

# DETRONS™



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# 1. Summary

This manual provides you about Aurora button panel technical information, and a detailed description of the functions, it also explains how to use the Aurora button panel with real-life examples.

## 1.1 Function Overview

Aurora button panel with up to 6 individual buttons, button control functions are: switch、dimmer、shutter、switch value、scene、profession、joint, total 7 functions can be selected, and you can control switch、dimmer、shutter、switch value、scene、PRO、mapping status.

Specific functions as below:

- Background light
- Indicator light
- Microwave detection function
  - Sleep mode
  - Energy saving mode
- Lock device
- Button mutual exclusion function
- Button function
  - switch
  - dimming
  - shutter
  - switch value
  - scene
  - profession
  - joint
- Relay function
- 0~10V Dimmer function

## 2. Technical Characteristic

### 2.1 Technical Data

☆ Operating Voltage: 24-30V DC

☆ Operating Current:

Light board +Relay main board: U=24V, I<sub>max</sub>=30mA; U=30V, I<sub>max</sub>=20mA  
Light board +0~10V main board: U=24V, I<sub>max</sub>=50mA; U=30V, I<sub>max</sub>=40mA

☆ Relay Output:

Number of switches: 4 channels Model: HFE46-1/12-1HT-L2  
Un Rated Voltage: 250 V AC  
In Rated Current: 16A

☆ 0~10V Output:

Number of output channels: 3 channels  
Output Voltage Range: 0~10V

☆ Operating Temperature: 0°C~45°C

Storage Temperature: -20°C~+80°C

☆ Ambient Humidity: ≤90%

☆ Exterior Material/casing and color:

☆ Protection level: IP20(IP Protection level according to EN60529 standard)

☆ Dimensions:

☆ Installation: wall mounted embedded

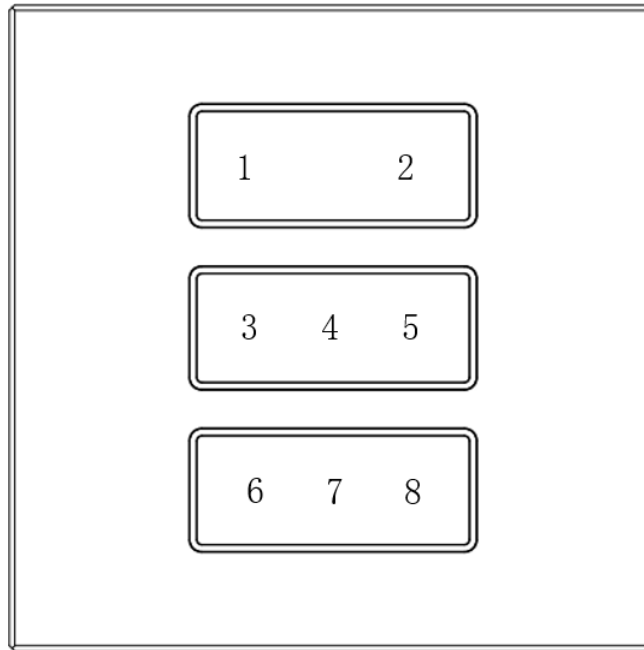
### 2.2 Dimension and Structure and Installation Diagram

Aurora button panel dimension as shown below:

Aurora button panel installation diagram:

### 2.3 Operation Method Of Programming Combination Buttons

Operating programming combination buttons and pressing the programming button, two operation methods to achieve the same function-----Make programming indicator turn red, programmable physical address. As shown below, introduce the operation steps of programming combination buttons on Aurora button panel:



**The operation steps of programming combination buttons as below:**

- 1) Press and hold the ① button
- 2) While not releasing the ① button , short press 2 times ② button 3)
- Release the ① button, and press the ① button 3 times quickly and briefly 4
- ) The background light flashes and the programming LED turns red

**3. Function Overview**

The specific functions of the Aurora button panel and an overview are shown in the table below: 1) Button function (6 independent button)

The optional function of buttons are switch、 dimming、 shutter、 switch value、 scene、 pro、 joint、 Button mutual exclusion function

2) Relay Function

General switch (delay switch, stair light switch, presetting, scenes, etc.), Curtain (ordinary curtain, dry contact curtain), dry contact and other functions.

3) 0~10V Function

Switching, absolute dimming, relative dimming, presets, scenes, stair lights and other functions. 4) Other Functions

Microwave detection, Energy saving mode, Sleep mode, Indicator light, Background light, Lock panel and other functions.

Combination of buttons to light up the programming lamp, USB/KNX upgrade program. Etc.

### 3.1 Parameter setting window “General”

The “General” parameter setting screen is show in Fig 3.1-1, the parameters set in this parameter setting screen are applied to the output of the entire Aurora button panel. The details of each parameter are described as below.

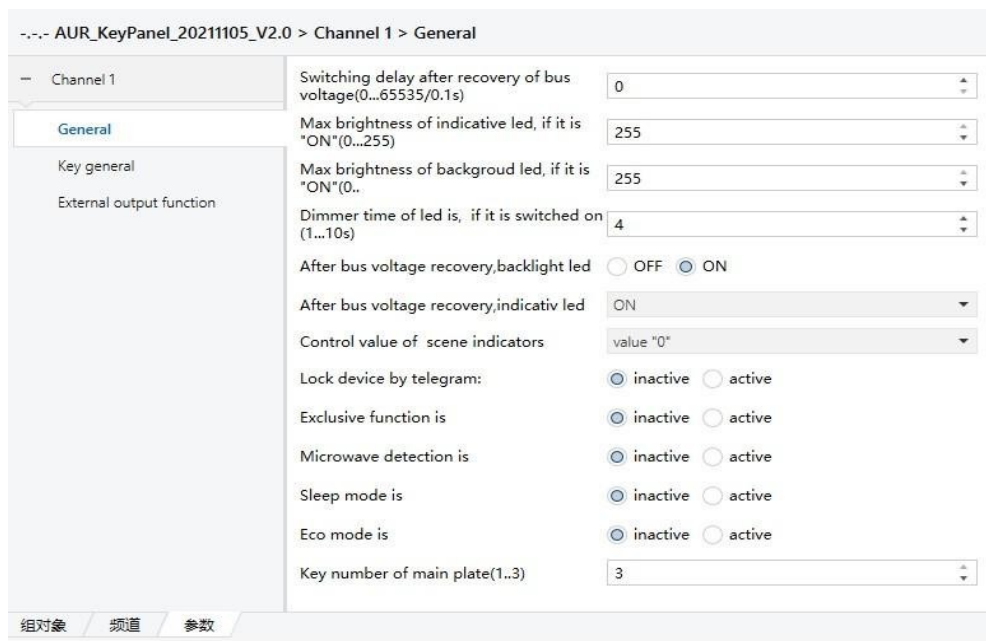


Fig.3.1-1 Parameter setting window “General”

#### Parameter “Switching delay after recovery of bus voltage(0...65535/0.1s)”

This parameter sets the delayed start time of the relay after the bus power is restored. Ranges: 0...65535, Unit: 0.1s

#### Parameter “Max brightness of indicative led, if it is “ON” (0..255)”

This parameter sets the brightness value of the indicator in normal mode. Ranges: 0...255

**Parameter “Max brightness of background led, if it is “ON” (0..255)”**

This parameter sets the brightness value of the backlight in normal mode. Ranges: 0..255

*Note: Aurora button panel light board, indicator, backlight hardware does not support separate adjustment, the default use of parameters “Max brightness of background led, if it is “ON”(0..255)” to adjust the indicator Backlight brightness value.*

**Parameter “Dimmer time of led is,if it is switched ON(1...10s)”**

This parameter sets the dimming time of the panel indicator and backlight. That is, the current state of the light reaches the target state of time.

Ranges: 1..10, Unit: Seconds

**Parameter “After bus voltage recovery,backlight led”**

This parameter sets whether to turn on the backlight after the bus power is restored.

Options: OFF

ON

**Parameter “After bus voltage recovery, indicativ led”**

This parameter sets whether the indicator turns on after the bus power is restored

Options: OFF

ON

after power down

**Parameter “Lock panel device by telegram”**

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

Options: inactive

active

Select “active”. Lock the device via the bus. The communication object is “Lock device”. Send 01 to the communication object “Lock device” via the bus to lock the device.

i.e. the key does not work. If 00 is sent, the device is locked by contact. i.e. the key works.

**Parameter “Exclusive function is”**

This parameter sets whether to activate the Button mutual exclusion function.

Options: inactive

active

Select “Active” to activate the mutual exclusion function.

The specific parameters of the mutually exclusive function can be found in the parameter setting window “Exclusive” in 3.1.1.

**Parameter “Microwave detection is”**

This parameter sets whether to activate the microwave detection function.

Options: inactive  
active

Select “Active” to activate the microwave detection function, the specific parameters of the microwave detection function are described in 3.1.2 parameter setting window “Microwave detection”.

**Parameter “Sleep mode is”**

This parameter sets whether sleep mode is activated

Options: inactive  
active

Select “Active” to activate the sleep mode. The specific parameters of the sleep mode are described in the parameter setting window “Sleep mode” in 3.1.3.

**Parameter “Eco mode is”**

This parameter sets whether to activate the energy saving mode

Options: inactive  
active

Select “Active” to activate the energy saving mode. The specific parameters of the energy saving mode are described in the parameter setting window “Eco mode” in 3.1.4.

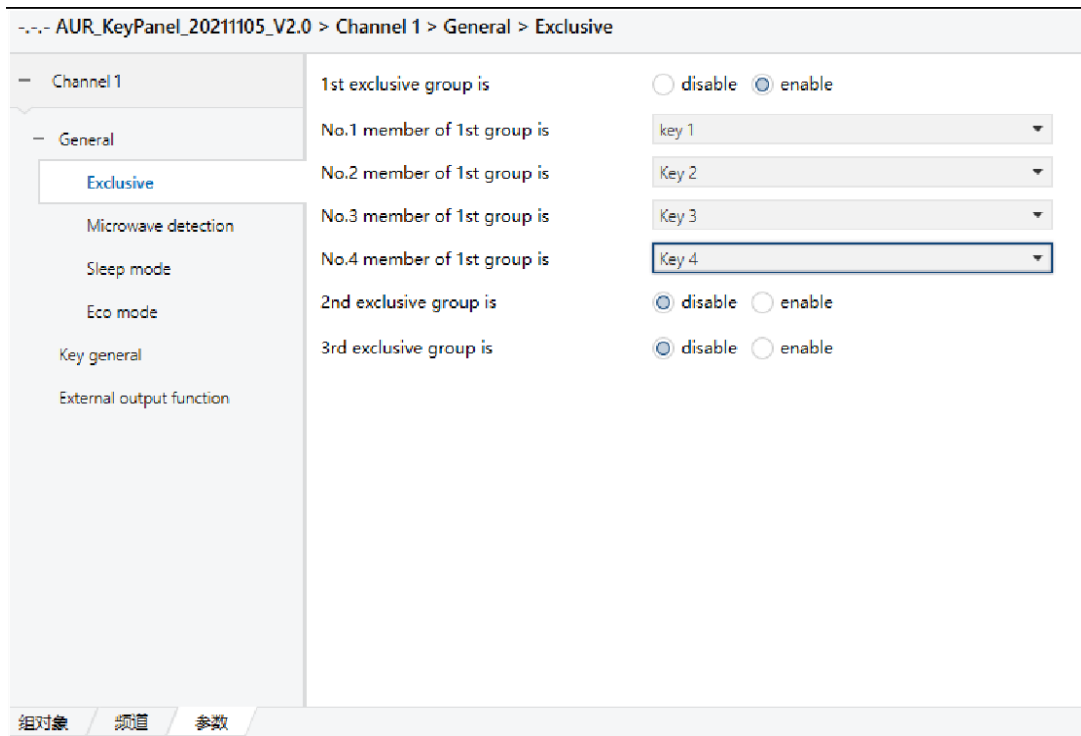
**Parameter “Key number of main plate(1..3)”**

This parameter sets the number of button on the motherboard. Filling in 3 means that all 3 rows of buttons on the motherboard are enabled. The number of button is K1...K6. The first row of button is used for the button combination function. Filling in 1 means that only the second (middle) row of button is activated. The number of keys is K1...K2, and the button combination is realized by the second row of buttons.

Ranges: 1...3

**3.1.1 Parameter setting window “Exclusive”**

*Note: When this function is enabled, three separate groups of buttons appear. 3 independent groups appear, each group of buttons is mutually exclusive. The mutually exclusive button indicators cannot be on at the same time. This function only takes effect when the button is “switch” function.*



**Parameter “1<sup>st</sup>/2<sup>nd</sup>/3<sup>rd</sup> exclusive group is”**

This parameter sets whether to enable the first, second and third mutually exclusive groups Options disable enable

Select “enable” to enable the mutually exclusive group.

Each group has the same parameters and is introduced with the first group as representative.

**Parameter “No.X number of 1<sup>st</sup>/2<sup>nd</sup>/3<sup>rd</sup> group is”**

(X=[1-4]) This parameter sets the Xth mutually exclusive key of the mutually exclusive group Options

: Key1

...

Key6

Select any of the buttons from the available options. The corresponding button will work. For example, the first group of mutually exclusive buttons are Key1, Key2, Key3 and Key5 (each group of four buttons cannot be set as the same button at the same time). Then press Key1 and the Key2/3/5 lights go off. Press Key2 to light up, Key1/3/5 lights out. Press Key3/5 and so on. When the mutually exclusive button function is switch. As soon as one of the button lights up, the other buttons’ lights go down and all the buttons’ values go to zero (no data is sent to the bus). All the other buttons will go down, and the value of all buttons will go to zero (no data will be sent to the bus), and all button are zeroed out (no data is sent to the bus. The value of all the buttons is zeroed (no data is sent to the bus, and at this time there is no determination of whether the 0 of each button is on or off). It is only when the button is operated that it is judged. For example, if the state of Key1 is 0 and 1 is off, the other three buttons are 0 and 1. 1 is off. The other three buttons, Key2, Key3 and Key5, are all 0 and 1. Key1 is on. When Key2 is on, all other buttons are 0. When Key1 is pressed again, the Key1 key value is issued as 1, but the light is not lit, and the light

will be lit only when the second button is issued as 0.

### 3.1.2 Parameter setting window “Microwave detection”

Remark.

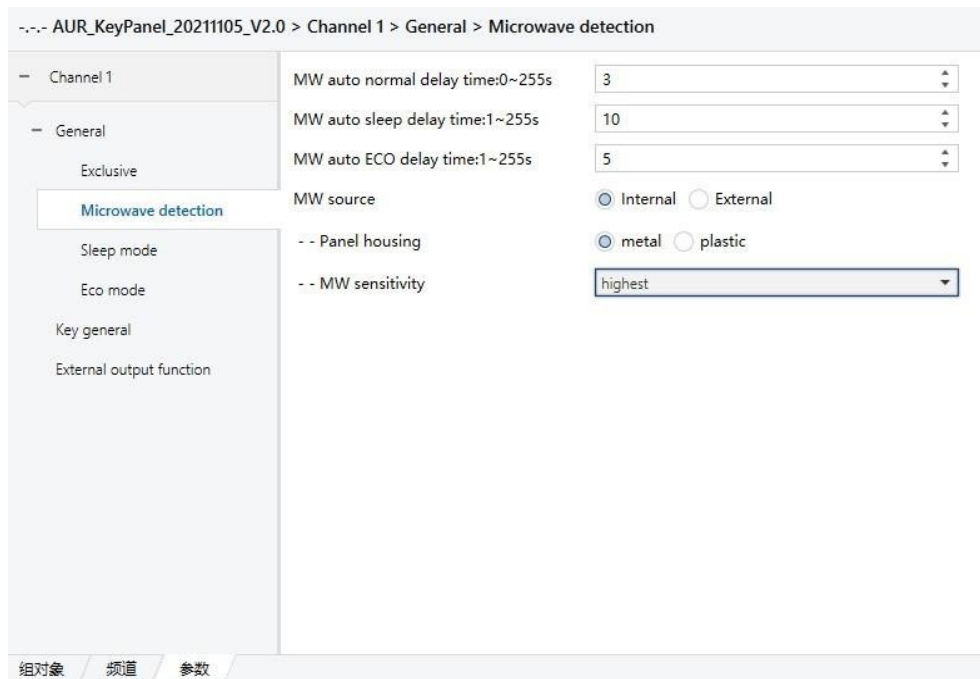
The device has 3 modes: normal mode, sleep mode, energy saving mode, priority: sleep > energy saving > normal

Normal mode: After disabling sleep and energy saving mode, the device is in normal mode, in this mode, the indicator light and backlight are in accordance with the parameters.

“Max brightness of background led, if it is “ON” (0..255)” set value is always bright, not affected by microwave.

Energy-saving mode: database to open the energy-saving mode function, the default activation of energy-saving mode after initialization. In energy saving mode, the microwave detects someone indicator light, backlight brightness according to “Max brightness of background led, if it is “ON” (0..255)” set value, microwave detects no one, indicator light, button light The brightness is set according to the parameter “ECO mode backlight brightness:0-100%”. The energy saving mode can be activated and disabled by the object “ECO mode active”.

Sleep mode: Sleep mode can be activated and disabled by the object “Sleep mode active”. In the sleep mode, the microwave detects someone indicator light, backlight brightness according to the “Sleep Mode Backlight ON rightness: 0~100%” setting value, microwave detects no one, indicator light, button light all out.



#### Parameter “MW auto normal delay time:0-255s”

This parameter is set in the normal mode, microwave detection when no one is turned off the

indicator, the backlight delay time. Ranges : 0...255, Unit: Second

**Parameter “MW auto sleep delay time:1-255s”**

This parameter is set in sleep mode, the microwave detects no one to turn off the indicator, the backlight delay time.

Ranges: 1...255, Unit: Second

**Parameter “MW auto ECO delay time:1-255s”**

This parameter sets the delay time to turn off the indicator and backlight when the microwave detects no one in the energy-saving mode.

Ranges: 1...255, Unit: Second

**Parameter “MW source”**

This parameter sets the source of the microwave signal, with internal and external options.

: Internal

External

When the device does not have a microwave module or needs to be synchronized with other devices, you can select “External” and the object “Ext MW human detect” will appear to do logical processing with the external input signal..

Select “Internal” when the device comes with microwave module, you can do logic processing according to the microwave signal that comes with it, the following two parameters will appear:

**Parameter “-- Panel housing”**

**Parameter “--MW sensitivity”**

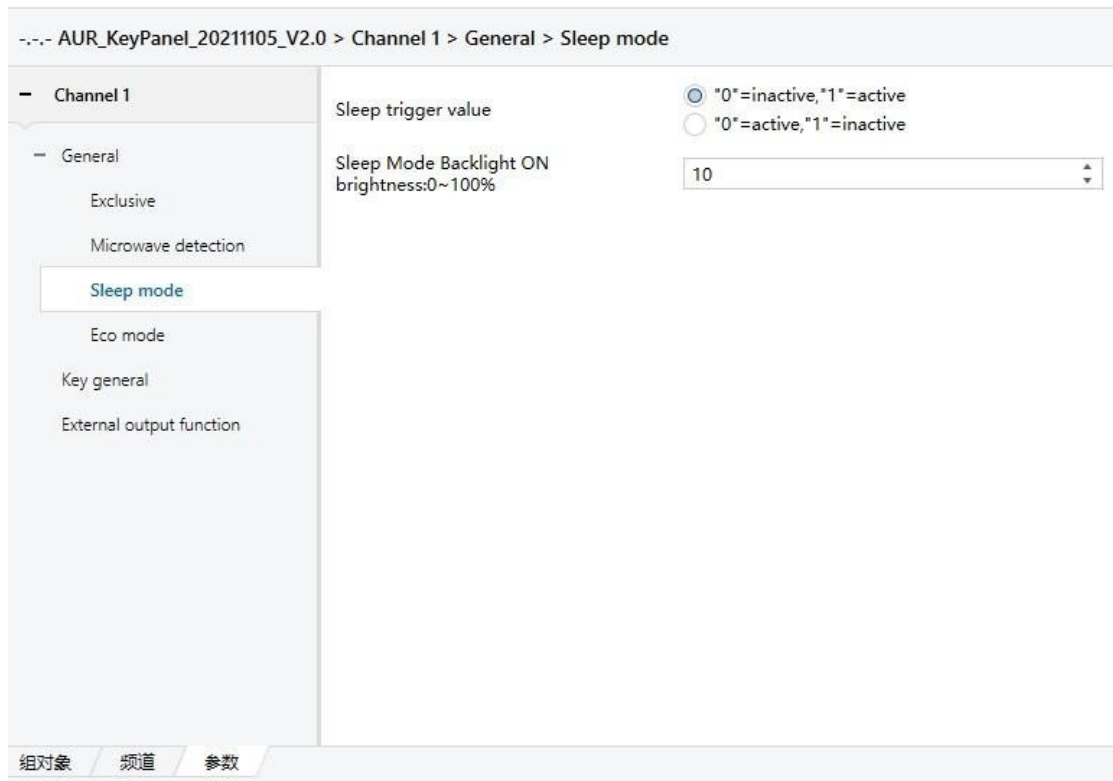
Parameter “-- Panel housing” defines the button material of the device, which can be selected according to the actual situation, and there are metal and plastic options. The parameter “--MW sensitivity” is used to set the microwave sensitivity, and there are 8 grades to choose from: highest, middle 1,..., middle 6, low.

According to the structure of the equipment, the microwave module is placed under the light board and the button. Different materials of the button will affect the sensitivity of the microwave. The microwave grades of metal materials and plastic materials correspond to different microwave grades, as follows:

\* Microwave sensitivity actually has 16 levels, 0 is the highest sensitivity, 15 is the lowest sensitivity

Micro-wave Gear	Microwave Level	
	Metal	Plastic
highest	0	8
middle 1	1	9
middle 2	2	10
middle 3	3	11
middle 4	4	12
middle 5	5	13
middle 6	6	14
low	7	15

### 3.1.3 Parameter setting window “Sleep mode”



#### Parameter “Sleep trigger value”

Sleep mode trigger value setting, the corresponding object is “Sleep mode active”.

Options: “0”=inactive, “1”=active

“0”=active, “1”=inactive

In any case, the panel receives the active object on/off to enable/disable the sleep mode function directly.

——Sleep triggerle state is active into sleep (default light out),

After a delay of 3s and then through the microwave signal to light up the lights (microwave lights on, brightness can be set, microwave lights are not all out);

——Sleep triggle state for inactive exit sleep.

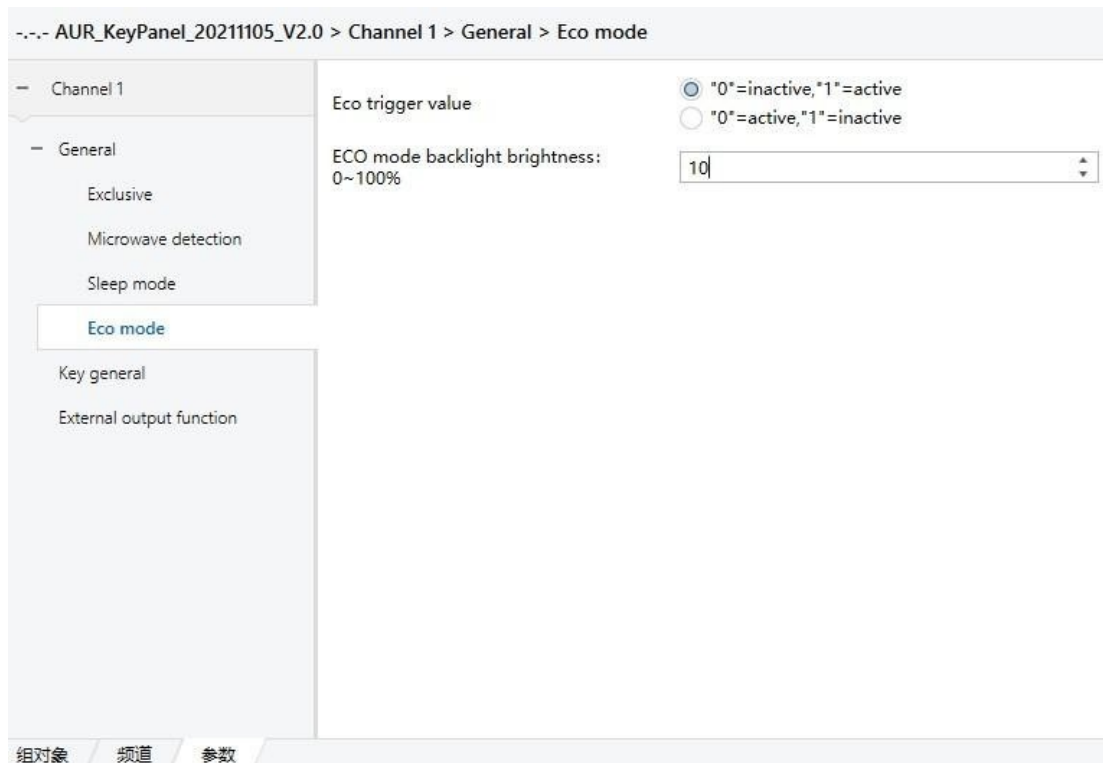
As for entering normal mode or energy-saving mode, see whether energy-saving mode is activated. If the energy-saving mode inactive, resume normal mode, energy-saving mode active, enter energy-saving mode.

#### Parameter “Sleep Mode Backlight ON brightness:0~100%”

Enter sleep mode, and microwave detection of someone, the light brightness is set by this parameter.

Ranges: 0~100%

**Parameter setting window “Eco mode”**



**Parameter “Eco trigger value”**

Sleep mode trigger value setting, the corresponding object is “ECO mode active”.

Options: "0"=inactive,"1"=active

"0"=active,"1"=inactive

Energy saving mode is enabled directly after the download is configured to be enabled. In any case, the panel receives active object on/off to enable/disable the energy saving mode function directly.

——Energy-saving mode, microwave detection of someone, restore the backlight brightness, guide ring brightness for the ordinary mode bright state

——Energy-saving mode when the panel backlight and light guide ring are normal. Microwave from scanning no one timing Auto ECO delay time reached after automatically enter energy- saving mode again (brightness can be set).

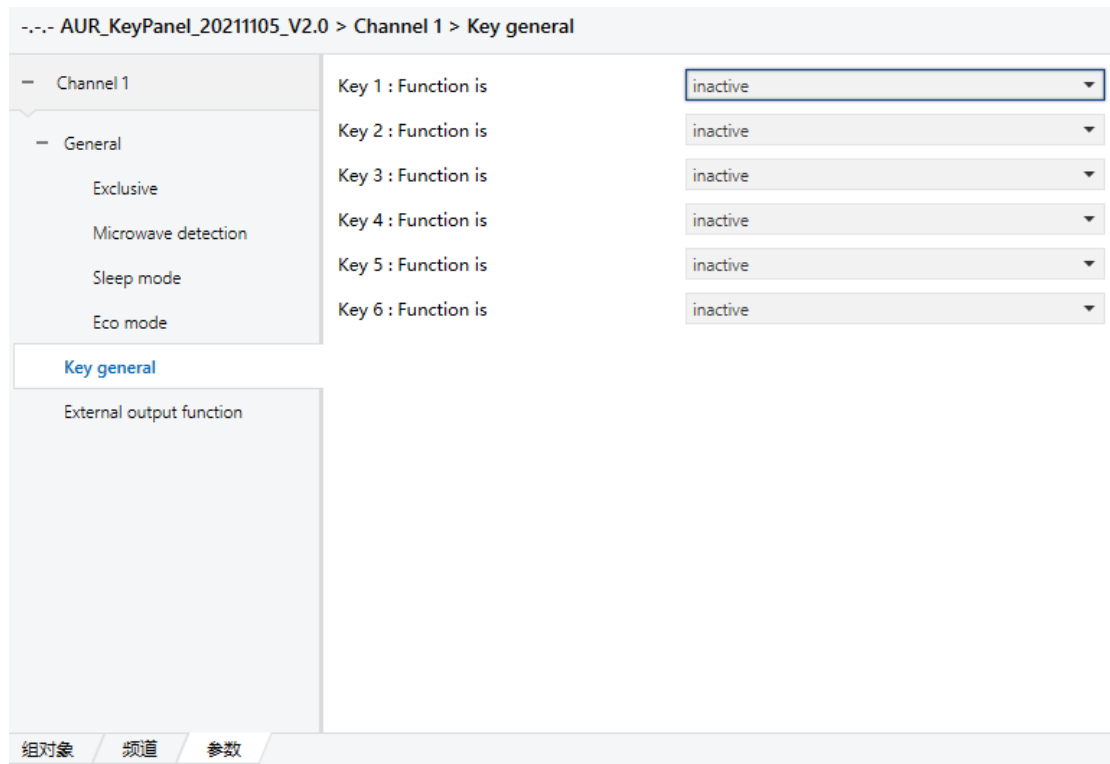
**Parameter “ECO mode backlight brightness: 0~100%”**

Enter the energy-saving mode, and microwave detection no one, the light brightness is set by this parameter

Ranges: 0~100%

### 3.2 Parameter setting window “Key General”

The “Key General” parameter setting screen is shown in Fig 3.2-1. The parameters set in this screen are used for the output of the entire Aurora button panel. The details of each parameter are described below.



Aurora button panel has 6 buttons, each button can realize switch, dimmer, shutter, switch value, scene, session, jiont, a total of 7 functions respectively.

#### Parameter “Key X: Function is” (X: 1~6)

This parameter is set to select the function of the button.

- Options:
- inactive
  - switch
  - dimmer
  - shutter
  - switch value
  - scene
  - profession
  - jiont

Select“inactive”, Does not activate any function of the button.

Select“switch”, The function realized by the corresponding button is switch, refer to 3.2.1 Parameter description.

Select“dimmer”, The function realized by the corresponding button is dimmer, refer to 3.2.2 Parameter description.

Select“shutter”, The function realized by the corresponding button is shutter, refer to 3.2.3 Parameter description.

Select“switch value”, The function realized by the corresponding button is switch value, refer to 3.2.4 Parameter description.

Select“scene”, The function realized by the corresponding button is scene, refer to 3.2.5 Parameter description.

Select“profession”, The function realized by the corresponding button is profession, refer to 3.2.6 Parameter description.

Select“jiont”, The function realized by the corresponding button is mapping function, refer to 3.2.7 Parameter description.

### 3.2.1 Parameter setting window “Key X switch page”

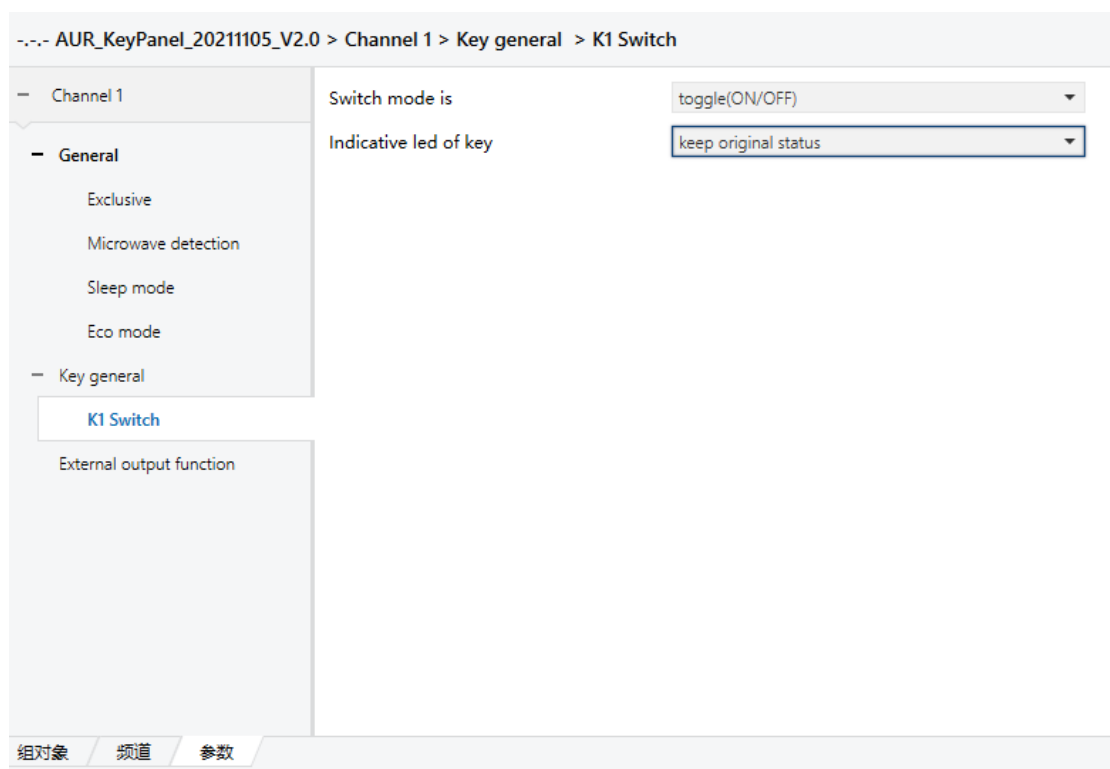


Fig. 3.2.1-1 Parameter Setting Window “Key X switch page”

#### Parameter “Switch mode is”

This parameter is used to set the switching mode of the button. Options: toggle(ON/OFF)

ON

OFF

falling=ON; rising=OFF

falling=OFF; rising=ON

falling=ON; rising=nothing

falling=OFF; rising=nothing

falling=nothing; rising=ON

falling=nothing; rising=OFF

teleg. toggle(No.1/No.2)

Select“toggle(ON/OFF)”, Press the button to send the data 01,00,01,00,01,00....

Select“ON”, Press the button to send data 01.

Select“OFF”, Press the button to send data 00.

Select“falling=ON; rising=OFF”, Pressing and releasing the button sends data 01,00 respectively. Select“falling=OFF; rising=ON”, Pressing and releasing the button sends data 00,01 respectively. Select“falling=ON; rising=nothing”, Press the button to send data 01, release the button to not send data.

Select“falling=OFF; rising=nothing”, Press the button to send data 00, release the button to not send data.

Select“falling=nothing; rising=ON”, Press the button to send no data, release the button to send data 01.

Select“falling=nothing; rising=OFF”, Press the button to send no data, release the button to send data 00.

Select“teleg.toggle(No.1/No.2)”, set the value of No.1/No.2 separately.

The parameter setting interface is shown in Fig 3.2.1-2.

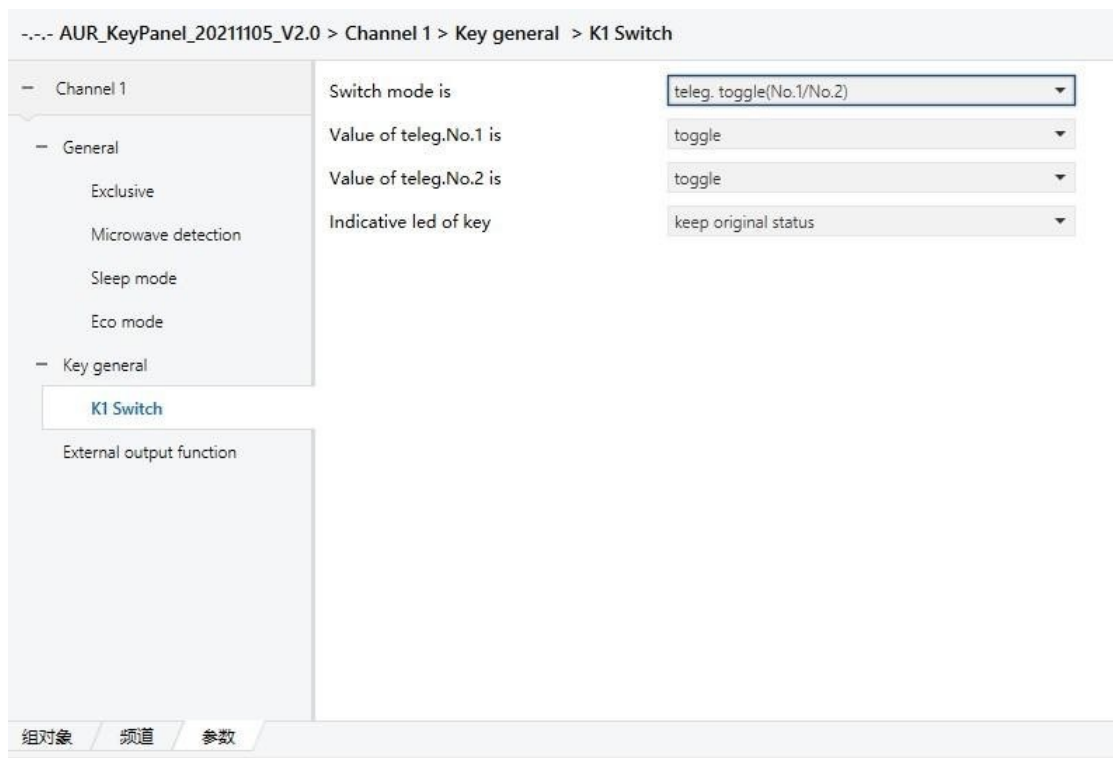


Fig. 3.2.1-2 Parameter Setting Window “Key X switch page”

**Parameter “Value of teleg. No.1/No.2 is”**

This parameter is used to set the data sent by pressing the button, and the communication object is “Switch, No.1/No.2, KX”.

Options: toggle

ON

OFF

Select“toggle”, Press the button to send data 01,00,01,00,01,00....

Select“ON”, Press the button to send data 01.

Select“OFF”, Press the button to send data 00.

Note: The first press of the button sends the data set by No.1. The second press of the button sends the data set by No.2, the third press of the button sends the data set by No.1, the fourth press of the button sends the data set by No.2, and so on.

**Parameter “Indicative led of key”**

This parameter is used to set the changing state of the indicator light corresponding to the button after the button is pressed.

Options: keep original status

show telegram of output show telegram of feedback show action of press key

Select “keep original status”, the indicator light corresponding to the button keeps the original state unchanged.

Select “show telegram of output”, output display according to buttons. The parameter setting interface is shown in Fig 3.2.1-3.

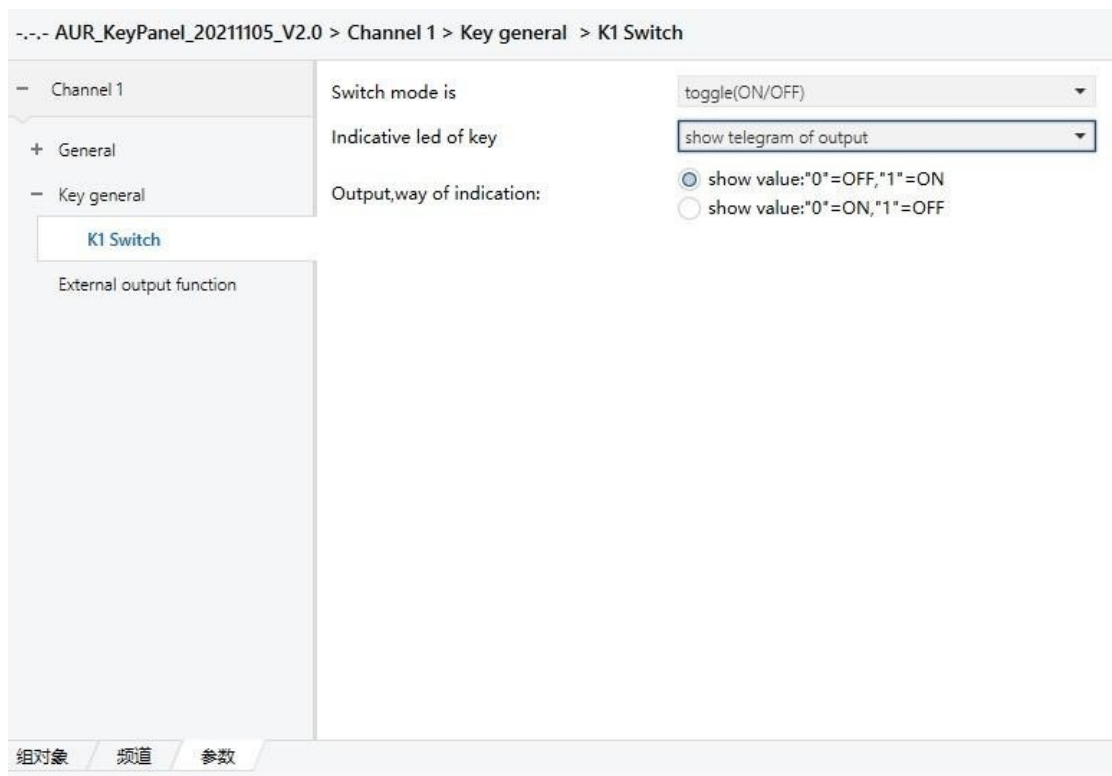


Fig. 3.2.1-3 Parameter Setting Window “Key X switch page”

**Parameter “Output ,way of indication”**

This parameter is used to set the output method of the indicator light.

Options: show value: “0”=OFF,“1”=ON

show value: “0”=ON,“1”=OFF

Select “show value: “0”=OFF,“1”=ON”, if you press the button “Switch, No.1,KX”, the indicator for sending data 00 goes off and the indicator for sending data 01 goes on.

Select “show value: “0”=ON,“1”=OFF”, if the communication object “Switch, No.1,KX” is pressed, the indicator for sending data 00 is on and the indicator for sending data 01 is off.

Note: When the parameter “Switch mode is” selects “teleg.toggle(No.1/No.2)” and the parameter “Indicative led of key “ selects “show telegram of output”, parameter “Output ,way of indicative”

sets the output mode of the indicator only with parameter “No.1 is”, but not with the parameter “Value

of teleg. No.2 is”.

Select “show telegram of feedback”, and according to the feedback output, the communication object is “Feedback of switch, KX”.

The parameter setting interface is shown in Fig 3.2.1-4.

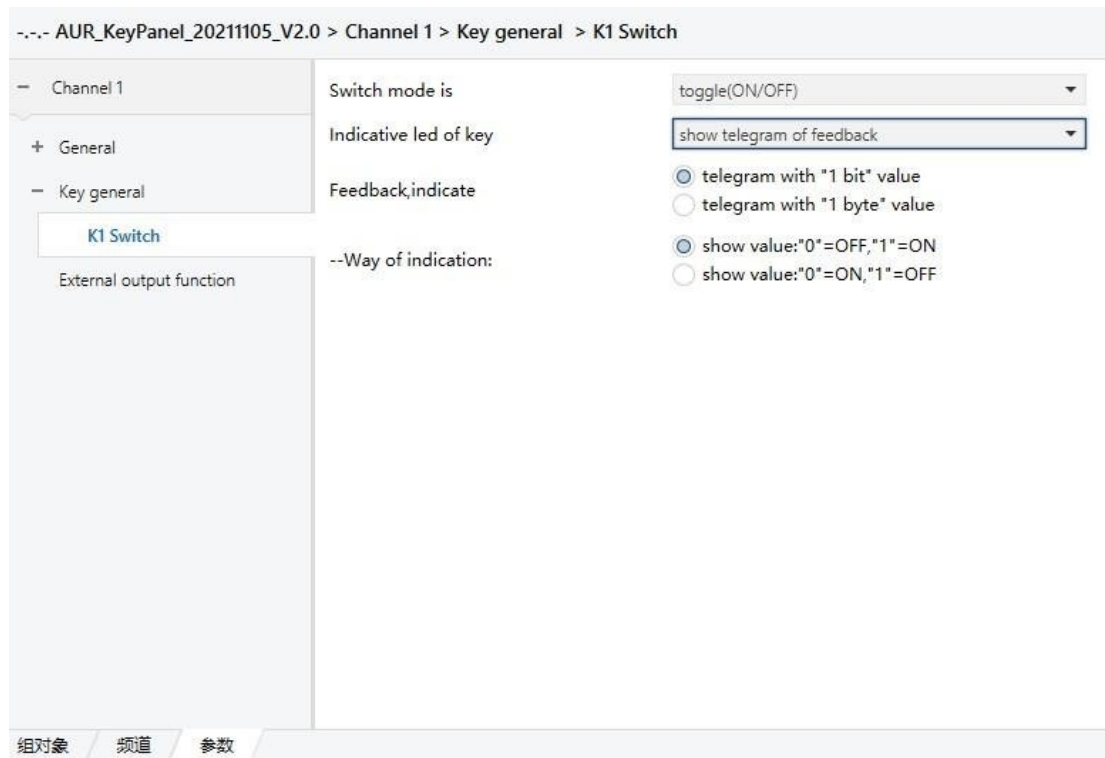


Fig. 3.2.1-4 Parameter Setting Window “Key X switch page”

**Parameter “Feedback, indicate”**

This parameter is used to set the method of feedback.

