ATTACHMENT RELAY
KNX-7013-72-DRI-DRO-IN

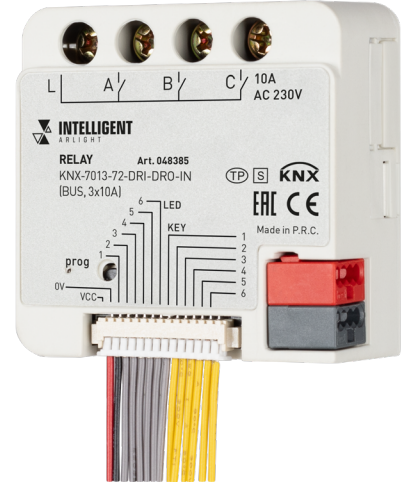INTELLIGENT ARLIGHT

03-2025

KNX-7013-72-DRI-DRO-IN, 1-fold

KNX-7013-72-DRI-DRO-IN, 2-fold

KNX-7013-72-DRI-DRO-IN, 3-fold

CONTENTS

1. SUMMARY

Embedded switch module is a simple, low-cost smart home system products, it is mainly for the post-installation market, that is, mainly for the existing has been wired building or old house intelligent transformation, which is installed in an ordinary 86 box, compared with the traditional lighting wiring and control methods, only need to add an additional KNX bus, you can transform the original traditional lighting program into a modern smart home! The installation is simple and convenient. The system is designed to cover the following application areas in response to the functional requirements of existing home applications:

▼ Switch output;
▼ Dry contact input;
▼ LED output indication.

The products of this system are only powered and communicated via the KNX system bus, no additional supply voltage is required, and the outputs are connected to the loads using screw terminals.

The system consists of the following function blocks. During the use of the product, we will select the relevant function blocks for functional configuration according to the product's characteristics. The configuration tool is the engineering design tool software ETS with pr4 project files (version ETS5 or above).The functions of the modules are summarized below:

Dry contact Input detection

can be connected with dry contact panels or sensor devices and supports up to 6 inputs.The functions are summarized as follows:

▼ Switching and dimming;
▼ Blind Control;
▼ Recall and Stored scene function;
▼ Value sending.

Switch output

It can connect some electrical loads, such as lighting, sockets,and heating control. There are 3 outputs,load: 250VAC 10A. Functions:

▼ Switch
▼ Provide 8 scenes, recall and storing via a 1byte object
▼ Status response, to know the current output state in the visualization
▼ Set the relay contact position after bus voltage recovery
▼ Set the relay contact position after bus voltage failure

LED Output indicator

can support common-cathode or common-anode LED indicator connection, and the voltage can be 12V. Up to 6 outputs.Real-time display of the status of the light circuits to be displayed on the panel (the connected switch panel must have the LED indicator function for the connection).

To ensure that the system works properly, it is essential to check the wiring for problems before use and to pay attention to the technical characteristics of the load equipment. The functional configuration of the product needs to be carried out in conjunction with the characteristics of the selected product. This manual provides the user with detailed technical information about the product, including installation and programming details, and explains how to use it about examples of actual use.

2. TECHNICAL PARAMETER, DIMENSION AND WIRING DIAGRAM

2.1 TECHNICAL PARAMETER

Power supply	Operation voltage, EIB	DC 21~30V, through EIB
	Current consumption, EIB	<24mA (with 2 slave)
	Power consumption, EIB	<360mW
Relay output	Channel	Up to 3-fold (Maximum 2 slaves connected to a single master)
	Un Rated Voltage	AC 250/440V (50/60Hz)
	In Rated Current/Capacity	10A/70uF
	Max. Switching Current	16A/250VAC
	Mechanical life	>1x106
	Electrical life	>2.5x105
	Max. Switching DC	(Resistive load) DC 16A/24V
Output LED	Channel	6-Way, common cathode
	Current output	1 mA
Input channel	Input channel	6-fold dry contract

Connection	EIB/KNX	Via bus connection terminals (Red/Black)
	Output terminal	0.8mmØ
	Wire Range	0.5-4mm²
	Torque	0.8N-m
Operation and display	Programming button	In the front of the module
	Red LED	Indicate the programming mode on
	Green LED flashing	Indicate the application layer is running normally
Protection	Protection	IP 20, EN 60 529
Temperature	Operation	-5... +45 °C
	Storage	-25... +55 °C
	Transport	-25... +70 °C
Environment	Rel. humidity	<93%, except dewing
Design	Design	Flush-mounted
Installation	Installation	Installation in a standard 86 or 60 square box. The depth of the terminal box is at least 50mm.70mm is recommended.
Dimension/ Weight	Dimension	49.3mm×49.2mm×22.85mm
	Weight	About 0.1KG

Application program:

