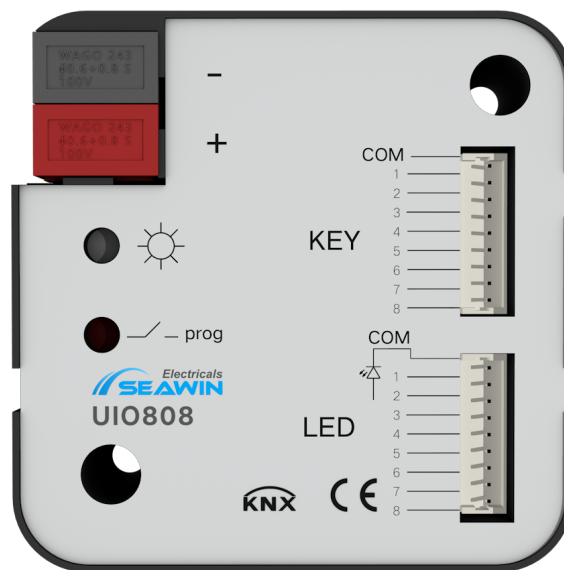


8 channel I/O contact input module

Manual-Ver2.1

UI0808



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1 Summary

This manual provides you with detailed technical information of the 8-channel universal interface module, including installation and programming details, and explains how to use the 8-channel universal interface module based on practical examples. The 8-way universal interface module is installed in the standard 86 bottom box, which is easy to install and disassemble.

The 8-way general-purpose interface module can be used to control switches, dimming, scenes, curtains, etc.

Through the IO interface, EIB/ KNX bus and other loads are installed together to become a system.

The entire system is set up and operated using the engineering design tool software ETS.

2 Product and functional application overview

2.1 Product description

The 8-channel universal module is mainly used in building control systems. It is installed together with other devices on the bus to form a system, and its functions are simple and intuitive to operate. Users can plan and execute these functions systematically according to their own needs.

The function application of the general interface is realized by ordinary buttons or switches, and uses binary technology for communication. It is mainly used to control actuator equipment, such as dimmers, relays, etc., and indirectly control various household appliances. At the same time, the common interface can also be used to control LEDs.

8-channel universal module is used to connect ordinary switch panels or sensors with dry contact output, up to 8 lines, and convert them into intelligent control signals. LED indication, with a maximum of 8 traditional LEDs, which can display the control status of the loop through the LED status in real time, and the connection method adopts a **common anode**.

8-channel universal module is a standard 86 bottom box installation device with 8 channel outputs. Connect to the EIB / KNX system through the EIB bus, and use the engineering design tool software ETS software (version ETS4 or above) to assign physical addresses and group addresses and set parameters.

It is directly connected to the bus through terminal blocks without additional power supply voltage. Each channel of the 8-way general-purpose interface module can use the various functions described above and is independent of each other.

2.2 Functional Overview

Functions:

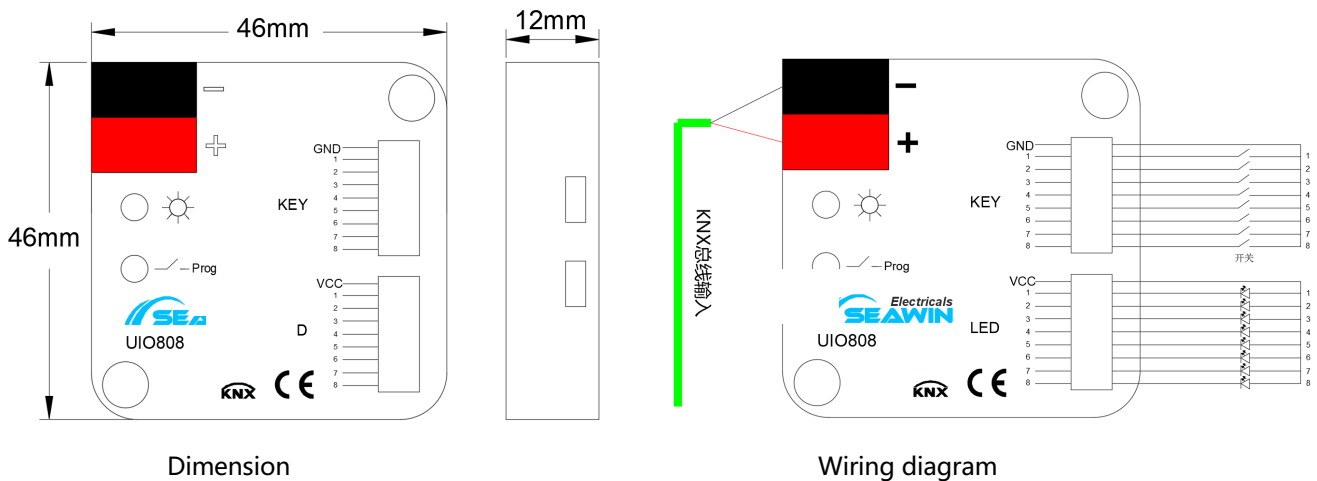
- (1) Can be used to switch lighting, open and close curtains, raise and lower projection screens, etc., with long press, short press and reverse functions;
- (2) Can control the dimming equipment, and has the function output of relative dimming and absolute dimming;
- (3) Can be used for dimming and curtains, and the function of sending fixed values;
- (4) 8-bit scene control can be performed, and the set scene function can be called;
- (5) With LED indication function, multiple display states can be selected, such as: normally open, normally closed, flashing...
- (6) With functions of LED interlock grouping and LED brightness adjustment;
- (7) The status LED has the functions of brightness wake-up and delayed extinguishment. The wake-up conditions include button press, object trigger, etc.