- Options: telegram with “1 bit” value
- telegram with “1 byte” value

Select “telegram with “1 bit” value”, the setting feedback is 1 bit.

The parameter setting interface is shown in Fig 3.2.1-4.

**Parameter “Way of indication”**

This parameter is used to set how the indicator will be displayed under feedback.

- Options: show value: “0”=OFF, “1”=ON
- show value: “0”=ON, “1”=OFF

Select “show value: “0”=OFF, “1”=ON”, in the communication object “Feedback of switch, KX”, the write 00 indicator is off and the write 01 indicator is on.

Select “show value: “0”=ON, “1”=OFF”, in the communication object “Feedback of switch, KX”, the write 00 indicator is on and the write 01 indicator is off.

Select “telegram with “1 byte” value”, the setting feedback is 1 byte。 The parameter setting interface is shown in Fig 3.2.1-5.

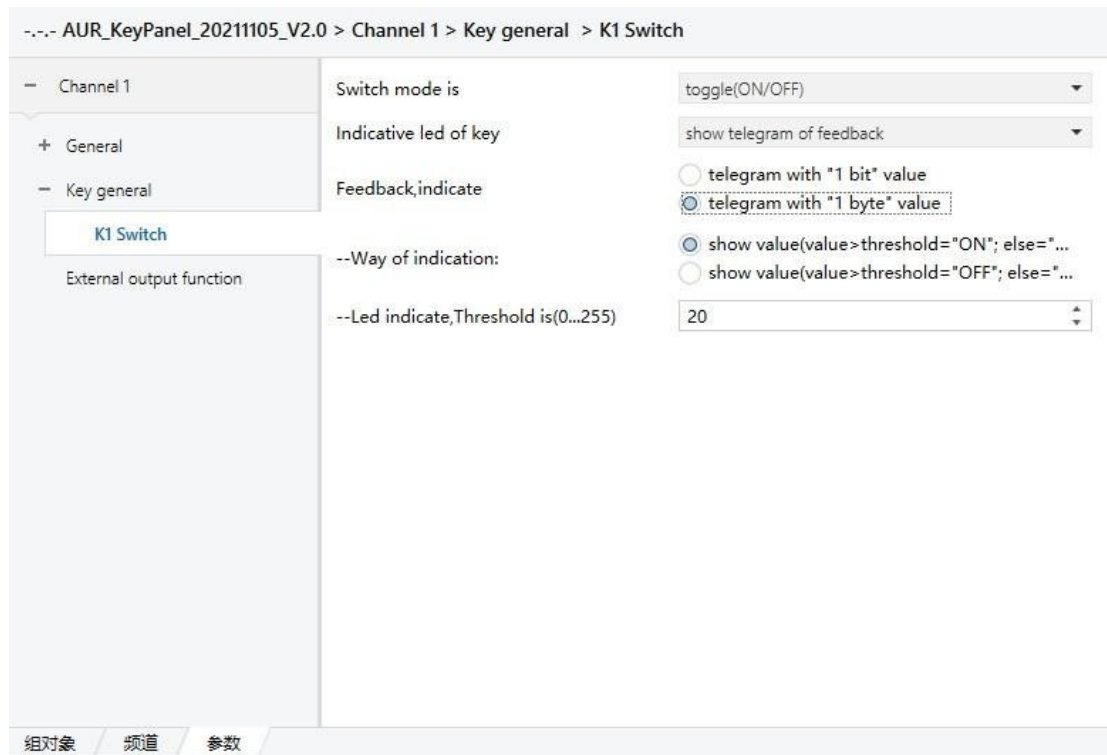


Fig. 3.2.1-5 Parameter Setting Window “Key X switch page”

**Parameter “Way of indication”**

This parameter is used to set how the indicator will be displayed under feedback.

- Options: show value ( value>threshold=“ON”; else=“OFF” )
- show value ( value>threshold=“OFF”; else=“ON” )

Select “show value ( value>threshold=“ON” ; else=“OFF” ) ” , if the value written in the communication object “Feedback of switch, KX” (the communication object writes values in the range of 0...255) is greater than the value set in threshold, the indicator is on, otherwise the indicator is off.

Select “show value ( value>threshold=“OFF” ; else=“ON” ) ” , if the value written in the communication object “Feedback of switch, KX” (the value range of the communication object is 0...255) is greater than the value set in threshold, the indicator is off, otherwise the indicator is on.

**Parameter “Led indicate, Threshold is(0...255)”** This parameter is used to set the value of threshold.

Ranges: 0...255

Select “show action of press key”, the light board indicator will be displayed according to the key status, when the key is pressed, the indicator will be on, when the key is released, the indicator will be off.

The parameter setting interface is shown in Fig 3.2.1-6.

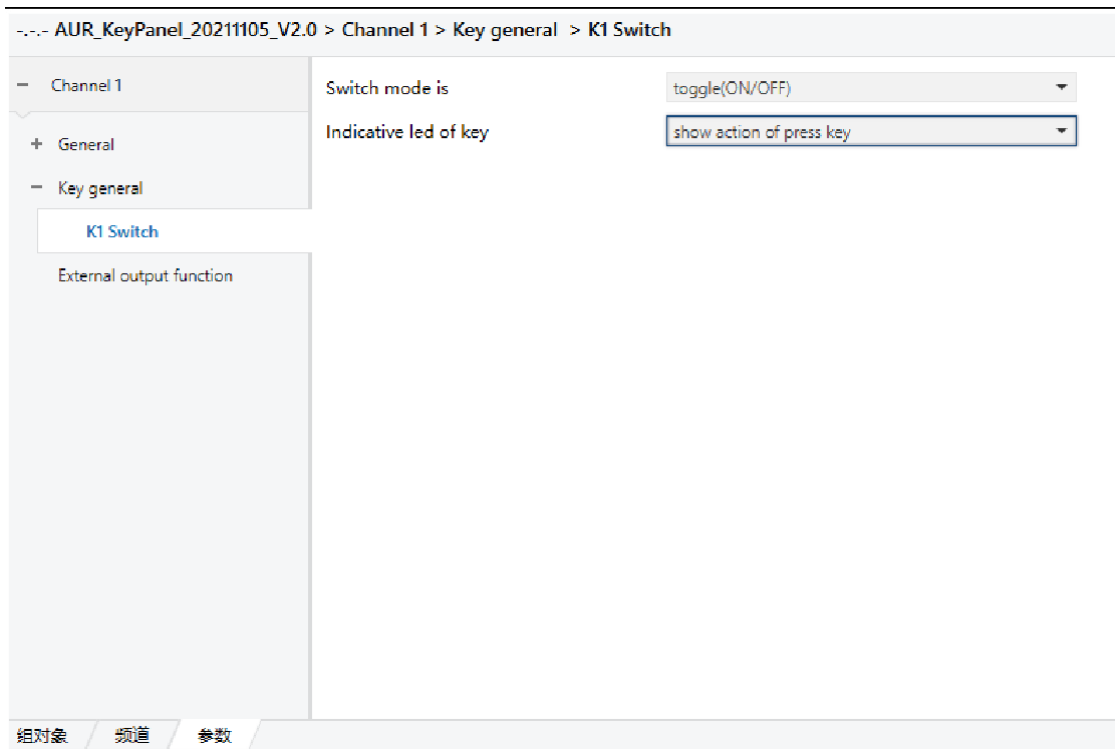


Fig. 3.2.1-6 Parameter Setting Window “Key X switch page”

### 3.2.2 Parameter setting window “Key X dimmer page”

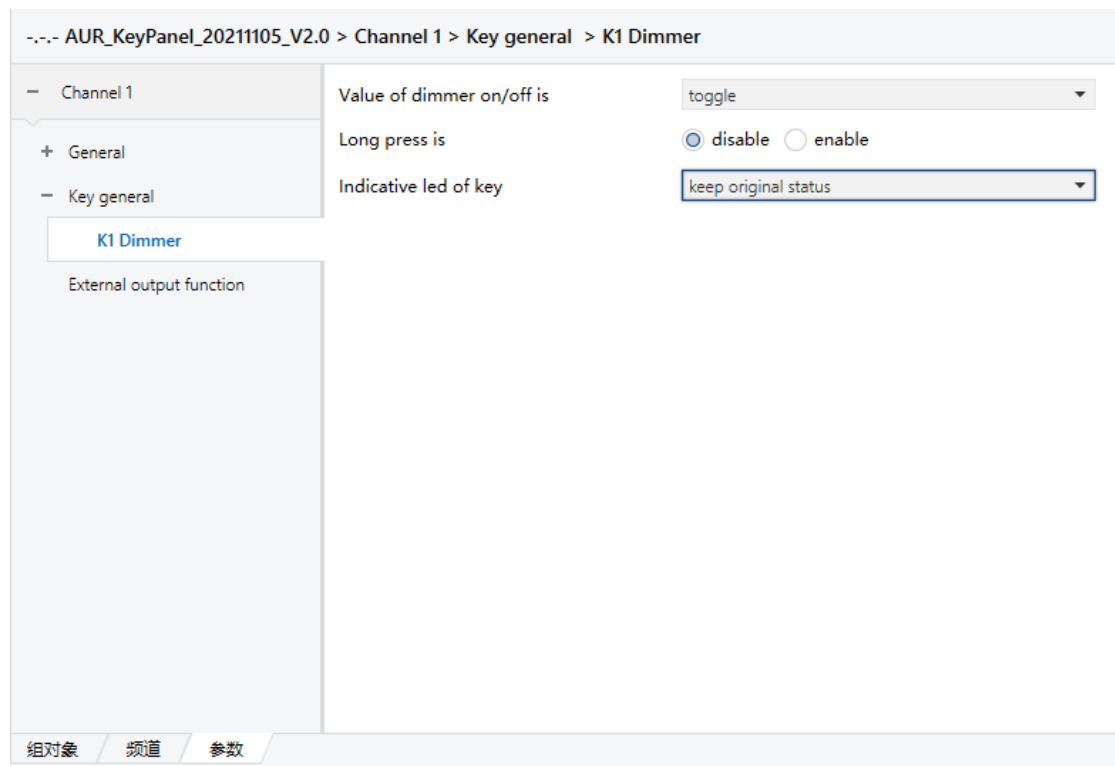


Fig. 3.2.2-1 Parameter Setting Window “Key X dimmer page”

#### Parameter “Value of dimmer on/off is”

This parameter is used to set the value of dimmer ON/OFF for short key presses, the

communication object is “Dimmer ON/OFF for short, KX”. Options:  
toggle

- ON
- OFF

Select “toggle”, press the button to send the data 01,00,01,00,01,00...

Select “ON”, press the button to send data 01.

Select “OFF”, press the button to send data 00.

**Parameter “Long press is”**

This parameter is set to enable or disable the long press button function.

- Options: disable
- enable

Select “disable”, does not enable the function of the long press button.

Select “enable”, enabling the long press button function, the communication object is “Dimmer for long press, KX”.

The parameter setting interface is shown in Fig. 3.2.2-2.

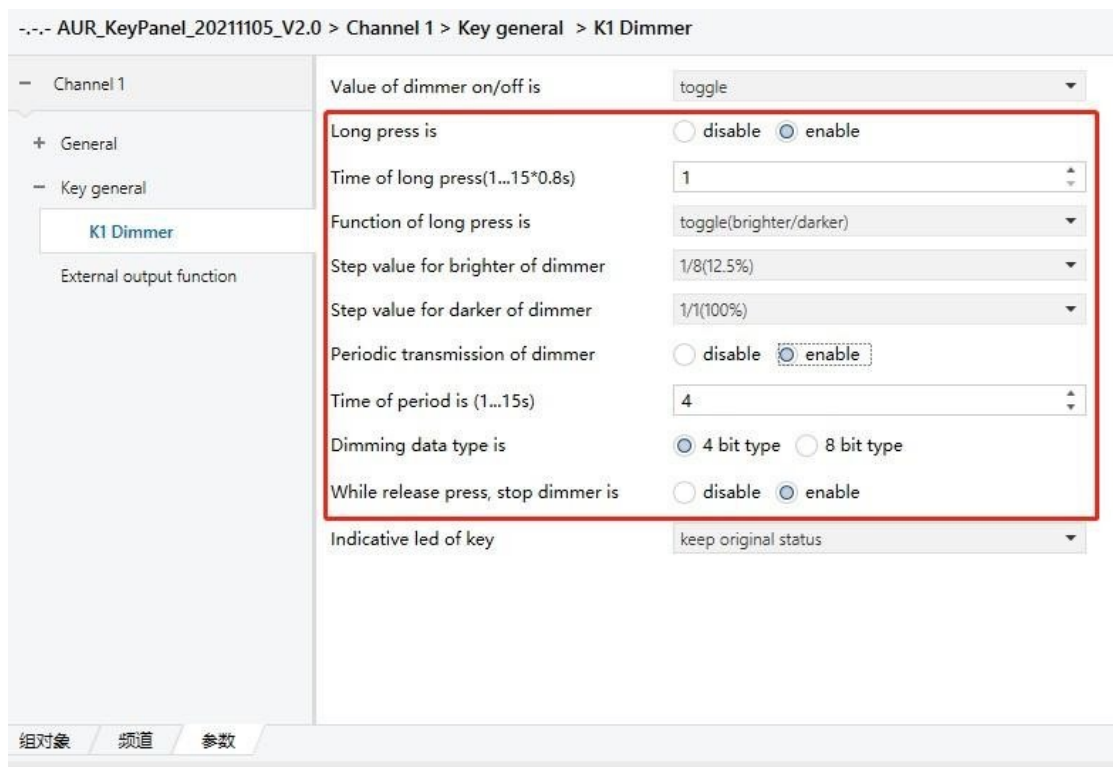


Fig. 3.2.2-2 Parameter Setting Window “Key X dimmer page”

**Parameter “Time of long press(1...15\*0.8s)”**

This parameter is used to set the time for a long press of a key, i.e., a long press of ? seconds button is determined as long press.

Range: 1...15, Unit: 0.8s

**Parameter “Function of long press is”**

This parameter is used to set the function realized by long pressing the button. Options: toggle ( brighter/darker )

brighter

darker

Select“toggle (brighter/darker) ”, long press the button to achieve the functions of brightening, dimming, brightening, dimming...

The parameter setting interface is shown in Fig.3.2.2-2.

#### **Parameter “Step value for brighter of dimmer”**

This parameter is used to set the brightness value of the dimmer. Options

: 1/1(100%)

1/2(50%)

1/4(25%)

1/8(12.5%)

1/16(6.3%)

1/32(3.1%)

1/64(1.6%)

#### **Parameter “Step value for darker of dimmer”**

This parameter is used to set the dimming value of the dimmer. Options

: 1/1(100%)

1/2(50%)

1/4(25%)

1/8(12.5%)

1/16(6.3%)

1/32(3.1%)

1/64(1.6%)

Select“brighter”, long press the button to achieve the function of dimming。

The parameter setting interface is shown in Fig.3.2.2-3.

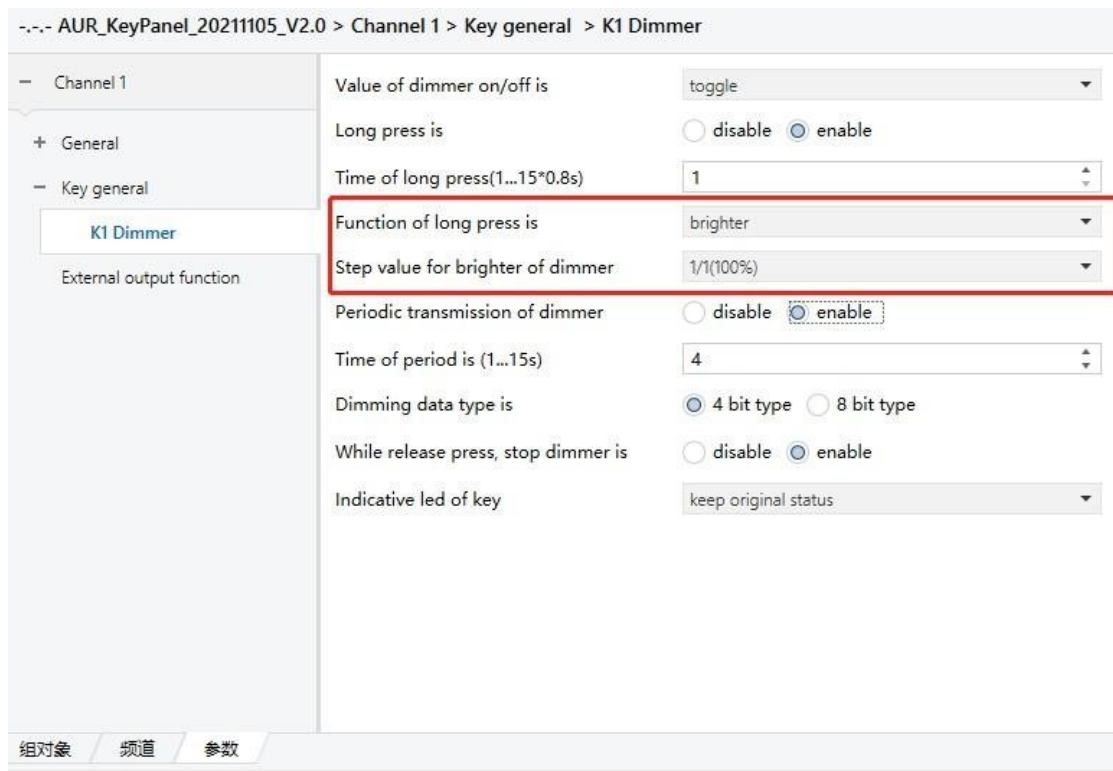


Fig. 3.2.2-3 Parameter Setting Window “Key X dimmer page”

**Parameter “Step value for brighter of dimmer”**

This parameter is used to set the brightness value of the dimmer. Options

- : 1/1(100%)
- 1/2(50%)
- 1/4(25%)
- 1/8(12.5%)
- 1/16(6.3%)
- 1/32(3.1%)
- 1/64(1.6%)

Select “darker” and press and hold the button to achieve the darkening function. The parameter setting interface is shown in Fig. 3.2.2-4.

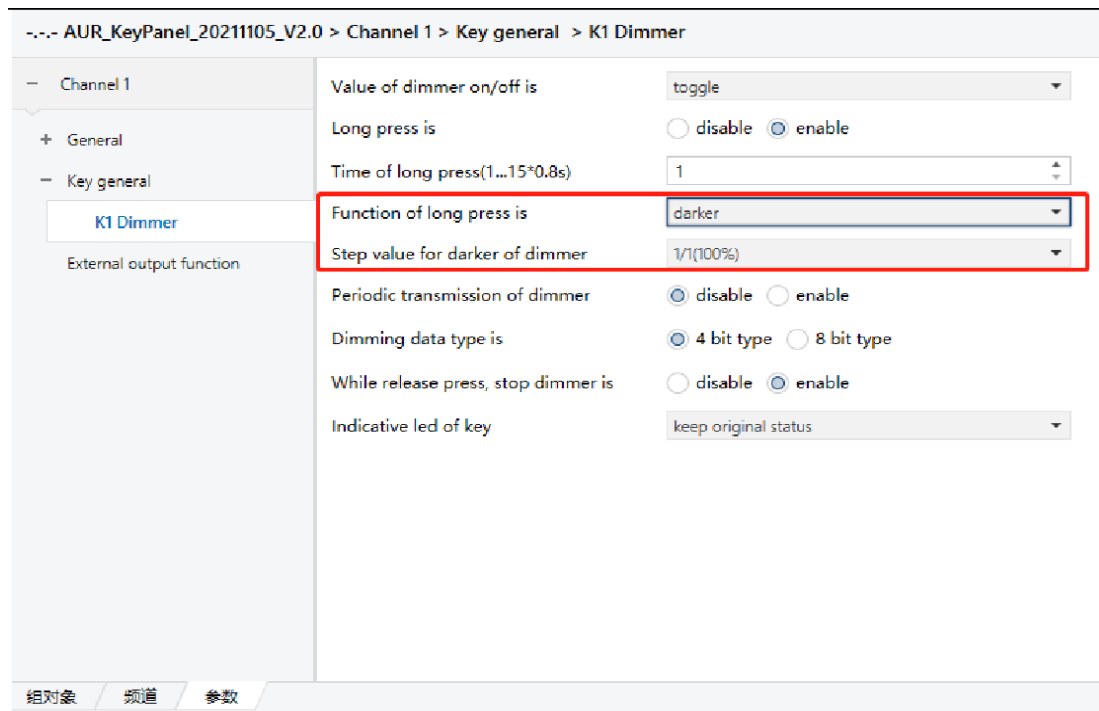


Fig. 3.2.2-4 Parameter Setting Window“Key X dimmer page”

**Parameter “Step value for darker of dimmer”**

This parameter is used to set the dimming value of the dimmer. Options

- : 1/1(100%)
- 1/2(50%)
- 1/4(25%)
- 1/8(12.5%)
- 1/16(6.3%)
- 1/32(3.1%)
- 1/64(1.6%)

*Note: The set dimmer dimming/darkening values are explained as follows, first the dimmer dimming/darkening values are related to the setting of the parameter “Dimmer data type is”:*

**1、** *When the **Parameter “Dimmer data type is”** is set to 4 bit type, the dimmer performs relative dimming, and the meanings of the brightening/darkening values are as follows:*

(100%)1/1	1/2(50%)	1/4(25%)	1/8(12.5%)	1/16(6.3%)	1/32(3.1%)	1/64(1.6%)
1	2	3	4	5	6	7

*When the brighter selects the values in the optional items in turn, press and hold the button to send 09, 0A, 0B, 0C, 0D, 0E, 0F in sequence.*

*When darker selects the values in the optional items in turn, press and hold the button to send out 01, 02, 03, 04, 05, 06, 07 in sequence.*

*The highest bit of the value issued here is 1 for brighter; the highest bit is 0 for darker.*

**2、** *When the parameter “Dimmer data type is” is set to 8 bit type, the dimmer performs absolute dimming, and the meanings of the brightening/dimming values are as follows:*

1/1(100%)	1/2(50%)	1/4(25%)	1/8(12.5%)	1/16(6.3%)	1/32(3.1%)	1/64(1.6%)
255	128	64	32	16	8	4

When brighter selects the optional values in turn, it means how much to add; when darker selects the optional values in turn, it means how much to subtract.

For example: parameter “Function of long press is” select “toggle (brighter/darker)”,and parameter “Step value for brighter of dimmer” select “1/8(12.5%)” and parameter “Step value for darker of dimmer” When “1/1(100%)” is selected, When the parameter “Dimmer data type is” selects “4 bit type”, the communication object “Dimmer for long press, KX” sends data 0x0C when the button is pressed for the first time, When the button is long pressed for the second time, the communication object “Dimmer for long press, KX” sends data 0x01.

**Parameter “Periodic transmission of dimmer”**

Continuously long press the button without releasing, whether to turn on the cycle to send dimming value.

- Options: disable
- enable

Select “disable” to disable the cycle transmission of the dimmer, i.e. to send only one data by pressing the button for a long time without releasing it.

Select “enable” to enable the period transmission of the dimmer, i.e. if the button is pressed and not released, the dimming value is repeated after the parameter “Time of period is(1...15s)”. .15s)” time, the dimming value will be repeated until the key is released.

The parameter setting interface is shown in Fig. 3.2.2-5.

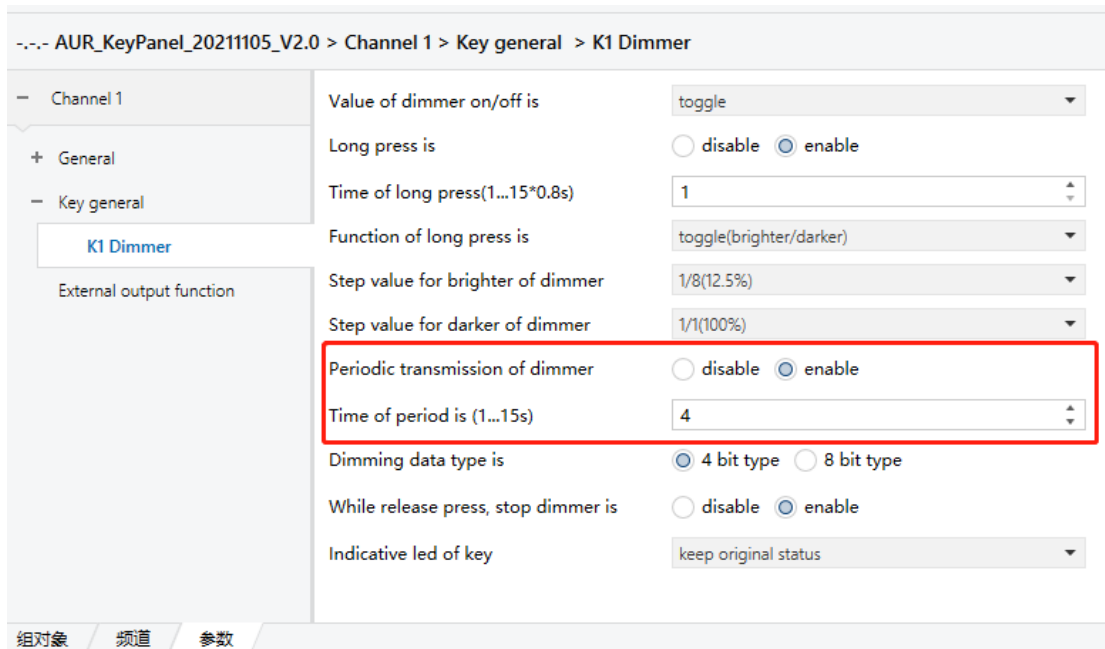


Fig. 3.2.2-5 Parameter Setting Window “Key X dimmer page”

**Parameter “Time of period is(1...15s)”**

This parameter is used to set the period transmission time of the dimming value. Range: 1...15, Unit: Seconds

**Parameter “Dimming data type is”**

This parameter is used to set the dimming data type. Options

- : 4 bit byte
- 8 bit byte

Select “4 bit byte” to set the dimming data type to “4 bit”.

The parameter setting interface is shown in Fig. 3.2.2-5.

**Parameter “While release press, stop dimmer is”**

This parameter sets whether the dimming stops when the button is released after a long press.

- Options: disable
- enable

Select “disable”, when the long press button does not stop dimming after release, i.e. the communication object “Dimmer for long press, KX” does not send data 00.

Select “enable” to stop dimming when the button is released after a long press, i.e. the communication object “Dimmer for long press, KX” sends the data 00 to stop dimming.

Select “8 bit byte” and set the dimming data type to “1 byte”.

The parameter setting interface is shown in Fig. 3.2.2-6.

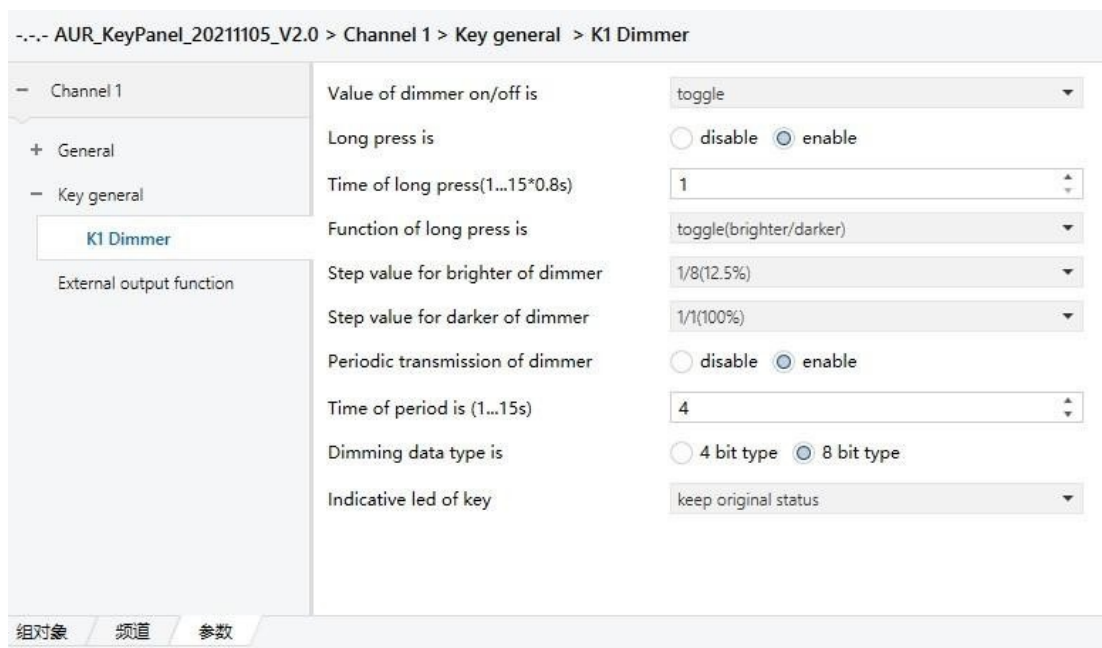


Fig. 3.2.2-6 Parameter Setting Window “Key X dimmer page”

**Parameter “Indicative led of key”**

This parameter is used to set the changing state of the indicator light corresponding to the button after the button is pressed.

- Options: keep original status
- show telegram of output
- show telegram of feedback

show action of press key

Select “keep original status”, the indicator light corresponding to the button will keep the original state unchanged.

Select “show telegram of output” to display according to the output of the button. The parameter setting interface is shown in Fig. 3.2.2-7.

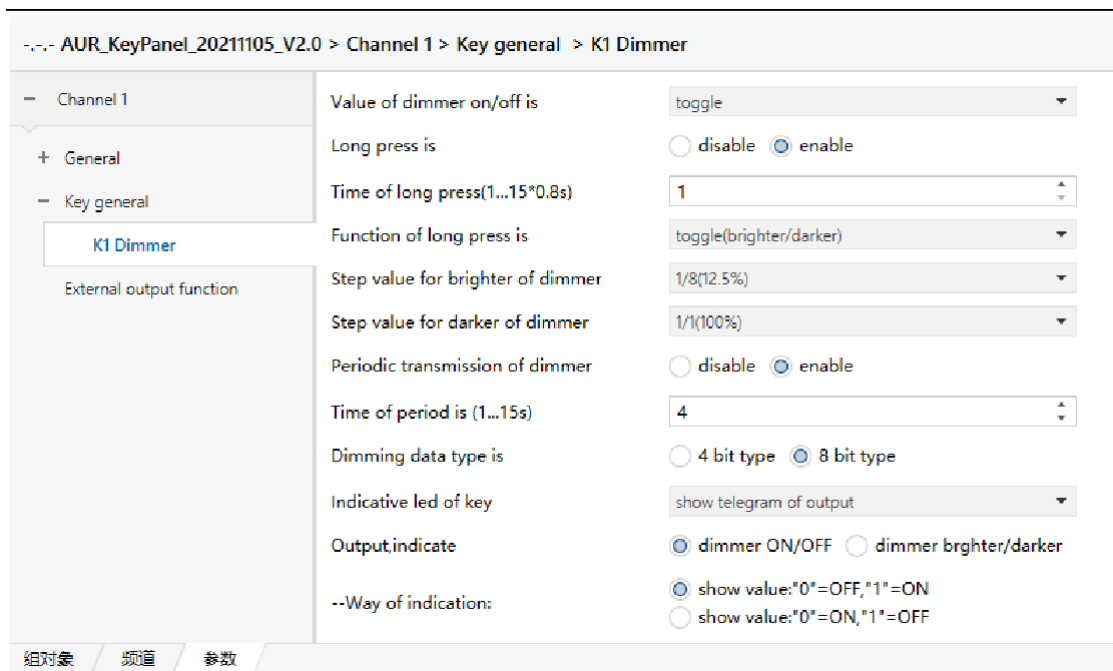


Fig. 3.2.2-7 Parameter Setting Window “Key X dimmer page”

**Parameter “Output ,indicate”**

This parameter is used to set the display of the indicator light.

Options: dimmer ON/OFF

dimmer brighter/darker

Select “dimmer ON/OFF”, it only works for short press button.

The parameter setting interface is shown in Fig. 3.2.2-7.

**Parameter “Way of indication”**

This parameter is used to set the display mode of the indicator light under the short press button.

Options: show value: “0”=OFF,“1”=ON

show value: “0”=ON,“1”=OFF

Select “show value: “0”=OFF, “1”=ON”, short press the button, if the communication object “Dimmer ON/OFF for short, KX” data 00, the corresponding indicator light is off, and 01 is the corresponding indication Light.

Select “show value: “0”=ON, “1”=OFF”, short press the button, if the communication object “Dimmer ON/OFF for short, KX” data 00, the corresponding indicator light will be on, if the data 01, the corresponding indicator light will be on light off.

Select “dimmer brighter/darker”, it only works for long press button, here it is only valid when the parameter “Dimming data type is” selects “4 bit byte”.

The parameter setting interface is shown in Fig. 3.2.2-8.

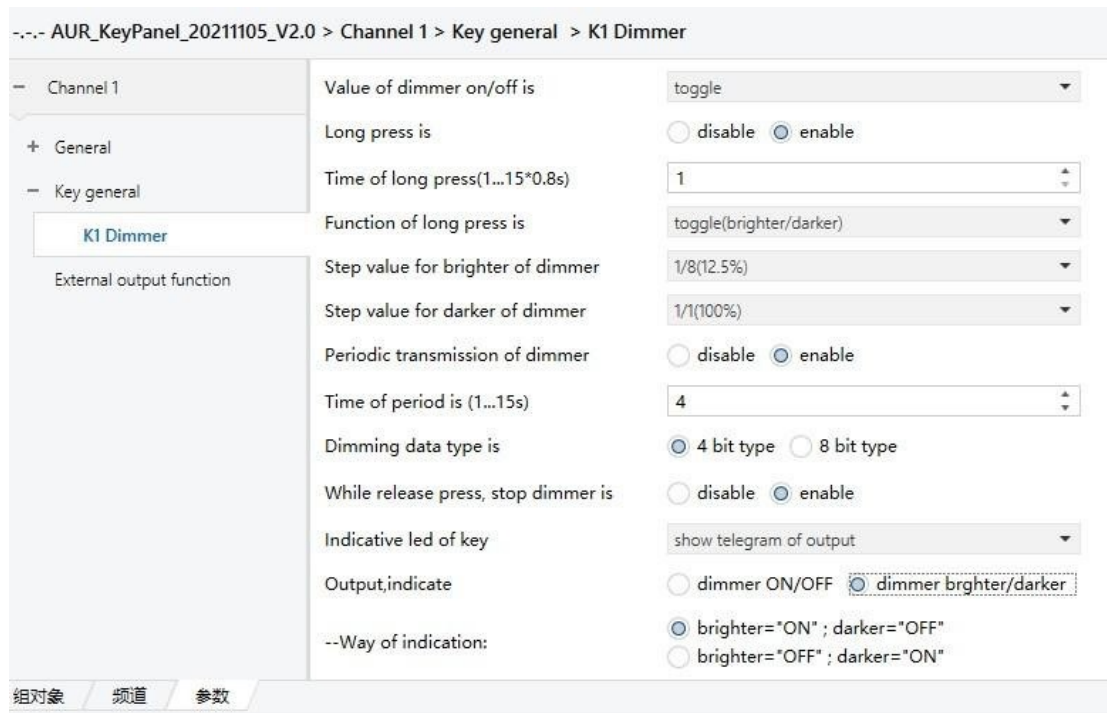


Fig. 3.2.2-8 Parameter Setting Window “Key X dimmer page”

**Parameter “Way of indication”**

This parameter is used to set the display mode of the indicator light when the button is pressed for a long time.

Options: “brighter”=ON; “darker”=OFF  
 “brighter”=OFF; “darker”=ON

Select “brighter”=ON; “darker”=OFF”, press and hold the button, if the data of the communication object “Dimmer for long press, KX” is brighter, the corresponding light will be on, if the data is darker, the corresponding light will be off.

Select “brighter”=OFF; “darker”=ON”, press and hold the button, if the data of the communication object “Dimmer for long press, KX” is brighter, the corresponding indicator will be off, if the data is darker, the corresponding indicator will be on.

Select “show telegram of feedback”, the light board indicator will show according to the feedback, the communication object is “Feedback of switch, KX”.

The parameter setting interface is shown in Fig. 3.2.2-9.

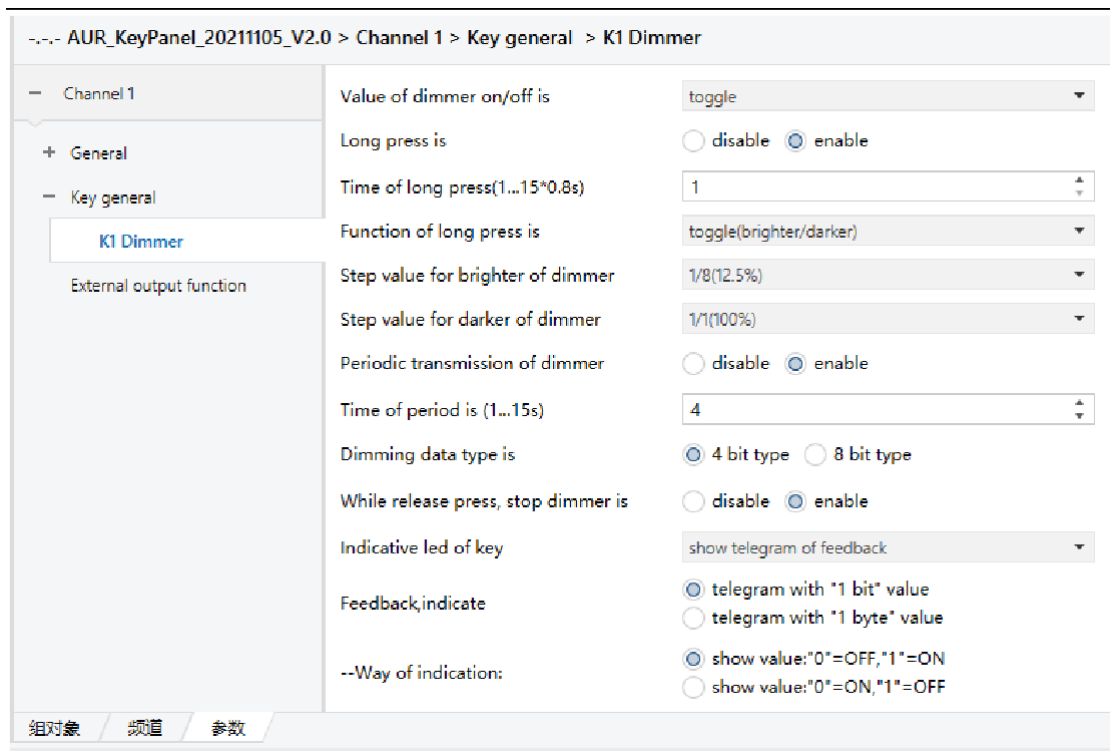


Fig. 3.2.2-9 Parameter Setting Window “Key X dimmer page”

**Parameter “Feedback, indicate”**

This parameter is used to set the method of feedback.

- Options: telegram with “1 bit” value
- telegram with “1 byte” value

Select “telegram with” 1 bit “value” to set the feedback method to 1 bit. The parameter setting interface is shown in Fig. 3.2.2-9.

**Parameter “Way of indication”**

This parameter is used to set the display method of the indicator light under feedback.

- Options: show value: “0”=OFF, “1”=ON
- show value: “0”=ON, “1”=OFF

Select “show value: “0”=OFF, “1”=ON”, write 00 in the communication object “Feedback of switch, KX”, the indicator light is off, and write 01, the indicator light is on.

Select “show value: “0”=ON, “1”=OFF”, write 00 in the communication object “Feedback of switch, KX”, the indicator light is on, and write 01, the indicator light is off.

Select “telegram with “1 byte” value” to set the feedback method to 1 byte.

The parameter setting interface is shown in Fig. 3.2.2-10.

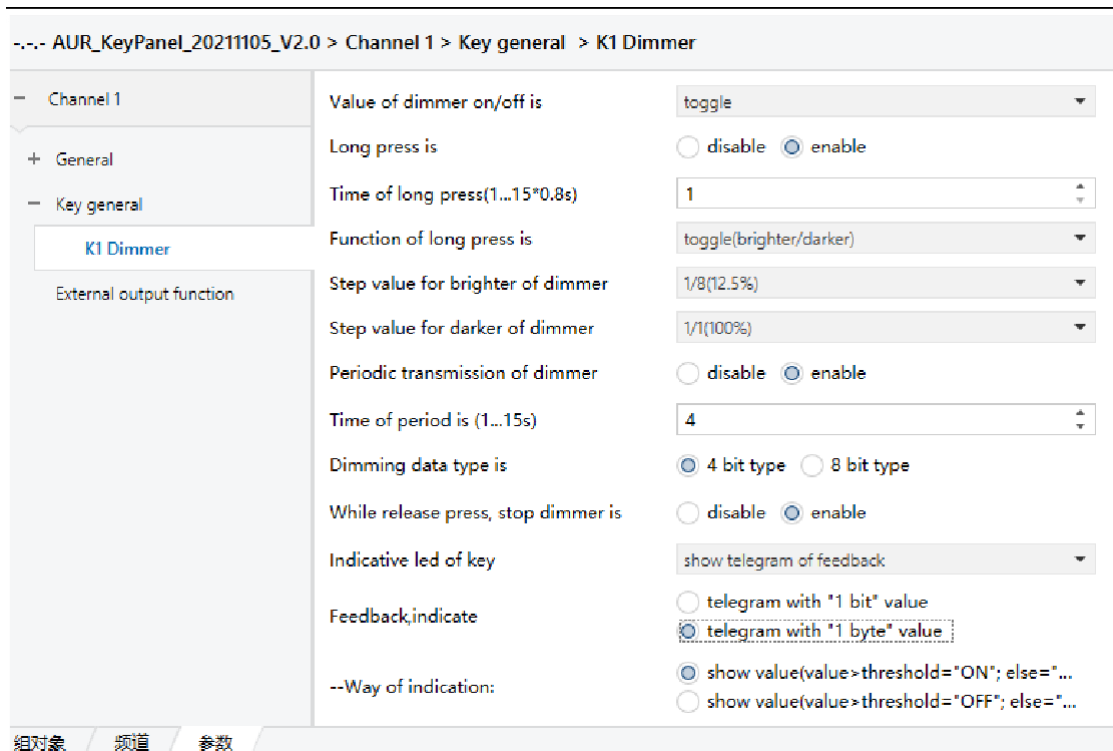


Fig. 3.2.2-10 Parameter Setting Window “Key X dimmer page”

**Parameter “Way of indication”**

This parameter is used to set the display method of the indicator light under feedback.

- Options: show value (value>threshold=“ON”; else=“OFF”)
- show value (value>threshold=“OFF”; else=“ON”)

Select “show value (value>threshold=“ON”; else=“OFF”)”, if the value written in the communication object “Feedback of switch, KX” is greater than the value set in threshold, the indicator light is on, otherwise the indicator light off.

Select “show value (value>threshold=“OFF”; else=“ON”)”, if the value written in the communication object “Feedback of switch, KX” is greater than the value set in threshold, the indicator light will be off, otherwise the indicator light on.

**Parameter “Led indicate, Threshold is(0...255)”**

This parameter is used to set the value of threshold.

Ranges: 0...255

Select “show action of press key”, the indicator light of the light board will display according to the state of the button. When the button is pressed, the indicator light will be on. When the button is released, the indicator light will be off.

The parameter setting interface is shown in Fig. 3.2.2-11.

