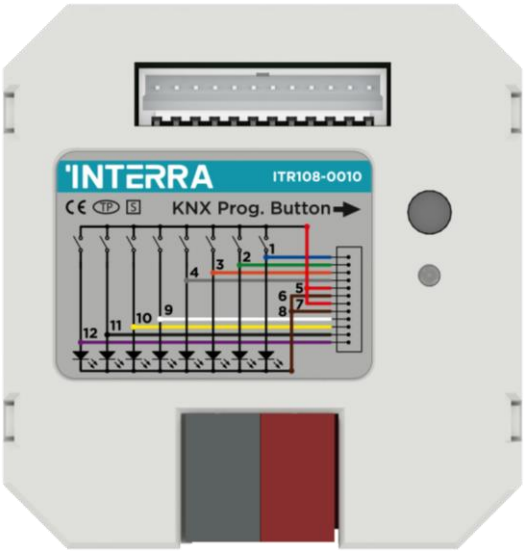
INTERRA

Developer of Uniqueness

Binary Interface

Product Manual



Contents

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1. Content of The Document

This document contains Interra ITR10X-0010 coded Binary Interface devices' electronic and all essential feature information for programming the products. In each subtitle is explained the characteristics of the device. Modifications of the product and special change requests are only allowed in coordination with product management.

This manual provides detailed technical information concerning ITR10X-0010 Binary Interface. All the models have the same software functionality so, the features described in this document apply to all versions.

This user manual is intended for use by KNX installers and describes the functions and parameters of the Interra Binary Interface family devices and how it is possible to change the settings and configurations using the ETS software tool. This document also describes the installation, programming, commissioning and use of the devices with detailed information.

2. Product Description

ITR10X-0010 series Binary Interface device is the newest products of Interra Technology. The Interra Binary Interfaces is designed for using at mainly in interior areas of buildings.

The Interra Binary Interface serve as interfaces for operation of KNX systems via conventional buttons/switches or for coupling of binary signals (signal contacts). The devices feature a push button for manual operation for each input. Input states can be simulated during manual operation, so that the conventional push buttons, switches or floating contacts do not need to be connected for commissioning purposes. The connection to the Binary Interface is established using the front side bus connection terminal.

All versions have a rear connector with 8 digital inputs that can be connected to buttons and used for switch sensor, switch/dimming sensor, shutter sensor, value/forced operation, control scene, RGB colour control, RGBW control, mode selection and command sequence.

Interra Binary Interface has 5 logic function blocks and can be set the logical relation AND/OR/XOR. Each block can control 5 output objects.

2.1. Technical Information

The following table shows the technical information of the Binary Interface.

Product Name	Binary Interface (EU)
Product Code	ITR10X-0010
Power Supply	KNX Power Supply
Current Consumption	5 mA
Input Measurament	
Voltage	3.3 V DC
Current	0.45 mA
Output Measurament	
Voltage	3.3 V DC
Current	0.55 mA
Inputs	2/4/6/8
Mode of Commissioning	S-Mode
Type of Protection	IP 20
Temperature Range	Operation (-5°C...45°C) Storage (-25°C...60°C)
Colour	Light Grey
Dimensions	40 x 10 x 40 mm (W x L x H)
Configuration	Configuration with ETS

X: 2/4/6/8 Channel

2.2. Connection Features

The figures below shows the Binary Interface connectors.

- All of the ITR10X-0010 models have the same connection layout.

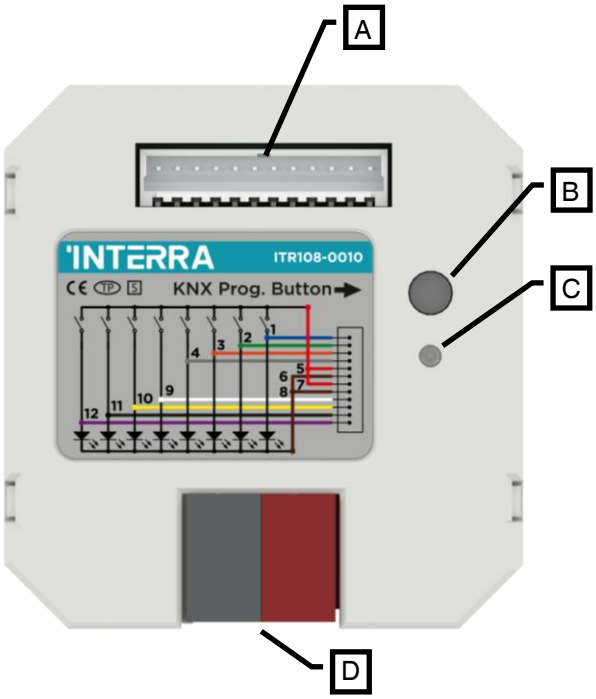

Fig. 1: Connection Features of Binary Interface

Letter	Feature
A	Input Connector
B	Programming Button
C	Programming LED
D	KNX Connector

2.3. Dimensions

All values given in the device dimensions are millimetres.

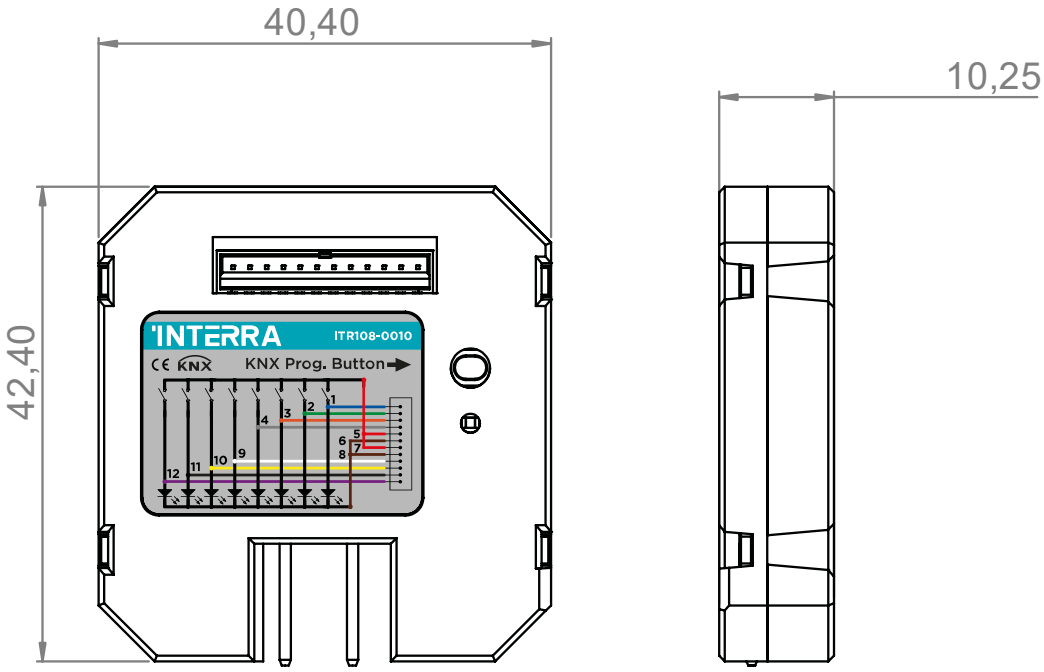

Fig. 2: Dimensions of Binary Interface

2.4. Functionality

The complete configuration of the device is performed via ETS5 or higher. Depending on ETS configuration and settings, the product feature will be different. Available functions are:

Input Functions

- Switch Sensor
- Switch / Dimming Sensor
- Shutter Sensor
- Value / Forced Operation
- Control Scene
- LED Control
- RGB Colour Control
- RGBW Control
- Mode Selection
- Command Sequence

Logic Functions

Internal Inputs (max. 4)

External Inputs

- Binary Value (adj. size) (max. 3 selectable)
- Movement
- Temperature
- Brightness

Output Types (max. 4 selectable)

- Switch
- Dim
- Shutter
- Alarm
- Percentage
- Sequence
- Scene Number
- String
- Threshold

Most functions only need one input, and therefore each input might be assigned a different function. However, there are also some functions that can also use two inputs, such as “Dimming with 2 buttons” and “Shutter/Blinds with 2 buttons”.

3. ETS Parameters & Descriptions

In this chapter, the ETS parameters of ITR10X-0010 Binary Interface device is described using the parameter pages and options. The parameter pages features are dynamic structures which mean further parameters and parameter pages are enabled depending on the configuration.

In the ETS parameter configuration pages, each of the parameters has got a default parameter value. These default values are written in bold.

- E.g.: Enable in operation ●**no** yes

3.1. General Page

When the ITR10X-0010 Binary Interface ETS configuration file is attached to the project from the ETS software, a configuration setting must be made primarily before loading. When entering the “GENERAL” in the parameter page, the configuration screen will be appeared shown below. General settings for the devices are made in this window.

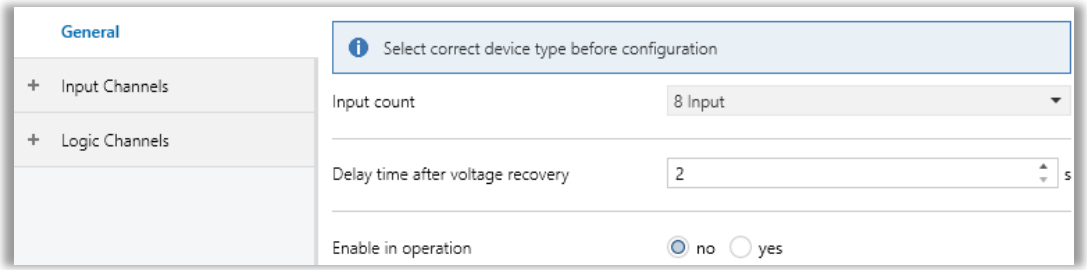

Fig. 3: General Page

3.1.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
Input count	This parameter is used to determine which device configure in ETS. (Input 2/4/6/8)	2 Input 4 Input 6 Input **8 Input**
Delay time after voltage return	This parameter is used to determine the delay time after voltage return in seconds. When in a delayed state, the Binary Interface does not send any KNX telegrams. Incoming telegrams are received and updated in the background. The updated values are only executed when the wait state ends and then sent according to the parametrization.	**2**…60
Enable in operation	This parameter is used to determine the existence of the Binary Interface on the KNX bus line. The cyclic telegram can be monitored by an external KNX device. If a telegram is not received, the device may be defective or the KNX cable to the transmitting device may be interrupted. **Yes:** The group object is enabled. **No:** The group object is not enabled.	**No** yes
-> In operation send[*1]	This parameter is used to determine the send value of the “General - In operation” group object on the KNX bus line.	Alive value 0 **Alive value 1**
-> In operation send interval (min)[*1]	This parameter is used to set the cyclically sending time interval value of the “General - In operation” group object.	1...**5**...255

[*1] This parameter is only visible when the parameter “Enable in operation” is set to “Yes”.

3.2. Inputs

Binary Interface has X digital inputs. By connecting buttons to digital inputs, you can choose the lighting, curtains/blinds, RGB LEDs, dim devices etc. you want to control. You can control the devices by making the necessary configurations via the Binary Interface.

X: 2/4/6/8

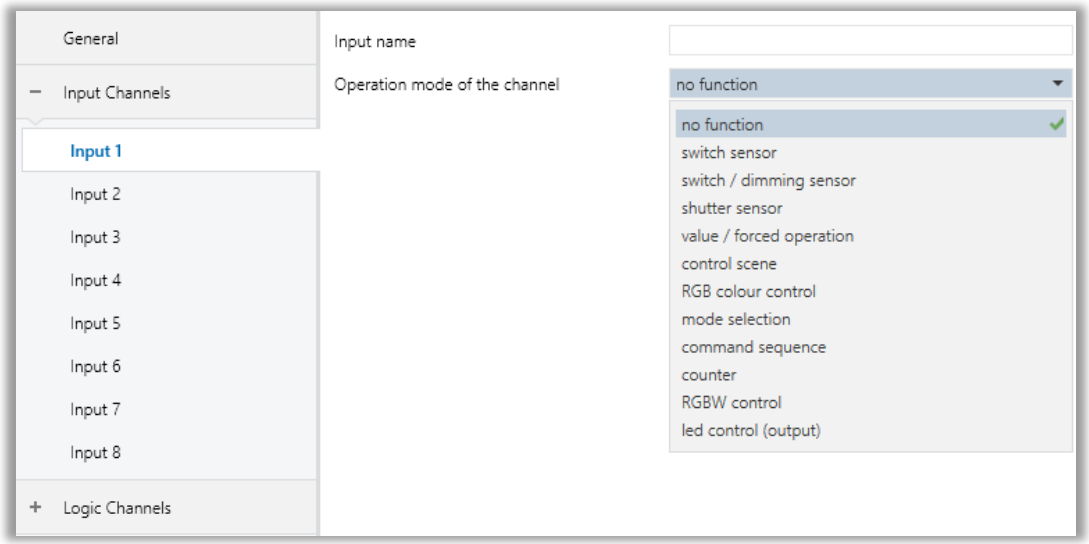

Fig. 4: Input X Configuration Page

3.2.1. Input - Switch Sensor

In this section, it is explained how to control the related automation unit via the Binary Interface by switching via buttons connected to digital inputs. Detailed information on the relevant parameter configurations is described in the table below.

