





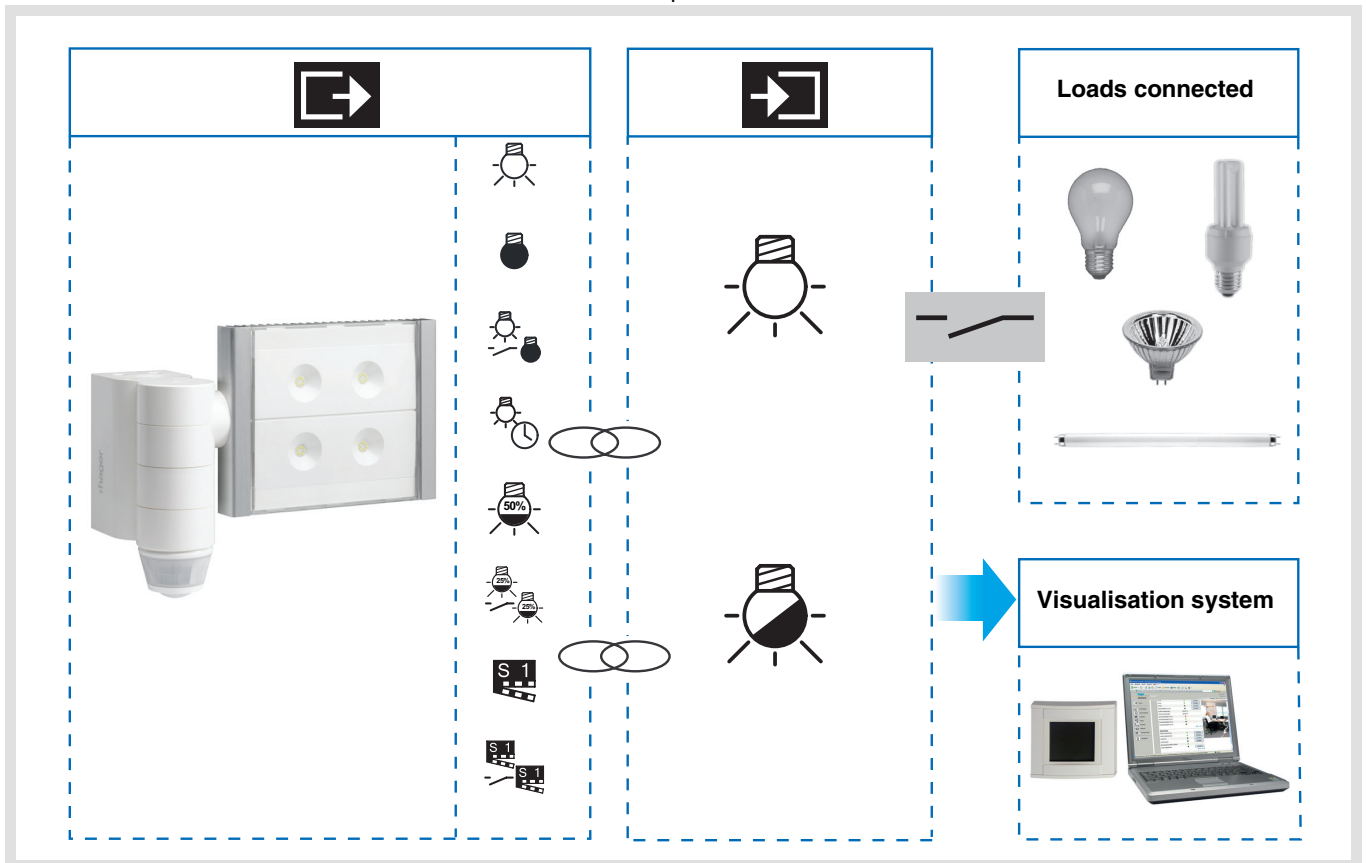
## Tebis TX100 Configurator



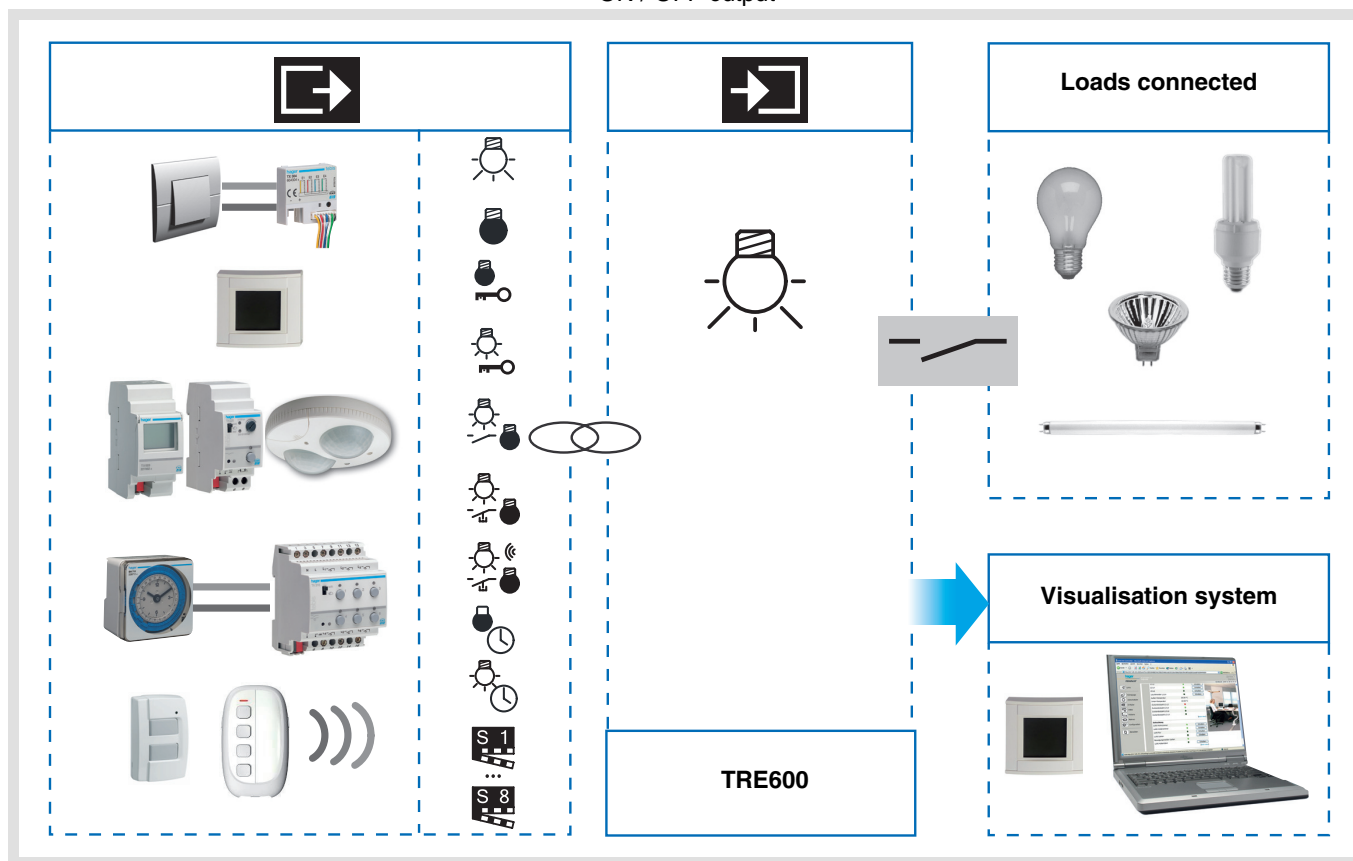
LED projector with quicklink<sup>®</sup> radio infrared detector  
*Electrical / Mechanical characteristics: see product user's instructions*

	Product reference	Product designation	TX100 version	TP device  RF device 
	TRE600	LED projector with infrared detector	≥ 2.7.0	

### Inputs



ON / OFF output





## Summary

1. Presentation.....	3
1.1 General points .....	3
1.2 Function Description.....	3
1.2.1 Inputs .....	3
1.2.2 Outputs.....	4
2. Configuration and settings .....	5
2.1 Configuration .....	5
2.2 On / Off Lighting functions.....	6
2.3 Dimmer Lighting functions.....	7
2.4 Scene Functions.....	8
2.5 Configuration of a Slave link.....	9
3. "+ info" and "expert" mode of the TX100 .....	10
3.1 Mode + Info .....	10
3.2 Expert mode .....	10
4. Restore Factory Configuration function .....	12
4.1 Factory reset using the TX100 .....	12
4.2 Factory reset on the product.....	12
5. Characteristics .....	12

# 1. Presentation

## 1.1 General points

All radio transmitters referred to in this document are radio quicklink  products. They can be recognised by the configuration **cfg** push button with which they are all equipped. Quicklink  indicates the configuration without tools mode.