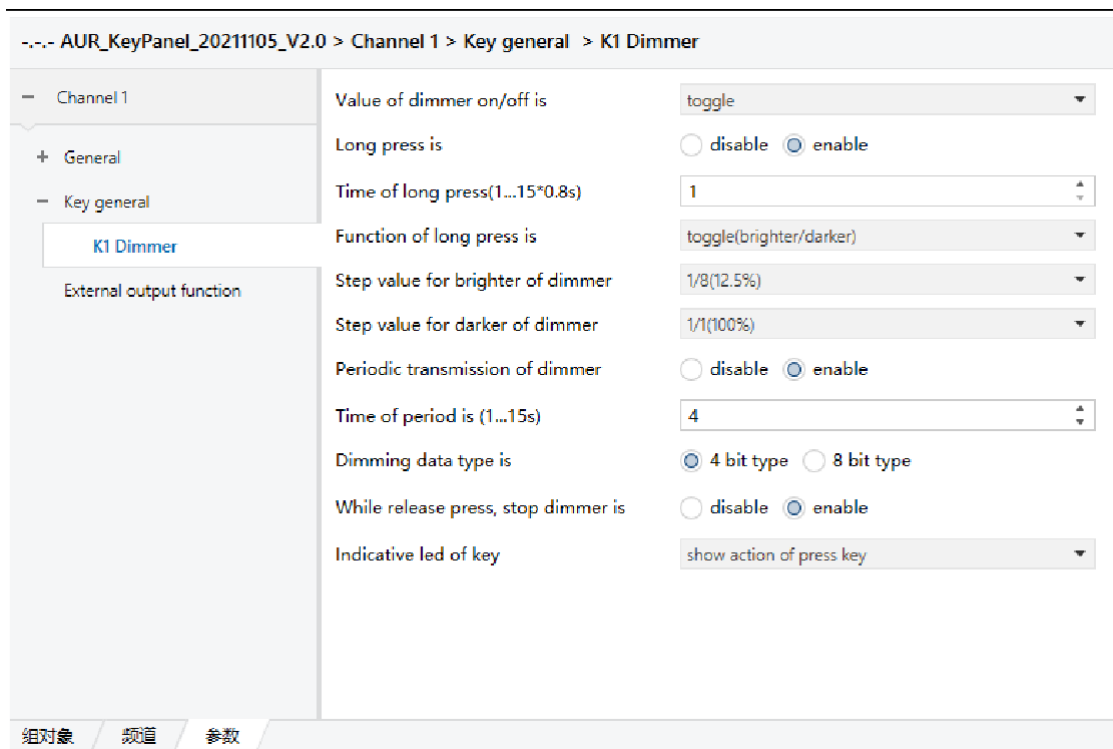


Fig. 3.2.2-11 Parameter Setting Window “Key X dimmer page”

### 3.2.3 Parameter setting window “Key X shutter page”

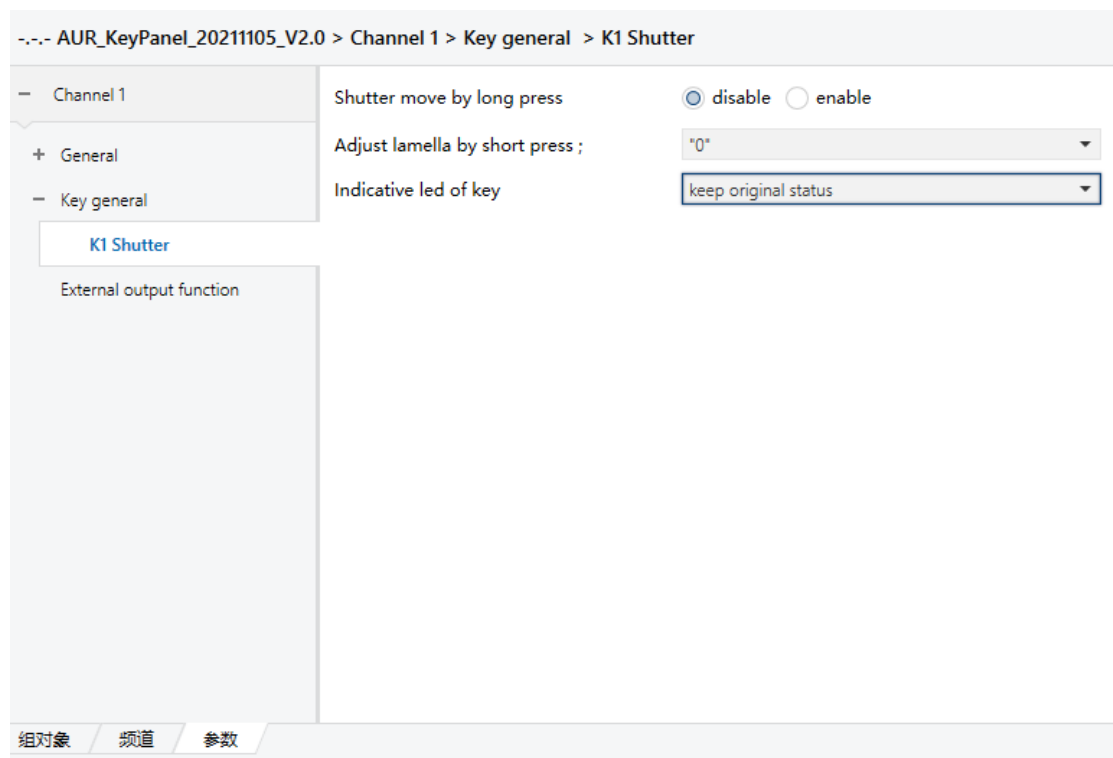


Fig. 3.2.3-1 Parameter Setting Window “Key X shutter page”

#### Parameter “Shutter move by long press”

This parameter sets whether to enable the long press function of the button.

- Options: disable
- enable

Select “disable” to disable the long press function of the button.

Select “enable” to enable the long press function of the button for moving the curtain, the communication object is “Move shutter, KX (0:up/decrease,1:down/increase)”.

The parameter setting interface is shown in Fig.3.2.3-2.

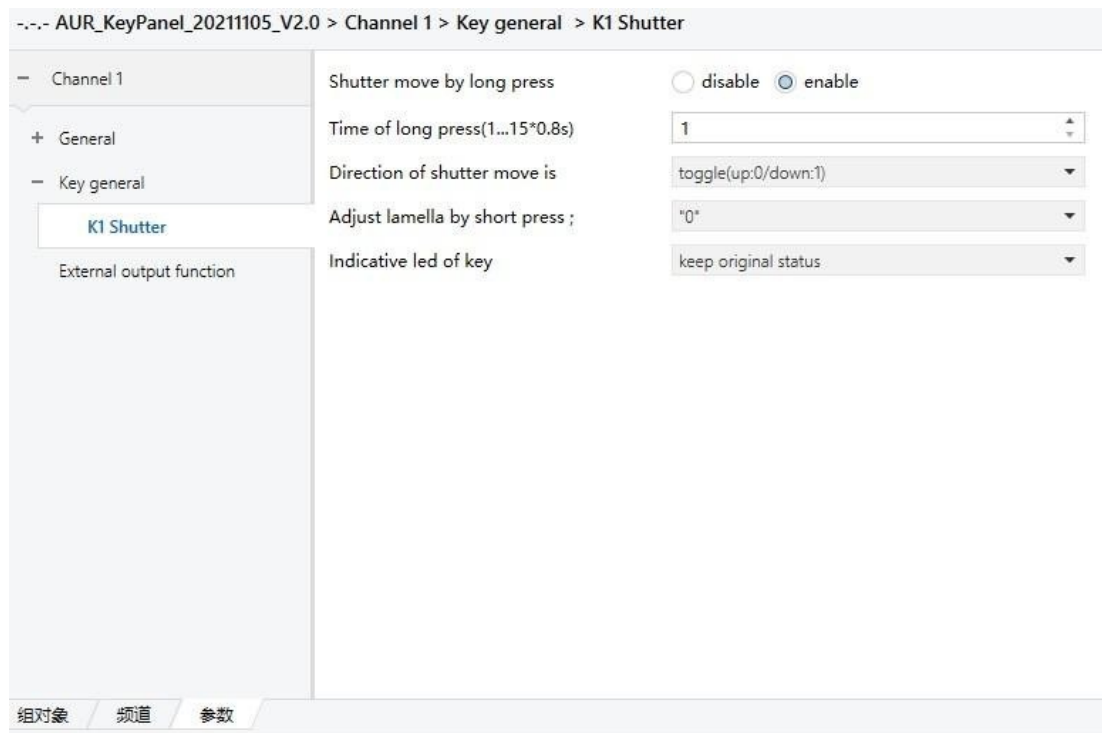


Fig. 3.2.3-2 Parameter Setting Window “Key X shutter page”

**Parameter “Time of long press(1...15\*0.8s)”**

This parameter is used to set the time for a long press of a button, i.e., a long press of ? seconds button is determined as long press.

Range: 1...15, Unit: 0.8 Seconds

**Parameter “Direction of shutter move is”**

This parameter is used to set the direction of long press to move the curtain.

- Options: toggle(up:0/down:1)
- up(teleg.value is“0”)
- down(teleg.value is“1”)

Select “toggle(up:0/down:1)”, press and hold the button, and the communication object “Move shutter, KX” sends the data 01 to move the curtain downward and the data 00 to move the curtain upward.

Select “up(teleg.value is “0”)", press and hold the button, and the communication object “Move shutter, KX” sends data 00 to move the curtain upward.

Select “down(teleg.value is “1”)", press and hold the button, and the communication object “Move shutter, KX” sends data 01 to move the curtain down.

**Parameter “Adjust lamella by short press”**

This parameter sets the value of the short press message for “Adjust lamella of shutter, KX”. Options

- : “0”
- “1”
- toggle(0/1)

Select “0”, short press the button, and the communication object “Adjust lamella of shutter, KX” sends data 00.

Select “1”, short press the button, and the communication object “Adjust lamella of shutter, KX” sends data 01.

Select “toggle(0/1)”, short press the button, and the communication object “Adjust lamella of shutter, KX” will send data 01, 00, 01, 00... in sequence.

**Parameter “Indicative led of key”**

This parameter is used to set the changing state of the indicator light corresponding to the button after the button is pressed.

- Options: keep original status
- show telegram of output
- show telegram of feedback
- show action of press key

Select “keep original status”, the indicator light corresponding to the button will keep the original state unchanged.

Select “show telegram of output”, the light board indicator light will be displayed according to the output of the button.

The parameter setting interface is shown in Fig. 3.2.3-3.

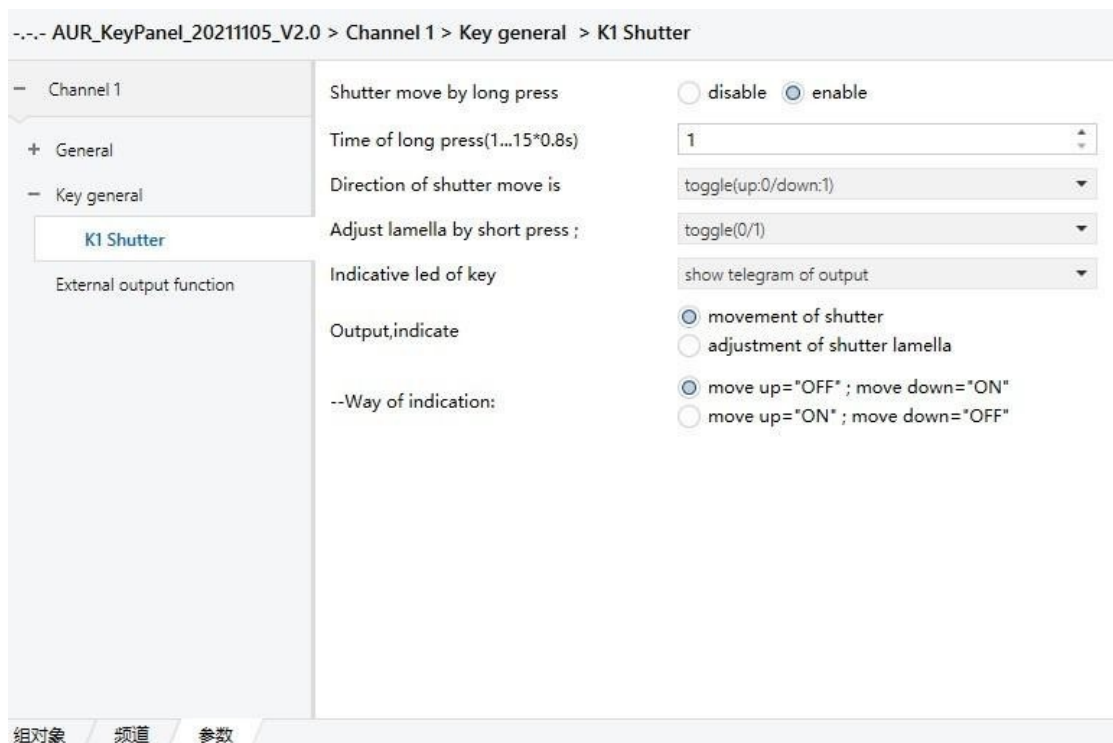


Fig. 3.2.3-3 Parameter Setting Window “Key X shutter page”

**Parameter “Output ,indicate”**

This parameter is used to set the display of the indicator light.

- Options: movement of shutter
- adjustment of shutter lamella

Select “movement of shutter”, the display of the indicator light works according to the output of the long press button.

The parameter setting interface is shown in Fig. 3.2.3-3.

**Parameter “Way of indication”**

This parameter is used to set the display method of the indicator light when the button is pressed for a long time.

- Options: move up=“ON”,move down=“OFF”
- move up=“OFF”,move down=“ON”

Select “move up=“ON”, move down=“OFF””, long press the button, the object “Move shutter” data is 0, the indicator light is on, the object “Move shutter” data is 1, the indicator light is off. Select “move up = “OFF”, move down = “ON””, long press the button, the object “Move shutter” data is 0, the indicator light is off, the object “Move shutter” data is 1, the indicator light is on.

Select “adjustment of shutter lamella”, the display of the indicator light works according to the output of the short press button.

The parameter setting interface is shown in Fig. 3.2.3-4.

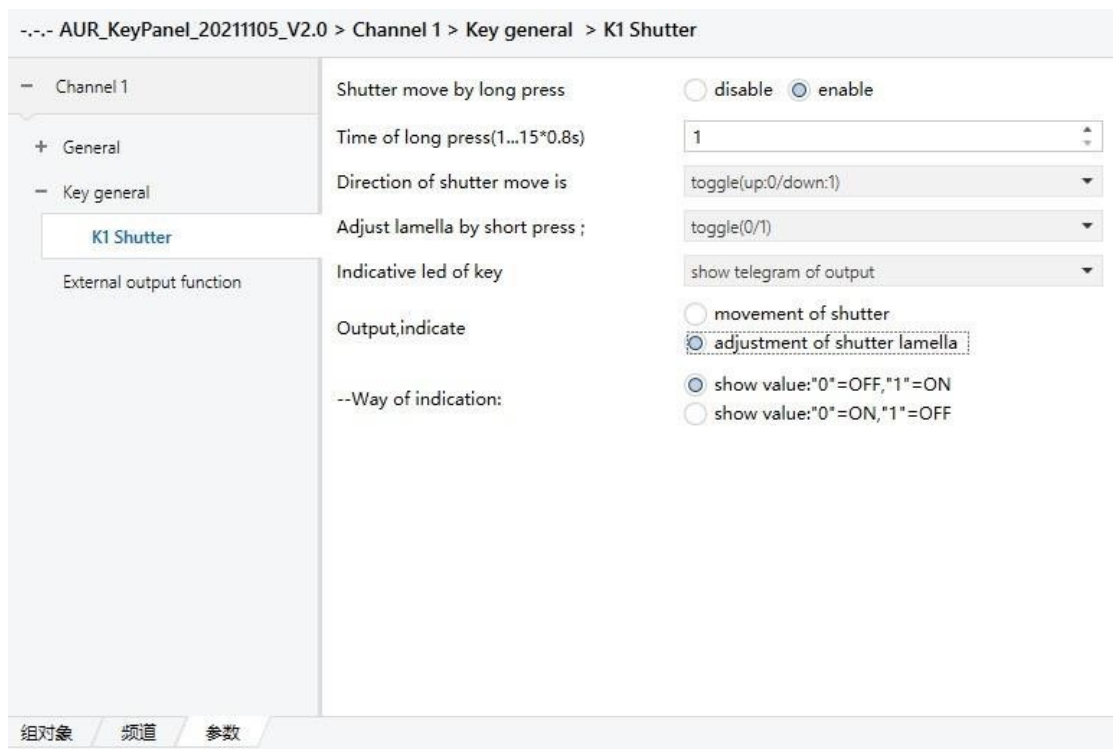


Fig. 3.2.3-4 Parameter Setting Window “Key X shutter page”

**Parameter “Way of indication”**

This parameter is used to set the display method of the indicator light under the short press button.

- Options: show value: “0”=OFF,“1”=ON
- show value: “0”=ON,“1”=OFF

Select “show value: “0”=OFF, “1”=ON”, short press the button, the indicator light corresponding to data 00 of the communication object “Adjust lamella of shutter, KX” is off, and the communication object “Adjust lamella of shutter, KX” The indicator light corresponding to data 01 is on.

Select “show value: “0”=ON, “1”=OFF”, short press the button, the indicator light corresponding to data 01 of the communication object “Adjust lamella of shutter, KX” is off, and the communication object “Adjust lamella of shutter, KX” The indicator light corresponding to the data 00 is on.

Select “show telegram of feedback”, the display of the indicator light is displayed according to the feedback, and the communication object is “Feedback of switch, KX”.

The parameter setting interface is shown in Fig. 3.2.3-5.

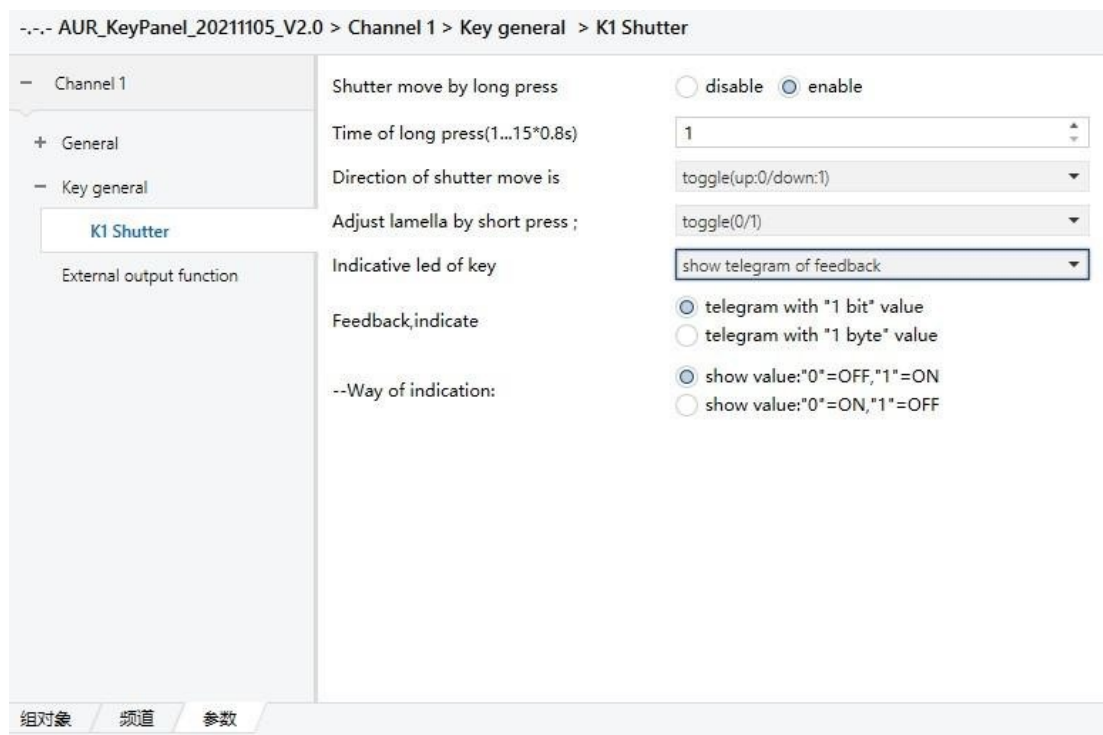


Fig. 3.2.3-5 Parameter Setting Window “Key X shutter page”

**Parameter “Feedback, indicate”**

This parameter is used to set the method of feedback。 Options: telegram with “1 bit” value telegram with “1 byte” value

Select “telegram with” 1 bit “value” to set the feedback method to 1 bit. The parameter setting interface is shown in Fig. 3.2.3-5.

**Parameter “Way of indication”**

This parameter is used to set the display method of the indicator light under feedback.

Options: show value: “0”=OFF,“1”=ON  
 show value: “0”=ON,“1”=OFF

Select “show value: “0”=OFF, “1”=ON”, write 00 in the communication object “Feedback of switch,

KX”, the indicator light is off, and write 01, the indicator light is on.

Select “show value: “0”=ON, “1”=OFF”, write 00 in the communication object “Feedback of switch, KX”, the indicator light is on, and write 01, the indicator light is off.

Select “telegram with “1 byte” value” to set the feedback method to 1 byte.

The parameter setting interface is shown in Fig. 3.2.3-6.

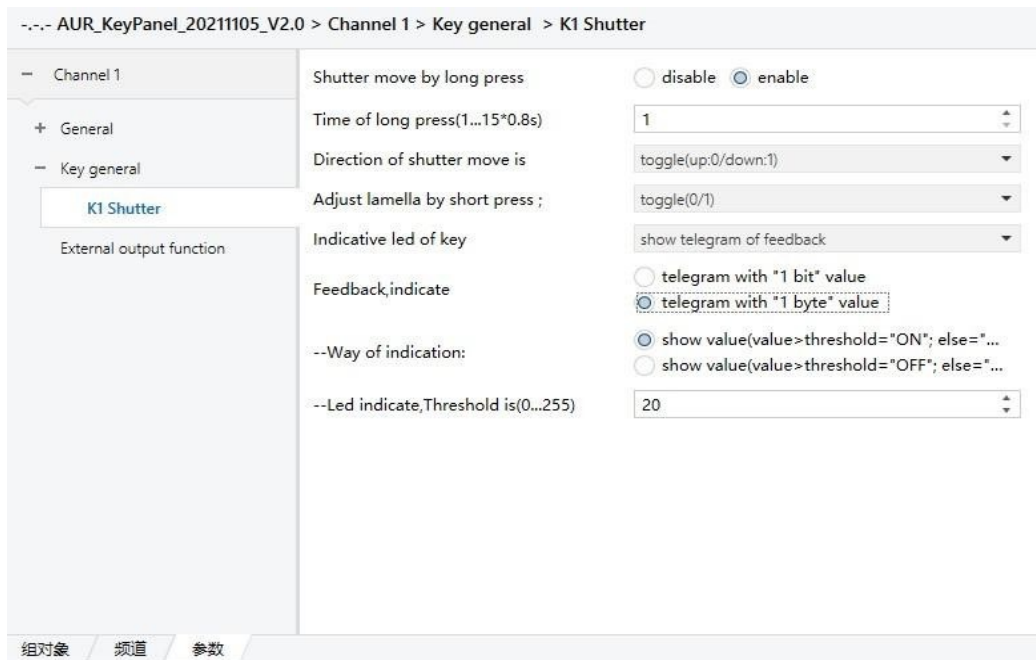


Fig. 3.2.3-6 Parameter Setting Window “Key X shutter page”

**Parameter “Way of indication”**

This parameter is used to set the display method of the indicator light under feedback.

- Options: show value (value>threshold=“ON”; else=“OFF”)
- show value (value>threshold=“OFF”; else=“ON”)

Select “show value (value>threshold=“ON”; else=“OFF”)”, if the value written in the communication object “Feedback of switch, KX” is greater than the value set in threshold, the indicator light is on, otherwise the indicator light off.

Select “show value (value>threshold=“OFF”; else=“ON”)”, if the value written in the communication object “Feedback of switch, KX” is greater than the value set in the threshold, then the indicator light off, otherwise the indicator light on.

**Parameter “Led indicate, Threshold is(0...255)”** This parameter is used to set the value of threshold.

Ranges: 0...255

Select “show action of press key”, the indicator light of the light board will display according to the state of the button. When the button is pressed, the indicator light will be on. When the button is released, the indicator light will be off.

The parameter setting interface is shown in Fig. 3.2.3-7.

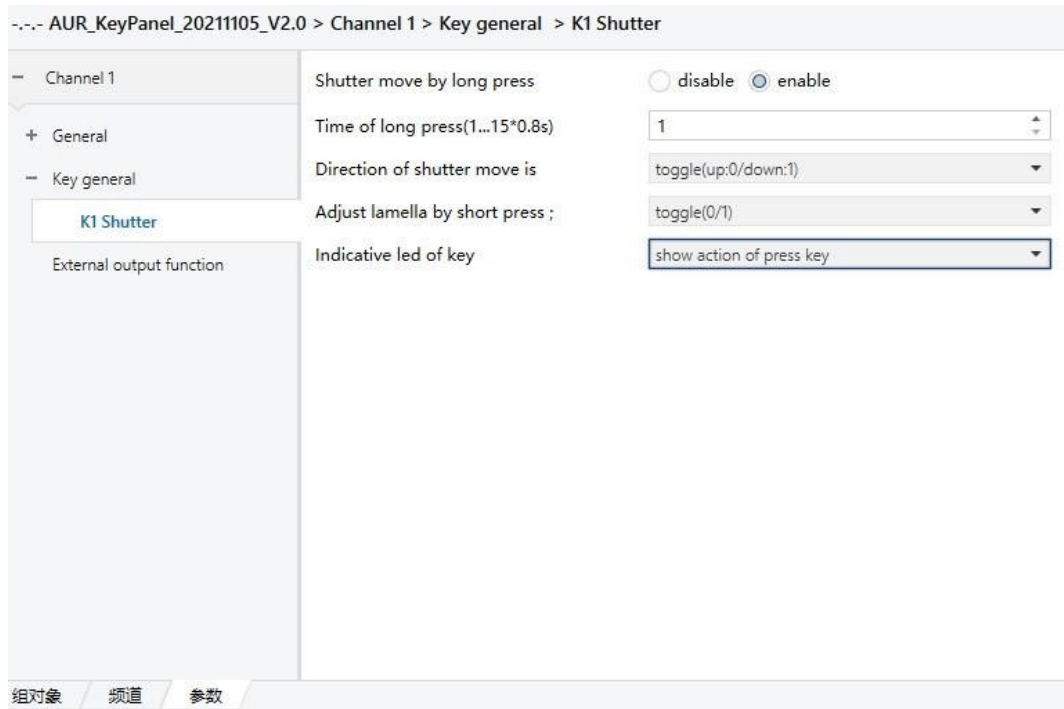


Fig. 3.2.3-6 Parameter Setting Window “Key X shutter page”

### 3.2.4 Parameter setting window “Key X switch value page”

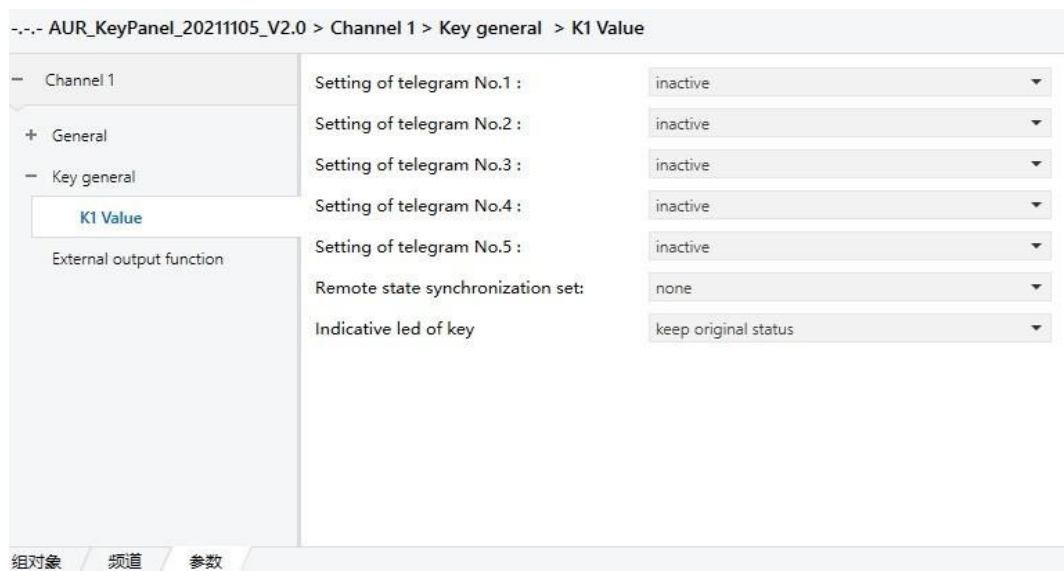


Fig. 3.2.4-1 Parameter Setting Window “Key X switch value page”

#### Parameter “Setting of telegram No.X”

This parameter is used to set the message No.X.

Options: inactive

value type is “1 bit”

value type is “4 bit”

value type is “1 byte”

Select “inactive” to inactivate the setting of the message.

Select “value type is “1 bit””, the message value type is “1 bit”, and the communication object is “Output 1 bit value, KX”.

The parameter setting interface is shown in Fig. 3.2.4-2.

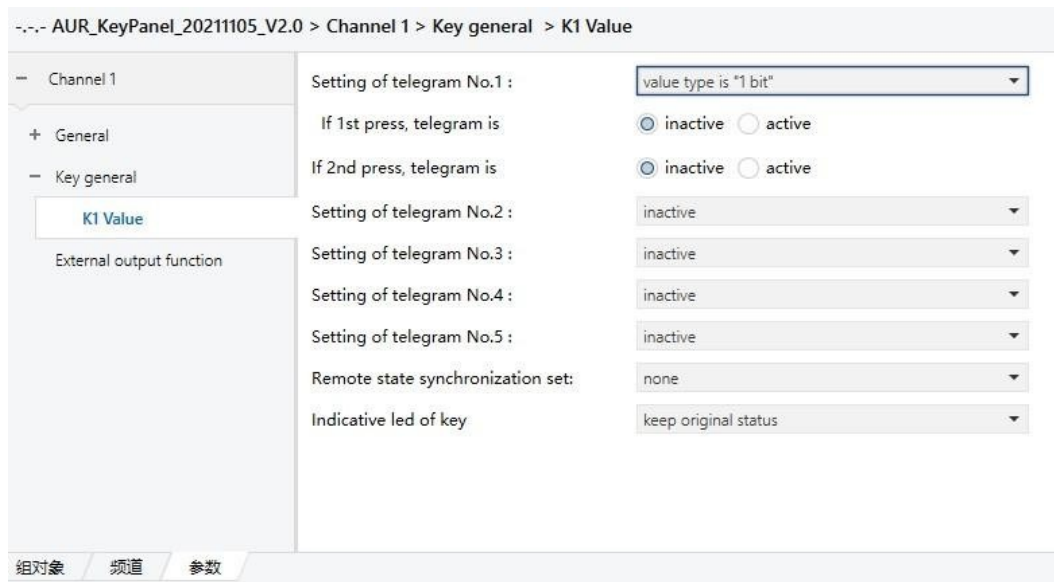


Fig. 3.2.4-2 Parameter Setting Window “Key X switch value page”

**Parameter “If 1st/2nd press, telegram is”**

This parameter is set to whether to send the value of the button corresponding to the first/second press message No.X.

- Options: inactive
- active

Select “inactive” to inactivate the function. Select “active” to activate the function.

The parameter setting interface is shown in Fig. 3.2.4-3.

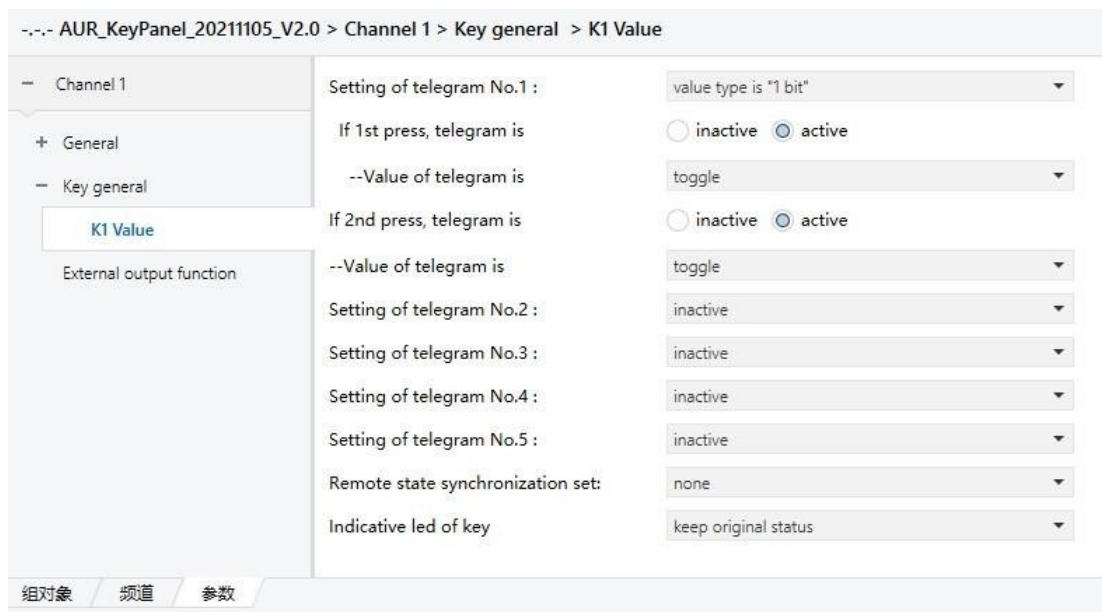


Fig. 3.2.4-3 Parameter Setting Window “Key X switch value page”

**Parameter “Value of telegram is”**

This parameter is set to the value of the message sent by pressing the button. Options

: toggle

ON

OFF

Select “toggle”, press the button to send data respectively 01,00,01,00,01,00.... Select “ON”, press the button to send data 01.

Select “OFF”, press the button to send data 00.

Select “value type is “4 bit”, the message value type is “4 bit”, and the communication object is “Output 4 bit value, KX”.

The parameter setting interface is shown in Fig. 3.2.4-4.

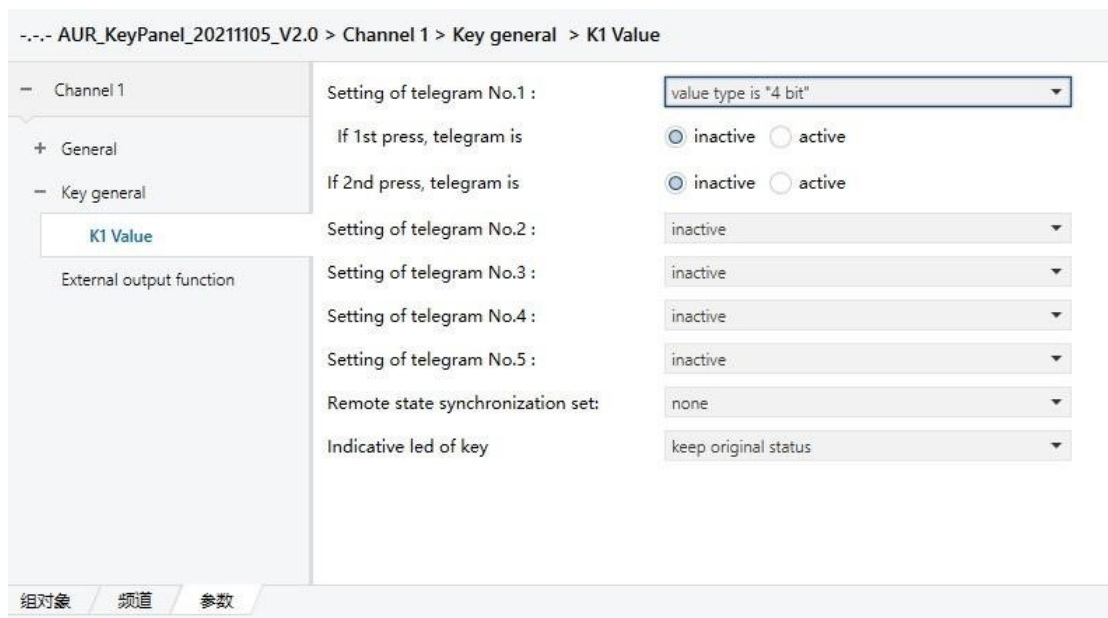


Fig. 3.2.4-4 Parameter Setting Window “Key X switch value page”

**Parameter “If 1st/2nd press, telegram is”**

This parameter is set to whether to send the value of the button corresponding to the first/second press message No.X.

Options: inactive

active

Select “inactive” to inactivate the function. Select “active” to activate the function.

The parameter setting interface is shown in Fig. 3.2.4-5.

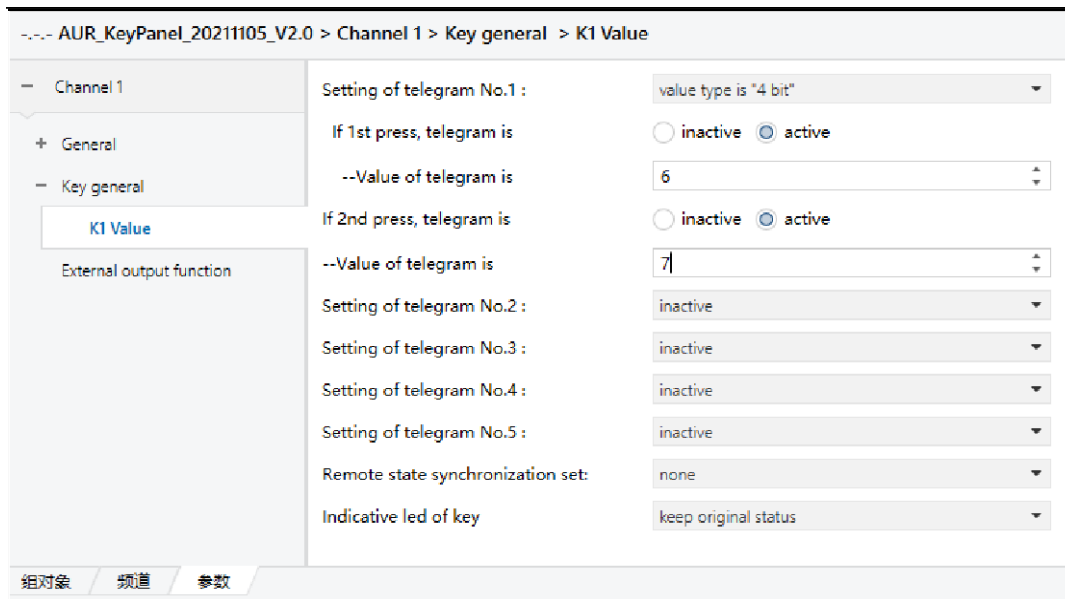


Fig. 3.2.4-5 Parameter Setting Window “Key X switch value page”

**Parameter “Value of telegram is(0...15)”**

This parameter is set to the value of the message sent by pressing the button. Range: 0...15

Select “value type is “1 byte”, the message value type is “1 byte”, and the communication object is “Output 1 byte value, KX”.

The parameter setting interface is shown in Fig. 3.2.4-6.

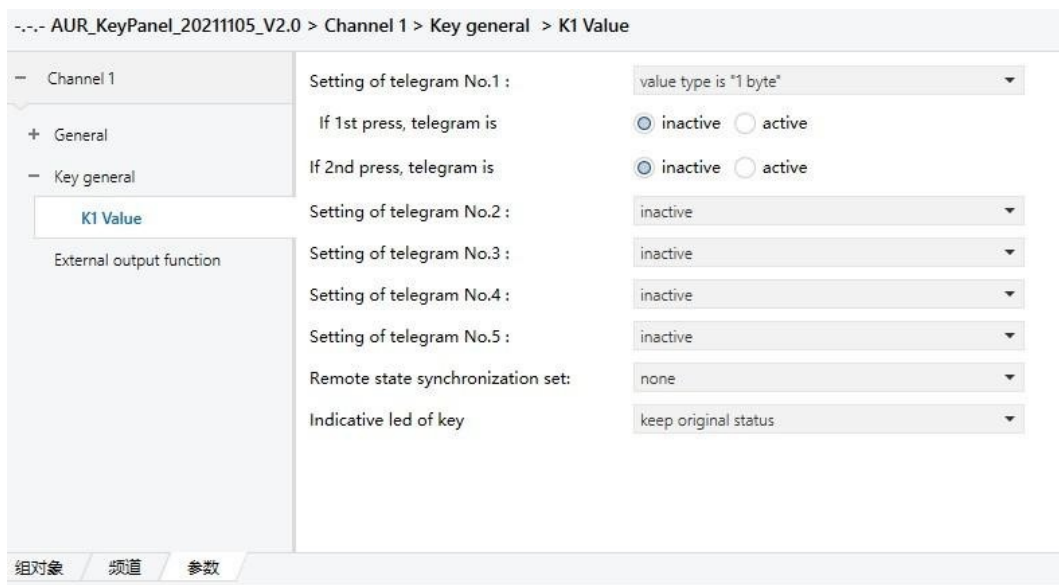


Fig. 3.2.4-6 Parameter Setting Window “Key X switch value page”

**Parameter “If 1st/2nd press, telegram is”**

This parameter is set to whether to send the value of the button corresponding to the first/second press message No.X.

- Options: inactive
- active

Select “inactive” to inactivate the function.

Select “active” to activate the function.

The parameter setting interface is shown in Fig. 3.2.4-7.

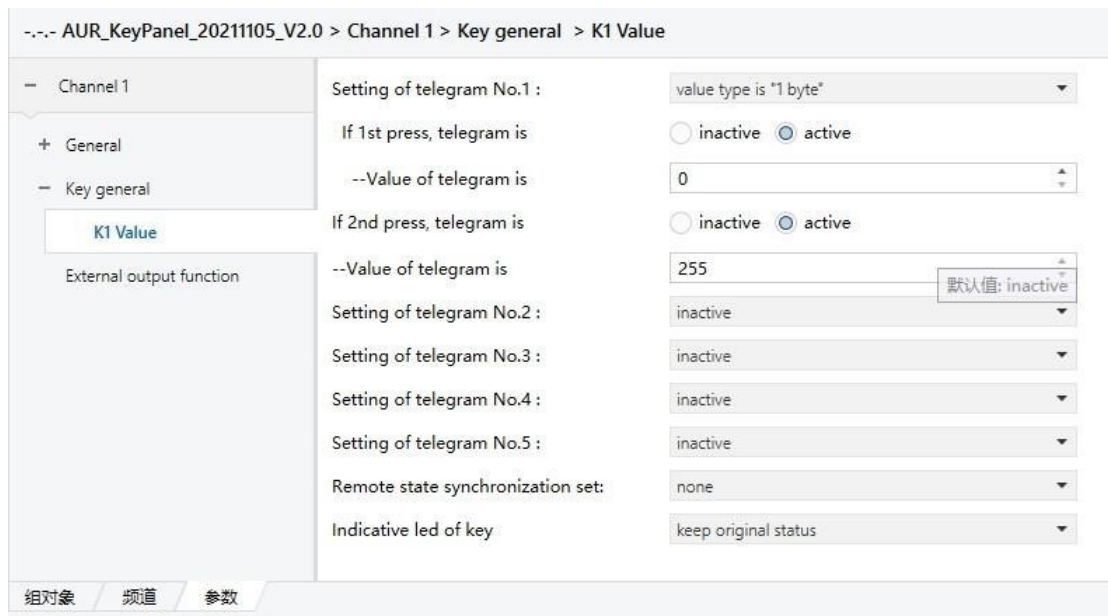


Fig. 3.2.4-7 Parameter Setting Window “Key X switch value page”

**Parameter “Value of telegram is(0...255)”**

This parameter is set to the value of the message sent by pressing the button. Range: 0...255

**Parameter “Indicative led of key”**

This parameter is used to set the display method of the light board indicator light.

- Options: keep original status
- show telegram of output
- show telegram of feedback
- show action of press key

Select “keep original status”, the indicator light corresponding to the key will keep the original state unchanged.

Select “show telegram of output”, the light board indicator light will be displayed according to the output of the button.

The parameter setting interface is shown in Fig. 3.2.4-8.

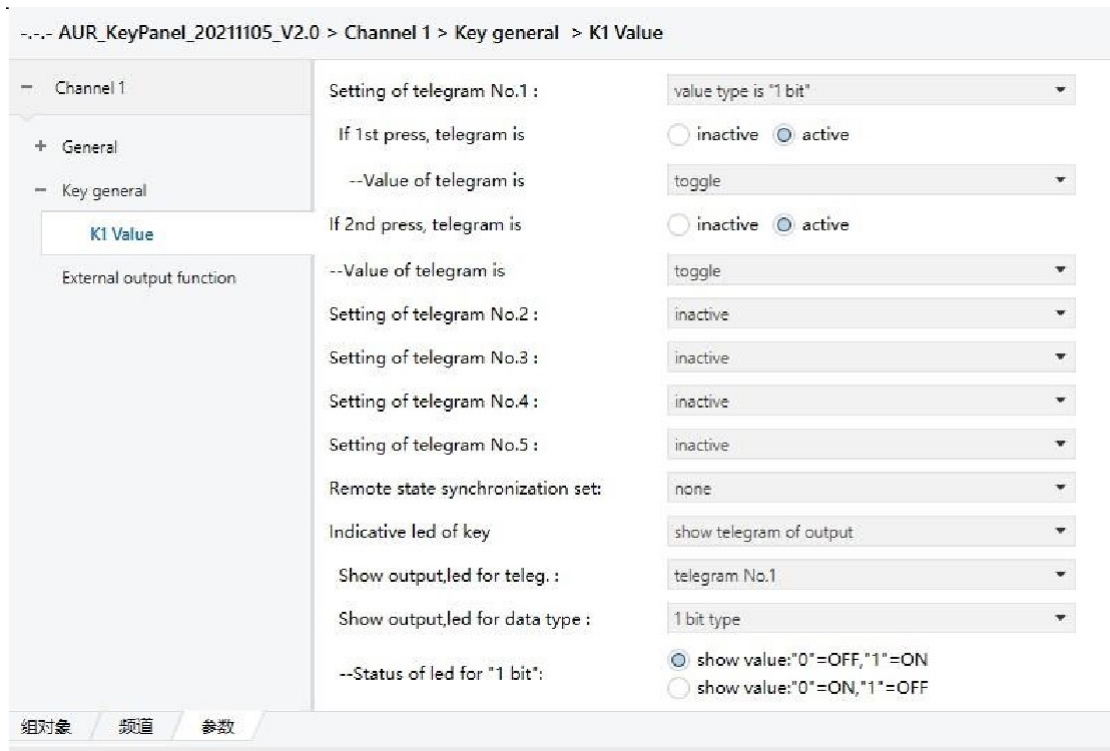


Fig. 3.2.4-8 Parameter Setting Window “Key X switch value page”

**Parameter “Show output ,led for teleg”**

This parameter is set to the display of the indicator light according to which message is output.