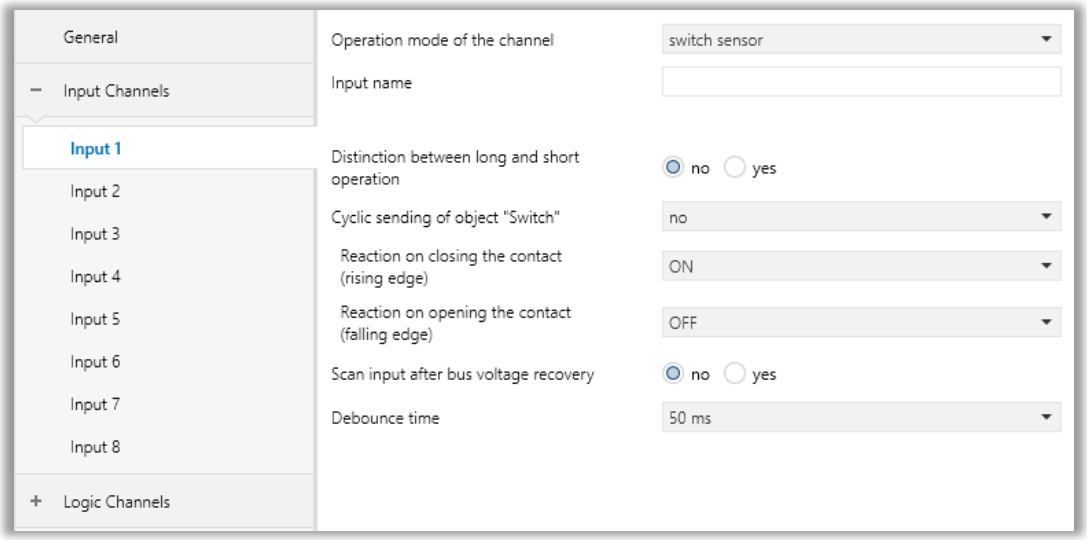

Fig. 5: Input - Switch Sensor Page

3.2.1.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
Input Name	This parameter is used to type an input name. The name can consist of up to 40 characters.	**40 bytes allowed**
Operation Mode of the channel	This parameter is used to determine the input x operation mode. If no function is selected, the input x will not be used. For other choices, all functionalities are configured separately.	**No function** Switch sensor Switch/dimming sensor Shutter sensor Value/forced operation Control scene RGB colour control Mode selection Command sequence Counter RGBW control LED control (output)
Distinction between short and long operation	This parameter is used to set if the input differentiates between short and long operations. With the option “yes”, after opening/closing of the contact, it must, first of all, be ascertained if a short or long operation has occurred here. Only thereafter will a possible reaction be triggered.	**No** Yes
-> Cyclic sending of object “Switch”[*1]	This parameter is visible if there is no distinction between short and long operations. The communication object “Switch” can be sent cyclically. If the parameter “always” is set, the object sends cyclically on the bus, regardless of its value. Should the parameter value “if telegram switch = ON” or “if telegram switch = OFF” be set, the corresponding object value is sent cyclically.	**No** If “Switch” = OFF If “Switch” = ON always
-> Reaction on closing the contact **(rising edge)**[*1]	This parameter is visible if there is no distinction between short and long operations. For each edge, you can set if the object value is to be switched ON, OFF or TOGGLE, or if no reaction should occur. If cyclical sending has been parameterized, it is possible by setting the parameter value “terminate cyclic sending” with an operation of the input, to stop cyclic sending without a new object value being sent.	No reaction **ON** OFF TOGGLE

-> Reaction on opening the contact **(Falling edge)**[*1]	This parameter is visible if there is no distinction between short and long operations. For each edge, you can set if the object value is to be switched ON, OFF or TOGGLE, or if no reaction should occur. If cyclical sending has been parameterized, it is possible by setting the parameter value “terminate cyclic sending” with an operation of the input, to stop cyclic sending without a new object value being sent.	No reaction ON **OFF** TOGGLE
-> Scan input after bus voltage recovery[*1]	This parameter is used to determine the scanning of the inputs when the bus voltage has been recovered.	**No** Yes
-> Connected contact type[*2]	This parameter is used to specify the contact type that is connected to the input x.	Normally closed **Normally open**
-> Reaction on short operation[*2]	This parameter is visible if there is a distinction between short and long operations. It is used to determine the short press operation sending the value of the input x.	No reaction **ON** OFF TOGGLE
-> Reaction on long operation[*2]	This parameter is visible if there is a distinction between short and long operations. It is used to determine the long-press operation sending the value of the input x.	No reaction ON **OFF** TOGGLE
-> Long operation after[*2]	This parameter is used to determine long operation detection after the button press operation. For making a long operation, the button should be pressed at least the configured value.	00:00.005…**00:00.500** …01:05.535
-> Telegram is repeated every[*2]	This parameter is visible if the cyclical transmission is active. The send cycle time describes the time used between two cyclically transmitted telegrams	00:00:005…**00:00:500** …01:05:535
-> Number of object for short/long operation[*2]	This parameter is used to determine the object count to use for short and long operations. **1 object:** short and long operations will proceed with the same object. **2 object:** Short and long operations will proceed with 2 different objects.	**1 object** 2 object
Debounce time	This parameter is used to determine the debounce time. Debouncing prevents unwanted multiple operations of the input, e.g., due to bouncing of the contact.	10 ms 20 ms 30 ms 40 ms

		50 ms 70 ms 100 ms 150 ms

*1 This parameter is only visible when the parameter “Distinction between long and short operation” is set to “No”.
*2 This parameter is only visible when the parameter “Distinction between long and short operation” is set to “Yes”.

3.2.2. Input – Switch / Dimming Sensor

In this section, it is explained how to control the unit of a lighting unit through the Binary Interface, both by switching and dimming, via the buttons connected to the digital inputs. Detailed information on the relevant parameter configurations is described in the table below. Make sure that the lighting unit to be controlled has a dimming feature.

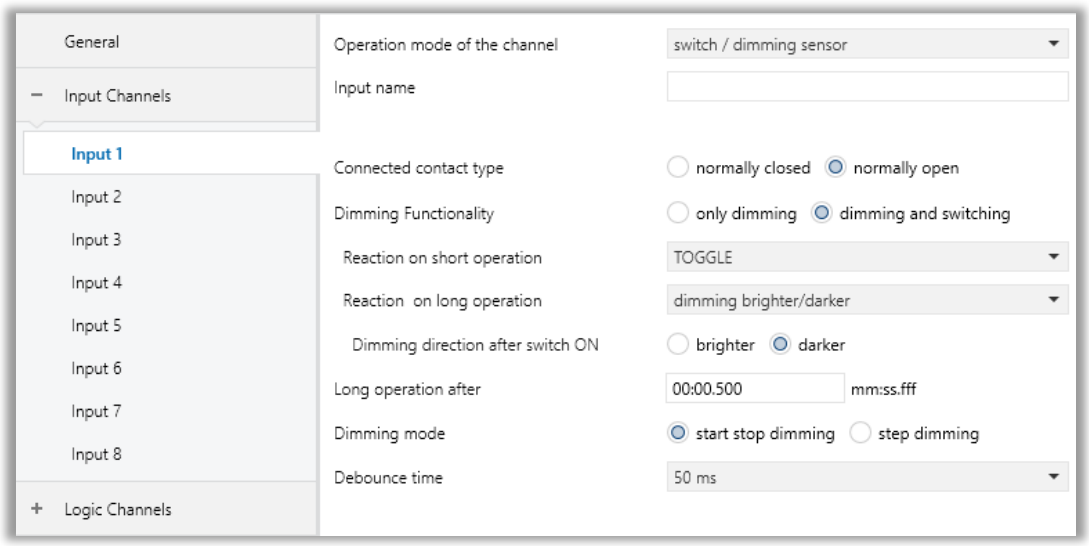

Fig. 6: Input – Switch / Dimming Sensor Page

3.2.2.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
Input Name	This parameter is used to type an input name. The name can be consisting of 40 characters.	**40 bytes allowed**
Operation Mode of the channel	This parameter is used to determine the input x operation mode. If no function is selected, the input x will not be used. For other choices, all functionalities are configured separately.	**No function** Switch sensor Switch/dimming sensor Shutter sensor Value/forced operation Control scene RGB colour control Mode selection Command sequence Counter RGBW control LED control (output)
Connected contact type	This parameter is used to specify the contact type that is connected to the input x.	Normally closed **Normally open**
Dimming functionality	This parameter is used to define if the lighting can only be dimmed “Only dimming” or if additional switching is also permitted “Dimming and switching”. In this case, a long button press dims and a short button push switch.	Only dimming **Dimming and switching**
-> Reaction on operation[*1]	A distinction is not made between short and long operations here. It is used to determine the press operation sending the value of the input x.	Dimming brighter Dimming darker **Dimming brighter/darker**
-> Reaction on short operation[*2]	This parameter is visible if there is a distinction between short and long operations. It is used to determine the short press operation sending the value of the input x.	No reaction ON OFF **TOGGLE**
-> Reaction on long operation[*2]	This parameter is visible if there is a distinction between short and long operations. It is used to determine the long-press operation sending the value of the input x.	Dimming brighter Dimming darker **Dimming brighter/darker**
-> Dimming direction after switch ON[*3]	This parameter is used to determine the dimming direction when the switch object is ON on long operation.	Brighter **Darker**

-> Long operation after[*2]	This parameter is used to determine long operation detection after the button press operation. For making a long operation, the button should be pressed at least the configured value.	00:00.005…**00:00.500** …01:05.535
Dimming mode	This parameter is used to determine the dimming mode. Normal “Start-stop-dimming” starts the dimming process with a telegram BRIGHTER or DARKER and ends the dimming process with a STOP telegram. Cyclic sending of the telegram is not necessary in this case. With “Dimming steps”, the dimming telegram is sent cyclically during a long operation. The STOP telegram ends the dimming process at the end of the operation.	**Start-stop dimming** Step Dimming
-> Brightness change on every sent telegram[*4]	This parameter is only visible with “Dimming steps”. This parameter is set to change the brightness (in per cent), which is cyclically sent with every dimming telegram.	%100 %50 **%25** %12.5 %6.25 %3.125 %1.563
-> Sending cycle time: Telegram is repeated every[*4]	This parameter is used to determine the sending cycle time. The dimming telegram is sent cyclically during a long operation if “Dimming steps” is set. The cycle time for sending corresponds with the time interval between two telegrams during cyclical sending.	0.3s, 0.4s, **0.5s**, 0.6s, 0.8s, 1s, 1.2s, 1.5s, 2s, 3s, 4s, 5s, 6s, 7s, 8s, 9s, 10s,
Debounce time	This parameter is used to determine the debounce time. Debouncing prevents unwanted multiple operations of the input, e.g., due to bouncing of the contact.	10 ms 20 ms 30 ms 40 ms **50 ms** 70 ms 100 ms 150 ms

[*1] This parameter is only visible when the parameter “Dimming Functionality” is set to “Only dimming”.

[*2] This parameter is only visible when the parameter “Dimming Functionality” is set to “Dimming and switching”.

[*3] This parameter is only visible when the parameter “Reaction on long operation” is set to “Dimming brighter / darker”.

[*4] This parameter is only visible when the parameter “Dimming mode” is set to “Step dimming”.

3.2.3. Input – Shutter Sensor

In this section, it is explained how to control a shutter/blind unit via the buttons connected to the digital inputs via the Binary Interface. Detailed information on the relevant parameter configurations is described in the table below.

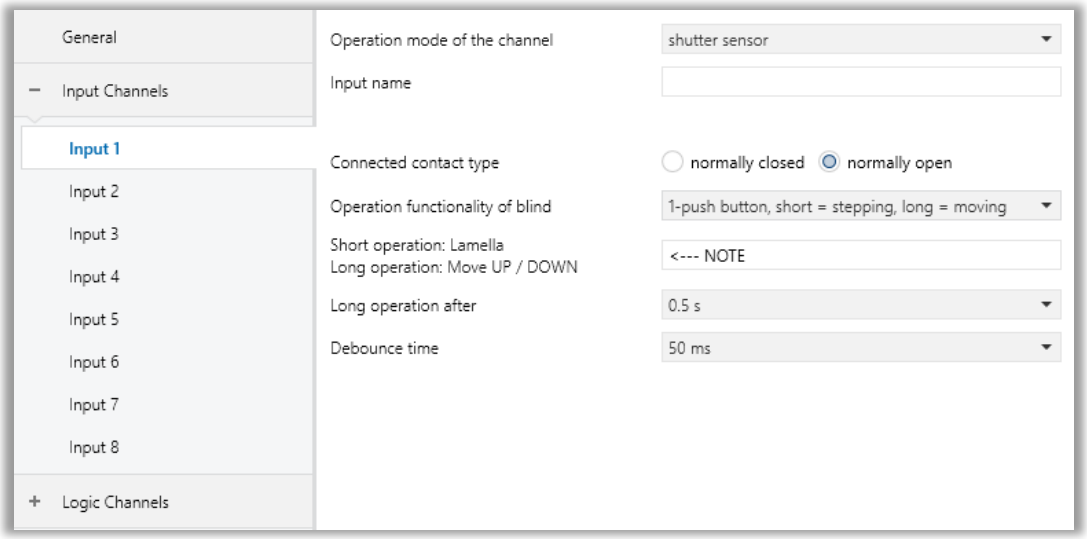

Fig. 7: Input – Shutter Sensor Page

3.2.3.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
Input Name	This parameter is used to type an input name. The name can be consisting of 40 characters.	**40 bytes allowed**
Operation Mode of the channel	This parameter is used to determine the input x operation mode. If no function is selected, the input x will not be used. For other choices, all functionalities are configured separately.	**No function** Switch sensor Switch/dimming sensor Shutter sensor Value/forced operation Control scene RGB colour control Mode selection Command sequence Counter RGBW control LED control (output)
Connected contact type	This parameter is used to specify the contact type that is connected to the input x.	Normally closed **Normally open**
Operation Functionality of blind	This parameter is used to determine long operation detection after the button press operation. For making a long operation, the button should be pressed at least the configured value.	**1-push button, short = stepping, long = moving** 1-push button, short = moving, long = stepping 1-push button - operation 1-switch button operation 2-push button operation, standard 2-switch operation, moving 2-push button operation, moving 2-push button operation, stepping
1-push button, short = stepping, long = moving		
Short Operation: Lamella Long Operation: Move UP - DOWN	NOTE	NOTE

Long operation after	This parameter is used to determine long operation detection after the button press operation. For making a long operation, the button should be pressed at least the configured value.	0.3s, 0.4s, **0.5s**, 0.6s, 0.8s, 1s, 1.2s, 1.5s, 2s, 3s, 4s, 5s, 6s, 7s, 8s, 9s, 10s,
1-push button, short = moving, long = stepping		
Short Operation: Move UP - DOWN **Long Operation: Lamella**	NOTE	NOTE
Long operation after	This parameter is used to determine long operation detection after the button press operation. For making a long operation, the button should be pressed at least the configured value.	0.3s, 0.4s, **0.5s**, 0.6s, 0.8s, 1s, 1.2s, 1.5s, 2s, 3s, 4s, 5s, 6s, 7s, 8s, 9s, 10s,
"STOP/Lamella adj." is repeated every	This parameter is used to determine the time between two telegrams is set. This parameter is visible in operations in which the object "STOP/lamella adjustment" is sent cyclically on the bus during a long operation.	0.3s, **0.4s**, 0.5s, 0.6s, 0.8s, 1s, 1.2s, 1.5s, 2s, 3s, 4s, 5s, 6s, 7s, 8s, 9s, 10s,
1-push button operation		
On every operation in succession: **UP – STOP – DOWN - STOP**	NOTE	NOTE
1-switch button operation		
On operation: UP – DOWN **End of operation: STOP**	NOTE	NOTE
2-push button operation, standard		
Short operation: STOP – Lamella UP / DOWN **Long operation: Move UP / DOWN**	NOTE	NOTE
Reaction on short operation	This parameter is visible if there is a distinction between short and long operations. It is used to determine the short press operation sending the value of the input x.	**Stop / lamella up** Stop / lamella down
Reaction on long operation	This parameter is visible if there is a distinction between short and long operations. It is used to determine the long-press operation sending the value of the input x.	**Move up** Move down