These products can also be configured in E mode by the USB configurer or in S mode by ETS via the media coupler.

In this case, the version of the TR131 must fulfill the following characteristics:

- Firmware:  $\geq 1.2.5$
- Plug-in:  $\geq 1.0.11$

This document describes the configuration principle with the TX100 tool and the functions available in this mode.

Within the same installation, a single configuration mode may be used.

**To reuse with TX100, a product that has already been programmed in another installation whatever the initial configuration (quicklink , TX100 or ETS), it is necessary to carry out a factory reset on the device.**

## 1.2 Function Description

### 1.2.1 Inputs

The main functions are the following:

#### ■ Movement detector and light measurement device

The radio detector senses the infrared radiation from the heat emitted by bodies in motion. It makes it possible to send commands for lighting, and scenes in case movement is detected (people present).

A potentiometer makes it possible to limit the sensitivity of the detection so that it can be adapted to the environment. The light level can be set by a potentiometer located on the product.

#### ■ Lighting channel

The lighting channel makes it possible to control a charge in case movement is detected, when the ambient light is below an adjustable threshold.

#### ■ Lighting time delay

A setting potentiometer located on the product enables the turn off time to be set. The light turns off after the time delay for turning off if no movement has been detected.

#### ■ Slave Configuration

This mode enables the detection zone to be turned off by association one or more slave detectors with a master product. The master product manages the light level.

#### ■ Scene and Scene Presence / Absence functions

The Scene function sends group controls to different kinds of outputs to create ambiances or scenarios (scenario with movement present, scenario without, etc.). The Scene Presence / Absence function enables one scene to be activated when movement is present and another scene when there is no movement present.

#### ■ Master / Slave function

This mode enables the detection zone to be turned off by association one or more slave detectors with a master product. Two different relations are possible for this purpose:

- Master: The detector operates in its own detection zone according to presence and the level of light,
- Slave: The detector operates in its own detection zone according to presence and transmits the presence information to a master.

## 1.2.2 Outputs

The application software allows you to configure individually the outputs.

The main functions are the following:

### ■ ON / OFF

The ON / OFF function is used to switch a lighting circuit ON or OFF. The command may come from switches, pushbuttons or automatic controls.

### ■ Status indication

The Status indication function displays the status of the output contact. It allows a Toggle function to be created by sending the status indication to each push button of the group.

### ■ Timer

The Timer function is used to switch a lighting circuit ON or OFF for an adjustable time. Depending on the operation mode selected, the output may be delayed for ON or OFF switching. The timer can be interrupted before the end of the time delay.

### ■ Priority

The Priority function allows overriding an output to a definite status, ON or OFF. This command has the highest priority. No other command is taken into account if a priority is active. Only a priority end command re-enables the other commands.

Application: maintaining lighting ON for safety reasons.

### ■ Scene

The Scene function groups a set of outputs. These outputs can be set to an adjustable predefined status. Pressing a push button activates a scene. Each output can be integrated in 8 different scenes.

## 2. Configuration and settings

### ■ General points

The infrared detector sends radio commands to carry out the following functions:


- Lighting control:
  - ON, OFF, ON / OFF, Timer,
  - Dimming to a predefined level: 25%, 50%, 75%, 100%,
  - Switching between 2 configurable dimming levels.
- Scene controls:
  - Switching between 2 configurable scenes.

### 2.1 Configuration

These functions are available in the TX100's Standard configuration mode by creating links with the appropriate output devices. For normal operation, the radio transmitters operate in a one-direction mode. Configuration takes place in bi-directional mode.

#### ■ Configuration principle

Before starting configuration, set the brightness potentiometer to the half-way point. Normal or slave mode is selected during numbering by a differentiated action on the Lux potentiometer.

Turn the potentiometer to position . At the next IR detection, the number appears with the Slave function.

Turn the potentiometer to the **auto / test** position. At the next IR detection, the number appears in normal mode.

To switch from one mode to another, perform a factory reset on the product. (see chapter 4 factory reset)



#### → Activating configuration mode

- Go to Prog mode and do a long key-press on the  button of TX100 to launch the products tutorial for the installation.