- Options:
- telegram No.1
  - telegram No.2
  - telegram No.3
  - telegram No.4
  - telegram No.5

Select “telegram No.1”, the display of the indicator light is based on the output of telegram No.1.  
 Select “telegram No.2”, the display of the indicator light is based on the output of telegram No.2.  
 Select “telegram No.3”, the display of the indicator light is based on the output of telegram No.3.  
 Select “telegram No.4”, the display of the indicator light is based on the output of telegram No.4.  
 Select “telegram No.5”, the display of the indicator light is based on the output of telegram No.5.

**Parameter “Show output ,led for data type”**

This parameter is set to the output data type of the message according to the light display, and the data type set here must be consistent with the data type set under the corresponding message No.X.

- Options:
- 1 bit type
  - 4 bit type
  - 8 bit type

Select “1 bit type”, the indicator light shows that the output data type of the message is “1 bit”.

The parameter setting interface is shown in Fig. 3.2.4-8.

**Parameter “Status of led for“1 bit””**

This parameter is used to set the state of the indicator light when the message output data type is “1 bit”.

Options: show value: “0”=OFF,“1”=ON show  
value: “0”=ON,“1”=OFF

Select “show value: “0”=OFF, “1”=ON”, after pressing the button, the communication object “Output 1 bit value” of the message corresponding to the parameter “Show output, led for teleg”, KX” sends data 00 The corresponding indicator light is off, and the indicator light is on when sending data 01.

Select “show value: “0” = ON, “1” = OFF”, press the button and the parameter “Show output,led for teleg” corresponds to the communication object of the message “Output 1 bit value, KX”, send data 00 then the corresponding light is on, send data 01 then the light is off.

Select “4 bit type”, the indicator light shows that the output data type of the message is “4 bit”.  
The parameter setting interface is shown in Fig. 3.2.4-9.

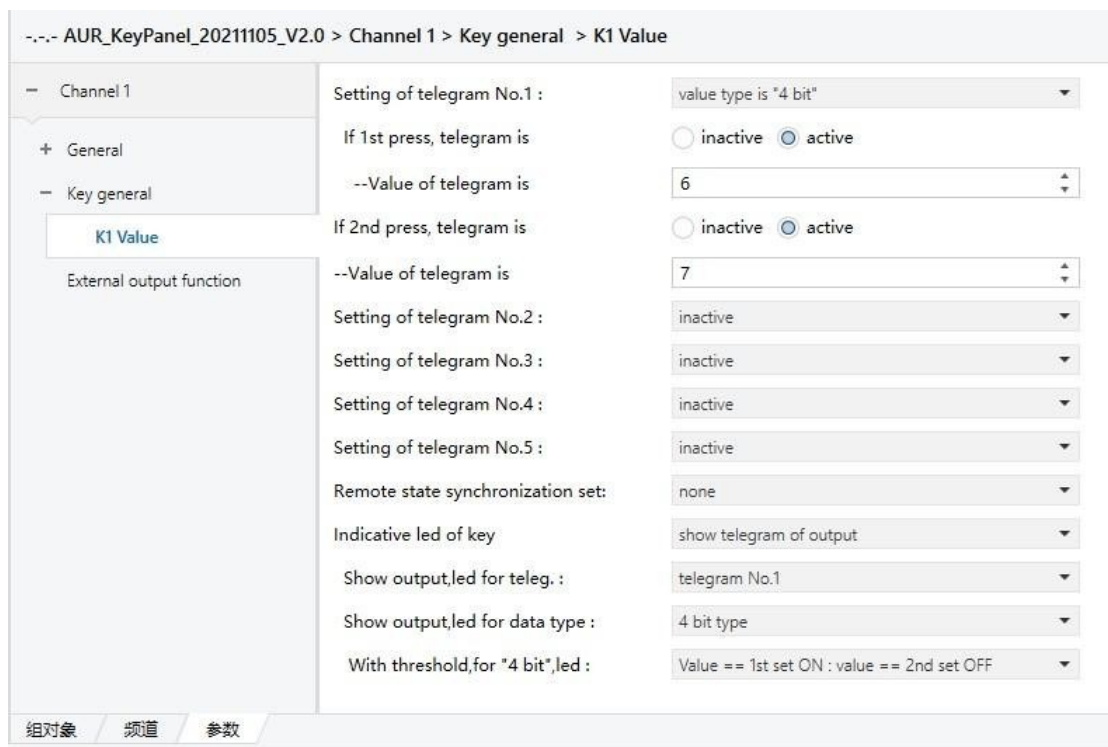


Fig. 3.2.4-9 Parameter Setting Window “Key X switch value page”

**Parameter “With threshold, for“4 bit”, led”**

This parameter sets the change of the indicator according to the value of the telegram output. The output value is related to the parameter “Setting of telegram No. X”, the value corresponding to X is set according to the parameter “Show output ,led for teleg”.

Options: Value == 1st set ON : value == 2nd set OFF  
Value == 1st set OFF : value == 2nd set ON  
Value == 1st set ON : else = OFF  
Value == 2nd set ON : else = OFF  
Value == 1st set OFF : else = ON  
Value == 2nd set OFF : else = ON

Select “Value == 1st set ON : value == 2nd set OFF”, the object “Output 4 bit value” receives the

message value of the 1st set value, the corresponding indicator light is on, and the received message value is the 2nd set value, The corresponding indicator light is off.

Select “Value == 1st set OFF : value == 2nd set ON”, the object “Output 4 bit value” receives the value of the message set by 1st, the corresponding indicator light is off, and the value of the received message is the value set by 2nd , the corresponding indicator light is on.

Select “Value == 1st set ON : else = OFF”, the object “Output 4 bit value” receives the message value set by 1st, the corresponding indicator light is on, receives other message values, the light is off.

Select “Value == 2nd set ON : else = OFF”, the object “Output 4 bit value” receives the message value set by 2nd, the corresponding indicator light is on, receives other message values, the indicator lights off.

Select “Value == 1st set OFF : else = ON”, the object “Output 4 bit value” receives the value of the message set by 1st, and the corresponding indicator light is off, and when other message values are received, the indicator light is on.

Select “Value == 2nd set OFF : else = ON”, the object “Output 4 bit value” receives the message value set by 2nd, and the corresponding indicator light is off, and receives other message values, the indicator light is on.

Select “8 bit type”, the indicator light shows that the output data type of the message is “8 bit”. The parameter setting interface is shown in Fig. 3.2.4-10.

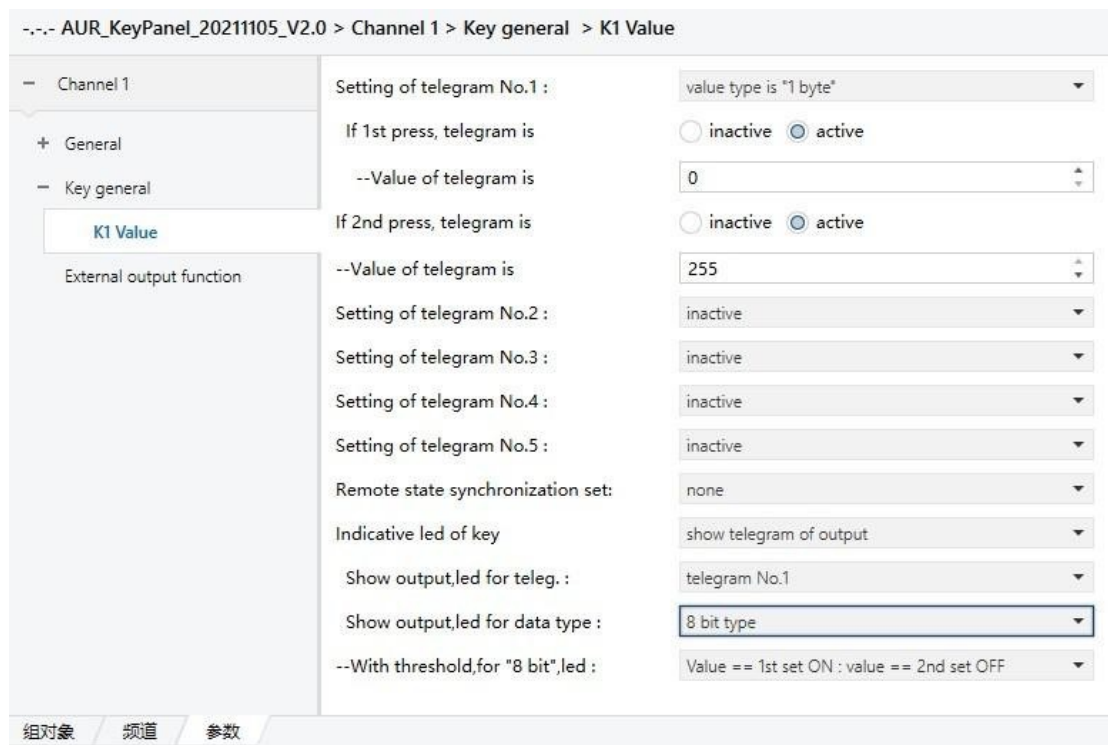


Fig. 3.2.4-10 Parameter Setting Window“Key X switch value page”

**Parameter “With threshold, for“8 bit”, led”**

This parameter sets the change of the indicator according to the output value of the telegram. The output value is related to the parameter “Setting of telegram No. X”, and the value corresponding to X is set according to the parameter “Show output ,led for teleg”.

Options: Value == 1st set ON : value == 2nd set OFF

Value == 1st set OFF : value == 2nd set ON

Value == 1st set ON : else = OF

F Value == 2nd set ON : else = OF

F Value == 1st set OFF : else = ON

Value == 2nd set OFF : else = ON

Select “Value == 1st set ON : value == 2nd set OFF”, the object “Output 1 byte value” receives the value of the message set by 1st, the corresponding indicator light is on, and the value of the received message is the value set by 2nd, The corresponding indicator light is off.

Select “Value == 1st set OFF : value == 2nd set ON”, the object “Output 1 byte value” receives the value of the message set by 1st, the corresponding indicator light is off, and the value of the received message is the value set by 2nd , the corresponding indicator light is on.

Select “Value == 1st set ON : else = OFF”, the object “Output 1 byte value” receives the value of the message set by 1st, and the corresponding indicator light is on, and when other message values are received, the indicator light is off

Select “Value == 2nd set ON : else = OFF”, the object “Output 1 byte value” receives the value of the message set by 2nd, and the corresponding indicator light is on, and when other message values are received, the indicator light is off.

Select “Value == 1st set OFF : else = ON”, the object “Output 1 byte value” receives the message value set by 1st, the corresponding indicator light is off, and the indicator light is on when other message values are received.

Select “Value == 2nd set OFF : else = ON”, the object “Output 1 byte value” receives the value set by the 2nd message, and the corresponding indicator light is off, and receives other message values, the indicator light is on.

Select “show telegram of feedback”, according to the feedback output display, the communication object is “Feedback of switch, KX”.

The parameter setting interface is shown in Fig. 3.2.4-11.

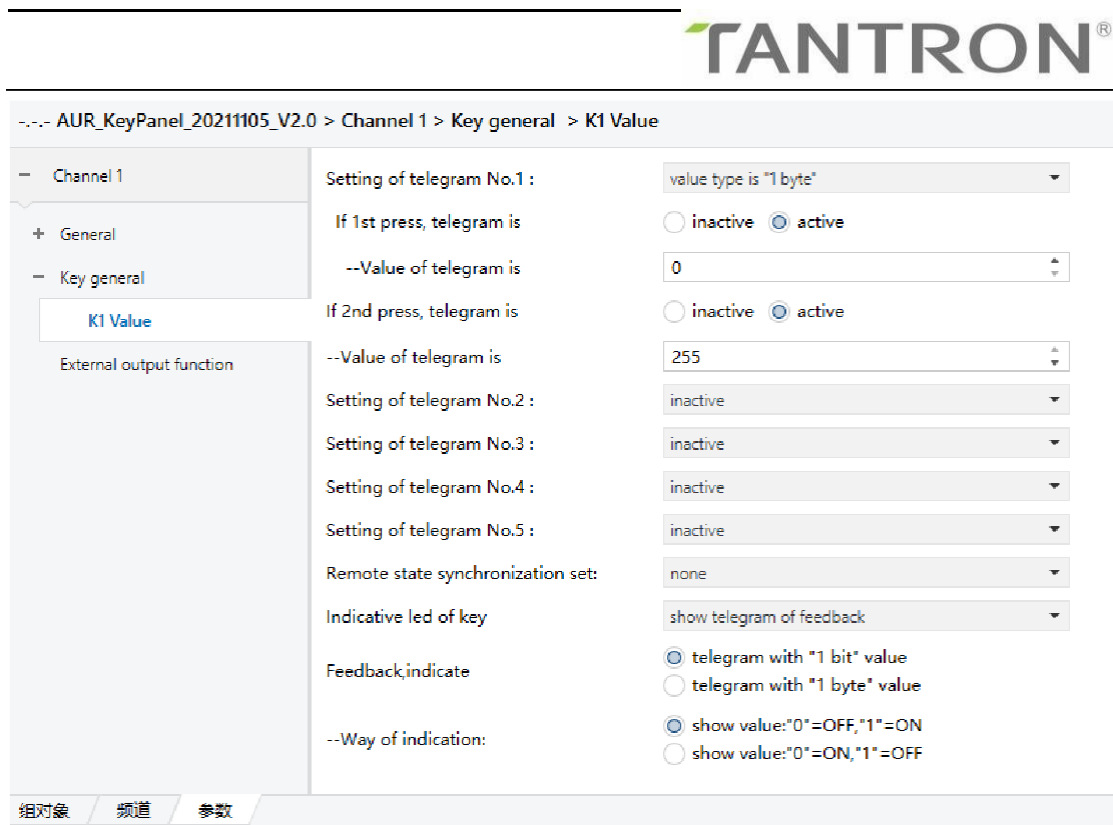


Fig. 3.2.4-11 Parameter Setting Window “Key X switch value page”

**Parameter “Feedback, indicate”**

This parameter is used to set the method of feedback.

- Options: telegram with “1 bit” value
- telegram with “1 byte” value

Select “telegram with” 1 bit “value” to set the feedback method to 1 bit. The parameter setting interface is shown in Fig. 3.2.4-11.

**Parameter “Way of indication”**

This parameter is used to set the display method of the indicator light under feedback.

- Options: show value: “0”=OFF,“1”=ON
- show value: “0”=ON,“1”=OFF

Select “show value: “0”=OFF, “1”=ON”, write 00 to the object “Feedback of switch, KX”, the indicator light is off, and write 01, the indicator light is on.

Select “show value: “0”=ON, “1”=OFF”, write 00 to the object “Feedback of switch, KX”, the indicator light is on, and write 01, the indicator light is off.

Select “telegram with “1 byte” value” to set the feedback method to 1 byte.

The parameter setting interface is shown in Fig. 3.2.4-12.

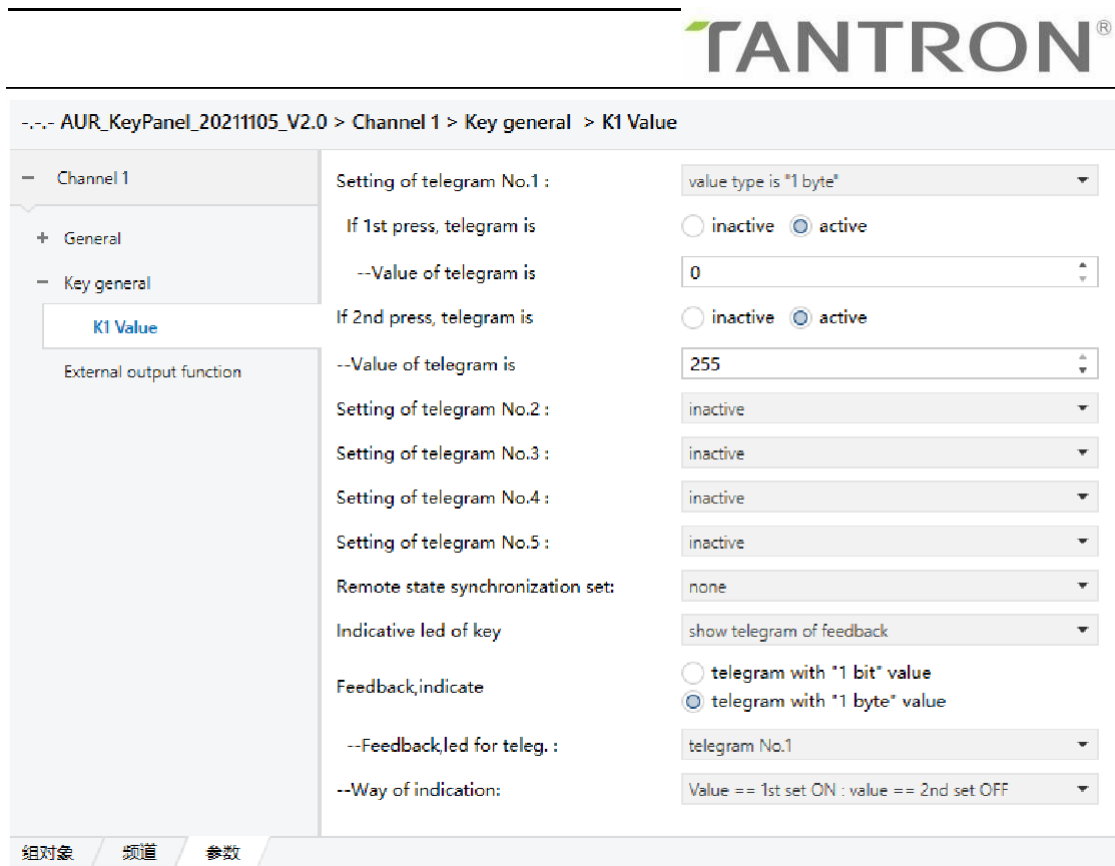


Fig. 3.2.4-12 Parameter Setting Window “Key X switch value page”

**Parameter “Feedback, led for teleg”**

This parameter is set to the display of the indicator light according to the feedback of which message.

- Options:
- telegram No.1
  - telegram No.2
  - telegram No.3
  - telegram No.4
  - telegram No.5

Select “telegram No.1”, the display of the indicator light is based on the feedback of telegram No.1.

Select “telegram No.2”, the display of the indicator light is based on the feedback of telegram No.2.

Select “telegram No.3”, the display of the indicator light is based on the feedback of telegram No.3.

Select “telegram No.4”, the display of the indicator light is based on the feedback of telegram No.4.

Select “telegram No.5”, the display of the indicator light is based on the feedback of telegram No.5.

**Parameter “Way of indication”**

This parameter is used to set the display method of the indicator light under feedback. Options:

- Value == 1st set ON : value == 2nd set OFF
- Value == 1st set OFF : value == 2nd set ON
- Value == 1st set ON : else = OFF

Value == 2nd set ON : else = OFF

Value == 1st set OFF : else = ON

Value == 2nd set OFF : else = ON

Select "Value == 1st set ON : value == 2nd set OFF", the object "Feedback of switch, KX" receives the message value of the 1st set value, the corresponding indicator light is on, and the received message value is the 2nd set value, the corresponding indicator light is off.

Select "Value == 1st set OFF : value == 2nd set ON", the object "Feedback of switch, KX" receives the message value set by 1st, the corresponding indicator light is off, and the received message value is set by 2nd value, the corresponding indicator lights on.

Select "Value == 1st set ON : else = OFF", the object "Feedback of switch, KX" receives the value of the message set by 1st, the corresponding indicator light is on, and other message values are received, the indicator light is off.

Select "Value == 2nd set ON : else = OFF", the object "Feedback of switch, KX" receives the message value of the 2nd set value, the corresponding indicator light is on, and other message values are received, the indicator light is off.

Select "Value == 1st set OFF : else = ON", the object "Feedback of switch, KX" receives the value of the message set by 1st, and the corresponding indicator light is off, and receives other message values, the indicator light is on.

Select "Value == 2nd set OFF : else = ON", the object "Feedback of switch, KX" receives the message value set by 2nd, the corresponding indicator light is off, and receives other message values, the indicator light is on.

*For example, as shown in Fig. 3.2.4-12*

*Select "Value == 1st set ON : value == 2nd set OFF", and write 0 in the communication object "Feedback of switch, K1" (consistent with the value of the first button press set by message No.1) Then the indicator light is on, write 0xFF (consistent with the value of the second button press set in message No.1) and the indicator light is off;*

*Select "Value == 1st set OFF : value == 2nd set ON", write 0 in the communication object "Feedback of switch, K1", the indicator light will be off, and write 0xFF, the indicator light will be on.*

#### **Parameter "Remote state synchronization set"**

This parameter is used to set remote state synchronization.

Options: none

telegram 1

telegram 2

telegram 3

telegram 4

telegram 5

Select "none" to not set remote state synchronization.

Select "telegram 1" and set remote status synchronization to telegram 1.

Select "telegram 2" and set remote status synchronization to telegram 2.

Select "telegram 3" and set remote status synchronization to telegram 3.

Select "telegram 4" and set remote status synchronization to telegram 4.

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

*Note: The remote state synchronization for telegram X means that the object “Output 1/4bit/1byte value, KX” of telegram X is used to modify the message state and synchronize it so that the next message sent is the opposite of the message. {For example: the settings of “first press value” and “second press value” of the five messages are ON and OFF respectively, and the value sent by the first press of the button is “first press value”, the first The value emitted by the second button press is the “second button press value”, the third button button button button is pressed and the value is “first button button value”, and so on. (If the synchronization state is telegram1, when the button is pressed for the first time, the values sent by the five message members are all ON, and the object “Output 1/4bit/1byte value, KX” corresponding to telegram1 is used to write the message OFF, then OFF is synchronized to the value sent by pressing the button for the second time, then the next time the button is pressed, the values of the five messages are all ON [that is, “the first pressed value”])}}*

### 3.2.5 Parameter setting window “Key X scene page”

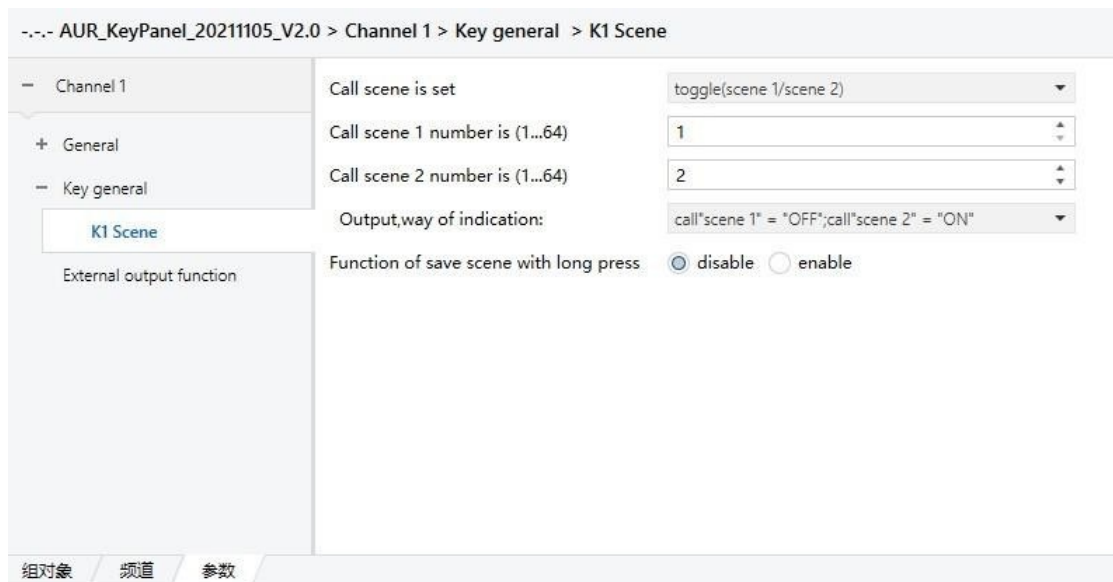


Fig. 3.2.5-1 Parameter Setting Window “Key X scene page”

#### Parameter “Call scene is set”

This parameter is used to set the scene.

Options: toggle(scene 1/scene 2)

scene 1

scene 2

Select “toggle(scene 1/scene 2)” to set scene 1 and scene 2.

The parameter setting interface is shown in Fig. 3.2.5-1.

#### Parameter “Call scene 1 number is(1...64)”

This parameter is used to set the scene number of scene 1. Ranges:

1...64

#### Parameter “Call scene 2 number is(1...64)”

This parameter is used to set the scene number of scene 2.

Ranges: 1...64

Select “scene 1” to set scene 1.

The parameter setting interface is shown in Fig. 3.2.5-2.

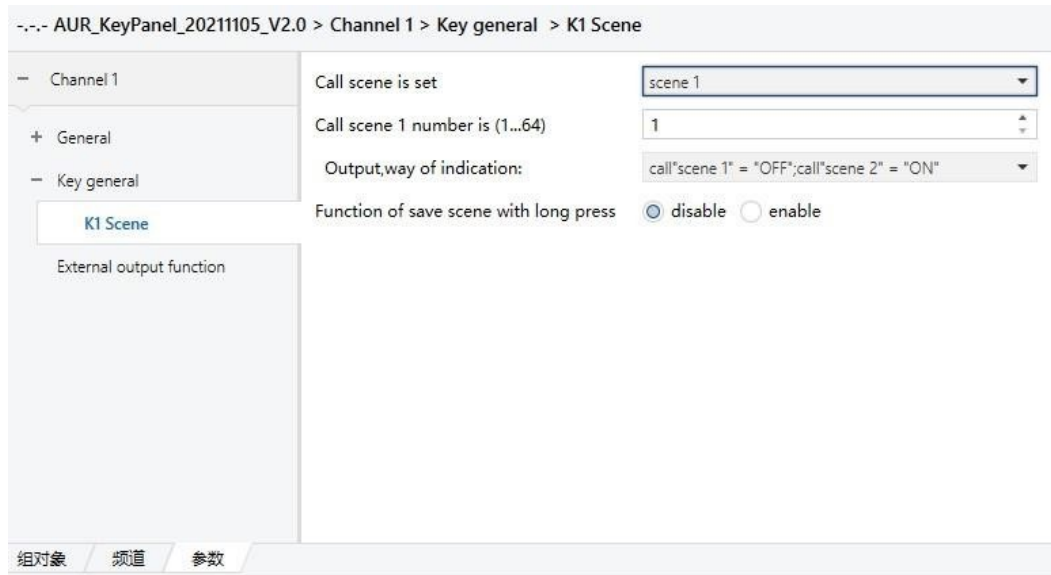


Fig. 3.2.5-2 Parameter Setting Window “Key X scene page”

**Parameter “Call scene 1 number is(1...64)”**

This parameter is used to set the scene number of scene 1. Ranges: 1...64

Select “scene 2” to set scene 2.

The parameter setting interface is shown in Fig. 3.2.5-3.

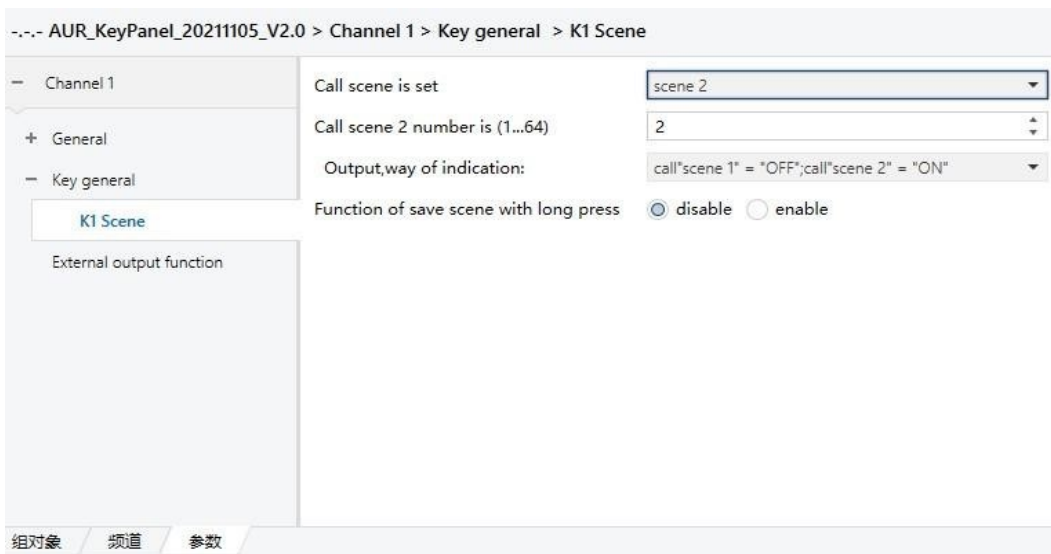


Fig. 3.2.5-3 Parameter Setting Window “Key X scene page”

**Parameter “Call scene 2 number is(1...64)”**

This parameter is used to set the scene number of scene 2.

Ranges: 1...64

**Note:**

The above communication objects are “Output 1 byte value, KX”, press the button, the communication object “Output 1 byte value, KX” will send out the corresponding scene number (**Note: The scene number here is the set scene number minus 1**), and when the parameter “Call scene is set” selects “toggle(scene 1/scene 2)”, the first time the button is pressed, the parameter “Call scene 2 number is(1...64)” corresponds to the scene number, Press the button for the second time and send the scene number corresponding to the parameter “Call scene 1 number is(1...64)”.

**Parameter “Output, way of indication”**

This parameter is used to set the changing state of the indicator light on and off.

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””, object “Output 1 byte value, KX” “The received data is “scene 1” corresponding to the scene number indicator light off, the received data is “scene 2” corresponding to the scene number indicator light on.

Select “call “scene 1”=“ON”; call “scene 2”=“OFF””, object “Output 1 byte value, KX” “The received data is “scene 1” corresponding to the scene number on, the received data is “scene 2” corresponding to the scene number light off.

Select “call “scene 1”=“ON”; else=“OFF””, object “Output 1 byte value, KX” “The received data is “scene 1” corresponding to the scene number indicator light on, received other data indicator light off.

Select “call “scene 2”=“ON”; else=“OFF””, object “Output 1 byte value, KX” “The received data is “scene 2” corresponding to the scene number indicator light on, received other data indicator light off.

**Parameter “Function of save scene with long press”**

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

Options: disable  
enable

Select “disable” to inactivate the long press to save the scene. Select “enable” to activate the long press to save the scene. The parameter setting interface is shown in Fig. 3.2.5-4.

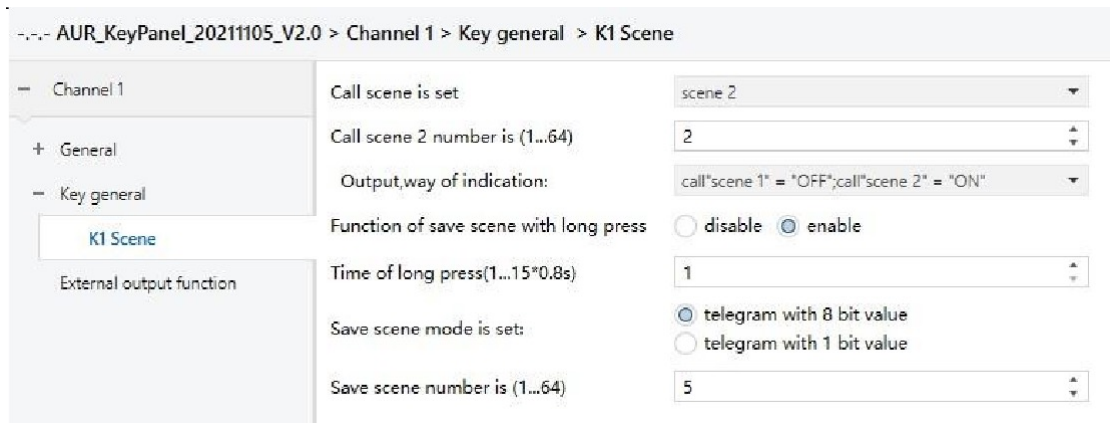


Fig. 3.2.5-4 Parameter Setting Window “Key X scene page”

**Parameter “Time of long press(1...15\*0.8s)”**

This parameter is set to the number of seconds after pressing and holding the button to determine it as a long press.

Ranges: 1...15, Unit: 0.8 s

**Parameter “Save scene mode is set”**

This parameter sets the mode for saving scenes.

Options: telegram with 8 bit value  
 telegram with 1 bit value

Select “telegram with 8 bit value”, set the save scene mode to “8 bit” and the communication object to “Save scene-8 bit, KX”.

The parameter setting interface is shown in Fig. 3.2.5-4.

**Parameter “Save scene number is(1...64)”**

This parameter sets which scene number to save. Ranges: 1...64

*For example, as shown in Figure 3.2.5-4.*

*After pressing and holding the button, the communication object “Save scene-8 bit, KX” will send 0x84, which will be converted to binary 10000100, the highest bit 1 regardless, and the remaining 0000100 will be converted to decimal 4, with the parameter “Save scene number is(1 64)”*

*set to 5 (where the 5 to subtract 1) corresponds.*

Select “telegram with 1 bit value”, set the save scene mode to “1 bit” and the communication object to “Save scene-1 bit, KX”.

The parameter setting interface is shown in Fig. 3.2.5-5.

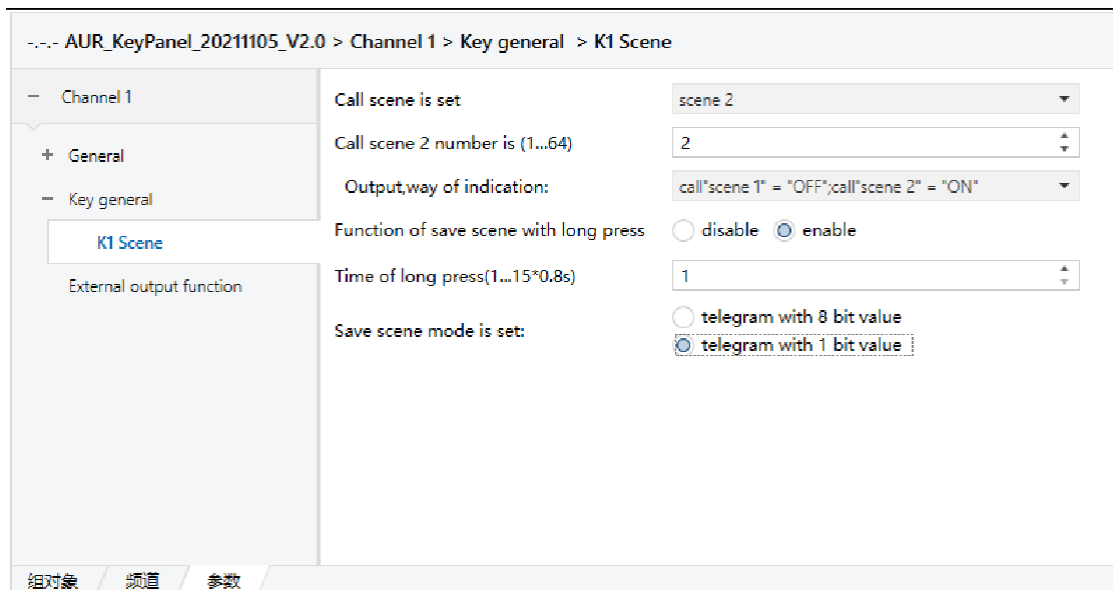


Fig. 3.2.5-5 Parameter Setting Window “Key X scene page”

For example: as shown in Figure 3.2.5-5, long press the button and send 01.

### 3.2.6 Parameter setting window “Key X Profession page”

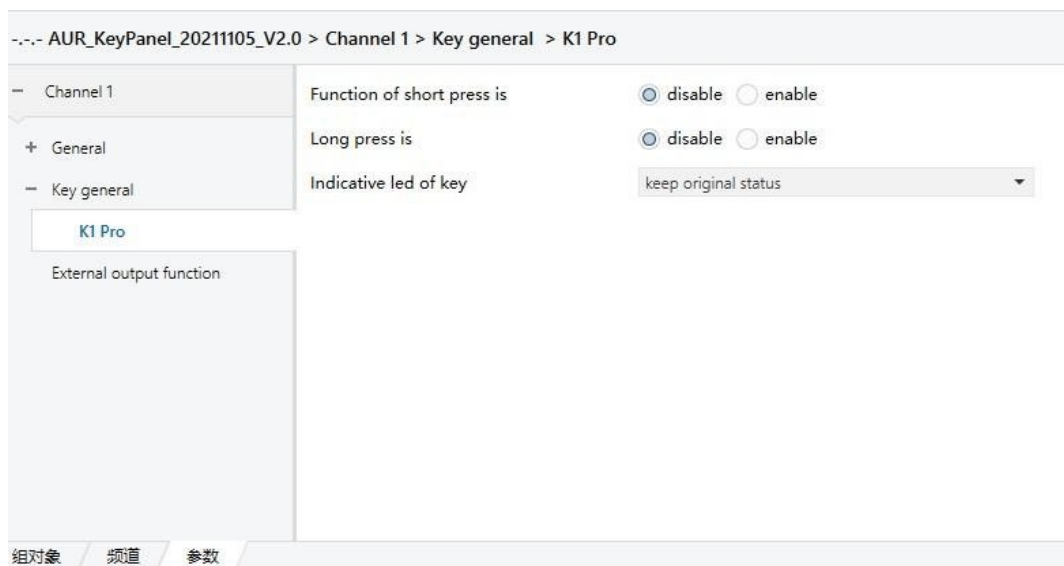


Fig. 3.2.6-1 Parameter Setting Window “Key X Profession page”

#### Parameter “Function of short press”

This parameter is set to enable or disable the function of short press button.

Options: disable  
enable

Select “disable” to disable the function of short-pressing the button.

Select “enable” to enable the function of short pressing the button.

The parameter setting interface is shown in Fig. 3.2.6-2.

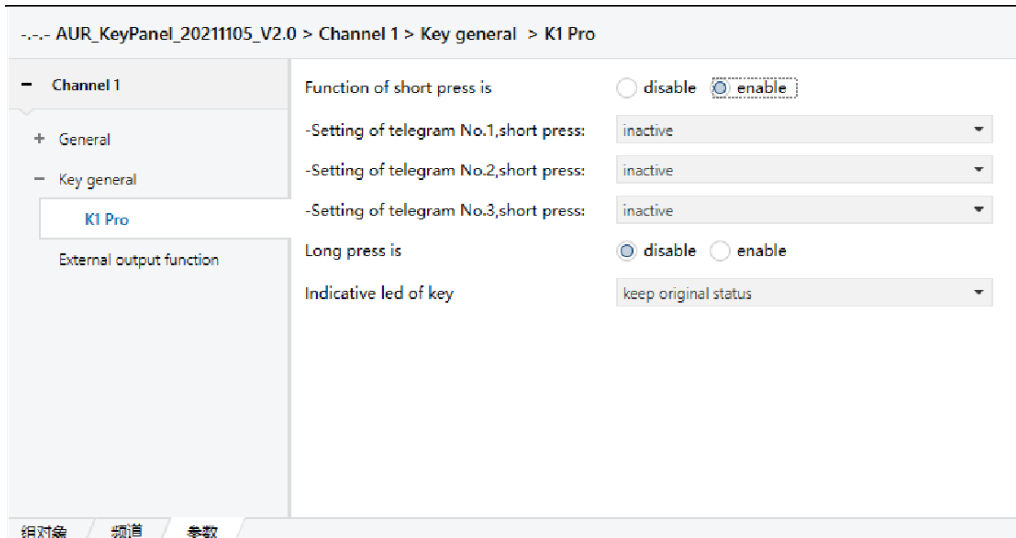


Fig. 3.2.6-2 Parameter Setting Window “Key X Profession page”

**Parameter “Setting of telegram No.X, short press”**

This parameter is set to whether to set the message No.X under the short press button.

Options: inactive

value type is“1 bit”

value type is“4 bit”

value type is“1 byte”

Select “inactive” to inactivate the setting of the message.

Select “value type is “1 bit””, the value of the message is “1 bit”, and the communication object is “Profession,1 bit short, KX”.

The parameter setting interface is shown in Fig. 3.2.6-3.

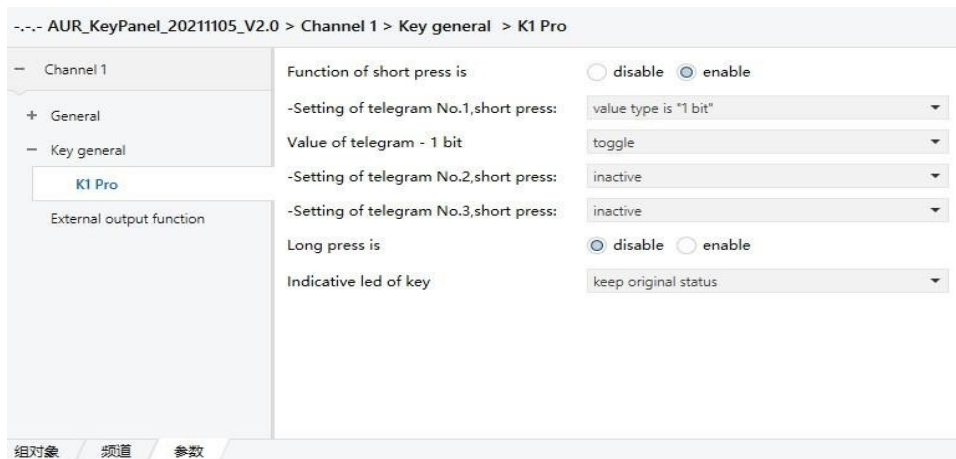


Fig. 3.2.6-3 Parameter Setting Window “Key X Profession page”

**Parameter “Value of telegram-1bit”**

This parameter is set to the 1-bit value corresponding to message No.X.

Options: toggle

ON

OFF

Select “toggle”, short press the button to send data 01,00,01,00,01,00...

Select “ON”, short press the button to send data 01.

Select “OFF”, short press the button to send data 00.

Select “value type is “4 bit””, the message value type is “4 bit”, and the communication object is “Profession, 4 bit short, KX”.

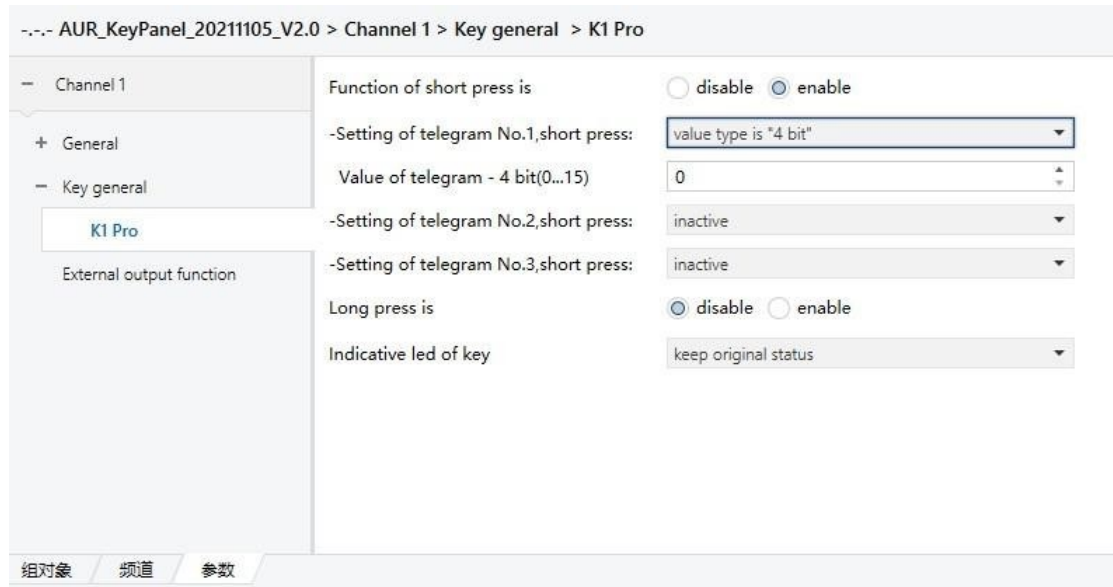


Fig. 3.2.6-4 Parameter Setting Window “Key X Profession page”

**Parameter “Value of telegram-4 bit(0...15)”**

This parameter is set to the message value sent by short pressing the button. Range: 0...15

Select “value type is “1 byte””, the value of the message is “1 byte”, and the communication object is “Profession,8 bit short, KX”.