Long operation after	This parameter is used to determine long operation detection after the button press operation. For making a long operation, the button should be pressed at least the configured value.	0.3s, 0.4s, **0.5s**, 0.6s, 0.8s, 1s, 1.2s, 1.5s, 2s, 3s, 4s, 5s, 6s, 7s, 8s, 9s, 10s,
2-switch operation, moving		
On operation: Moving UP/DOWN **End of Operation: STOP**	NOTE	NOTE
Reaction on operation	This parameter is used to determine the reaction when an operation occurs. A distinction is not made between short and long operations here.	**Move up** Move down
2-push button operation, moving		
On Operation: Moving UP/DOWN - STOP	NOTE	NOTE
Reaction on operation	This parameter is used to determine the reaction when an operation occurs. A distinction is not made between short and long operations here.	**Move up** Move down
2-push-button operation, stepping		
On operation: Stepping	NOTE	NOTE
Reaction on operation	This parameter is used to determine the reaction when an operation occurs. A distinction is not made between short and long operations here.	**Stop / Lamella up** Stop / Lamella down
“STOP/Lamella adj.” is repeated every	This parameter is used to determine the time between two telegrams is set. This parameter is visible in operations in which the object “STOP/lamella adjustment” is sent cyclically on the bus during a long operation.	0.3s, **0.4s**, 0.5s, 0.6s, 0.8s, 1s, 1.2s, 1.5s, 2s, 3s, 4s, 5s, 6s, 7s, 8s, 9s, 10s,
Debounce time	This parameter is used to determine the debounce time. Debouncing prevents unwanted multiple operations of the input, e.g. due to bouncing of the contact.	10 ms 20 ms 30 ms 40 ms **50 ms** 70 ms 100 ms 150 ms

3.2.3.2. The Functionality of Each Function

1 push button: Short Press = stepping, Long Press = moving	
Short Operation	Stop/ Lamella Adjustment
Long Operation	Toggle between “Move Up” and “Move Down”
1 push button: Short Press = moving, Long Press = stepping	
Short Operation	Toggle between “Move Up” and “Move Down”
Long Operation	Stop/Lamella Adjustment (Sent Cyclically as the button is kept pressed)
1 push button operation: Press: moving, Long Press Disabled	
On Operation	Following signals are sent in order on each press. → Move UP → Stop/Lamella Adj. Up → Move Down → Stop/Lamella Adj. Down →
1 switch Operation: Moving, Long Press Disabled	
Press Operation	Toggle between “Move Up” and “Move Down”
Release Operation	Stop/Lamella Adjustment
2 Push Button Operation: Standard	
Short Operation	“Stop/Lamella Adj. Down” or Stop/Lamella Adj. Up (Whichever is chosen as the parameter)
Long Operation	“Move Up” or “Move Down” (Whichever is chosen as the parameter)
2 Switch Operation: Moving, Long Press Disabled	
Press Operation	“Move Up” or “Move Down” (Whichever is chosen as the parameter)
Release Operation	“Stop/Lamella Adj. Down” or “Stop/Lamella Adj. Up” (Whichever is chosen)
2 Push Button Operation: Moving, Long Press Disabled	
On Operation	Whichever sequence is selected as the parameter; “ → Move Up → Stop/Lamella Adj. Up → “ or “ → Move Down → Stop/Lamella Adj. Down → “
2 Push Button Operation: Stepping, Long Press Disabled	
On Operation	Whichever signal is selected as the parameter, is sent cyclically as the button is kept pressed; “Stop/Lamella Adj. Up” or “Stop/Lamella Adj. Down”

3.2.4. Input Value / Forced Operation

In this section, it is explained how to control an automation unit via Binary Interface via a value/forced via buttons connected to digital inputs. Detailed information on the relevant parameter configurations is described in the table below.

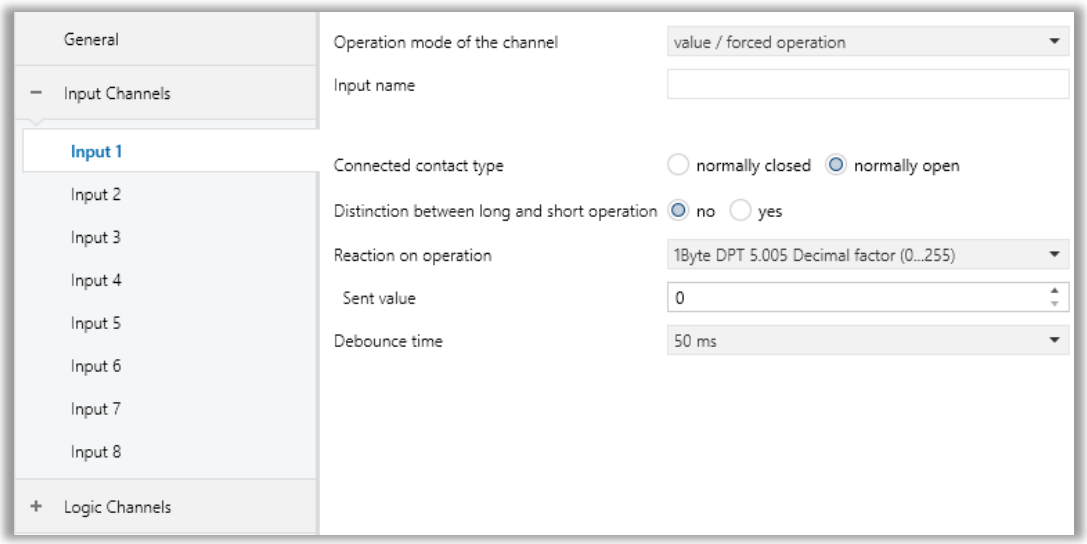

Fig. 8: Input – Value / Forced Operation Page

3.2.4.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
Input Name	This parameter is used to type an input name. The name can be consisting of 40 characters.	**40 bytes allowed**
Operation Mode of the channel	This parameter is used to determine the input x operation mode. If no function is selected, the input x will not be used. For other choices, all functionalities are configured separately.	**No function** Switch sensor Switch/dimming sensor Shutter sensor Value/forced operation Control scene RGB colour control Mode selection Command sequence Counter RGBW control LED control (output)
Connected contact type	This parameter is used to specify the contact type that is connected to the input x.	Normally closed **Normally open**
Distinction between short and long operation	This parameter is used to set if the input differentiates between short and long operations. With the option “yes”, after opening/closing of the contact, it must, first of all, be ascertained if a short or long operation has occurred here. Only thereafter will a possible reaction be triggered.	**No** Yes
-> Long operation after[*1]	This parameter is used to determine long operation detection after the button press operation. For making a long operation, the button should be pressed at least the configured value.	00:00.200…**00:00.500**…01:05.000
Reaction on operation	This parameter is visible if there is a distinction between short and long operations. It is used to determine the short press operation sending the value of the input x.	2-bit DPT 2.001 Switch Control 1-byte DPT 5.001 Percent (0…100%) **1-byte DPT 5.005 Decimal factor (0…255)** 1-byte DPT 17.001 Scene Number 2-byte DPT 7.600 Colour temperature(Kelvin)

		2-byte DPT 9.001 Temperature (˚C) 2-byte DPT 9.004 Brightness (Lux) 3-byte DPT 232.600 RGB value 3x (0…255)
Sent value	This parameter is used to determine the sending value to the bus when a short operation occurs.	Values depends on DPT selection.
-> Reaction on long operation[*1]	This parameter is visible if there is a distinction between short and long operations. It is used to determine the long-press operation sending the value of the input x.	2-bit DPT 2.001 Switch Control 1-byte DPT 5.001 Percent (0…100%) **1-byte DPT 5.005 Decimal factor (0…255)** 1-byte DPT 17.001 Scene Number 2-byte DPT 7.600 Color temperature(Kelvin) 2-byte DPT 9.001 Color temperature (˚C) 2-byte DPT 9.004 Brightness (Lux) 3-byte DPT 232.600 RGB value 3x (0…255)
-> Sent value[*1]	This parameter is used to determine the sending value to the bus when a long operation occurs.	Values depends on DPT selection.
Debounce time	This parameter is used to determine the debounce time. Debouncing prevents unwanted multiple operations of the input, e.g., due to bouncing of the contact.	10 ms 20 ms 30 ms 40 ms **50 ms** 70 ms 100 ms 150 ms

[*1] This parameter is only visible when the parameter “Distinction between long and short operation” is set to “Yes”.

3.2.5. Input – Control Scene

In this section, it is explained how to control the related automation unit via the Binary Interface by triggering a scenario via buttons connected to digital inputs. Detailed information on the relevant parameter configurations is described in the table below.

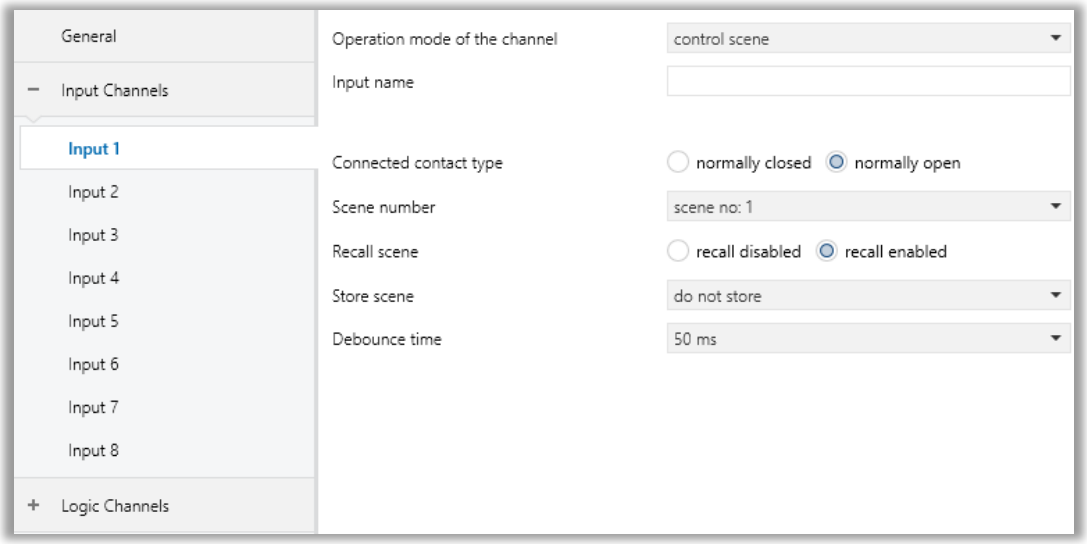

Fig. 9: Input – Control Scene Page

3.2.5.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
Input Name	This parameter is used to type an input name. The name can be consisting of 40 characters.	**40 bytes allowed**
Operation Mode of the channel	This parameter is used to determine the input x operation mode. If no function is selected, the input x will not be used. For other choices, all functionalities are configured separately.	**No function** Switch sensor Switch/dimming sensor Shutter sensor Value/forced operation Control scene RGB colour control Mode selection Command sequence Counter RGBW control LED control (output)
Connected contact type	This parameter is used to specify the contact type that is connected to the input x.	Normally closed **Normally open**
Scene Number	This parameter is used to configure the scene number to send to the KNX when a short press operation occurs.	**Scene no.1**…64
Recall scene	This parameter is used to determine the recalling of the scene. If this parameter is selected as “recall enabled” the configured scene number will be called.	Recall disabled **Recalled enabled**
Store Scene	This parameter is used to determine to store or not to store the related scene. **On long operation**: The scene will be stored after a long operation. **With “Store scene” obj. value = 1**: The scene will be stored on operation if the Store scene object value is 1. **On long operation (“Store scene” obj. value = 1)**: The scene will be stored on long operation if the Store scene object is 1.	**Do not store** On long operation With “Store scene” obj value = 1 On long operation (“Store scene” obj value = 1)
-> Long operation after[*1]	This parameter is used to determine long operation detection after the button press operation. For making a long operation, the button should be pressed at least the configured value.	00:00.005…**00:00.500**…01:05.535

Debounce time	This parameter is used to determine the debounce time. Debouncing prevents unwanted multiple operations of the input, e.g., due to bouncing of the contact.	10 ms 20 ms 30 ms 40 ms **50 ms** 70 ms 100 ms 150 ms

[*1] This parameter is only visible when the parameter “Store scene” is set to “On long operation” or “On long operation (“Store scene” obj value = 1)”.

3.2.6. Input – RGB Colour Control

In this section, it is explained how to control an RGB LED device through the buttons connected to the digital inputs via the Binary Interface. Detailed information on the relevant parameter configurations is described in the table below.

