speed off(0255)	0	
	Speed 1 set:(0255)	1	
	Speed 2 cati(0, 255)	3	

Speed 3 set:(0255)	3
Speed auto set:(0255)	4 ‡
Current state feedback object	Inactive O Active
Object value'Switch feedback/Panel'	◎ 0 = OFF:1 = ON ○ 0 = ON:1 = OFF
Object value'Mode feedback/Panel': Dehumidify mode	0
Cooling mode	1 ‡
Ventilation mode	2 ‡
Heating mode	3
Object value'Speed feedback/Panel': Speed off	0
Speed 1	1 ‡
Speed 2	2
Speed 3	3
Speed auto	4 ‡

### Parameter "Dehumidify/Cooling/Ventilation/Heating mode active"

These parameters are used to disable or activate the dehumidification/cooling/ventilation/heating mode.

Options: inactive

Active

Select "inactive" to deactivate, select "Active" to activate.

#### Parameter "speed off/1/2/3/ Automatic speed active"

These parameters are used to disable or activate the wind speed. The parameter "Automatic speed active" is valid only when the parameter "Control mode" selects "Fan coil". Select "inactive" to deactivate, select "Active" to activate.

### Parameter "Speed object set"

This parameter sets the object type of wind speed control value/feedback value.

Optional: 1bit

1byte

Select "1bit", the object type of wind speed control value/feedback value is 1bit, and the communication objects are "Speed 1", "Speed 2", and "Speed 3" respectively. Select "1byte", the object type of wind speed control value/feedback value is 1byte, and the communication object is "Speed 1byte", and 4 parameters are activated, as shown in the figure below:

General page	Dehumidify mode active	Inactive 🔘 Active	
Temperature page	Cooling mode active	🔵 Inactive 🔘 Active	
Humidity page	Ventilation mode active	Inactive O Active	
Sleep page	Heating mode active	Inactive O Active	
Laser detection	Speed object set:	🔵 1 bit 🔘 1 byte	
Thermostat	Speed off active	Inactive O Active	
<ul> <li>Fancoil page 1</li> </ul>	'Speed' value set(0255)	0	
object value	'Speed feedback' value set(0255)	0	3
Timing page 1	Speed 1 active	Inactive O Active	
Key page 1	'Speed' value set(0255)	1	3
Key page block 1	'Speed feedback' value set(0255)	1	
	Speed 2 active	Inactive O Active	
	'Speed' value set(0255)	2	
	'Speed feedback' value set(0255)	2	;
	Speed 3 active	Inactive O Active	
	'Speed' value set(0255)	3	
	'Speed feedback' value set(0255)	3	
	Automatic speed active	Inactive O Active	
	Threshold ON-> fan speed 1(1100%)	10	
	Threshold ON-> fan speed 2(1100%)	40	
	Threshold ON-> fan speed 3(1100%)	70	

# Parameter "'Speed' value set (0...255)"

This parameter sets the control value of fan coil unit wind speed off/wind speed 1/wind speed 2/wind speed 3.

Range: 0...255

#### Parameter "'Speed feedback' value set (0...255)"

This parameter sets the setting value of fan coil wind speed off/wind speed 1/wind speed 2/wind speed 3.

Range: 0...255

Parameter "Threshold ON->fan speed 1(1...100%)"

Parameter "Threshold ON->fan speed 2(1...100%)"

Parameter "Threshold ON->fan speed 3(1...100%)"

These parameters are only valid when "Fan coil" is selected in the parameter "Control mode".

In the case of automatic wind speed,

When the control value is lower than the setting value of the parameter "Threshold ON->fan speed 1(1...100%)", the automatic wind speed is wind speed 0;

When the control value is between the parameter "Threshold ON->fan speed 1(1...100%)" and the parameter "Threshold ON->fan speed 2(1...100%)", the automatic wind speed Is wind speed 1; When the control value is between the parameter "Threshold ON->fan speed 2(1...100%)" and the parameter "Threshold ON->fan speed 3(1...100%)", the automatic wind speed Is wind speed 2; When the control value is higher than the setting value of the parameter "Threshold ON->fan speed 3(1...100%)", the automatic wind speed 3.

#### Parameter "Auto speed set object"

This parameter is valid only when "Fan coil" is selected in the parameter "Control mode" to set the type of automatic wind speed.

Options: Manual/auto object

Speed object

Select "Manual/auto object", activate the parameter "Auto/manual speed set" and the communication object "Speed auto", switch to the automatic wind speed object "Speed auto" and send a message 0 or 1, by the parameter "Auto/manual speed set" set up; Select "Speed object", switch to automatic wind speed, automatic wind speed 0~3 gears use

wind speed  $0 \sim 3$  gear objects.

#### Parameter "Remote control object"

This parameter sets whether to activate the remote control object, select "Active" and activate the following parameters:

#### Parameter "Object value 'Remote control switch'"

This parameter sets the remote control value of the fan coil switch.

Options: 0=OFF; 1=ON

0=ON; 1=OFF

Select "0=OFF; 1=ON", when the communication object "Remote control switch" receives the message 0, the fan coil switch status is off, and when the message 1 is received, the fan coil switch status is on;

Select "0=ON; 1=OFF", the opposite is true.

#### Parameter "Object value "Remote control mode':

#### Dehumidify/Cooling/Ventilation/Heating (0...255)"

This parameter sets the remote control value of the fan-coil operating mode. The communication object "Remote control mode" receives the remote control value set by the corresponding mode and enters the corresponding mode.

Range: 0...255

#### Parameter "Object value "Remote control speed':

#### Speed off/speed 1/speed 2/speed 3/speed auto(0...255) set"

This parameter sets the remote control value of the wind speed of the fan coil. The communication object "Remote control speed" receives the remote control value of the corresponding wind speed setting and enters the corresponding wind speed grade.

Range: 0...255

#### Parameter "Current state feedback object"

This parameter sets whether to activate the feedback object. After selecting "Active", the following parameters are activated:

#### Parameter "Object value 'Switch feedback/Panel'"

This parameter sets the feedback value of the fan coil switch.

Options: 0=OFF; 1=ON

0=0N; 1=0FF

Select "0=OFF; 1=ON", turn on the air conditioner through the panel, the communication object "Switch feedback/Panel" will send out 01, turn off the air conditioner, and the communication object "Speed feedback/Panel" will send out 00; Select "0=ON; 1=OFF", the opposite is true.

### Parameter "Object value 'Mode feedback/Panel':

#### Dehumidify/Cooling/Ventilation/Heating mode (0...255)"

This parameter sets the feedback value of the fan-coil working mode (dehumidification/cooling/ventilation/heating). The mode is modified through the panel, and the communication object "Mode feedback/Panel" sends the corresponding feedback value to the bus. Range: 0...255

Parameter "Object value 'Speed feedback/Panel': Speed off/speed 1/speed 2/speed 3/speed auto (0...255)"

This parameter sets the feedback value of the fan coil wind speed (wind speed off/wind speed 1/wind speed 2/wind speed 3/auto wind speed). The wind speed is modified through the panel, and the communication object "Speed feedback/Panel" sends the corresponding feedback value to the bus.

Range: 0...255

# 3.2.3.3 Parameter "Timing page"

General page	Time of timing is(01440 unit is 1 minutes)	0	
Temperature page	Action while timing over	O OFF ON	
Humidity page	Report time	O Inactive O Active	
Sleep page	Change value(1144 unit is 1 minutes)	0	4
Laser detection			
– Thermostat			
— Fancoil page 1			
object value			
Timing page 1			

### Parameter "Time of timing is(1...1440;0:invalid;unit is 1 minutes)"

This parameter is used to set the timing time. The communication object is "Timing". Sending 1 to the communication object means that the timing is 1min. Range: 1...144, 0 is invalid, unit: 1 minute

#### Parameter "Action while timing over"

This parameter is used to set the status of the device after the timer expires. Options: off

on

Select "off", and the air conditioner switch status will be off when the time is over; Select "on", and the air conditioner switch status will be on when the time is over.

#### Parameter "Report time"

This parameter sets whether to activate the timing report function.

**Options: inactive** 

active

If you select "activated", activate the timing report function, activate the parameter **"change value (1...144/1min)"**, set how long the timing time changes, and then send a message to report

the current timing time, the communication object is "Timing report".

#### 3.2.4 Parameter "Music"

Remarks: Each channel of the music function is the same. Take channel 1 as an example to introduce in detail.

– General page	The number of music channel setting	1	* *
Temperature page Humidity page Sleep page			
Laser detection + Thermostat			
+ Music			
+ Key page 1			

#### 

This parameter is enabled when the music function is activated, and is used to set the number of music channels.

Range: 1...6

-.-- T/N TC26L/LCD display 2.6'/V3.0/3017/20210621 > General page > Music > Music page 1 O Move previous = 0:Move next = 1 General page Move previous and move next set Move previous = 1:Move next = 0 Temperature page Play control value set Play = 0 : Stop = 1 Play = 1 : Stop = 0 Humidity page Play feedback value set Play = 0 : Stop = 1 Play = 1 : Stop = 0 Sleep page O Disable = 0 : Enable = 1 Mute control value set Laser detection Disable = 1 : Enable = 0 O Disable = 0 : Enable = 1 + Thermostat Mute feedback value set O Disable = 1 : Enable = 0 - Music ÷. 0 Local music value setting Music page 1 ¢ 1 Bluetooth music value setting Key page 1 ÷ Network music value setting 2 组对象 频道 参数

36
# Parameter "Move previous and move next set"

This parameter is used to set the setting value of switching to the previous song and the next song, and the communication object is "move previous/next, CH1".

Options: Move previous=0; move next=1

Move previous=1; move next=0

Select "move previous=0; move next=1" to switch to the previous song when the communication object "move previous/next, CH1" sends out 0, and switch to the next song when the communication object "move previous/next, CH1" sends out 1;

Select "Move previous=1; move next=0", the opposite.

#### Parameter "play control value set"

This parameter sets the control value of play/pause, and the communication object is "play state control, CH1".

Options: Play=0; stop=1

Play=1; stop=0

Select "play=0; stop=1", when playing music, the communication object "play state control, CH1" sends out 0, when the music is paused, the communication object "play state control, CH1" sends out 1;

Select "Play=1; stop=0", the opposite is true.

### Parameter "play feedback value set"

This parameter sets the feedback value of play/pause, and the communication object is "play state feedback, CH1".

Options: Play=0; stop=1

Play=1; stop=0

Select "play=0; stop=1", when the communication object "play state control, CH1" receives message 0, the music will be played, and when the communication object "play state control, CH1" receives message 1, the music will be paused;

Select "Play=1; stop=0", the opposite is true.

#### Parameter "mute control value set"

This parameter sets the mute control value, and the communication object is "mute control, CH1". Options: disable=0; enable=1

disable=1; enable=0

Selecting "disable=0; enable=1" means that when exiting the mute mode, the communication object "mute control, CH1" sends out 0, and when entering the mute mode, the communication object "mute control, CH1" sends out 1;

Select "disable=1; enable=0", the opposite is true.

# Parameter "mute feedback value set"

This parameter sets the mute feedback value, and the communication object is "mute feedback, CH1".

Options: disable=0; enable=1

### disable=1; enable=0

Select "disable=0; enable=1", when the communication object "mute feedback, CH1" receives message 0, it exits the mute mode, and receives message 1 and enters the mute mode; Select "disable=1; enable=0", the opposite is true.

#### Parameter "local music value setting"

This parameter sets the setting value when the sound source is local music. Range: 0...255

#### Parameter "Bluetooth music value setting"

This parameter sets the setting value when the audio source is Bluetooth music. Range: 0...255

### Parameter "network music value setting"

This parameter sets the setting value when the audio source is network music. Range: 0...255

# 3.2.5 Parameter "Temperature page"

General page	Transmit current temperature value	Periodic	
Temperature page	Cycle is (1255 unit : 1min)	10	
	Calibration of temperature is	Addition	
Key page 1	Calibration value is(0255 unit is 0.1 centig.)	20	
	Temperature alarm function of is	Inactive O Active	
	Upper limit of temperature is(11000 unit is 0.1 centig.)	320	÷
	Lower limit of temperature is(11000 unit is 0.1 centig.)	300	ţ
	hysteresis of temperature alarm is (0255 unit is 0.1 centig.)	50	;
	if current temperature> upper.telegram value is	0 0 1	
	if current temperature < lower.telegrar value is	<sup>m</sup> _ 0 🔘 1	

# Parameter "transmit current temperature value"

Options: None

After changed

Periodic

Selecting "After changed" means sending the current temperature value to the bus when the current temperature changes. As for how much the current temperature value is reported, it is set

by the parameter "-change value(1...100 unit:0.1centig.)".

Select "periodic" to send the current temperature value to the bus periodically, and the cycle time is set by the parameter "--Cycle is(1...255,unit:1min)".

#### Parameter "Calibration of temperature is"

It is used to set whether to activate the function of calibrating the current temperature.

Options: inactive

addition

subduction

Select "addition", the current temperature calibration direction is increase; select "subduction", the current temperature calibration direction is subtract, the calibration value is set by the parameter "Calibration value is(0...255,unit is 0.1 centig)".

#### Parameter "temperature alarm function of is"

This parameter is used to set whether to activate the temperature alarm function.

Options: inactive

active

Select "active" to activate the temperature alarm function, and 5 related parameters appear, as described below:

#### Parameter "-- Upper limit of temperature is(1...1000;unit is 0.1centing)"

This parameter is used to set the upper limit of temperature alarm, and the upper limit of temperature can also be modified through the communication object "Upper limit of temp.alarm". Range:  $1\cdots 1000$ , unit:  $0.1^{\circ}C$ 

#### Parameter "Lower limit of temperature is(1...1000;unit is 0.1centing)"

This parameter is used to set the lower limit of temperature alarm, and the lower limit of temperature can also be modified through the communication object "Lower limit of temp.alarm". Range:  $1\cdots 1000$ , unit:  $0.1^{\circ}C$ 

#### Parameter "Hysteresis of temperature alarm(0...255;unit is 0.1centing)"

This parameter is used to set the hysteresis value of the temperature alarm. Range: 0...255, unit:  $0.1^{\circ}$ C

#### Parameter "If current temperature>upper, telegram value is"

This parameter is used to set the data sent by the message if the current temperature is greater than the set temperature upper limit value.

Options: "0"

"1"

Select "0", if the current temperature is greater than the set temperature upper limit, the data sent out will send 00 through the communication object "Temperature alarm status".

Select "1", if the current temperature is greater than the set temperature upper limit, the data sent by the message will be sent to 01 through the communication object "Temperature alarm status".

# Parameter "If current temperature<lower, telegram value is"

This parameter is used to set the data sent by the message if the current temperature is less than the set temperature lower limit value.

Options: "0"

"1"

Select "0", if the current temperature is less than the set temperature lower limit value, the data sent by the message will send 00 through the communication object "Temperature alarm status". Select "1", if the current temperature is less than the set temperature lower limit value, the data sent by the message is sent to 01 through the communication object "Temperature alarm status".

Note:

1. The communication object "temp.alarm activate" is whether to activate the temperature alarm function. Writing 00 through the bus means turning off the temperature alarm function, and writing 01 means turning on the temperature alarm function.