The parameter setting interface is shown in Fig. 3.2.6-5.

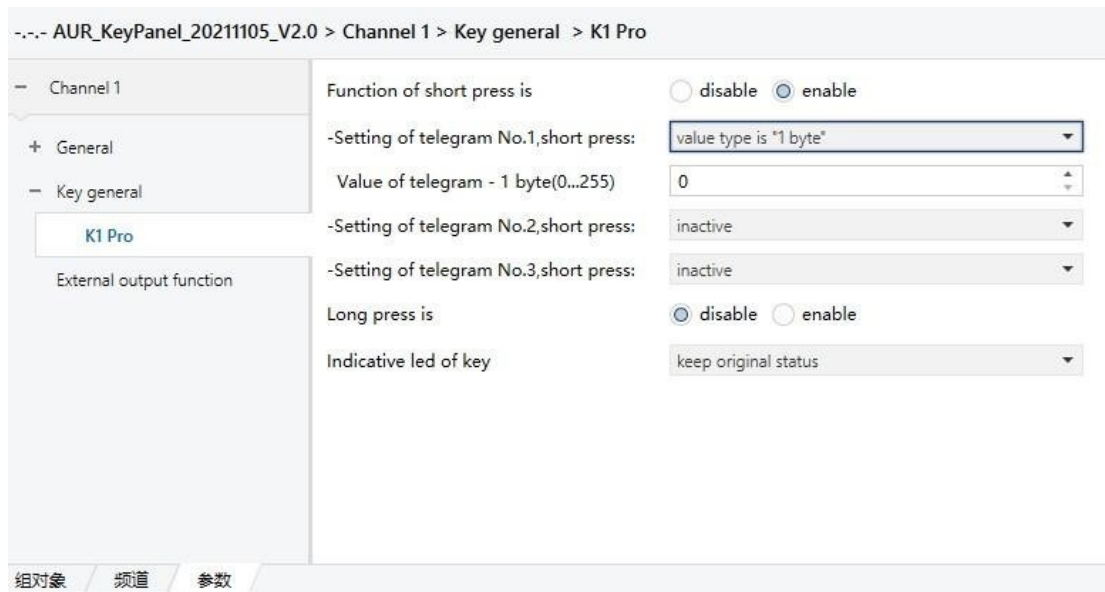


Fig. 3.2.6-5 Parameter Setting Window “Key X Profession page”

**Parameter “Value of telegram-1 byte(0...255)”**

This parameter is set to the message value sent by short pressing the button. Ranges: 0...255

**Parameter “Long press is”**

This parameter is set to enable or disable the long press button function.

- Options: disable
- enable

Select “disable” to disable the long press button function.

Select “enable” to enable the long press button function.

The parameter setting interface is shown in Fig. 3.2.6-6.

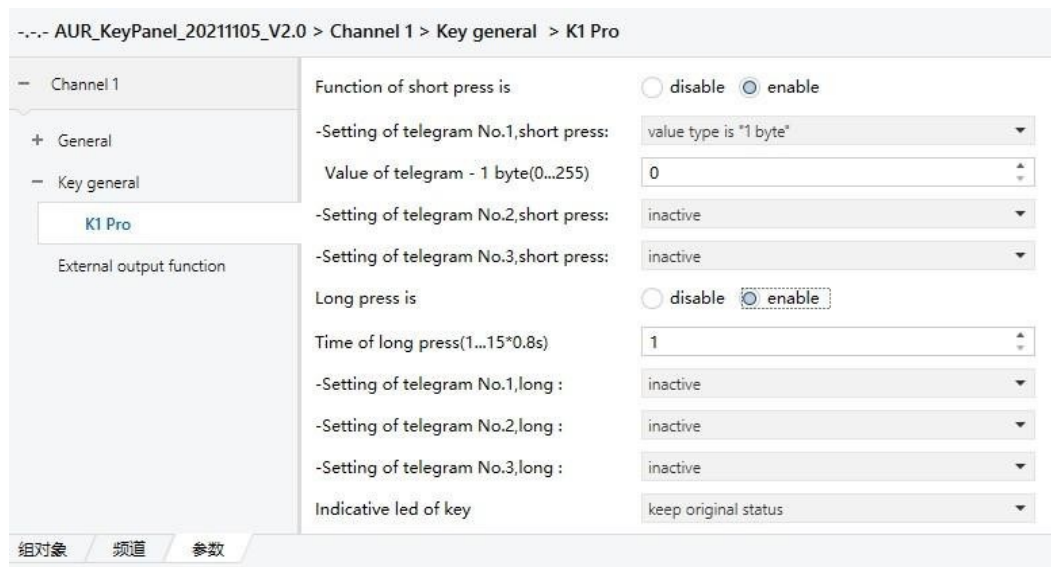


Fig.3.2.6-6 Parameter Setting Window “Key X Profession page”

**Parameter “Time of long press(2...10s)”**

This parameter is used to set the time for a long press of a key, i.e., a long press of ? seconds button is determined as long press.

Ranges: 2...10, Unit: Seconds

**Parameter “Setting of telegram No.X, long”**

This parameter is set to whether to set the message No.X under the long press button.

Options: inactive

value type is “1 bit”

value type is “4 bit”

value type is “1 byte”

Select “inactive” to inactivate the setting of the message.

Select “value type is “1 bit”” type is “1 bit”, communication object is “Profession, 1 bit long, KX”.

The parameter setting interface is shown in Fig. 3.2.6-7.

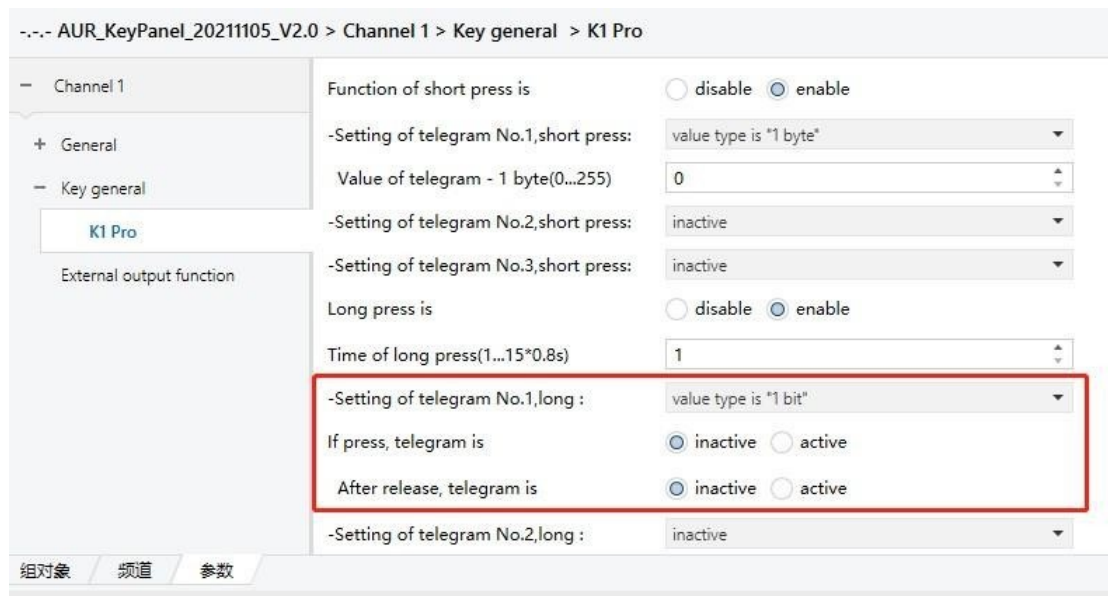


Fig. 3.2.6-7 Parameter Setting Window “Key X Profession page”

**Parameter “If press,telegram is”**

This parameter is set to whether to send the 1-bit value corresponding to message No.X after long pressing the button.

Options: inactive

active

Select “inactive”, no data will be sent when the button is pressed for a long time.

Select “active” to send the 1-bit value corresponding to message No. X when the button is pressed for a long time.

The parameter setting interface is shown in Fig. 3.2.6-8.

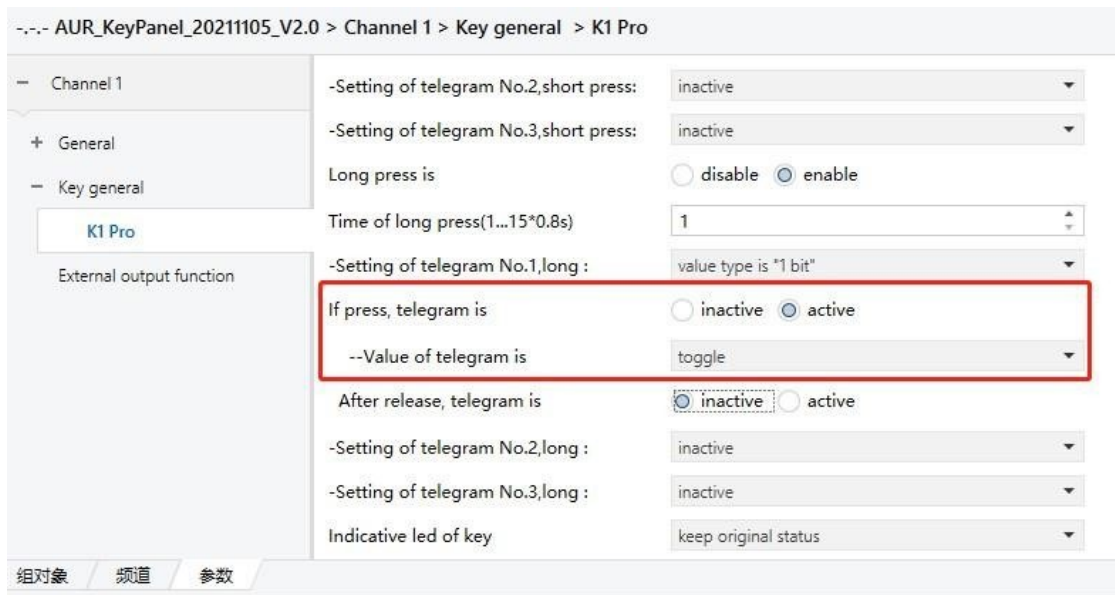


Fig. 3.2.6-8 Parameter Setting Window “Key X Profession page”

**Parameter “Value of telegram is”**

This parameter is set to the 1-bit value corresponding to message No.X.

Options: toggle

ON

OFF

Select “toggle” and press and hold the button to send the data 01,00,01,00,01,00...

Select “ON” and press and hold the button to send data 01.

Select “OFF” and press and hold the button to send data 00.

**Parameter “After release,telegram is”**

This parameter is set to whether to send the 1-bit value corresponding to message No.X when the button is long pressed and released.

Options: inactive

active

Select “inactive” to not send data when the button is released after a long press.

Select “active” to send the 1-bit value corresponding to message No. X when the button is released after a long press.

The parameter setting interface is shown in Fig. 3.2.6-9.

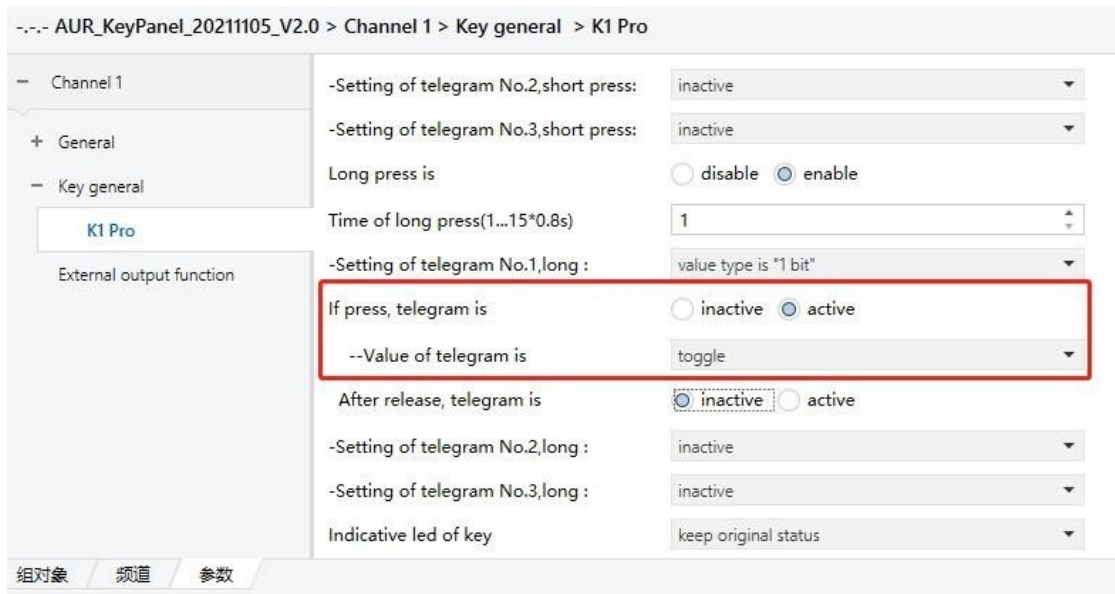


Fig. 3.2.6-9 Parameter Setting Window “Key X Profession page”

**Parameter “Value of telegram is”**

This parameter is set to the 1-bit value corresponding to message No.X after long pressing the button and releasing it.

Options: toggle

ON

OFF

Select “toggle”, long press the button and release it, then send data 01, 00, 01, 00, 01, 00....

Select “ON”, long press the button and release it to send data 01.

Select “OFF”, long press the button and release it to send data 00.

Select “value type is “4 bit””, the message value type is “4 bit”, and the communication object is “Profession, 4 bit long, KX”.

The parameter setting interface is shown in Fig. 3.2.6-10.

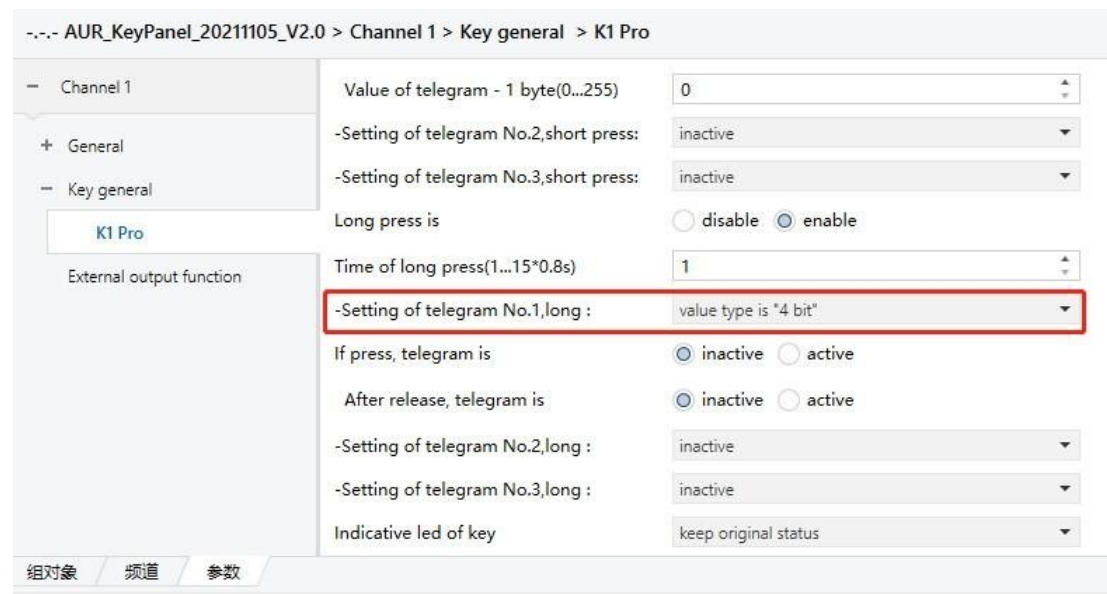


Fig. 3.2.6-10 Parameter Setting Window “Key X Profession page”

**Parameter “If press,telegram is”**

This parameter is set to whether to send the 4bit value corresponding to message No.X after long

pressing the button.

Options: inactive

active

Select “inactive”, no data will be sent when the button is pressed for a long time.

Select “active” to send the 4-bit value of the message No. X when the button is pressed for a long time.

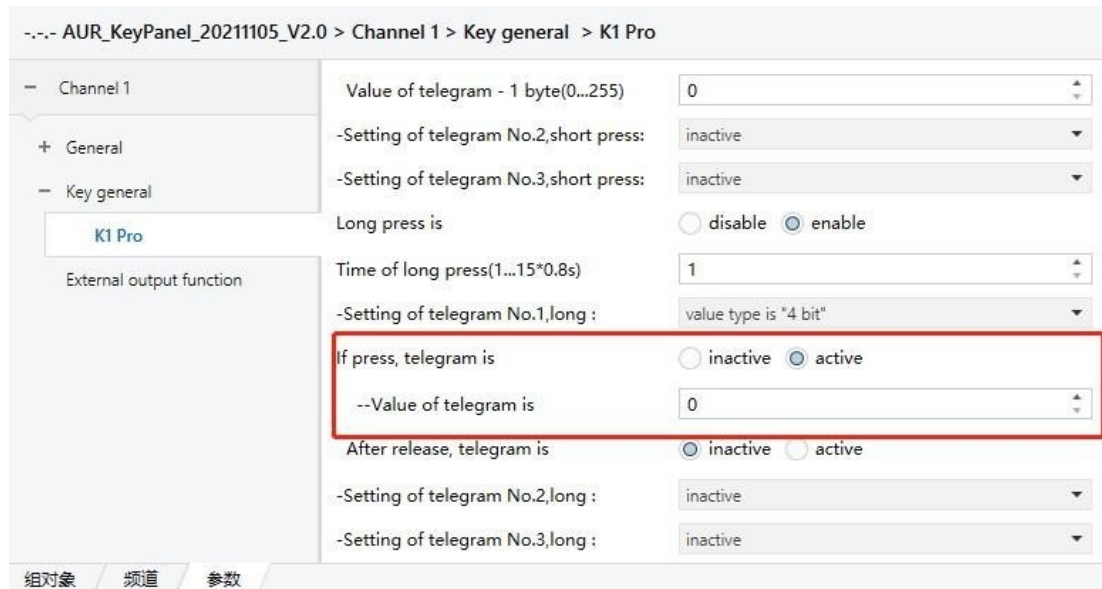


Fig. 3.2.6-11 Parameter Setting Window “Key X Profession page”

**Parameter “Value of telegram is(0...15)”**

This parameter is set to the 4bit value corresponding to the long press button message No.X. Ranges : 0...15

**Parameter “After release,telegram is”**

This parameter is set to whether to send the 4-bit value corresponding to message No.X when the button is long pressed and released.

Options: inactive

active

Select “inactive” to not send data when the button is released after a long press.

Select “active” to send the 4-bit value of the message No. X when the button is released after a long press.

The parameter setting interface is shown in Fig. 3.2.6-12.

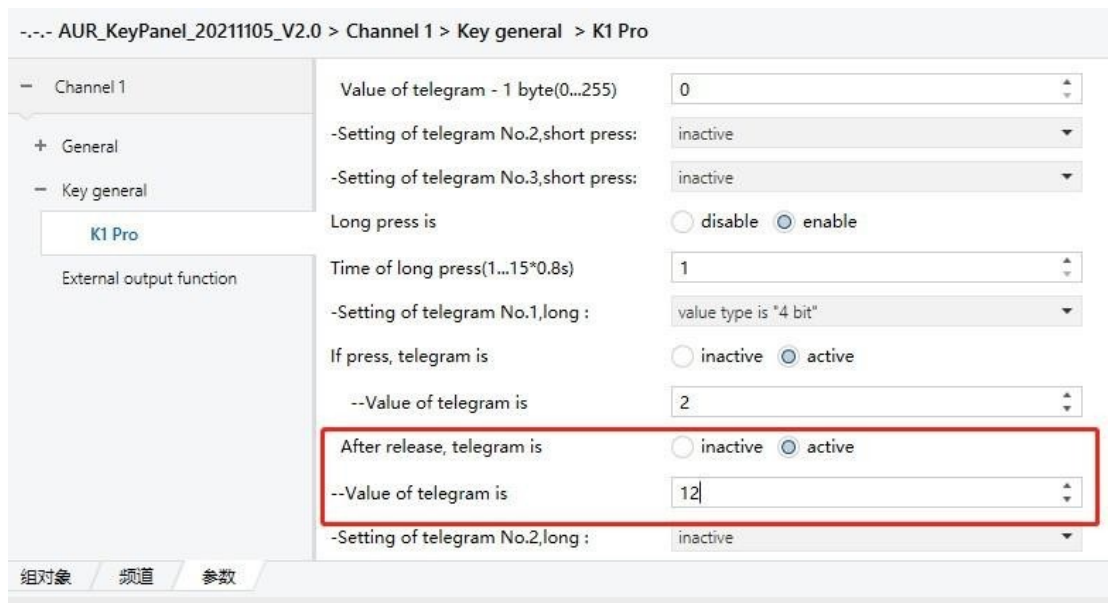


Fig. 3.2.6-12 Parameter Setting Window “Key X Profession page”

**Parameter “Value of telegram is(0...15)”**

This parameter is set to the 4-bit value corresponding to message No.X after long pressing the button and releasing it.

Ranges: 0...15

Select “value type is “1 byte””, the message value type is “1 byte”, and the communication object is “Profession, 8 bit long, KX”.

The parameter setting interface is shown in Fig. 3.2.6-13.

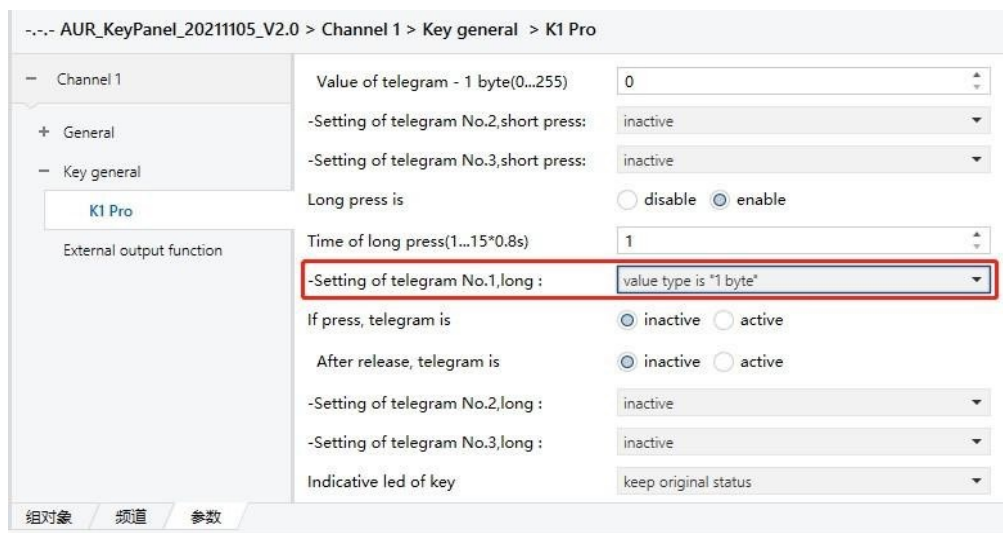


Fig. 3.2.6-13 Parameter Setting Window “Key X Profession page”

**Parameter “If press,telegram is”**

This parameter is set to whether to send the 1byte value corresponding to message No.X after long pressing the button.

Options: inactive  
active

Select “inactive”, no data will be sent when the button is pressed for a long time.

Select “active”, when the button is long pressed, the 1byte value corresponding to message No.X will be sent.

The parameter setting interface is shown in Fig. 3.2.6-14.

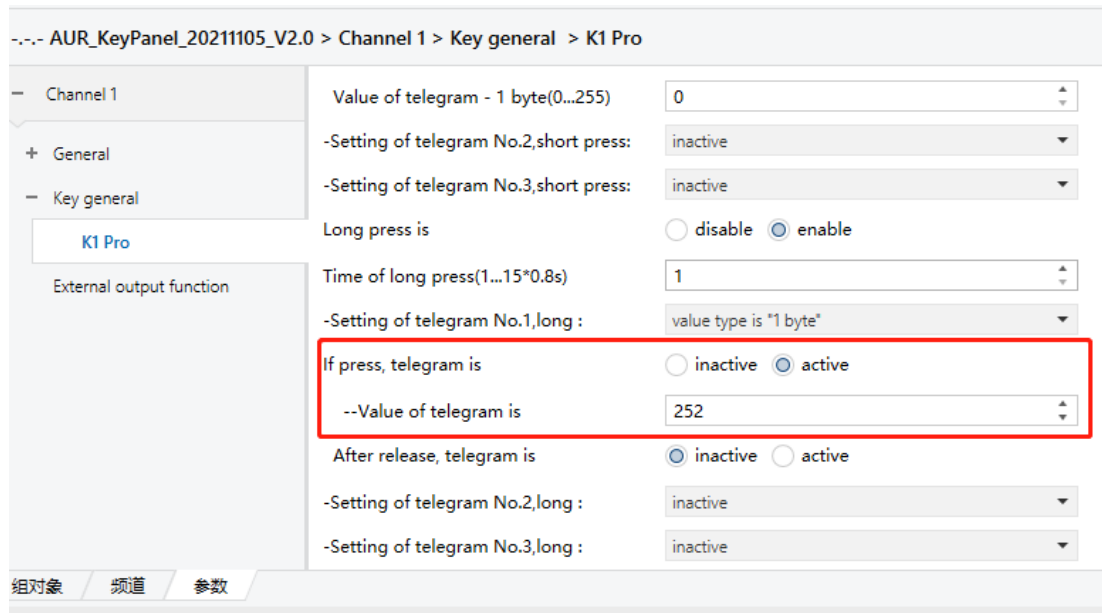


Fig. 3.2.6-14 Parameter Setting Window “Key X Profession page”

**Parameter “Value of telegram is(0...255)”**

This parameter is set to the 1byte value corresponding to the long press button message No.X. Ranges: 0...255

**Parameter “After release,telegram is”**

This parameter is set to whether to send the 1byte value corresponding to message No.X when the button is long pressed and released.

- Options: inactive
- active

Select “inactive” to not send data when the button is released after a long press.

Select “active”, when the button is long pressed and released, the 1byte value corresponding to message No.X will be sent.

The parameter setting interface is shown in Fig. 3.2.6-15

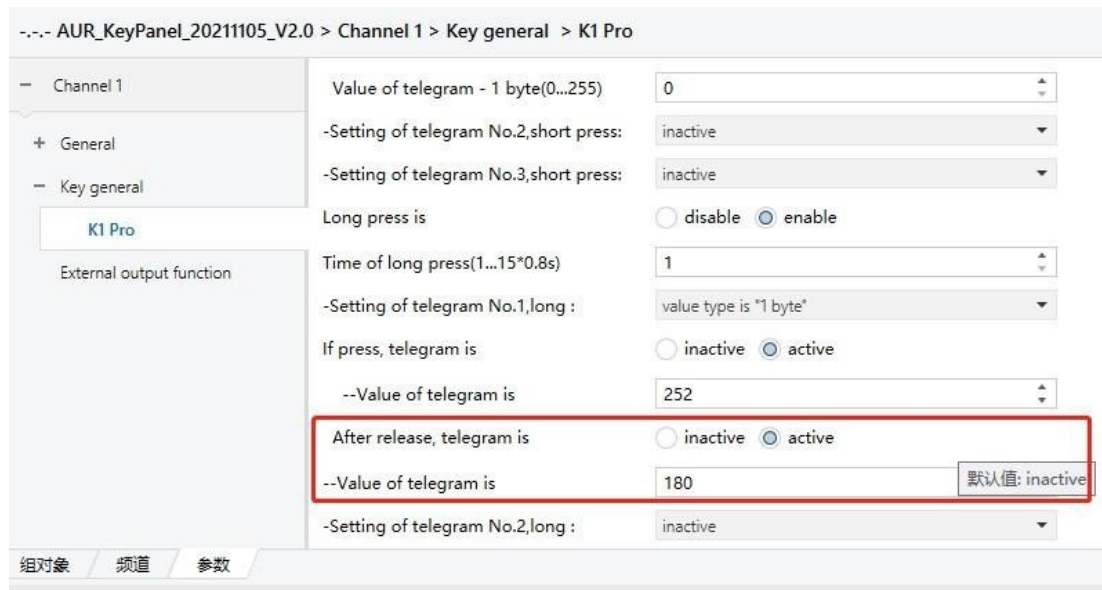


Fig. 3.2.6-15 Parameter Setting Window “Key X Profession page”

**Parameter “Value of telegram is(0...255)”**

This parameter is set to the value of 1 byte corresponding to message No.X after long pressing the button and releasing it.

Range: 0...255

**Parameter “Indicative led of key”**

This parameter is used to set the changing state of the indicator light corresponding to the button after the button is pressed.

- Options:
- keep original status
  - indicate for short pressing
  - indicate for long pressing
  - show action of press key

Select “keep original status”, the indicator light corresponding to the key will keep the original state unchanged.

Select “indicate for short pressing” and the indicator will change according to the output of the short pressed button.

The parameter setting interface is shown in Fig. 3.2.6-16.

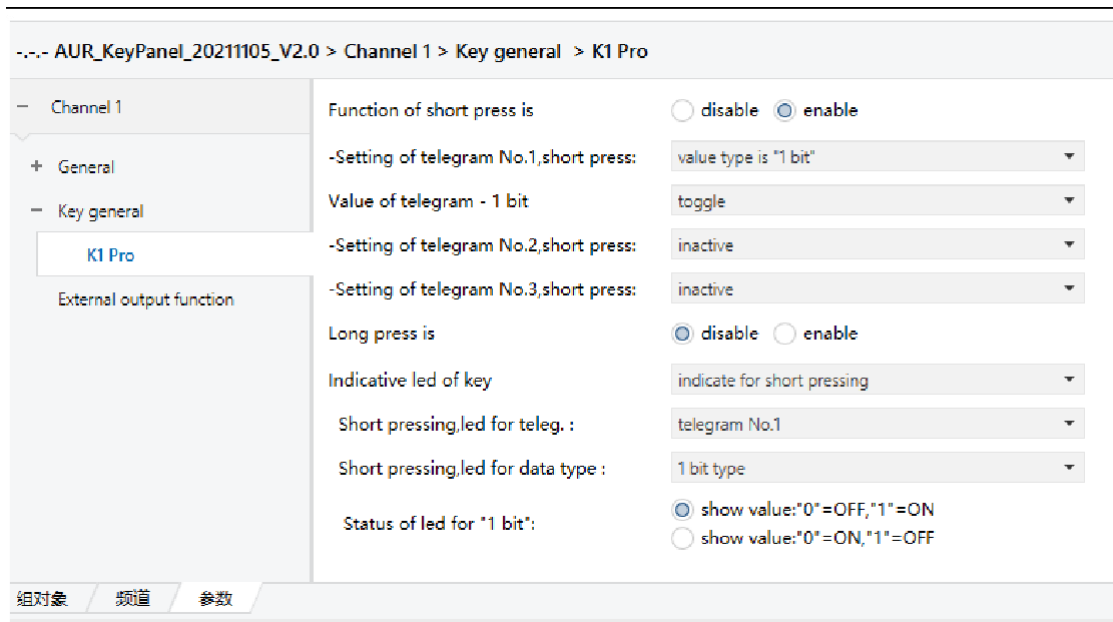


Fig. 3.2.6-16 Parameter Setting Window “Key X Profession page”

**Parameter “Short pressing,led for teleg”**

This parameter is set to the display of the indicator light according to the output of the message corresponding to the short press button.

- Options: telegram No.1
- telegram No.2
- telegram No.3

Select “telegram No.1”, the display of the indicator light corresponds to the output of message No.1 by short pressing the button.

Select “telegram No.2”, the display of the indicator light corresponds to the output of message No.2 by short pressing the button.

Select “telegram No.3”, the display of the indicator light corresponds to the output of message No.3 by short pressing the button.

**Parameter “Short pressing ,led for data type”**

This parameter is set to the output data type of the message according to the indicator light display. The data type set here must be consistent with the data type set under the message No.X corresponding to the short press button.

- Options: 1 bit type
- 4 bit type
- 8 bit type

Select “1 bit type”, the indicator shows that the output data type of the message is “1 bit”.

The parameter setting interface is shown in Fig. 3.2.6-16.

**Parameter “Status of led for“1 bit””**

This parameter is used to set the state of the indicator light when the message output data type is “1 bit”.

- Options: show value: “0”=OFF,“1”=ON show value: “0”=ON,“1”=OFF

Select “show value: “0”=OFF, “1”=ON”, press the button and the communication object of the message corresponding to the **parameter “Setting of telegram No.X, short press”** is “Profession, 1 bit short, KX” When sending data 00, the corresponding indicator light is off, and when sending

data 01, the indicator light is on.

Select “show value: “0”=ON, “1”=OFF”, after pressing the button, the communication object of the message corresponding to the parameter “Setting of telegram No.X, short press” is “Profession, 1 bit short, KX” When sending data 00, the corresponding indicator light is on, and when sending data 01, the indicator light is off.

Select “4 bit type”, the indicator shows that the output data type of the message is “4 bit”.

The parameter setting interface is shown in Fig. 3.2.6-17.

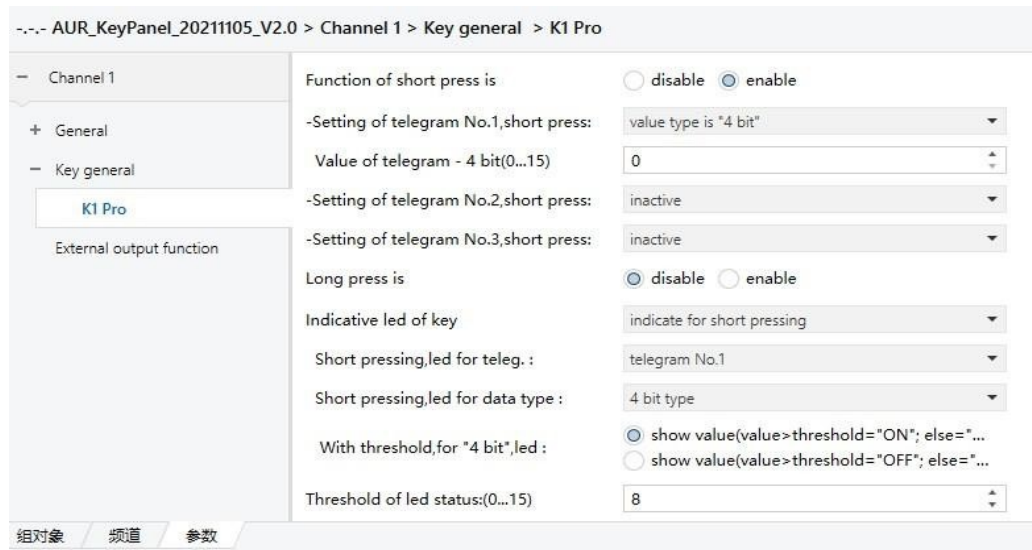


Fig. 3.2.6-17 Parameter Setting Window “Key X Profession page”

**Parameter “With threshold, for “4 bit”, led”**

This parameter is used to set the state of the indicator light when the message output data type is “4 bit”.

- Options: show value (value>threshold=“ON”; else=“OFF”)
- show value (value>threshold=“OFF”; else=“ON”)

Select “show value (value>threshold=“ON”; else=“OFF”)”, if you select “value type is “4 bit”” in the parameter “Setting of telegram No.X, short press” and in the parameter “Value If the value filled in of telegram-4 bit(0...15)” is sent through the communication object “Profession, 4 bit short, KX” is greater than the value set in threshold, the indicator light will be on, otherwise the indicator light will be off.

Select “show value (value>threshold=“OFF”; else=“ON”)”, if you select “value type is “4 bit”” in the parameter “Setting of telegram No.X, short press” and in the parameter “Value If the value filled in of telegram-4 bit(0...15)” is sent through the communication object “Profession, 4 bit short, KX” is greater than the value set in threshold, the indicator light will be off, otherwise the indicator light will be on.

**Parameter “Threshold of Led status (0...15)”**

This parameter is used to set the value of threshold.

Ranges: 0...15

Select “8 bit type”, the indicator light shows that the output data type of the message is “8 bit”. The parameter setting interface is shown in Fig. 3.2.6-18.

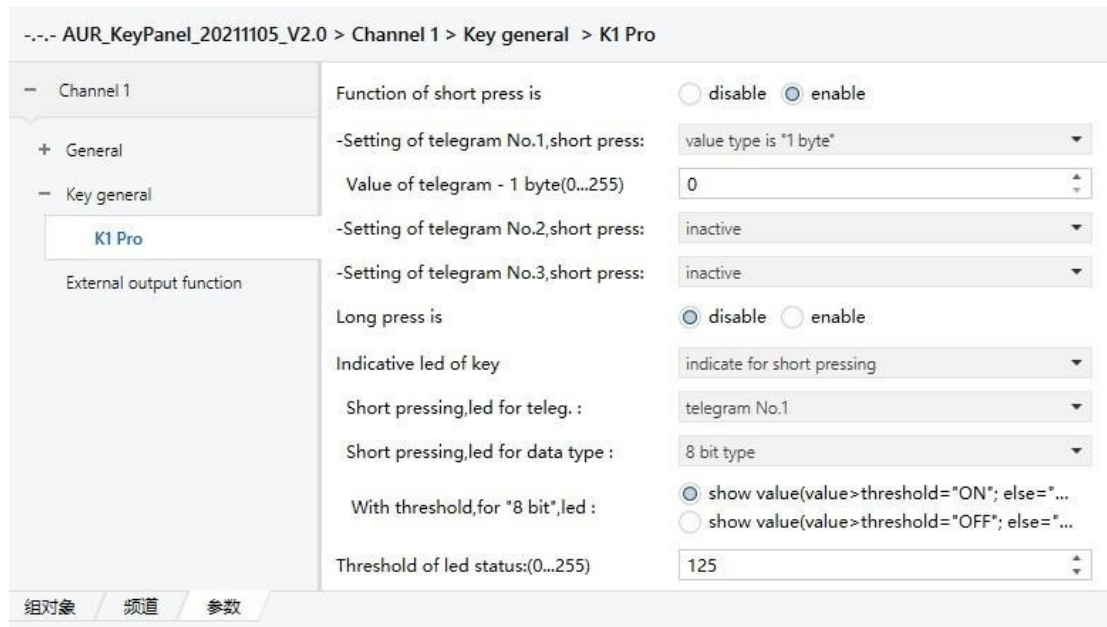


Fig. 3.2.6-18 Parameter Setting Window “Key X Profession page”

**Parameter “With threshold, for “8 bit”, led”**

This parameter is used to set the state of the indicator light when the message output data type is “8 bit”.

Options: show value (value>threshold=“ON”; else=“OFF”)

show value (value>threshold=“OFF”; else=“ON”)

Select “show value (value>threshold=“ON”; else=“OFF”)”, if you select “value type is “1 byte”” in the parameter “Setting of telegram No.X, short press” and in the parameter “Value If the value filled in of telegram-1byte (0...255)” is sent through the communication object “Profession, 8 bit short, KX” is greater than the value set in threshold, the indicator light is on, otherwise the indicator light is off.

Select “show value (value>threshold=“OFF”; else=“ON”)”, if you select “value type is “1 byte”” in the parameter “Setting of telegram No.X, short press” and in the parameter “Value The value filled in of telegram-1byte (0...255)” is sent through the communication object “Profession, 8 bit short, KX” and the value is greater than the value set in threshold, the indicator light is off, otherwise the indicator light is on.

**Parameter “Threshold of Led status (0...255)”**

This parameter is used to set the value of threshold. Ranges: 0...255

Select “indicate for long pressing”, the change state of the indicator light is displayed according to the output of the long press button.

The parameter setting interface is shown in Fig. 3.2.6-19.

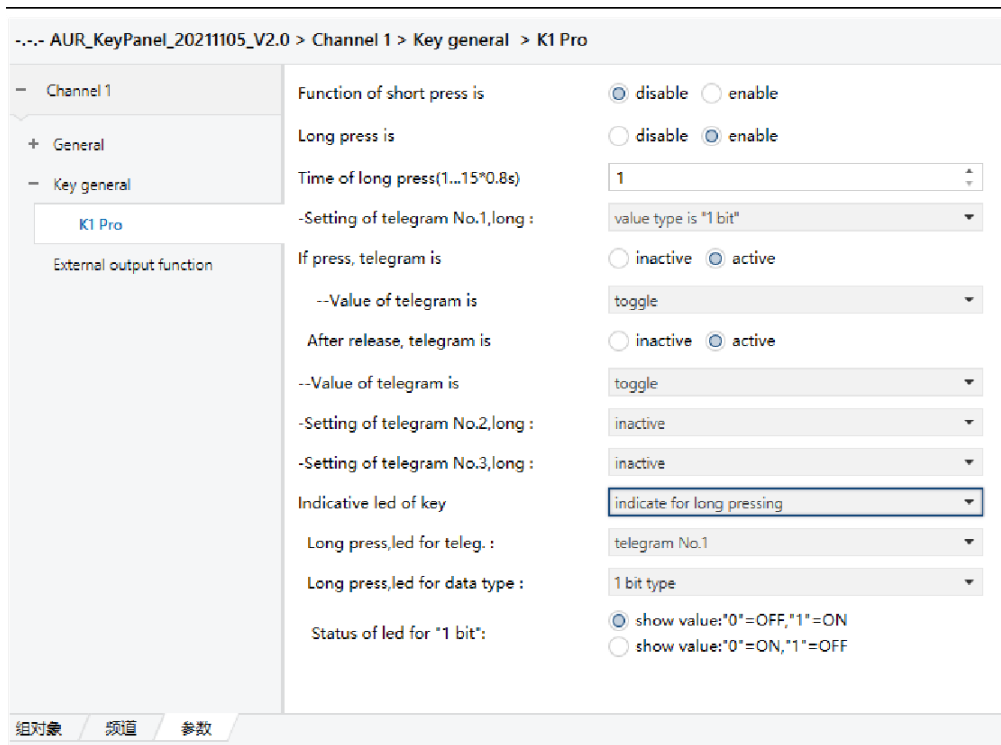


Fig. 3.2.6-19 Parameter Setting Window “Key X Profession page”

**Parameter “Long pressing,led for teleg”**

This parameter is set to the display of the indicator light according to the output of the message corresponding to the long press button.

- Options: telegram No.1  
 telegram No.2  
 telegram No.3

Select “telegram No.1”, the display of the indicator light corresponds to the output of message No.1 by pressing the button for a long time.

Select “telegram No.2”, the display of the indicator light corresponds to the output of message No.2 by pressing the button for a long time.

Select “telegram No.3”, the display of the indicator light corresponds to the output of message No.3 by pressing the button for a long time.

**Parameter “Long pressing ,led for data type”**

This parameter is set to the output data type of the message according to the indicator light display. The data type set here must be consistent with the data type set under the message No.X corresponding to the long press button.

- Options: 1 bit type  
 4 bit type  
 8 bit type

Select “1 bit type”, the indicator shows that the output data type of the message is “1 bit”. The parameter setting interface is shown in Fig. 3.2.6-19.

**Parameter “Status of led for“1 bit””**

This parameter is used to set the state of the indicator light when the message output data type is “1 bit”.

- Options: show value: “0”=OFF,“1”=ON

show value: “0”=ON,“1”=OFF

Select “show value: “0”=OFF, “1”=ON”, press the button and the communication object “Profession, 1 bit long, KX” of the message corresponding to the parameter “Setting of telegram No.X, long press” Send data 00, the corresponding indicator light is off, send data 01, the indicator light is on. Select “show value: “0”=ON, “1”=OFF”, press the button and the communication object “Profession, 1 bit long, KX” of the message corresponding to the parameter “Setting of telegram No.X, long press” When sending data 00, the corresponding indicator light is on, and when sending data 01, the indicator light is off. Select “4 bit type”, the indicator light shows that the output data type of the message is “4 bit”. The parameter setting interface is shown in Fig. 3.2.6-20.