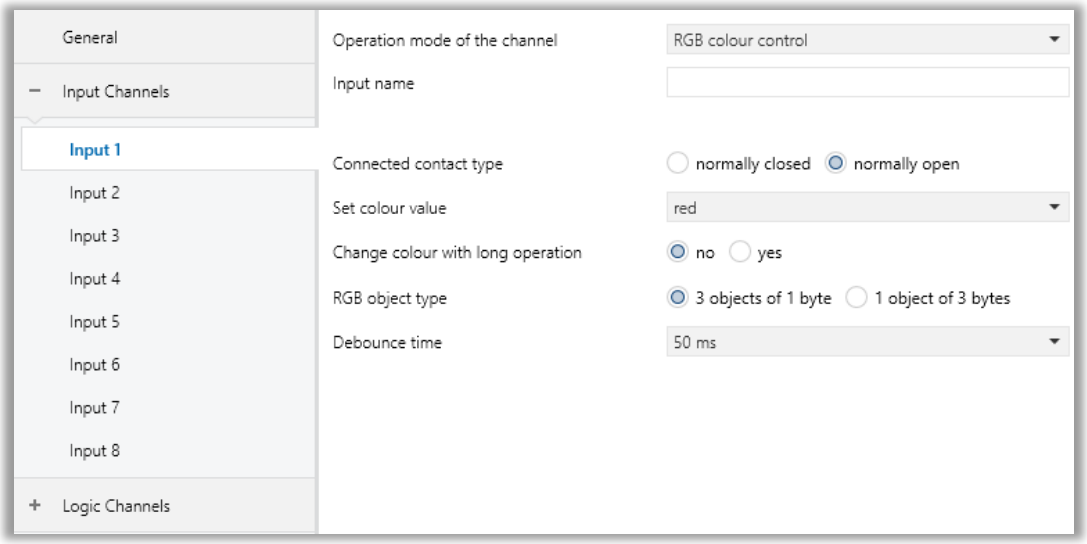

Fig. 10: Input – RGB Colour Control Page

3.2.6.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
Input Name	This parameter is used to type an input name. The name can be consisting of 40 characters.	**40 bytes allowed**
Operation Mode of the channel	This parameter is used to determine the input x operation mode. If no function is selected, the input x will not be used. For other choices, all functionalities are configured separately.	**No function** Switch sensor Switch/dimming sensor Shutter sensor Value/forced operation Control scene RGB colour control Mode selection Command sequence Counter RGBW control LED control
Connected contact type	This parameter is used to specify the contact type that is connected to the Binary Interface input x.	Normally closed **Normally open**
Set colour value	This parameter is used to set RGB colours according to the configured values.	**Red** Orange Yellow Green-yellow Green Green-cyan Cyan Blue-cyan Blue Blue-magenta Red-magenta white
Change colour with long operation	This parameter is used to enable or disable the colour changing with long press operation.	**No** Yes
-> Long operation after[*1]	This parameter is used to determine long operation detection after the button press operation. For making a long operation, the button should be pressed at least the configured value.	00:00.005…**00:00.500** …01:05.535

RGB object type	This parameter is used to determine the RGB colour object type.	**3 objects of 1 byte** 1 object of 3 bytes
Debounce time	This parameter is used to determine the debounce time. Debouncing prevents unwanted multiple operations of the input, e.g., due to bouncing of the contact.	10 ms 20 ms 30 ms 40 ms **50 ms** 70 ms 100 ms 150 ms

*1 This parameter is only visible when the parameter “Change colour with long operation” is set to “Yes”.

3.2.7. Input – Mode Selection

In this section, it is explained how to control the operating modes of an HVAC unit via the buttons connected to the digital inputs via the Binary Interface. Detailed information on the relevant parameter configurations is described in the table below.

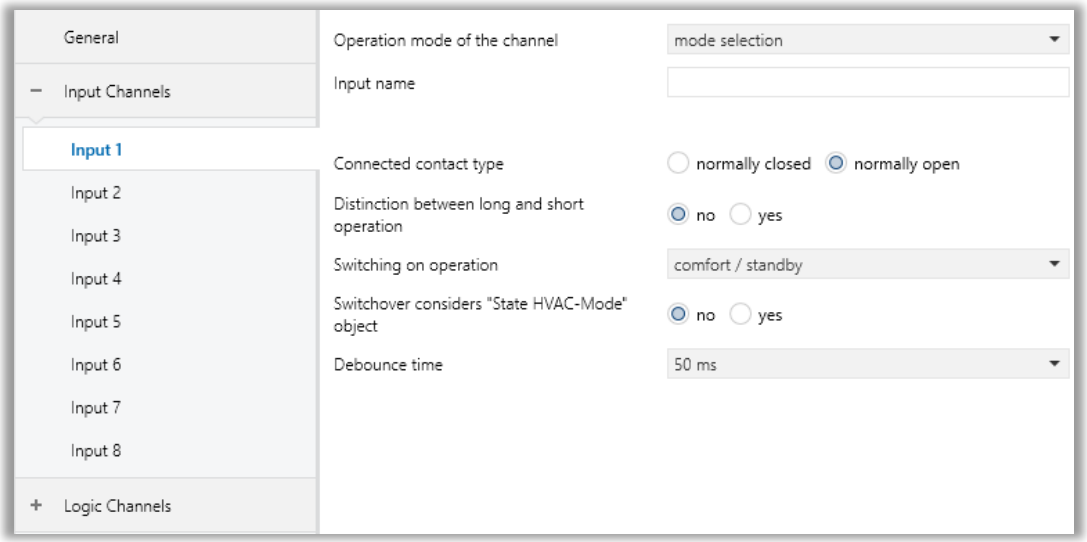

Fig. 11: Input – Mode Selection Page

3.5.7.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
Input Name	This parameter is used to type an input name. The name can be consisting of 40 characters.	**40 bytes allowed**
Operation Mode of the channel	This parameter is used to determine the input x operation mode. If no function is selected, the input x will not be used. For other choices, all functionalities are configured separately.	**No function** Switch sensor Switch/dimming sensor Shutter sensor Value/forced operation Control scene RGB colour control Mode selection Command sequence Counter RGBW control LED control (output)
Connected contact type	This parameter is used to specify the contact type that is connected to the input x.	Normally closed **Normally open**
Distinction between short and long operation	This parameter is used to set if the input differentiates between short and long operations. With the option “yes”, after opening/closing of the contact, it must, first of all, be ascertained if a short or long operation has occurred here. Only thereafter will a possible reaction be triggered.	**No** Yes
-> Switching on operation[*1]	This parameter is used to determine the press operation sending the value of the input x.	**Comfort / standby** Comfort / economy Comfort / standby / economy Comfort / standby / economy / frost
-> Switching on short operation[*2]	This parameter is visible if there is a distinction between short and long operations. It is used to determine the short press operation sending the value of the input x.	**Comfort / standby** Comfort / economy Comfort / standby / economy Comfort / standby / economy / frost
-> Reaction on long operation[*2]	This parameter is used to determine the long-press operation sending the value of the input x.	**Comfort / standby** Comfort / economy

		Comfort / standby / economy Comfort / standby / economy / frost
-> Long operation after[*2]	This parameter is used to determine long operation detection after the button press operation. For making a long operation, the button should be pressed at least the configured value.	00:00.005…**00:00.500**…01:05.535
Switchover considers "State HVAC-Mode" object	This parameter is used to enable the HVAC-Mode state object to change the current HVAC mode via KNX.	**No** Yes
Debounce time	This parameter is used to determine the debounce time. Debouncing prevents unwanted multiple operations of the input, e.g., due to bouncing of the contact.	10 ms 20 ms 30 ms 40 ms **50 ms** 70 ms 100 ms 150 ms

[*1] This parameter is only visible when the parameter "Distinction between long and short operation" is set to "No".
[*2] This parameter is only visible when the parameter "Distinction between long and short operation" is set to "Yes".

3.2.8. Input – Command Sequence

In this section, it is explained how the command sequence function works. Up to 4 commands are attainable with either 1 bit, 1 byte (percentage) or 1 byte (0..255) objects. Each press event toggles through the used commands (Object A, B, C, D) via the assigned buttons. Detailed information on the relevant parameter configurations is described in the table below.

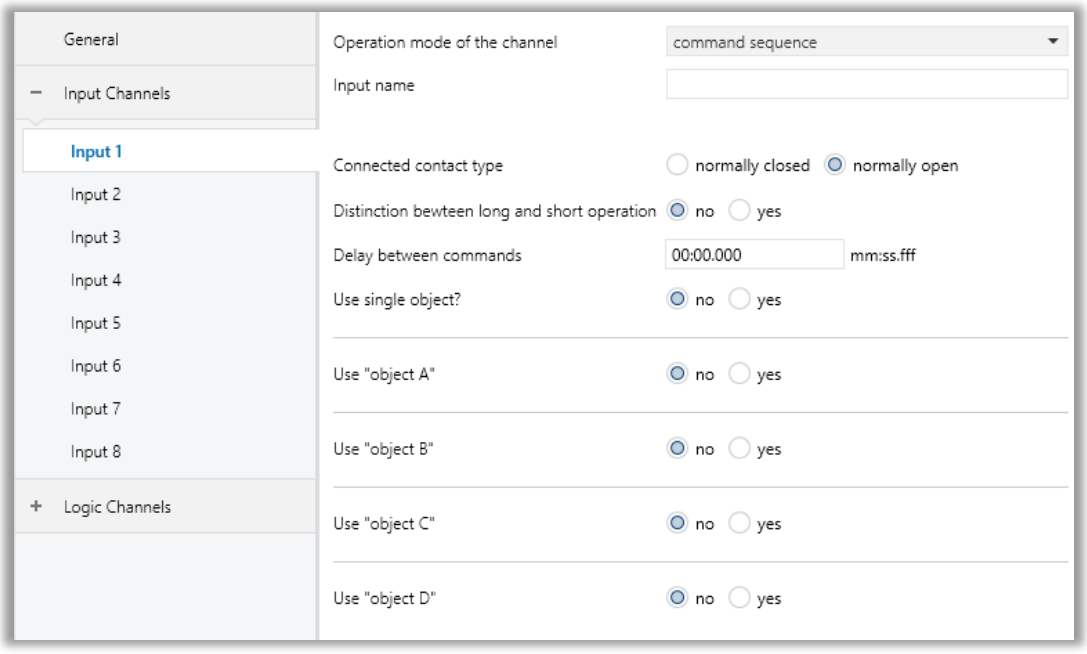

Fig. 12: Input – Command Sequnce Page

3.2.8.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
Input Name	This parameter is used to type an input name. The name can be consisting of 40 characters.	**40 bytes allowed**
Operation Mode of the channel	This parameter is used to determine the input x operation mode. If no function is selected, the input x will not be used. For other choices, all functionalities are configured separately.	**No function** Switch sensor Switch/dimming sensor Shutter sensor Value/forced operation Control scene RGB colour control Mode selection Command sequence Counter RGBW control LED control (output)
Connected contact type	This parameter is used to specify the contact type that is connected to the Binary Interface input x.	Normally closed **Normally open**
Distinction between short and long operation	This parameter is used to set if the input differentiates between short and long operations. With the option “yes”, after opening/closing of the contact, it must, first of all, be ascertained if a short or long operation has occurred here. Only thereafter will a possible reaction be triggered.	**No** Yes
Delay between commands	This parameter is visible if there is a distinction between short and long operations. It is used to determine the short press operation sending the value of the input x.	**00:00.000**…00:20.000
-> Long operation after[*1]	This parameter is used to determine long operation detection after the button press operation. For making a long operation, the button should be pressed at least the configured value.	00:00.005…**00:00.500** …01:05.535
Use single object?	This parameter decides wheter each object is sent to a single object or to objects assigned to each command.	**No** Yes
-> Value Amount[*2]	This parameter is used to determine the debounce time. Debouncing prevents unwanted multiple operations of the input, e.g., due to bouncing of the contact.	2 **3** 4

-> Data type[*2]	This parameter is used to determine the sending value to the bus when a short operation occurs.	**1 bit** 1 byte (0..255) 1 byte (0..100%) HVAC mode
-> Value 'X'[*2]	This parameter is used to the sending value to the bus when a short operation occurs.	Values depends on DPT selection.
-> Value 'X' for long operation[*3]	This parameter is used to the sending value to the bus when a long operation occurs.	Values depends on DPT selection.
Use "object X"	This parameter is used to enable each command object when they are set to yes.	**No** Yes
-> Data type[*4]	This parameter is used to determine the sending value to the bus when a short operation occurs.	**1 bit** 1 byte (0..255) 1 byte (0..100%) HVAC mode
-> Value 'X'[*4]	This parameter is used to the sending value to the bus when a short operation occurs.	Values depends on DPT selection.
-> Value 'X' for long operation[*5]	This parameter is used to the sending value to the bus when a long operation occurs.	Values depends on DPT selection.

[*1] This parameter is only visible when the parameter "Distinction between long and short operation" is set to "Yes".
[*2] This parameter is only visible when the parameter "Use single object?" is set to "Yes".
[*3] This parameter is only visible when the parameters "Use single object?" and "Distinction between long and short operation" are set to "Yes".
[*4] This parameter is only visible when the parameter "Use "object X"" is set to "Yes".
[*5] This parameter is only visible when the parameters "Use "object X"" and "Distinction between long and short operation" are set to "Yes".

3.2.9. Input – Counter

In this section, it is explained how to count input pulses on the Binary Interface. Detailed information on the relevant parameter configurations is described in the table below.

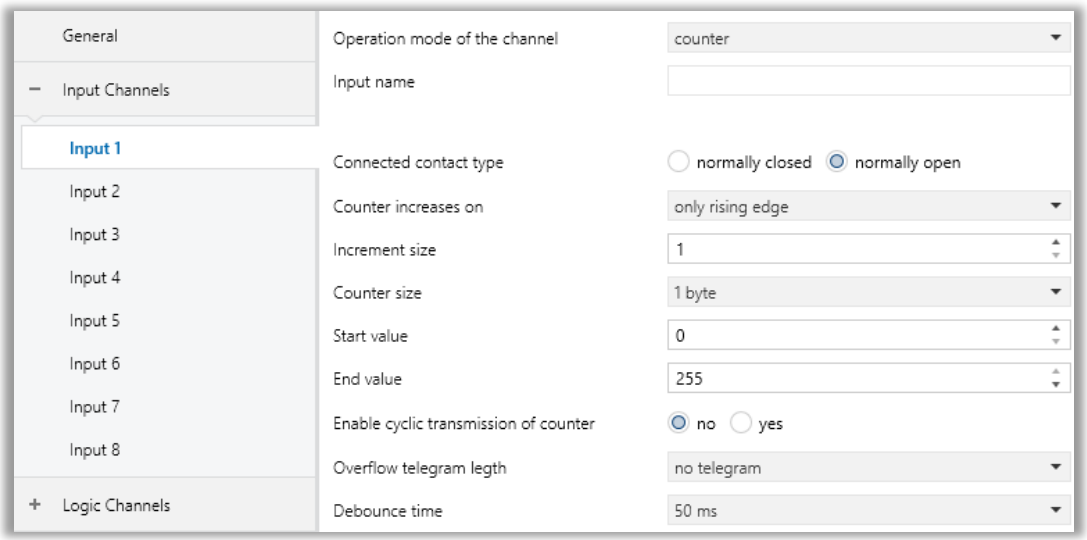

Fig. 13: Input – Counter Page

3.2.9.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
Input Name	This parameter is used to type an input name. The name can be consisting of 40 characters.	**40 bytes allowed**
Operation Mode of the channel	This parameter is used to determine the input x operation mode. If no function is selected, the input x will not be used. For other choices, all functionalities are configured separately.	**No function** Switch sensor Switch/dimming sensor Shutter sensor Value/forced operation Control scene RGB colour control Mode selection Command sequence Counter RGBW control LED control (output)
Connected contact type	This parameter is used to specify the contact type that is connected to the input x.	Normally closed **Normally open**
Counter increases on	This parameter is used to set how the input pulse is to be generated.	**Only rising edge** Only falling edge Both edges
Increment size	This parameter is used to assign the increment size when a press event occurs.	**1**…255
Counter size	This parameter is used to determine long operation detection after the button press operation. For making a long operation, the button should be pressed at least the configured value.	1 byte **2 byte** 4 byte
Start Value	This parameter is used to set the initial value of the counter after a reset or a failure.	Values depends on DPT selection.
End Value	This parameter is used to set the end value of the counter.	Values depends on DPT selection.
Enable cyclic transmission of counter	This parameter is used to determine if the counter value is sent cyclically on the bus	**No** Yes
-> Repeated transmit cycle period[*1]	This parameter is used to determine the sending value to the bus when a short operation occurs.	00:00:00…**00:00:30**…18:12:15

Overflow telegram length	This parameter is used to set the length of the overflow telegram which will be sent to bus when counter value exceeds the end value set in the parameter list.	**No telegram** 1bit 1 byte
-> Overflow telegram value[*2]	This parameter is used to determine the sending value to the bus when a short operation occurs.	Values depends on DPT selection.
Debounce time	This parameter is used to determine the debounce time. Debouncing prevents unwanted multiple operations of the input, e.g., due to bouncing of the contact.	10 ms 20 ms 30 ms 40 ms **50 ms** 70 ms 100 ms 150 ms

[*1] This parameter is only visible when the parameter “Enable cyclic transmission of counter” is set to “Yes”.
[*2] This parameter is only visible when the parameter “Overflow telegram length” is set to “1 bit” or “1 byte”.