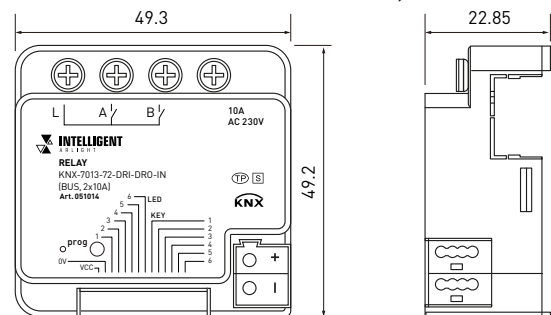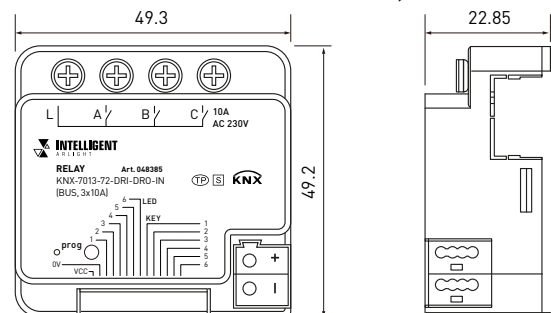| Application program	Max. number of communication objects	Max. number of group addresses	Max. number of group addresses
Flush mounted Switch and IO, 3fold, 10A	92	250	250

2.2 DIMENSION

KNX-7013-72-DRI-DRO-IN , 1-fold
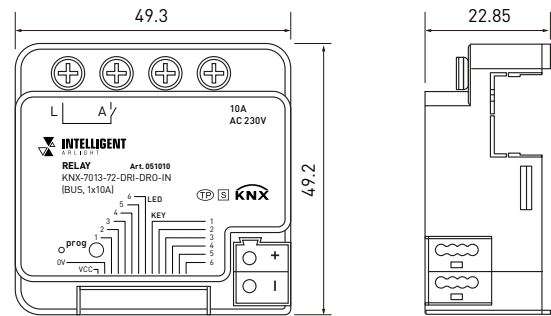
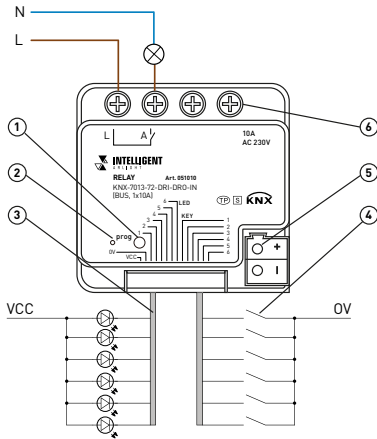#### KNX-7013-72-DRI-DRO-IN , 2-fold

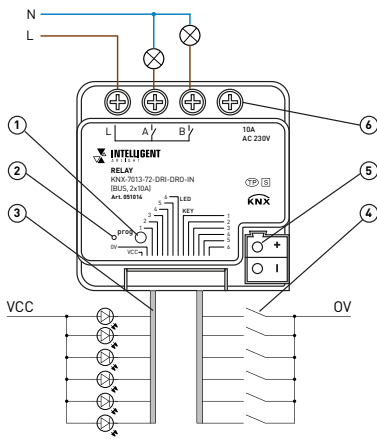
KNX-7013-72-DRI-DRO-IN , 3-fold
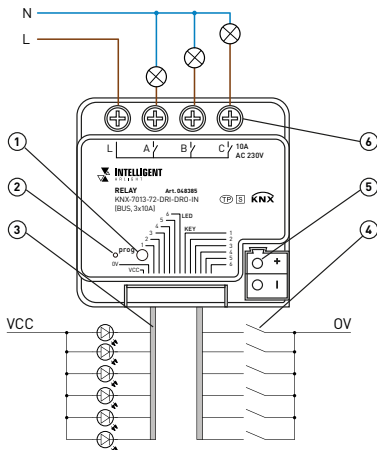
2.3 CONNECTION DIAGRAM

KNX-7013-72-DRI-DRO-IN , 1-fold

KNX-7013-72-DRI-DRO-IN , 2-fold

KNX-7013-72-DRI-DRO-IN , 3-fold

① Programming Button
② Programming LED
③④ LED and push button terminal
⑤ KNX/EIB bus terminal
⑥ LED and key terminal blocks

NOTES:

VCC indicates positive power (red), 0V indicates negative power (black).
LED indicates an external indicator. KEY indicates a dry contact switch

3. PARAMETER SETTING DESCRIPTION IN THE ETS

The parameter in the ETS system is described in function blocks.

3.1. PARAMETER WINDOW "INPUT X"

This section describes the input functions in detail. There are 6 inputs in total, each with the same function. The following is an example of one of the inputs to explain the parameter setting:
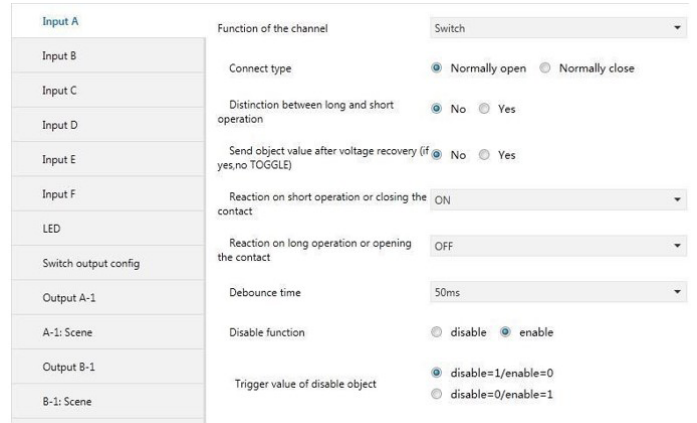
Fig . 3.1 Parameter window "Input X-Switch"

"Function of the channel"
This parameter sets the function of the input. If the option is "No function", it means that the function of this input is not enabled.