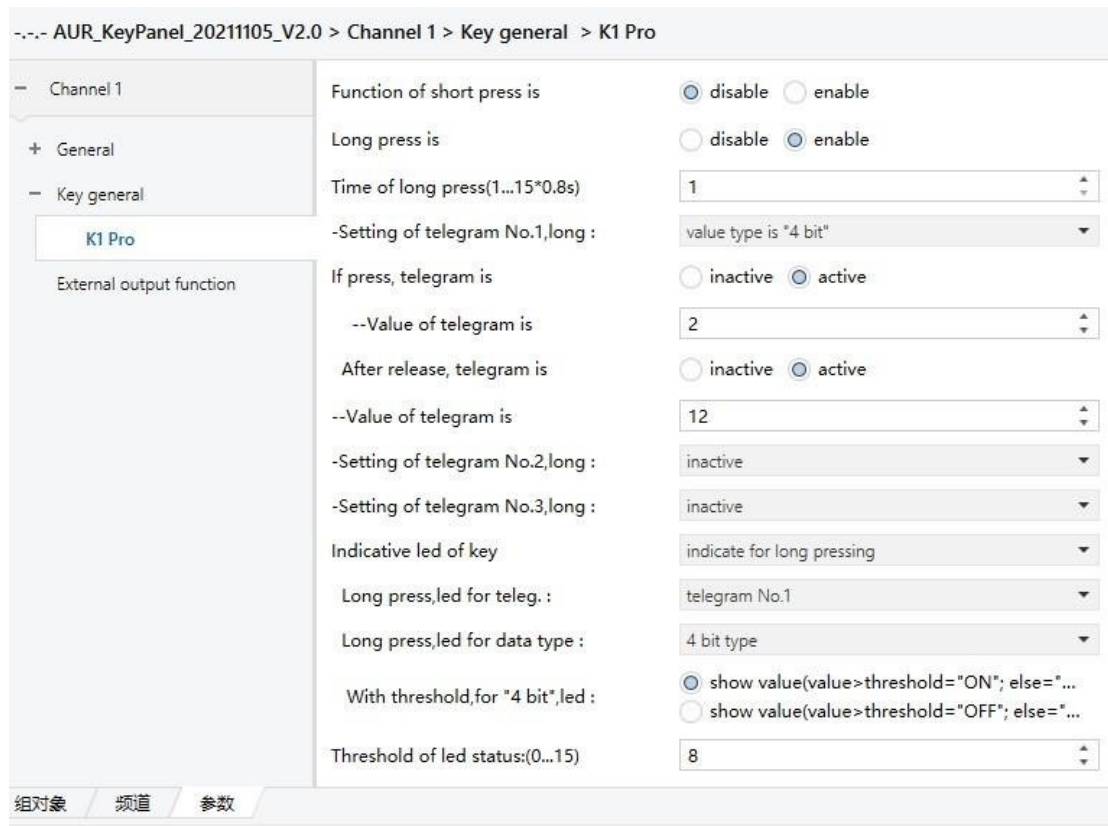


Fig. 3.2.6-20 Parameter Setting Window “Key X Profession page”

**Parameter “With threshold, for“4 bit”, led”**

This parameter is used to set the state of the indicator light when the message output data type is “4 bit”.

Options: show value (value>threshold=“ON”; else=“OFF”)

show value (value>threshold=“OFF”; else=“ON”)

Select “show value (value>threshold=“ON”; else=“OFF”)”, if the communication object “Profession,4 bit long, KX” sends a value greater than the value set in the threshold, the indicator light is on, otherwise the indicator light is off.

Select “show value (value>threshold=“OFF”; else=“ON”)”, if the communication object “Profession,4 bit long, KX” sends a value greater than the value set in the threshold, the indicator light is off, otherwise the indicator light is on.

**Parameter “Threshold of Led status (0...15)”**

This parameter is used to set the value of threshold.

Ranges: 0...15

Select “8 bit type”, the indicator light shows that the output data type of the message is “8 bit”.

The parameter setting interface is shown in Fig. 3.2.6-21.

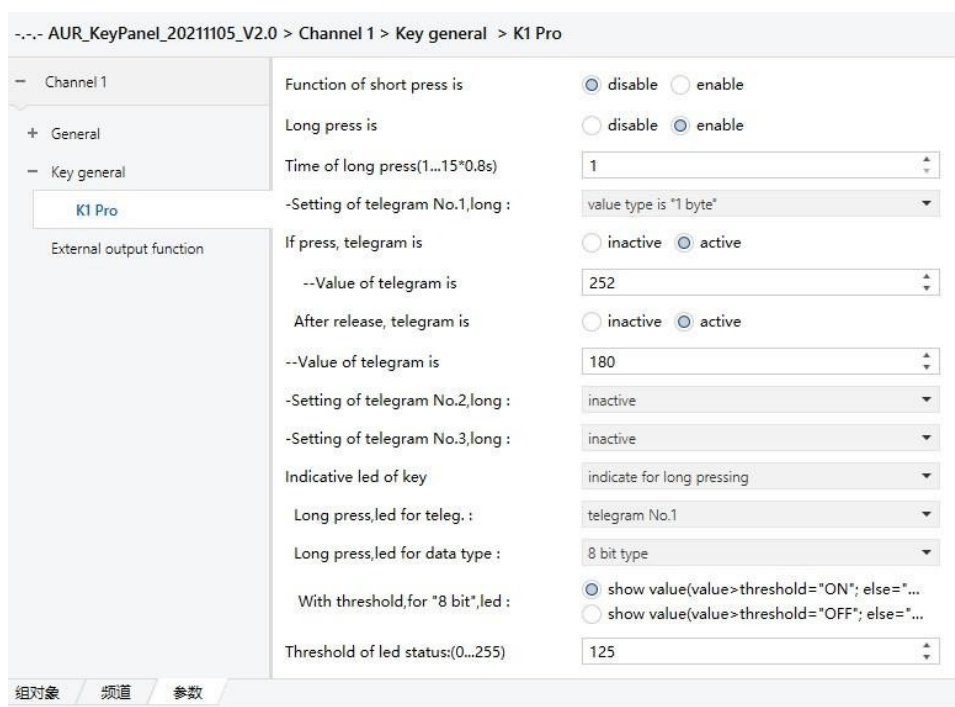


Fig. 3.2.6-21 Parameter Setting Window “Key X Profession page”

**Parameter “With threshold, for“8 bit”, led”**

This parameter is used to set the state of the indicator light when the message output data type is “8 bit”.

Options: show value (value>threshold=“ON”; else=“OFF”)  
 show value (value>threshold=“OFF”; else=“ON”)

Select “show value (value>threshold=“ON”; else=“OFF”)”, if the communication object “Profession,8 bit long, KX” emits a value greater than the value set in threshold, then the indicator light is on, otherwise the indicator light is off.

Select “show value (value>threshold=“OFF”; else=“ON”)”, if the value issued in the communication object “Profession,8 bit long, KX” is greater than the value set in the threshold, then the indicator light is off, otherwise the indicator light is on.

**Parameter “Threshold of Led status (0...255)”**

This parameter is used to set the value of threshold.

Ranges: 0...255

Note:

When the above parameter **“Indicative led of key”** is selected as **“indicate for long pressing”**, if only one of the parameter **“If press, telegram is”** and the parameter **“After release, telegram is”** is activated, the change state of the indicator light depends on the activated one. The parameter setting changes, and when both are activated, it changes according to whether the button is pressed or released.

Select **“show action of press key”**, the indicator light of the light board will display according to the state of the key. When the key is pressed, the indicator light will be on, and when the key is released, the indicator light will be off.

The parameter setting interface is shown in Fig. 3.2.6-22.

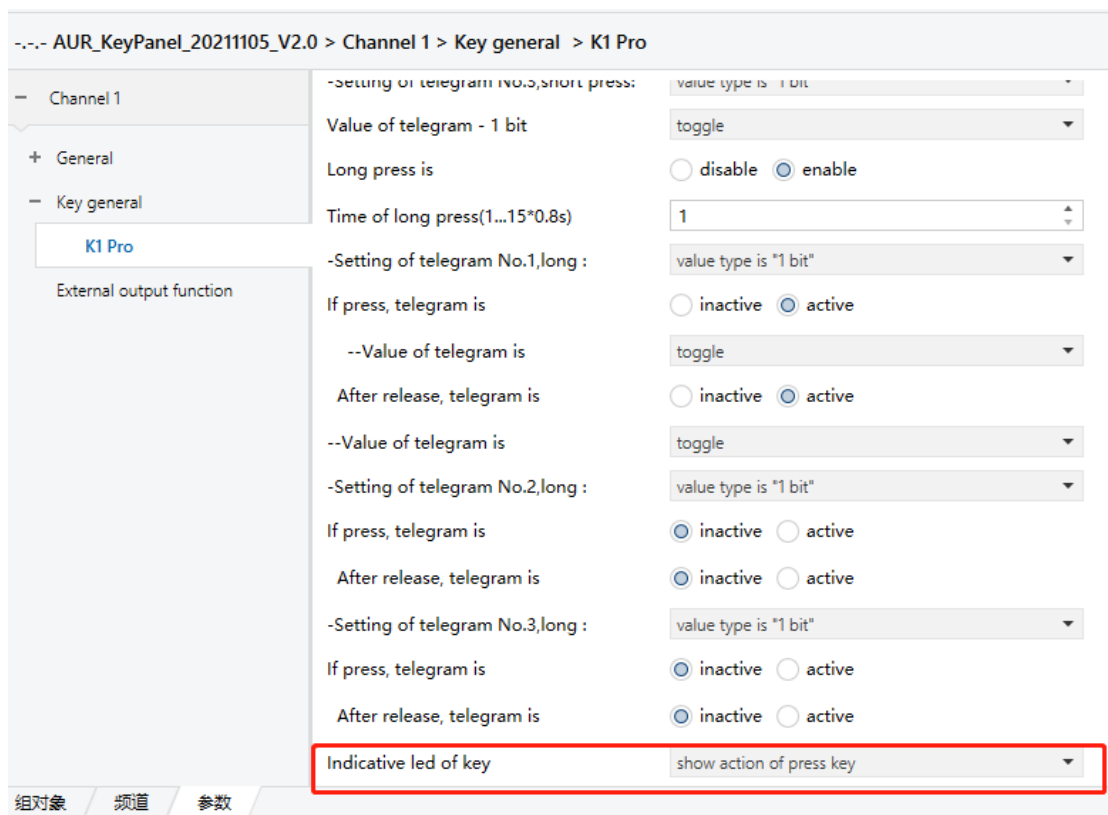


Fig. 3.2.6-22 Parameter Setting Window “Key X Profession page”

### 3.3.7 Parameter setting window “Key X joint page”

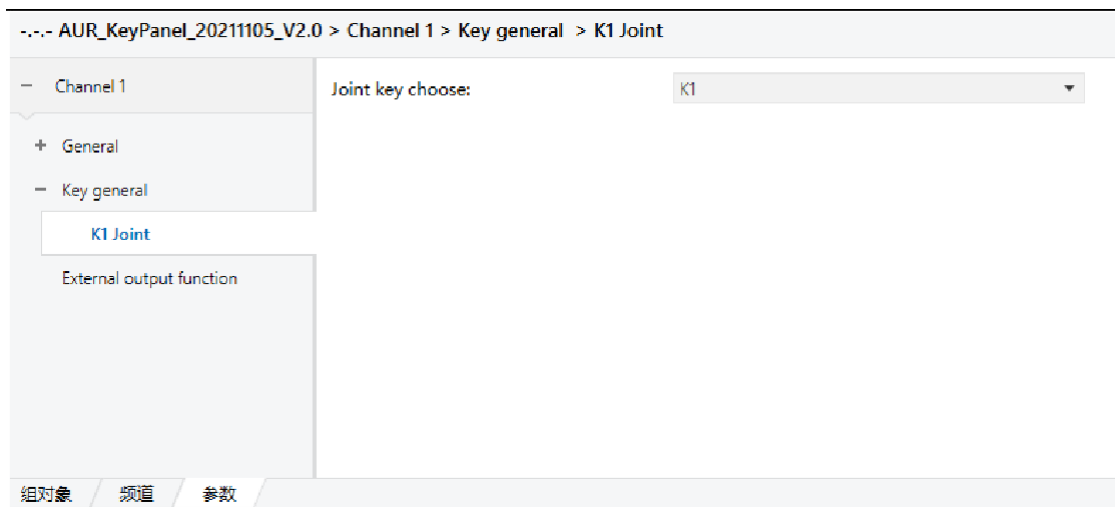


Fig. 3.2.7-1 Parameter Setting Window “Key X joint page”

### Parameter “Joint key choose”

This parameter is set to select the mapped key, i.e., if key X is selected and key not X is mapped, the two keys will have the same function.

Options: K1

...

K6

Select “K1”, button X (not 1) has the same function as button 1

...

Select “K6”, button X (not 6) has the same function as button 6

### 3.3 Parameter setting window “Relay”

**Note: to open the relay function, the hardware must be configured with a relay motherboard, otherwise the relay function can not take affect.**

The Aurora key panel has 4 relay channels. In the parameter setting window “External output function”, the parameter “External output function” selects “relay function”, and the parameter setting window “Relay” of the relay function appears, as shown in the figure below

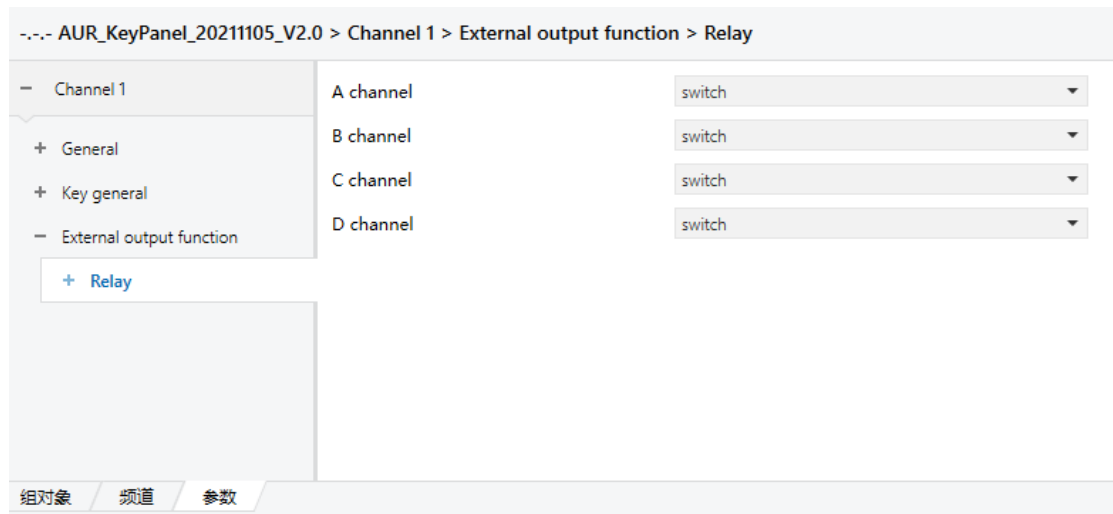


Fig. 3.3-1 Parameter Setting Window “Relay”

### 3.3.1 Parameter setting window “channel x switch”

It is displayed when the “switch” function is selected for “x channel” under “Relay”. The specific parameters are shown in Figure 3.3.1-1 below.

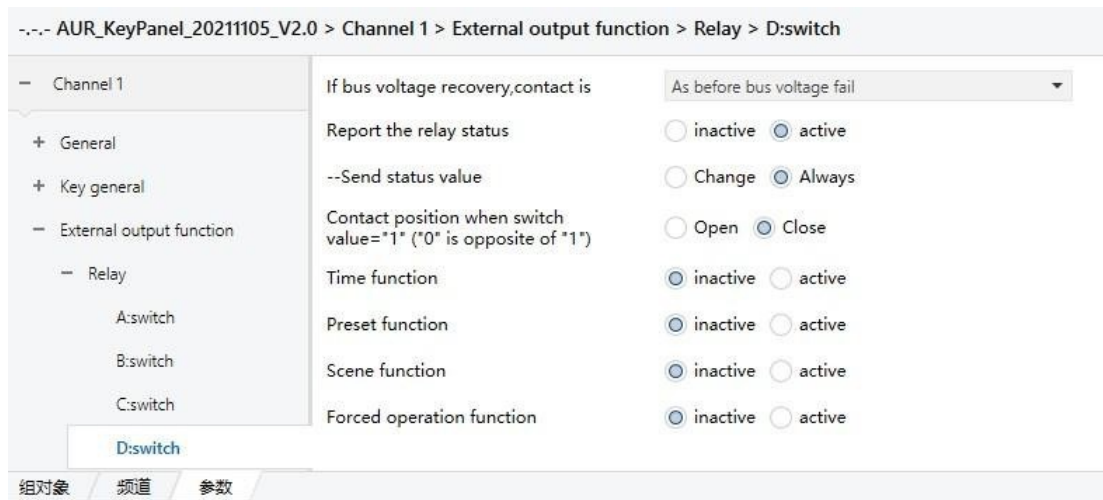


Fig. 3.3.1-1 Parameter Setting Window “Switch”

#### Parameter “If bus voltage recovery, contact is”

This parameter sets the contact state of the switch when the bus power is restored.

Options: unchanged

open

close

as before bus voltage fail

If “unchanged” is selected, the relay contact of this channel will not change when the bus is powered on; (to be initialized)

If “open” is selected, the relay contact of the channel is opened when the bus is powered on, and the channel is closed (OFF);

If “close” is selected, the relay contact of the channel is closed when the bus is powered on, and

the channel is opened (ON);

If “as before bus voltage fail” is selected, the relay contact of the channel will return to the state before the power failure when the bus is powered on.

#### **Parameter “Report the relay status”**

This parameter sets whether to enable the status function of the reporting relay.

Options: Inactive

Active

Select “Active” to enable the status of the report relay, and activate the parameter “send status value”.

#### **Parameter “Send status value”**

This parameter sets the conditions for sending the switch status to the bus, and the communication object is “switch status”.

Options: Change

Always

Selecting Change means that the switch state value is only issued when the switch contact state changes; Selecting Always indicates that the switch state value is sent regardless of whether the switch contact state changes.

#### **Parameter “contact position when switch value=’1’(’0’ is opposite of ’1’)”**

This parameter sets the position of the contact when the message value of the communication object “switch” is 1.

Options: Open

Close

Select “Open” to indicate open the contact when the value of the communication object “switch” message is 1, and close the contact when it is 0.

Select “Close” to indicate that the contact is closed when the value of the communication object “switch” message is 1, and open when it is 0.

*Note: The communication object “switch status” is fixed as 1 contact closed and 0 contact open, which has nothing to do with the parameter “contact position when switch value=’1’(’0’ is opposite of ’1’)”;*

#### **Parameter “Time function”**

This parameter sets whether to enable the timing function. Options:

Inactive

Active

Selecting Inactive means that the timing function is not enabled;

Select Active to enable the timing function, please refer to window 3.3.1.1 below for details.

#### **Parameter “Preset function”**

This parameter sets whether to enable the preset function. Options: Inactive

Active

Selecting Inactive means that the preset function is not enabled;  
 Select Active to enable the preset function, please refer to window 3.3.1.2 below for details.

**Parameter “Scene function”**

This parameter sets whether to enable the scene function. Options

- : Inactive
- Active

Selecting Inactive means that the scene function is not enabled;  
 Select Active to enable the scenario function, refer to 3.3.1.3 window below for details.

**Parameter “Forced operation function”**

This parameter sets whether to enable the forced operation function, and the communication object is “Forced operation”.

- Options: Inactive
- Active

Selecting Inactive means that the forced operation function is not enabled;  
 Select Active means that enable the forced operation function.

**3.3.1.1 Parameter setting window “channel x time function”**

This parameter is displayed when “active” is selected for “Time function” under “channel x switch”.  
 As shown in Fig. 3.3.1.1-1 below.

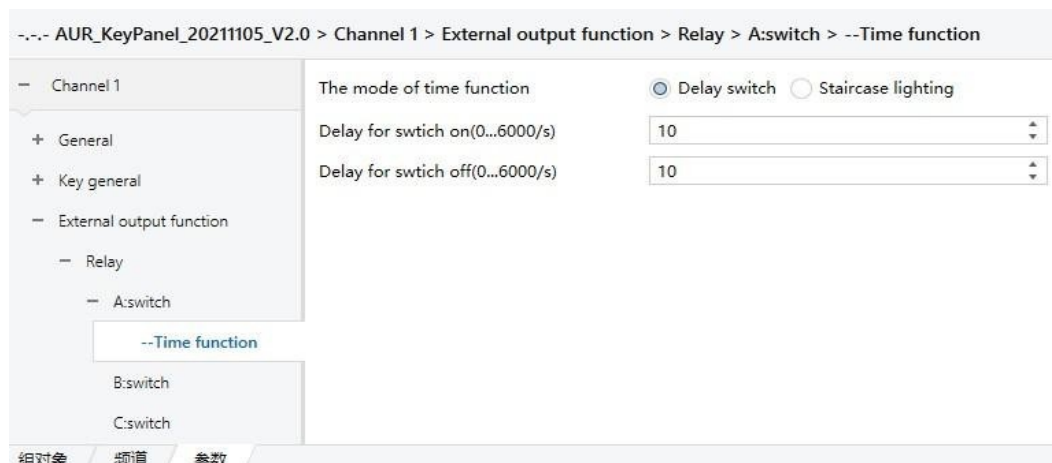


Fig. 3.3.1.1-1 Parameter Setting Window “time”

**Parameter “The mode of time function”**

This parameter sets the mode of the timing function. Options:

- Delay switch
- Staircase lighting

Select Delay switch to indicate that the mode of timing function is delay switch, the parameters are shown in A.Delay switch below;

Select Staircase lighting to indicate that the mode of the timing function is staircase lighting, see B. Staircase lighting below for parameters.

**A. Delay switch**

**Parameter “Delay for switch on (0...6000/s)”**

This parameter sets the delay time for opening the switch. Ranges: 0~6000, Unit: Seconds

**Parameter “Delay for switch off (0...6000/s)”**

This parameter sets the delay time for closing the switch. Ranges : 0~6000, Unit: Seconds

**B. Staircase lighting**

When “Staircase lighting” is selected for the parameter “The mode of time function”, the parameters are shown in Figure 3.3.1.1-2 below.

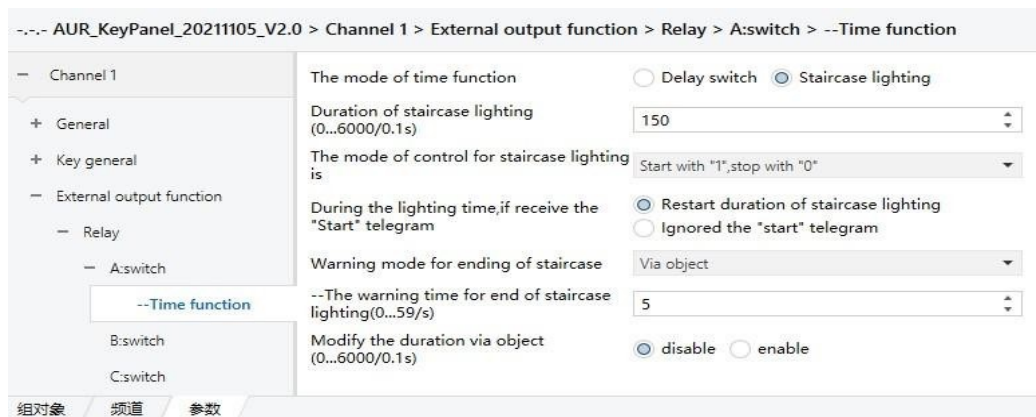


Fig. 3.3.1.1-2 Parameter Setting Window “time”

**Parameter “Duration of staircase lighting (0...6000/0.1s)”**

This parameter sets the duration of the stair light illumination. Ranges: 0~6000, Unit: 0.1 Second

**Parameter “The mode of control for staircase lighting is”**

This parameter sets the mode of controlling the stair light.

- Options: Start with ‘1’, stop with ‘0’  
 Start with ‘1’, no active with ‘0’  
 Start with ‘0/1’, can’t be stop

Select Start with ‘1’, stop with ‘0’ means that when the communication object “output of staircase lighting” receives a logic value of 01, the staircase light will be on, and when the logic value is 00, the staircase light will be off;

Selecting Start with ‘1’, no active with ‘0’ means that when the communication object “output of staircase lighting” receives a logic value of 01, the staircase lights will be on, and when it receives a logic value of 00, no action will be taken;

Select Start with ‘0/1’, can’t be stop means that when the communication object “output of staircase lighting” receives a logic value of 00 or 01, the staircase light will be on, no matter what other value it receives, it cannot be turned off.

**Parameter “During the lighting time, if receive ‘Start’ telegram”**

This parameter sets the action if a ‘start’ command is received during the lighting of the staircase (i.e. the communication object “switch” receives a 1).

- Options: Restart duration of staircase lighting  
 Ignored the start telegram

Select Restart duration of staircase lighting to restart the calculation of the duration of staircase lighting;  
Select Ignored the start telegram to ignore the 'start' command.

#### **Parameter “Warning mode for ending of staircase”**

This parameter sets the warning mode for ending the stairway light illumination.

Options: None

Via object

Flashing the output with ON/OFF

Via object and flashing the output

Two types of alerts are available:

---Warning via communication object: set the value of the communication object “Warning of staircase” to “1” at the start of warning, and send it to the bus.

---Warning by light flashing: control output flashing (brief switch) with 3 seconds interval between switches.

These two methods can be used independently or mixed. When the parameter “via object” is selected, it means the warning is via the communication object; when “flashing the output with OFF/ON” is selected, it means the warning is via the light flashing;

Select “via object & flashing the output” is mixed use warning.

#### **Parameter “The warning time for end of staircase lighting (0..59s) ”**

This parameter is visible when a warning mode is selected and is used to set the duration of the warning.

Ranges: 0~59, Unit: Seconds

*Note: The warning time here should be less than the duration of the lighting of the stairs, if it is longer than that, the lighting of the stairs will be turned off before the warning, and the warning function will not work.*

#### **Parameter “Modify the duration via object (0..6000/0.1s) ”**

This parameter sets whether the duration of the stair light illumination is modified via the bus.

Options: disable

Enable

When “enable” is selected, a 2byte communication object “Staircase duration” will be activated, and the lighting time of the stairs can be modified through this communication object;

If “disable” is selected, the lighting time of the stairs cannot be modified through the bus.

### 3.3.1.2 Parameter setting window “channel x Preset function”

This parameter is displayed when “active” is selected for “Preset function” under “Channel x switch”. As shown in Figure 3.3.1.2-1 below.

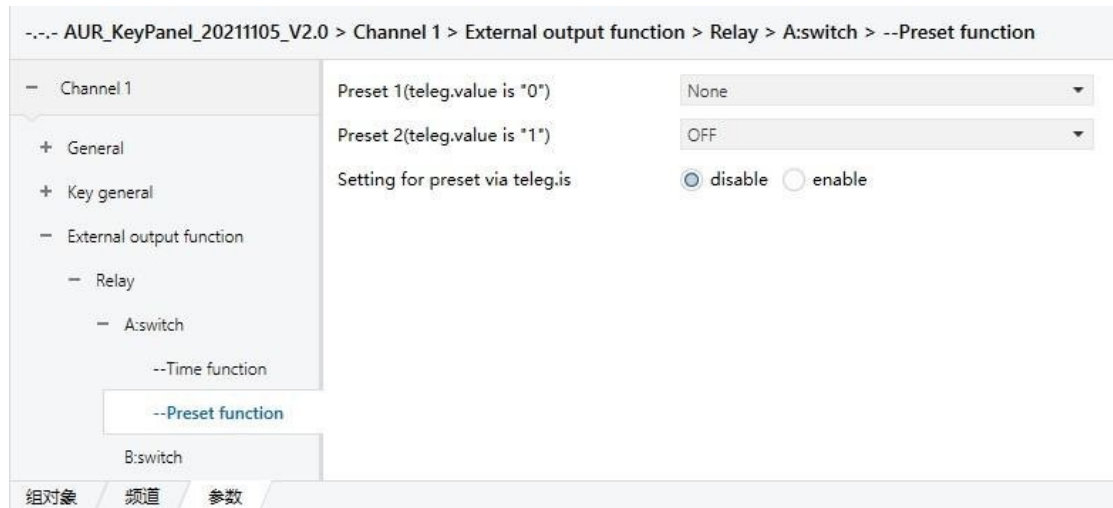


Fig. 3.3.1.2-1 Parameter Setting Window “Preset”

The preset value function is used to realize the preset lighting function, and the set preset value can be recalled, and the current switch state can also be saved as a new preset value through the bus.

2 communication objects are used to recall and save presets. Here provide 2 preset values (preset 1 and preset 2) for selection, the value “0” of the communication object corresponds to “preset 1”, and the value “1” corresponds to “preset 2”.

#### Parameter “preset 1 (teleg.Value is“0”) ”

This parameter sets the preset value 1.

Options: none

ON

Off

Selecting none means that when the communication object calls the preset value 1, it has no effect on the channel status.

Selecting ON means that when the communication object calls the preset value 1, the channel state is open;

Selecting Off means that when the communication object calls the preset value 1, the channel status is off.

#### Parameter “preset 2 (teleg.Value is“1”) ”

This parameter sets the preset value 2.

Options: OFF

ON

Last status of contact

Setting of preset 1

Selecting ON means that when the communication object calls the preset value 1, the channel state is open;  
Selecting Off means that when the communication object calls the preset value 1, the channel status is off;  
The purpose of selecting “last status of contact” is : When preset 2 is called, the relay contacts of the channel return to the previous state (the one before the operation to the current state). For example: when the meeting room, broadcast a video clip, you need to turn the lights into play video mode, then call to turn on the video playback scene mode, when the video playback is complete, and then call the preset value 2 (preset 2) to restore the lights to the mode before playing the video;

The purpose of selecting “setting of preset 1”: Restore the channel state to the state set by the preset value 1 (preset 1), which is useful when modifying the preset value through the bus. For example: the preset value of preset value 1 (preset 1) is modified through the bus, and then the switch state can be restored to the state before the modification of preset value 1 (preset 1) by calling preset value 2 (preset 2).

#### **Parameter “Setting for preset via teleg is”**

This parameter is used to set whether the preset value is allowed to be modified through the bus. The communication object “Set preset1/2” is used to save the current switch state of the channel as a new preset value when “enable” is selected to allow modification of the preset value via the bus. When it receives the message “0”, the current switch state value is saved as the new preset 1 (preset 1); when it receives the message “1”, the current switch state value is saved as the new Preset 2 (preset 2).

Options:   Enable  
              Disable

*Note: When the bus is powered off, the new preset values set are not lost.*

#### **3.3.1.3 Parameter setting window “channel x Scene function”**

This parameter is displayed when “active” is selected for “Scene function” under “Channel x switch”. As shown in Figure 3.3.1.3-1 below.

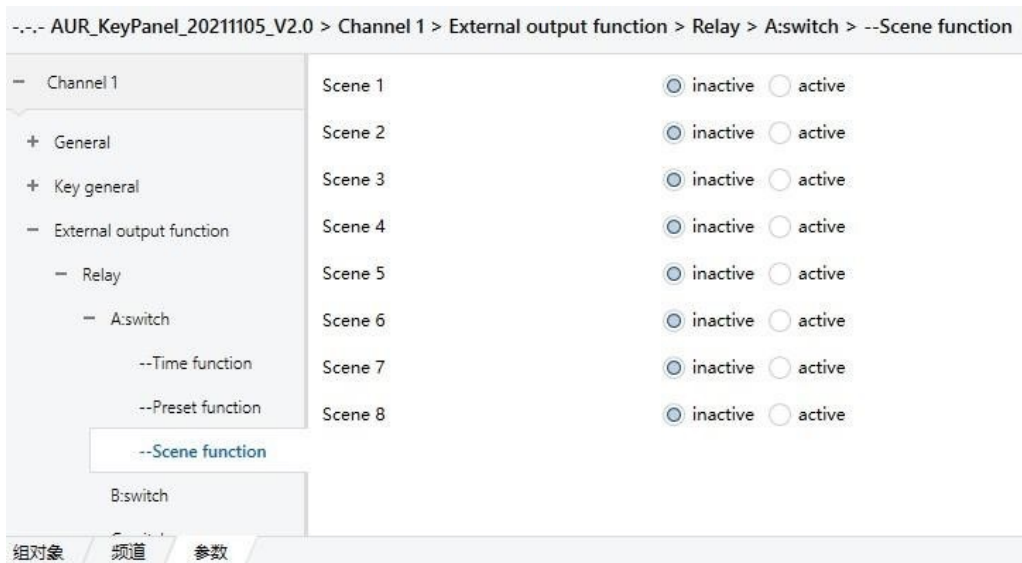


Fig. 3.3.1.3-1 Parameter Setting Window “Scene”

The window has eight scenes to choose from, with X below representing the number of scenes X=1 8

**Parameter “Scene X”**

This parameter sets whether to enable the scene X

Options: Inactive

Active

Select Active to enable scene X and activate several parameters, as shown in Fig. 3.3.1.3-2:

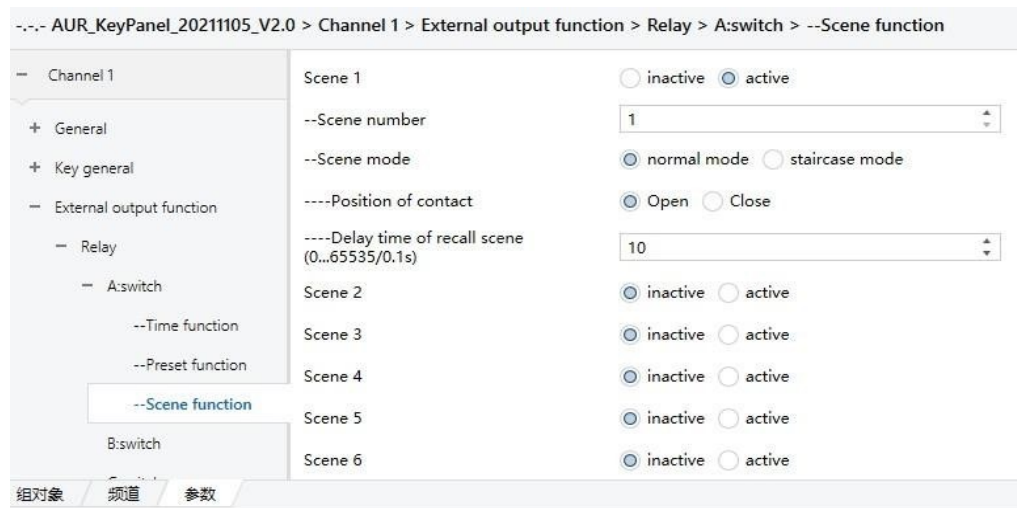


Fig. 3.3.1.3-2 Parameter Setting Window “Scene”

**Parameter “Scene number”**

This parameter is used to set the scene number.

Ranges: 1.....64

*Note: The scene number cannot be 0, because the conditions must be met if you want to call the scene number (scene number = value of input call + 1).*

**Parameter “Scene mode”**

This parameter sets the scene mode.

Options: Normal mode

Staircase mode

Selecting Normal mode means that the delay switching mode of the relay in the normal state is called, and the parameters are shown in A.

Normal\_mode;

Select Staircase mode to indicate the continuous lighting mode of the stair light, see D. Staircase mode for parameters.

**A. Normal mode**

**Parameter “Position of contact”**

This parameter sets the relay contact state of scene X. Options:

Open

Close

Select open contact open, channel closed;

Select close contact close, channel open.

**Parameter “Delay time of recall scene”**

This parameter sets the delay time of scene X.

Ranges: 0...65535, Unit: 0.1 Second

**D. Staircase mode**

This parameter setting interface is displayed when “scene mode” is selected as “staircase mode”, as shown in Figure 3.3.1.3-3:

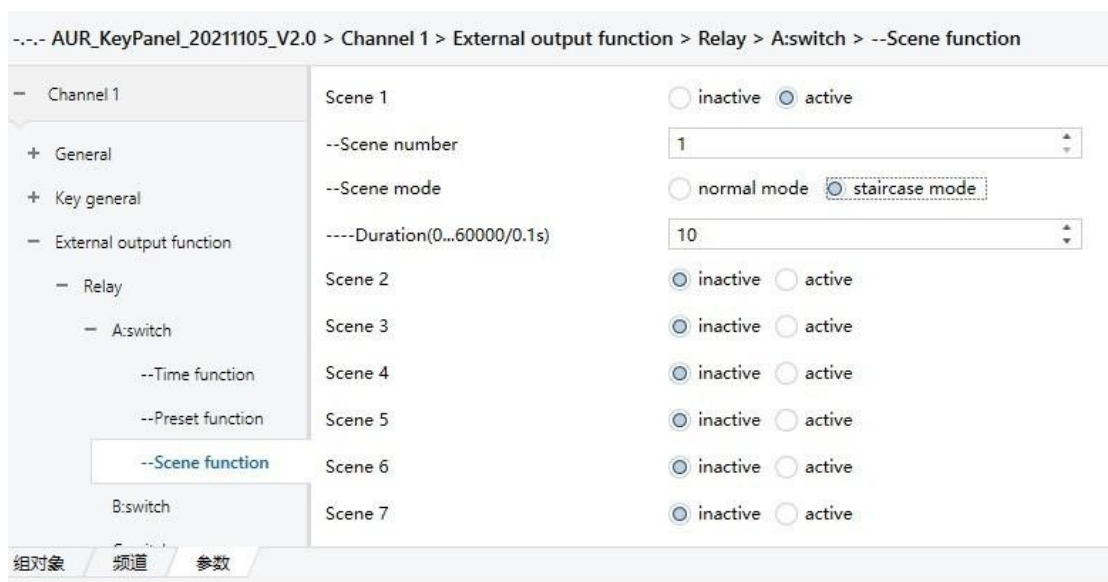


Fig. 3.3.1.3-3 Parameter Setting Window “Scene”

**Parameter “Duration (0...60000/0.1s)”**

This parameter sets the continuous lighting time of the stair light in the stair light mode of scene X.

Ranges: 0...60000, Unit: 0.1s

### 3.3.2 Parameter setting window“channel x Curtain”

The “curtain” function is displayed when “channel x” is selected under “Relay”. The specific parameters are shown in Figure 3.3.2-1.

Note:

- 1、 When the curtain function is turned on, curtain should be selected for channels 1 and 2 at the same time, indicating curtain channel 1 (the same is true for channels 3 and 4);
- 2、 Curtain moves up, relay A/C closes, moves down, relay B/D closes;

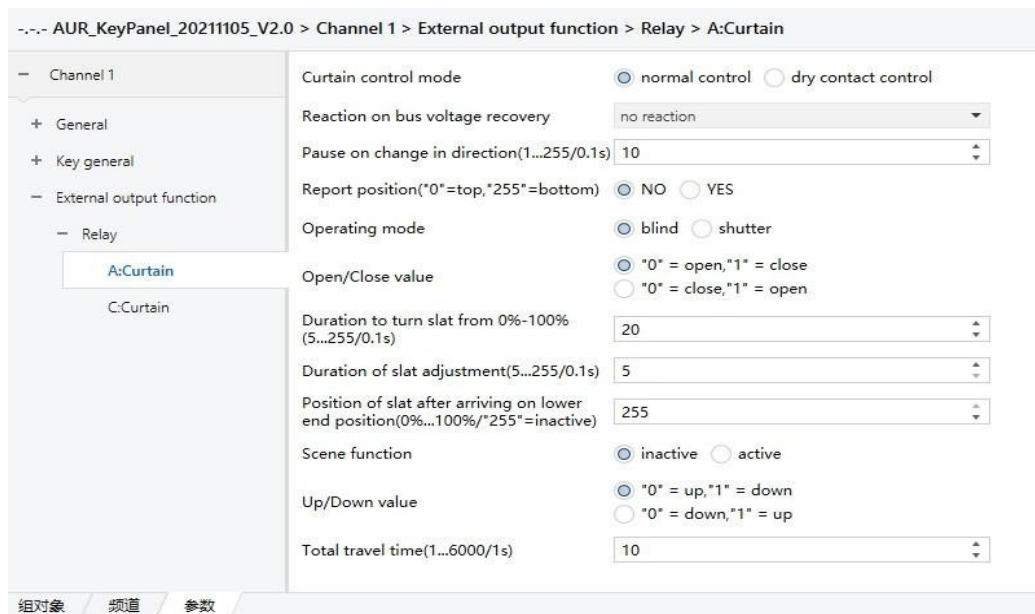


Fig. 3.3.2-1 Parameter Setting Window “curtain”

#### Parameter “Curtain control mode”

This parameter sets the control mode of the curtain, there are two kinds of normal control and dry contact control.

- Options:
- normal control
  - dry contact control

#### 3.3.2.1 Curtain control mode normal control

The parameter “Curtain control mode” selects normal control, which means the control mode of curtain is normal control mode. The specific parameters are shown in Figure 3.3.2-1.

#### Parameter “Reaction on bus voltage recovery”

This parameter sets the action state of the curtain after the bus power is restored.

- Options:
- No reaction
  - Up
  - Down
  - Stop

Select “no reaction” means that the curtain will not react when the bus power is restored;  
 Select “up” means that the curtain moves upwards and moves to the top;  
 Select “down” means that the curtain moves down and moves to the bottom;  
 Select “stop” means the curtain stops moving.

**Parameter “Pause on change in direction (1...255/0.1s) ”**

This parameter sets the pause time when the curtain movement direction changes. Ranges: 1...255  
 , Unit: 0.1s

**Parameter “Report position (“0”=top, “255”=bottom) ”**

This parameter sets whether the position of the curtain is reported. Where 0 means the curtain moves to the top and 255 means the curtain moves to the bottom.

**Parameter “Operation mode”**

This parameter sets the operating mode of the curtain.

Options: blind  
 shutter

Selecting “blind” means that the curtain operation mode is the mode with blades, see A.blind description;  
 Selecting “shutter” means that the curtain operation mode is without blade mode, see B.shutter description.

**A. blind**

**Parameter “Open/Close value”**

Options: “0”=open, “1”=close  
 “0”= close, “1”= open

Select “0” = open, “1” = close means that the communication object “Adjustment stop/up/down” receives the message 0 when the shutter blades are fully opened, and the angle value is 0%, and when the message 1 is received, the shutter blades are completely closed , the angle value is 100%; Select “0” = close, “1” = open, and vice versa.

**Parameter “Duration to turn slat from 0%-100% (5...255/0.1s) ”**

This parameter sets the duration for the curtain angle to run from 0% to 100%.  
 Ranges: 5...255, Unit: 0.1s

**Parameter “Duration of salt adjustment(5...255/0.1s)”**

This parameter sets the adjustment time of each step of the curtain angle. Ranges: 5...255, Unit: 0.1s

*Note: As shown in Figure 3.3.2-1, the parameter “Duration to turn slat from 0%-100% (5...255/0.1s)” is set to 20, and the parameter “Duration of salt adjustment (5...255/0.1s)” is set 5. Indicates that the total adjustment time of the angle is 2s, and the adjustment is divided into 4 steps. The adjustment time of each step is 0.5s, and each step is adjusted by 25%. The communication object of the step-by-step adjustment is “Adjustment stop/up/down”.*

**Parameter “Position of salt after arriving on lower end position (0%...100%/“255”= inactive) ”**

This parameter sets the position of the angle when the height of the curtain reaches the bottom (100%).

Ranges: 0%...100%, 255 indicates that no value is enabled.

**Parameter “Up/Down value”**

Options: “0”=up, “1”=down

“0”=down, “1”=up

Select “0”=up, “1”=down” means that the communication object “Move curtain up/down” sends 00 to move the curtain up to the top, and sends 01 to move the curtain down to the bottom; Select “0”=down, “1”=up” means the communication object “Move curtain up/down” send 00 to move the curtain down to the bottom, and send 01 to move the curtain up to the top.