3.2.10. Input – RGBW control

In this section, it is explained how to control an RGBW device through the buttons connected to the digital inputs via the Binary Interface. Detailed information on the relevant parameter configurations is described in the table below.

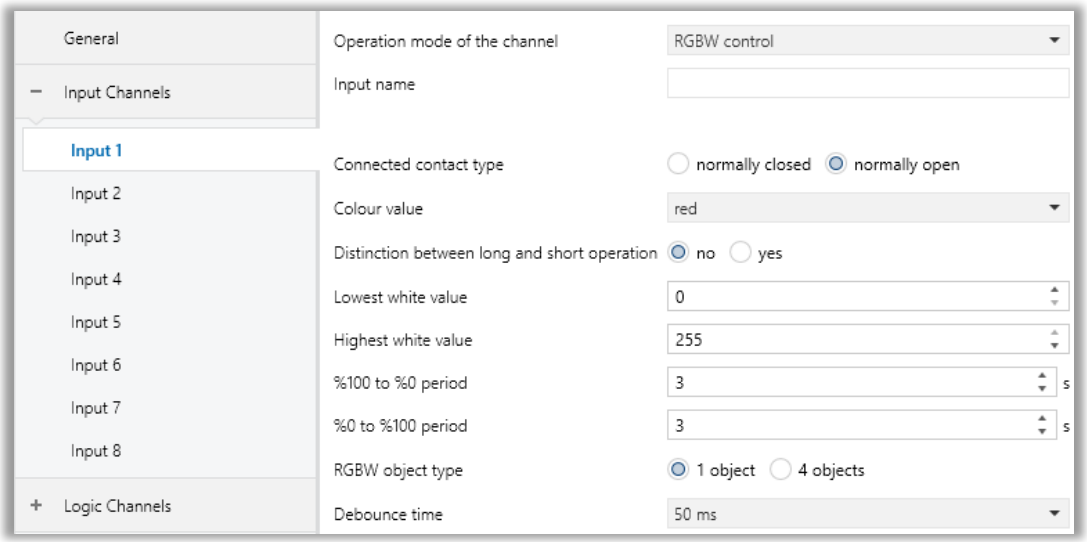

Fig. 14: Input – RGBW Control Page

3.2.10.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
Input Name	This parameter is used to type an input name. The name can be consisting of 40 characters.	**40 bytes allowed**
Operation Mode of the channel	This parameter is used to determine the input x operation mode. If no function is selected, the input x will not be used. For other choices, all functionalities are configured separately.	**No function** Switch sensor Switch/dimming sensor Shutter sensor Value/forced operation Control scene RGB colour control Mode selection Command sequence Counter RGBW control LED control (output)
Connected contact type	This parameter is used to specify the contact type that is connected to the input x.	Normally closed **Normally open**
Colour value	This parameter is used to set RGB colours according to the configured values.	**Red** Orange Yellow Green-yellow Green Green-cyan Cyan Blue-cyan Blue Blue-magenta Red-magenta white
Distinction between long and short operation	This parameter is used to enable or disable the colour changing with long press operation.	**No** Yes
-> Long operation after[*1]	This parameter is used to determine long operation detection after the button press operation. For making a long operation, the button should be pressed at least the configured value.	00:00.005…**00:00.500** …01:05.535

Lowest white value	This parameter is set to the lowest white value.	**0**..254
Highest white value	This parameter is set to the highest white value.	1…**255**
%100 to %0 period	This parameter is used to set how long it takes to go from 100% to 0%.	1s...**3s**…10s
%0 to %100 period	This parameter is used to set how long it takes to go from 0% to 100%.	1s...**3s**…10s
Object type	This parameter is used to determine the RGB colour object type.	**1 object** 4 objects
Debounce time	This parameter is used to determine the debounce time. Debouncing prevents unwanted multiple operations of the input, e.g., due to bouncing of the contact.	10 ms 20 ms 30 ms 40 ms **50 ms** 70 ms 100 ms 150 ms

*1 This parameter is only visible when the parameter “Distinction between long and short operation” is set to “Yes”.

3.2.11. Input – LED Control (output)

In this section, it is explained how to control LED through the buttons connected to the digital inputs via the Binary Interface. Detailed information on the relevant parameter configurations is described in the table below.

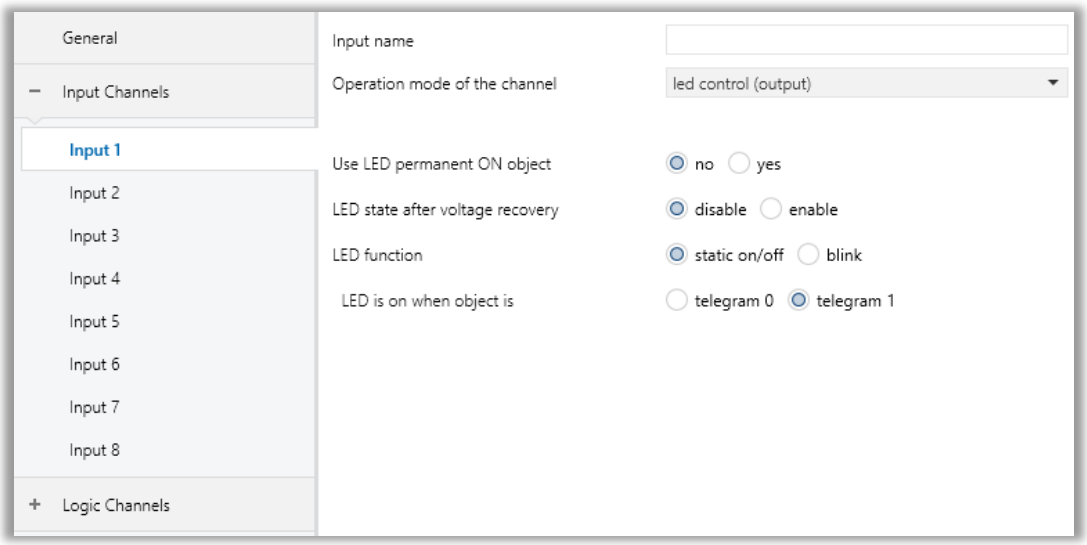

Fig. 15: Input – LED Control Page

3.2.11.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
Input Name	This parameter is used to type an input name. The name can be consisting of 40 characters.	**40 bytes allowed**
Operation Mode of the channel	This parameter is used to determine the input x operation mode. If no function is selected, the input x will not be used. For other choices, all functionalities are configured separately.	**No function** Switch sensor Switch/dimming sensor Shutter sensor Value/forced operation Control scene RGB colour control Mode selection Command sequence Counter RGBW control LED control (output)
Use LED permanent ON object	This parameter is used to enable LED permanently control object when they are set to yes.	**No** Yes
LED state after voltage recovery	This parameter is used to save LED state before bus failure and recover last saved LED state after voltage recovery.	**Disable** Enable
LED function	This parameter is used to set LED outputs' behaviour. **Static on/off:** When output set ON, output always be ON. **Blink:** When Output is On, It will cycle on and off periodically.	**Static on/off** Blink
-> LED is on when object is[*1]	This parameter is used to set output ON with which telegram	Telegram 0 **Telegram 1**
-> LED flashes when object is[*2]	This parameter is used to set output flash mode with which telegram.	**Telegram 0** Telegram 1
-> Use custom blink interval[*2]	This parameter is used to set time to turn output ON and OFF periodically.	**No** Yes
-> LED on time[*3]	This parameter is used to set ON output time in periodic blink time.	0.1 s / 0.15 s / 0.2 s / **0.25 s** / 0.3 s / 0.4 s / 0.5 s / 0.6 s / 0.7 s / 0.8 s / 0.9 s / 1 s /

		1.2 s / 1.4 s / 1.5 s / 1.7 s / 2 s
-> LED off time[*3]	This parameter is used to set OFF output time in periodic blink time.	0.1 s / 0.15 s / 0.2 s / **0.25 s** / 0.3 s / 0.4 s / 0.5 s / 0.6 s / 0.7 s / 0.8 s / 0.9 s / 1 s / 1.2 s / 1.4 s / 1.5 s / 1.7 s / 2 s

[*1] This parameter is only visible when the parameter “LED function” is set to “Static on/off”.

[*2] This parameter is only visible when the parameter “LED function” is set to “Blink”.

[*3] This parameter is only visible when the parameter “Use custom blink interval” is set to “Yes”.

3.3. Logic Channels

This section describes the logical function modules of the Binary Interface. With the logical function blocks on the Binary Interface, a logical expression can be created with the ambient temperature, the brightness level of the environment, whether there is a presence detection in the environment, the data coming through the local digital inputs or external inputs, and various 'TRUE' or 'FALSE' results can be obtained. actions can be taken and scenarios can be triggered.

3.3.1. Logic Channels – General

This section describes the general parameters of the logical association module of the Binary Interface. Parameters must be configured separately for each logic block.

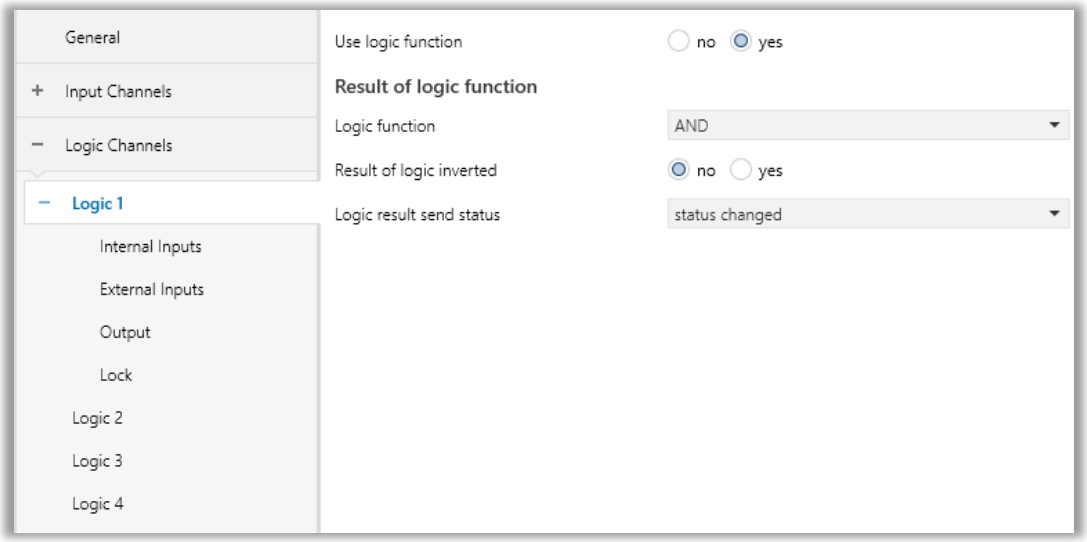

Fig. 16: Logic Functions – General Page

3.3.1.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
Use Logic Function	This parameter is used to enable or disable the related logic function gate.	**No** Yes
Logic Function	This parameter is used to determine the logical relation of the parameterized logic inputs. **AND**: All inputs are put into the 'AND' operation. **OR**: All inputs are put into the 'OR' operation. **XOR**: All inputs are put into the 'XOR' operation.	**AND** OR XOR
Result of Logic Inverted	This parameter is used to invert or not invert the calculated logic function block. If it is selected as yes for example, when the logic function gate output is 'TRUE', the output will be 'FALSE'. Vice versa also applies.	**No** Yes
Logic result send status	This parameter is used to determine the logic function block result sending status to the KNX bus.	**Status changed** Status is TRUE Status is FALSE Status changed and periodically Status is TRUE periodically Status is FALSE periodically
Result send status cycle time	The result send status cycle time describes the time used between two cyclically transmitted telegrams	1…**5**…255

[*1] This parameter is only visible when the parameter "Logic result send status" is set to "Status changed and periodically" or "Status is TRUE periodically" or "Status is FALSE periodically".

3.3.2. Logic Functions – Internals Inputs

This section describes the input parameters of the logical association module of the Binary Interface. Parameters must be configured separately for each logic block.