2. As shown in the red box in the above figure, first write 01 through the communication object "temp.alarm activate" to turn on the temperature alarm function, when the current temperature is greater than the set temperature upper limit of 32.5 degrees (the set temperature upper limit The hysteresis 0.5 needs to be added, and the set temperature lower limit needs to be subtracted from the hysteresis 0.5), the communication object "Temperature alarm status" sends 00 (when the temperature is lower than 31.5 ° C and then greater than 32.5 ° C, the communication object "Temperature alarm status" remains 00 will be sent; when the temperature drops and is between 32 ° C and 31.5 ° C, again greater than 32.5 ° C, the communication object "Temperature alarm status" will not send 00); when the current temperature is lower than the set temperature lower limit of 29.5 ° C, The communication object "Temperature alarm status" sends 01 (when the temperature is greater than 30.5 ° C and then lower than 29.5 ° C, the communication object "Temperature alarm status" will still send 01; when the temperature rises and is between 30 ° C

and 30.5  $^{\circ}$  C, again If it is less than 29.5  $^{\circ}$ C, the communication object "Temperature alarm status" will not send 01).

# 3.2.6 Parameter "Humidity page"

General page	Transmit current humidity value	After changed	
Temperature page	Change value (1100 unit : 0.1%)	10	
Humidity page	Calibration of humidity is	Addition	
	Calibration value is(0255 unit is 0.1%)	20	
Key page 1	Humidity alarm function of is	Inactive O Active	
	Upper limit of humidity is(11000 unit is 0.1%)	700	
	Lower limit of humidity is(11000 unit is 0.1%)	500	
	hysteresis of humidity alarm is(0255 unit is 0.1%)	50	
	if current humidity > upper.telegram value is	O 0 1	
	if current humidity < lower.telegram value is	0 0 1	

# Parameter "transmit current humidity value"

Options: None

After changed

Periodic

Selecting "After changed" means sending the current humidity value to the bus when the humidity changes. The current humidity value is reported by the parameter "- change value(1 ... 100 unit:0.1centig.)".

Select "periodic" to send the current humidity value to the bus periodically, and the cycle time is set by the parameter "--Cycle is(1...255,unit:1min)".

# Parameter "Calibration of humidity is"

It is used to set whether to activate the function of calibrating humidity value.

Options: inactive

addition

subduction

Select "addition", the direction of calibration is increase; select "subduction", the direction of calibration is subtraction, and the calibration value is set by the parameter "Calibration value

is(0...255,unit is 0.1 centig)"

#### Parameter "Humidity alarm function of is"

This parameter is used to set whether to activate the humidity alarm function.

Options: inactive

active

Select "active" to activate the humidity alarm function, and 5 related parameters appear, as described below:

# Parameter "--Upper limit of Humidity is(1...1000;unit is 0.1centing)"

This parameter is used to set the upper limit of humidity alarm, and the upper limit of humidity can also be modified through the communication object "Upper limit of humidity alarm". Range:  $1\cdots 1000$ , unit:  $0.1^{\circ}$ C

### Parameter "Lower limit of humidity is(1...1000;unit is 0.1centing)"

This parameter is used to set the lower limit of humidity alarm, and the lower limit of humidity can also be modified through the communication object "Lower limit of humidity alarm". Range:  $1\cdots 1000$ , unit:  $0.1^{\circ}$ C

# Parameter "Hysteresis of humidity alarm(0...255; unit is 0.1 centing)"

This parameter is used to set the hysteresis value of the humidity alarm. Range: 0...255, unit:  $0.1^{\circ}$ C

# Parameter "If current humidity>upper, telegram value is"

This parameter is used to set the data sent by the message if the current humidity is greater than the set humidity upper limit value.

Options: "0"

"1"

Select "0", if the current humidity is greater than the set humidity upper limit, the communication object "humidity alarm status" sends 00;

Select "1", if the current humidity is greater than the set humidity upper limit, the communication object "humidity alarm status" sends 01.

#### Parameter "If current humidity<lower, telegram value is"

This parameter is used to set the data sent by the message if the current humidity is less than the

set humidity lower limit value.

Options: "0"

"1"

Select "0", if the current humidity is less than the set humidity lower limit, the communication object "humidity alarm status" sends 00;

Select "1", if the current humidity is less than the set humidity lower limit, the communication object "humidity alarm status" sends 01.

Note:

1. The communication object "humidity alarm activate" is whether to activate the humidity alarm function. Writing 00 through the bus means turning off the humidity alarm function, and writing 01 means turning on the humidity alarm function.

2. As shown in the figure above, first write 01 through the communication object "Humility alarm activate" to turn on the humidity alarm function, when the current humidity is greater than the set humidity upper limit 75% (the set humidity upper limit needs to add a hysteresis of 5%, The set humidity lower limit needs to subtract 5% hysteresis), the communication object "Humility alarm status" sends 01; when the current humidity is less than the set humidity lower limit 45%, the communication object "Humility alarm status" sends 00.

# 3.2.7 Parameter "floor heating"

General page	The number of channel setting	1	-
Temperature page Humidity page Sleep page Laser detection + Thermostat	Channel 1	Inactive O Active	
Music Floor heating Channel 1			
K1			

# Parameter "the number of channel setting"

The floor heating function can set  $1 \sim 10$  channels, this parameter is used to set the number of channels for floor heating.

# Parameter "channel x"

This parameter sets whether to activate the floor heating channel.

Options: inactive

active

Selecting "active" means to activate the corresponding floor heating channel, and the floor heating function setting interface "channel x" appears, as shown in the figure below:

<ul> <li>General page</li> </ul>	'Switch contorl' object value:	◎ 0 = OFF:1 = ON ○ 0 = ON:1 = OFF	
Temperature page	'Switch feedback' object value:	◎ 0 = OFF:1 = ON ○ 0 = ON:1 = OFF	
Humidity page	'Switch remote' object value:	◎ 0 = OFF:1 = ON ○ 0 = ON:1 = OFF	
Sleep page	The minimum set temperature: (01000)	50	\$
Laser detection	The maximum set temperature: (01000)	350	÷
+ Thermostat	Floor heating temperature of the source	O Local O External	
+ Music	Calibration of temperature is	Inactive	•
- Floor heating	Automatic function	O Inactive O Active	
Channel 1	Themostat control actuator	O Inactive Active	
Key page 1	Set temperature increases or decreases value	1.0	•
	If switch on.whether reading data:	O Inactive O Active	
	After bus voltage recovery.setting is	<ul> <li>Follow preset</li> <li>Restored before power down</li> </ul>	
	Floor heating is switch:	OFF ON	

-.-.- T/N TC26L/LCD display 2.6'/V3.0/3017/20210621 > General page > Floor heating > Channel 1

Parameter "switch value type set(control)"

Parameter "switch value type set(feedback)"

#### Parameter "switch value type set(remote)"

These parameters set the switch control value, feedback value and remote control value of floor heating.

Options: 0=OFF; 1=ON

0=ON; 1=OFF

### Parameter "the minimum set temperature (0...1000)"

### Parameter "the maximum set temperature (0...1000)"

This parameter is used to set the minimum and maximum values of the floor heating setting temperature.

Range: 1...1000, unit: 0.1℃

#### Parameter "Floor heating temperature of the source"

This parameter is used to set the source of the current temperature of the floor heating.

**Options: Local** 

External

Select "Local", the current temperature of the floor heating adopts the actual temperature detected by the device's own sensor;

Select "External", the current temperature of the floor heating uses the external temperature, and the communication object is "External current temperature".

Note: When this parameter selects "External", the temperature can also be calibrated.

# Parameter "Calibration of temperature is"

This parameter is used to set whether to calibrate the ambient temperature.

**Options:** Inactive

Addition

Subduction

Select "Inactive" to not calibrate the ambient temperature of the floor heating;

Select "Addition" to calibrate the ambient temperature of the floor heating, the calibration method is increase, and the calibration deviation value is set by the parameter "- value of addition (0...255/0.1 centig)";

Select "Subduction" to calibrate the ambient temperature of floor heating. The calibration method is subtraction. The calibration deviation is set by the parameter "—value of subduction (0...255/0.1 centig)".

# Parameter "automatic function"

This parameter sets whether to enable the automatic function.

Options: inactive

active

Select "Enable" to enable the automatic function and activate 2 parameters, as shown in the figure below:

# **TANTRON**

	If switch on whether reading data:	Inactive     Active     Solution	
	Set temperature increases or decreases value	1.0	•
	Themostat control actuator	O Inactive Active	
Key page 1	Switch OFF when>= (11000/0.1 centig.)	180	÷
Channel 1	Switch ON when<= (11000/0.1 centig.)	150	ţ
<ul> <li>Floor heating</li> </ul>	Automatic function	Inactive Active	
+ Music	Calibration of temperature is	Inactive	•
+ Thermostat	Floor heating temperature of the source	O Local O External	
Laser detection	The maximum set temperature: (01000)	350	-
Sleep page	The minimum set temperature: (01000)	50	-
Humidity page	'Switch remote' object value:	◎ 0 = OFF:1 = ON ○ 0 = ON:1 = OFF	
Temperature page	'Switch feedback' object value:	0 = OFF:1 = ON 0 = ON:1 = OFF	
General page	'Switch contorl' object value:	○ 0 = OFF:1 = ON ○ 0 = ON:1 = OFF	

#### Parameter "--Switch ON when<=(1...1000/0.1 centig.)"

This parameter is used to set when the local temperature is less than or equal to how much, the floor heating switch state is on.

Range: 1...1000, unit: 0.1°C

#### Parameter "Switch OFF when>=(1...1000/0.1 centig.)"

This parameter is used to set when the local temperature is greater than or equal to how much, the floor heating switch state is off.

Range: 1...1000, unit: 0.1°C

# Parameter "Thermostat control Actuator"

This parameter is used to set whether to enable the thermostat automatic control device.

Options: inactive

active

Select "active" to enable the thermostat automatic control device and activate 5 parameters, as shown in the figure below:

	Set temperature increases or decreases value	1.0	
	Switch off value	Send 0 Send 1	
	Switch on value	Send 0 🔘 Send 1	
	Control object type	◎ 1 bit ○ 1 byte	
	Actuator 100% on when temperature distance>=	4.0 Degree	
	min)	20	
	Themostat control actuator	Inactive O Active	
Key page 1	centig.)	180	į.
	centig.) Switch OFF when $> = (1, 1000/0.1)$	150	
Channel 1	Switch ON when<= (11000/0.1	150	
<ul> <li>Floor heating</li> </ul>	Automatic function	Inactive O Active	
- Music	Calibration of temperature is	Inactive	
F Thermostat	Floor heating temperature of the source	Local External	
Laser detection	The maximum set temperature: (01000)	350	
Sleep page	The minimum set temperature: (01000)	50	
Humidity page	'Switch remote' object value:	◎ 0 = OFF:1 = ON ○ 0 = ON:1 = OFF	
Temperature page	'Switch feedback' object value:	◎ 0 = OFF:1 = ON ○ 0 = ON:1 = OFF	
General page	'Switch contorl' object value:	○ 0 = OFF:1 = ON ○ 0 = ON:1 = OFF	

#### -.-.- T/N TC26L/LCD display 2.6'/V3.0/3017/20210621 > General page > Floor heating > Channel 1

#### Parameter "-Control acutuator cycle time(20...1000/minute)"

This parameter is used to set the cycle time of the control device.

Range: 20...1000, unit: minute

### Parameter "---Actuator 100% on when Temperature distan>="

This parameter is used to set the number of degrees that the temperature can change within the cycle time of the control device.

Options: 0.5 degree

1 degree
 1.5 degree
 2 degree
 2.5 degree
 3 degree
 3.5 degree
 4 degree

Select "0.5/1/1.5/2/2.5/3/3.5/4 degree", when the current temperature is less than the set temperature  $0.5/1/1.5/2/2.5/3/3.5/4^{\circ}$  C, the communication object "control value 1bit/" byte"

sends out the setting value of the parameter "--Switch ON value". After the current temperature reaches the set temperature, the setting value of the parameter "--Switch OFF value" is sent out. After one cycle time is up, the detection control of the next cycle will continue. Analogy...The time for the current temperature to reach the set temperature is determined by the parameter "-- Control acutuator cycle time(20...1000/minute)".

#### Note:

The time for the current temperature to reach the set temperature = cycle time / the number of degrees the temperature can be changed \* (set temperature-current temperature) Cycle time: set by the parameter "—Control acutuator cycle time(20...1000/minute)" The degree that the temperature can be changed: set by the parameter "—Actuator 100% on when Temperature distan>="

#### Parameter "-Control Object type"

This parameter is used to set the data type of the control value.

Options: 1bit

1byte

# Parameter "--Switch ON value"

This parameter is used to set the data for turning on the floor heating. Range: 0...1/0...255

# Parameter "--Switch OFF value"

This parameter is used to set the data for turning off the floor heating. Range: 0...1/0...255

#### Parameter "set temperature increases or decreases value"

This parameter is used to set the increase or decrease of the set temperature through the touch screen.

Options: 0.1

0.5

1.0

#### Parameter "if switch on, whether reading data"

This parameter sets whether to read the floor heating setting temperature when the floor heating is

turned on.

Options: OFF

ON

Select "ON", which means to read the set temperature of the floor heating when the floor heating is turned on.

# Parameter "After bus voltage recovery, setting is"

This parameter is used to set the state of floor heating after the device bus restores power.

Optional: Follow preset

Restored before powerdown

Select "Follow preset", and the floor heating status will be set according to the setting after the device bus restores power supply;

### Parameter "--Switch setting"

This parameter sets the on-off state of floor heating after the device bus restores power.

Options: OFF

ON

Select "OFF", the on-off state of the floor heating is off after the device bus restores the power supply;

Select "ON", the switch state of the floor heating will be on after the power supply of the device bus is restored, and the parameter "--Display value is(0..1000)" is activated, which is used to set the rated temperature of the floor heating.

# 3.2.8 Parameter "fresh air"

T/N TC26L/LCD display 2	2.6'/V3.0/3017/20210621 > General pag	e > Fresh air	
— General page	The number of channel setting	1	÷
Temperature page Humidity page Sleep page Laser detection + Thermostat + Music + Floor heating	Channel 1	Inactive Active	
+ Fresh air			
+ Key page 1			
组对象 频道 参数			

# Parameter "the number of channel setting"

The fresh air function can set  $1 \sim 10$  channels, this parameter is used to set the number of fresh air channels.

# Parameter "channel x"

This parameter sets whether to activate the fresh air channel.