(8) I/O dry contact wiring communication distance: less than 10m

3 Specification

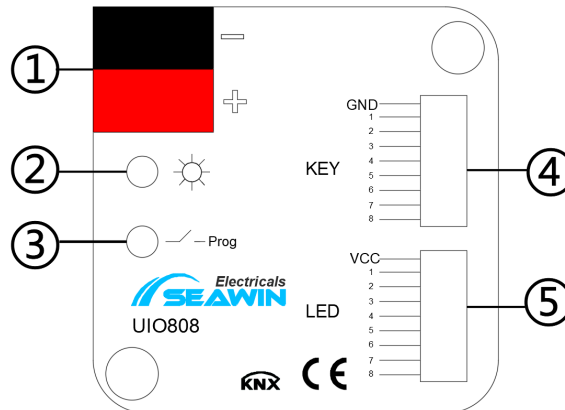
Bus voltage	21-30 VDC from KNX bus
Bus current	≤ 12mA
Bus power	< 360mW
Input channel	8 channel I/O contact
LED output current	1mA
LED Channel	8-way, common anode connection
Shell material	PC
Dimension (H x W x D)	46mm x46mm x 12.5 mm
Weight(approx.)	almost 17.8g
Installation way	Put in 86 boxes
Working temperature	-5°C...+ 45°C
Stock temperature	- 25°C...+ 55°C
Delivery temperature	- 25°C...+70°C
Relative humidity	max 90%

4 Dimensions and wiring diagram



5 Product operation and installation instructions

5.1 Product Operation Instructions



- (1) Description: KNX bus terminal;
- (2) Description: programming indicator light;
- (3) Description: programming button, press the button, the indicator light will be on, enter the programming state, and the indicator light will automatically turn off when programming;
- (4) Description: dry contact terminal block;
- (5) Description: LED terminal block;

5.2 Product Installation Instructions

Due to its compact design, it can be installed in a conventional 60mm junction box or in a standard 86 back box

6 Communication object description

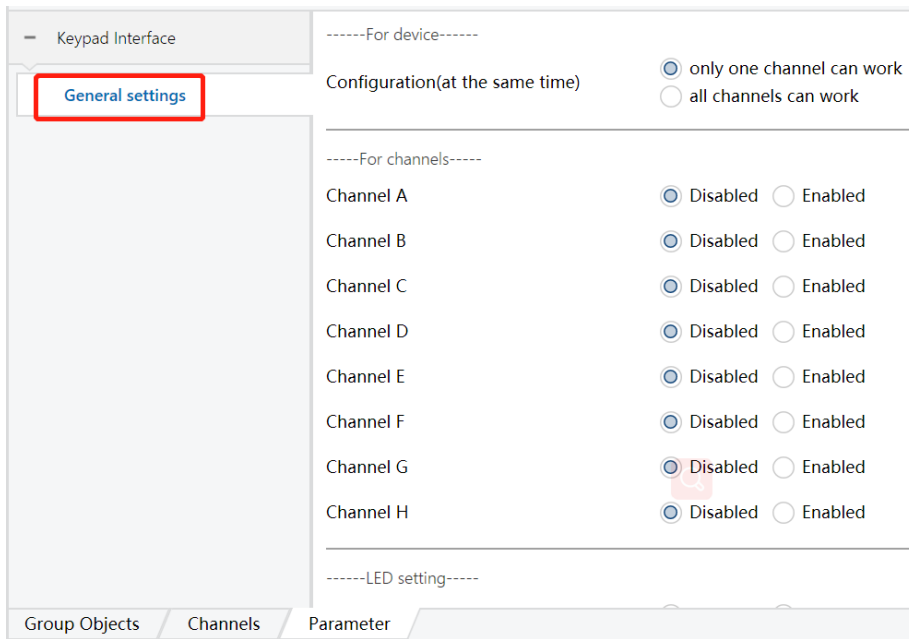
6.1 Parameter setting description

The following takes ETS5 as an example to set parameters in ETS5. Note: In the following introduction, Channel X or X represents the output of the corresponding channel. (8 channels are taken as an example here)

1) Parameter: "configuration (as the same time)" indicates the configuration when multiple buttons are pressed at the same time, options: only one channel can work (only one button can be used) (this parameter does not work); all channel can work (multiple keys can be used at the same time).

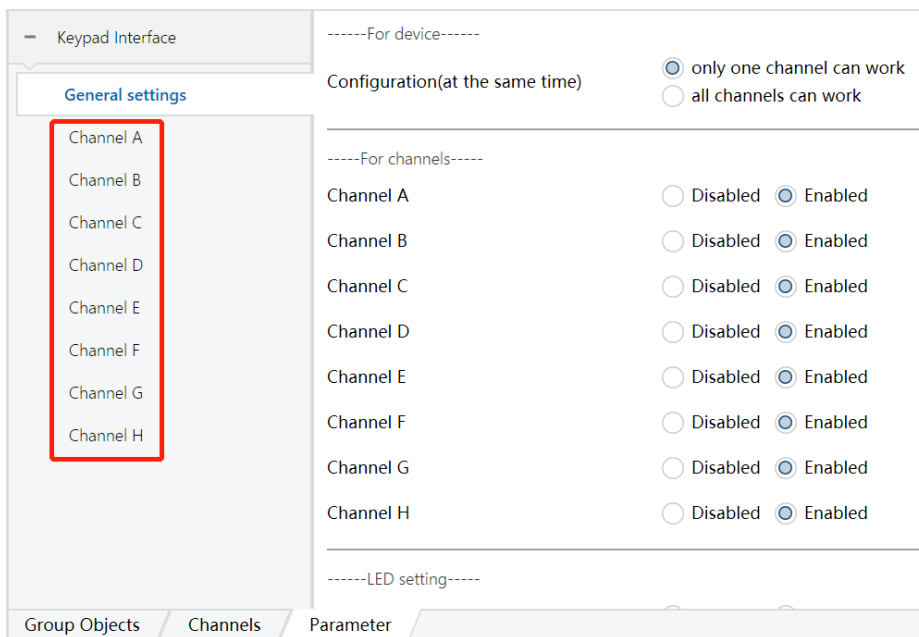
2) Open the parameter setting interface of the 8-channel general interface module in ETS5, as shown in Figure 6.1.1.

