

	<h2>application software</h2>	
<ul style="list-style-type: none"> ▲ Manufacturers ▲ Hager Electro ▲ Outputs <li style="background-color: #e0ffe0; padding: 2px;">1-output module 	<p>1 switch actuator</p> <p><i>Electrical/Mechanical characteristics: see product user manual</i></p>	

	Product reference	Product designation	Application software ref	TP device Radio device
	TXB601B	1 flush mounted output 10A twisted pair	STXB601B 1.x Version	

Content

1. General	3
1.1 About this guide	3
1.2 About the program ETS	3
1.2.1 ETS compatibility	3
1.2.2 Application descriptions	3
1.3 Easy tool software appearance	3
2. General Description	4
2.1 Installation of the device	4
2.1.1 Overview presentation	4
2.1.2 Description of the device	5
2.1.3 Physical addressing	5
2.1.4 Connection	5
2.2 Function modules of the application	6
3. Programming by ETS	8
3.1 Parameters	8
3.1.1 Fixed parameters	8
3.1.2 Functions of each switch actuator	8
3.1.2.1 Timer	8
3.1.2.2 Priority	9
3.1.2.3 Automatic control	10
3.1.2.4 Load shedding	11
3.1.2.5 Scene	11
3.2 Communication objects	14
3.2.1 ON/OFF	14
3.2.2 Status indication	14
3.2.3 Timer	15
3.2.4 Priority	15
3.2.5 Scene	16
3.2.6 ON/OFF automatic control	16
3.2.7 Automatic control deactivation	17
3.2.8 Load shedding	17
4. Programming by Easy Tool	18
4.1 Product overview	18
4.2 Product functionalities	20
4.2.1 ON/OFF	20
4.2.2 Timer	21
4.2.3 Priority	23
4.2.4 Automatic control	25
4.2.5 Load shedding	27
4.2.6 Scene	28
5. Appendix	31
5.1 Specifications	31
5.2 Characteristics	31
5.3 Index of objects	32

1. General

1.1 About this guide

The purpose of this manual is to describe the operation and configuration of KNX devices using ETS software or Easy tool software.

It consists of 4 parts:

- General information.
- The parameters and KNX objects available.
- The Easy tool configurations are available.
- Technical characteristics.

1.2 About the program ETS

1.2.1 ETS compatibility

The application programs are compatible with ETS4 and ETS5. They can be downloaded from our website under the order number.

ETS Version	File extension of compatible files
ETS4 (V4.1.8 or higher)	*.knxprod
ETS5	*.knxprod

1.2.2 Application descriptions

Application	Product reference
STXB601B	TXB601B

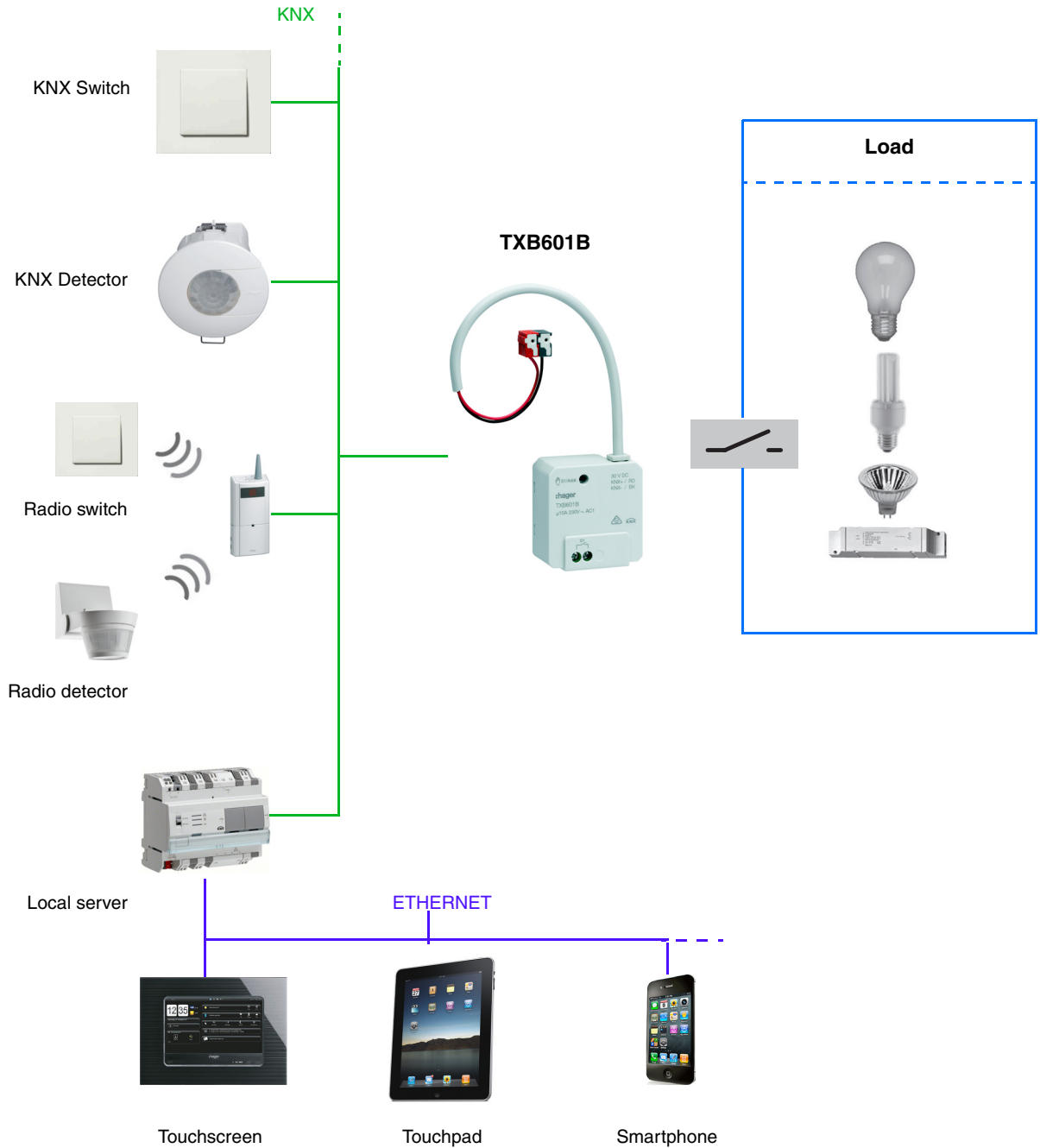
1.3 Easy tool software appearance

This product can also be configured using the TXA100 configuration tool. It is composed of a TJA665 configuration server. It is essential to update the configuration server software version. (Please refer to the TXA100 user manual).

2. General Description

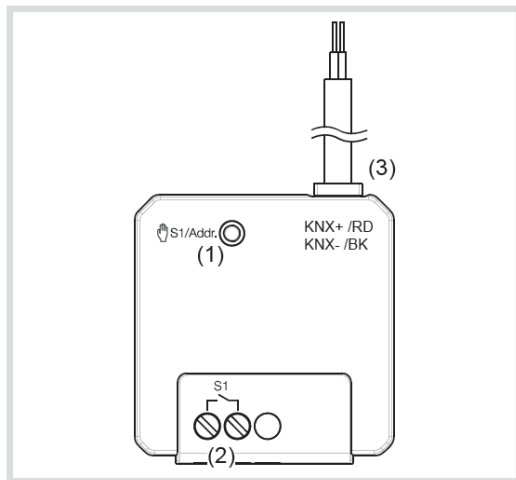
2.1 Installation of the device

2.1.1 Overview presentation



2.1.2 Description of the device

- TXB601B



- (1) Illuminated button for manual operation/
programming button
- (2) Connection of load(s)
- (3) KNX bus connection cable

2.1.3 Physical addressing

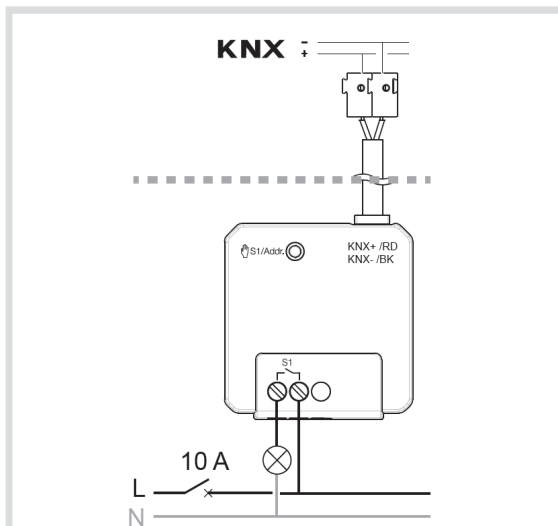
In order to perform the physical addressing or to check whether or not the bus is connected, press the lighted push button (see chapter 2.1.2 for the button location).

Light on = bus connected and ready for physical addressing.