Options: inactive

active

Selecting "active" means to activate the corresponding fresh air channel, and the fresh air function setting interface "channel x" appears, as shown in the figure below:

# **TANTRON**<sup>®</sup>

<ul> <li>General page</li> </ul>	After bus voltage recovery.setting is	OFF	•
Temperature page	Switch set	Inactive O Active	
Humidity page	'Switch' object value	◎ 0 = OFF:1 = ON ○ 0 = ON:1 = OFF	
Sleep page	'Switch Feedback' object value	◎ 0 = OFF:1 = ON ○ 0 = ON:1 = OFF	
Laser detection	'Switch Remote' object value	◎ 0 = OFF:1 = ON ○ 0 = ON:1 = OFF	
+ Thermostat	Mode set	Inactive O Active	
+ Music	'Automatic mode' object value	◎ 0=manual.1=auto ○ 0=auto.1=manual	
+ Floor heating	'Automatic mode feedback' object value	0 0=manual.1=auto 0 0=auto.1=manual	
— Fresh air	'Automatic mode remote' object value	0 0=manual.1=auto 0=auto.1=manual	
Channel 1	Speed off	Inactive Active	
Key nage 1	Speed off(control); (0, 255)	0	*
Key page 1	Speed off(foodback) (0, 255)	0	*
	Speed off(remote); (0, 255)	0	*
	Speed 1		Ŧ
	Speed 1(control): (0, 255)		
	speed (control): (0255)	1	*
	Speed 1(remote): (0. 255)	1	*
	Speed 2		¥
	Speed 2(control): (0, 255)		*
	speed 2(control): (0255)	2	*
	speed 2(reedback): (0255)	2	*
	speed 2(remote): (0255)	2	٣
	Speed 3	O Inactive O Active	
	Speed 3(control): (0255)	3	
	Speed 3(feedback): (0255)	3	
	Speed 3(remote): (0255)	3	
	Speed 4	O Inactive O Active	
	Speed 4(control): (0255)	4	
	Speed 4(feedback): (0255)	4	1
	Speed 4(remote): (0255)	4	3
	Speed 5	Inactive O Active	
	Speed 5(control): (0255)	5	3
	Speed 5(feedback): (0255)	5	
	Speed 5(remote): (0, 255)	5	

#### -.-- T/N TC26L/LCD display 2.6'/V3.0/3017/20210621 > General page > Fresh air > Channel 1

# Parameter "After bus voltage recovery, setting is"

This parameter is used to set the state of the fresh air after the bus power is restored.

Options: OFF

Speed 1 Speed 2 Speed 3 Speed 4 Speed 5 Auto

Last state

# Parameter "Switch set"

This parameter is used to set whether to activate the switch setting of fresh air.

Options: inactive

active

Select "active" to activate the switch setting of fresh air.

```
Parameter "'switch' object value"
```

#### Parameter "'switch feedback' object value"

#### Parameter "'switch remote' object value"

Set the control value, feedback value, and remote value corresponding to the fresh air switch.

Options: 0=OFF; 1=ON

0=ON; 1=OFF

# Parameter "Mode set"

This parameter sets whether to activate the mode setting function.

Options: inactive

active

Select "active" to activate the mode setting function.

# Parameter "automatic mode' object value"

Parameter "' automatic mode feedback' object value"

### Parameter "' automatic mode remote' object value"

Set the control value, feedback value, and remote control value corresponding to the automatic mode and manual mode.

Options: 0 = manual, 1 = auto

0 = auto, 1 = manual

## Parameter "Speed off/1/2/3/4/5"

This parameter is used to set whether to activate wind speed off/1/2/3/4/5.

Options: inactive

active

Select "active" to activate this function.

### Parameter "—Speed off/1/2/3/4/5(control)"

This parameter is used to set the value of the message sent by the communication object "Speed" when the fresh air speed is off/1/2/3/4/5 through the button or the remote control object. Range: 0...255

#### Parameter "-Speed off/1/2/3/4/5(feedback)"

This parameter is used to set the message value that needs to be written to the communication object "Speed, Feedback" when the fresh air wind speed is off/1/2/3/4/5. Range: 0...255

#### Parameter "-Speed off/1/2/3/4/5(remote)"

This parameter is used to set the message value that needs to be written to the communication object "Speed, Feedback" when the fresh air wind speed is off/1/2/3/4/5. Range: 0...255

### 3.5 Parameter "Key page block x"

The function of this interface is to set how many modules (up to 6 modules) each page on the panel consists of, and define the function of each module.

Remarks: x represents the number of pages, the range of x is set according to the parameter "set the number of key pages" in the parameter setting interface "General page", the maximum range is 1...10;

*z* represents the number of modules on the page, the range of *z* is set according to the parameter "The number of key setting", the maximum range is 1...6;



General page	The number of key setting	6	
Temperature page	Function of key 1_1 is	Dimmer	
Humidity page	Function of key 1_2 is	Shutter	,
Humany page	Function of key 1_3 is	Air conditioning	,
Key page 1	Function of key 1_4 is	Music	,
- Key page block 1	Function of key 1_5 is	Scene	,
Key 1_1 dimmer page	Function of key 1_6 is	Switch value	,
Key 1_2 shutter page			
Key 1_3 air conditioniting page			
Key 1_4 music page			
Key 1_5 scene page			
Key 1_6 switch value page			
Key page 2			
£ /.	1		

# Parameter "The number of key setting"

This parameter is used to set the number of modules on the page

Range: 1····6

# Parameter "Function of key x\_z"

This parameter is used to set the function of the module.

**Options:** Inactive

Dimmer Shutter S c e ne Switch value Display Jump page Thermostat Music Floor heating Fresh air

Select "Dimmer" to indicate that the function of the module is dimming;

Select "Shutter" to indicate that the function of the module is curtain;

Select "Scene" to indicate that the function of the module is a scene;

Select "Switch value" to indicate that the function of the module is on and off;

Select "Display" to indicate that the function of the module is display;

Select "Jump page" to indicate that the function of the module is to jump to the specified page;

Select "Thermostat" to indicate that the function of the module is the air conditioning adjustment function;

Select "Music" to indicate that the function of the module is music;

Select "Floor heating" to indicate that the function of the module is floor heating;

Select "Fresh air" to indicate that the function of the module is fresh air.

# 3.5.1 Parameter "key x\_z dimmer page"

+ Music	Dimming type	Common dimming RGB dimming	
+ Floor heating	Short press is	Switch ON/OFF Enter dimmer inter	erface
<ul> <li>Fresh air</li> </ul>	Value of dimmer on/off is	Toggle	1
Channel 1	Long press is	🔿 Disable 🔘 Enable	
Key page 1	Time of long press(110s)	1	
<ul> <li>Key page block 1</li> </ul>	Long press is	Switch ON/OFF O Enter dimmer inte	erface
Key 1_1 dimmer page	Dimming value interval to send	🔵 Disable 🔘 Enable	
Key 1_2 shutter page	Interval time(115/100ms)	1	
Key 1_3 thermostat page	Display current brightness	🔵 Disable 🔘 Enable	
Key 1_4 music page	Icon setting	Common lamp	
	which is the state	O Default O User defined	
Key 1_5 scene page	Litle display	U Deladit U Oser delined	

# Parameter "Dimming type"

This parameter is used to set the dimming mode.

Options: Common dimming

RGB dimming

Select "Common dimming", the dimming mode is normal dimming;

Select "RGB dimming", the dimming mode is RGB dimming, and activate the parameter "RGB object length" to set the length of the RGB object, 3byte/1byte is optional.

# Parameter "short press is"

This parameter sets the function realized by short press-the corresponding dimming module on the page.

Options: Switch ON/OFF

Enter dimmer interface

Select "Enter dimmer interface" to indicate that the function realized by short press is to enter the dimming interface;

Selecting "switch ON/OFF" means that the function realized by the short press is the switch dimming function, and the parameter "value of dimming on/off is" appears;

## Parameter "value of dimming on/off is"

The communication object is "dimmer on/off for short K\_x\_z"

Optional: Toggle

On

Off

Select "toggle", short press the corresponding dimming module on the page to send data 01,00,01,00,01,00...;

Select "ON", short press the corresponding dimming module on the page to send data 01;

Select "OFF", short press the corresponding dimming module on the page to send data 00.

# Parameter "long press is"

This parameter sets whether to activate the long press function.

**Options:** Disable

Enable

Select "Enable" to activate the long press function, and activate the following 2 parameters:

# Parameter "time of long press(1...10s)"

This parameter sets the long press time, that is, long press? The corresponding dimming module in the second page is determined to be a long press.

Range: 1...10, unit: second

# Parameter "long press is"

This parameter is used to set the function realized by the long press-the corresponding dimming module on the page.

Options: Switch ON/OFF

Enter dimmer interface

The long-press function options are similar to the short-press function, please refer to the introduction of short-press function.

#### Parameter "dimming value interval to send"

This parameter sets whether to activate the function of sending dimming values at intervals.

**Options:** Disable

Enable

Select "Enable", enter the dimming interface and click or drag the dimming progress bar. The communication object "dimmer value K  $x_z$ " will send the dimming value to the bus at intervals. The interval time is determined by the parameter "—interval time(1…15/100ms))"set up.

#### Parameter "display current brightness"

Whether the corresponding dimming module in the parameter setting page displays the current dimming value.

Options: Disable

Enable

#### Parameter "icon setting"

The dimming icon of the corresponding dimming module in the parameter setting page.

Option: Common lamp

Ceiling lamp Dining lamp Canister lamp Wall lamp Lamp with Foot lamp Spotlight Table lamp Night light Reading light RGB light User defined

When selecting a fixed icon, the title can choose to use the default title or custom title, and the title is set by the parameter "Icon display";

When "User defined" is selected, the title is also mandatory to customize, which means that the icon and title of the corresponding dimming module on the page are customized, which can be modified by the host computer.

For example, 6 modules are set on the first page of the panel, and a custom icon is set on the first module;

Modify the custom icon operation process:



1. Open the host computer TFT26 Page Setting V1.3.exe, as shown in the figure below:



2. Distinguish the modules: You need to check the "Enabled" and "Split" combo boxes in the first row of page 1, which means there are 2 modules in the first row;

3. Set the icon: Click the icon of the first module in the first row, and the select picture window will pop up (as shown in the figure below), set the "picture-on" and "picture-off" pictures, and click "ok" after the setting is complete back to main interface;

*Note: Picture format resolution 48\*35* 



4. Set the label: click the label of the first module in the first row, the "edit label" window will pop up (as shown in the figure below), fill in the "label", and set the label font size, after the setting is complete, click "ok" to return to the main interface;

🎸 Edit lable			×
Label	: dimmer		
Font	size: 9		
	OK	Cancel	

5. Download: Long press the panel programming button (or long press the panel setting button, the programming button operation page appears, long press the "Updata program" module), until

the programming button flashes red (the screen is blank at the same time), the panel and the computer directly use the USB cable Connect, click the download icon bound to download the custom icon to the panel

# 3.5.2 Parameter "key x\_z shutter page"

+ Thermostat	Short press is	Move function	•
+ Music	Direction of shutter move is	Toggle(up:0/down:1)	
· Floor heating	Long press is	O Disable O Enable	
Fresh air	Time of long press(110s)	1	
Channel 1	Long press is	Move function	,
Key page 1	Direction of shutter move is	Toggle(up:0/down:1)	
Key page block 1	Curtain interface: Move key	<ul> <li>Move up = 0:Move down = 1</li> <li>Move up = 1:Move down = 0</li> </ul>	
Key 1_1 dimmer page	Curtain interface: Adjuste key	0	
Key 1_2 shutter page	Curtain interface: Height key	NO VES	
Key 1_3 thermostat page	Curtain interface: Slat key	NO VES	
Key 1_4 music page	Display shutter position	🔵 Disable 🔘 Enable	
Key 1_5 scene page	Icon seeting	Shutter	
Key 1_6 switch value page	Title display	O Default O User defined	

### Parameter "Short press is"

This parameter sets the function realized by short press-the corresponding curtain module on the page.

Options: Move function

Adjuste function

Enter curtain interface

Select "Move function" means short press to realize the curtain moving function, activate the parameter "Direction of shutter move is";

Selecting "Adjuste function" means short press to realize the curtain angle adjustment function, and activate the parameter "Adjust lamella value setting";

Select "Enter curtain interface" to short press to enter the curtain adjustment interface.

# Parameter "Direction of shutter move is"

Options: Toggle(up:0/down:1) Up(teleg.value is 0) Down{teleg.value is 1)

Select "Toggle(up:0/down:1)", short press the module, and the communication object "Move shutter K\_x\_z" will send data 01 to move the curtain down, and send data 00 to move the curtain up;

Select "Up(teleg.value is 0)", short press the module, the communication object "Move shutter  $K_x_z$ " will send data 00 to move the curtain upwards;

Select "Down(teleg.value is 1)", short press the module, the communication object "Move shutter  $K_x$ " sends data 01 to move the curtain down.

Note: Under the curtain module, when the curtain moves up to the top, the curtain icon is displayed in white, and the curtain position is not at the top, and the curtain icon is displayed in yellow.

# Parameter "Adjust lamella value setting"

Options: 0

toggle(0/1)

1

Select "0", short press the module, and the communication object "Adjust lamella of shutter K x z" will send data 00.

Select "1", short press the module, and the communication object "Adjust lamella of shutter K x z" will send data 01.

Select "toggle(0/1)", short press the module, the communication object "Adjust lamella of shutter  $K_x_2$ " sends data 01, 00, 01, 00... in sequence.

Note: The adjust function does not affect the curtain icon.

# Parameter "Long press is"

This parameter sets whether to activate the long press function.

**Options:** Disable

Enable

Select "Enable" to activate the long press function, and activate the following 2 parameters:

# Parameter "time of long press(1...10s)"

This parameter sets the long press time, that is, long press? The second-the corresponding curtain module on the page-is determined to be a long press.

Range: 1...10, unit: second

# Parameter "Long press is"

This parameter is used to set the function realized by long press-the corresponding curtain module

on the page.

Options: Move function

Adjuste function

Enter curtain interface

The long-press function options are similar to the short-press function, please refer to the introduction of short-press function.

### Parameter "curtain interface: move key"

This parameter defines the function of the " $\land$ " or " $\lor$ " icon under the curtain interface, and the communication object is "Move shutter".

Options: Mve up=0; Move down=1

Move up=1;Move down=0

Select "Mve up=0; Move down=1", click the " $\land$ " icon to indicate that the curtain is moved to the top (0%), and the " $\lor$ " icon to indicate that the curtain is moved to the bottom (100%); Select "Move up=1;Move down=0", click the " $\land$ " icon to indicate that the curtain is moved to the bottom (100%), and the " $\lor$ " icon to indicate that the curtain is moved to the top (0%).

### Parameter "curtain interface: adjust key"

This parameter sets the output message of the pause button in the curtain interface, and the communication object is "Adjust lamella of shutter".

Options: 0

1 Toggle(0/1)

### Parameter "curtain interface: Height key"

This parameter sets whether the Height scroll bar appears under the curtain interface, which is used to adjust the height of the curtain.

Options: NO

YES

#### Parameter "curtain interface: Slat key"

This parameter sets whether the Slat scroll bar appears under the curtain interface, which is used to adjust the curtain Slat.

Options: NO

YES

# Parameter "Display shutter position"

This parameter sets whether the corresponding curtain module on the page displays the current curtain height/angle value.

**Options:** Disable

Enable

### Parameter "Icon seeting"

The curtain icon of the corresponding curtain module in the parameter setting page.

Optional: Shutter

Drape Electric curtain Gauze shade User defined

When selecting a fixed icon, the title can choose to use the default title or customize it, which is set by the parameter "Icon display";

Select "User defined", and the title is also forced to customize. For the user to modify the user-defined icon and title, see the description of the parameter "icon setting" in "3.5.1 parameter setting interface key x\_z dimmer page".