#### → To number the radio inputs:

- Go to the Num numbering menu → Inputs → ✓ ,
- Press on the input key to be numbered. A beep will sound when the input is detected, the configurer will automatically allocate a number to it,
- Proceed the same way for the other inputs.

#### → To allocate a function to an input key:

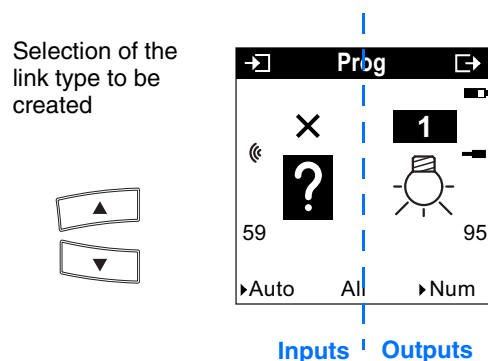
- Go to the Num numbering menu,
- Select the number of the input key required,
- Press ,
- Select the function and validate using .

## 2.2 On / Off Lighting functions

The ON / OFF Lighting functions command the ON / OFF Lighting outputs symbolized by the icon on the right part of the display.

Refer to the configuration instructions of the various lighting output products for the installation and configuration of these products.

After numbering, the functions and the links appear on the left side of the screen of the TX100.



The symbol indicates that it is a radio input. To select the functions, switch to the numbering mode.

The table here after shows all type of links compatible with the product:

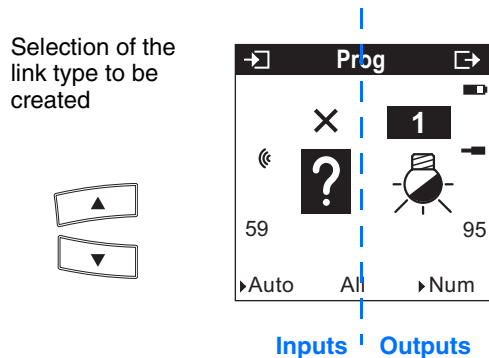
Possible link type		Link description	Output operation
	ON	The ON function switches the lighting circuit ON.	A valid movement detection causes the output contact to close.*
	OFF	The OFF function switches the lighting circuit OFF.	A valid movement detection causes the output contact to open.*
	Switch ON / OFF	The Switch function switches the lighting circuit ON or OFF.	A valid movement detection causes the output contact to close.* Each valid detection restarts the turn-off time delay.* At the end of the time delay, if no movement has been detected, the output contact opens.
	Timer ON	The Timer ON function switches the lighting circuit ON for an adjustable time. Select the time delay after confirming the link: Setting range [0 s - 24 h] 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: 1 min	A valid movement detection causes the timed closing of the output contact.* At the end of the timer's time delay, the contact opens. Setting the turn-off time delay on the detector is not included.

\* Detection of valid movement: movement detected and ambient light below the threshold.

## 2.3 Dimmer Lighting functions

The dimmer Lighting functions command the dimmer Lighting output symbolized by the icon on the right part of the display. Refer to the configuration manuals for the various dimmer Lighting output devices for information on installing and configuring these devices.


After numbering the push buttons, the functions and the links available appear in the left-hand part of the TX100 screen.



The symbol indicates that it is a radio input. To select the functions, switch to the numbering mode.

The table here after shows all type of links compatible with the product:

Possible link type		Link description	Output operation
	ON	The ON function switches the lighting circuit ON.	Press on the push button → the light switches ON at the last level stored  Pressing repeatedly keeps the light on the last level stored.
	OFF	The OFF function switches the lighting circuit OFF.	Press on the push button → Switching OFF the light at 0%  Pressing repeatedly keeps the light off.
	Level 25%	Turning on the light to 25%.	A valid movement detection causes the light to turn on to 25%.*
	Level 50%	Turning on the light to 50%.	A valid movement detection causes the light to turn on to 50%.*
	Level 75%	Turning on the light to 75%.	A valid movement detection causes the light to turn on to 75%.*
	Level 100%	Turning on the light to 100%.	A valid movement detection causes the light to turn on to 100%.*
	Level x% / Level y%	Enables switching between 2 configurable dimming levels. 1st Dimming and 2nd Dimming Values: 0% to 100% in 10% steps. Default value: 0%.	A valid movement detection causes the light to turn on to x%.*  Each valid detection restarts the turn-off time delay.  At the end of the time delay, if no movement has been detected, the light changes to level y%.
	Switch	The Switch function switches the lighting circuit ON or OFF.	A valid movement detection causes the light to turn on at the last memorised level.*  Each valid detection restarts the turn-off time delay.  At the end of the time delay, if no movement has been detected, the light is turned off to 0%.