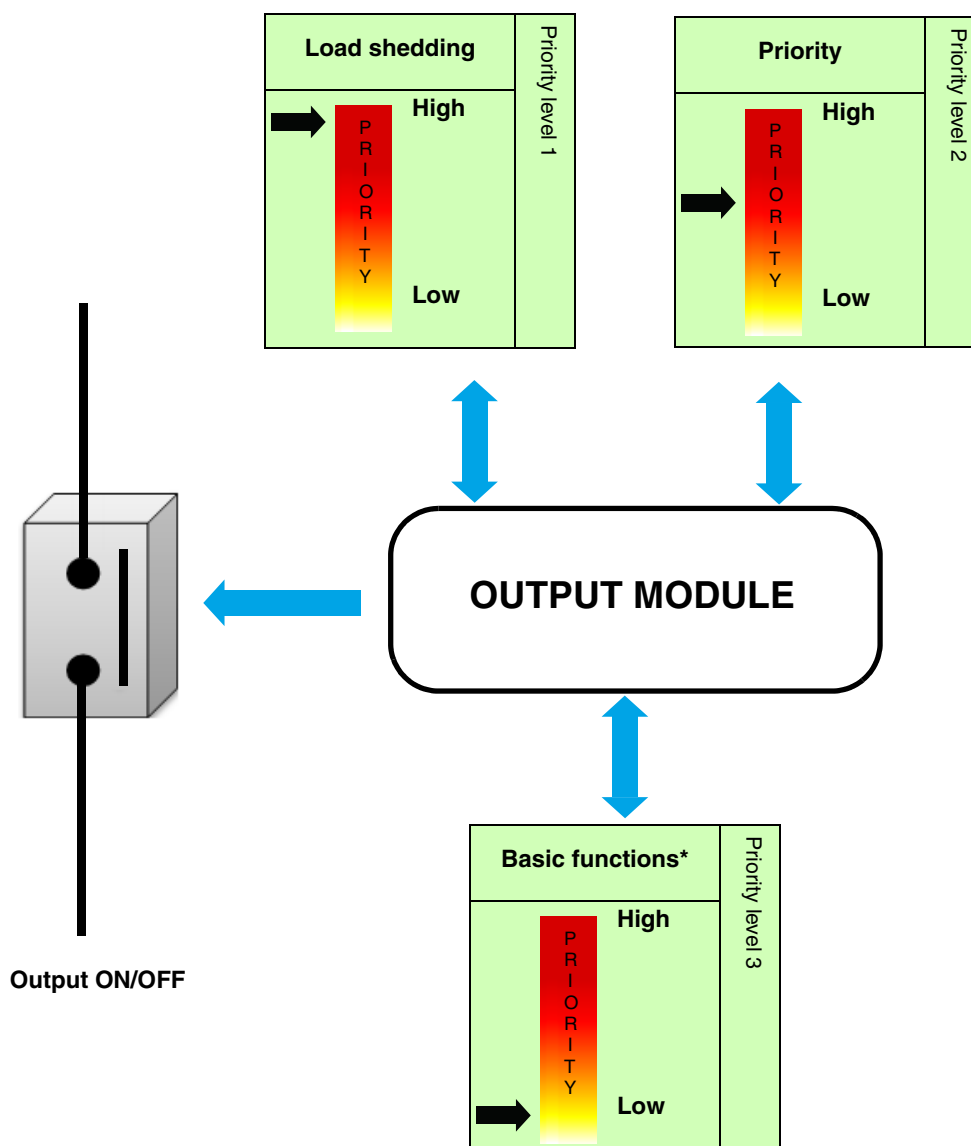
Programming mode is activated, until the physical address is transferred from ETS. Pressing the button again, exits programming mode.

2.1.4 Connection

- TXB601B



2.2 Function modules of the application



* ON/OFF - Timer - Scene: The last command received will have priority.

The applications allow individual configuration of the device outputs.

The most important functions are:

■ ON/OFF

An output can be switched on or off using the ON/OFF function. The command can come from switches, buttons or other control inputs.

■ Timer

The Timer function is used to switch an output on for a programmable period. A programmable Cut-OFF pre-warning announces the end of the delay time by a 1-second inversion of the output status. The timer duration can be modified via the bus KNX.

■ Priority

The Priority function is used to force the output into a defined state. The Priority function is controlled with a 2-bit command.
 Priority: **Load shedding** > **Priority** > Basic function.
 Application: Keeping lighting on for security reasons.

■ Automatic control

The Automatic control function is used to command an output in parallel to the ON/OFF function. The two functions have the same level of priority. The last command received will act on the status of the output.
 An additional command object is used to activate or deactivate the Automatic control.

■ Load shedding

The Load shedding function is used to force an output to OFF. Load shedding is activated by receipt of a 1-byte command.
 Priority: **Load shedding** > Priority > Basic function.
 This command has the highest priority. No other command is taken into account if the mode is active. The status of the output is memorised but not applied. At the end of load shedding, the output is switched to the theoretical status without Load shedding (memorisation).

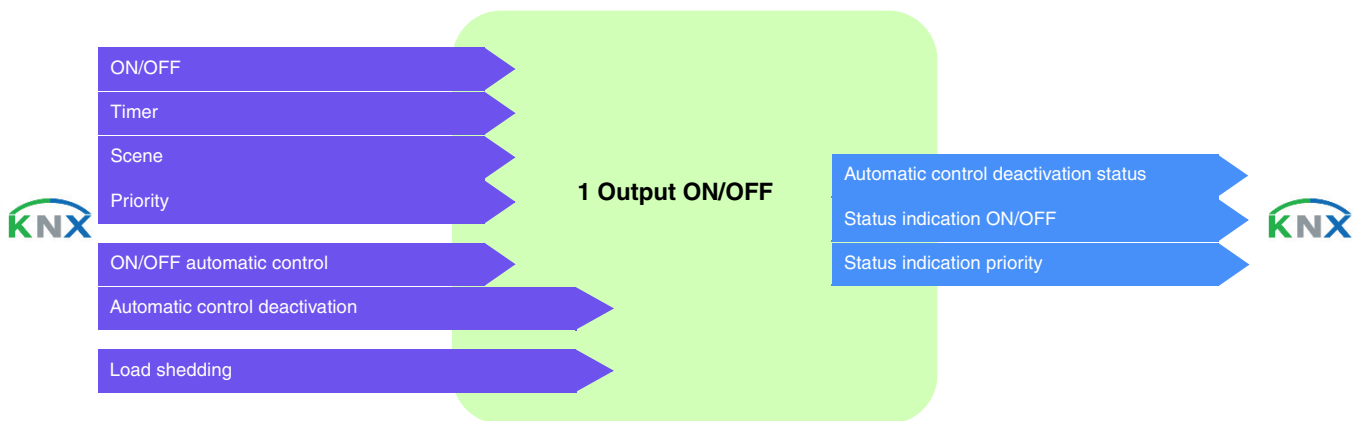
■ Scene

The Scene function is used to switch groups of outputs into a configurable predefined state. Pressing a push button activates a scene.
 A scene is activated by receipt of a 1-byte command.
 Each output can be included in 64 different scenes.

■ Status indication

The Status indication sends the switching status of the individual output contact on the KNX bus.

Communication objects



3. Programming by ETS

The function of the different devices only differs in the number of outputs. For this reason, only one device or one output will ever be described.

3.1 Parameters

3.1.1 Fixed parameters

The fixed parameters define the operating mode of the output relays.

Parameter	Description	Value
Output contact	On receipt of an ON command: The output relay closes.	Normally open
Parameters overwrite at next download (scenes)	The parameter values stored in the device will be overwritten with the ETS configured values at the next download.	Active
Status after ETS download	The output status remains unchanged after ETS download. <i>Note: During ETS-parameters download, the outputs remain unchanged.</i>	Maintain status
Status after bus power cut	The output status remains unchanged during at bus return. <i>Note: The device will reboot on bus return. The priority functions that were present before the bus power cut are no longer active (Load shedding, Priority).</i>	Maintain status
Status after priority	At the end of the priority, the output is: Switched back to the status before priority was activated.	Status before priority

3.1.2 Functions of each switch actuator

3.1.2.1 Timer

The Timer function is used to switch on a lighting circuit for a programmable period. The timer may be interrupted before expiry of the delay time. A programmable Cut-OFF pre-warning announces the end of the delay time by a 1-second inversion of the output status.

Timer

Timer duration

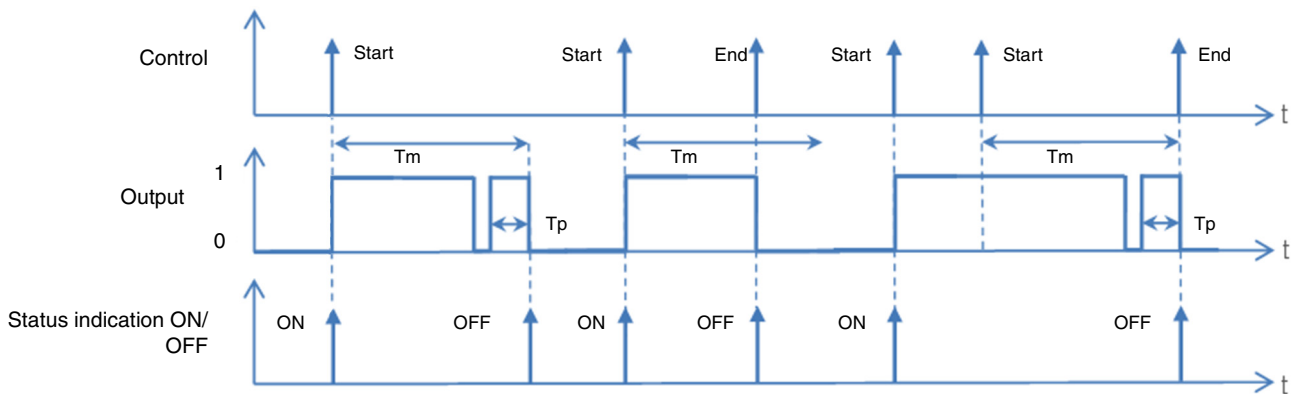
Cut-OFF pre-warning

Parameter	Description	Value
Timer duration	This parameter determines the timer duration.	Not active, 1 s, 2 s, 3 s, 5 s, 10 s, 15 s, 20 s, 30 s, 45 s, 1 min, 1 min 15 s, 1 min 30 s, 2 min* , 2 min 30 s, 3 min, 5 min, 15 min, 20 min, 30 min, 1 h, 2 h, 3 h, 5 h, 12 h, 24 h

* Default value

Parameter	Description	Value
Cut-OFF pre-warning	This parameter determines the lead time of the cut-OFF pre-warning.	Not active, 15 s, 30 s* , 1 min

Operating principle:



T_m : Timer duration
 T_p : Pre-warning lead time

Note: If the lead time of the cut-OFF pre-warning is greater than the duration of the timer, the cut-OFF pre-warning is not triggered.