# 3.5.3 Parameter "key x\_z Thermostat page"

General page	Channel Setting	1	
Key page 1	Short press is	<ul> <li>Switch ON/OFF</li> <li>Enter thermostat interface</li> </ul>	
K <mark>ey page block 1</mark>	Long press is	Disable Enable	
Key 1_1 dimmer page	Time of long press(110s)	1	
Key 1_2 shutter page	Long press is	Switch ON/OFF	
Key 1_3 thermostat page	Long prosition	<ul> <li>Enter thermostat interface</li> </ul>	
Key 1_4 music page	Icon setting	Default User defined	
Key 1_5 scene page	Title display	O Default 🔵 User defined	
Key 1_6 switch value page			

# Parameter "Channel Setting"

The corresponding air conditioner module on this parameter setting page adjusts the number of air conditioners, which is related to how many air conditioner channels are turned on in the parameter "The number of channel setting" in the parameter setting interface "3.2.3 Parameter setting interface Thermostat".

#### Maximum range: 1…10

#### Parameter "Short press is"

This parameter sets the short press function.

Options: Switch ON/OFF

Enter Thermostat interface

Selecting "Switch ON/OFF" means short press-the corresponding air conditioning module on the page-to modify the on/off state of the air conditioner;

Selecting "Enter Thermostat interface" means to short press-the corresponding air conditioning module on the page-to enter the air conditioning adjustment interface.

### Parameter "Long press is"

This parameter sets whether to activate the long press function.

**Options:** Disable

Enable

Select "Enable" to activate the long press function, and activate the following 2 parameters:

# Parameter "time of long press(1...10s)"

This parameter sets the long press time, that is, long press? Seconds-the corresponding air conditioning module on the page-is determined to be a long press. Range: 1...10, unit: second

### Parameter "Long press is"

This parameter sets the long press function.

Options: Switch ON/OFF

Enter Thermostat interface

The long-press function options are similar to the short-press function, please refer to the introduction of short-press function.

#### Parameter "Icon setting"

The air conditioner icon of the corresponding air conditioner module on the parameter setting page.

**Options: Default** 

User defined

#### Parameter "title display"



When the icon is a fixed icon, activate this parameter to set whether the title is customizable.

**Options: Default** 

User defined

#### 3.5.4 Parameter "key x\_z music page"

General page	Channel Setting	1	3
Key page 1	Short press is	O Play/Suspend C Enter music interface	
- Key page block 1	Long press is	Disable Enable	
Key 1_1 dimmer page	Time of long press(110s)	1	
Key 1_2 shutter page	Long press is	Play/Suspend Enter music interface	
Key 1_3 thermostat page	Icon setting	Default User defined	
Key 1_4 music page	Title display	O Default User defined	
Key 1_5 scene page			
Key 1_6 switch value page			

### Parameter "Channel Setting"

Which channel's music function is adjusted by the corresponding music module in this parameter setting page is related to how many music channels are enabled in the parameter "—the number of music channel setting" in the parameter setting interface "3.2.4 parameter setting interface Music". Maximum range: 1....6

## Parameter "Short press is"

This parameter sets the short press function.

Options: Play/suspend

Enter music interface

Choosing "play/suspend" means short press-the corresponding music module in the page-play/pause music;

Selecting "Enter music interface" means short press-the corresponding music module on the page-to enter the music control interface.

# Parameter "Long press is"

This parameter sets whether to activate the long press function.

Options: Disable

#### Enable

Select "Enable" to activate the long press function, and activate the following 2 parameters:

### Parameter "time of long press(1...10s)"

This parameter sets the long press time, that is, long press? The second-the corresponding music block module on the page-is determined to be a long press. Range: 1...10, unit: second

#### Parameter "Long press is"

This parameter sets the long press function.

Options: Play/suspend

Enter music interface

The long-press function options are similar to the short-press function, please refer to the introduction of short-press function.

#### Parameter "Icon setting"

The icon of the corresponding music module in the parameter setting page.

**Options: Default** 

User defined

# Parameter "title display"

When the icon is the default icon, activate this parameter to set whether the title is customizable.

**Options: Default** 

User defined

3.5.5 Parameter "key x\_z scene page"

General page	Call scene is set	Toggle(scene 1/scene 2)	
Key page 1	Call scene A number is (164)	1	3
	Call scene B number is (164)	2	;
<ul> <li>Key page block 1</li> </ul>	Function of save scene with long press	Oisable O Enable	
Key 1_1 dimmer page	Time of long press(110s)	1	
Key 1_2 shutter page	Save scene number is (164)	3	
Key 1_3 thermostat page	Feedback setting	Call scene 1 = OFF:call scene 2 = ON	
Key 1_4 music page	lass antice		
Key 1_5 scene page	icon setting	Common scene	
Key 1_6 switch value page	Title display	O Default User defined	

# Parameter "Call scene is set"

This parameter is set by short press-the corresponding scene module on the page-the recalled scene.

Options: toggle(scene 1/scene 2)

scene 1 scene 2

Select "toggle(scene 1/scene 2)", short press the module, you can call scene 1 and scene 2; Select "scene 1", short press the module to call scene 1; Select "scene 2", short press the module to call scene 2;

# Parameter "Call scene A/B number is (1...64)"

Set the scene value of Scene 1/Scene 2.

Range: 1...64

# Parameter "Function of save scene with long press"

This parameter sets whether to activate the function of long press to save the scene.

**Options:** Disable

Enable

Selecting "Enable" means to activate the function of long press to save the scene, and activate the following 2 parameters:

# Parameter "time of long press(1...10s)"

This parameter sets the long press time, that is, long press? The second scene module is determined to be a long press.

Range: 1…10, unit: second

### Parameter "Save scene number is (1...64)"

This parameter sets the saved scene number. Range: 1...64

#### Parameter "Feedback setting"

This parameter is used to set the display of the icon in a short press.

Options: Call scene 1=OFF; call scene 2=ON

Call scene 1=ON; call scene 2=OFF

Call scene 1=ON; else=OFF

Call scene 2=ON; else=OFF

Select "call scene 1=OFF; call scene 2=ON", short press the module, and the communication object "Call scene(1...64),  $K_x_z$ " will send out the scene number corresponding to "scene 1", the icon will be displayed in white, and it will be sent out The icon of the scene number corresponding to "scene 2" is displayed in yellow.

Select "Call scene 1=ON; call scene 2=OFF", short press the module, and the communication object "Call scene(1...64),  $K_x_z$ " will send out the scene number corresponding to "scene 1", the icon will be displayed in yellow, and it will be sent out The icon of the scene number corresponding to "scene 2" is displayed in white.

Select "Call scene 1=ON; else=OFF", short press the module, the communication object "Call scene(1...64),  $K_x_z$ " sends out the scene number corresponding to "scene 1", the icon will be displayed in yellow, otherwise the icon will be displayed Is white.

Select "Call scene 1=ON; else=OFF", short press the module, the communication object "Call scene(1...64),  $K_x_z$ " sends out the scene number corresponding to "scene 2", the icon will be displayed in yellow, otherwise the icon will be displayed Is white.

#### Parameter "Icon setting"

Set the scene icon.

Options: Common scene

TV scene Come home scene Dining scene Romance scene Leave home scene Sleep scene Music scene Reading scene Main switch on Main switch off User defined

Parameter "title display"



When the icon selects a fixed icon, this parameter is activated to set whether the title is customizable.

**Options: Default** 

User defined

### 3.5.6 Parameter "key x\_z switch value page"

General page	Setting of telegram No1 :	Value type is 1 bit	
Key page 1	If 1st press.telegram is	Inactive O Active	
Key page block 1	Value of telegram is	Toggle	
Key 1 1 dimmer page	If 2nd press.telegram is	Inactive O Active	
Key 1_2 shutter page	Value of telegram is	Toggle	
Key 1_3 thermostat page	Setting of telegram No2 :	Inactive	
Key 1_4 music page	Setting of telegram No3 :	Inactive	
Key 1_5 scene page	Setting of telegram No4 :	Inactive	
Key 1_6 switch value page	Setting of telegram No5 :	Inactive	
	Remote state synchronization set:	None	
	Icon setting	Common swtich	
	Title display	O Default User defined	

### Parameter "Setting of telegram NoX"

Parameter "If 1<sup>st</sup>/2<sup>nd</sup> press telegram is"

#### Parameter "-Value of telegram is"

These parameters are used in combination to set the data type and message value of the message sent from the panel to the bus when the module is short-pressed. The communication object is "Output 1bit/4 bit/1byte value NoX K\_x\_z".

There are 3 options for the data type: 1bit, 4 bit, 1byte;

Message value range: 0/1, 0...15, 0...255

# Parameter "Remote state synchronization set"

This parameter is used to set the remote status synchronization.

Options: none

telegram 1 telegram 2 telegram 3

telegram 4

telegram 5

Select "none", do not set remote status synchronization;

Select "telegram 1" and set the remote status synchronization to telegram 1;

Select "telegram 2" and set the remote status synchronization to telegram 2;

Select "telegram 3" and set the remote status synchronization to telegram 3;

Select "telegram 4" and set the remote status synchronization to telegram 4;

Select "telegram 5" and set the remote status synchronization to telegram 5.

Note: The remote status synchronization is telegrm X means that the telegram X object "Output 1bit/4 bit/1byte value NoX  $K_x_z$ " is used to modify the message status and synchronize to make the next message sent out opposite to this message.

For example: the "first press value" and "second press value" of these five messages are set to ON and OFF respectively. The value issued by the second press of the button is the "second press value", the value issued by the third press of the button is the "first press value", and so on. (If the synchronization status is telegram1, when the key is pressed for the first time, the values by the five message members are all ON. Use the object "Output 1bit/4 bit/1byte value NoX  $K_x z$ " corresponding to telegram1 to write the message OFF, Then OFF is synchronized as the value issued for the second time by pressing the button, then the values are all ON when the button is pressed next time [ie "the first pressed value"])

#### Parameter "Icon setting"

Set the open and close icon. Optional: Common switch

> Common lamp Common curtain Switch socket Floor heating Thermostat Dining room Kitchen Living room Bedroom Balcony Locker room Shower room

### Parameter "title display"

When the icon selects a fixed icon, this parameter is activated to set whether the title is customizable.

Options: Default

User defined

### 3.5.7 Parameter "key x\_z display page"

The function of this parameter setting interface is to select any value display among time, alarm, label, temperature, humidity, VOC, PM2.5, PM10, CO, and CO2.

```
-.-.- T/N TC26L/LCD display 2.6'/V3.0/3017/20210621 > Key page 2 > Key page block 2 > Key 2_1 display page
```

+ General page	Display setting	Time	
— Key page 1	Display the date	NO O YES	
+ Key page block 1			
— Key page 2			
<ul> <li>Key page block 2</li> </ul>			
Key 2_1 display page			
组对象 频道 参数			

#### Parameter "display setting"

This parameter sets the object displayed by the module.

**Options:** Time

Alarm Character Data value Temperature Humidity VOC PM25 PM10 CO CO2

Selecting "Time" means to turn on the time display function. As for whether to display the date, it is set by the parameter "display the data", and the time and date are written by the communication objects "Time" and "Data";

Select "Alarm" to turn on the warning display, and the communication object "Alarm" can modify the alarm status;

Select "Character" to turn on the label display. The content of the label is written by the communication object "Character", which can display approximately 13 numbers and letters;

Select "Data value" to turn on the value + unit display, the unit is set by the parameter "Display unit", the length is allowed to be 8 bytes, the value type is set by the parameter "Object type", 1bit/1byte/2byte is optional, and the 2byte data type is Unsigned integer /Signed integer/Floating point is optional;

Select "Temperature/Humidity" to turn on the temperature/humidity display, you can select the detection source of ambient temperature/humidity, which is set by the parameter "Temperature/Humidity source"; if the detection source is external, activate the parameter "alarm function is" to turn on the temperature and humidity Threshold alarm;

When "VOC/PM25/PM10/CO/CO2" is selected, the parameter "alarm function is" is activated, as shown in the figure below.

Note: Selecting "VOC" is similar to selecting "PM25/PM10/CO/CO2". The parameters and communication objects are similar. Take VOC as an example to expand the explanation; VOC/PM25/PM10/CO/CO2 gas values are all external inputs, and there is no local sensor Detection.

Display setting	VOC
Icon setting	Default User defined
Title display	O Default O User defined
Alarm function is	O Inactive Active
	Display setting Icon setting Title display Alarm function is

#### Parameter "alarm function is"

This parameter sets whether to activate the gas alarm function.

Options: inactive

active

Select "active" to activate the gas alarm function, and 6 related parameters appear, as shown in the figure below:

General page	Display setting	VOC	
Key page 1	Icon setting	O Default O User defined	
Key page 2	Title display	O Default O User defined	
	Alarm function is	Inactive O Active	
Key page block 2	Threshold 1 value is(060000)	50	
Key 2_1 display page	Threshold 2 value is(060000)	100	
	Threshold behaviour	O With hysteresis O Without hysteresis	
	value <low: is<="" td="" telegram=""><td>1 bit value type</td><td></td></low:>	1 bit value type	
	Value set is	Toggle	
	Low <value<upper: is<="" td="" telegram=""><td>4 bit value type</td><td></td></value<upper:>	4 bit value type	
	Value set is(015)	0	
	upper <value: is<="" td="" telegram=""><td>8 bit value type</td><td></td></value:>	8 bit value type	
	Value set is(0255)	0	

# Parameter "threshold 1/2 value is(0...60000)"

These 2 parameters are used to set the minimum/maximum alarm threshold of the gas value, threshold 1 <threshold 2.

Range: 0...60000

### Parameter "-threshold behaviour"

Optional: Without hysteresis

With hysteresis

Select "without hysteresis" to conform to the behavior of the channel setting without hysteresis, and the parameters "value<low, telegram is", "low<value<upper, telegram is", "upper<value, telegram is" will appear;

Select "With hysteresis", the behavior mode of the channel setting in case of hysteresis, the parameters "value<low, telegram is" and "upper<value, telegram is" appear.

# Parameter "value<low, telegram is"

When the gas value is lower than the minimum alarm threshold, the communication object "falling, 1bit/4bit/8bit,  $K_x_z$ " sends out an alarm message, and the message value is set by the parameter "--Value set is".

### Parameter "low<value<upper, telegram is"

This parameter is activated when the parameter "— threshold behaviour" selects "without hysteresis". When the gas value is between the lowest alarm threshold and the highest alarm threshold, the communication object "middle, 1bit/4bit/8bit,  $K_x_z$ " sends out an alarm message, The message value is set by the parameter "--Value set is".

#### Parameter "upper<value, telegram is"

When the gas value is higher than the highest alarm threshold, the communication object "beyond,


1bit/4bit/8bit, K\_x\_z" sends out an alarm message, and the message value is set by the parameter "--Value set is".

Parameter "Icon setting" This parameter is used to set the icon. Options: Default User defined

### Parameter "title display"

When the icon is the default icon, activate this parameter to set whether the title is customizable.

**Options: Default** 

User defined

#### 3.5.8 Parameter "key x\_z jump page"

The function of the parameter setting interface is to set the jump page.