**Parameter “Total travel time (1...6000/1s) ”**

This parameter sets the full time of curtain operation (height + angle). Ranges:

1...1000, Unit: Seconds

*Note: 1、Curtain height full time = total full time - angle full time;*

*2、When the curtain height is moved to the very top (0%), the angle must be 0%;*

*3、When the curtain is moved upward, the angle is first moved to 0% and then the height is moved to the specified position before the angle is restored; when the downward move command is executed, the angle is first moved to 100% and then the height is moved to the specified position before the angle is restored;*

*4、By default, when the curtain is fully adjusted, the time is the total time plus 5% of the whole time, for example, the whole time is 10s,  $10+10*5\%=10.5s$ .*

**Parameter “Scene function”**

This parameter sets whether to activate the scene function of the curtain. Options:

Inactive

Active

Select “inactive” means that the scene function will not be activated

Select “active” to activate the scene function, and its parameter interface refers to the following figure:

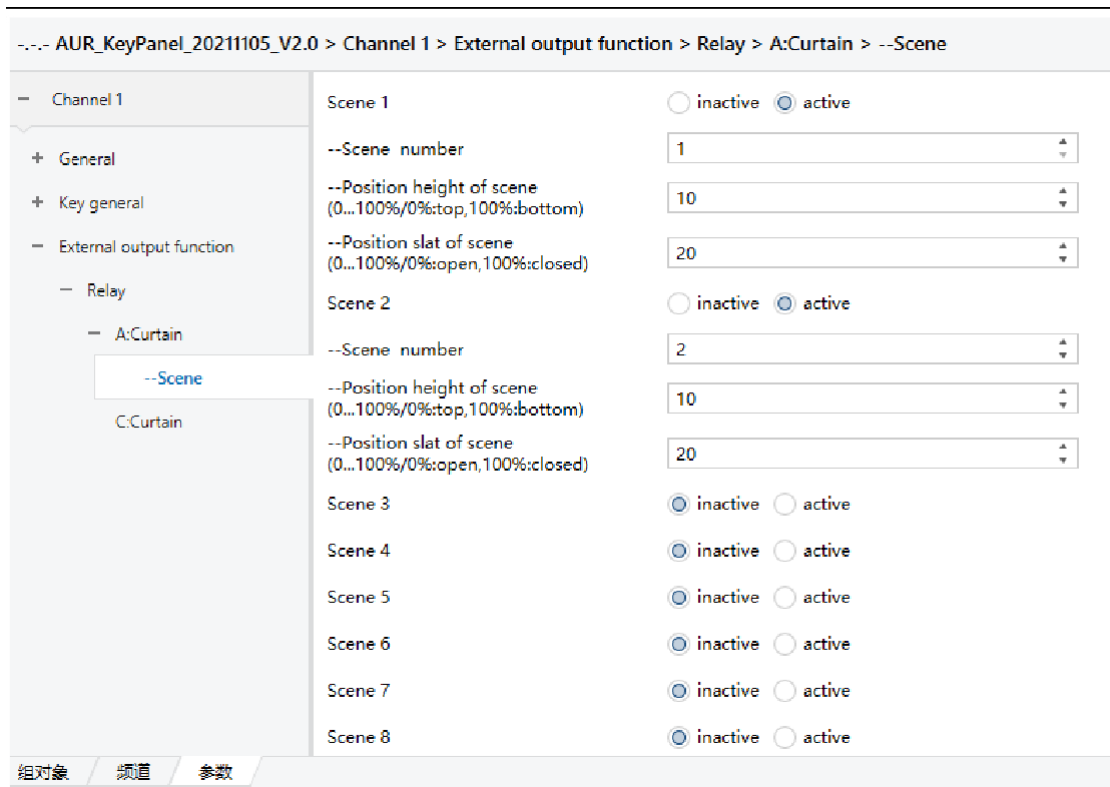


Fig. 3.3.2-2 Parameter Setting Window “curtain scene”

The window has eight scenes to choose from, with X below representing the number of scenes

X=1 ..... 8

**Parameter “Scene X”**

This parameter sets whether to enable the scene X.

Options: Inactive

Active

Select Inactive to disable scene X;

Select Active to enable scene X.

**Parameter “Scene X number”**

This parameter sets the scene number of scene X.

Ranges: 1 .....64

**Parameter “Position height of scene ( 0...100%/0%: top, 100%: bottom ) ”**

This parameter sets the height position of scene X.

Ranges: 0 .. 100%, 0% means the height moves to the top, 100% means the height moves to the bottom.

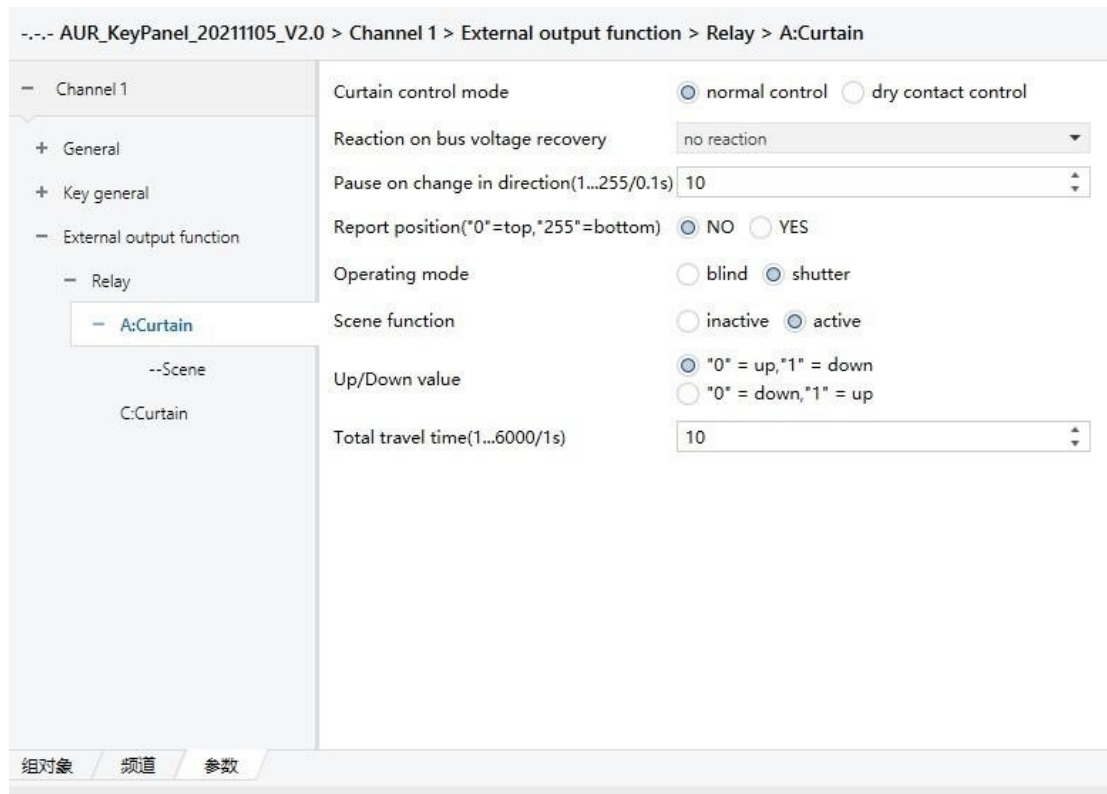
**Parameter “Position salt of scene ( 0...100%/0%: open, 100%: colsed ) ”**

This parameter sets the angular position of scene X.

Ranges: 0 .. 100%, 0% means the angle is fully open, 100% means the angle is fully closed.

**B. shutter**

C. \_\_\_\_\_



D. Fig. 3.3.2-3 Parameter Setting Window “curtain”

E. **Parameter “Up/Down value”**

F. Options: “0”=up,  
“1”=down

G. “0”=down, “1”=up

H. Select “0”=up, “1”=down” means that the communication object “Move curtain up/down” sends 00 to move the curtain up to the top, and sends 01 to move the curtain down to the bottom; Select “0”=down, “1”=up” means the communication object “Move curtain up/down” send 00 to move the curtain down to the bottom, and send 01 to move the curtain up to the top.

I.

J. **Parameter “Total travel time (1...1000/1s) ”**

K. This parameter sets the full duration of curtain operation. Ranges: 1...1000, Unit: Seconds

L.

M. **Parameter “Scene function”**

N. This parameter sets whether to activate the scene function of the curtain. Options Inactive

O. Active

P. Select “inactive” means that the scene function will not be activated

Q. Select “active” to activate the scene function, and its parameter interface refers to the following figure:

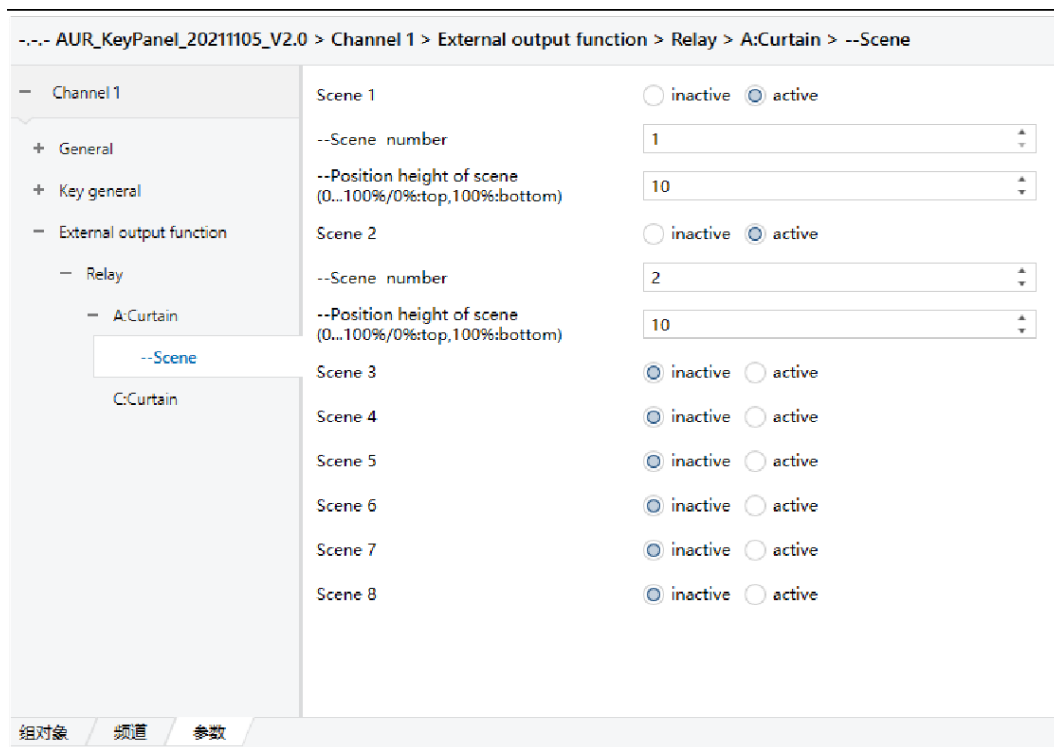


Fig. 3.3.2-4 Parameter Setting Window “curtain scene”

The window has eight scenes to choose from, with X below representing the number of scenes  
 X=1..... 8

**Parameter “Scene X”**

This parameter sets whether to enable the scene X.

- Options: Inactive
- Active

Select Inactive to disable scene X;  
 Select Active to enable scene X.

**Parameter “Scene X number”**

This parameter sets the scene number of scene X.

Ranges: 1.....64

**Parameter “Position height of scene ( 0...100%/0%: top, 100%: bottom ) ”**

This parameter sets the height position of scene X.

Ranges: 0...100%, 0% means the height moves to the top, 100% means the height moves to the bottom.

**3.3.2.2 Curtain control mode dry contact control**

The parameter “Curtain control mode” selects dry contact control to indicate that the control mode of the curtain is dry contact control. Its specific parameters are shown in Figure 3.3.2-5.

Curtain dry contact control, the main feature is that when the curtain is suspended, the two relays will be closed at the same time.

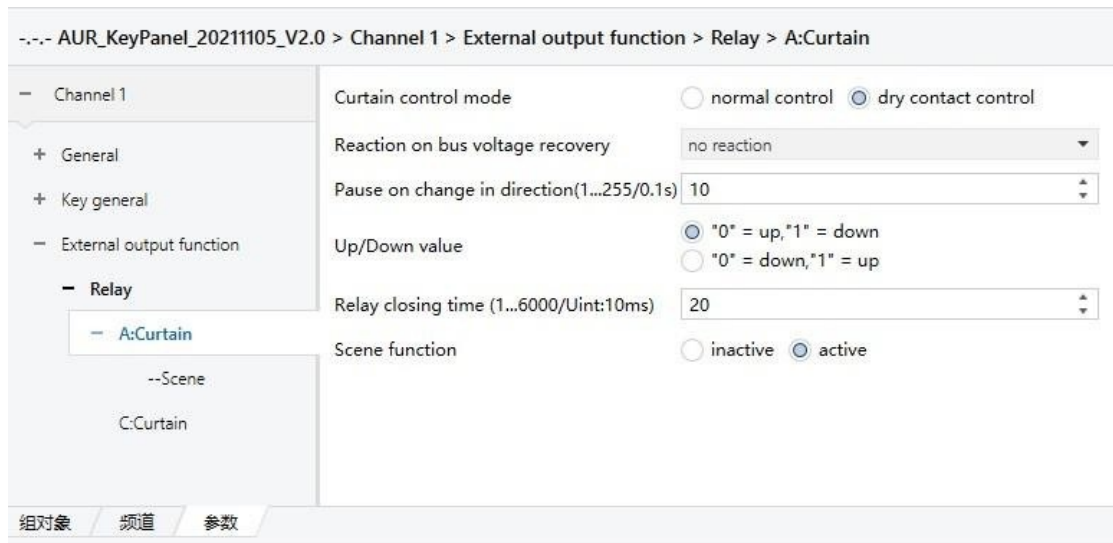


Fig. 3.3.2-5 Parameter Setting Window “curtain”

**Parameter “Reaction on bus voltage recovery”**

This parameter sets the action state of the curtain after the bus power is restored.

Options: No reaction

Up

Down

Stop

Select “no reaction” means that the curtain will not react when the bus power is restored;

Select “up” to indicate that the curtain moves upwards and moves to the top;

Select “down” to indicate that the curtain moves down and moves to the bottom;

Select “stop” means the curtain stops moving.

**Parameter “Pause on change in direction(1...255/0.1s)”**

This parameter sets the pause time when the direction of curtain movement is changed. Ranges:

1...255, Unit: 0.1s

**Parameter “Up/Down value”**

Options: “0”=up, “1”=down

“0”=down, “1”=up

Selecting “0”=up, “1”=down” means that the object “Move curtain up/down” receives the message 00 and the curtain moves up to the top (relay A is closed), and 01 the curtain moves down to the bottom (relay B closed);

Select “0”=down, “1”=up” means the communication object “Move curtain up/down” receives the message 00 the curtain moves down to the bottom, 01 the curtain moves up to the top.

**Parameter “Relay closing time (1..6000/Unit:10ms)”**

This parameter sets the relay closing time, i.e. the full time of curtain movement, curtain pause time.

Ranges: 1...6000, Unit: 10ms

**Parameter “Scene function”**

This parameter sets whether to activate the scene function of the curtain. Options:

Inactive

Active

Select “inactive” means that the scene function will not be activated.

Select “active” to activate the scene function, and its parameter interface refers to the following figure:

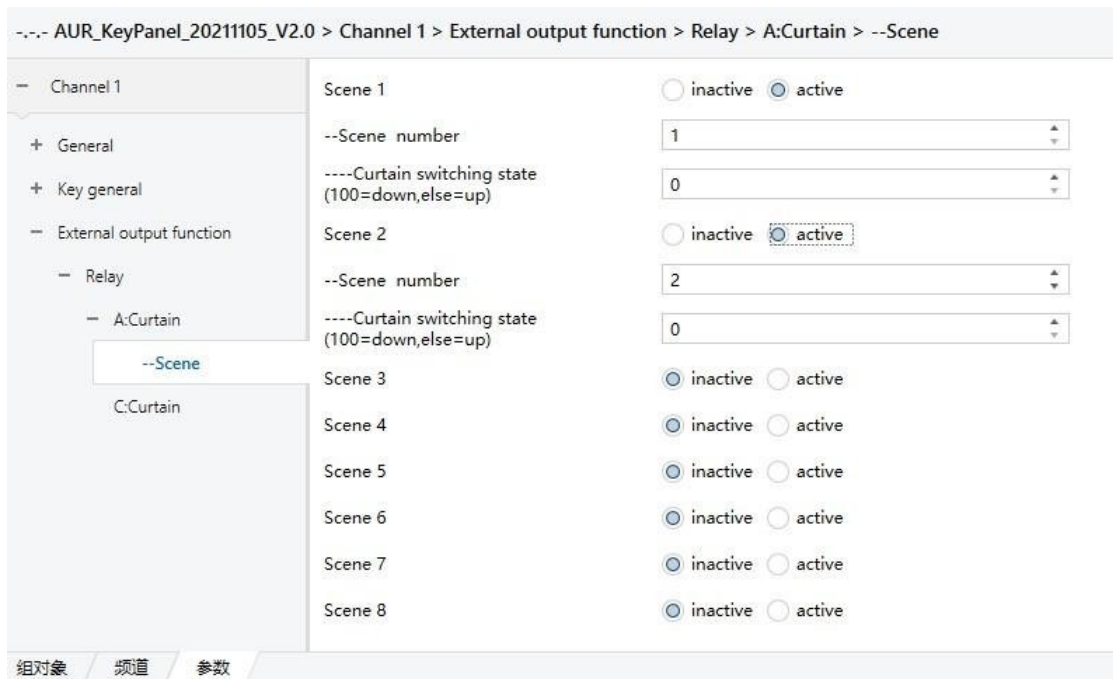


Fig. 3.3.2-6 Parameter Setting Window “curtain”

There are eight scenes to choose from in this window, and X is used to represent the number of scenes X=1...8

**Parameter “Scene X”**

This parameter sets whether to enable the scene X.

Options: Inactive

Active

Select Inactive to disable scene X;

Select Active to enable scene X.

**Parameter “Scene X number”**

This parameter sets the scene number of scene X.

Ranges: 1...64

**Parameter “Curtain switching state (100=down,else=up) ”**

This parameter sets the on/off state of the curtain.

Ranges: 0...100%, 0~99% means the height moves to the top, 100% means the height moves to the bottom.

### 2.2.2 Parameter setting window “channel x Dry contact”

Displayed when the “dry contact” function is selected for “channel x” under “Relay”. Its specific parameters are shown in Figure 3.3.3-1.

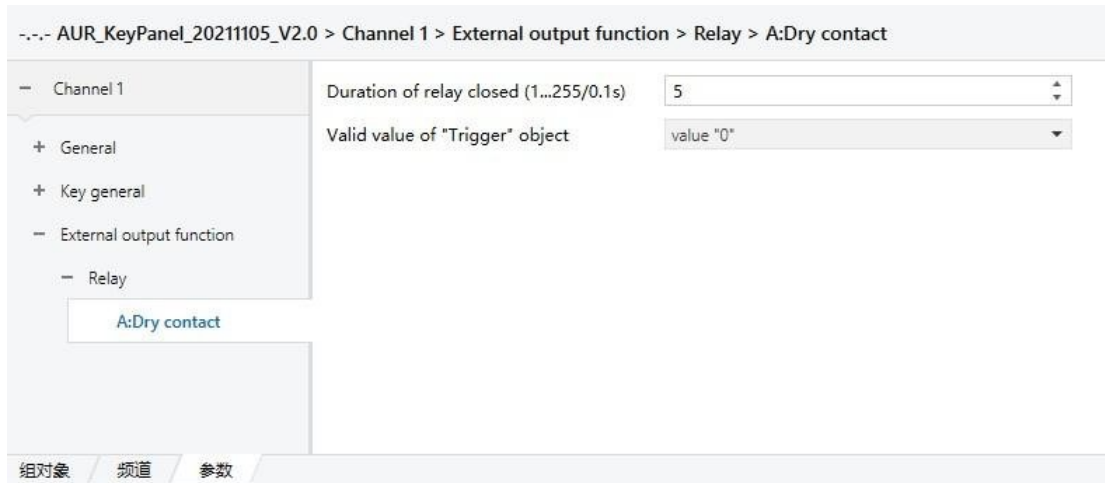


Fig. 3.3.3-1 Parameter Setting Window “dry contact”

#### Parameter “Duration of relay closed (1...255/0.1s)”

This parameter sets the duration for which the relay will close. Ranges: 1...255, Unit : 0.1s

#### Parameter “Valid value of “Trigger”object”

This parameter sets the valid value of the trigger relay. Options:

Value “0”

Value “1”

Value “0/1”

Select “value “0”” to indicate that the valid value of the trigger relay is 00.

Select “value “0”” to indicate that the valid value of the trigger relay is 01.

Selecting “value “0/1”” to indicate that the valid value of the trigger relay is 00/01.

### 3.4 Parameter setting window “dimming”

**Note: To turn on the 0-10V dimming function, the hardware must be equipped with a motherboard with 0-10V, otherwise the 0-10V function will not take effect.**

The Aurora key panel has 3 0-10V channels. Select “dimming function” for the parameter “External output function” in the parameter setting window “External output function”, and the dimming function parameter setting window “dimming” appears, as shown in the figure below.

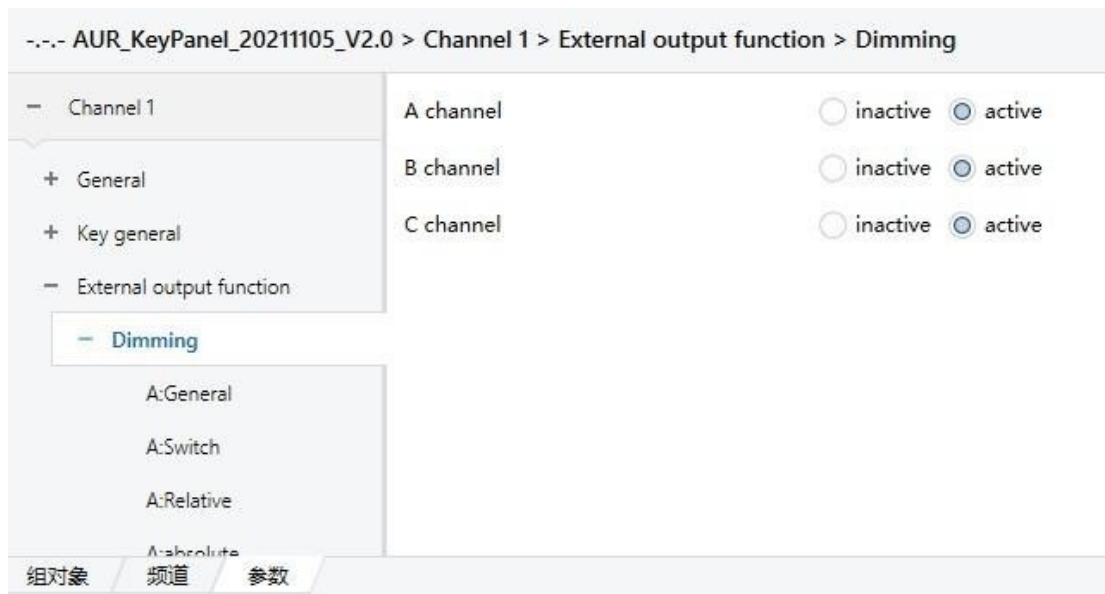


Fig. 3.4-1 Parameter Setting Window “dimming”

### 3.4.1 Parameter setting window “channel x general”

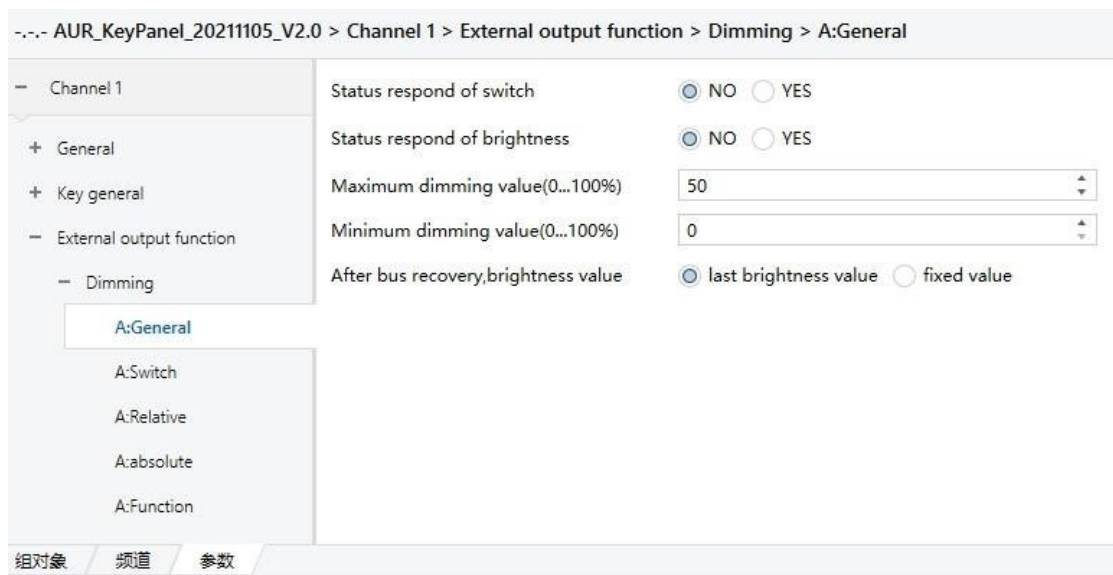


Fig. 3.4.1-1 Parameter Setting Window “General”

#### Parameter “Status responded of switch”

This parameter sets whether to send the state of the switch, and the communication object is “Current switch state”.

Options: NO  
 YES

Select “NO” to not send the status of the switch; Select “YES” to send the status of the switch.. The parameter setting interface is shown in Fig. 3.4.1-2.

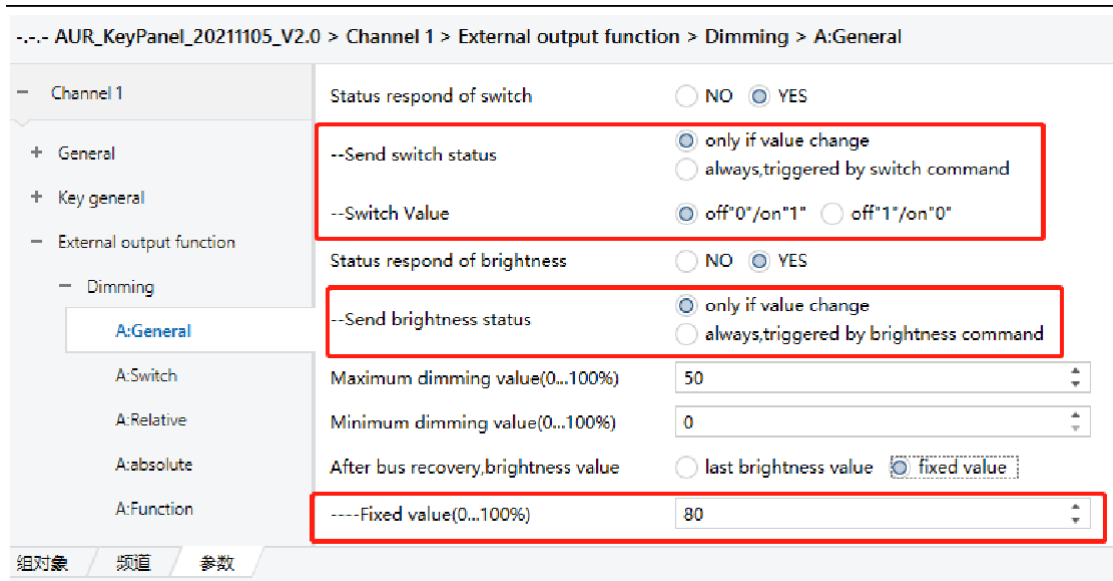


Fig. 3.4.1-2 Parameter Setting Window “General”

**Parameter “Send switch status”**

This parameter sets the way to send the state of the switch.

- Options: only if value change
- always triggered by switch command

Select “only if value change” to set the switch status to change;

Select “always triggered by switch command” to send the current switch status to the bus whenever a switch is triggered.

**Parameter “Switch Value”**

This parameter sets the status value of the switch.

- Options: off“0”/on“1”
- off“1”/on“0”

Select off “0”/on “1”, the state value of the switch is 00 is to close the switch, 01 is to open the switch;

Select off “1”/on “0”, the state value of the switch is 00 to open the switch, 01 to close the switch.

**Parameter “Status response of brightness”**

This parameter sets whether to send the brightness value, and the communication object is “Current brightness value”.

- Options: NO
- YES

Select “NO” to not send the brightness value;

Select “YES”, send the brightness value and activate a new parameter, as shown in Figure 3.4.1-2.

**Parameter “Send brightness status”**

This parameter sets the way to send brightness values.

- Options: only if value change
- always triggered by brightness command

Select “only if value change” to set the way to send the brightness value to send out when the brightness value changes.

Select “always triggered by brightness command”, as long as the brightness command is triggered, the current brightness value will be sent to the bus.

**Parameter “Maximum dimming value (0...100%) ”**

This parameter sets the maximum dimming value. Ranges: 0...100%

**Parameter “Minimum dimming value (0...100%) ”**

This parameter sets the minimum dimming value. Ranges: 0...100%

*Note: The decimal numbers corresponding to 0...100% are shown in the figure below*

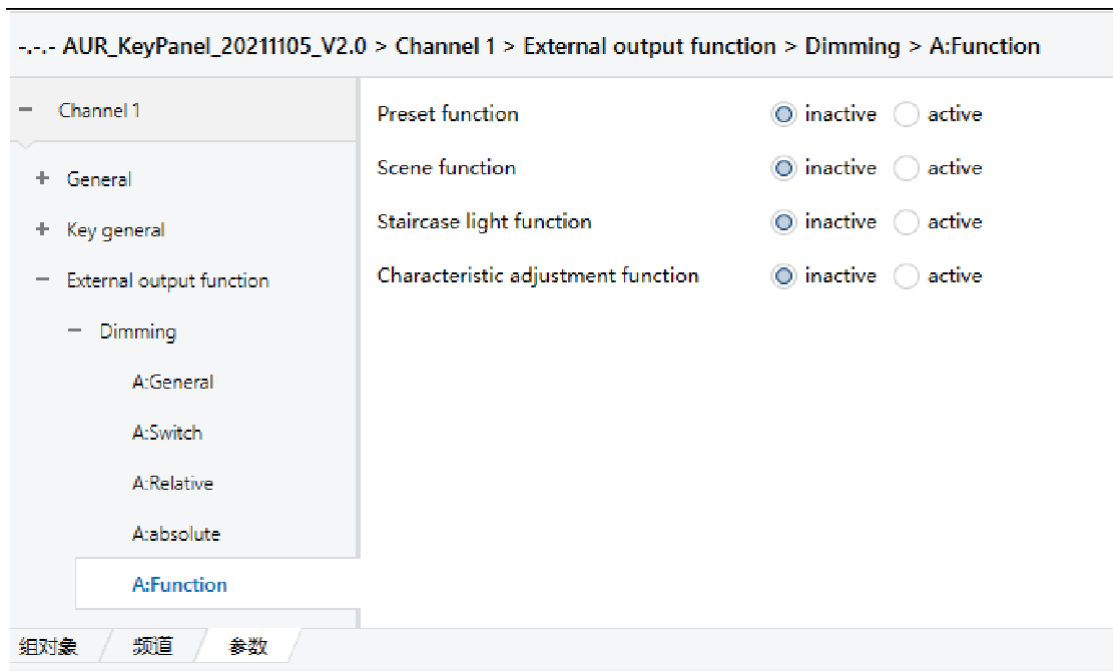
```
const UCHAR PercentDataTable[101] = {0,3,5,8,10,13,15,18,20,23,26,
                                     28,31,33,36,38,41,43,46,48,51,
                                     54,56,59,61,64,66,69,71,74,77,
                                     79,82,84,87,89,92,94,97,99,102,
                                     105,107,110,112,115,117,120,122,125,128,
                                     130,133,135,138,140,143,145,148,150,153,
                                     156,158,161,163,166,168,171,173,176,179,
                                     181,184,186,189,191,194,196,199,201,204,
                                     207,209,212,214,217,219,222,224,227,230,
                                     232,235,237,240,242,245,247,250,252,254};
```

**Parameter “After bus recovery, brightness value”**

This parameter sets the brightness value after bus recovery.

- Options: last brightness value
- fixed value

Select “last brightness value”, the brightness value after bus recovery is the last brightness value;  
 Select “fixed value”, the brightness value after the bus is restored is a fixed value, and the fixed value is set by the parameter “Fixed value (0...100%)”, as shown in Figure 3.4.1-4.



**Parameter “Preset function”**

This parameter sets whether to activate the preset function, select “active” means to activate the preset function, see “3.4.1.1 parameter setting window channel x preset” for introduction.

**Parameter “Scene function”**

This parameter sets whether to activate the scene function, select “active” means to activate the function, see “3.4.1.2 parameter setting window channel x scene” for introduction.

**Parameter “characteristic adjustment function”**

This parameter sets whether to activate the characteristic dimming function, select “active” means to activate the function, see “3.4.1.3 parameter setting window “channel x adjustment dim” for introduction.

**Parameter “staircase light function”**

This parameter sets whether to activate the feature adjustment function, select “active” means to activate the function, the function description can be found in “3.4.1.4 parameter setting window channel x staircase light”.

**3.4.1.1 Parameter setting window “channel x preset”**

The preset function is divided into two parts, “Preset 1 and 2” and “Preset 3 and 4”. The functions of these two parts are the same, and they are written together.

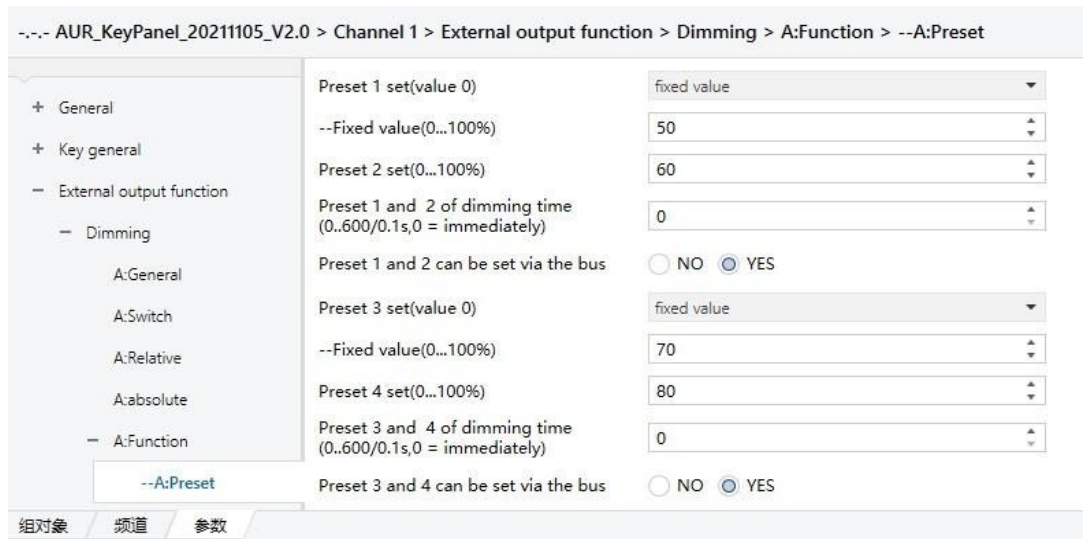


Fig. 3.4.1.1-1 Parameter Setting Window “preset”

**Parameter “Preset 1/3 set (value 0) ”**

This parameter sets the value of preset 1 (preset 3).

Options: fixed value

restore value before first preset call

reset to parameterized value before preset 2/4

Select “fixed value” to set the value of preset 1 (preset 3) to a fixed value.

The parameter setting interface is shown in Fig. 3.4.1.1-1.

**Parameter “Fixed value (0...100%) ”**

This parameter sets the fixed value of preset 1 (preset 3). Ranges:

0...100%, Unit: Percent

Select “restore value before first preset call”, which means that the value of preset 1 (preset 3) is restored to the value of the last preset function.

Select “reset to parameterized value before preset 2/4”, which means that the value of preset 1 (preset 3) is reset to the value of preset 2 (preset 4).

**Parameter “Preset 2/4 set (0...100%) ”**

This parameter sets a fixed value for preset 2 (preset 4). Ranges

: 0...100%

**Parameter “Preset 1 and 2/Preset 3 and 4 of dimming time(0...600/0.1s, 0=immediately)”**

This parameter sets the dimming time for preset 1 and 2 (preset 3 and 4). Ranges:

0...600, Unit: 0.1s, 0 for immediately

**Parameter “Preset 1 and 2/Preset 3 and 4 can be set via the bus”**

This parameter sets whether to set the value of preset 1 and 2 (preset 3 and 4) through the bus, and the communication objects are “Set preset 1 and 2” (“Set preset 3 and 4”). Options

: NO

YES

Select “NO” to set the values of presets 1 and 2 (presets 3 and 4) without the bus.;  
 Select “YES” to set the values of presets 1 and 2 (presets 3 and 4) via the bus.

### 3.4.1.2 Parameter setting window “channel x scene”

The scene function includes 16 scenes, each scene has the same parameters and communication objects, take scene 1 as an example.  
 where x represents 0...16.

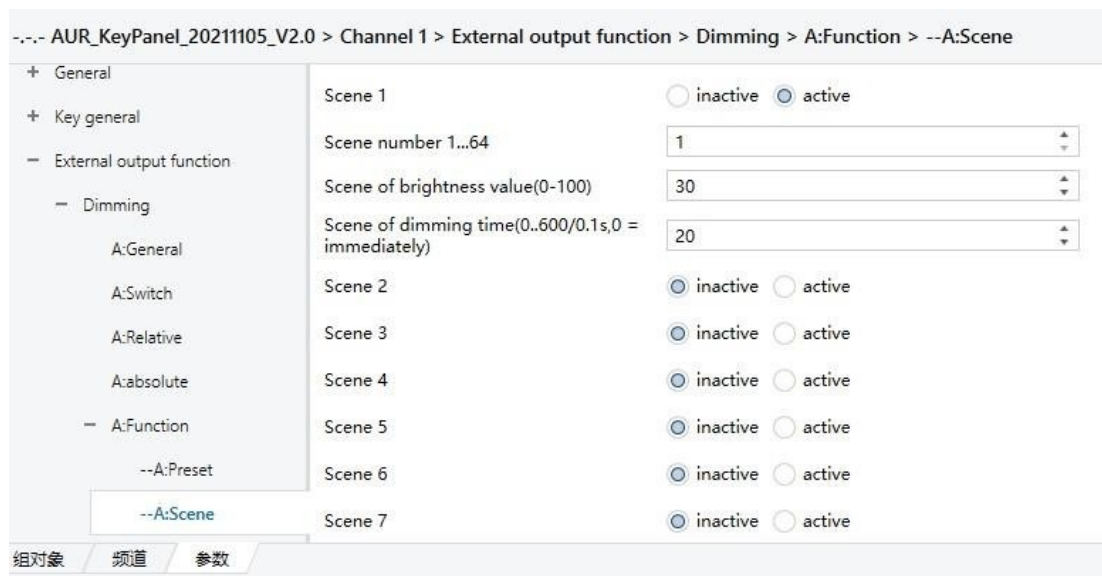


Fig. 3.4.1.2-1 Parameter Setting Window “scene”

#### Parameter “Scene x”

This parameter sets whether to activate the function of scene x。 Options: inactive  
 active

Select “active” to activate the function of scene x and activate three parameters, as shown in Figure 3.4.1.2-1.

#### Parameter “Scene x number”

This parameter sets the scene number of scene x. Ranges: 1...64

#### Parameter “Scene x of brightness value (0...100) ”

This parameter sets the brightness value of scene x.

Ranges: 0...100%

#### Parameter “Scene x of dimming time(0...600/0.1s,0=immediately)”

This parameter sets the dimming time of scene x. Ranges: 0...600, Unit: 0.1s, 0 for immediately

Parameter setting window “channel x adjustment dim”

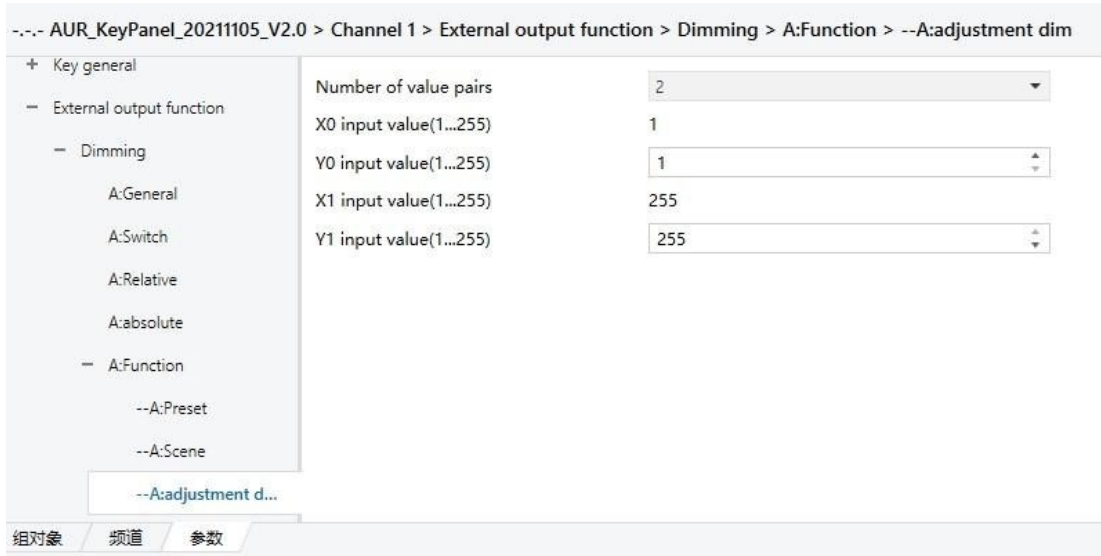


Fig. 3.4.1.3-1 Parameter Setting Window “adjustment dim”

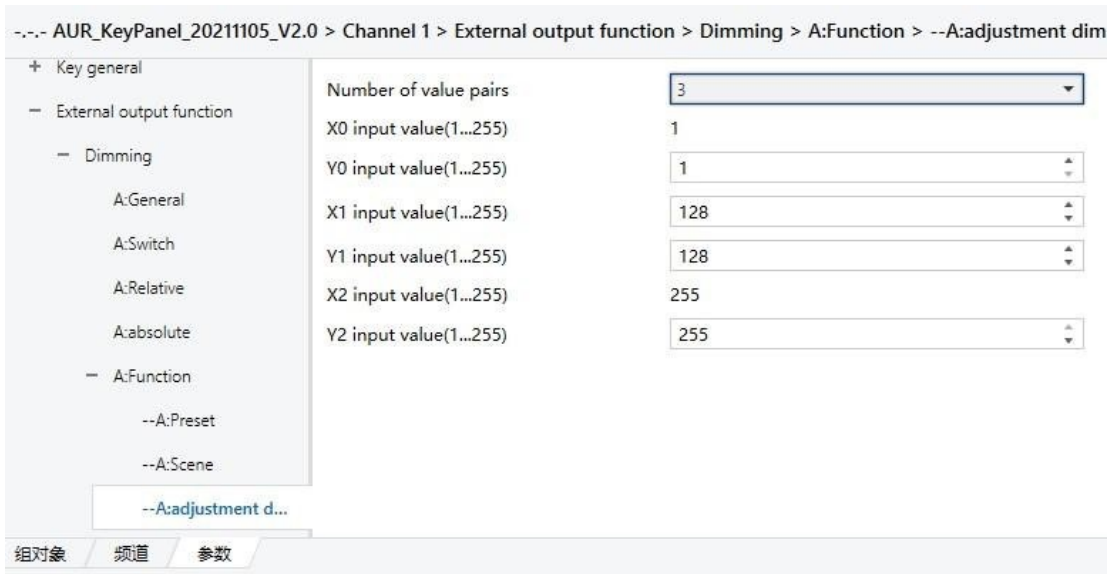


Fig. 3.4.1.3-2 Parameter Setting Window “adjustment dim”

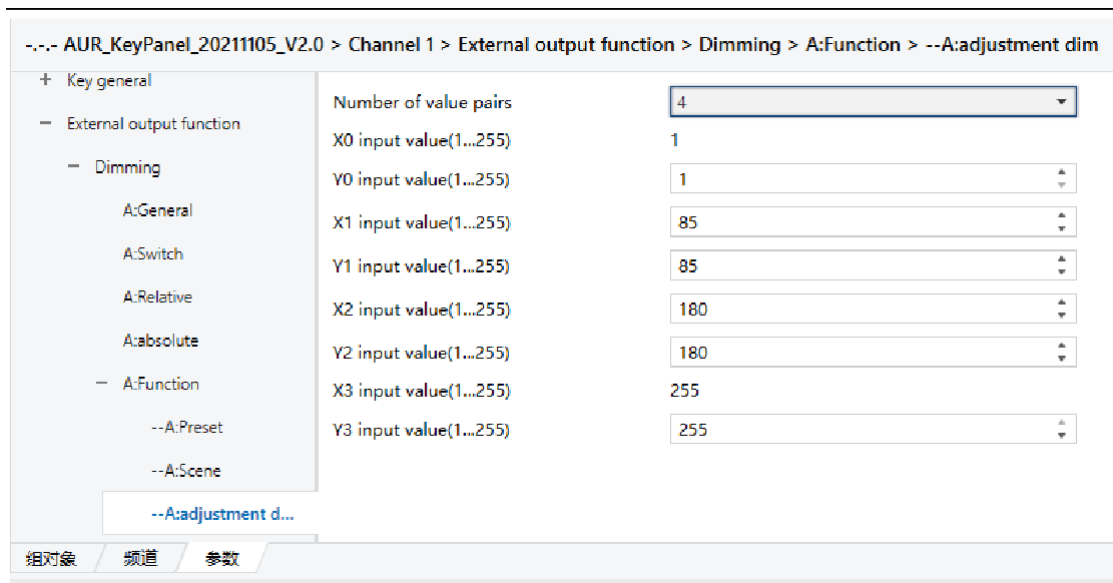


Fig. 3.4.1.3-3 Parameter Setting Window “adjustment dim”

**Parameter “Number of value pairs”**

This parameter sets the number of value pairs.