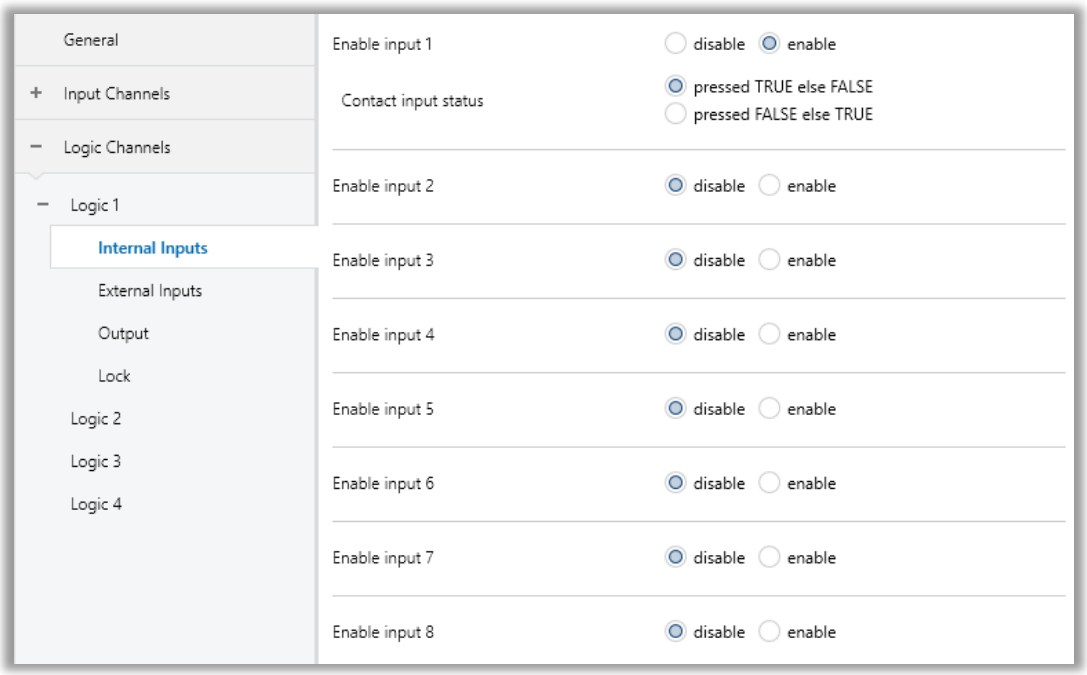

Fig. 17: Logic Functions – Internal Inputs Page

3.3.2.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
Enable Input 1…8	This parameter is used to enable or disable input 1…8 for logic function block as input	**Disable** Enable
-> Contact Input Status[*1]	This parameter is used to determine when a press occurs on the local input is accounted as TRUE or FALSE.	**Pressed TRUE else FALSE** Pressed FALSE else TRUE

[*1] This parameter is only visible when the parameter “Enable Input 1…8” is set to “Enable”.

3.3.3. Logic Functions – Externals Inputs

This section describes the externals input parameters of the logical association module of the Binary Interface.

Parameters must be configured separately for each logic block.

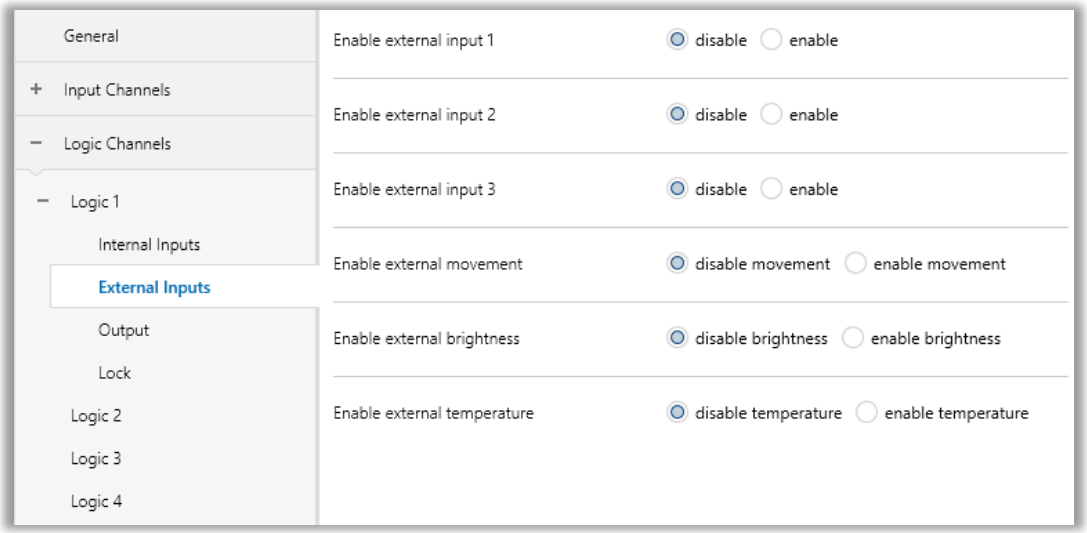

Fig. 18: Logic Functions – External Inputs Page

3.3.3.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
Enable external input X	This parameter is used to enable or disable input 1 for logic function block as input	**Disable** Enable
-> External input type[*1]	This parameter is used to determine the external input type of the enabled input X object.	**1-bit value('1'/'0')** 1-byte threshold (0..255) 2-byte threshold (0..65535) 2-byte float threshold (-50C..100C) 4-byte threshold (0..4294967295)
-> External input threshold value[*2]	This parameter is used to determine the external input threshold value to evaluate the input status as TRUE or FALSE.	**0**…255 **0**…65535 -500…0…1000 0…4294967295
-> External input status[*1]	This parameter is used to determine the input status as TRUE or FALSE according to the value. (This is visible if the input is not selected as 1 bit)	**TRUE if input value >= threshold else FALSE** FALSE if input value <= threshold else TRUE
Enable Extarnal movement	This parameter is used to enable or disable input 1 for logic function block as input	**Disable movement** Enable movement
-> External movement input is set to TRUE when received[*3]	This parameter is used to determine when a press occurs on the local input is accounted as TRUE or FALSE.	**Slave value '0'** Slave value '1'
Enable External Brightness	This parameter is used to enable or disable input 2 for logic function block as input	**Disable brightness** Enable brightness
-> Threshold brightness lower[*4]	This parameter is used to determine the lower threshold brightness value.	1…**100**…1200
-> Threshold brightness upper[*4]	This parameter is used to determine the upper threshold brightness value.	1…**300**…1200

-> Brightness Status[*4]	This parameter is used to determine when the ambient brightness value is accounted as TRUE or FALSE.	**In range is TRUE, else is FALSE** Out range is TRUE, else is FALSE Under lower is TRUE, above upper is FALSE Under lower is FALSE, above upper is TRUE
-> Change brightness via bus[*4]	This parameter is used to determine when a press occurs on the local input is accounted as YES or NO.	**No** Yes
Enable External Temperature	This parameter is used to enable or disable input 2 for logic function block as input	**Disable temperature** Enable temperature
-> Threshold temperature[*5] **lower**	This parameter is used to determine the lower threshold temperature value.	-300…**220**…700°C
-> Threshold temperature upper[*6]	This parameter is used to determine the upper threshold temperature value.	-300…**260**…700°C
-> Temperature Status[*5]	This parameter is used to determine when the ambient temperature value is accounted as TRUE or FALSE.	**In range is TRUE, else is FALSE** Out range is TRUE, else is FALSE Under lower is TRUE, above upper is FALSE Under lower is FALSE, above upper is TRUE
-> Change temperature threshold via bus[*5]	This parameter is used to determine when a press occurs on the local input is accounted as YES or NO.	**No** Yes

[*1] This parameter is only visible when the parameter “Enable external input X” is set to “Enable”.
[*2] This parameter is only visible when the parameter “Enable external input X” is set to “1-byte threshold (0..255)” or “2-byte threshold (0..65535)“ or “2-byte float threshold (-50C..100C)” or “4-byte threshold (0..4294967295)”.
[*3] This parameter is only visible when the parameter “Enable Extarnal movement” is set to “Enable movement”.
[*4] This parameter is only visible when the parameter “Enable external brightness” is set to “Enable brightness”.
[*5] This parameter is only visible when the parameter “Enable external temperature” is set to “Enable temperature”.

3.3.4. Logic Functions – Output General

This section describes the general parameters of the logic output functions. The property of each respective output channel is set by configuring the parameters in this section. Also, repetitive sending of output values can be set here.

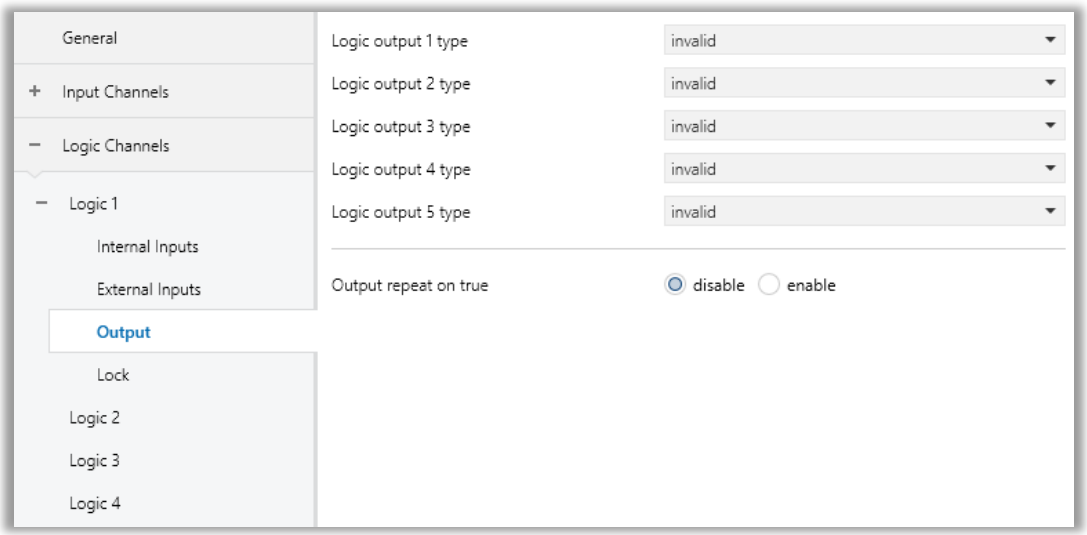

Fig. 19: Logic Functions – Output General Page

3.3.4.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
Logic Output X type (1...5)	This parameter is used to specify the related logic output x channel functionality. If this parameter is selected as invalid, the related output channel will not be used. Other selected options will be configured separately.	**Invalid** Switch controller Dim controller Shutter controller Alarm controller Percentage control. Sequence control. Scene controller String controller Threshold controller
Output repeat on true	This parameter is used to enable or disable the output repeating time for all output channels when the logic gate state is true.	**Disable** Enable
-> Repeated time interval[*1]	This parameter is used to determine the repeated time for all enabled output channels to send output channel values when the logic gate state is true.	**0**…65535

[*1] This parameter is only visible when the parameter “Output repeat on true” is set to “Enable”.

3.3.5. Logic Functions – Outputs 1-5

This section describes parameter configurations for each logic output channel. Although the working principle is the same for all output channels, only the type of values to be sent changes depending on the selected output functionality. For this reason, parameters are described in a common table about only one feature.

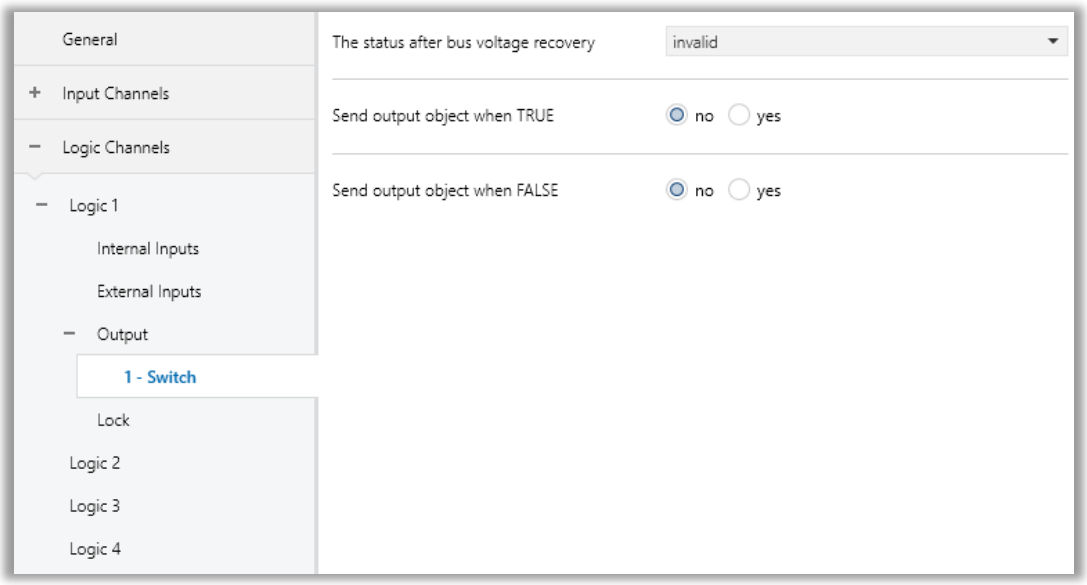

Fig. 20: Logic Functions – Output: Dimming Page

3.3.5.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
The status after bus voltage recovery	This parameter is used to determine the logic output channel x status after bus voltage recovery.	**Invalid** Defined Recovery
-> Recovery Defined Value[*1]	This parameter is used to determine the output channel x value when the bus voltage has been recovered.	**ON**…OFF **%0**…%100 **Up**…Down **No alarm**…alarm **Stop**…start **Scene no.1**…scene no.64 14 bytes string **0**…65535
Send output object when TRUE	This parameter is used to enable or disable the sending output object when the logic gate is true.	**No** Yes
-> Defined Output Value[*2]	This parameter is used to determine the logic output channel x defined value when the logic gate is true.	**ON**…OFF %0…**%100** **Up**…Down No alarm…**alarm** Stop…**start** Scene no.1…**scene no64** 14 bytes string 0…**65535**
-> On Delay Time[*2]	This parameter is used to determine the on-delay time of the related logic output channel x when the logic gate is true.	**00:00:00**…18:12:15
-> Change on Time Via Bus[*2]	This parameter is used to enable or disable the on-delay time object for changing the delay time on the true state.	**No** Yes
Send output object when FALSE	This parameter is used to enable or disable the sending output object when the logic gate is false.	**No** Yes
-> Defined Output Value[*3]	This parameter is used to determine the logic output channel x defined value when the logic gate is false.	On…**Off** **%0**…%100 **Up**…Down **No alarm**…alarm

		Stop…start **Scene no. 1** … scene no64 14 bytes string **0**…65535
-> On Delay Time	This parameter is used to determine the on-delay time of the related logic output channel x when the logic gate is false.	**00:00:00**…18:12:15
-> Change on Time Via Bus	This parameter is used to enable or disable the on-delay time object for changing the delay time on the false state.	**No** Yes

[*1] This parameter is only visible when the parameter “The status after bus voltage recovery” is set to “Defined”.
[*2] This parameter is only visible when the parameter “Send output value when TRUE” is set to “Yes”.
[*3] This parameter is only visible when the parameter “Send output value when FALSE” is set to “Yes”.