•

### Parameter "Jumps to the specified page"

This parameter sets the page to jump to when clicking the jump module.

The number of pages that can be set is related to the parameter "set the number of key pages" in the parameter setting interface "3.2. Parameter setting interface General page", the maximum range is 1...10.

#### Parameter "Icon setting"

This parameter sets the icon displayed by the jump module.

Optional: Dining room

Locker room Living room Balcony

Shower room Bedroom User defined

### Parameter "title display"

When the icon is a fixed icon, activate this parameter to set whether the title is customizable.

Options: Default

User defined

### 3.5.9 Parameter "key x\_z floor heating page"

The function of the parameter setting interface is to set the floor heating page.

```
-.-- T/N TC26L/LCD display 2.6'/V3.0/3017/20210621 > Key page 2 > Key page block 2 > Key 2_3 floor heating page
```

General page	Channel Setting	1	* *
Key page 1	Short press is	<ul> <li>Switch ON/OFF</li> <li>Enter thermostat interface</li> </ul>	
Key page 2	Long press is	🔵 Disable 🔘 Enable	
<ul> <li>Key page block 2</li> </ul>	Time of long press(110s)	1	* *
Key 2_1 display page	Long press is	<ul> <li>Switch ON/OFF</li> <li>Enter thermostat interface</li> </ul>	
Key 2_2 jump page	Icon setting	O Default O User defined	
Key 2_5 hoor heating pa.	Title display	O Default User defined	

The parameters on this page are the same as the air conditioner display page, please refer to the description of "3.5.3 Parameter Setting Interface key  $x_z$  Thermostat page".

### 3.5.10 Parameter "key x\_z fresh air page"

The function of the parameter setting interface is to set the fresh air page.



General page	Channel Setting	1	18
Key page 1	Short press is	<ul> <li>Switch ON/OFF</li> <li>Enter thermostat interface</li> </ul>	
Key <mark>p</mark> age 2	Long press is	O Disable O Enable	
<ul> <li>Key page block 2</li> </ul>	Time of long press(110s)	1	ŝ
Key 2_1 display page	Long press is	<ul> <li>Switch ON/OFF</li> <li>Enter thermostat interface</li> </ul>	
Key 2_2 jump page	Icon setting	O Default User defined	
Key 2_3 floor heating page Key 2_4 fresh air page	Title display	O Default O User defined	

The parameters on this page are the same as the air conditioner display page, please refer to the description of "3.5.3 Parameter Setting Interface key  $x_z$  Thermostat page".

### 4. Communication object

Note: "C" in the attribute column of the table below represents the communication function enable of the communication object, "W" represents that the communication object can rewrite the value of other devices, and "R" represents the value of the communication object can be read by other devices. "T" represents that the communication object has a transmission function, and "U" represents that the value of the communication object can be rewritten through the response message of the bus.

#### 4.1 "General" communication object

There are 4 communication objects under "General", as shown in Figure 4.1-1, and the specific functions are shown in Table 1-1.

10 million										
<b>■</b> ‡ 1	General	Lock device	1 bit	С	R	W	2	-	1-bit, enable	低
∎‡ 3	General	LCD display ON/OFF	1 bit	С	-	W	-	÷	1-bit, switch	低
∎‡ 4	General	Brightness of LCD	1 byte	С	R	W	2	ੁ	8-bit unsigned value, percentage (0100%)	低
■26	General	Valid action of key	1 bit	С	-	W	Т	×	1-bit, enable	低
-+1-	E LE R			-						100

Figure 4.1-1 Genera	l communication	object
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No.	Object function	Name	Type of data	Attributes				
1	Lock device	General	1bit	C,R,W				
This communication object is used to lock the device. The communication object is sent 01 to lock								

the device through the bus, and the touch panel cannot be operated. Sending 00 will unlock the device.

3	OLED display ON/OFF	General	1bit	C,W					
This co	This communication object is used to switch the OLED screen, receive message 0 to turn off the								
OLED screen, and receive message 1 to turn on the OLED screen.									
4	Brightness of OLEDGeneral1byteC,R,W								
This communication object is used to modify the brightness value of the OLED screen.									
6	Valid action of key	General	1bit	C,W,T					
This co	mmunication object is a valid ke	ey. When the key is a	ctivated for the firs	t time, 01 is issued					
to indic	cate that the key is pressed, other	wise no data will be	sent, and the valid	key is also related					
to the v	value of the communication obje	ect when the key is a	ctivated for the first	t time: Send 00 to					
the con	nmunication object, if yes When	the button is pressed	, the communication	n object sends data					
01 to in	ndicate a button is pressed; if the	communication obje	ect sends 01, if a bu	tton is pressed, the					
commu	nication object "Valid action of l	key" does not send da	ata.						
12	Current temperature	General	2byte	C,R,T (,W)					
When t	he temperature value is collected	d by the internal sen	sor, use this comm	unication object to					
send th	e current temperature value.								
18	Current humidity	General	2byte	C,R,T (,W)					
When t	he humidity value is collected by	the internal sensor,	use this communica	tion object to send					
the curr	the current humidity value.								

Table 1-1 General communication object

### 4.2 "Laser detection" communication object

There are 5 communication objects under "Laser detection", as shown in Figure 4.2-1, and the specific functions are shown in Table 2-1.

<b>■‡</b>  7	Laser detection	Trigger No1	1 bit	C	÷	W	-	-	1-bit, trigger	低
■28	Laser detection	Status No1	1 bit	С	R	-25	Т	-25	1-bit, switch	低
∎‡ 9	Laser detection	Trigger No2	1 bit	С	ie.	W	-	-	1-bit, trigger	低
■之 10	Laser detection	Status No2	1 bit	C	R	-25	Т	12	1-bit, switch	低

Figure 4.2-1	Laser detection	communication	object
--------------	-----------------	---------------	--------

No.	Object function	Name	Type of data	Attributes					
7	Trigger No.1	Laser detection	1bit	C,W					
This co	This communication object is used to activate or deactivate the laser detection function. As to								
whether	the received message 1 is active	ated or deactivated, i	t is set according to	the parameter "					
Way of	Way of trigger by bus".								
8	Status No.1	C,R,T							
The cor	nmunication object is activated	when the parameter	"—if state changed,	, teleg No.1 is"					
is se	elected as "Active". When the	laser detects a pers	on (detection dista	nce is not 0), the					
commu	nication object "Status No.1" set	nds message 1 When	the laser detection	distance is 0, wait					
for the	time set by the parameter "-d	elay time for shut of	ff backlight" to fini	sh, then adjust the					
backlig	ht (the brightness of the backlight	ht adjustment is set a	according to the par	ameter "-percent					

value of OLED is"), and at the same time, the communication The object "Status No.1" sends							
message 0 to the bus.							
9	Trigger No.2Laser detection1bitC,W						
Refer to	o the communication object "Trig	gger No.1"					
10	Status No.2	Laser detection	1bit	C,R,T			
Refer to the communication object "Status No.1"							

Table 2-1 Laser detection communication object

### 4.3 "VRV" communication object

Each VRV channel has the same communication object. Taking the communication object of VRV channel 1 as an example, there are 14 communication objects in total, as shown in Figure 4.3-1. The specific functions are shown in Table 3-1.

■2 387	VRV	Switch status feedback.CH1	1 bit	С	R	W	Т	U	1-bit, switch	低
■2 388	VRV	Temperature feedback.CH1	2 bytes	С	R	W	Т	U	2-byte float value, temperature (°C)	低
■2 389	VRV	Speed feedback.CH1	1 byte	С	R	W	Т	U	8-bit unsigned value, fan stage (0255)	低
■2 390	VRV	Mode feedback.CH1	1 byte	C	R	W	Т	U	1-byte, HVAC mode	低
■2 391	VRV	Switch ON/OFF.CH1	1 bit	С	R	-	Т	-	1-bit, switch	低
■≵ 392	VRV	Set temperature.CH1	2 bytes	С	R	-	Т	5	2-byte float value, temperature (°C)	低
■2 393	VRV	Speed.CH1	1 byte	С	R	-0	Т	-	8-bit unsigned value, fan stage (0255)	低
■2 394	VRV	Mode.CH1	1 byte	C	R	-	Т	5	1-byte, HVAC mode	低
■2 395	VRV	Dehumidify active.CH1	1 bit	С	R	W	14	-	1-bit, enable	低
■2 396	VRV	Cooling active.CH1	1 bit	С	R	W	-	5	1-bit, enable	低
■2 397	VRV	Ventilation active.CH1	1 bit	С	R	W	-	-	1-bit, enable	低
■2 398	VRV	Heating active.CH1	1 bit	C	R	W	-	5	1-bit, enable	低
■2 407	VRV	Min set temperature.CH1	2 bytes	С	R	W	-	-	2-byte float value, temperature (°C)	低
■2 408	VRV	Max set temperature.CH1	2 bytes	С	R	W	-	5	2-byte float value, temperature (°C)	低
21										1000

Figure 4.3-1	VRV	communication	obie	ct

No.	Function	Communication	Type of	Attributes			
		object name	data				
387	Switch status feedback	VRV	1bit	C,R,W,T,U			
Synchronizing the switch status of the air conditioner panel through this feedback object is related							
to the selection o	f the parameter "Object value 'Sw	witch status feedba	ck' ":				
Select "0=OFF;	1=ON", when the message receive	d by the communi	cation object	"Switch status			
feedback" is 0,	the air conditioner state is off, a	and when the mes	sage received	d is 1, the air			
conditioner state	is on;						
Select "0=ON; 1	=OFF", the opposite is true.						
388	Temperature feedback	VRV	2byte	C,R,W,T,U			
This feedback ob	ject is used to synchronize the setti	ng temperature of	the air conditi	oner panel.			
389	Speed feedback	VRV	1byte	C,R,W,T,U			
This feedback ob	ject is used to synchronize the wind	d speed of the air c	onditioning pa	anel.			
390	Mode feedback	VRV	1byte	C,R,W,T,U			
The operation me	ode of the air conditioning panel is	synchronized throu	igh this feedb	ack object.			
391	Switch ON/OFF	VRV	1bit	C,R,T			
This communica	tion object is used to send the cor	ntrol value of the a	air conditione	r switch to the			
bus.							

According to the	ne setting of the parameter "Obj	ect value'Switch	ON/OFF'", s	elect "0=OFF;				
1=ON". When the air conditioner is turned on by clicking on the display, the communication								
object "Switch ON/OFF" sends out 1, and the communication object when the air conditioner is								
turned off" Switch ON/OFF" sends out 0; select "0=ON; 1=OFF", which is the opposite of the								
previous one.								
392 Set temperature VRV 2byte C,R,T								
This communica	tion object is used to send the air co	onditioner setting to	emperature to	the bus.				
393	Speed	VRV	1 byte	C,R,T				
这个通讯对象是	出用于往总线发出空调风速的控制	值。						
394	Mode	VRV	1byte	C,R,T				
This communica	tion object is used to send the con	trol value of the a	ir conditionir	ng mode to the				
bus.								
395	Dehumidify active	VRV	1bit	C,R,W				
This communica	ation object is used to disable/ac	tivate the dehumi	idification me	ode of the air				
conditioner. The	communication object receives the	e message value 1	to indicate th	e activation of				
the dehumidifica	tion mode, and receiving 0 indicate	s the dehumidifica	tion mode is a	lisabled.				
396	Cooling active	VRV	1bit	C,R,W				
This communica	ation object is used to disable/act	ivate the cooling	mode. The d	communication				
object receives a	a message with a value of 1 indic	ating that the coo	ling mode is	activated, and				
receiving 0 indic	ates that the cooling mode is disable	ed.						
397	Ventilation active	VRV	1bit	C,R,W				
This communica	tion object is used to disable/activ	ate the ventilation	mode. The a	communication				
object receives a	a message with a value of 1 indicat	ing that the ventile	ation mode is	activated, and				
receiving 0 indic	ates that the ventilation mode is dis	abled.						
398	Heating active	VRV	1bit	C,R,W				
This communica	ation object is used to disable/act	ivate the heating	mode. The c	communication				
object receives a	a message with a value of 1 indic	ating that the hea	ting mode is	activated, and				
receiving 0 indic	receiving 0 indicates that the heating mode is disabled.							
407	ates that the neuting mode is disubly							
Modify the minimum temperature value of the set temperature of the VRV air conditioner through								
Modify the mini	Min set temperature mum temperature value of the set to	VRV emperature of the V	2byte VRV air cond	C,R,W itioner through				
Modify the mini this communicat	Min set temperature mum temperature value of the set to ion object.	VRV emperature of the	2byte VRV air cond	C,R,W itioner through				
Modify the mini this communicat 408	Min set temperature mum temperature value of the set to ion object. Max set temperature	VRV emperature of the V	2byte VRV air cond 2byte	C,R,W itioner through C,R,W				
Modify the mini this communicat 408 Modify the maxi	Min set temperature mum temperature value of the set to ion object. Max set temperature mum temperature value of the set to	VRV emperature of the VRV emperature of the	2byte VRV air cond 2byte VRV air cond	C,R,W itioner through C,R,W itioner through				

Table 3-1 VRV communication object

### 4.4 "Fan coil" communication object

Each fan coil channel has the same communication object. Taking the communication object of Fan coil channel 1 as an example, there are a total of 24 communication objects, as shown in Figure 4.4-1, and the specific functions are shown in Table 4-1.