Available options: Disabled, Enabled



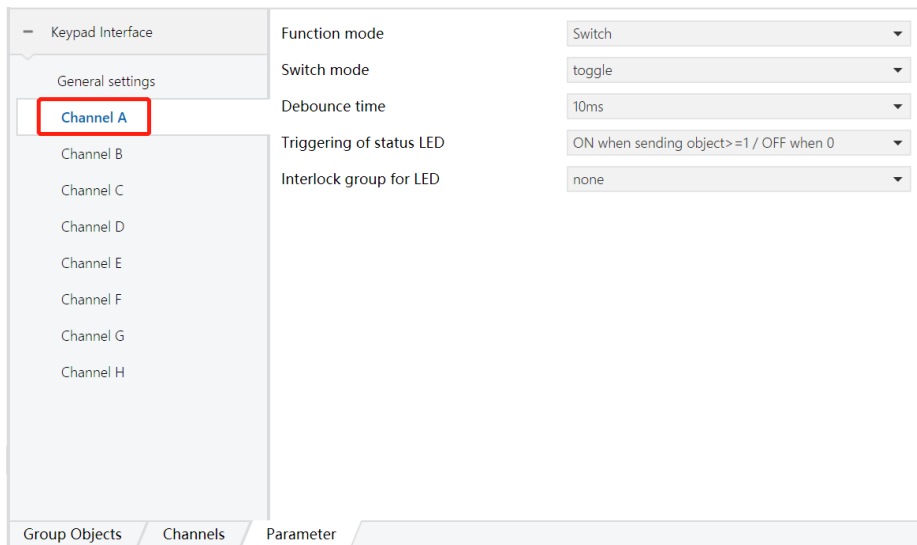
Pic 6.1.1

3) When "Enabled" is selected in the Channel X function, as shown in pic 6.1.2, 8 channel options appear in the red box in the figure.



Pic 6.1.2

4) Click the options in the red box above to set the parameters of each channel respectively, as shown in Pic 6.1.3 ,



Pic 6.1.3

Function mode

Option:

Switch : Used to control the on/off state of the switch actuator to the lamp;

Blind : Used to control the opening/closing status of blinds, curtains, etc. by curtain actuators;

Blind position : Used to control the absolute open/close position of curtain actuators for blinds, curtains, etc.;

Dimming : Used to control the adjustment of the brightness value by the dimming actuator ;

Dimming position : Used to control the adjustment of the absolute value of the brightness by the dimming actuator;

Scene: Used to recall scenes in switches, dimmers, curtain actuators.

Value Send: Used to output a value with a size of 1 bit/1 byte, which can be used flexibly.

6.1.1 Choose "switch"

Specification	Description
Switch mode	Option : always on, always off, toggle, user define
Debounce time	Option : 10ms, 20ms.....300ms
Triggering of status LED	Option : (1) always on ; (1) always off ; (2) always flashes ; (3) press =ON/release=OFF ; (4) press =OFF/release=ON ; (5) press =flashes/release=OFF ; (6) press =flashes/release=ON ; (7) Flashes three times , then OFF ; (8) Flashes three times , then ON ; (9) ON when sending object >= 1 ; OFF when 0 (10) OFF when sending object >= 1 ; ON when 0 (11) flashes when sending object >= 1 ; OFF when 0 (12) OFF when sending object >= 1 ; flashes when 0 (13) ON when feedback object=1 ; OFF when 0

	(14) OFF when feedback object=1 ; ON when 0 (15) flashes when feedback object=1 ; OFF when 0 (16) OFF when feedback object=1 ; flashes when 0 (17) ON when scene object=number/OFF when no equal
Interlock group for LED	Option : none, group 1, group 2, group 3, group 4

6.1.2 Choose "blind"

Parameter	Describe
Blind mode	Options : always up、 always down、 toggle
Long operation	Long press, option: yes, no; when you choose "yes", shows "long operation after:", means long press few seconds data will be sent, option: 0.5s, 1s, 2s...7s. Specification "the interval of data (base: 0.1s)" indicates the interval time for data to be sent continuously when long press; can fill in 0~255;
The interval of data(base:0.1s)	Time to send data interval (unit: 0.1s), can be filled: 0-255
Debounce time	Options : 10ms、 20ms.....300ms
Triggering of status LED	Options : (1) always on ; (2) always off ; (3) always flashes ; (4) press =ON/release=OFF ; (5) press =OFF/release=ON ; (6) press =flashes/release=OFF ; (7) press =flashes/release=ON ; (8) Flashes three times , then OFF ; (9) Flashes three times , then ON ; (10) ON when sending object>=1 ; OFF when 0 (11) OFF when sending object>=1 ; ON when 0 (12) flashes when sending object>=1 ; OFF when 0 (13) OFF when sending object>=1 ; flashes when 0 (14) ON when feedback object=1 ; OFF when 0 (15) OFF when feedback object=1 ; ON when 0 (16) flashes when feedback object=1 ; OFF when 0 (17) OFF when feedback object=1 ; flashes when 0 (18) ON when scene object=number/OFF when no equal
Interlock group for LED	Options : none、 group 1、 group 2、 group 3、 group 4

6.1.3 Choose "blind position"

Parameter	Describe
Blind position mode	Curtain absolute position mode, options: position value, position toggle, user define; When position value is selected, the parameter "send value 1" appears, which can be filled in 0-255; When "position toggle" is selected, the parameters "send value 1" and "send value 2" will appear, and you can fill in 0-255;