Possible link type	Link description	Output operation
 Timer ON	<p>The Timer ON function switches the lighting circuit ON for an adjustable time.</p> <p>Select the time delay after confirming the link: Setting range [0 s - 24 h]</p> <p>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.</p> <p>Default value: 1 min.</p>	<p>A valid movement detection causes the light to turn on at the last memorised level.*</p> <p>At the end of the timer's time delay, the light turns off to 0%.</p> <p>Setting the turn-off time delay on the detector is not included.</p>

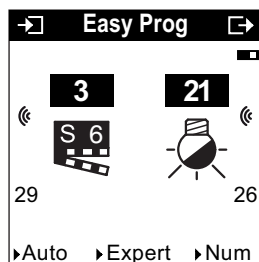
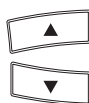
\* Detection of valid movement: movement detected and ambient light below the threshold.



## 2.4 Scene Functions

### ■ Link creation

When selecting a Scene function (number 1 to 8), it is possible to create links between a radio detector and outputs to be included in the scene.

Selection of the link type to be created



Possible link type	Link description	Output operation
 Scene 1 to 8	<p>The Scene function groups a set of outputs. These outputs can be set to an adjustable predefined status. Pressing a push button activates a scene. Each output may be integrated into 8 different scenes.</p>	<p>A valid movement detection causes the scene to activate.* The status of each output can be defined:</p> <ul style="list-style-type: none"> <li>• By parameterising the actuators or regulators,</li> <li>• Via learning, with the push buttons on the installation or on the front of certain devices.</li> </ul>
 Scene x to Scene y	<p>Enables switching between 2 scenes.</p> <p>Selection for the 1st scene and the 2nd scene: Scene 1 to 8.</p>	<p>A valid movement detection causes the scene to activate x.*</p> <p>Each valid detection restarts the turn-off time delay. At the end of the time delay, if no movement has been detected, the detector will activate the scene y.</p>

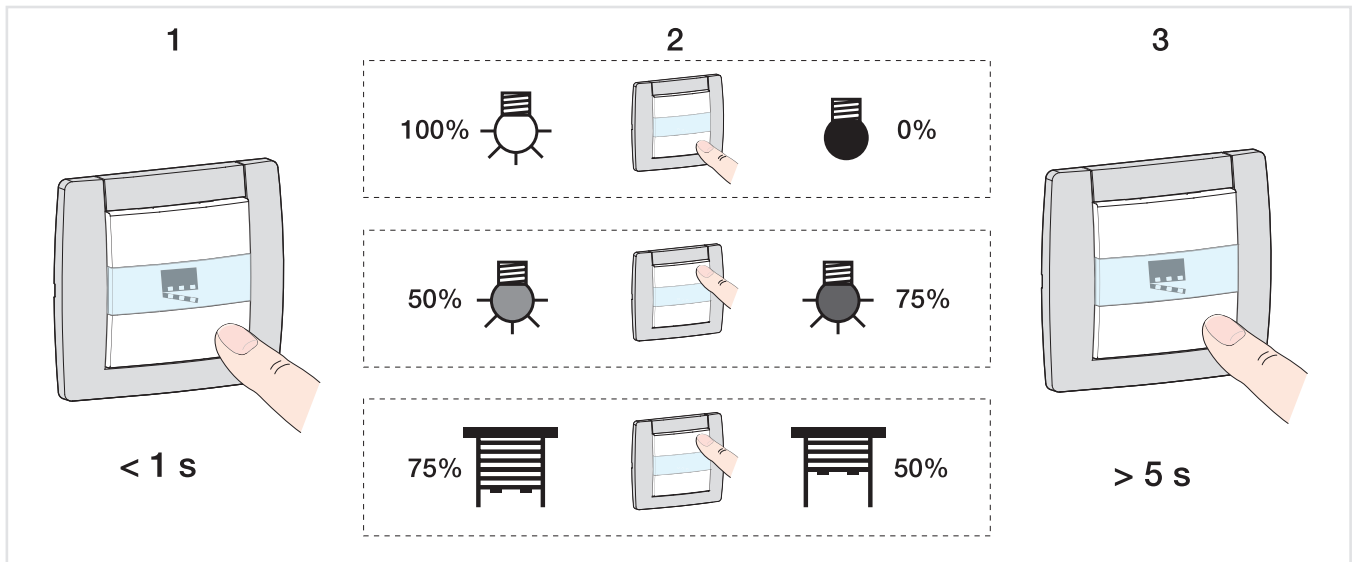
\* Detection of valid movement: movement detected and ambient light below the threshold.