■2 387	Fan coil	Speed 1.CH1	1 bit	С	R	-	Т	ж	1-bit, switch	低
<b>■‡</b>  388	Fan coil	Speed 2.CH1	1 bit	С	R	2	Т	2	1-bit, switch	低
■2 389	Fan coil	Speed 3.CH1	1 bit	С	R	÷	Т	æ	1-bit, switch	低
■≵ 390	Fan coil	Heating value.CH1	1 byte	С	R	2	Т	12	8-bit unsigned value, percentage (0100%)	低
■‡ 391	Fan coil	Cooling value.CH1	1 byte	С	R	÷	Т	÷	8-bit unsigned value, percentage (0100%)	低
■₽ 392	Fan coil	Speed 1 feedback/Fan coil.CH1	1 bit	С	R	W	12	2	1-bit, switch	低
■‡ 393	Fan coil	Speed 2 feedback/Fan coil.CH1	1 bit	С	R	W	-	-	1-bit, switch	低
■2 394	Fan coil	Speed 3 feedback/Fan coil.CH1	1 bit	С	R	W	-2	12	1-bit, switch	低
■‡ 395	Fan coil	Speed auto.CH1	1 bit	С	R	-	Т	-	1-bit, switch	低
■₹ 396	Fan coil	External temperature.CH1	2 bytes	С	R	W	1	2	2-byte float value, temperature (°C)	低
■2 397	Fan coil	Remote control switch.CH1	1 bit	С	-	W	-	÷	1-bit, switch	低
■2 398	Fan coil	Remote control mode.CH1	1 byte	С	- 25	W	- 21	12	1-byte, HVAC mode	低
■之 399	Fan coil	Remote control speed.CH1	1 byte	С	-	W	-	÷	8-bit unsigned value, fan stage (0255)	低
■≵ 400	Fan coil	Remote setting Temperature.CH1	2 bytes	С	-25	W	-25	12	2-byte float value, temperature (°C)	低
■‡ 401	Fan coil	Switch feedback/Panel.CH1	1 bit	С	R	÷	Т	)e	1-bit, switch	低
■2 402	Fan coil	Mode feedback/Panel.CH1	1 byte	С	R	ੁ	Т	2	1-byte, HVAC mode	低
■≵ 403	Fan coil	Speed feedback/Panel.CH1	1 byte	С	R	-	Т	-	8-bit unsigned value, fan stage (0255)	低
■≵ 404	Fan coil	Set temperature feedback/Panel.CH1	2 bytes	С	R	ੁ	Т	ੁ	2-byte float value, temperature (°C)	低
■‡ 405	Fan coil	Switch.CH1	1 bit	С	R	-	Т	÷	1-bit, switch	低
■2 406	Fan coil	Switch feedback/Fan coil.CH1	1 bit	С	R	W	-	12	1-bit, switch	低
■2 407	Fan coil	Heating lower theshold.CH1	2 bytes	С	R	W	-	÷	2-byte float value, temperature (°C)	低
■2 408	Fan coil	Heating upper theshold.CH1	2 bytes	С	R	W	-2	2	2-byte float value, temperature (°C)	低
■2 409	Fan coil	Cooling lower theshold.CH1	2 bytes	С	R	W	-	÷	2-byte float value, temperature (°C)	低
■2 410	Fan coil	Cooling upper theshold.CH1	2 bytes	С	R	W	13	2	2-byte float value, temperature (°C)	低
∎≵ 414	Fan coil	Dehumidify active.CH1	1 bit	С	R	W	-	÷	1-bit, enable	低
∎‡ 415	Fan coil	Cooling active.CH1	1 bit	С	R	W	-	-	1-bit, enable	低
■2 416	Fan coil	Ventilation active.CH1	1 bit	C	R	W	-	-	1-bit, enable	低
417	Fan coil	Heating active.CH1	1 bit	C	R	W		2	1-bit, enable	低

#### Figure 4.4-1 Fan coil communication object

No.	Function	Communication	Type of	Attributes
		object name	data	
387/388/389	Speed 1/2/3	Fan coil	1bit	C,R,T
387	Speed 1byte	Fan coil	1byte	C,R,T

This communication object is used to send the wind speed control value of the fan coil to the bus. The data type of the communication object is related to the selection of the parameter "Speed object set":

Optional: 1bit

1byte

Select "1bit", the object type of wind speed control value/feedback value is 1bit, and the communication objects are "Speed 1", "Speed 2", and "Speed 3" respectively. Select "1byte", the object type of wind speed control value/feedback value is 1byte, and the communication object is "Speed 1byte".

390/391	Heating/Refrigeration value	Fan coil	1bit/1byte	C,R,T
391	Control value	Fan coil	1bit/1byte	C,R,T

This communication object represents the heating/cooling control value, and the communication object is related to the selection of the parameter "Number of output channels":

Options: 2 channel (4 pipe) for heat/cool

1 channel (2 pipe) for heat/cool

Select "2 channel (4 pipe) for heat/cool" and set the number of output channels of the fan coil unit to 4 pipes, then the fan coil unit can have both cooling and heating, and the communication objects are "Heating value" and "Refrigeration" value";

Select "1 channel (2 pipe) for heat/cool", set the number of output channels of the fan coil to 2 pipes, then only one of the cooling and heating in the fan coil can exist, and the two communication objects "Control value" are activated, "Switch cooling/heating", when the mode is

# Inication object "Switch cooling/heating" will send 0 or 1, which is set by the

cooling, the communication object "Switch cooling/heating" will send 0 or 1, which is set by the									
parameter "Switch cooling/heating'object value"									
390	Switch cooling/heating	Fan coil	1bit	C,R,T					
It appears when the parameter "Number of output channels" is "1 channel (2 pipe) for heat/cool",									
it is used to indicate whether it is currently in cooling mode or cooling mode. As for the object to									
emit 0 for cooling or heating, the parameter "Switch cooling/heating'object value" setting									
392/393/394	\$92/393/394Speed 1/2/3 feedback/Fan coilFan coil1bitC,R,W								
392Speed feedback/Fan coilFan coil1ByteC,R,W									
This communica	ation object is used to feed back th	e wind speed of th	e fan coil. Th	ne data type of					
the communicati	on object is related to the selection	of the parameter "S	Speed of	oject set":					
Optional: 1bit									
1byte									
Select "1bit", the	he object type of wind speed co	ontrol value/feedba	ack value is	1bit, and the					
communication	objects are "Speed 1 feedback	k/Fan coil", "Speed	2 feedl	back/Fan coil",					
"Speed 3 fe	eedback/Fan coil";								
Select "1byte",	the object type of wind speed co	ontrol value/feedba	ick value is	lbyte, and the					
communication	object is "Speed feedback/Fan	coil".							
395	Speed auto	Fan coil	1bit	C,R,T					
This communica	tion object indicates whether the fa	an coil unit is in th	e automatic v	wind state. The					
communication	object is related to the selection of the	he parameter "Auto	o/manual spee	ed set":					
Options: "0"=ma	anual, "1"=auto	-	-						
"0"=auto "1"=m	Options: "0"=manual, "1"=auto								
"0"=auto, "1"=manual									
Select "0"=man	anual 1al, "1"=auto", then set 0 as manua	al wind speed, 1 as	automatic w	ind speed, and					
Select "0"=manu the communicati	anual al, "1"=auto", then set 0 as manua on object "Speed auto" sends	l wind speed, 1 as out 01 when it is at	automatic w	ind speed, and ind speed.					
Select "0"=manu the communicati Select "0"=auto,	anual ual, "1"=auto", then set 0 as manua ion object "Speed auto" sends "1"=manual", then set 0 as autom	I wind speed, 1 as out 01 when it is a atic wind speed, 1	automatic w t automatic wi as manual w	ind speed, and ind speed. ind speed, and					
Select "0"=manu the communicati Select "0"=auto, the communicati	anual ual, "1"=auto", then set 0 as manual ion object "Speed auto" sends "1"=manual", then set 0 as autom ion object "Speed auto" sends	I wind speed, 1 as out 01 when it is at atic wind speed, 1 out 00 when it is at	automatic w t automatic w as manual w t automatic wi	ind speed, and ind speed. ind speed, and ind speed.					
Select "0"=manu the communicati Select "0"=auto, the communicati 396	anual ual, "1"=auto", then set 0 as manual ion object "Speed auto" sends "1"=manual", then set 0 as autom ion object "Speed auto" sends External temperature	I wind speed, 1 as out 01 when it is at atic wind speed, 1 out 00 when it is at Fan coil	automatic w t automatic w as manual w t automatic w 2byte	ind speed, and ind speed. ind speed, and ind speed.					
Select "0"=manu the communicati Select "0"=auto, the communicati 396 This communica	anual ual, "1"=auto", then set 0 as manual ion object "Speed auto" sends "1"=manual", then set 0 as autom ion object "Speed auto" sends External temperature tion object is used to receive the ex	I wind speed, 1 as out 01 when it is at atic wind speed, 1 out 00 when it is at Fan coil ternal temperature	automatic w t automatic w as manual w t automatic w 2byte value.	ind speed, and ind speed. ind speed, and ind speed. C,W					
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Select "0"=manu the communicati Select "0"=auto, the communicati 396 This communica 397 This communica	anual ual, "1"=auto", then set 0 as manual ion object "Speed auto" sends "1"=manual", then set 0 as autom ion object "Speed auto" sends External temperature tion object is used to receive the ex Remote control switch auton object is used to remotely cor	al wind speed, 1 as out 01 when it is an atic wind speed, 1 out 00 when it is an Fan coil ternal temperature Fan coil ntrol the switch sta	automatic wit automatic wit as manual wit automatic wit 2byte value. 1bit tus of the fan	ind speed, and ind speed, and ind speed, and C,W C,R,W coil unit. The					
Select "0"=manu the communicati Select "0"=auto, the communicati 396 This communica 397 This communication	anual al, "1"=auto", then set 0 as manual ion object "Speed auto" sends "1"=manual", then set 0 as autom ion object "Speed auto" sends External temperature tion object is used to receive the ex Remote control switch auton object is used to remotely correspondent to the selection of the	al wind speed, 1 as out 01 when it is at atic wind speed, 1 out 00 when it is at Fan coil ternal temperature Fan coil ntrol the switch sta he parameter "Swit	automatic w t automatic w as manual w t automatic w 2byte value. 1bit tus of the fan cch set":	ind speed, and ind speed. ind speed. C,W C,R,W coil unit. The					
Select "0"=manu the communicati Select "0"=auto, the communicati 396 This communicati 397 This communication Contions: "0" = "	anual al, "1"=auto", then set 0 as manual ion object "Speed auto" sends "1"=manual", then set 0 as autom ion object "Speed auto" sends External temperature auto" sends External temperature tion object is used to receive the ex Remote control switch ation object is used to remotely cor object is related to the selection of the OFF": "1" = "ON"	al wind speed, 1 as out 01 when it is at atic wind speed, 1 out 00 when it is at Fan coil ternal temperature Fan coil ntrol the switch sta he parameter "Swit	automatic wit as manual wit as manual wit automatic wit 2byte value. 1bit tus of the fan ich set":	ind speed, and ind speed, and ind speed, and ind speed. C,W C,R,W coil unit. The					
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Select "0"=manu the communicati Select "0"=auto, the communicati 396 This communicati 397 This communication Options: "0" = "0" "0" = "0" Select "0" = "0" "Remote control Select "0" = "0" "Remote control Select "0" = "0"	anualual, "1"=auto", then set 0 as manualion object "Speedauto" sends"1"=manual", then set 0 as automion object "Speedauto" sendsExternal temperaturetion object is used to receive the exRemote control switchation object is used to remotely corobject is related to the selection of theOFF"; "1" = "ON"ON"; "1" = "OFF"OFF"; "1" = "ON", when the setswitch" sends out 01, when the setswitch" sends out 00;ON"; "1" = "OFF", when the setswitch" sends out 00, when the setswitch" sends out 00, when the setswitch" sends out 01.Remote control modeation object is used to remotelyobject is related to the setting of the	al wind speed, 1 as out 01 when it is an atic wind speed, 1 out 00 when it is an Fan coil ternal temperature Fan coil ntrol the switch sta he parameter "Swit reen is turned on, reen displays "OFF reen is turned on, reen displays "OFF Fan coil control the mode	automatic with automatic with automatic with as manual with automatic with a submatic with automatic with automatic with automatic with a set w	ind speed, and ind speed, and ind speed, and ind speed. C,W C,R,W coil unit. The nication object nication object nication object C,R,W coil unit. The C,R,W					

399	Remote control speed	Fan coil	1byte	C,R,W				
This communica	ation object is used to remotely	control the wind	speed of the	fan coil. The				
communication	object and the parameter "Object	t value"Remote co	ontrol speed':	Speed				
off/speed 1/speed	d 2/speed 3/speed auto(0255) The	setting of "set" is	related.					
400	Remote setting set temperature	Fan coil	2byte	C,R,W				
This communica	tion object is used to remotely cont	rol the temperature	of the fan co	il.				
401 Switch feedback/Panel Fan coil 1bit C,R,T								
This communica	tion object is used to send a messa	ige to the bus to re	port the on-o	ff status of the				
fan coil unit.		-						
402	Mode feedback/Panel	Fan coil	1byte	C,R,T				
This communica	tion object is used to send a messa	ge to the bus to re	port the curre	nt mode of the				
fan coil.								
403	Speed feedback/Panel	Fan coil	1byte	C,R,T				
This communica	tion object is used to send a messa	ige to the bus to re	eport the curre	ent wind speed				
of the fan coil.								
404	Set temperature feedback/Panel	Fan coil	2byte	C,R,T				
This communica	tion object is used to send the curre	nt set temperature	value of the fa	an coil.				
405	Switch	Fan coil	1bit	C,R,T				
When the fan co	oil is switched on and off, the switched	ch status of the fai	n coil is fed b	back to the bus				
through this obj	ect. When the fan coil is turned of	f, a message "0" is	s sent out, and	d when the fan				
coil is turned on,	a message "1" is sent out.							
406	Switch feedback/Panel	Fan coil	1bit	C,R,W				
Send a message	"1" to the communication object to	turn on the fan coi	l, and send a	message "0" to				
turn off the fan c	oil.							
407/409	Heating/ Cooling lower theshold	Fan coil	2byte	C,R,W				
Through this c	communication object, modify th	ne minimum tem	perature valu	ue of the set				
temperature of th	ne fan coil heating/cooling mode.							
408/410	Heating/ Cooling upper theshold	Fan coil	2byte	C,R,W				
Modify the max	timum temperature value of the se	et temperature of	the fan-coil h	neating/cooling				
mode through th	is communication object.							
414	Dehumidify active	Fan coil	1bit	C,R,W				
This communic	ation object is used to disable	e/activate the de	humidification	n mode. The				
communication	object receives a message with a v	value of 1 indicatin	ng that the de	humidification				
mode is activated	d, and receiving 0 indicates that the	dehumidification r	node is disabl	ed.				
415	Cooling active	Fan coil	1bit	C,R,W				
This communica	ation object is used to disable/act	ivate the cooling	mode. The c	communication				
object receives	a message with a value of 1 indic	ating that the coo	ling mode is	activated, and				
receiving 0 indic	ates that the cooling mode is disable	ed.						
416	Ventilation active	Fan coil	1bit	C,R,W				
This communica	tion object is used to disable/activ	rate the ventilation	mode. The c	communication				
object receives a	a message with a value of 1 indicat	ing that the ventile	ation mode is	activated, and				
receiving 0 indic	ates that the ventilation mode is dis	abled.						

417	Heating active	Fan coil	1bit	C,R,W			
This communication object is used to disable/activate the heating mode. The communication							
object receives a	object receives a message with a value of 1 indicating that the heating mode is activated, and						
receiving 0 indic	ates that the heating mode is disable	ed.					

Table 4-1 Fan coil communication object

### 4.5 "auto dehumidify" communication object

The automatic dehumidification function of each channel has the same communication object. Taking the communication object of channel 1 as an example, auto dehumidify has 3 communication objects, as shown in Figure 4.5-1. The specific functions are shown in Table 5-1.

■2 411	Auto dehumidify	Auto dehumidify status.CH1	1 bit	C	R	W	-	-	1-bit, start/stop	低
■2 412	Auto dehumidify	Start threshold of dehumidify.CH1	2 bytes	С	R	W	-	-	2-byte float value, humidity (%)	低
413	Auto dehumidify	Stop threshold of dehumidify.CH1	2 bytes	C	R	W	-	-	2-byte float value, humidity (%)	低

Figure 4.5-1 auto dehumidify communication object

No.	Function	Communication	Type of data	Attributes
		object name		
411	Auto dehumidify status	Auto dehumidify	1 bit	C,R,W
This c	communication object is used to set	t whether to enter the	e automatic dehu	midification
functio	on: send 00 to the communication object	et to enter automatic del	numidification, and	d send 01 to
exit au	tomatic dehumidification.			
412	start threshold of dehumidify	Auto dehumidify	2 byte	C,R,W
This co	ommunication object is used to set the	threshold for starting au	tomatic dehumidif	fication.
413	stop threshold of dehumidify	Auto dehumidify	2 byte	C,R,W
This co	ommunication object is used to set the	threshold for ending aut	omatic dehumidifi	cation

Table 5-1 auto dehumidify communication object

### 4.6 "Music" communication object

Each channel of Music has the same communication object. Taking the communication object of channel 1 as an example, there are 9 communication objects in total, as shown in Figure 4.6-1. The specific functions are shown in Table 6-1.