	When "user define" is selected, the parameters "operate when pressing" and "operate when releasing" will appear, options: Yes, No, when "Yes" is selected, the parameters will appear: "send value", which can be filled in 0-255;
Debounce time	Options : 10ms、 20ms.....100ms
Triggering of status LED	Options : (1) always on ; (2) always off ; (3) always flashes ; (4) press =ON/release=OFF ; (5) press =OFF/release=ON ; (6) press =flashes/release=OFF ; (7) press =flashes/release=ON ; (8) Flashes three times , then OFF ; (9) Flashes three times , then ON ; (10) ON when sending object>=1 ; OFF when 0; (11) OFF when sending object>=1 ; ON when 0; (12) flashes when sending object>=1 ; OFF when 0; (13) OFF when sending object>=1 ; flashes when 0; (14) ON when feedback object=1 ; OFF when 0; (15) OFF when feedback object=1 ; ON when 0; (16) flashes when feedback object=1 ; OFF when 0; (17) OFF when feedback object=1 ; flashes when 0; (18) ON when scene object=number/OFF when no equal
Interlock group for LED	Option : none、 group 1、 group 2、 group 3、 group 4

6.1.4 Choose "dimming"

Parameter	Describe
Dimming mode	Options : dimming up、 dimming down、 dimming toggle
Long operation after :	Long press for a few seconds to send data, optional : 0.5s、 1s、 2s.....7s.
Transmission mode for long operation	Options : cyclic transmission、 one-time transmission ; when choose "cyclic transmission" , Parameter "the interval of data (base : 0.1s)" Indicates the interval time that data is continuously sent when long-pressed ; It could be filled by 0~255.
Step dimming	Options : 1%、 3%、 6%、 12%、 25%、 50%、 100%
Send stop instruction when releasing	Send stop command when released, options: Yes, No
Debounce time	Option:10ms,20ms.....300ms
Triggering of status LED	Options : (1) always on ; (2) always off ; (3) always flashes ; (4) press =ON/release=OFF ; (5) press =OFF/release=ON ; (6) press =flashes/release=OFF ; (7) press =flashes/release=ON ;

	<p>(8) Flashes three times , then OFF ; (9) Flashes three times , then ON ; (10) ON when sending object >= 1 ; OFF when 0 ; (11) OFF when sending object >= 1 ; ON when 0 ; (12) flashes when sending object >= 1 ; OFF when 0 ; (13) OFF when sending object >= 1 ; flashes when 0 ; (14) ON when feedback object = 1 ; OFF when 0 ; (15) OFF when feedback object = 1 ; ON when 0 ; (16) flashes when feedback object = 1 ; OFF when 0 ; (17) OFF when feedback object = 1 ; flashes when 0 ; (18) ON when scene object = number / OFF when no equal</p>
Interlock group for LED	Options : none、 group 1、 group 2、 group 3、 group 4

6.1.5 Choose “dimming position”

Parameter	Describe
Dimming position mode	<p>Absolute dimming mode, options: position value, position toggle, user define. When position value is selected, the parameter "send value 1" appears, options: 0%, 1%, 2%...100%; When "position toggle" is selected, the parameters "send value 1" and "send value 2" appear, and the options are: 0%, 1%, 2%...100%; When "user define" is selected, the parameters "operate when pressing" and "operate when releasing" appear, options: yes, no, when "yes" is selected, parameters appear: "send value", options 0%, 1 %, 2%...100%;</p>
Debounce time	Options : 10ms、 20ms.....100ms
Triggering of status LED	<p>Options :</p> <p>(1) always on ; (2) always off ; (3) always flashes ; (4) press =ON/release=OFF ; (5) press =OFF/release=ON ; (6) press =flashes/release=OFF ; (7) press =flashes/release=ON ; (8) Flashes three times , then OFF ; (9) Flashes three times , then ON ; (10) ON when sending object >= 1 ; OFF when 0 ; (11) OFF when sending object >= 1 ; ON when 0 ; (12) flashes when sending object >= 1 ; OFF when 0 ; (13) OFF when sending object >= 1 ; flashes when 0 ; (14) ON when feedback object = 1 ; OFF when 0 ; (15) OFF when feedback object = 1 ; ON when 0 ; (16) flashes when feedback object = 1 ; OFF when 0 ; (17) OFF when feedback object = 1 ; flashes when 0 ; (18) ON when scene object = number / OFF when no equal</p>
Interlock group for LED	The indicator light lock function. Options: None, Group 1, Group 2, Group 3, Group 4

6.1.6 Choose "Scene"

Parameter	Describe
Scene mode	Options : scene number、 scene toggle、 user define When choose scene number, parameter "1 scene value, could be filled by1~64 ; When choose "scene toggle" , parameter "1scene value" , "2 scene value" , could be filled by1~64 ; When choose "user define" ,parameter"operate when pressing"、"operate when releasing" , Option : yes、 no. When choose "yes" , parameter : "send value "could be filled by1~64 ;
Debounce time	Option : 10ms、 20ms.....100ms
Triggering of status LED	Option : (1) always on ; (2) always off ; (3) always flashes ; (4) press =ON/release=OFF ; (5) press =OFF/release=ON ; (6) press =flashes/release=OFF ; (7) press =flashes/release=ON ; (8) Flashes three times , then OFF ; (9) Flashes three times , then ON ; (10) ON when sending object>=1 ; OFF when 0; (11) OFF when sending object>=1 ; ON when 0; (12) flashes when sending object>=1 ; OFF when 0; (13) OFF when sending object>=1 ; flashes when 0; (14) ON when feedback object=1 ; OFF when 0; (15) OFF when feedback object=1 ; ON when 0; (16) flashes when feedback object=1 ; OFF when 0; (17) OFF when feedback object=1 ; flashes when 0; (18) ON when scene object=number/OFF when no equal
Interlock group for LED	Options : none、 group 1、 group 2、 group 3、 group 4