3.3.6. Logic Functions – Lock

In this section, the locking feature of the logic functions is mentioned. The locking feature is for each logic function gate and is configured separately. Since there are 5 different logic function gates in the Binary Interface device, a separate configuration is required for each. Since the parameter page for each section is the same, only 1 is explained in this section.

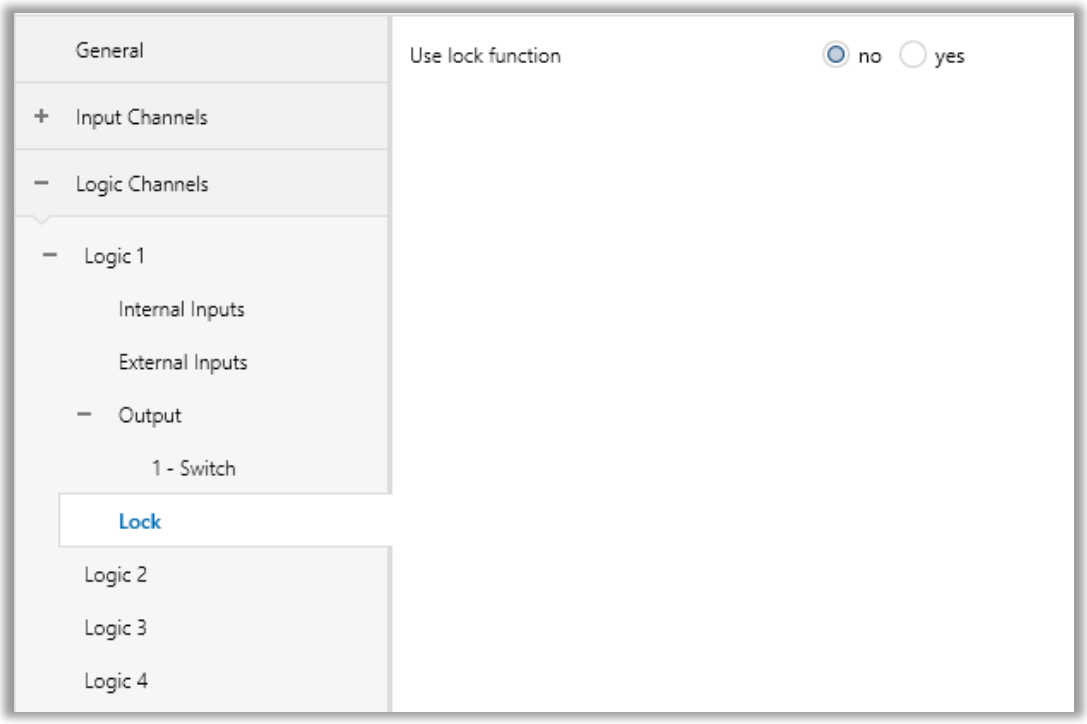

Fig. 21: Logic Functions – Lock Page

3.3.6.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
Use lock function	This parameter is used to lock the related logic function gate.	**No** Yes
-> Telegram for lock activation[*1]	This parameter is used to determine the telegram value that locks the related logic function gate.	**ON telegram** OFF telegram
-> Automatic unlock after delay[*1]	This parameter is used to enable or disable the automatic unlock to unlock the logic gate after a while.	**No** Yes
-> Automatic unlock time[*2]	This parameter is used to determine the automatically unlock period to unlock the logic function gate.	00:00:00…**00:00:05**... 18:12:15
-> Feedback of logic function lock status[*1]	This parameter is used to enable or disable the feedback of the logic lock status object.	**No** Yes
-> After bus voltage recovery[*1]	This parameter is used to determine the logic function gate lock status after the bus voltage recovery.	**Lock Passive** Lock Active

[*1] This parameter is only visible when the parameter “Use lock function” is set to “Yes”.

[*2] This parameter is only visible when the parameter “Automatic unlock after delay” is set to “Yes”.

4. ETS Objects List & Descriptions

The Binary Interface can communicate via the KNX bus line. In this section, the group objects of the Binary Interface is described. All of the communication objects listed below are available to the Binary Interface. Which of these group objects are visible and capable of being linked with group addresses are explained in sub-sections.

No	Name	Function	DTP Type	Length	Flags				
					C	R	W	T	U
1	General	In operation	1.002	1 bit	X			X	
2	Input x	Block	1.003	1 bit	X		X		
3	Input x: Switch function || Switch/Dim function	Switch	1.001	1 bit	X		X	X	
	Input x: Shutter function	Shutter UP/DOWN	1.008	1 bit	X		X	X	
	Input x: Value/Forced op.	Forced operation	2.001	2 bit	X			X	
		Percent value	5.001	1 byte	X			X	
		Decimal value	5.005	1 byte	X			X	
		Scene number	17.001	1 byte	X			X	
		Colour Temperature	7.600	2 bytes	X			X	
		Temperature value	9.001	2 bytes	X			X	
		Brightness value	9.004	2 bytes	X			X	
		Percent value (RGB)	232.600	3 bytes	X			X	
	Input x: Control Scene	8-bit Scene	18.001	1 byte	X			X	
	Input x: RGB control	RGB Colour	232.600	3 bytes	X	X		X	
		Red Colour	5.010	1 byte	X	X		X	
	Input x: Mode Selection	Mode Selection	20.102	1 byte	X	X		X	
	Input x: Command Sequence	Sequence – 1 bit	1.001	1 bit	X	X		X	
		Sequence – 1 byte	5.001	1 byte	X	X		X	
			5.010	1 byte	X	X		X	
			20.102	1 byte	X	X		X	
		Sequence A – 1 bit	1.001	1 bit	X	X		X	
		Sequence A – 1 bye	5.001	1 byte	X	X		X	
			5.010	1 byte	X	X		X	
			20.102	1 byte	X	X		X	
	Input x: Counter	Counter Value – 1 byte	5.010	1 byte	X	X		X	
		Counter Value – 2 bytes	7.001	2 bytes	X	X		X	
		Counter Value – 4 bytes	12.001	4 bytes	X	X		X	
	Input x: RGBW control	Percent Value (RGBW)	251.600	6 bytes	X			X	
		Red colour	5.010	1 byte	X	X		X	
	Input x: LED control	LED	1.001	1 bit	X		X	X	

4	Input x: Switch function	Switch - long	1.001	1 bit	X			X	
	Input x: Switch/Dim function	Dimming	3.007	4 bit	X			X	
	Input x: Shutter function	STOP/lamella adjustment	1.007	1 bit	X			X	
	Input x: Value/Forced op.	Forced operation – long	2.001	2 bit	X			X	
		Percent value – long	5.001	1 byte	X			X	
		Decimal value - long	5.005	1 byte	X			X	
		Scene number – long	17.001	1 bytes	X			X	
		Colour Temperature – long	7.600	2 bytes	X			X	
		Temperature value – long	9.001	2 bytes	X			X	
		Brightness value – long	9.004	2 bytes	X			X	
		Percent value (RGB) – long	232.600	3 bytes	X			X	
	Input x: Control Scene	Store scene	1.003	1 bit	X	X	X		
	Input x: RGB control	Green colour	5.010	1 byte	X			X	
	Input x: Mode Selection	HVAC-Mode State	20.102	1 byte	X		X		
	Input x: Command Sequence	Sequence B – 1 bit	1.001	1 bit	X	X		X	
		Sequence B – 1 byte	5.001	1 byte	X	X		X	
			5.010	1 byte	X	X		X	
			20.102	1 byte	X	X		X	
	Input x: Counter	Reset Counter	1.001	1 bit	X	X	X	X	
	Input x: RGBW control	Green colour	5.010	1 byte	X			X	
	Input x: LED control	LED permanent ON	1.003	1 bit	X		X	X	
5	Input x: Shutter function	Upper limit position	1.002	1 bit	X		X		
	Input x: RGB control	Blue colour	5.010	1 byte	X			X	
	Input x: Command Sequence	Sequence C – 1 bit	1.001	1 bit	X	X		X	
		Sequence C – 1 byte	5.001	1 byte	X	X		X	
			5.010	1 byte	X	X		X	
			20.102	1 byte	X	X		X	
	Input x: Counter	Overflow – 1 bit	1.001	1 bit	X	X	X	X	
		Overflow – 1 byte	5.010	1 byte	X	X	X	X	
	Input x: RGBW control	Blue colour	5.010	1 byte	X			X	
6	Input x: Shutter function	Lower limit operation	1.002	1 bit	X		X		
	Input x: Command Sequence	Sequence D – 1 bit	1.001	1 bit	X	X		X	
		Sequence D – 1 byte	5.001	1 byte	X	X		X	
			5.010	1 byte	X	X		X	
			20.102	1 byte	X	X		X	
	Input x: RGBW control	White colour	5.010	1 byte	X	X		X	
42	Logic x:	Lock	1.003	1 bit	X		X		
43	Logic x:	Lock Feedback	1.003	1 bit	X	X		X	
44	Logic x: Input	External movement	1.001	1 bit	X		X	X	X
45	Logic x: Input	External brightness	9.004	2 bytes	X		X	X	X

46	Logic x: Input	Lower brightness threshold	9.004	2 bytes	X		X	X	X
47	Logic x: Input	Upper brightness threshold	9.004	2 bytes	X		X	X	X
48	Logic x: Input	External temperature	9.001	2 bytes	X		X	X	X
49	Logic x: Input	Lower temperature threshold	9.001	2 bytes	X		X	X	X
50	Logic x: Input	Upper temperature threshold	9.001	2 bytes	X		X	X	X
51	Logic x: Input	External input 1 – 1 bit	1.001	1 bit	X		X	X	X
		External input 1 – 1 byte	5.010	1 byte	X		X	X	X
		External input 1 – 2 bytes	7.001	2 bytes	X		X	X	X
		External input 1 – 2 bytes (float threshold)	9.001	2 bytes	X		X	X	X
		External input 1 – 4 bytes	12.001	4 bytes	X		X	X	X
52	Logic x: Input	External input 2 – 1 bit	1.001	1 bit	X		X	X	X
		External input 2 – 1 byte	5.010	1 byte	X		X	X	X
		External input 2 – 2 bytes	7.001	2 bytes	X		X	X	X
		External input 2 – 2 bytes (float threshold)	9.001	2 bytes	X		X	X	X
		External input 2 – 4 bytes	12.001	4 bytes	X		X	X	X
53	Logic x: Input	External input 3 – 1 bit	1.001	1 byte	X		X	X	X
		External input 3 – 1 byte	5.010	1 byte	X		X	X	X
		External input 3 – 2 bytes	7.001	2 bytes	X		X	X	X
		External input 3 – 2 bytes (float threshold)	9.001	2 bytes	X		X	X	X
		External input 3 – 4 bytes	12.001	4 bytes	X		X	X	X
54	Logic x: Output	Result	1.002	1 bit	X	X		X	
55	Logic x: Output y:	Switching	1.001	1 bit	X	X		X	
		Absolute dimming	5.001	1 byte	X	X		X	
		Shutter	1.008	1 bit	X	X		X	
		Alarm	1.005	1 bit	X	X		X	
		Percentage	5.004	1 byte	X	X		X	
		Sequence	1.010	1 bit	X	X		X	
		Scene	5.004	1 byte	X	X		X	
		String	16.000	14 bytes	X	X		X	
		Threshold	7.001	2 bytes	X	X		X	
56	Logic x: Output y:	Delay time on TRUE state	7.005	2 bytes	X		X	X	X
57	Logic x: Output y:	Delay time on FALSE state	7.005	2 bytes	X		X	X	X

4.1. General Objects

This section describes the "general" group objects and their properties. General group objects, as the name suggests, indicate the general characteristics of the Binary Interface.

Object Number	Object Name	Function	Type	Flags
1	**General**	**In operation**	**1 bit**	**CT**
This object is used to monitor the presence of the device on the KNX bus line regularly. However, monitoring telegrams can be sent cyclically on the KNX bus line. DPT: 1.002 (boolean)				

4.2. Inputs

This section contains information about KNX objects and their properties related to the input channels. The types, flags and properties of the objects are explained in detail below. There are 12 digital inputs and 2 analog inputs channels with the same functionality and an additional probe channel. In this section, digital and analog inputs objects are described only for one channel due to the identical.

Object Number	Object Name	Function	Type	Flags
2, 7, 12, 17, 22, 27, 32, 37	**Input x**	**Block**	**1 bit**	**CW**
This object is used to lock the universal interface channel. It becomes visible when the "use universal interface lock" parameter is set to yes. Depending on the parameter setting, when an ON or OFF telegram is sent to this object, the corresponding presence channel is locked. For example, when "ON telegram" is selected in the parameter page for locking, it will be locked when an ON telegram is received from the KNX bus line, and when an OFF telegram is received, the universal interface channel will be unlocked. Depending on the parameter configuration, an output value can also be sent when the locking operation is performed. DPT: 1.003 (enable)				
3, 8, 13, 18, 23, 28, 33, 38	**Input x: Switch function**	**Switch**	**1 bit**	**CWT**
This communication object changes in functionality depending on the selected input function. In accordance with the parameter setting, this communication object can be switched by actuation of the input to ON, OFF or TOGGLE. DPT: 1.001 (switch)				
4, 9, 14, 19, 24, 29, 34, 39	**Input x: Switch function-long**	**Switch**	**1 bit**	**CT**
This communication object changes in functionality depending on the selected input function In accordance with the parameter setting, this communication object can be switched by actuation of the input to ON, OFF or TOGGLE. DPT: 1.001 (switch)				

4, 9, 14, 19, 24, 29, 34, 39	**Input x: Switch/Dim function**	**Dimming**	**4 bit**	**CWT**

This communication object changes in functionality depending on the selected input function. In accordance with the parameter setting, A long operation at the input has the effect that BRIGHTER or DARKER dim telegrams are sent via this communication object on the bus. A STOP telegram is sent and the cyclic sending of dim telegrams is stopped at the end of the actuation with START-STOP-DIMMING.

DPT: 3.007 (dimming control)

3, 8, 13, 18, 23, 28, 33, 38	**Input x: Shutter function**	**Shutter UP/DOWN**	**1 bit**	**CWT**

This communication object changes in functionality depending on the selected input function. This communication object sends a shutter motion telegram UP or DOWN on the bus. By receiving telegrams, the device also recognises movement telegrams of another sensor, e.g. parallel operation.