■2 715	Music function	Move previous/next.CH1	1 bit	С	-	-	Т	-	1-bit, up/down	低
■2 716	Music function	volume control.CH1	1 byte	С	R	2	Т	2	8-bit unsigned value, percentage (0100%)	低
■2 717	Music function	volume feedback.CH1	1 byte	С	R	W	÷	-	8-bit unsigned value, percentage (0100%)	低
■2 718	Music function	Play state control.CH1	1 bit	С	23	3 <u>1</u>	Т	82.0	1-bit, start/stop	低
■‡ 719	Music function	Play state feedback.CH1	1 bit	С	R	W	Т	U	1-bit, start/stop	低
■₽ 720	Music function	Mute control.CH1	1 bit	С	23	32	Т	32	1-bit, enable	低
■₽ 721	Music function	Mute feedback.CH1	1 bit	С	R	W	Т	U	1-bit, enable	低
■₽ 722	Music function	Music source.CH1	1 byte	С	2	32.	Т	32.	8-bit unsigned value, percentage (0100%)	低
₩₹ 723	Music function	Source feedback.CH1	1 byte	С	R	W	-	-	8-bit unsigned value, percentage (0100%)	低

Figure 4.6-1 music communication object

No.	Function	Communication	Type of data	Attributes					
		object name							
715	Move previous/next.CH1	Music function	1bit	C,T					
This co	ommunication object is used to t	transmit the setting	value of the previou	us song/next song,					
switch	switch to the previous song and send out 1 or 0 by the parameter "Move previous and move next								
set"	-			-					
716	volume control.CH1	Music function	1byte	C,R,T					
This co	mmunication object is used to tra	ansmit the volume va	llue.						
717	volume feedback.CH1	Music function	1byte	C,R,W					
The vol	lume value can be modified throu	igh this communicat	ion object.						
718	Play state control.CH1	Music function	1bit	C,T					
This co	ommunication object is used to	transmit the music	playing state cont	rol value, and the					
output	value is related to the parameter '	'play control value se	et".						
719	Play state feedback.CH1	Music function	1bit	C,R,W,T,U					
The mu	isic playback status can be modi	fied through this cor	nmunication object,	and what value is					
sent to	set the music playback status to	pause is determined	by the parameter "p	lay feedback value					
set".									
720	Mute control.CH1	Music function	1bit	C,T					
This co	mmunication object is used to tr	cansmit the control v	alue of the music m	nute mode, and the					
output	value is related to the parameter '	'mute control value s	set".						
721	Mute feedback.CH1	Music function	1bit	C,R,W,T,U					
The mu	ite mode of the music is modified	ied through the com	munication object,	and what value is					
sent to	enter the mute mode is determine	ed by the parameter "	mute feedback valu	e set".					
722	Music source.CH1	Music function	1byte	C,T					
This c	ommunication object is used 1	to transmit music s	source. As for wh	at message value					
represents which source, it is set by the parameter "local/ Bluetooth/ network music value setting".									
723	Source feedback.CH1	Music function	1byte	C,R,W,T,U					
The mu	The music source can be modified through this communication object. As for what message value								
represents which music source, it is set by the parameter "local/ Bluetooth/ network music value									
setting'									

Table 6-1 music communication object

### 4.7 "Dimmer" communication object

The Dimmer function of each module has the same communication object. Take the dimming communication object of the first module on page 1 as an example. There are 7 communication objects in total, as shown in Figure 4.7-1. The specific functions are shown in Table 7. -1.

■25	Output K_1_1	Switch ON/OFF K_1_1	1 bit	С	14	-	Т	-	1-bit, switch	低
■26	Input K_1_1	Switch feedback K_1_1	1 bit	C	R	W	-	3	1-bit, switch	低
■27	Output K_1_1	Dimming value K_1_1	1 byte	С	R	- 1	Т	-	8-bit unsigned value, percentage (0100%)	低
∎≵ 28	Input K_1_1	Dimming feedback K_1_1	1 byte	С	R	W	-	5	8-bit unsigned value, percentage (0100%)	低



-+ -7	0 + + + 1 1	DCD D K 1 1	1 1	~	D	14/	Ŧ		8 bit	Int
+ 21	Output K_I_I	RGB_R K_I_I	i byte	C	R	VV	1	- 74	8-bit unsigned value, percentage (0100%)	155
■28	Output K_1_1	RGB_G K_1_1	1 byte	С	R	W	Т	-	8-bit unsigned value, percentage (0100%)	低
■‡ 29	Output K_1_1	RGB_B K_1_1	1 byte	С	R	W	T	-	8-bit unsigned value, percentage (0100%)	低
■2 27	Output K_1_1	RGB K_1_1	3 bytes	С	-	-	Т	-	3-byte colour RGB, RGB value 3x(0255)	低
<b>■‡</b>  28	Input K_1_1	RGB feedback K_1_1	3 bytes	С	R	W	•	-	3-byte colour RGB, RGB value 3x(0255)	低

### Figure 4.7-1 Dimmer communication object

	i	i		1				
No.	Function	Communication	Type of data	Attributes				
		object name						
25	Switch ON/OFF for	Output	1bit	C,T				
	short.K_1_1							
This communication object works when the dimming function is switched on, and the output								
value is de	etermined by the parameter "value of	of dimming on/off i	is".					
26	Switch feedback.K_1_1	Output	1byte	C,R,W				
This com	nunication object is used to receive	the feedback value	e of the dimmer sv	vitch.				
27	Dimming value.K_1_1	Output	1byte	C,T				
This com	munication object is enabled when	n the parameter "	Dimming type" s	elects "Common				
dimming"	, and it works when adjusting th	e dimming value,	and is used to	send the current				
dimming	value to the bus.							
28	Dimming feedback.K_1_1	Input	1byte	C,R,W				
This com	munication object is enabled whe	n the parameter "	Dimming type" s	elects "Common				
dimming"	, and the dimming value can be syn	chronized through	this communication	on object.				
27/28/29	RGB_R/G/B.K_1_1	Output	1byte	C,R,W,T				
These co	mmunication objects appear whe	en the parameter	"Dimming type	" selects "RGB				
dimming"	and the parameter "RGB object len	ngth RGB object le	ength" selects "1by	yte", and they are				
used for R	GB dimming.							
27	RGB K_1	Output	3byte	C,R,T				
This com	munication object appears when the	e parameter "Dimn	ning type" selects	"RGB dimming"				
and the p	arameter "RGB object length RGB	B object length" se	elects "3byte", it	is used for RGB				
dimming.								
28	RGB feedback K_1_1	Input	3byte	C,R,W				
This communication object appears when the parameter "Dimming type" selects "RGB dimming"								
and the parameter "RGB object length RGB object length" selects "3byte", this object can								
synchroni	ze the RGB dimming value.							

Table 7-1 dimmer communication object

### 4.8 "shutter" communication object

The shutter function of each module has the same communication object. Take the communication object of the curtain of the second module on the first page as an example. There are 3 communication objects, as shown in Figure 4.8-1. The specific functions are shown in Table 8-1.



1.0222										
■‡ 25	Output K_1_1	Move shutter K_1_1	1 bit	С	-	12	Т	2	1-bit, up/down	低
■26	Output K_1_1	Adjust lamella of shutter K_1_1	1 bit	С	-	-	Т	-	1-bit, step	低
■27	Output K_1_1	Height value K_1_1	1 byte	С	R	2	Т	2	8-bit unsigned value, percentage (0100%)	低
■2 28	Output K_1_1	Height feedback K_1_1	1 byte	С	R	W	-	-	8-bit unsigned value, percentage (0100%)	低
■29	Output K_1_1	Slat value K_1_1	1 byte	С	R	2	Т	2	8-bit unsigned value, percentage (0100%)	低
■2 30	Output K_1_1	Slat feedback K_1_1	1 byte	С	R	W	-	-	8-bit unsigned value, percentage (0100%)	低

Figure 4.8-1 shutter communication object

No.	Function	Communication	Type of data	Attributes	
		object name			
25	Move shutter.K_1_1	Output	1bit	C,T	
This co	ommunication object works when mo	oving the curtain, a	nd the output value	e is determined by	
the par	rameter "Direction of shutter move is"	".			
26	Adjust lamella of shutter.K_1_1	Output	1bit	C,T	
This c	communication object works when	adjusting the curt	ain angle, and the	e output value is	
determ	ined by the parameter "Adjust lamell	a value setting".			
27	Height value K_1_1	Output	1byte	C,R,T	
Use th	is object to control the height of the c	urtain.			
28	Height Feedback K_1_1	Output	1byte	C,R,W	
The cu	rtains highly reflect the object.				
29	Slat value K_1_1	Output	1byte	C,R,T	
Use this object to adjust the angle of the curtain.					
30	Slat Feedback K_1_1	Output	1byte	C,R,W	
Curtai	n angle feedback object.				

Table 8-1 shutter communication object

### 4.9 "scene" communication object

The scene function of each module has the same communication object. Take the communication object of the scene of the first module on the first page as an example. There are 3 communication objects, as shown in Figure 4.9-1. The specific functions are shown in Table 9-1.

∎₽ 25	Output K_1_1	Save scene 1 byte K_1_1	1 byte	С		-	Т	-	scene control, scene control	低
■26	Output K_1_1	Call scene(164) K_1_1	1 byte	C	7	W	Т	5	scene control, scene control	低
■‡ 30	Input K_1_1	Feedback of scene K_1_1	1 byte	С	R	W	-	-	scene number, scene number	低

Figure 4.9-1 scene communication object

No.	Function	Communication	Type of data	Attributes	
		object name			
25	Save scene 1 byte.K_1_1	Output	1byte	C,T	
This c	ommunication object is activated wh	hen the scene oper	ns the long-press a	nd save function,	
and the	e message value outputted by the long	g-press is set by the	e parameter. The da	ata type can be set	
to 1bit or 1Byte by the parameter "call scene is set".					
26	Call scene(164).K_1_1	Output	1byte	C,W,T	

This communication object works under the short-press function of the scene, and the scene							
number output by the short-press is set by parameters.							
30	Feedback of scene.K_1_1	Input	1byte	C,R,W			
This communication object is the feedback value of the scene function, and the written message							
value needs to subtract 1 from the scene number.							

Table 9-1 scene communication object

### 4.10 "switch value" communication object

The switch value function of each module has the same communication object. Take the open and close communication object of the 6th module on page 1 as an example. There are 5 communication objects in total, as shown in Figure 4.10-1. The specific functions are shown in the table. 10-1.

■2 55	Output.K_1_6	Output 1 bit value.No1.K_1_6	1 bit	С	-	W	Т	-	1-bit, boolean	低
■2 56	Output.K_1_6	Output 1 bit value.No2.K_1_6	1 bit	С		W	Т	-	1-bit, boolean	低
■2 57	Output.K_1_6	Output 1 bit value.No3.K_1_6	1 bit	С	-	W	Т	-	1-bit, boolean	低
■2 58	Output.K_1_6	Output 1 bit value.No4.K_1_6	1 bit	C		W	т	-	1-bit, boolean	低
■之 59	Output.K_1_6	Output 1 bit value.No5.K_1_6	1 bit	С	-	W	Т	-	1-bit, boolean	低

Figure 4.10-1 switch value communication object

No.	Function	Communication	Type of data	Attributes			
		object name					
55	Output 1 bit value.No1.K_1_6	Output	1bit/4bit/1byte	C,W,T			
This c	ommunication object is activated wh	nen the module sel	ects switch value.	Press the module,			
and the	e output message value is set by para	meters. The data ty	pe can be set to 1b	it or 4bit or 1Byte			
by the	parameter "If 1st/2nd press telegram	is".		_			
56	Output 1 bit value.No2.K_1_6	Output	1bit/4bit/1byte	C,W,T			
Refer	to the communication object "Output	1 bit value.No1.K	_1_6"				
57	Output 1 bit value.No3.K_1_6	Output	1bit/4bit/1byte	C,W,T			
Refer	to the communication object "Output	1 bit value.No1.K	_1_6"				
58	Output 1 bit value.No4.K_1_6	Output	1bit/4bit/1byte	C,W,T			
Refer to the communication object "Output 1 bit value.No1.K_1_6"							
59	Output 1 bit value.No5.K_1_6	Output	1bit/4bit/1byte	C,W,T			
Refer	to the communication object "Output	1 bit value.No1.K	1_6"				

Table 10-1 switch value communication object

### 4.11 "display" communication object

The Display module has 10 functions, namely: time, alarm, label, temperature, humidity, VOC, PM2.5, PM10, CO, CO2, each module can choose any function, and different modules have the

same function when choosing the same function. The communication object, take the communication object of the first module on page 2 as an example, as shown in Figure 4.11-1, and the specific functions are shown in Table 11-1.

63	Output.K_2_1	Falling. 1 bit.K_2_1	1 bit	С	R	( <b>7</b> )	Т		1-bit, boolean
64	Output.K_2_1	Middle. 1 bit.K_2_1	1 bit	С	R	W	Т	22	1-bit, boolean
65	Output.K_2_1	Beyond. 1 bit.K_2_1	1 bit	С	R	W	T		1-bit, boolean
66	Input.K_2_1	Gas value.K_2_1	2 bytes	С	R	W	0	127	2-byte unsigned value, pulses
66	Input.K_2_1	Temperature.K_2_1	2 bytes	С	R	W	-	•	2-byte unsigned value, pulses
66	Input.K_2_1	Humidity.K_2_1	2 bytes	С	R	W	Ø	-	2-byte unsigned value, pulses
63	Input.K_2_1	Time.K_2_1	3 bytes	С	R	W	Т	-	time, time of day
64	Input.K_2_1	Data.K_2_1	3 bytes	C	R	W	2	22	date, date
63	Input.K_2_1	Alarm.K_2_1	1 bit	С	R	W	T	( <del>7</del> 1)	1-bit, alarm
63	Input.K_2_1	Character.K_2_1	14 bytes	С	R	W	T	(73)	character string, Character String (ASC
63	Input K_2_1	Value K_2_1		1	bit	(	C F	R N	V T - 1-bit, boolean

### Figure 4.11-1 display communication object

No	Function	Communication	Type of data	Attributes					
110.		object name	Type of dutu	1 turio di Co					
63	Falling.1 bit.K 2 1	Output	1bit/4bit/1bvte	C.R.T					
This c	ommunication object appears when "	Temperature/Humi	idity/VOC/PM25/P	M10/CO/CO2" is					
selecte	calcated in the peremeter "display setting" and the alarm massage is activated. When the gas value								
is low	ver than the minimum alarm thread	hold the commun	vication object ser	nen me gas varue					
15 10w	The message value is get by the m	anomator " Valua	actic"	lus out an alarm					
messa	ge, The message value is set by the p			~ <b>D T</b>					
64	Middle.4 bit.K_2_1	Output	1bit/4bit/1byte	C,R,T					
In the	parameter "display setting" select	"Temperature/Hui	midity/VOC/PM25	/PM10/CO/CO2",					
the par	rameter "-threshold behaviour" sele	cts "without hyster	esis", the commun	ication object will					
be act	ivated, when the gas value is at th	e lowest alarm th	reshold Between	the highest alarm					
thresh	old, this communication object sends	out an alarm mess	age, and the messa	ige value is set by					
the par	rameter "Value set is".								
65	Beyond.8 bit.K_2_1	Output	1bit/4bit/1byte	C,R,T					
This	communication object appears wh	nen the paramete	r " display set	ting "selects					
"Ten	perature/Humidity/VOC/PM25/PM1	0/CO/CO2" and t	he alarm message i	s activated. When					
the gas	s value is higher than the highest alar	m threshold, the co	mmunication object	et "beyond, 1bit/					
4bit/81	oit, K x z" sends out an alarm mes	ssage, and the me	ssage value is set	by the parameter					
"Valı	ue set is".		-						
66	Gas value.K_2_1	Intput	2byte	C,R,W					
This	communication object appears	when the para	meter "display	setting" selects					
"VOC	/PM25/PM10/CO/CO2". This comm	nunication object	is used to transn	nit the externally					
detecte	detected VOC/PM25/PM10/CO/CO2 gas value.								
66	Temperature.K_2_1	Intput	2byte	C,R,W					
This c	communication object appears when	the parameter "dis	splay setting" selec	ets "Temperature"					
and th	and the parameter "Temperature source" selects "external", it is used to input the externally								
detecte	ed temperature value.								