Communication objects: [2 - Output 1 - Timer \(1 Bit – 1.001 DPT_Switch\)](#)

3.1.2.2 Priority

The Priority function is used to force the output into a defined state.

Priority: Load shedding > **Priority** > Basic function.

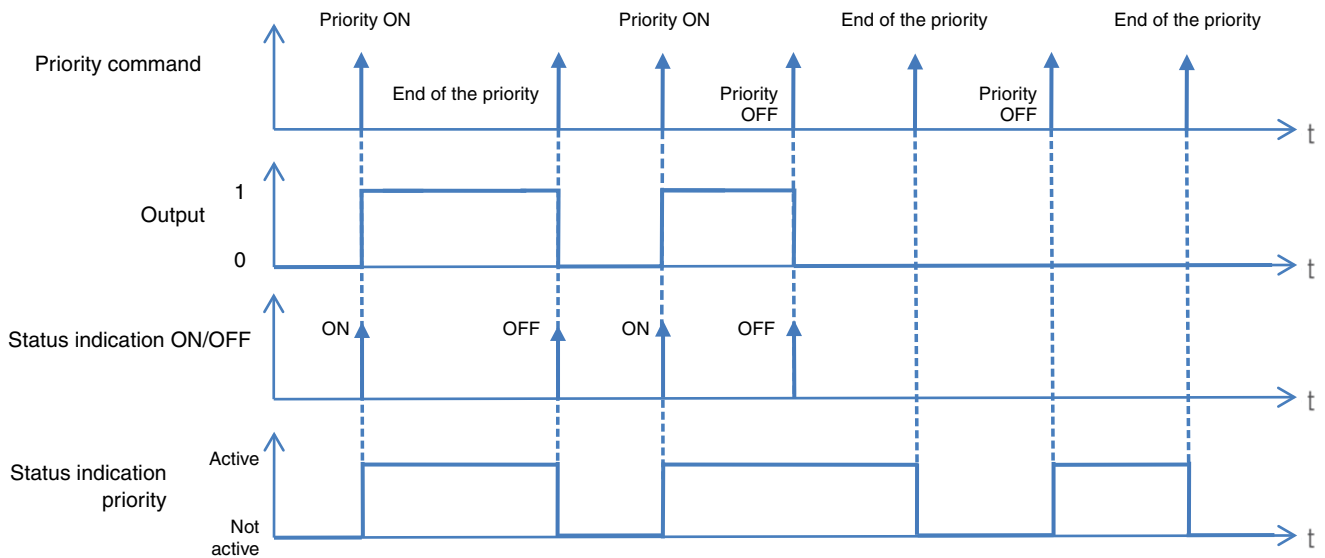
At the end of the priority, the output returns to the status it had before the priority (Memorisation function).

The device responds to telegrams received via the **Priority** object, as given in the following table:

Telegram received by the priority operation object			Output behaviour
Hexadecimal Value	Binary Value		
	Bit 1 (MSB)	Bit 0 (LSB)	
00	0	0	End of the priority
01	0	1	End of the priority
02	1	0	Priority OFF
03	1	1	Priority ON

* Default value

Operating principle:

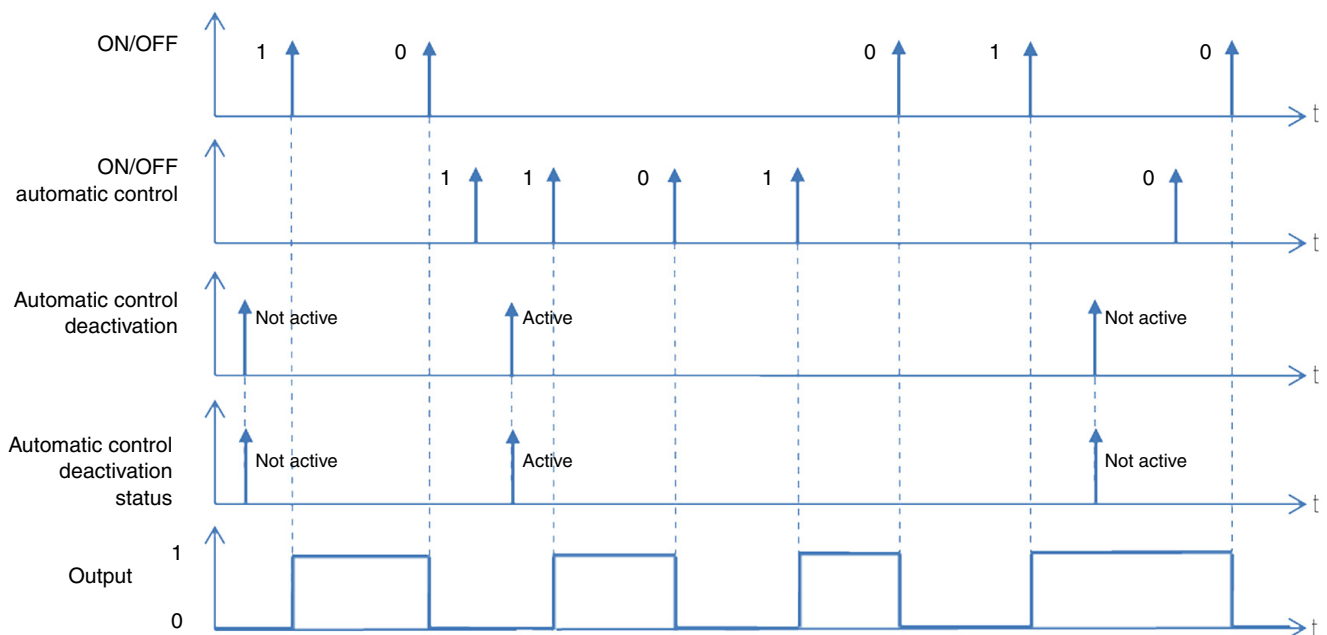


- Communication objects:
- 3 - Output 1 - Priority (2 Bit – 2.002 DPT_Bool_Control)**
 - 4 - Output 1 - Status indication priority (1 Bit – 1.011 DPT_State)**

3.1.2.3 Automatic control

The Automatic control function is used to command an output in parallel to the ON/OFF function. The two functions have the same level of priority. The last command received will act on the status of the output. An additional command object is used to activate or deactivate the Automatic control.

Example: when an output is controlled by a button and in parallel by an automatic control (timer, twilight switch, weather station, etc.) the automatic control can be deactivated for reasons of comfort (vacations, public holidays, etc.).

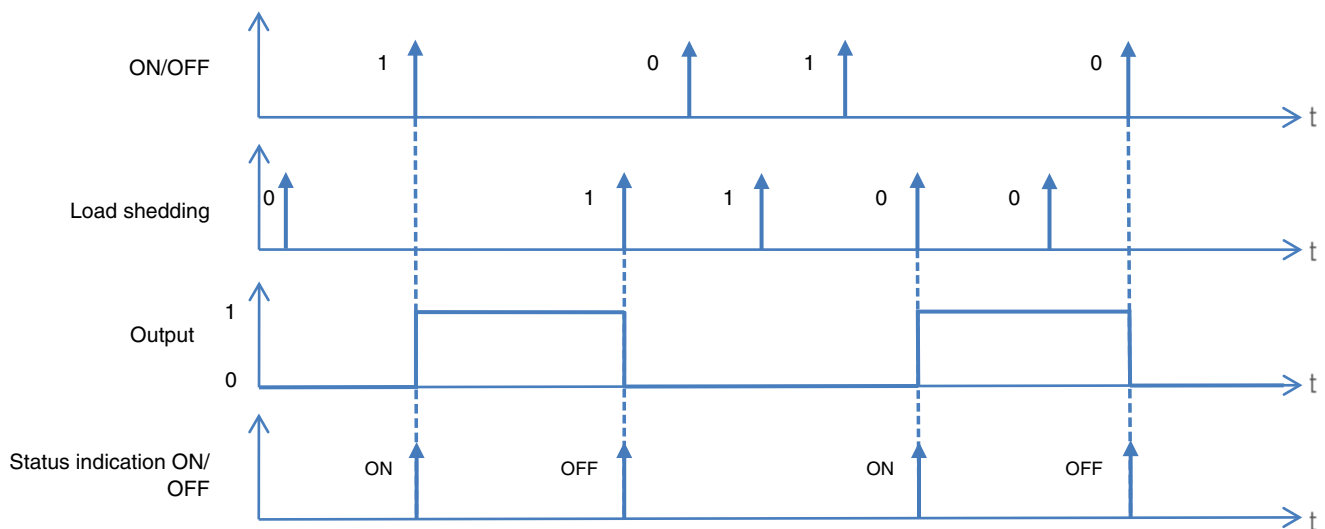


- Communication objects:
- 6 - Output 1 - ON/OFF automatic control** (1 Bit – 1.001 DPT_Switch)
 - 7 - Output 1 - Automatic control deactivation** (1 Bit – 1.001 DPT_Switch)
 - 8 - Output 1 - Automatic control deactivation status** (1 Bit – 1.001 DPT_Switch)

3.1.2.4 Load shedding

The Load shedding function is used to force an output to OFF. Load shedding is activated by receipt of a 1-byte command.
 Priority: **Load shedding** > Priority > Basic function.
 This command has the highest priority. No other command is taken into account if the mode is active. The status of the output is memorised but not applied. At the end of load shedding, the output is switched to the theoretical status without Load shedding (memorisation).

Example: Load shedding function



- Communication objects: **9 - Output 1 - Load shedding** (1 Bit – 1.001 DPT_Switch)

3.1.2.5 Scene

Scene

Number of scenes used

Scene 1

Output status for scene 1 OFF ON

Scene 2

Scene 3

Scene 4

Scene 5

Scene 6

Scene 7

Scene 8

Parameter	Description	Value
Number of scenes used	This parameter determines the number of scenes used.	8* - 16 - 24 - 32 - 48 - 64

Note: If the Scene number received on the Scene object is greater than the maximum number of scenes, the status of the output remains unchanged.