Options:

No function
Switch
Switch/Dimming
Value/Force output
Scene control
Shutter control

3.1.1. "SWITCH" FUNCTION

The parameter window of "Switch" is shown in Figure 4.1.

"Connect type"
This parameter for setting the contact connection type, in general, and whether the input contact is a normally open type or a normally closed type.

Options:

Normally open
Normally close

The parameters presented in this section are all in terms of Normally open types; Normally closed types operate oppositely to Normally open types.

"Distinction between long and short operation"
This parameter for setting whether the contact input distinguishes between long and short operations. If the "yes" option is selected, the input reaches a specific time to determine whether the operation is long or short, then the contact will execute the set action. The processing of long operation is shown in the figure:

NOTE:

The processing of long operations in the following sections is the same as here. tl is the time for a long operation, i.e., the time required to determine that an input operation is long.

Options:
Yes
No

"Send object value after voltage recovery (if yes, no TOGGLE)."
This parameter for setting whether the current switching value is sent to the bus when power is restored to the bus,this parameter is visible when there is no distinction between long/short operations.

Options: Yes/No

If the option is "yes", the current switching value is sent to the bus after bus reset, but only if the parameter"Reaction on the short operation or closing the contact"/"Reaction on long are not 'Toggle', the switching value will be sent to the bus, if any of the parameter options is "Toggle If any of the parameter options is "Toggle", no value is sent to the bus. If the current operation is "No reaction", no value will be sent.

"Long operation after (*0.1S)"
This parameter is visible when distinguishing between long/short operations. The valid time for long operations is set here. If the input contact is connected for longer than the time set here, the operation is determined to be a long operation.otherwise, it is a short operation.

Options: 3...25

"Reaction on short operation or closing the contact"/" Reactionon long operation or opening the contact"
This parameter for setting the operation to be performed when the contact is closed/disconnected or during a long/short operation is set here. When the input is determined, the object value is updated immediately.

Options:

No action
ON
OFF
Toggle

"No action" — No messages
"ON" — Sending open messages;
"OFF" — Sending close messages.
"Toggle", Each operation will transition between switch ON and OFF, e.g., if the last time a switch ON message was sent (or received) ,then this operation will trigger the sending of a switch OFF message; when the switch is operated again , a switch ON message will be sent, etc. Therefore, the switch will always memorize its last state, and will be converted to another value when operated.

"Debounce time"
The de-jitter time is set on this parameter to prevent unnecessary multiple operations caused when the contact is triggered multiple times during the jitter time, i.e., the minimum practical time for contact input.

Options: 10ms/20ms/.../150ms

"Disable function"
This parameter for setting whether to enable the disable function of the input.

Options:

Disable
Enable

"Enable", inputs can be disabled or enabled by objects.

"Trigger value of disable object."
This parameter for setting the trigger value for disable/enable inputs.

Options:

Disable=1/enable=0
Enable=0/enable=1

3.1.2."SWITCH / DIMMING" FUNCTION

"Switch / Dimming"The parameter setting window is shown in Figure 3.2.

Fig.3.2 Parameter window"Input X-Switch/Dimming"

"Connect type"
This parameter for setting the contact connection type, in general, and whether the input contact is a normally open type or a normally closed type.
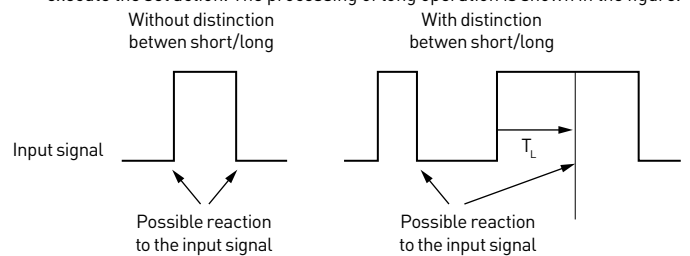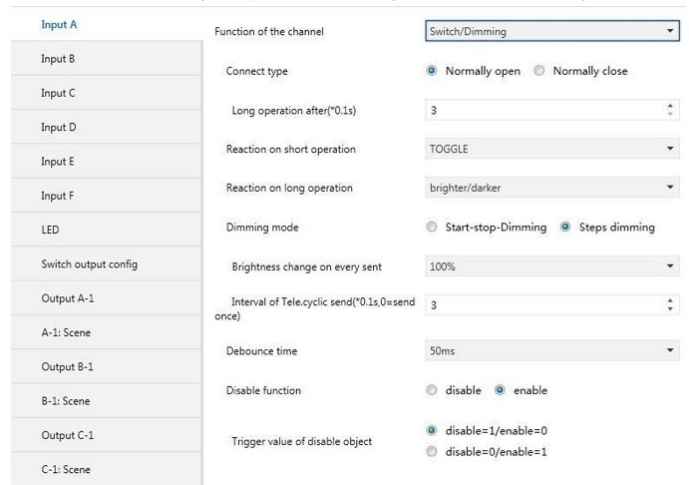
Options:

Normally open
Normally close

The parameters presented in this section are all in terms of Normally open types; Normally closed types operate oppositely to Normally open types.