6.1.7 choose "Value Send"

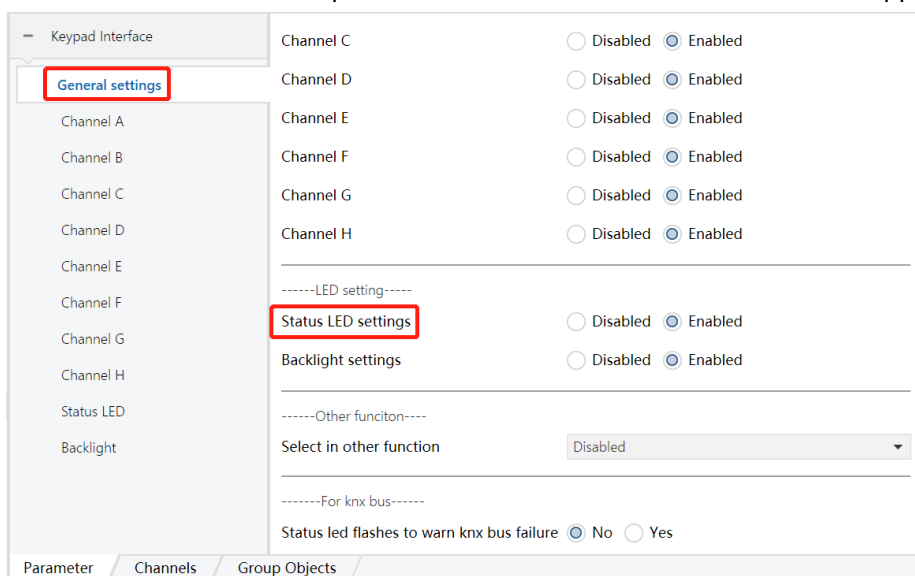
Parameter	Description
Value send	Value sending;
Data type for value	Data types of value, options: 1bit, 1byte; ① When selecting "1bit", the parameter "Value for sending" is sent as a value, which can be options: OFF, on; Sending "is sent by value, the option is: 0 ~ 255;
Long operation	Long -press operation, the options are: NO, YES, when selecting "YES", ① The parameter "Long Operation after" is to start sending commands after a long press, options: 0.5s, 1s ... 4s; ② Parameters; parameters "Data Type for Long Operation" is the data type issued by long -press operation, which can be optional: 1bit, 1BYTE; when selecting "1bit", the parameter "Value for sending" is sent as: OFF, on; should be; When selecting "1byte", the parameter "Value for Sending" is sent as a value. The option can be: 0 ~ 255;

Debounce time	Time, options: 10ms, 20ms ... 300ms ...
Triggering of status LED	<p>LED indicator light activation mode, can be optional:</p> <p>(1) always on ;</p> <p>(2) always off ;</p> <p>(3) always flashes ;</p> <p>(4) press =ON/release=OFF ;</p> <p>(5) press =OFF/release=ON ;</p> <p>(6) press =flashes/release=OFF ;</p> <p>(7) press =flashes/release=ON ;</p> <p>(8) Flashes three times , then OFF ;</p> <p>(9) Flashes three times , then ON ;</p> <p>(10) ON when sending object>=1 ; OFF when 0;</p> <p>(11) OFF when sending object>=1 ; ON when 0;</p> <p>(12) flashes when sending object>=1 ; OFF when 0;</p> <p>(13) OFF when sending object>=1 ; flashes when 0;</p> <p>(14) ON when feedback object=1 ; OFF when 0;</p> <p>(15) OFF when feedback object=1 ; ON when 0;</p> <p>(16) flashes when feedback object=1 ; OFF when 0;</p> <p>(17) OFF when feedback object=1 ; flashes when 0;</p> <p>(18) ON when scene object=number/OFF when no equal;</p>
Interlock group for LED	The indicator light lock function. Options: None, Group 1, Group 2, Group 3, Group 4.

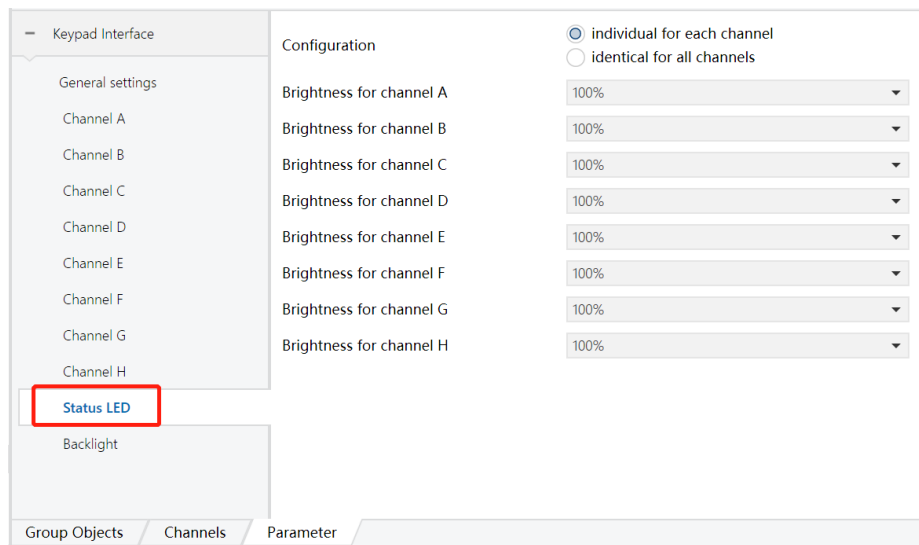
6.1.8 "Status LED"

(1) The parameter "Status LED SETTINGS" represents the status indicator setting, which can be options: Disabled, Enabled;

When selecting "Enabled", the "STATUS LED" option as shown in the red box as shown below appears



Pic 6.1.8.1



Pic 6.1.8.2

Parameter: "Configuration" represents the configuration of LED brightness. Options: Individual for Each Channel; Identical for All Channels.