Parameter	Description
Scene x	This parameter is used to activate the scene in question.

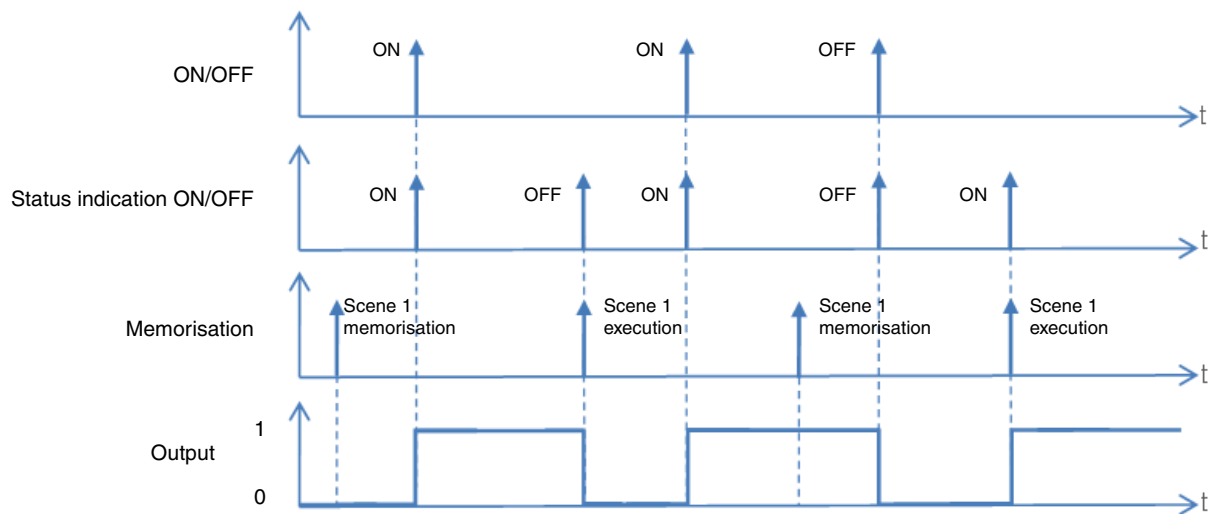
Parameter	Description	Value
Output status for scene x	On activation of Scene x, the output is: Selectively switched on. Selectively switched off.	ON* OFF

x = 1 to 64

Note: Each output has up to 64 scenes available, in accordance with the **Number of scenes used** parameter.

Communication objects: [5 - Output 1 - Scene](#) (1 Byte – 17.001 DPT_SceneNumber)

Operating principle:



* Default value

Learning and storing scenes

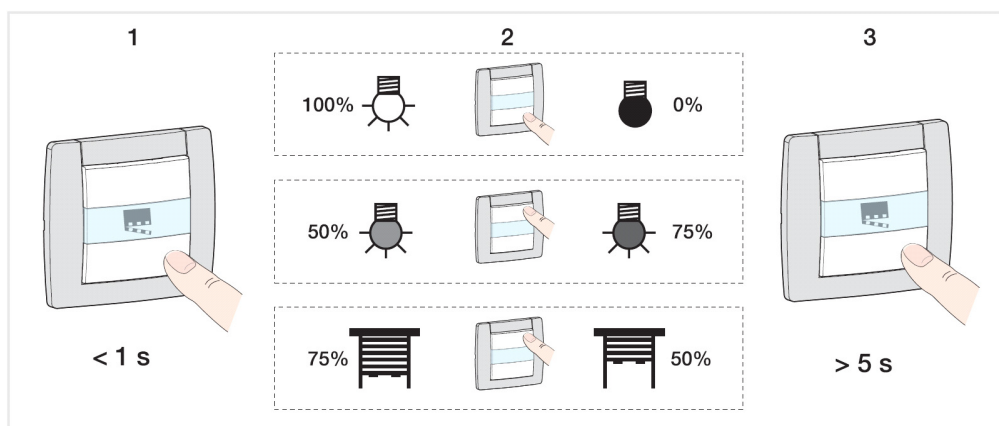
This process is used to change and store a scene. For example, by locally pressing the key in the room or by emission of the values from a visualization.

To access and store scenes, the following values must be sent:

Scene number	Access scene (Object value: 1 byte)	Store scene (Object value: 1 byte)
1-64	= Scene number -1	= Scene number +128
Examples		
1	0	128
2	1	129
3	2	130
...	...	
64	63	191

Here is the scene memorisation for local switches, for example.

- Activate scene by briefly pressing the transmitter that starts it,
- The outputs (lights, shutters, etc.) are set in the desired state using the usual local control devices (buttons, remote control, etc.),
- Memorise the status of the outputs with a press greater than 5 seconds long on the transmitter that starts the scene. The memorisation can be displayed by short-term activation of the outputs.



3.2 Communication objects

	Number	Name	Function of the object	Length	C	R	W	T
	0	Output 1	ON/OFF	1 bit	C	R	W	-
	1	Output 1	Status indication ON/OFF	1 bit	C	R	-	T
	2	Output 1	Timer	1 bit	C	R	W	-
	3	Output 1	Priority	2 bit	C	R	W	-
	4	Output 1	Status indication priority	1 bit	C	R	-	T
	5	Output 1	Scene	1 byte	C	R	W	-
	6	Output 1	ON/OFF automatic control	1 bit	C	R	W	-
	7	Output 1	Automatic control deactivation	1 bit	C	R	W	-
	8	Output 1	Automatic control deactivation status	1 bit	C	R	-	T
	9	Output 1	Load shedding	1 bit	C	R	W	-

3.2.1 ON/OFF

No.	Name	Function of the object	Data type	Flags
0	Output x	ON/OFF	1 bit - 1.001 DPT_Switch	C, R, W

These objects are always activated.
They enable switching of the output contact in accordance with the value that is sent via the KNX bus.

Normally open:

- On input of an OFF command, the output relay contact opens.
- On input of an ON command, the output relay contact closes.

3.2.2 Status indication

No.	Name	Function of the object	Data type	Flags
1	Output x	Status indication ON/OFF	1 bit - 1.001 DPT_Switch	C, R, T

These objects are always activated.
This object allows the status of the output contact to be sent from the device over the KNX bus.

Object value:

- If the output relay is open, a telegram with logic value 0 is sent on the KNX bus.
- If the output relay is closed, a telegram with logic value 1 is sent on the KNX bus.

This object is sent when there is a status change.

3.2.3 Timer

No.	Name	Function of the object	Data type	Flags
2	Output x	Timer	1 bit - 1.010 DPT_Start	C, R, W

This object is activated when the **Timer** parameter is active.
This object is used to activate the Timer function of the device via the KNX bus.

Object value:

- If a rising edge (0 to 1) arrives at this object, the output switches for a configurable period.
- If a falling edge (1 to 0) arrives at this object, the output remains in its current state.

Note: The timer duration can be interrupted by a long press on the button controlling the timer.
Note: When a start command is received during the timer, the timer duration is reset.

For further information, see: [Timer](#).

3.2.4 Priority

No.	Name	Function of the object	Data type	Flags
3	Output x	Priority	2 bit - 2.002 DPT_Bool_Control	C, R, W

This object is activated if the **Priority** parameter is active.
The status of the output contact is determined directly by this object.

Details on the format of the object are given below.

Telegram received by the priority operation object			Output behaviour
Hexadecimal Value	Binary Value		
	Bit 1 (MSB)	Bit 0 (LSB)	
00	0	0	End of the priority
01	0	1	End of the priority
02	1	0	Priority OFF
03	1	1	Priority ON

The first bit of this object (Bit 0) determines the status of the output contact, which should be priority controlled. The second bit activates or deactivates the Priority.

For further information, see: [Priority](#).

No.	Name	Function of the object	Data type	Flags
4	Output x	Status indication priority	1 bit - 1.011 DPT_State	C, R, T
<p>This object is activated if the Priority parameter is active. This object allows the status of the Priority to be sent from the device on the KNX bus.</p> <p>Object value: 0 = Not forced, 1 = Forced:</p> <ul style="list-style-type: none"> - If Priority is deactivated, a telegram is sent with logic value 0. - If Priority is activated, a telegram is sent with logic value 1. <p>This object is sent when there is a status change. For further information, see: Priority.</p>				

3.2.5 Scene

No.	Name	Function of the object	Data type	Flags																
5	Output x	Scene	1 byte - 18.001 DPT_SceneNumber	C, R, W																
<p>This object is activated when the Scene parameter is active. This object is used to recall or save a scene.</p> <p>Details on the format of the object are given below.</p> <table border="1" style="margin-left: 20px;"> <tr> <td style="text-align: center;">7</td> <td style="text-align: center;">6</td> <td style="text-align: center;">5</td> <td style="text-align: center;">4</td> <td style="text-align: center;">3</td> <td style="text-align: center;">2</td> <td style="text-align: center;">1</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="text-align: center;">Learning</td> <td style="text-align: center;">Not used</td> <td colspan="6" style="text-align: center;">Scene number</td> </tr> </table> <p>Bit 7: 0: The scene is called / 1: The scene is saved. Bit 6: Not used. Bit 5 to Bit 0: Scene numbers from 0 (Scene 1) to 63 (Scene 64).</p> <p>For further information, see: Scene.</p>					7	6	5	4	3	2	1	0	Learning	Not used	Scene number					
7	6	5	4	3	2	1	0													
Learning	Not used	Scene number																		

3.2.6 ON/OFF automatic control

No.	Name	Function of the object	Data type	Flags
6	Output x	ON/OFF automatic control	1 bit - 1.001 DPT_Switch	C, R, W
<p>This object is activated when the Automatic control parameter is active. They enable switching of the output contact in accordance with the value that is sent via the KNX bus.</p> <p>Normally open:</p> <ul style="list-style-type: none"> - On input of an OFF command, the output relay contact opens. - On input of an ON command, the output relay contact closes. <p>For further information, see: Automatic control.</p>				

3.2.7 Automatic control deactivation

No.	Name	Function of the object	Data type	Flags
7	Output x	Automatic control deactivation	1 bit - 1.003 DPT_Enable	C, R, W

This object is activated when the **Automatic control deactivation** parameter is active.
This object is used to activate the automatic control function.