"Long operation after (*0.1s)"
The valid time for a long operation is set here. If the input contact connection time exceeds the time set here, the operation is determined to be a long operation; otherwise a short operation.

Options: 3...25

"Reaction on short operation"
This parameter for setting the switch's value that is sent when a short operation is entered.

Options:

No action
ON
OFF
Toggle

"No action", no any messages.
"ON", sending an open message.
"OFF",sending a close message.
"Toggle", each operation will transition between switching on and off.

"Reaction on long operation"
This parameter for setting the value of the relative dimming sent when the input is operated long, dims the light or dims the light, and stops the dimming when the button is released.

Options:

Brighter
Darker
Toggle

"Brighter", Sends a dimming message when the button is operated long.
"Darker", Send dimmed message.
"Toggle", Each operation will toggle between lightening and darkening.

NOTE:

In the parameter setting of the switch and relative dimming, if one of the options is "Toggle", there will be a linkage between them; for example, if the switch object receives a switch- on state, then the next time the dimming will be dimmed. For instance, if the object gets an off state, the next dimming will be dimmed.

"Dimming mode"
This parameter for setting the relative dimming method, whether the start-stop or the step-by-step dimming method.

Options:
Start-stop dimming
Steps-dimming

When the "Start-stop dimming" option is selected, the relative dimming method is start-stop dimming; a dimming or brightening message is sent when dimming, and a stop message is sent when dimming is finished. In the start-stop dimming mode, the dimming message does not need to be sent cyclically.
when the "Steps-dimming" option is selected, the relative dimming mode is step-by-step dimming mode; the dimming message will be sent in a cycle, and the stop-dimming message will be sent immediately when the dimming is finished.

"Brightness change one very sent"
This parameter is visible when the "Dimming mode" option is "Steps dimming". Here you can set the brightness (in percentage) which can be changed by sending a dimming telegram cyclically.

Options:
100%
50%
...
1.56%

"Interval of Tele. Cyclic send (*0.1s, 0=send once)"
When the parameter "Dimming mode" is "Steps dimming", this parameter is visible to set the time interval of sending a dimming message cyclically.

Options: 0...25

"Debounce time"
The de-jitter time is set on this parameter to prevent unnecessary multiple operations caused when the contact is triggered multiple times during the jitter time, i.e., the minimum practical time for contact input.

Options: 10ms/20ms/.../150ms

"Disable function"
This parameter for setting whether to enable the disable function of the input.

Options: Disable/Enable
If "Enable", the input can be disabled or enabled by the object.

"Trigger value of disable object"
This parameter for setting the trigger value for the disable/enable input.

Options:
Disable=1/enable=0
Enable=0/enable=1

3.1.3. "VALUE / FORCE OUTPUT" FUNCTION

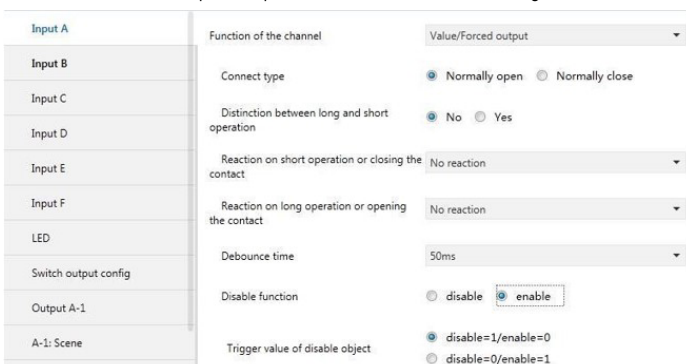"Value / Force output"the parameter window is shown in Figure 3.3

Fig. 3.3 Parameter window"Input X-Value/Forced output"

"Connect type"
This parameter for setting the type of contact connection, in general, whether the input contact is of the normally open or normally closed type.

Options:
Normally open
Normally close

The parameters presented in this section are all in terms of Normally open types; Normally closed types operate in the opposite way to Normally open types.

"Distinction between long and short operation"
This parameter for setting whether the contact input distinguishes between long and short operations. If the "yes" option is selected, the input reaches a certain time before it can be determined whether the operation is a long or a short operation, and the contact performs the set action.

Options: yes/No

"Long operation after (*0.1s)"
This parameter is visible when distinguishing between long/short operations. The valid time for long operations is set here. If the input contact is connected for longer than the time set here, the operation is determined to be a long operation, otherwise it is a short operation.

Options: 3...25

"Reaction on short operation or closing the contact"/"Reaction on long operation or opening the contact"
This parameter for setting the type of data to be sent when the contact is closed/disconnected or during long/short operation.

Options:
No reaction
1bit value [0/1]
...
2byte value [0...65535]

"Output value[...]"
The parameter for setting the value of the data that is sent when the operation is performed. The range of values depends on the data type selected in the previous parameter.

"Debounce time"
The de-jitter time is set on this parameter to prevent unnecessary multiple operations caused when the contact is triggered multiple times during the jitter time, i.e., the minimum effective time for contact input.

Options: 10ms/20ms/.../150ms

"Disable function"
This parameter for setting whether or not to enable the disable function of the input.

Options: Disable/Enable
If "Enable", the input can be disabled or used by the object.

"Trigger value of disable object"
This parameter for setting the trigger value for the disable/enable input.