66	Humidity.K_2_1	Intput	2byte	C,R,W				
This c	ommunication object appears when t	the parameter "disj	play setting" select	s "Humidity" and				
the pa	the parameter "Humidity source" selects "external", it is used to input the externally detected							
humid	humidity value.							
63	Time. K_2_1	Intput	3byte	C,R,W,T				
This c	ommunication object appears when	the parameter "dis	splay setting" selec	ets "Time", and is				
used to	write the current time.							
63	Data. K_2_1	Intput	3byte	C,R,W				
This co	This communication object is enabled when the parameter "display setting" selects "Time" and the							
parame	eter "Display the date" selects "YES"	, and is used to wri	te the date.					
63	Alarm. K_2_1	Input	1bit	C,R,W,T				
This c	ommunication object appears when	the parameter "dis	play setting" selec	ts "alarm", and is				
used to	modify the alarm state.							
63	Character. K_2_1	Input	14bytes	C,R,W,T				
This co	ommunication object appears when t	he parameter "disp	olay setting" selects	s "Character", and				
is used	I to write the content of the label. It ca	an display approxir	nately 13 numbers	and letters.				
63	Value K_2_1	Input	1bit/1byte/2byte	C,R,W,T				
This co	This communication object appears when the parameter "display setting" selects "Data value", and							
is used	l to write a value.							

Table 11-1 display communication object

### 4.12 "Temperature/humidity alarm" communication object

There are 8 communication objects under "Temperature/humidity alarm", as shown in Figure 4.12-1, and the specific functions are shown in Table 12-1.

z/12	General	Current temperature	2 bytes	С	R	-	Т	-	2-byte float value, temperature (°C)	低
■2 14	Alarm	temperature alarm active	1 bit	C	R	W	-		1-bit, boolean	低
■2 15	Alarm	Upper limit of temp. alarm	2 bytes	С	R	W	-	-	2-byte float value, temperature (°C)	低
■2 16	Alarm	Lower limit of temp. alarm	2 bytes	С	R	W	-	-	2-byte float value, temperature (°C)	低
<b>■‡</b>  17	Alarm	Temperature alarm status	1 bit	С	R	-	Т	-	1-bit, boolean	低
∎‡ 18	General	Current humidity	2 bytes	С	R	e.	Т	e.	2-byte float value, temperature (°C)	低
■2 20	Alarm	humidity alarm active	1 bit	С	R	W	-	÷.	1-bit, boolean	低
∎‡ 21	Alarm	Upper limit of humidity alarm	2 bytes	C	R	W	-	-	2-byte float value, temperature (°C)	低
■2 22	Alarm	Lower limit of humidity alarm	2 bytes	С	R	W	-	-	2-byte float value, temperature (°C)	低
■23	Alarm	humidity alarm status	1 bit	C	R	-	Т		1-bit, boolean	低
10										

Figure 4.12-1 Temperature/humidity alarm communication object

No.	Function	Communication	Type of data	Attributes				
		object name						
14	temperature alarm active	C,R,W						
This communication object is used to activate the temperature alarm function: send 01 to the								
commu	inication object to activate the te	emperature alarm	function; send 00	to inactivate the				
temper	ature alarm function.							
15	Upper limit of temp, alarm	Alarm	2byte	C,R,W				
This communication object is used to set the upper limit of the temperature alarm.								
16	Lower limit of temp, alarm	Alarm	2byte	C,R,W				

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This communication object is used to set the lower limit value of the temperature alarm.										
17	Temperature alarm status	Alarm	1bit	C,R,T						
This communication object is used to send temperature alarm status messages.										
20	humidity alarm active	Alarm	1bit	C,R,W						
This c	This communication object is used to activate the humidity alarm function: send 01 to the									
commu	communication object to activate the humidity alarm function; send 00 to deactivate the humidity									
alarm f	unction.									
21	Upper limit of humidity alarm	Alarm	2byte	C,R,W						
This co	mmunication object is used to set th	ne upper limit of th	e humidity alarm.							
22	Lower limit of humidity alarm	Alarm	2byte	C,R,W						
This co	ommunication object is used to set th	ne lower limit of th	e humidity alarm.							
23	humidity alarm status	Alarm	1bit	C,R,T						
This co	ommunication object is used to send	the message of the	humidity alarm sta	itus.						

Table 12-1 Temperature/humidity alarm communication object

### 4.13 "Timing" communication object

The timing function of each channel has the same communication object. Taking the communication object of channel 1 as an example, there are 2 communication objects in Timing, as shown in Figure 4.13-1. The specific functions are shown in Table 13-1.

385	Timing	Timing.CH1	2 bytes	С	R	W	-	-	2-byte unsigned value, pulses
386	Timing	Report.CH1	2 bytes	С	R	-	Т	-	2-byte unsigned value, pulses

#### Figure 4.13-1 Timing communication object

No.	Function	Communication	Type of data	Attributes					
		object name							
385	Timing	Timing	2byte	C,W					
This co	This communication object is used to set the timing time. Sending 1 to the communication object								
means	that the timing is 1min.								
386	Report	Timing	2byte	C,R,T					
This communication object is used to send a message to the bus to report the current timing									
time.									

Table 13-1 Timing communication object

### 4.14 "Floor heating" communication object

Each floor heating channel has the same communication object. Taking the communication object

of floor heating channel 1 as an example, there are a total of 12 communication objects, as shown in Figure 4.14-1. The specific functions are shown in Table 14-1.

₩2769	Floor heating	Switch contorl.CH1	1 bit	С	R	÷	Т	÷	1-bit, switch	低
<b>■‡</b> 770	Floor heating	Switch feedback.CH1	1 bit	С	R	W	23	-	1-bit, switch	低
<b>₽2</b> 771	Floor heating	Switch remote.CH1	1 bit	С	R	W		-	1-bit, switch	低
<b>₽</b> ₽772	Floor heating	External current temperature.CH1	2 bytes	С	R	W	2	-	2-byte float value, temperature (°C)	低
₽₽ 773	Floor heating	Automatic function active.CH1	1 bit	С	R	W	-	÷	1-bit, enable	低
₹774	Floor heating	Control actuator/1 bit.CH1	1 bit	С	R	-	Т	2	1-bit, switch	低
■₽ 775	Floor heating	Set temperature.CH1	2 bytes	С	R	-	Т	÷	2-byte float value, temperature (°C)	低
₩₹ 776	Floor heating	Set temperature feedback.CH1	2 bytes	С	R	W	Т	U	2-byte float value, temperature (°C)	低
₽₽ 777	Floor heating	Set temperature remote.CH1	2 bytes	C	R	W	-	-	2-byte float value, temperature (°C)	低
<b>■‡</b>  778	Floor heating	Minimum set temperature.CH1	2 bytes	С	R	W	23	-	2-byte float value, temperature (°C)	低
■₹ 779	Floor heating	Maximum set temperature.CH1	2 bytes	С	R	W	-	-	2-byte float value, temperature (°C)	低
■2 780	Floor heating	Active.CH1	1 bit	С	R	W	-	-	1-bit, enable	低

Figure 4.14-1 Floor heating communication object

No.	Function	Communication object name	Type of data	Attributes					
769	Switch contorl	Floor heating	1bit	C,R,T					
The switch status of floor heating is transmitted to the bus through this communication object.									
770	Switch feedback	Floor heating	1bit	C,R,W					
This communication object is used to feed back the status of the floor heating switch.									
771	Switch remote	Floor heating	2byte	C,R,W					
Remot	ely switch the floor heating through	the communication	n object.						
772	External current temperature	Floor heating	1bit	C,R,W					
When	the current temperature of the floo	or heating adopts	the external temper	rature, the current					
temper	ature of the floor heating is written	through the commu	inication object.	r					
773	Automatic function active	Floor heating	1bit	C,R,W					
The au	tomatic function of floor heating ca	an be turned on or	disabled through th	nis communication					
object.	1	1	1	1					
774	Control actuator/1 bit	Floor heating	2byte	C,R,T					
This co	ommunication object is enabled wh	en the parameter '	'Thermostat control	Actuator" selects					
"YES"	, and is used to transfer the setting	values of the	e parameter "Swit	ch ON value" and					
the par	ameter "Switch OFF value" to the	bus.	I	Γ					
775	Set temperature	Floor heating	2byte	C,R,T					
The set	t temperature of floor heating is tran	smitted to the bus	through this commu	inication object.					
776	Set temperature feedback	Floor heating	2byte	C,R,W,T,U					
This co	ommunication object is used to feed	back the set tempe	rature of the floor h	eating.					
777	Set temperature remote	Floor heating	2byte	C,R,W					
The set	t temperature of floor heating can be	e changed remotely	through this comm	unication object.					
778	Minimum set temperature	Floor heating	2byte	C,R,W					
Modify	the minimum temperature value of	of the set temperat	ture of the floor he	eating through this					
commu	communication object.								
779	Maximum set temperature	Floor heating	2byte	C,R,W					
Modify	the maximum temperature value	of the set tempera	ture of the floor he	ating through this					
commu	inication object.	-							

780	Active	Floor heating	1bit	C,R,W
The flo	or heating function can be activated	or deactivated thro	ough this communic	cation object.

Table 14-1 Floor heating communication object

### 4.15 "Fresh air" communication object

Each fresh air function channel has the same communication object. Taking the communication object of channel 1 as an example, there are 10 communication objects in total, as shown in Figure 4.15-1. The specific functions are shown in Table 15-1.

■2 889	Fresh air	Switch.CH1	1 bit	C	R	-	Т	-	1-bit, switch	低
■2 890	Fresh air	Switch.Feedback.CH1	1 bit	С	R	W	-	2	1-bit, switch	低
■2 891	Fresh air	Switch.Remote.CH1	1 bit	C	8.78	W	-	-	1-bit, switch	低
■2 892	Fresh air	Automatic mode.CH1	1 bit	С	R	Ξ.	Т	0	1-bit, switch	低
■2 893	Fresh air	Automatic mode feedback.CH1	1 bit	C	R	W			1-bit, switch	低
■2 894	Fresh air	Automatic mode remote.CH1	1 bit	С	-	W	-	0	1-bit, switch	低
■2 895	Fresh air	Speed.CH1	1 byte	C	R	-	Т		8-bit unsigned value, fan stage (0255)	低
■2 896	Fresh air	Speed.Feedback.CH1	1 byte	С	R	W	-	0	8-bit unsigned value, fan stage (0255)	低
■2 897	Fresh air	Speed.Remote.CH1	1 byte	C	8.78	W			8-bit unsigned value, fan stage (0255)	低
■2 898	Fresh air	Active.CH1	1 bit	С	R	W	-	9	1-bit, enable	低

Figure 4.15-1 Fresh air communication object

No.	Function	Communication	Type of data	Attributes						
		object name								
889	Switch	Fresh air	1bit/1byte	C,T						
The communication object is visible when the parameter "Switch set" is "activated". When the										
fresh air is turned on by a button or a remote object, the communication object sends a message										
value to report the on/off status of the fresh air function.										
890	Switch, feedback	Fresh air	1bit/1byte	C,R,W						
This communic	ation object is visible when the p	arameter "Switch set	" is "activated",	and is used						
to receive messa	ages from external devices to turn	on or turn off the free	sh air function.							
891	Switch, remote	Fresh air	1bit/1byte	C,W						
This communication object is visible when the parameter "Switch set" is "activated", and is used										
to remotely turn	on or turn off the fresh air function	on.								
892	Mode	Fresh air	1bit	C,T						
The communica	ation object is enabled when the	parameter "Mode set	" is selected as	"activated".						
When the fresh	air mode is switched by the butto	n or the remote objec	t, the communic	ation object						
sends a message	e value to report the current mode	of the fresh air.								
893	Mode, feedback	Fresh air	1bit	C,R,W						
The communica	ation object is enabled when the	parameter "Mode set	" is selected as	"activated",						
and the fresh a	ir mode is switched by receivin	ng messages from ex	ternal devices t	hrough this						
object. As for	the message received by this co	mmunication object	is 0, whether t	o switch to						
manual mode or	automatic The mode is determine	ed by the parameter "-	-auto speed (fe	edback)".						
894	894 Mode, remote Fresh air 1bit C, W									
The communica	tion object is enabled when the p	arameter "Mode set"	is "activated", an	nd it is used						
to switch the fre	esh air mode remotely. As to whet	her to switch to manu	ual mode or auto	matic mode						

by sending a message 0 to this communication object, the parameter "- auto speed				
(remote)"Decide				
895	Speed	Fresh air	1byte	C,T
The communication object is valid when the parameter "Speed off/1/2/3/4/5" is selected as				
"activated". When the wind speed of the fresh air function in manual mode is modified by the key				
or remote object, the communication object sends a message value to report the current value.				
Wind speed.				
896	Speed,feedback	Fresh air	1byte	C,R,W
This communication object is valid when the parameter "Speed off/1/2/3/4/5" is "activated",				
and is used to receive messages from external devices to modify the wind speed in the manual				
mode of the fresh air function.				
897	Speed,remote	Fresh air	1byte	C,W
This communication object is valid when the parameter "Speed off/1/2/3/4/5" is "activated",				
and is used to remotely modify the wind speed in the manual mode of the fresh air function				
898	Active	Fresh air	1bit	C,R,W
This communication object appears when the parameter "Fresh air function" is "activated" and is				
used to enable or disable the fresh air function. Send message 1 to this communication object to				
enable the fresh air function, and send message 0 to disable the fresh air function.				

Table 15-1 Fresh air communication object