Object value:

- If the object receives the value 0, the automatic control function is inactive.
- If the object receives the value 1, the automatic control function is active.

For further information, see: [Automatic control](#).

No.	Name	Function of the object	Data type	Flags
8	Output x	Automatic control deactivation status	1 bit - 1.003 DPT_Enable	C, R, T

This object is activated when the **Automatic control deactivation** parameter is active.
This object is used to send the status of the Automatic control deactivation function of the device on the KNX bus.

Object value:

- If the Automatic control deactivation function is deactivated, a telegram with a logical value 0 is sent.
- If the Automatic control deactivation function is activated, a telegram with a logical value 1 is sent.

This object is sent when there is a status change.
For further information, see: [Automatic control](#).

3.2.8 Load shedding

No.	Name	Function of the object	Data type	Flags
9	Output x	Load shedding	1 bit - 1.002 DPT_Bool	C, R, W

This object is activated when the **Load shedding** parameter is active.
This object is used to force an output to OFF.

Object value:

- If the object receives the value 0, the output remains unchanged.
- If the object receives the value 1, the output is forced to OFF.

For further information, see: [Load shedding](#).

4. Programming by Easy Tool

4.1 Product overview

■ TXB601B: 1 flush mounted output 10A twisted pair

Product view:

The screenshot shows the 'Product' configuration window. On the left, the 'Product' section is expanded, showing the following details:

- Name:** TXB601B - 1 flush mounted output
- Use:** Lighting
- Place:** House
- Electrical tracking:** TXB601B - 1
- Product:** TXB601B (1 flush mounted output)

On the right, the '1 Output' section is visible, showing a single output configuration:

- Output 1:** TXB601B - 1 - 1 (House - Lighting)

View of channels:

0 Input

1 Output	
	TXB601B - 1 - 1 Housing - Lighting

■ Pathway parameters

This parameter window is used to set the device outputs. These parameters are available individually for each output.

The 'Pathway parameters' window for TXB601B - 1 - 1 shows the following settings:

- Timer duration:** 2 min
- Cut-OFF pre-warning:** 30 s

■ Available functionalities: ON/OFF

	ON		Automatic control ON
	OFF		Automatic control OFF
	ON/OFF		ON/OFF automatic control
	Toggle switch		Load shedding
	Timer		Scene
	Priority ON		Scene switch
	Priority OFF		Automatic control deactivation
	Priority ON push-button (1)		Deactivation Automatic control push-button (1)
	Priority OFF push-button (1)		

(1) This function is only available with push-button input products with LEDs indicating status.

Note: Dimming functions can also be linked with ON/OFF outputs. In this case, only the ON/OFF function is used. This procedure enables a same input to be connected to an ON/OFF output and to a dimming output.

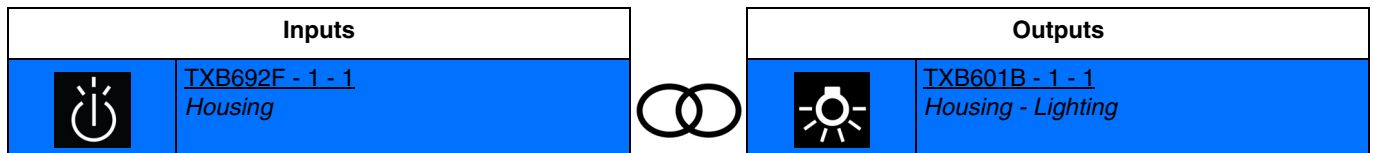
	Increase dimming/ON
	Decrease dimming/OFF
	Increase/decrease dimming

4.2 Product functionalities

4.2.1 ON/OFF

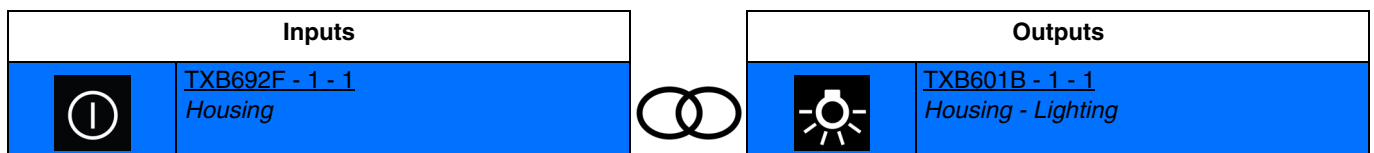
An output can be switched on or off using the ON/OFF function. The command can come from switches, buttons or other control inputs.

- **ON:** turns on the lighting circuit.



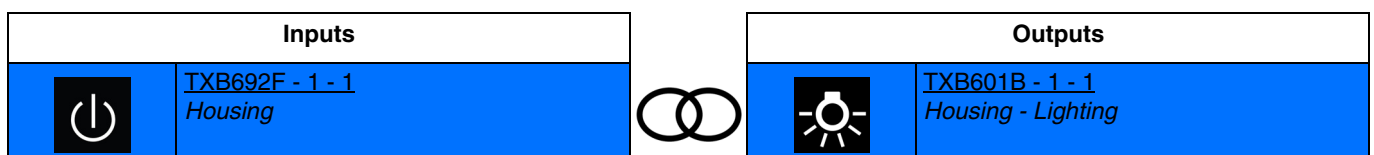
Closing input contact: turn on the light.
Opening input contact: no action.

- **OFF:** turns off the lighting circuit.



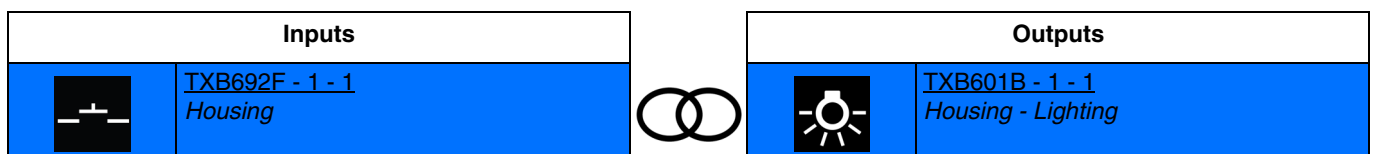
Closing input contact: turns off the light.
Opening input contact: no action.

- **ON/OFF:** turns on or shuts off the lighting circuit (switch).






Closing input contact: turn on the light.
Opening input contact: turns off the light.

- **Toggle switch:** inverses the lighting circuit status.



Closing input contact: switch between turning the lights on and off.
Successive closings inverse output contact status each time.

Note: Dimming functions can also be linked with ON/OFF outputs. In this case, only the ON/OFF function is used. This procedure enables a same input to be connected to an ON/OFF output and to a dimming output.

	Increase dimming/ON
	Decrease dimming/OFF
	Increase/decrease dimming

4.2.2 Timer

The Timer function is used to switch on a lighting circuit for a programmable period. The timer may be interrupted before expiry of the delay time. A programmable Cut-OFF pre-warning announces the end of the delay time by a 1-second inversion of the output status.

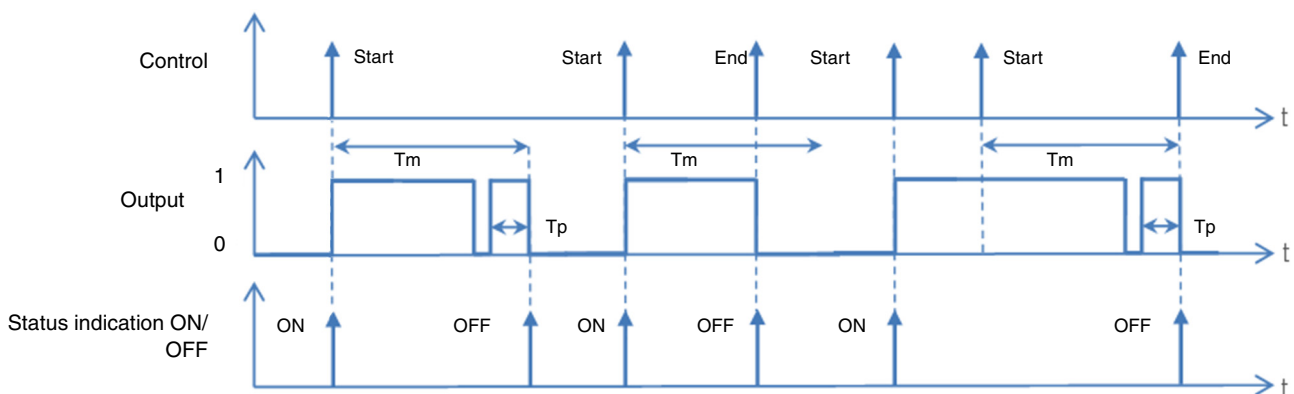
Timer duration 2 min ▾

Cut-OFF pre-warning 30 s ▾

Parameter	Description	Value
Timer duration	This parameter determines the timer duration.	Not active, 1 s, 2 s, 3 s, 5 s, 10 s, 15 s, 20 s, 30 s, 45 s, 1 min, 1 min 15 s, 1 min 30 s, 2 min* , 2 min 30 s, 3 min, 5 min, 15 min, 20 min, 30 min, 1 h, 2 h, 3 h, 5 h, 12 h, 24 h

Parameter	Description	Value
Cut-OFF pre-warning	This parameter determines the lead time of the cut-OFF pre-warning.	Not active, 15 s, 30 s* , 1 min

Operating principle:



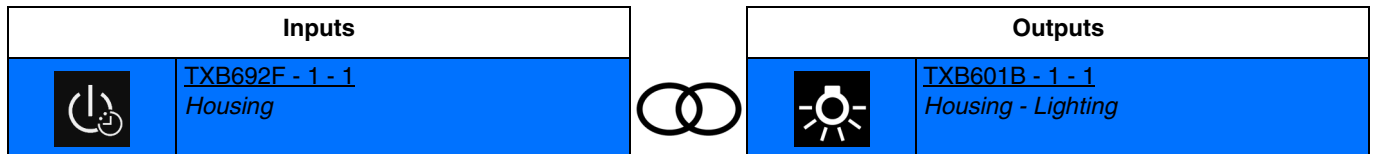
T_m : Timer duration
 T_p : Pre-warning lead time

Note: If the lead time of the cut-OFF pre-warning is greater than the duration of the timer, the cut-OFF pre-warning is not triggered.