Options:
Disable=1/enable=0
Enable=0/enable=1

3.1.4. "SCENE CONTROL"FUNCTION

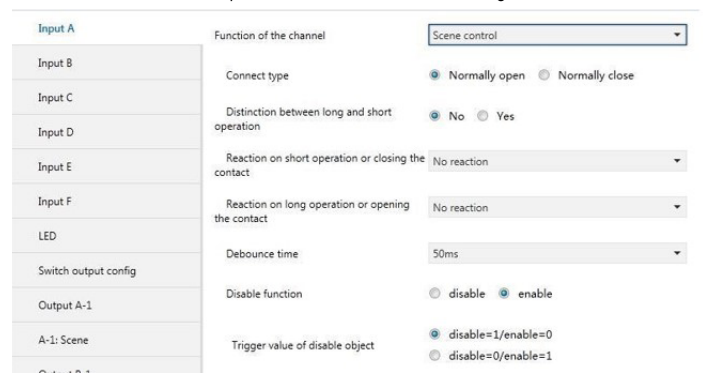"Scene control" The parameter window is shown in Figure 3.4.

Fig.3.4 parameter window"Input X-Scene control"

"Connect type"
This parameter for setting the contact connection type, in general, whether the input contact is a normally open type or a normally closed type.

Options:

        Normally open
        Normally close

The parameters presented in this section are all in terms of Normally open types; Normally closed types operate in the opposite way to Normally open types.

"Distinction between long and short operation"
This parameter for setting whether the contact input distinguishes between long and short operations. If the "yes" option is selected, the input reaches a certain time before it can be determined whether the operation is a long or a short operation, and the contact performs the set action.

        Options: yes/No

"Long operation after (*0.1s)"
This parameter is visible when distinguishing between long/short operations. The valid time for long operations is set here. If the input contact is connected for longer than the time set here, the operation is determined to be a long operation, otherwise it is a short operation.

        Options: 3...25

"Reaction on short operation or closing the contact"/"Reaction on long operation or opening the contact"
Scenes are set on this parameter to be recalled or stored when the contact is closed/disconnected or during long/short operation.

        Options:

            No reaction
            Recall scene
            Store scene

"Scene number (1..64)"
This parameter for setting scene no.: Scene NO.1~64, the according telegram is 0~63.

"Debounce time"
This parameter for setting the scene number, the scene number range: Scene NO.1~64, the corresponding message is 0~63.

        Options: 10ms/20ms/.../150ms

"Disable function"
This parameter for setting whether to enable the disable function of the input.

        Options: Disable/Enable

If "Enable", the input can be disabled or used by the object.

"Trigger value of disable object"
This parameter for setting the trigger value for the disable/enable input.

        Options:

            Disable=1/enable=0
            Enable=0/enable=1

3.1.5. "SHUTTER CONTROL" FUNCTION

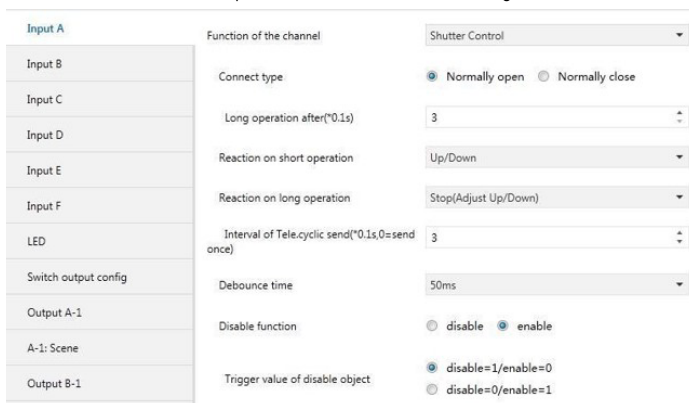"Shutter control" The parameter window is shown in Figure 3.5.

Fig. 3.5 parameter window "Input X-Shutter control"

"Connect type"
This parameter for setting the contact connection type, in general, whether the input contact is a normally open type or a normally closed type.

        Options:

            Normally open
            Normally close

The parameters presented in this section are all in terms of Normally open types; Normally closed types operate in the opposite way to Normally open types.

"Long operation after (*0.1s)"
The valid time for a long operation is set here. If the input contact connection time exceeds the time set here, the operation is determined to be a long operation, otherwise a short operation.

        Options: 3...25

"Reaction on short/long operation"
This parameter for setting the action to be performed when the input is a short or long operation

        Options:

            No action
            Up
            Down
            Up/Down
            Stop(Adjust Up)
            Stop(Adjust Down)
            Stop(Adjust Up/Down)

"No action", no any actions.
"Up", move curtains up or open them.
"Down", move curtains down or close them.
"Up/Down",performs curtain opening and closing (move up/down) actions alternately.
"Stop(Adjust Up)", stopping the operation of the curtains or adjusting the angle of the blinds upwards.
"Stop(Adjust Down)",stopping the operation of the curtains or adjusting the angle of the blinds upwards.
"Stop(Adjust Up/Down)",stops curtain operation or alternately performs upward/downward louver angle adjustments.

"Interval of Tele. Cyclic send (*0.1s, 0=send once)"
This parameter is visible when the previous parameter option is "Stop...". This parameter is visible when the previous parameter option is "Stop...", and it sets the time interval for cyclic sending of louver angle adjustment messages.