When selecting "Individual For Each Channel", the parameters appear: Brightness for Channel A, Brightness for Channel B ... Brightness for Channel H (brightness of the channel H) can be set through these parameters. The LED brightness value of each channel can 0%, 1%... 100%.

When selecting "Identical for All Channels", the parameters appear "Brightness for All Channel" (the brightness value of all channels), which can be options: 0%, 1%... 100%. Parameter "OverWrite Brightness Via Object for All Channel" (using the object to rewrite the brightness value of all channels), options: yes, no.

6.1.9 "Backlight" indicates the background light setting, the function is not enabled yet, select "Disabled".

6.1.10 "Other function" means other functions, the function has not been enabled yet, select "Disabled".

6.1.11 "For knx bus" indicates that the status LED light flashes to warn that the KNX bus is powered off, and the function is not activated yet, so select "Disabled".

6.2 Communication object description

The communication object is the medium through which the device communicates with other devices on the bus, that is, only the communication object can perform bus communication. The function of each communication object is introduced in detail below.

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 value of the communication object can be rewritten through the bus, "R" means that the value of the communication object can be read through the bus, "T" means that the communication object has the transmission function, and "U" means that the value of the communication object can be updated.

6.2.1 "switch" Model

There are 8 objects in the "switch" mode, as shown in pic 6.2.1, and the specific functions are shown in Table 1.1.

Number	Name	Object Function	Description	Group Addr	Length	C	R	W	T	U	Data Type	Priority
0	Switch, Channel A	On / Off			1 bit	C	R	W	T	-	switch	Low
9	Switch, Channel B	On / Off			1 bit	C	R	W	T	-	switch	Low
18	Switch, Channel C	On / Off			1 bit	C	R	W	T	-	switch	Low
27	Switch, Channel D	On / Off			1 bit	C	R	W	T	-	switch	Low
36	Switch, Channel E	On / Off			1 bit	C	R	W	T	-	switch	Low
45	Switch, Channel F	On / Off			1 bit	C	R	W	T	-	switch	Low
54	Switch, Channel G	On / Off			1 bit	C	R	W	T	-	switch	Low
63	Switch, Channel H	On / Off			1 bit	C	R	W	T	-	switch	Low

图 6.2.1

No.	Name	Data length	Attributes
0,9,18,27,36,45,54,63	Switch, Channel X	1 bit	C, R, W, T
This communication object is enabled when the parameter "Function mode" selects "switch". This communication object is used to control the operation of the lighting switch and send on ("1")/off ("0") messages.			

Table 1.1

6.2.2 "blind" Model

There are 16 objects in the "blind" mode, as shown in Pic 6.2.2, and the specific functions are shown in Table 1.2.

Number	Name	Object Function	Description	Group Addr	Length	C	R	W	T	U	Data Type	Priority
1	Blind, Channel A	Up / Down			1 bit	C	R	W	T	-	up/down	Low
2	Blind, Long, Channel A	Up / Down			1 bit	C	R	W	T	-	up/down	Low
10	Blind, Channel B	Up / Down			1 bit	C	R	W	T	-	up/down	Low
11	Blind, Long, Channel B	Up / Down			1 bit	C	R	W	T	-	up/down	Low
19	Blind, Channel C	Up / Down			1 bit	C	R	W	T	-	up/down	Low
20	Blind, Long, Channel C	Up / Down			1 bit	C	R	W	T	-	up/down	Low
28	Blind, Channel D	Up / Down			1 bit	C	R	W	T	-	up/down	Low
29	Blind, Long, Channel D	Up / Down			1 bit	C	R	W	T	-	up/down	Low
37	Blind, Channel E	Up / Down			1 bit	C	R	W	T	-	up/down	Low
38	Blind, Long, Channel E	Up / Down			1 bit	C	R	W	T	-	up/down	Low
46	Blind, Channel F	Up / Down			1 bit	C	R	W	T	-	up/down	Low
47	Blind, Long, Channel F	Up / Down			1 bit	C	R	W	T	-	up/down	Low
55	Blind, Channel G	Up / Down			1 bit	C	R	W	T	-	up/down	Low
56	Blind, Long, Channel G	Up / Down			1 bit	C	R	W	T	-	up/down	Low
64	Blind, Channel H	Up / Down			1 bit	C	R	W	T	-	up/down	Low
65	Blind, Long, Channel H	Up / Down			1 bit	C	R	W	T	-	up/down	Low

Pic 6.2.2

No.	Name	Data length	Attributes
1,10,19,28,37,46,55,64	Blind, Channel X	1 bit	C, R, W, T
This communication object is enabled when the parameter "Function mode" selects "blind". This communication object is used to control the curtain up/down operation and send up ("0")/down ("1") messages.			
2,11,20,29,38,47,56,65	Blind, Long, Channel X	1 bit	C, R, W, T
This communication object is enabled when the parameter "Function" selects "blind", then the parameter "long operation" appears, and "yes" is selected. To adjust the position of the curtain, when the communication object sends a "1" message, jog downward to adjust; when sending a "0" message, jog upward to adjust.			

Table 1.2

6.2.3 "blind position" Model

8 objects in the "blind position" mode, as shown in pic 6.2.3, and the specific functions are shown in Table 1.3.

	Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
■↕	3	Blind value, Channel A	8-bit Value			1 byte	C	R	W	T	-	percentage (0..100%)	Low
■↕	12	Blind value, Channel B	8-bit Value			1 byte	C	R	W	T	-	percentage (0..100%)	Low
■↕	21	Blind value, Channel C	8-bit Value			1 byte	C	R	W	T	-	percentage (0..100%)	Low
■↕	30	Blind value, Channel D	8-bit Value			1 byte	C	R	W	T	-	percentage (0..100%)	Low
■↕	39	Blind value, Channel E	8-bit Value			1 byte	C	R	W	T	-	percentage (0..100%)	Low
■↕	48	Blind value, Channel F	8-bit Value			1 byte	C	R	W	T	-	percentage (0..100%)	Low
■↕	57	Blind value, Channel G	8-bit Value			1 byte	C	R	W	T	-	percentage (0..100%)	Low
■↕	66	Blind value, Channel H	8-bit Value			1 byte	C	R	W	T	-	percentage (0..100%)	Low

Pic 6.2.3

No.	Name	Data length	Attributes
3,12,21,30,39,48,57,66	Blind value, Channel X	8 bits	C, R, W, T
<p>This communication object is enabled when the parameter "Function mode" selects "blind position". This communication object is used to control the absolute position operation of the curtain, send the preset percentage, and adjust the curtain to the corresponding position.</p>			

Table 1.3

6.2.4 "dimming" Model

There are 16 objects in "dimming" mode, as shown in Pic 6.2.4, and the specific functions are shown in Table 1.4.

	Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
■↕	4	Dimming switch, Channel A	On / Off			1 bit	C	R	W	T	-	switch	Low
■↕	5	Dimming level, Channel A	Brighter / Darker			4 bit	C	R	W	T	-	dimming control	Low
■↕	13	Dimming switch, Channel B	On / Off			1 bit	C	R	W	T	-	switch	Low
■↕	14	Dimming level, Channel B	Brighter / Darker			4 bit	C	R	W	T	-	dimming control	Low
■↕	22	Dimming switch, Channel C	On / Off			1 bit	C	R	W	T	-	switch	Low
■↕	23	Dimming level, Channel C	Brighter / Darker			4 bit	C	R	W	T	-	dimming control	Low
■↕	31	Dimming switch, Channel D	On / Off			1 bit	C	R	W	T	-	switch	Low
■↕	32	Dimming level, Channel D	Brighter / Darker			4 bit	C	R	W	T	-	dimming control	Low
■↕	40	Dimming switch, Channel E	On / Off			1 bit	C	R	W	T	-	switch	Low
■↕	41	Dimming level, Channel E	Brighter / Darker			4 bit	C	R	W	T	-	dimming control	Low
■↕	49	Dimming switch, Channel F	On / Off			1 bit	C	R	W	T	-	switch	Low
■↕	50	Dimming level, Channel F	Brighter / Darker			4 bit	C	R	W	T	-	dimming control	Low
■↕	58	Dimming switch, Channel G	On / Off			1 bit	C	R	W	T	-	switch	Low
■↕	59	Dimming level, Channel G	Brighter / Darker			4 bit	C	R	W	T	-	dimming control	Low
■↕	67	Dimming switch, Channel H	On / Off			1 bit	C	R	W	T	-	switch	Low
■↕	68	Dimming level, Channel H	Brighter / Darker			4 bit	C	R	W	T	-	dimming control	Low

Pic 6.2.4

No.	Name	Data length	Attributes
4,13,22,31,40,49,58,67	Dimming switch , Channel X	1 bit	C, R, W, T
<p>This communication object is enabled when the parameter "Function mode" selects "dimming". This communication object is used for short-press operation of the corresponding channel key to send the dimming on/off message.</p>			
5,14,23,41,50,59,68	Dimming level, Channel X	4 bits	C, R, W, T
<p>This communication object is enabled when the parameter "Function" selects "dimming". This communication object is used for the long-press operation of the corresponding channel, and the relative dimming command is continuously issued according to the dimming level set by the VD library.</p>			

Table 1.4

6.2.5 “dimming position” model

There are 8 objects in the “dimming position” mode, as shown in pic 6.2.5, and the specific functions are shown in Table 1.5.

	Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
■↕	6	Dimming value, Channel A	8-bit Value			1 byte	C	R	W	T	-	percentage (0..100%)	Low
■↕	15	Dimming value, Channel B	8-bit Value			1 byte	C	R	W	T	-	percentage (0..100%)	Low
■↕	24	Dimming value, Channel C	8-bit Value			1 byte	C	R	W	T	-	percentage (0..100%)	Low
■↕	33	Dimming value, Channel D	8-bit Value			1 byte	C	R	W	T	-	percentage (0..100%)	Low
■↕	42	Dimming value, Channel E	8-bit Value			1 byte	C	R	W	T	-	percentage (0..100%)	Low
■↕	51	Dimming value, Channel F	8-bit Value			1 byte	C	R	W	T	-	percentage (0..100%)	Low
■↕	60	Dimming value, Channel G	8-bit Value			1 byte	C	R	W	T	-	percentage (0..100%)	Low
■↕	69	Dimming value, Channel H	8-bit Value			1 byte	C	R	W	T	-	percentage (0..100%)	Low

Pic 6.2.5

No.	Name	Data length	Attributes
6,15,24,33,42,51,60,69	Dimming value , channel X	8 bits	C, R, W, T
This communication object is enabled when the parameter "Function mode" selects "dimming position". This communication object is used to control the absolute brightness operation of dimming, send the preset percentage, and adjust the brightness to the corresponding position			

6.2.6 “scene” Model

There are 6 objects in "scene" mode, as shown in Pic 6.2.6, and the specific functions are shown in Table 1.6.