* Default value

■ The connection:

The Timer function is used to switch on a lighting circuit for a programmable period.

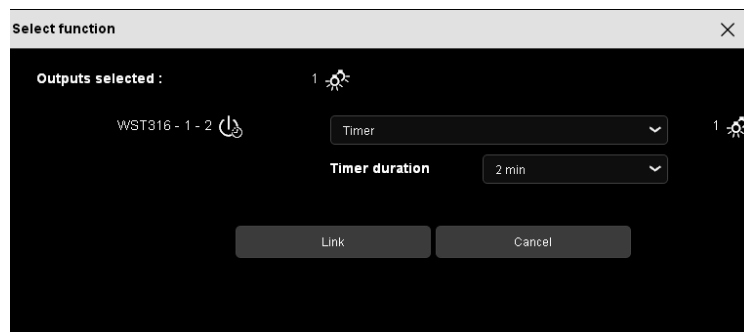


Brief closing of the input contact: timing function light switched on at the last saved level.

Timing function interruption:

Prolonged closing of the input contact: stop of timing delay in progress and light is turned off.

Note: At the time of connection, it is possible to define the timer duration.



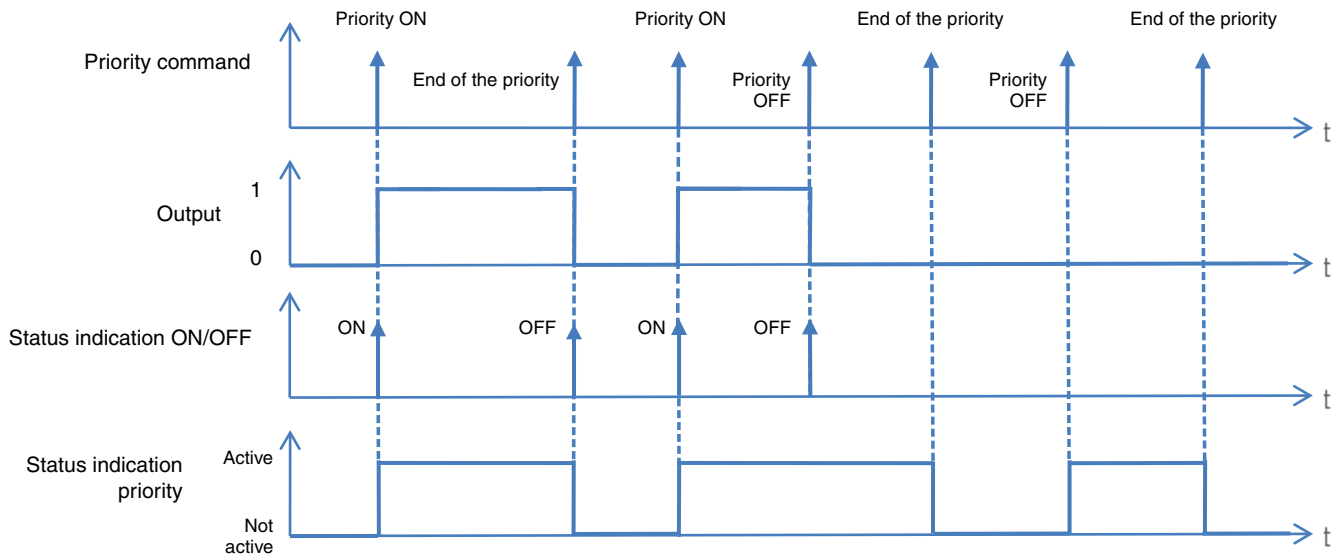
4.2.3 Priority

The Priority function is used to force the output into a defined state.

Priority: Load shedding > **Priority** > Basic function.

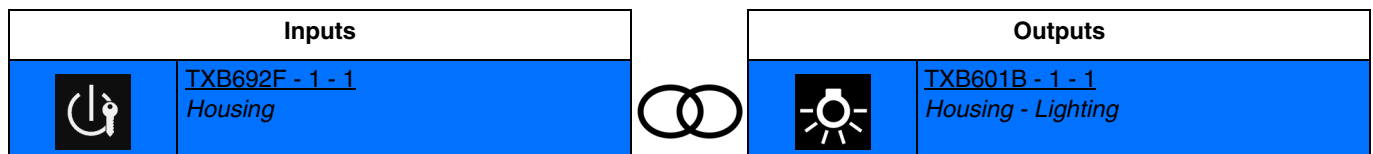
At the end of the priority, the output returns to the status it had before the priority (Memorisation function).

Operating principle:



■ Links

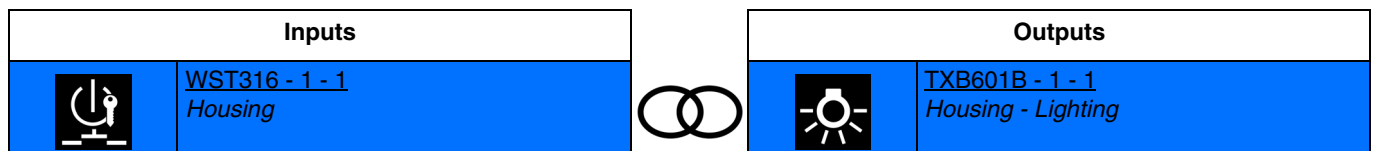
- **Priority ON:** allows forcing and keeping the lighting circuit on.



Closing input contact: turn on the light.

Opening input contact: end of the priority.

- **Priority ON push-button:** allows forcing and keeping the light circuit on using a push-button.



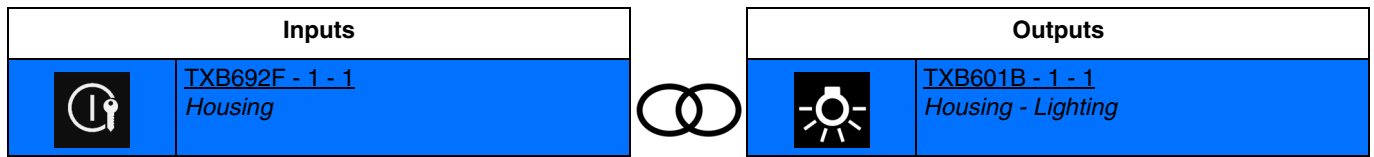
Closing input contact: turn on the light.

Opening input contact: no action.

A second closure of the input contact triggers the end of priority.

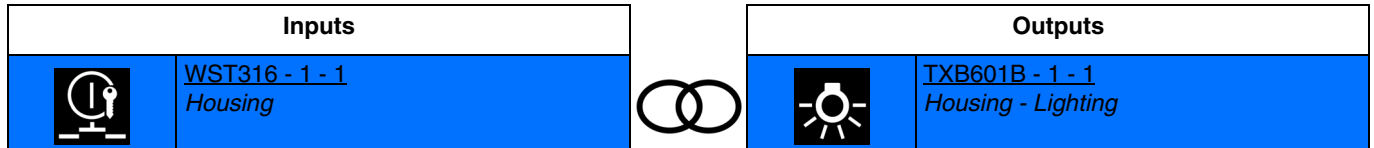
Note: This function is only available with push-button input products with LEDs indicating status.

- **Priority OFF:** allows forcing and keeping the lighting circuit off.



Closing input contact: turns off the light.
 Opening input contact: end of the priority.

- **Priority OFF push-button:** allows forcing and keeping the lighting circuit off using a push-button.



Closing input contact: turns off the light.
 Opening input contact: no action.
 A second closure of the input contact triggers the end of priority.

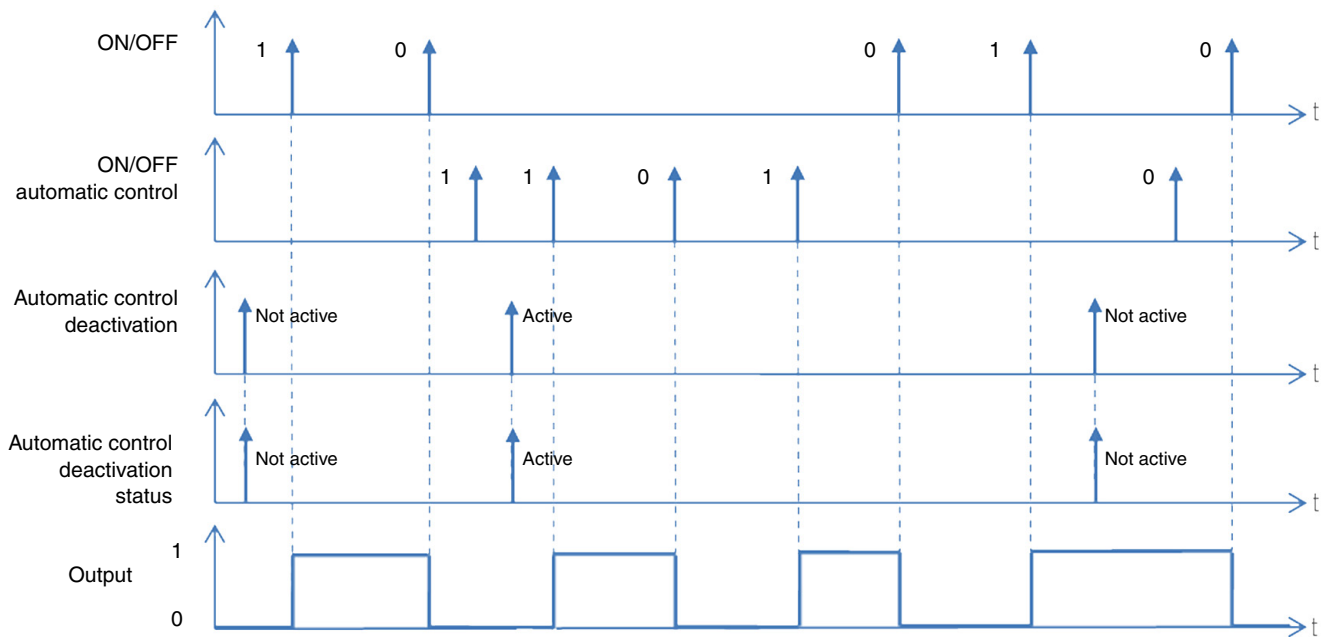
Note: This function is only available with push-button input products with LEDs indicating status.