        Options: 0...25

"Debounce time"
The de-jitter time is set on this parameter to prevent unnecessary multiple operations caused when the contact is triggered multiple times during the jitter time, i.e., the minimum effective time for contact input.

        Options: 10ms/20ms/.../150ms

"Disable function"
This parameter for setting whether to enable the disable function of the input.

        Options: Disable/Enable

If "Enable", Inputs can be disabled or used by objects.

"Trigger value of disable object"
This parameter for setting the trigger value for the disable/enable input.

        Options:

            Disable=1/enable=0
            Enable=0/enable=1

3.2. PARAMETER SETTING WINDOW "LED"

This interface is used to set the function of the LED. 6 LEDs are provided for indication, each LED can be set individually, we will take one of the LEDs as an example for parameter setting.
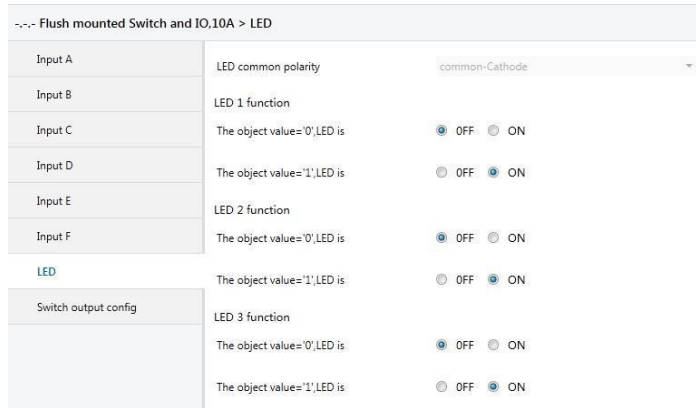

Fig.3.6 parameter window "LED"

"LED common polarity"
This parameter comments on the polarity of the LED: common cathode.

"LED X function"
"The object value='0/1', LED is"
This parameter for setting whether the LED will light up or go out when the object receives a telegram with a value of "1" or "0".

Options: OFF/ON

3.3. PARAMETER WINDOW "SWITCH OUTPUT CONFIG"

"Switch output config" parameter window is shown in Figure 4.7.
The switching outputs have a total of 9 output channels and are composed of three modules, one is the Main module and the other two are the Slave modules (Sub1/2module).
The parameters of slave module 2 can only be set after slave module 1 is enabled. However, the parameters and communication objects assigned to each output are the same, and the following is an example of one of the outputs.
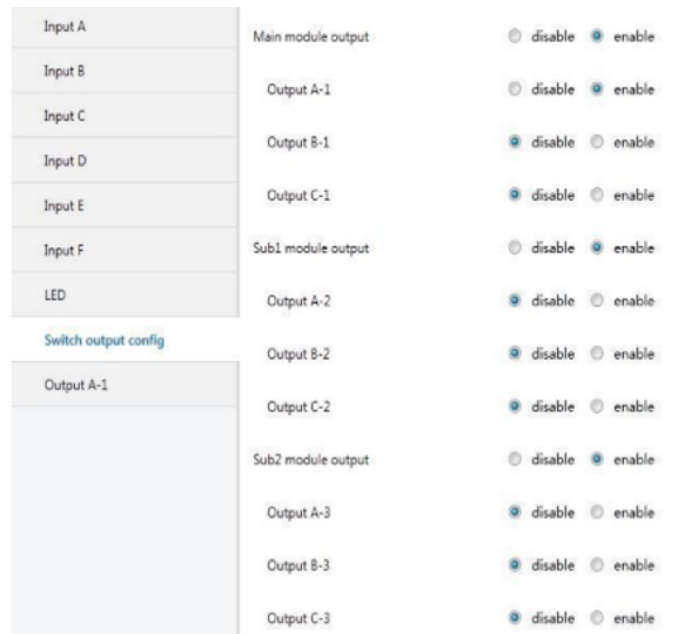

Fig. 3.7 parameter window "Switch output con fig"

The following window is visible when the parameter "Output..." is selected as "enable" in the window of Fig. 4.7.
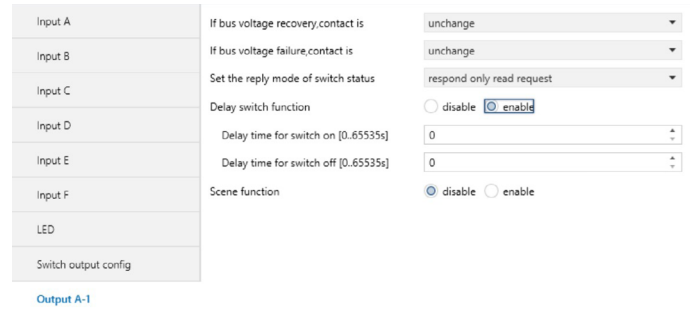

Fig. 3.8 parameter window "Output..."

"If bus voltage recovery, contact is"
This parameter for setting the position of the relay contacts after the bus voltage is restored.

Options:
OF
unchange
open
close
As before bus voltage fail

When "un change" is selected, the relay contacts of this output will not operate after the bus voltage is restored;
When "open" is selected, the relay contact of this output is broken after the bus voltage is restored;
When "close" is selected, the relay contact of this output closes after the bus voltage is restored.
When "as before bus voltage fail" is selected, the relay contacts of this output will be operated to the position before power down after the bus voltage is

"If bus voltage failure, contact is"
This parameter is set at the contact position of the relay after the bus is powered down.