序号 ^	名称	对象功能	描述	群组地址	长度	C	R	W	T	U	数据类型	优先级
■↕	7	Scene, Channel A	8-bit Value		1 byte	C	R	W	T	-		低
■↕	16	Scene, Channel B	8-bit Value		1 byte	C	R	W	T	-		低
■↕	25	Scene, Channel C	8-bit Value		1 byte	C	R	W	T	-		低
■↕	34	Scene, Channel D	8-bit Value		1 byte	C	R	W	T	-		低
■↕	43	Scene, Channel E	8-bit Value		1 byte	C	R	W	T	-		低
■↕	52	Scene, Channel F	8-bit Value		1 byte	C	R	W	T	-		低

Pic 6.2.6

No.	Name	Data length	Attributes
7,16,25,34,43,52,61,70	Scene, channel X	1 Byte	C, R, W, T
This communication object is enabled when the parameter "Function" selects "scene", and this communication object is used to send scene control messages.			

Table 1.6

6.2.7"Value send" mode

There are 16 objects in the "Value send" mode, as shown in Figure 6.2.6, and the specific functions are shown in Table 1.7.

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
6	Value send, Channel A	1-bit value			1 bit	C	R	W	T	-	switch	Low
7	Value send, Long, Channel A	1-bit Value			1 bit	C	R	W	T	-	switch	Low
15	Value send, Channel B	1-bit Value			1 bit	C	R	W	T	-	switch	Low
16	Value send, Long, Channel B	1-bit Value			1 bit	C	R	W	T	-	switch	Low
24	Value send, Channel C	1-bit Value			1 bit	C	R	W	T	-	switch	Low
25	Value send, Long, Channel C	1-bit Value			1 bit	C	R	W	T	-	switch	Low
33	Value send, Channel D	1-bit Value			1 bit	C	R	W	T	-	switch	Low
34	Value send, Long, Channel D	1-bit Value			1 bit	C	R	W	T	-	switch	Low
42	Value send, Channel E	1-bit Value			1 bit	C	R	W	T	-	switch	Low
43	Value send, Long, Channel E	1-bit Value			1 bit	C	R	W	T	-	switch	Low
51	Value send, Channel F	1-bit Value			1 bit	C	R	W	T	-	switch	Low
52	Value send, Long, Channel F	1-bit Value			1 bit	C	R	W	T	-	switch	Low
60	Value send, Channel G	1-bit Value			1 bit	C	R	W	T	-	switch	Low
61	Value send, Long, Channel G	1-bit Value			1 bit	C	R	W	T	-	switch	Low
69	Value send, Channel H	1-bit Value			1 bit	C	R	W	T	-	switch	Low
70	Value send, Long, Channel H	1-bit Value			1 bit	C	R	W	T	-	switch	Low

Pic 6.2.7

Number	Name	Data length	Attributes
6,15,24,33,42,51,60,69	Value send,Channel X	1 bit	C,R,W,T
In the channel "Channel X" (X=A~H), it is enabled when the parameter "Function mode" selects "Value send". This communication object is used to send the channel X on/off message to the bus to control the opening /close.			
7,16,25,34,43,52,61,70	Value send. Lona. Channel X	1 bit	C,R,W,T
In the channel "Channel X" (X=A~H), when the parameter "Function mode" selects "Value send", and the parameter "Value for sending" selects "Yes", it is enabled. This communication object is used to send the channel to open /Off message to the bus, control on/off.			

6.2.8 Feedback object function

There are 8 objects in total for the feedback object control LED indicator function, as shown in Figure 6.2.8, and the specific functions are shown in Table 1.8

Number	Name *	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
8	Status feedback, Channel A	On / Off			1 bit	C	-	W	T	U	switch	Low
17	Status feedback, Channel B	On / Off			1 bit	C	-	W	T	U	switch	Low
26	Status feedback, Channel C	On / Off			1 bit	C	-	W	T	U	switch	Low
35	Status feedback, Channel D	On / Off			1 bit	C	-	W	T	U	switch	Low
44	Status feedback, Channel E	On / Off			1 bit	C	-	W	T	U	switch	Low
53	Status feedback, Channel F	On / Off			1 bit	C	-	W	T	U	switch	Low
62	Status feedback, Channel G	On / Off			1 bit	C	-	W	T	U	switch	Low
71	Status feedback, Channel H	On / Off			1 bit	C	-	W	T	U	switch	Low

Pic 6.2.8

Number	Name	Data length	Attributes
8,17,26,35,44,53,62,71	Status feedback , Channel X	1 Bit	C,R,W,T
The communication object is to select "ON when feedback object=1; OFF when 0" or "OFF when feedback object=1; ON when 0" or "flashes when feedback object=1; OFF when 0" in the parameter "triggering of status LED" or "OFF when feedback object=1; flashes when 0", this object is used to bind the feedback object, and use the received feedback status to control the status of the LED indicator.			

Table 1.8

6.2.9 Status light brightness function

There is one object for rewriting the status light function through objects, as shown in Figure 6.2.9, and the specific functions are shown in Table 1.9

Number	Name *	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
72	Overwrite brightness, Statu...	8-bit Value			1 byte	C	R	W	T	-	percentage (0..100%)	Low

Pic6.2.9

Number	Name	Data length	Attributes
72	Overwrite brightness,Status LED	1byte	C,R,W,T
This communication object is enabled when the parameter "Overwrite brightness via object for all channel" is selected as "Yes", and this object is used to rewrite the brightness of the status light.			

7 Safe use and maintenance

- (1) Read all instructions carefully before use.
- (2) To establish a good ventilation environment.
- (3) During use, pay attention to moisture-proof, shock-proof and dust-proof.
- (4) Rain, contact with other liquids or corrosive gases are strictly prohibited.
- (5) If it is wet or invaded by liquid, it should be dried in time.
- (6) When the machine fails, please contact professional maintenance personnel or our company.

8 Contact us

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