4.2.4 Automatic control

The Automatic control function is used to command an output in parallel to the ON/OFF function. The two functions have the same level of priority. The last command received will act on the status of the output. An additional command object is used to activate or deactivate the Automatic control.

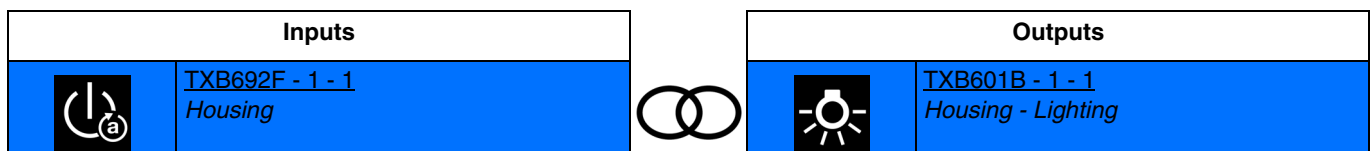
Example: when an output is controlled by a button and in parallel by an automatic control (timer, twilight switch, weather station, etc.) the automatic control can be deactivated for reasons of comfort (vacations, public holidays, etc.).

Operating principle:



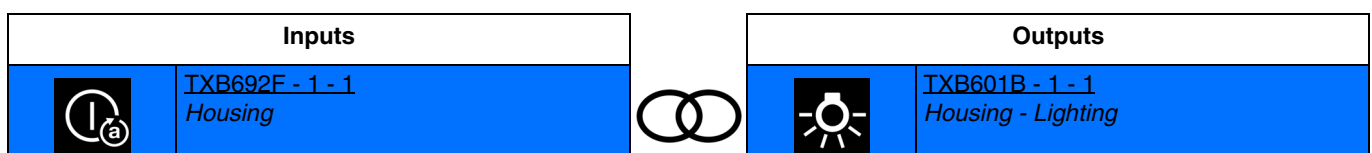
■ Links

- **Automatic control ON:** allows turning on the light circuit using automatic control.



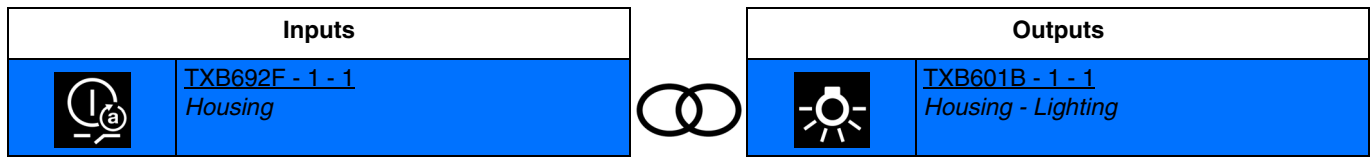
Closing input contact: turn on the light.
Opening input contact: no action.

- **Automatic control OFF:** allows switching off the light circuit using automatic control.



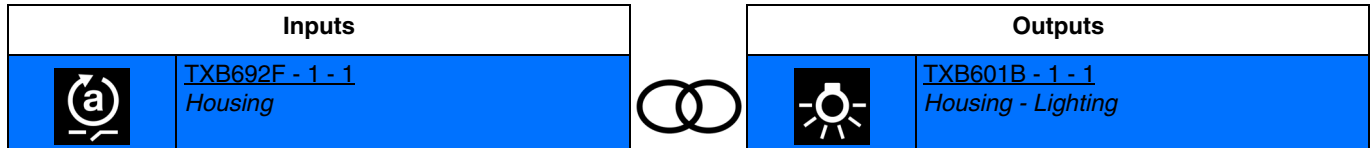
Closing input contact: turns off the light.
Opening input contact: no action.

- **ON/OFF automatic control:** allows turning the lighting circuit on or off using automatic control (switch).



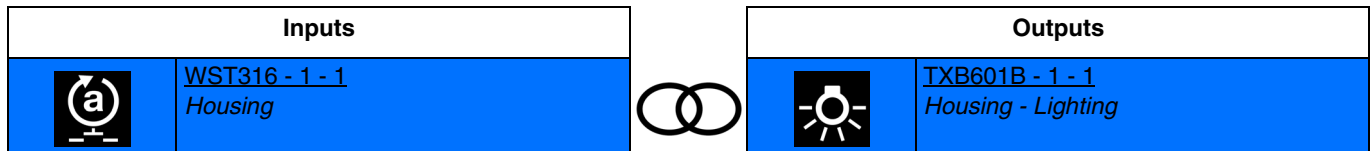
Closing input contact: turns on the light at the last saved level.
Opening input contact: turns off the light.

- **Automatic control deactivation:** deactivates automatic control.



Closing input contact: deactivated automatic control.
Opening input contact: activated automatic control.

- **Deactivation Automatic control push-button:** deactivates automatic control using a push-button.



Closing input contact: deactivated automatic control.
Opening input contact: no action.
A second closing input contact triggers activation of the automatic control.

Note: This function is only available with push-button input products with LEDs indicating status.

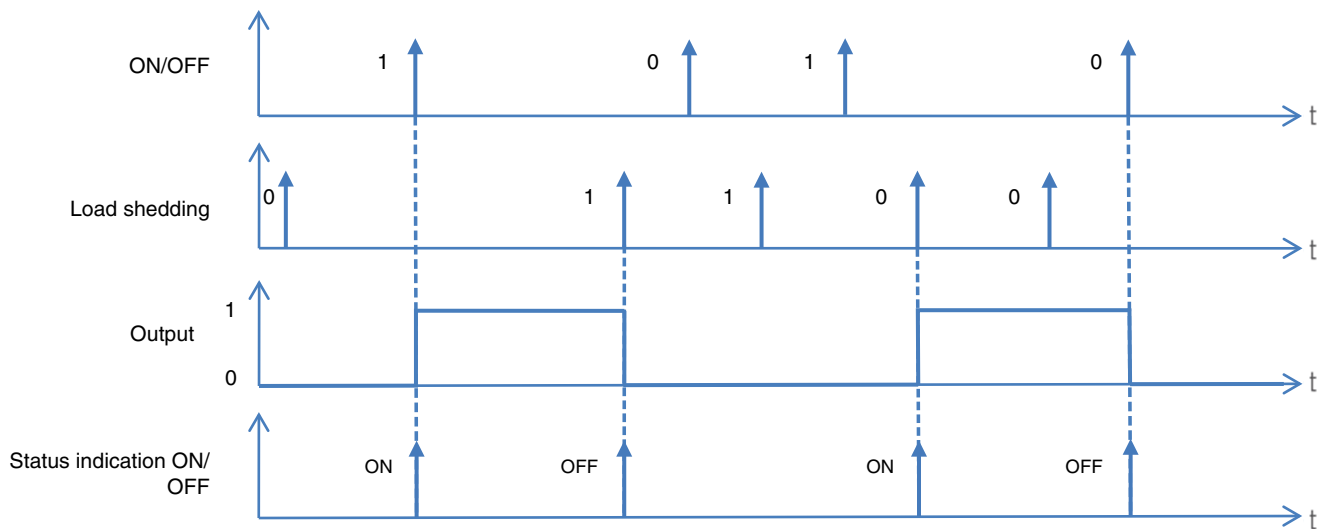
4.2.5 Load shedding

The Load shedding function is used to force an output to OFF.

Priority: **Load shedding** > Priority > Basic function.

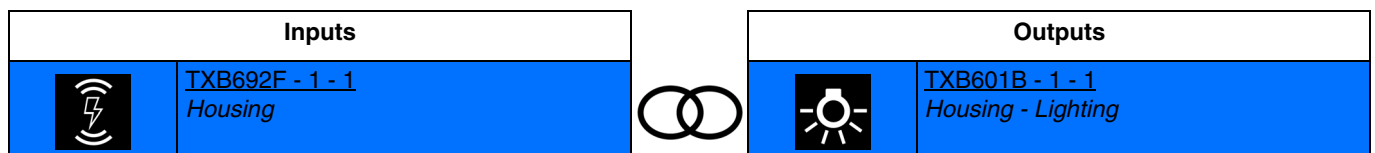
This command has the highest priority. No other command is taken into account if the mode is active. The status of the output is memorised but not applied. At the end of load shedding, the output is switched to the theoretical status without Load shedding (memorisation).

Example: Load shedding function



■ Links

- **Load shedding:** allows forcing an output to off.