Options:
Un change
open
close

"set the reply mode of switch status"
This parameter for setting the mode in which the device sends messages to report the current switching state of the relay, with three options to choose from.

Options:
Respond only read request
Respond after change
Respond always

By selecting "Respond only read request", the object "status" sends the current switching status to the bus only when the device receives a request to read the switching status of this output from another bus device or from the bus;
By selecting "Respond after change", the object "status" immediately sends a message to the bus to report the current status when the switching status of the channel is changed;
By selecting "Respond always", the object "status" sends the current switching status to the bus every time the relay is triggered.

"Delay switch function"
This parameter is used to activate the time delay switch function

Options: Disable/Enable

"Delay time for switch on: (0...65535s)"
This parameter is visible when the delay switch function is enabled. Setting the time for the output delay to turn on:

Options: 0...65535

"Delay time for switch off: (0...65535s)"
This parameter is visible when the delay switch function is enabled. Sets the time for the output to delay switching off.

Options: 0...65535

"Scene function"
This parameter is used to activate the scene function

Options: Disable/Enable

When Enable is selected, the following parameter setting screen is visible.

3.3.1. PARAMETER SETTING WINDOW "X:SCENE" SCENE FUNCTION

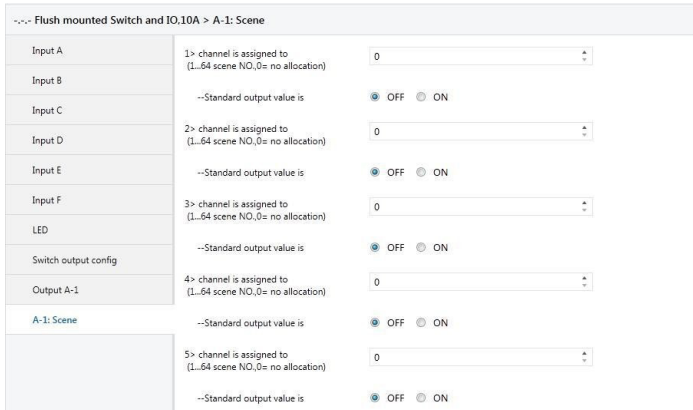The parameter window is shown in Figure 3.9, and there are 8 scenarios for setting.

Fig. 3.9 parameter window"X: Scene"

"channel is assigned to (1...64 scene NO.,0=no allocation)"
Each output can be assigned 64 different scene numbers. 8 different Scenes can be set simultaneously per output. Options: 1...64, 0=no allocation .
NOTE: The valid scene numbers in the parameter setting options are 1~64, and the corresponding message values are 0~63.

"--Standard output value is"
This parameter for setting the switch state of the output when the scene is called.

Options: OFF/ON

4.   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 of each function block is described in detail below.

NOTE:
"C" in the property bar of the table below represents the communication function of the communication object;
"W" represents the value of the communication object can be rewritten by the bus;
"R" represents the value of the communication object can be read through the bus;
"T" stands for communication object with transmission function: "U" means that the value of the communication.

4.1.   COMMUNICATION OBJECT OF "INPUT X"

Number ▲	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
0	Input A	Short/Close,Switch			1 bit	C	-	W	T	-		Low
1	Input A	Long/Open,Switch			1 bit	C	-	W	T	-		Low
2	Input A	Disable, A			1 bit	C	-	W	-	-		Low

"Switch" Function

Number ▲	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
0	Input A	Short,Switch			1 bit	C	-	W	T	-	switch	Low
1	Input A	Long,Dimming			4 bit	C	-	W	T	-	dimming...	Low
2	Input A	Disable, A			1 bit	C	-	W	-	-		Low

"Switch/dimming" Function

Number ▲	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
0	Input A	Short/Close,1bit value			1 bit	C	-	-	T	-		Low
1	Input A	Long/Open,1bit value			1 bit	C	-	-	T	-		Low
2	Input A	Disable, A			1 bit	C	-	W	-	-		Low

"Value/Force output "Function

Number ▲	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
0	Input A	Short/Close,scene			1 byte	C	-	-	T	-		Low
1	Input A	Long/Open,scene			1 byte	C	-	-	T	-		Low
2	Input A	Disable, A			1 bit	C	-	W	-	-		Low

"Scene control"Function

Number ▲	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
0	Input A	Up/Down,Blind			1 bit	C	-	-	T	-		Low
1	Input A	Stop/Adjust,Blind			1 bit	C	-	-	T	-		Low
2	Input A	Disable, A			1 bit	C	-	W	-	-		Low

"Shutter control"Function
Fig, 4.1 Communication object of "Input X"

No.	Object function	Name	Type	Flags	DPT
0	Short/Close,Switch	Input X	1bit	C,W, T	1.001DPT_Switch
1	Long/Open,Switch	Input X	1bit	C,W, T	1.001DPT_Switch

This communication object is used to trigger the switch operation."Short/Close" is an output object corresponding to a short operation or a rising edge operation. "Long/Open" is an output object corresponding to long or falling edge operation.