DPT: 1.008 (up/down)

4, 9, 14, 19, 24, 29, 34, 39	**Input x: Shutter function**	**STOP/lamella adjustment**	**1 bit**	**CT**

This communication object changes in functionality depending on the selected input function. This communication object sends a STOP telegram or slat adjustment.

DPT: 1.007 (step)

5, 10, 15, 20, 25, 30, 35, 40	**Input x: Shutter function**	**Upper limit operation**	**1 bit**	**CW**

This communication object changes in functionality depending on the selected input function. According to the input configuration on the ETS parameter page, the object usage changes. If the shutter function is selected, ‘0’ is no upper limit operation, ‘1’ upper-end operation.

DPT: 1.002 (boolean)

6, 11, 16, 21, 26, 31, 36, 41	**Input x: Shutter function**	**Lower limit operation**	**1 bit**	**CW**

This object is used for the shutter actuator indicates if it is in the lower limit position (“shutter/blind closed”). The object is intended for a 1-button operation. ‘0’ is no lower limit operation, ‘1’ lower end operation.

DPT: 1.002 (boolean)

3, 8, 13, 18, 23, 28, 33, 38	**Input x: Valued/ Forced function**	**Forced operation / Percent value / Decimal Value / Scene number / Colour Temperature / Temperature value / Brightness value / Percent value (RGB)**	**2 bit / 1 byte / 2 bytes/ 3 bytes**	**CT**

This communication object changes in functionality depending on the selected input function. This communication object sends a value on the bus with short operation when opening or closing of the contact. Depending on the configuration, the data type of this object changes. forced, percent value, decimal value, Scene number, temperature value, brightness value and percent value (RGB) can be performed on this object.

DPT: According to parameter selection

3, 8, 13, 18, 23, 28, 33, 38	**Input x: Control Scene**	**8-bit Scene**	**1 byte**	**CT**

This communication object stores the value of the active scene number (1 - 64).

DPT: 18.001 (scene control)

4, 9, 14, 19, 24, 29, 34, 39	**Input x: Control Scene**	**Store Scene**	**1 bit**	**CRT**

This communication object, when active, decides wheter to call or store the preset 8-bit scene number in the parameter list. When the store scene object is enabled the preset scene number is stored, but, when disabled preset scene number is called to be active.

DPT: 1.003 (enable)

3, 8, 13, 18, 23, 28, 33, 38	**Input x: RGB control**	**Red colour / RGB colour**	**1 byte / 3 bytes**	**CRT**

This object either keeps the 1-Byte Red value of the RGB, or keeps the entire 3-Byte RGB value. Decision is made in the parameter list as either “1 object of 3 bytes” or 3 objects of 1 byte”.

DPT: 5.010 (counter pulses (0..255)) / 232.600 (RGB value 3x(0..255))

4, 9, 14, 19, 24, 29, 34, 39	**Input x: RGB control**	**Green colour**	**1 byte**	**CT**

This object keeps the 1-Byte green value of RGB if “3 objects of 1 Byte” option is selected in the parameter list.

DPT: 5.010 (counter pulses (0..255))

5, 10, 15, 20, 25, 30, 35, 40	**Input x: RGB control**	**Blue colour**	**1 byte**	**CT**

This object keeps the 1-Byte blue value of RGB if “3 objects of 1 Byte” option is selected in the parameter list.

DPT: 5.010 (counter pulses (0..255))

3, 8, 13, 18, 23, 28, 33, 38	**Input x: Mode Selection**	**Mode Selection**	**1 byte**	**CRT**

This object keeps the active HVAC state that can be toggled through press events.

Note: There can be up to 4 differenet HVAC state (comfort, standby, economy, building protection) selected and each press event toggles through the HVAC states that are set as available in the parameter list.

DPT: 20.102 (HVAC mode)

4, 9, 14, 19, 24, 29, 34, 39	**Input x: Mode Selection**	**HVAC-Mode State**	**1 byte**	**CW**

This object takes the HVAC state changed via the bus.

Note: Whenever this object is updated from the bus, the HVAC state that this object holds will be considered as the valid HVAC state and press events will act as if the last HVAC state is what this object is updated with.

DPT: 20.102 (HVAC mode)

3, 8, 13, 18, 23, 28, 33, 38	**Input x: Command Sequence**	**Sequence**	**1 bit / 1 byte**	**CRT**

This object keeps the current command that can be toggled through press events. Used for “Single Object” parameter selection.

Note: Each state (State A, B, C, D) holds a different value with adjustable data length. Each press event puts the next available state’s data to the “Sequence” object.

DPT: According to parameter selection

3, 8, 13, 18, 23, 28, 33, 38 / 4, 9, 14, 19, 24, 29, 34, 39 / 5, 10, 15, 20, 25, 30, 35, 40	**Input x: Command Sequence**	**Sequence X**	**1 bit / 1 byte**	**CRT**

/ 6, 11, 16, 21, 26, 31, 36, 41				

This object keeps the current command that can be toggled through press events. Used for “Multiple Object” parameter selection.

Note: Each object (Object A, B, C, D) holds a different value with adjustable data length. Each press event puts the next available state’s data to the “Sequence X” object and whichever object is holds the current state is sent to bus with its data.

DPT: According to parameter selection

3, 8, 13, 18, 23, 28, 33, 38	**Input x: Counter**	**Counter Value**	**1 byte / 2 bytes/ 4 bytes**	**CRT**

This object keeps the current value of the press counter.

DPT: According to parameter selection

4, 9, 14, 19, 24, 29, 34, 39	**Input x: Counter**	**Reset Counter**	**1 bit**	**CRWT**

This object is used to reset the counter value to preset start value that can be set from parameter list.

DPT: 1.001 (switch)

5, 10, 15, 20, 25, 30, 35, 40	**Input x: Counter**	**Overflow Value**	**1 bit / 1 byte**	**CRWT**

This object is sent to bus with the preset value from the parameter list when the counter value exceeds the preset end value of the counter.

DPT: 1.001 (switch) / 5.010 (counter pulses (0..255))

3, 8, 13, 18, 23, 28, 33, 38	**Input x: RGBW control**	**Red colour / Percent Value (RGBW)**	**1 byte / 6 bytes**	**CRT**

If the “object type” is set to “1 object”, this object keeps the 6-Byte RGBW value, but, if the “object type” is set to “4 objects”, this object keeps the 1-Byte Red value of the RGBW.

DPT: 5.010 (counter pulses (0..255)) / 251.600 (counter pulses 3x(0..255))

4, 9, 14, 19, 24, 29, 34, 39	**Input x: RGBW control**	**Green colour**	**1 byte**	**CT**

If the “object type” is set to “4 objects”, this object keeps the 1-Byte Green value of the RGBW.

DPT: 5.010 (counter pulses (0..255))

5, 10, 15, 20, 25, 30, 35, 40	**Input x: RGBW control**	**Blue colour**	**1 byte**	**CT**

If the “object type” is set to “4 objects”, this object keeps the 1-Byte Blue value of the RGBW.

DPT: 5.010 (counter pulses (0..255))

6, 11, 16, 21, 26, 31, 36, 41	**Input x: RGBW control**	**White colour**	**1 byte**	**CT**

If the “object type” is set to “4 objects”, this object keeps the 1-Byte White value of the RGBW.

Note: White value is the colour temperature.

DPT: 5.010 (counter pulses (0..255))

4.3. Logic Function

This section contains information about KNX objects and their properties related to the logic function channels. The types, flags and properties of the objects are explained in detail below. There are 4 identical logic channels in the Binary Interface, so only one logical channel is described here. The x values can be between 1…4 and y values also can be 1…5. Please do not forget to take this into account.

Object Number	Object Name	Function	Type	Flags
42	**Logic x:**	**Lock**	**1 bit**	**CW**
This object is used to lock the related logic channel x. It becomes visible when the "use logic lock" parameter is set to yes. Depending on the parameter setting, when an ON or OFF telegram is sent to this object, the corresponding logical channel is locked. For example, when "ON telegram" is selected in the parameter page for locking, it will be locked when an ON telegram is received from the KNX bus line, and when an OFF telegram is received, the logic channel will be unlocked. DPT: 1.003 (enable)				
43	**Logic x:**	**Lock Feedback**	**1 bit**	**CRT**
This object is used to send feedback on the lock status for the related logic channel x. It becomes visible when the "use logic lock" parameter is set to yes. If a status change occurs on the lock function, the changed statue value will be sent from this object. DPT: 1.003 (enable)				
44, 72, 100, 128	**Logic x: Input**	**External movement**	**1 bit**	**CWTU**
This object is used to receive movement information from the KNX bus line. According to the ETS parameter configuration, the ‘0’ or ‘1’ value is accounted as there is a movement detection occurs. DPT: 1.001 (switch)				
45, 73, 101, 129	**Logic x: Input**	**External brightness**	**2 bytes**	**CWTU**
This object is used to obtain a brightness value from the KNX bus line. The received brightness value will be used to evaluate the input status according to the brightness thresholds. DPT: 9.004 (lux (Lux))				
46, 74, 102, 130	**Logic x: Input**	**Lower brightness threshold**	**2 bytes**	**CWTU**

This object is used to receive the brightness threshold lower value from the KNX bus line. The value read on this object is will be used as a new brightness threshold lower value. This object becomes visible when the "Change brightness threshold via bus" parameter is set to yes

Note: The values which can be sent are between **1-1200** lux. If a value that is too small or too large is sent, the value is automatically adjusted to the limit value.

DPT: 9.004 (lux (Lux))

47, 75, 103, 131	**Logic x: Input**	**Upper brightness threshold**	**2 bytes**	**CWTU**

This object is used to receive the brightness threshold upper value from the KNX bus line. The value read on this object is will be used as a new brightness threshold upper value. This object becomes visible when the "Change brightness threshold via bus" parameter is set to yes

Note: The values which can be sent are between **1-1200** lux. If a value that is too small or too large is sent, the value is automatically adjusted to the limit value.

DPT: 9.004 (lux (Lux))

48, 76, 104, 132	**Logic x: Input**	**External temperature**	**2 bytes**	**CWTU**

This object is used to obtain temperature values from the KNX bus line. The received temperature value will be used to evaluate the input status according to the temperature thresholds.

DPT: 9.001 (temperature (°C))

49, 77, 105, 133	**Logic x: Input**	**Lower temperature threshold**	**2 bytes**	**CWTU**

This object is used to receive the temperature threshold lower value from the KNX bus line. The value read on this object is will be used as a new temperature threshold lower value. This object becomes visible when the "Change temperature via bus" parameter is set to yes

Note: The values which can be sent are between **-30 ˚C - 70 ˚C**. If a value that is too small or too large is sent, the value is automatically adjusted to the limit value.

DPT: 9.001 (temperature (°C))

50, 78, 106, 134	**Logic x: Input**	**Upper temperature threshold**	**2 bytes**	**CWTU**

This object is used to receive the temperature threshold upper value from the KNX bus line. The value read on this object is will be used as a new temperature threshold upper value. This object becomes visible when the "Change temperature via bus" parameter is set to yes

Note: The values which can be sent are between **-30 ˚C - 70 ˚C**. If a value that is too small or too large is sent, the value is automatically adjusted to the limit value.

DPT: 9.001 (temperature (°C))

51, 79, 107, 135	**Logic x: Input**	**External input-1**	**1 bit / 1 byte / 2 bytes/ 4 bytes**	**CWTU**

This object is used to obtain external input 1 information from the KNX bus line. According to the ETS parameter configuration, the received values are accounted as TRUE or FALSE for this external input. For 1-bit configuration, there is only '1' or '0' values for calculating the input status. But for other inputs (such as 1 byte, etc.) the received value is compared to the external input value parameter.

DPT: According to parameter selection, DPT changes.

52, 80, 108, 136	**Logic x: Input**	**External input-2**	**1 bit / 1 byte / 2 bytes/ 4 bytes**	**CWTU**

This object is used to obtain external input 2 information from the KNX bus line. According to the ETS parameter configuration, the received values are accounted as TRUE or FALSE for this external input. For 1-bit configuration, there is only '1' or '0' values for calculating the input status. But for other inputs (such as 1 byte, etc.) the received value is compared to the external input value parameter.

DPT: According to parameter selection, DPT changes.

53, 81, 109, 137	**Logic x: Input**	**External input-3**	**1 bit / 1 byte / 2 bytes/ 4 bytes**	**CWTU**

This object is used to obtain external input 3 information from the KNX bus line. According to the ETS parameter configuration, the received values are accounted as TRUE or FALSE for this external input. For 1-bit configuration, there is only '1' or '0' values for calculating the input status. But for other inputs (such as 1 byte, etc.) the received value is compared to the external input value parameter.

DPT: According to parameter selection, DPT changes.

54, 82, 110, 138	**Logic x: Output**	**Result**	**1 bit**	**CRT**

This object is used to send the related logic function block's result status to the KNX bus line. According to the ETS parameter configuration, this value can be sent periodically, on change or only configured value(TRUE or FALSE).

DPT: 1.002

55, 58, 61, 64, 67/ 83, 86, 89, 92, 95/ 111, 114, 117, 120, 123/ 139, 142, 145, 148, 151	**Logic x: Output: y**	**Switching …. Threshold**	**1 bit / 1 byte / 2 bytes/ 14 bytes**	**CRT**

This object is used to send the related output object's value to the KNX bus line. When the logic function block's status changes, the sending value also can be configured separately. In addition, according to the output type, the object's value type will be changed.

DPT: According to parameter selection

56, 59, 62, 65, 68/ 84, 87, 90, 93, 96/ 112, 115, 118, 121, 124/ 140, 143, 146, 149, 152	**Logic x: Output: y**	**Delay time on the TRUE state**	**2 bytes**	**CWTU**

This object is used to receive the 'delay time on TRUE state' value from the KNX bus line. When a new value is received from this object, the received value is used as the output on delay time for the TRUE state value. The configured parameter value will not be used anymore. This object becomes visible when the "Change on time via bus" parameter is set to yes

DPT: 7.005 (time (s))

57, 60, 63, 66, 69/ 85, 88, 91, 94, 97/ 113, 116, 119, 122, 125/ 141, 144, 147, 150, 153	**Logic x: Output: y**	**Delay time on the FALSE state**	**2 bytes**	**CWTU**

This object is used to receive the 'delay time on FALSE state' value from the KNX bus line. When a new value is received from this object, the received value is used as the output on delay time for the FALSE state value.

The configured parameter value will not be used anymore. This object becomes visible when the "Change on time via bus" parameter is set to yes

DPT: 7.005 (time (s))

CONTACT INFORMATION

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