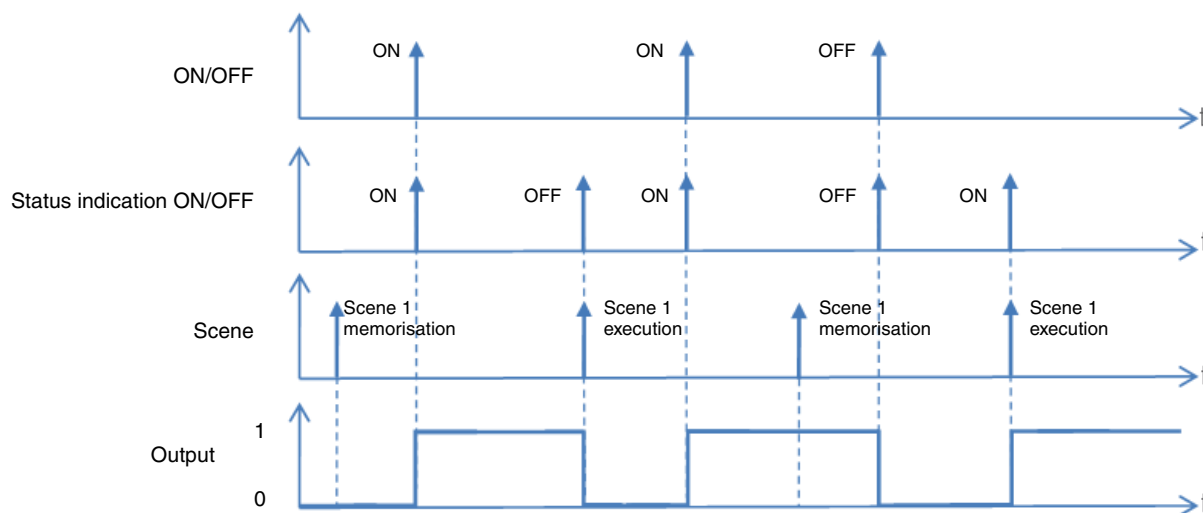
Closing input contact: priority of the output to off.

Opening input contact: return to output status before load shedding (memorisation).

4.2.6 Scene

The Scene function is used to switch groups of outputs into a configurable predefined state. Each output can be included in 8 different scenes.

Operating principle:



Learning and storing scenes

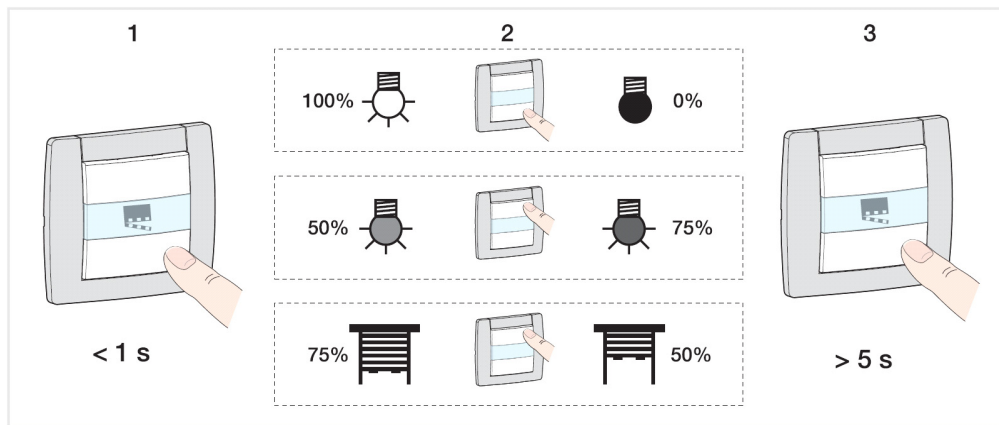
This process is used to change and store a scene. For example, by locally pressing the key in the room or by emission of the values from a visualization.

To access and store scenes, the following values must be sent:

Scene number	Access scene (Object value: 1 byte)	Store scene (Object value: 1 byte)
1-64	= Scene number - 1	= Scene number + 128
Examples		
1	0	128
2	1	129
3	2	130
...	...	
64	63	191

Here is the scene memorisation for local switches, for example.

- Activate scene by briefly pressing the transmitter that starts it,
- The outputs (lights, shutters, etc.) are set in the desired state using the usual local control devices (buttons, remote control, etc.),
- Memorise the status of the outputs with a press greater than 5 seconds long on the transmitter that starts the scene. The memorisation can be displayed by short-term activation of the outputs.



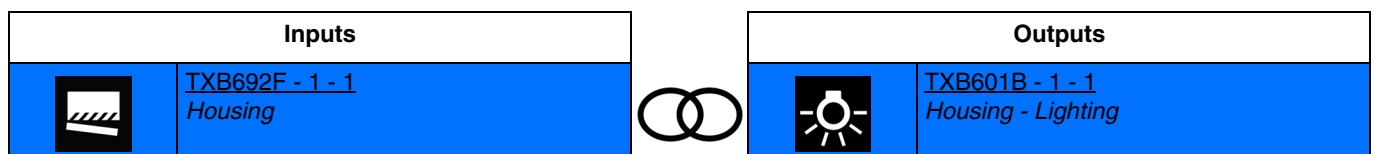
Product learning and memorisation

This procedure allows modifying a scene using a local action on the push buttons located on the front side of the product.

- Activate the scene using a short press on the ambiance push button, which triggers the scene,
- Set the product to manual mode and set the outputs to the desired status by pressing the push-buttons associated with the outputs,
- Return to Auto mode,
- Save the scene using a long push for more than 5 seconds on the push-button that triggers the scene,
- Memorisation is signalled by the inversion of the concerned output status for 3 sec.

■ Links

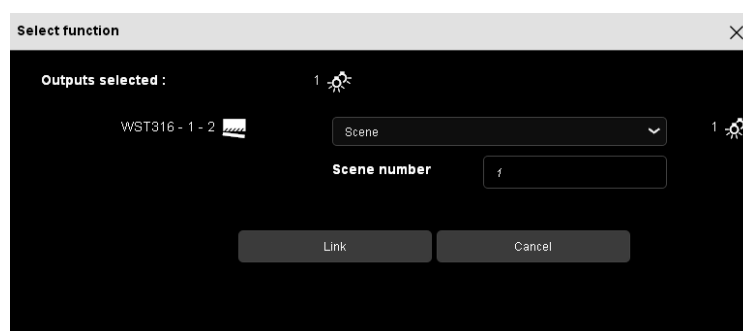
- **Scene:** the scene is activated by pressing the push-button.



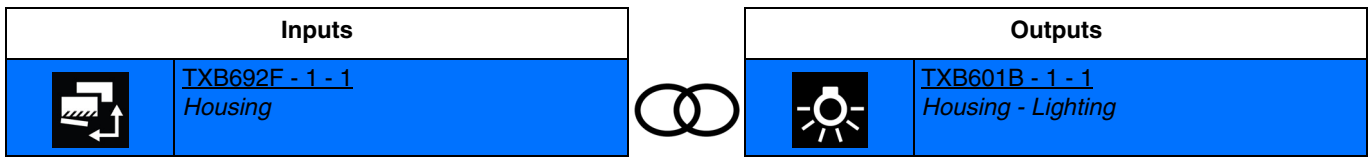
Closing input contact: scene activation.

Opening input contact: no action.

Note: At the time the connection is made, the scene number must be defined for the closing input contact.

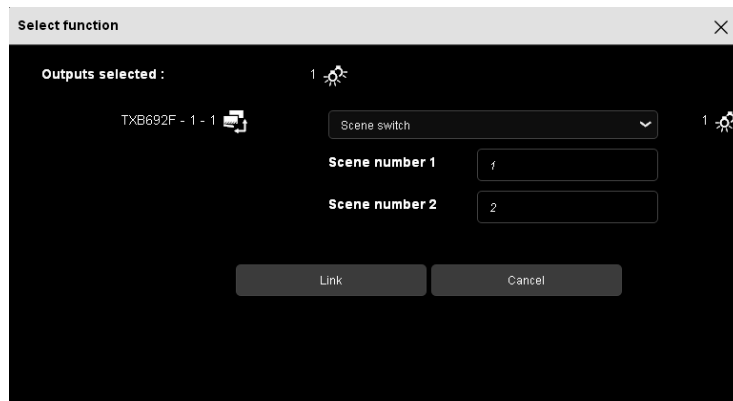


- **Scene switch:** the scene is activated according to the closing or opening input contact.



Closing input contact: scene activation 1.
 Opening input contact: scene activation 2.

Note: At the time the connection is made, the scene number must be defined for the closing and opening input contact.



5. Appendix

5.1 Specifications

5.1.1 - TXB601B

Supply voltage KNX	21...32 V DC TBTS
Breaking capacity	μ 10 A AC1 230 V~
Switching current at $\cos \Phi = 0.8$ max.	10 A
Minimum switching current	10 mA
Operating altitude max.	2000 m
Degree of contamination	2
Surge voltage	4 kV
Degree of protection of housing	IP20
Impact protection	IK 04
Overvoltage class	III
Ambient temperature	-5 °C ... +45 °C
Storage/transport temperature	-20 °C ... +70 °C
Maximum switching cycle rate at full load	
switching cycle/minute	20
Connection capacity	0,75 mm ² ... 2,5 mm ²
Standards	EN 50491-3 ; EN 60669-2-1
Dimensions	44 x 43 x 22,5 mm
Own consumption on the KNX bus:	
typical	7 mA
in standby	5 mA
Incandescent lamps	600 W
Halogen lamps	600 W
Conventional transformer	600 VA
Electronic transformer	600 W
Fluorescent lamps	
--without ballast	600 W
--with EVG	6 x 58 W
Energy-saving lamps	5 x 15 W
LED lamps	5 x 15 W

5.2 Characteristics

Device	TXB601B
Max. number of group addresses	254
Max. number of allocations	255
Objects	10

5.3 Index of objects

ON/OFF	14
Status indication ON/OFF	14
Timer.....	15
Priority.....	15
Status indication priority.....	16
Scene.....	16
ON/OFF automatic control	16
Automatic control deactivation	17
Automatic control deactivation status	17
Load shedding	17