0	Short, Switch	Input X	1bit	C,W, T	1.001DPT_Switch

This communication object is used to trigger the switch operation.
telegram: 0—off; 1—on

1	Long, Dimming	Input X	4bit	C,W, T	3.007 DPT_Dimming control

This communication object is used to trigger the dimming operation.
When the message value is 1~7, it is downward dimming, the larger the value in this range, the smaller the downward dimming amplitude is, the largest downward dimming amplitude is 1, the smallest is 7, and 0 is stopping dimming; when the input value is 9~15, it is upward dimming, the larger the value in this range, the smaller the upward dimming amplitude is, the largest upward dimming amplitude is 9, the smallest upward dimming amplitude is 15, and 8 is stopping dimming.

0	Short/Close, 1bit/4bit/1byte/ 2byte value	Input X	1bit / 4bit / 1byte / 2byte	C,T	1.001 DPT_Switch/ 3.007 DPT_Dimming control/ 5.010 DPT_counter pulses 7.001 DPT_pulses
1	Long/Open, 1bit/4bit/1byte/ 2byte value	Input X	1bit / 4bit / 1byte / 2byte	C,T	

This communication object is used to send contact input values. The range of values that can be sent is determined by the data type, which is set by the parameter "Reaction on short operation or closing the contact"/ "Reaction on long operation or opening the contact"

0	Short/Close, Scene	Input X	1byte	C,T	18.001 DPT_Scene Control
1	Long/Open, Scene	Input X	1byte	C,T	18.001 DPT_Scene Control

This communication object is used to send an 8bit instruction to call or store a scene. The following describes the meaning of the 8bit instruction in detail. Let an 8bit instruction be (binary code): FXNNNNNNNNN
F: Calling the scene for '0'; storing the scene for '1';
X: 0;
NNNNNN: Scenes no. (0...63).
The parameter setting option is 1~64. In fact, the scene message received by the communication object"Scene" corresponds to 0~63. I
If the scene is set in the parameter 1, the communication object "Scene" receives the scene as 0.

as follows:

Object message value	Description
0	Recall Scene 1
1	Recall Scene 2
2	Recall Scene 3
...	...
63	Recall Scene 64
128	Storage scene 1
129	Storage scene 2
130	Storage scene 3
...	...
191	Storage scene 64

0	Up/Down, Blind	Input X	1bit	C,T	1.008DPT_up/down

The communication object is used to send the position of the curtain.
Telegram: 0—Upward moving curtains/blinds
1—Downward moving curtains/blinds

1	Stop/Adjust, Blind	Input X	1bit	C,T	1.007DPT_Step

This communication object is used to stop the curtains' operation or adjust the blinds' angle.

2	Disable	Input X	1bit	C,W	1.003DPT_enable

This communication object is used to disable/enable the function of the input channel

Table 4.1 Communication object table of "Input X"

Number ▲	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
18	LED 1	LED 1			1 bit	C	-	W	-	-		Low
19	LED 2	LED 2			1 bit	C	-	W	-	-		Low
20	LED 3	LED 3			1 bit	C	-	W	-	-		Low
21	LED 4	LED 4			1 bit	C	-	W	-	-		Low
22	LED 5	LED 5			1 bit	C	-	W	-	-		Low
23	LED 6	LED 6			1 bit	C	-	W	-	-		Low

Fig. 4.2 Communication object of "LED"

4.2. COMMUNICATION OBJECT OF "LED"

No.	Function	Name	Type	Flags	DPT
18	LED X	LED X	1bit	C,W	1.001DPT_Switch
This communication object is used to receive 1bit messages for switching instructions.					

Table 4.2 communication object table of "LED"

4.3. COMMUNICATION OBJECT OF"SWITCH OUTPUT"

24	Main-Output A-1	Switch	1 bit	C - W - -	Low
25	Main-Output A-1	Status	1 bit	C R - T -	Low
26	Main-Output A-1	Delay switch	1 bit	C - W - -	Low
27	Main-Output A-1	Scene	1 byte	C - W - -	Low

Fig. 4.3 Communication object of"Switch output"

No	Function	Name	Type	Flags	DPT
24	Switch	Main/Sub-Output X	1bit	C,W	1.001DPT_Switch
This communication object is used to trigger switching operations Telegram"1"trigger on action Telegram"0"trigger off action					
25	Status	Main/Sub-Output X	1bit	C,R,T	1.001DPT_Switch
This communication object is used to report the switching status of the relay contacts.					
26	Delay switch	Main/Sub-Output X	1bit	C,W	1.001DPT_Switch
This communication object is used to trigger a time delay switch.					
27	Scene	Main/Sub-Output X	1byte	C,W	18.001DPT_Scene Control

Sending a communication object 8bit Instruction calls or store scenes. Detailed 8bit
the meaning of the directive
Set up 8bit Order for the (Binary code): XXNNNNNN
XX: 0;
NNNNNN: scene number (0...63).
Parameter setting Options are 1~64 Actually communication object "Scene" Corresponds
to the telegram received is 0~63 . Such as parameter settings are scene 1, and communication
object "Scene" sends the scene for 0.
As follows:

Object message value	Description
0	Recall scene 1
1	Recall scene 2
2	Recall scene 3
...	...
63	Recall scene 64
128	Storage scene 1
129	Storage scene 2
130	Storage scene 3
...	...
191	Storage scene 64

Table 4.3 Communication object table of"Switch output"