- Options: 2
- 3
- 4

Select “2” to activate 2 pairs of values, X0/Y0, X1/Y1, as shown in Figure 3.4.1.3-1;

Select “3” to activate 3 pairs of values, X0/y0, X1/Y1, X2/Y2, as shown in Figure 3.4.1.3-2;

Select “4” to activate 4 pairs of values, X0/Y0, X1/Y1, X2/Y2, X3/Y3, as shown in Figure 3.4.1.3-3.

**Parameter “X0/X1/X2/X3 input value ( 1...255 ) ”**

This parameter sets the input value of X0/X1/X2/X3

Ranges: 1...255

**Parameter “Y0/Y1/Y2/Y3 output value ( 1...255 ) ”**

This parameter sets the output value of Y0/Y1/Y2/Y3.

Ranges: 1...255

*Note: 1、 Relationship of X-values:  $X_0 < X_1 < X_2 < X_3$  , Relationship of Y-values:  $Y_0 < Y_1 < Y_2 < Y_3$ ;  
 2、 Turn on the characteristic dimming function, when dimming (absolute dimming/relative dimming, etc.), the relationship between the input dimming value and the output dimming value needs to be calculated by the formula, the formula is as follows:*

$$\text{Input dimming value less than } X_1 \quad y = \frac{(Y_1 - Y_0)(x - 1)}{X_1 - 1} + Y_0$$

$$\text{Input dimming value less than } X_1 \quad y = \frac{(Y_2 - Y_1)(x - X_1)}{X_2 - X_1} + Y_1$$

$$Input\ dimming\ value\ less\ than\ X \quad y = \frac{(Y3 - Y2)(x - X2)}{X3 - X2} + Y2$$

Where x is the input dimming value, y is the actual output dimming value.

### 3.4.1.3 Parameter setting window “channel x stair light”

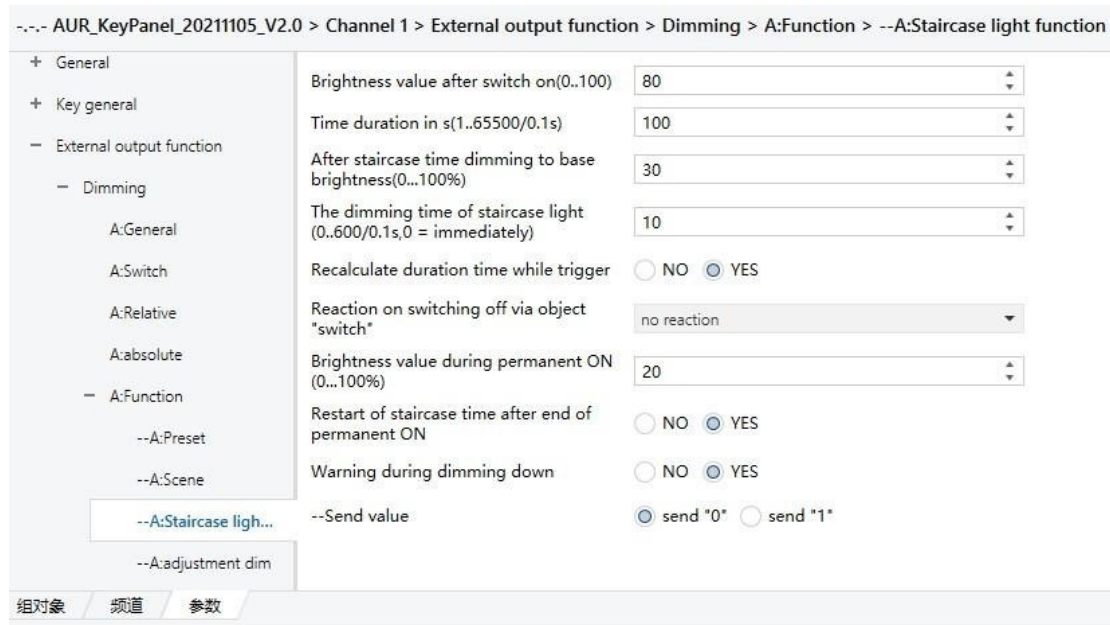


Fig. 3.4.1.4-1 Parameter Setting Window “stair light”

#### Parameter “Brightness value after switch on(0...100%)”

This parameter sets the brightness value when the switch is turned on.

Ranges: 0...100%

#### Parameter “Time duration in is(1...65536/0.1s)”

This parameter sets the delay time of the stair light.

Ranges: 1...65536, Unit: 0.1s

#### Parameter “After staircase time dimming to base brightness(1...100%)”

This parameter sets the brightness value returned to after the dimming of the stair light ends.

Ranges: 0...100%

#### Parameter “The dimming time of staircase light (0...600/0.1s,0=immediately) ”

This parameter sets the dimming time for the stair light to return to the set brightness value. Ranges : 0...600, Unit: 0.1s, 0 for immediately

#### **Parameter “Recalculate duration time while trigger”**

This parameter sets whether to recalculate the duration when the staircase light is triggered again.

Options: NO

YES

Select “NO” to not recalculate the duration when the stair light is triggered again;

Select “YES” to recalculate the duration when the stair light is triggered again.

#### **Parameter “Reaction on switching off via object “switch””**

This parameter sets the state change of the switch when the switch is turned off through the communication object “switch”.

Options: no reaction

base brightness value

switch off

If “no reaction” is selected and the switch is turned off by the communication object “switch”, the status of the switch changes to no reaction, i.e., it remains as it is.

If you select “base brightness value” and turn off the switch by using the communication object “switch”, the status of the switch changes to the set base brightness value.

If you select “switch off” and turn off the switch with the communication object “switch”, the status of the switch changes to switch off.

#### **Parameter “Brightness value during permanent ON(0...100%)”**

This parameter sets the brightness value when the switch state is permanently on.

Ranges: 0...100%

#### **Parameter “Restart of staircase time after end of permanent ON”**

This parameter sets whether to recalculate the stair light time after the switch state is permanently on.

Options: NO

YES

Select “NO”, the switch state is permanently on, and the stair light time will not be recalculated after the end. (The delay function of the stair light will not work after triggering).

Select “YES”, the switch state is permanently on and then recalculate the stair light time.

*Note: Select “YES” for the parameter “Restart of staircase time after end of permanent ON”, when the setting value of the parameter “brightness value during permanent ON” is smaller than the setting value of the parameter “after staircase time dimming to base brightness”, the stair light time will not be recalculated after the permanent on.*

#### **Parameter “Warning during dimming down”**

This parameter sets whether to issue a warning after the dimming time ends, and the communication object is “Warning staircase lighting”.

Options: NO  
 YES

Select “NO” to not warn when the dimming time is over;

Select “YES”, a warning will be issued after the dimming time is over, and the warning value is set by the parameter “Send value”.

### 3.4.2 Parameter setting window “channel x switch”

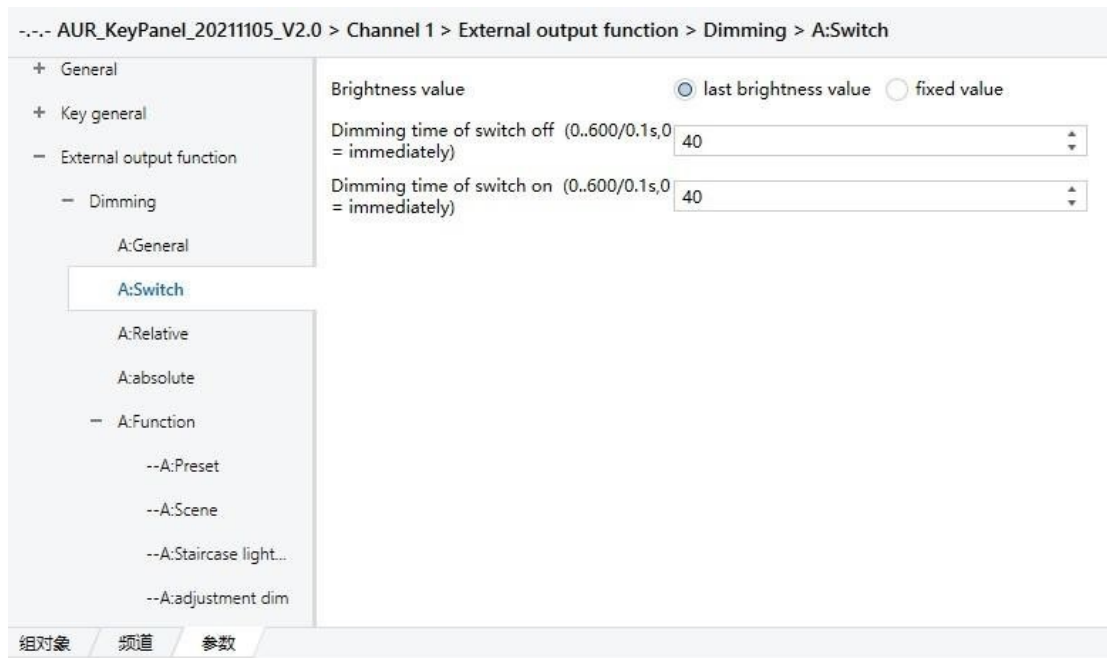


Fig. 3.4.2-1 Parameter Setting Window “switch”

#### Parameter “brightness value”

This parameter sets the brightness value when the switch state is on.

Options: last brightness value  
 fixed value

Select “last brightness value”, the brightness value when the switch is turned on is the last brightness value.

Select “fixed value”, the brightness value when the switch is turned on is a fixed value, activate a parameter, as shown in Figure 3.4.2-2.

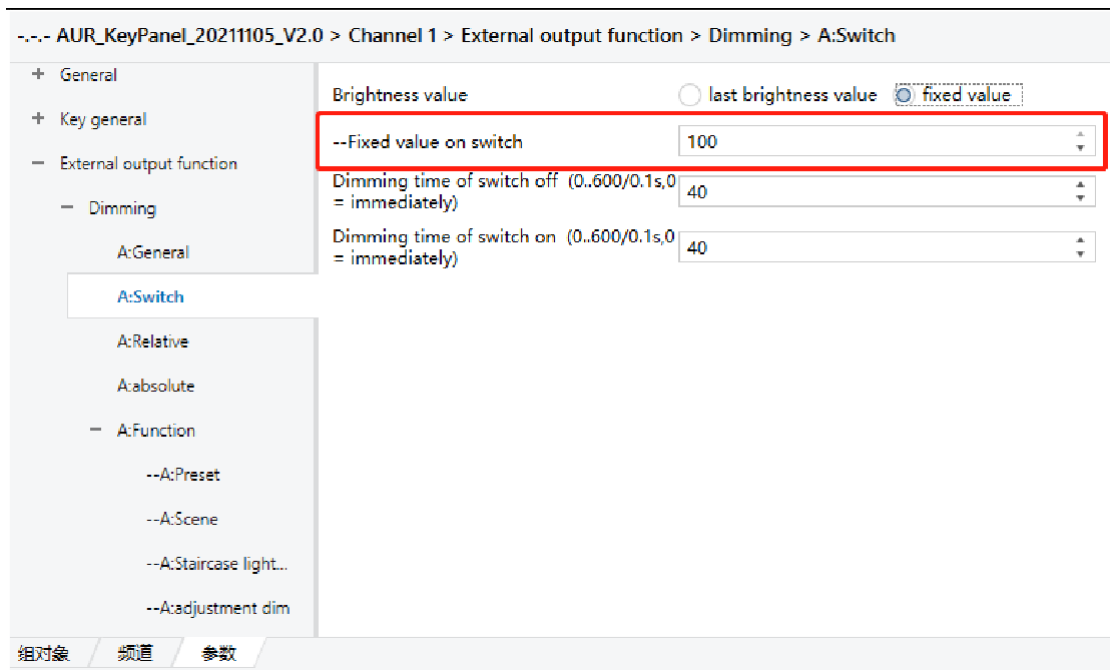


Fig. 3.4.2-2 Parameter Setting Window “Switch”

**Parameter “Fixed value on switch (0...100%) ”**

This parameter sets the brightness value when the switch state is on.

Ranges: 0...100%

**Parameter “Dimming time of switch off (0...600/0.1s,0=immediately) ”**

This parameter sets the dimming time of the off switch. Ranges

: 0...600, Unit: 0.1s, 0 for immediately

**Parameter “Dimming time of switch on (0...600/0.1s,0=immediately) ”**

This parameter sets the dimming time to turn on the switch. Ranges:

0...600, Unit: 0.1s, 0 for immediately

**Parameter setting window “channel x relative”**

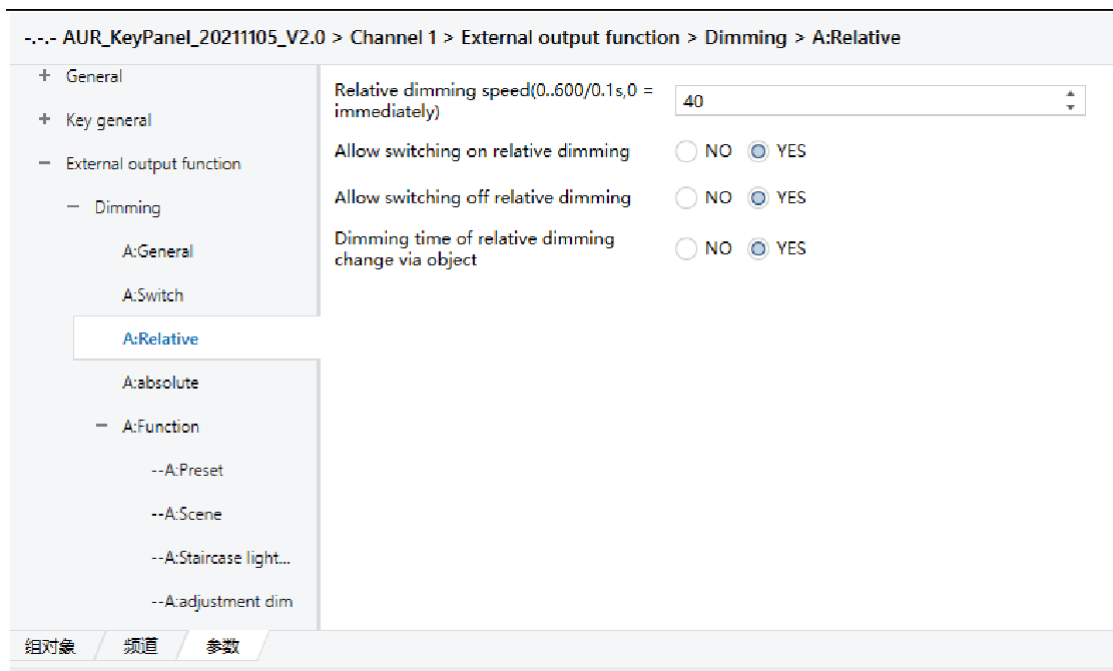


Fig. 3.4.3-1 Parameter Setting Window “Relative”

**Parameter “Relative dimming speed ( 0...600/0.1s,0=immediately) ”**

This parameter sets the dimming time of relative dimming.

Ranges: 0...600, Unit: 0.1s, 0 for immediately

**Parameter “Allow switching on via relative dimming”**

This parameter sets whether to allow the switch to be turned on by relative dimming.

Options: NO

YES

Select “NO” to not allow the switch to be turned on by relative dimming; Select “YES” to allow the switch to be turned on with relative dimming.

**Parameter “Allow switching off via relative dimming”**

This parameter sets whether to allow the switch to be turned off by relative dimming.

Options: NO

YES

Select “NO” to not allow the switch to be turned off by relative dimming; Select “YES” to allow the switch to be turned off by relative dimming.

**Parameter “Dimming time of relative dim chang via object”**

This parameter sets whether to change the dimming time of relative dimming through the communication object, and the communication object is “Dimming time of relative”.

Options: NO

YES

Select “NO”, do not change the dimming time of relative dimming through the communication object; Select “YES” to change the dimming time of relative dimming through the communication object.

**Parameter setting window “channel x absolute”**

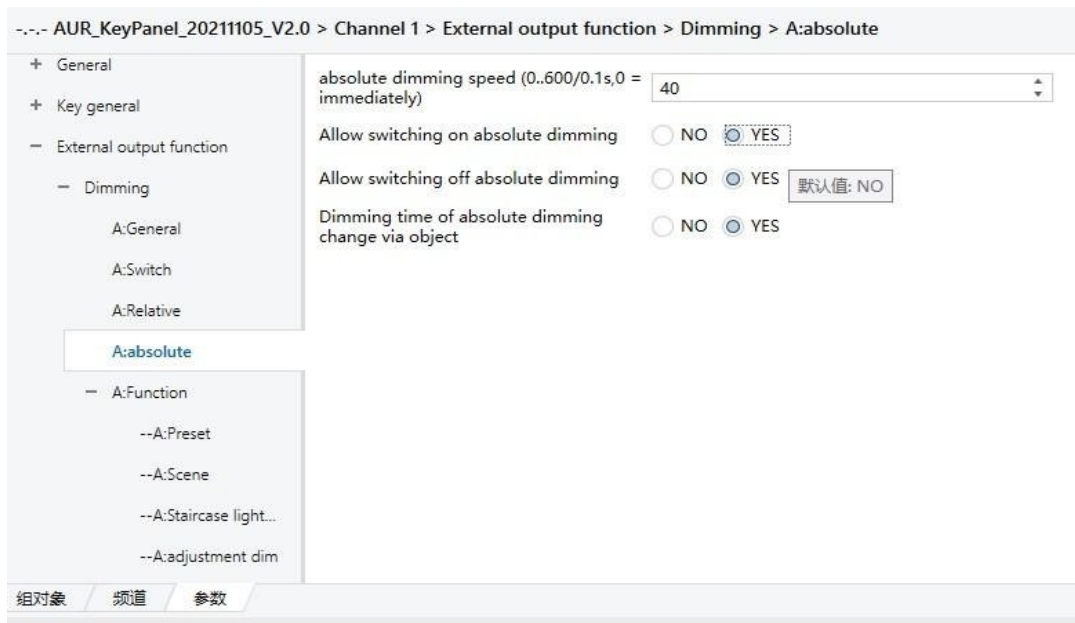


Fig. 3.4.4-1 Parameter Setting Window “Absolute”

**Parameter “Absolute dimming speed ( 0...600/0.1s,0=immediately ) ”**

This parameter sets the dimming time for absolute dimming.

Ranges: 0...600, Unit: 0.1s, 0 for immediately

**Parameter “Allow switching on via absolute dimming”**

This parameter sets whether to allow the switch to be turned on by absolute dimming.

Options: NO

YES

Select “NO” to not allow the switch to be turned on by absolute dimming.

Select “YES” to allow the switch to be turned on with absolute dimming.

**Parameter “Allow switching off via absolute dimming”**

This parameter sets whether to allow the switch to be turned off by absolute dimming.

Options: NO

YES

Select “NO” to not allow the switch to be turned off by absolute dimming.

Select “YES” to allow the switch to be turned off by absolute dimming.

**Parameter “Dimming time of absolute dimming changable via object”**

This parameter sets whether to change the dimming time of absolute dimming through the communication object, the communication object is “Dimming time of value”.

Options: NO

YES

Select “NO”, do not change the dimming time of absolute dimming through the communication

object.

Select “YES” to change the dimming time of absolute dimming through the communication object.

### 3.5 Communication Object Description

The communication object is the medium through which the device communicates with other devices on the bus, i.e. only the communication can communicate with the bus. The role of each communication object is described in detail below. Each communication object corresponds to various functions.

#### 3.5.1 “General” Communication Object

There are 9 communication objects under “General”, as shown in Figure 3.5.1-1, and the specific functions are shown in Table 1-1.

序号 ^	名称	对象功能	群组地址	长度	C	R	W	T	U
0	General	Lock device		1 bit	C	-	W	-	-
1	General	control all indicative		1 bit	C	-	W	-	-
2	General	Control all backlight		1 bit	C	-	W	-	-
3	General	Control indicative led brightness		1 byte	C	R	W	-	-
4	General	Control background led brightness		1 byte	C	R	W	-	-
5	General	MW detection active		1 bit	C	R	W	-	-
6	General	MW human detect		1 bit	C	R	-	T	-
8	General	Sleep mode active		1 bit	C	R	W	-	-
9	General	ECO mode active		1 bit	C	R	W	-	-
10	General	MW Sensitivity		1 byte	C	R	W	-	-
11	General	Valid key work(0:active ; 1:inactive ; trans value : 1)		1 bit	C	-	W	T	-
14	General	Turn off all scene indicators		1 bit	C	-	W	-	-

Fig. 3.5.1-1 General Communication Objects

*Note: “C” in the attribute column of the form below means that the communication function of the communication object is enabled, “W” means that the communication object can rewrite the value of other devices, and “R” means that the value of the communication object can be read by other devices. “T” means that the communication object has the transmission function, and “U” means that the value of the communication object can be rewritten through the response message of the bus.*

Number	Function	Communication object name	Data Type	Properties
0	Lock device	General	1bit	C,W
This communication object is used to lock the device. Send 01 to the communication object through the bus to lock the device, and the buttons will not work. Send 00 to unlock the device, and the buttons will work.				
1	Control all indicative	General	1bit	C,W
This communication object is used to control all indicators.				
2	Control all backlight	General	1bit	C,W

This communication object is used to control all backlights.				
3	Control indicative led brightness	General	1byte	C,R,W
This communication object is used to adjust the brightness of the indicator light. Because the light board, indicator light, and backlight hardware of the Aurora button panel do not support separate adjustments, this object can control all lights.				
4	Control background led brightness	General	1byte	C,R,W
This communication object is used to adjust the brightness of the backlight. Because the light board, indicator light, and backlight hardware of the Aurora button panel do not support separate adjustments, this object can control all lights.				
5	MW detetion active	General	1bit	C,R,W
This object is used to activate and deactivate the microwave detection function.				
6	MW detetion detect	General	1bit	C,R,T
This object is used to report microwave detection status, 1 is sent when someone is detected, and 0 is sent when no one is detected. If the microwave selects an external source, a third-party microwave signal can be passed in through this object.				
8	Sleep mode active	General	1bit	C,R,W
This object allows you to activate and disable sleep mode.				
9	ECO mode active	General	1bit	C,R,W
This object allows you to activate and disable the power saving mode.				
10	MW sensitivity	General	1byte	C,R,W
The sensitivity of the microwave can be modified through this object, the range is 0~15, 0 means the most sensitive, 15 means the least sensitive.				
11	Valid key work	General	1bit	C,W,T
This communication object is a valid key. When the key is activated for the first time, 01 is sent to indicate that the key is pressed, otherwise no data will be sent. NOTE: In sleep mode, this object also emits 1 on any press.				
14	Turn off all scene indicators	General	1bit	C,W
This object is valid when the button function is scene, and is used to turn off all the lights whose button function is scene.				

Table 1-1 General Communication Object Table

Note: “KX” in the table below means: K is the button, X is the button number (X range: 1, 2...15, 16).

### 3.5.2 “Key X switch page” Communication Object

There are 3 communication objects under the “Key X switch page”, as shown in Figure 3.5.2-1, and the specific functions are shown in Table 2-1.

21	Output,K1	Switch,No.1,K1	1 bit	C - W T -
22	Output,K1	Switch,No.2,K1	1 bit	C - W T -
23	Output,K1	Feedback of switch,K1	1 bit	C - W - U

Fig. 3.5.2-1 Key X switch page Communication Object

Number	Function	Communication object name	Data Type	Properties
21	Switch,No.1,KX	Output,KX	1bit	C,W,T
This communication object is the button to select the function under the switch, and the specific output of the button is set by the parameter.				
22	Switch,No.2,KX	Output,KX	1bit	C,W,T
This communication object is enabled when the parameter “Switch mode is” selects “teleg. toggle(No.1/No.2)”, and the specific output of the button is set by the parameter.				
23	Feedback of Switch, KX	Output,KX	1bit/1byte	C,W,U
This communication object is to set the feedback value of the switch button, and the data type can be set to 1bit or 1Byte by the parameter “Feedback, indicate”.				

Table 2-1 Key X switch page Communication Object Table

### 3.5.3 “Key X dimmer page” Communication Object

There are 3 communication objects under “Key X dimmer page”, as shown in Figure 3.5.3-1, and the specific functions are shown in Table 3-1.

21	Output,K1	Dimmer ON/OFF for short,K1	1 bit	C - W T -
22	Output,K1	Dimmer for long press,K1	4 bit	C - W T -
23	Output,K1	Feedback of switch,K1	1 byte	C - W - U

Table 3.5.3-1 Key X dimmer page Communication Object

Number	Function	Communication object name	Data Type	Properties
21	Dimmer ON/OFF for short,KX	Output,KX	1bit	C,W,T
This communication object is the short-press function under the button selection dimmer, and the data output by short-pressing the button is set by parameters.				
22	Dimmer for long press,KX	Output,KX	4bit/1byte	C,W,T
This communication object is the long-press function under the button selection dimmer, and the data output by long-pressing the button is set by parameters. The data type can be set to “4bit or 1Byte by the parameter “Dimming data type is				
23	Feedback of	Output,KX	1bit/1byte	C,W,U

	Switch,KX		
<p>The communication object can be triggered when pressing the button to select dimmer, and the data type can be set to 1bit or 1Byte by the parameter “Feedback, indicate”. Used to modify the status of the light board indicator light.</p>			

Table 3-1 Key X dimmer page Communication Object Table

### 3.5.4 “Key X shutter page” Communication Object

There are 3 communication objects under the “Key X shutter page”, as shown in Figure 3.5.4-1, and the specific functions are shown in Table 4-1.

21	Output,K1	Move shutter,K1 0:up /decrease; 1:down/increase	1 bit	C - W T -
22	Output,K1	Adjust lamella of shutter,K1	1 bit	C - W T -
23	Output,K1	Feedback of switch,K1	1 bit	C - W - U

Fig. 3.5.4-1 Key X shutter page Communication Object

Number	Function	Communication object name	Data Type	Properties
21	Move shutter,KX	Output,KX	1bit	C,W,T
<p>This communication object is to select the long press function under the shutter for the button, and the data output by long pressing the button is set by the parameter.</p>				
22	Adjust lamella of shutter,KX	Output,KX	1bit	C,W,T
<p>This communication object is the short-press function under the button selection shutter, and the data output by short-pressing the button is set by parameters.</p>				
23	Feedback of Switch, KX	lutput,KX	1bit/1byte	C,W,U
<p>This communication object is to set the feedback value of the shutter button, and the data type can be set by the parameter “Feedback, indicate” Set to 1bit or 1Byte.</p>				

Table 4-1 Key X shutter page Communication Object Table

### 2.4.3 “Key X switch value page” Communication Object

There are 6 communication objects under the “Key X switch value page”, as shown in Figure 3.5.3-1, and the specific functions are shown in Table 5-1.

21	Output,K1	Output 1 bit value,K1	1 bit	C - W T -
22	Output,K1	Output 1 bit value,K1	1 bit	C - W T -
23	Output,K1	Output 1 bit value,K1	1 bit	C - W T -
24	Output,K1	Output 1 bit value,K1	1 bit	C - W T -
25	Output,K1	Output 1 bit value,K1	1 bit	C - W T -
26	Input,K1	Feedback of switch,K1	1 bit	C - W - U

Fig. 3.5.3-1 Key X switch value page Communication Object

Number	Function	Communication object name	Data Type	Properties
21~25	Output 1bit/4bit/1byte value,KX	Output,KX	1bit/4bit/1byte	C,W,T

This communication object is the button to select the function under the switch value. The data output by the button is set by the parameter, and the data type can be set to 1bit, 4bit, 1Byte by

the parameter "Setting of telegram No.X".

26	Feedback of Switch, KX	lutput,KX	1bit/1byte	C,W,U
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This communication object is the feedback value for the switch value button. The data type can be set by the parameter "Feedback, indicate" to 1 bit or 1 Byte.

Table 5-1 Key X switch value page Communication Object Table

### 2.4.6 "Key X scene page" Communication Object

There are 3 communication objects under the "Key X scene page", as shown in Figure 3.5.6-1, and the specific functions are shown in Table 6-1.

21	Save scene - 1 bit,K1	Save scene - 1 bit,K1	1 bit	C - - T -
22	Output,K1	Output 1 byte value,K1	1 byte	C - W T -
23	Input,K1	Feedback of switch,K1	1 byte	C - W - U

Fig. 3.5.6-1 Key X scene page Communication Object

Number	Function	Communication object name	Data Type	Properties
21	Save scene-1bit/8bit,KX	Save scene-1bit/8bit,KX	1bit/1byte	C,T
This communication object is the long-press save function under the button selection scene, and the data output by long-pressing the button is set by parameters. The data type can be set to 1bit or 1Byte by the parameter "Save scene mode is set".				
22	Output 1byte value,KX	Output,KX	1byte	C,W,T
This communication object is the short-press function under the button selection scene, and the data output by short-pressing the button is set by parameters.				
23	Feedback of Switch, KX	lutput,KX	1bit/1byte	C,W,U
This communication object is to set the feedback value of the scene button, and the data type can be set by the parameter "Feedback, indicate" Set to 1bit or 1Byte.				

Table 6-1 Key X scene page Communication Object Table

**“Key X Profession page” Communication Object**

There are 6 communication objects under the “Key X Profession page”, as shown in Figure 3.5.7-1, and the specific functions are shown in Table 7-1.

121	Profession,1 bit short,K1	Profession,1 bit short,K1	1 bit	C - W T -
122	Profession,1 bit short,K1	Profession,1 bit short,K1	1 bit	C - W T -
123	Profession,1 bit short,K1	Profession,1 bit short,K1	1 bit	C - W T -
124	Profession,1 bit long,K1	Profession,1 bit long,K1	1 bit	C - W T -
125	Profession,1 bit long,K1	Profession,1 bit long,K1	1 bit	C - W T -
126	Profession,1 bit long,K1	Profession,1 bit long,K1	1 bit	C - W T -

Fig. 3.5.7-1 Key X Profession page Communication Object

Number	Function	Communication object name	Data Type	Properties
21~23	Profession, 1bit/4bit/8bit	Profession, 1bit/4bit/8bit short,KX	1bit/4bit/1byte	C,W,T
	short,KX			
This communication object is the short press function under the key selection session, the data output by the short press is set by the parameter “Setting of telegram No. X, short press” to 1bit or 4bit or 1Byte.				
24~26	Profession, 1bit/4bit/8bit long,KX	Profession, 1bit/4bit/8bit long,KX	1bit/4bit/1byte	C,W,T
This communication object is the long press function under the key selection session. The output data of the long press key is set by the parameter “Setting of telegram No. X, long” to 1bit or 4bit or 1Byte.				

Table 7-1 Key X Profession page Communication Object Table

**2.4.7 “relay” Communication Object**

There are 10 communication objects under the relay function switch, as shown in Figure 3.5.8-1, and the specific functions are shown in Table 8-1.

121	Switch_A	Switch	1 bit	C - W - -
122	Switch_A	Switch status	1 bit	C R - T -
123	Switch_A	Switch time function	1 bit	C - W - -
124	Switch_A	Output of staircase lighting	1 bit	C - W - -
125	Switch_A	Warning of staircase	1 bit	C - - T -
126	Switch_A	Staircase duration	2 bytes	C - W - -
127	Switch_A	Call preset 1/2	1 bit	C - W - -
128	Switch_A	Set preset 1/2	1 bit	C - W - -
129	Switch_A	Scene	1 byte	C - W - -
130	Switch_A	Forced operation	2 bit	C - W - -

Fig. 3.5.8-1 Switch Communication Object

No.	Communication object function	Name	Length	Properties
121	Switch	Switch, X	1bit	C,W

You can send 00 or 01 to the communication object through the bus to change the state of the relay, and the specific control state is determined by selecting “open” or “close” for the parameter “Contact position when switch value=’1’”. If open is selected, the state of sending 00 relay is closed, the channel is open, and the state of sending 01 relay is open, the channel is closed; if close is selected, the opposite is true.

122	status	Switch	Switch, X	1bit	C,R,T
This communication object is displayed when “Report the relay status” is selected as Active, which means to report the status of the relay through the bus. The communication sends 1 to indicate that the relay contact is closed, and 0 to indicate that the contact is open.					
123	Switch time Function		Switch, X	1bit	C,W
This communication object is displayed when “Time function” is selected as Active. If the communication object receives the message 0, the Time function is disabled, and when the message 1 is received, the Time function is enabled. Note: power failure cannot save					
124	Output of delay time		Switch, X	1bit	C,W
This communication object is displayed when “Delay switch” is selected in “The mode of time function” under “Time function”, indicating the delay control switch. If the communication object receives the message 0, the switch delay is closed. If the communication object receives When the message 1 arrives, the switch delay is turned on.					
124	Output of staircase lighting		Switch, X	1bit	C,W

<p>This communication object is displayed when “Staircase lighting” is selected in “The mode of time function” under “Time function”, and it is used to control the state of the staircase lighting. The condition to trigger the staircase lighting is determined by the parameter “The mode of control for staircase lighting is” The selection decision, choose Start with ‘1’, stop with ‘0’, the communication object receives the message 1, the staircase light is on, and 0, the staircase light is off; choose Start with ‘1’, no active with ‘0’, the communication The object receives the message 1 and the staircase lighting is turned on, and 0 has no effect on the staircase lighting; select Start with ‘0/1’, can’t be stop, then the communication object receives the message 0/1 and the staircase lighting is turned on, and cannot pass the communication Subject turns off stair lighting.</p>				
125	Warning of staircase	Switch, X	1bit	C,T
<p>This communication object is displayed when “Via object” or “Via object and flashing the output” is selected in “Warning mode for ending of staircase” under “Time function”, indicating the warning of staircase lighting. The warning mode is output object or output object and Early warning through the off-on-off state of the light..</p>				
126	Staircase duration	Switch, X	2byte	C,W
<p>This communication object is displayed when “Modify the duration via object” under “Time function” selects Enable, which means that it is allowed to modify the duration of the stair light lighting through the bus. Its data type is 2byte.</p>				
127	Call preset1/2	Switch, X	1bit	C,W
<p>This communication object is displayed when Active is selected for “Preset function” under “Switch”, which means calling the preset value function, and its preset value has two presets 1 and 2. If the communication object receives a message of 0, the preset value 1 is called, and when a message of 1 is received, the preset value 2 is called</p>				
128	Set preset1/2	Switch, X	1bit	C,W
<p>This communication object is displayed when “Enable” is selected in “Setting for preset via teleg.is” under the parameter “Preset function”, which means that the current value is set to a new preset value through the bus. When the communication object receives a message of 0, it will set the current value to a new preset value of 1, and when it receives a message of 1, it will set the current value to a new preset value of 2</p>				
129	Sence	Switch, X	1byte	C,W
<p>This communication object is displayed when the “Preset function” under “Switch” is selected as Active, which means calling or storing the scene function, and its data type is 8bit. Sending an 8bit command through this communication object can call or store the scene. The meaning of the 8bit command is explained in detail below:                  Let an 8bit instruction be (binary code): FXNNNNNN                  F: call scene for “0”; store scene for “1”; X: not used, does not affect the result NNNNNN: scene number (1...64)</p>				
130	Forced operation	Switch, X	2bit	C,W
<p>This communication object is displayed when “Forced operation function” is selected as Active, indicating the forced operation function.</p>				

Table 8-1 “ Switch” Communication Object Table

There are 7 communication objects under the relay function curtain, as shown in Figure 3.5.8-2, and the specific functions are shown in Table 8-2.

121	Curtain,A	Move curtain up/down	1 bit	C R W T -
122	Curtain,A	Adjustment stop/up/down	1 bit	C - W - -
123	Curtain,A	Curtain height position	1 byte	C R - T -
124	Curtain,A	scene	1 byte	C - W - -
125	Curtain,A	Curtain slat position	1 byte	C R - T -
126	Curtain,A	Move height 0..255	1 byte	C - W - -
127	Curtain,A	Move slats 0..255	1 byte	C - W - -

3.5.8-2 “curtain” Communication Object

No.	Communication object function	Name	Length	Properties
121	Move curtain up/down	Curtain, X	1bit	C,W
<p>The communication object represents the upward/downward movement of the curtain height. When the parameter “Up/Down value” selects “0=up” and “1”=down, the communication object sends 00 to indicate that the curtain height moves up to the top, and sends 01 to indicate that the curtain The height moves down to the bottom; select “0”=down, “1”=up, when the communication object sends 00, it means the curtain height moves down to the bottom, and sends 01, which means the curtain height moves up to the top.</p>				
122	Adjustment stop/up/down	Curtain, X	1bit	C,W
<p>The communication object indicates the adjustment of the angle. When the parameter “Open/Close value” selects “0” = open, “1” = close, the communication object sends 00 to indicate that the curtain angle value decreases, and sends 01 to indicate that the curtain angle value increases; select “0” = close, “1” = open, when the communication object sends 00, it means that the curtain angle value increases, and when it sends 01, it means that the curtain angle value decreases.</p>				
123	Curtain height position	Curtain, X	1byte	C,R,T
<p>.This communication object represents the position that reports the height of the curtain</p>				
124	Scene	Curtain, X	1byte	C,W
<p>This communication object is displayed when the “Scene function” under “Curtain” is selected as Active, which means calling or storing the scene function, and its data type is 8bit. Sending an 8bit command through this communication object can call or store the scene. The meaning of the 8bit command is explained in detail below:                      Let an 8bit instruction be (binary code): FXNNNNNN                      F: call scene for “0”; store scene for “1”; X: not used, does not affect the result                      NNNNNN: scene number (1...64)</p>				
125	Curtain salt position	Curtain, X	1byte	C,R,T
<p>This communication object will only be displayed when the parameter “Operating mode” is selected as “blind”, indicating the position of reporting the angle of the curtain.</p>				
126	Move height	Curtain, X	1byte	C,W
<p>This communication object indicates that the height value of the curtain can be modified through the bus.</p>				
127	Move salt	Curtain, X	1byte	C,W

This communication object will only be displayed when the parameter “Operating mode” is selected “blind”, which means that the angle value of the curtain can be modified through the bus.

Table 8-2 “curtain” Communication Object Table

There is one communication object under the relay function dry contact, as shown in Figure 3.5.8-3, and the specific functions are shown in Table 8-3.

121 Dry contact,A Trigger 1 bit C - W - -

3.5.8-3 “dry contact” Communication Object

No.	Communication object function	Name	Length	Properties
121	Trigger	Dry contact	1bit	C,W
The communication object is used to trigger the relay. Select value “0” in the parameter “Valid value of “Trigger” object” to indicate that the effective value of the trigger relay is “0”, that is, the communication object sends 00 to trigger the relay; select value “1” to indicate The effective value of the trigger relay is “1”, that is, the communication object sends 01 to trigger the relay; select value “0/1” means that the effective value of the trigger relay is “0/1”, that is, the communication object sends 00/01 to trigger the relay.				

Table 8-3 “dry contact” Communication Object Table

3.5.8 “dimming” Communication Object

There are 17 communication objects under the dimming function, as shown in Figure 3.5.9-1, and the specific functions are shown in Table 9-1.

164	0-10V,A	current switch state	1 bit	C R - T -
165	0-10V,A	current brightness value	1 byte	C R - T -
166	0-10V,A	switch	1 bit	C - W - -
167	0-10V,A	Relative dimming	4 bit	C R W - -
168	0-10V,A	Dimming time of relative	2 bytes	C R W - -
169	0-10V,A	Brightness value	1 byte	C - W - -
170	0-10V,A	Dimming time of absolute	2 bytes	C R W - -
171	0-10V,A	Set preset 1 and 2	1 bit	C - W - -
172	0-10V,A	Set preset 3 and 4	1 bit	C - W - -
173	0-10V,A	Call preset 1 and 2	1 bit	C - W - -
174	0-10V,A	Call preset 3 and 4	1 bit	C - W - -
175	0-10V,A	Call scene	1 byte	C R W - -
176	0-10V,A	Store scene	1 byte	C R W - -
177	0-10V,A	activate staircase function	1 bit	C R W - -
178	0-10V,A	Permanent ON	1 bit	C - W - -
179	0-10V,A	Duration of staircase lighting	2 bytes	C R W - -
180	0-10V,A	Warning staircase lighting	1 bit	C - - T -

3.5.9-1 “dimming” Communication Object

No.	Communication object function	Name	Length	Properties
164	Current switch state	0-10V,X	1bit	C,R,T
<p>This communication object is used to send the current switching state. It is enabled when the <b>parameter "Status responded of switching state"</b> is selected as "YES". The sending method is set by the <b>parameter "Send"</b>, and the generated state value is set by the <b>parameter "Value"</b>.</p>				
165	Current brightness value	0-10V,X	1byte	C,R,T
<p>This communication object is used to send the current brightness value. It is enabled when the <b>parameter "Status response of brightness state"</b> is selected as "YES", and the sending method is set by the <b>parameter "Send"</b>.</p>				
171	Set preset 1 and 2	0-10V,X	1bit	C,W
<p>This communication object is used to set preset 1 and 2, send 00 to this communication object to set preset 1, send 01 to set preset 2.</p>				

172	Set preset 3 and 4	0-10V,X	1bit	C,W
This communication object is used to set preset 3 and 4, send 00 to this communication object to set preset 3, send 01 to set preset 4.				
173	Call preset 1 and 2	0-10V,X	1bit	C,W
This communication object is used to call preset 1 and 2, send 00 to this communication object to call preset 1, send 01 to call preset 2.				
174	Call preset 3 and 4	0-10V,X	1bit	C,W
This communication object is used to call presets 3 and 4, send 00 to this communication object to call preset 3, send 01 to call preset 4.				
180	Warning staircase lighting	0-10V,X	1bit	C,T
This communication object is used to send the warning data of the stair light. The sent data is related to the setting of the <b>parameter "Send value"</b> under the <b>parameter "Warning during dimming down"</b> and selecting "YES".				
177	Activate staircase function	0-10V,X	1bit	C,R,W
This communication object is used to activate the stair light function, send 01 to the communication object to activate the stair light function, send 00 to not activate the stair light function.				
178	Permanent ON	0-10V,X	1bit	C,W
This communication object is used to enter the permanent open function, send 01 to the communication object to enter the permanent open function, send 00 to enter the permanent open function.				
179	Duration of staircase lighting	0-10V,X	2byte	C,W
This communication object is used to modify the absolute dimming time.				
166	Switch	0-10V,X	1bit	C,W
This communication object is used to change the switch state, send 01 to the communication object "Switch", the indicator light is on, and send 00, the indicator light is off.				
168	Dimming time of relative	0-10V,X	2byte	C,R,W
This communication object is used to modify the relative dimming time.				
167	Relative dimming	0-10V,X	4bit	C,W
This communication object changes the brightness value through relative dimming.				
170	Dimming time of absolute	0-10V,X	2byte	C,R,W
This communication object is used to modify the delay time of the stair light.				
169	Brightness value	0-10V,X	1byte	C,W
This communication object changes the brightness value through absolute dimming.				
175	Call scene	0-10V,X	1byte	C,W
This communication object is used to call the scene, send the <b>parameter "Scene number 1...64"</b> to the communication object and subtract 1 from the corresponding scene number in the setting to enter the scene.				
176	Store scene	0-10V,X	1byte	C,W
This communication object is used to save the scene, and the maximum value of the communication object is 1+scene number minus 1 to save the scene. For example, the scene number of scene 1 is 1, then write 0x80 to save the current brightness value to scene 1.				

Table 9-1 "dimming" Communication Object Tabl