## ■ Learning and memorisation of scenes

This procedure enables a scene to be modified and memorised by locally using the push buttons in the room, on a remote control RF.

- Activate the scene with a short key-press on the transmitter that launches the scene,
- Put the outputs (Lighting, Shutters, Thermostat, etc.) into the desired status using the usual local controls (push button, remote control, etc.),
- Memorise the status of the inputs with a long key-press greater than 5s on the transmitter that launches the scene. The memorisation is indicated by the momentary activation of the outputs.

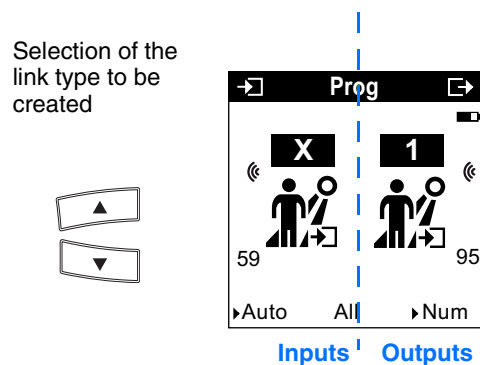


## 2.5 Configuration of a Slave link

This function enables a link to be established between a master detector and a slave detector.

During numbering turn the potentiometer to position ☀. At the next IR detection, the number appears with the Slave function.

The master detector is represented by the icon on the right of the screen and the slave detector by the icon on the left of the screen:



The creation of a link enables the master detector and the slave detector to be connected.

### 3. "+ info" and "expert" mode of the TX100

#### 3.1 Mode + Info

The mode +Info can be accessed in the Prog and Visu modes of the TX100. This display mode is active for the installation products until it is deactivated.



The +Info mode allows the status indication to be linked from an output to a viewing product: Area controller, LED output, etc. The status indication sends the current status over the network each time the status changes.

The status indication is represented by the symbol .

The status indication adds itself to the list of inputs on the left of the TX100 screen with the same number as the output.

#### 3.2 Expert mode

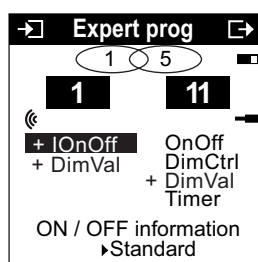
##### ■ General points

To set a program in Expert mode, it is necessary to have some basic knowledge in KNX (for example, software ETS).

The Expert mode allows:

- Non-configurable KNX products to be integrated by ETS (viewing tool, Internet gateway, domovea) in the installation,
- Specific links, not available in the Standard configuration mode, to be created.

In Expert mode, the functions are displayed through the communication objects used in the configuration ETS mode. The objects appear as a list located under the input and output numbers.



The Expert mode allows links to be established between objects with the same format by giving them the same group address.

■ List of the available objects

**On / Off and Dimmer Lighting controls**

Designation TX100	Designation ETS	Function	Format	Description
OnOff	On/Off	ON / OFF	EIS1 1 bit	Allows an ON / OFF command to be transmitted.
IOnOff	InfoOn/Off	ON / OFF information	EIS1 1 bit	Indicates the output's status.
Dimval	DimmingValue	Dimming command	1 byte	Enables the output level of a dimmer to be set to a defined value.
Timer	TimedStartstop	Timer	EIS1 1 bit	Allows you to activate or interrupt the timer.

**Scene**

Designation TX100	Designation ETS	Function	Format	Description
Scene	SceneNumber	Scene	1 byte	Activates the scene by its number.

**Output**


Designation TX100	Function	Format	Description
OnOff	ON / OFF	1 bit	The <b>OnOff</b> object enables the output to be switched.
Timer	Timer	1 bit	The <b>Timer</b> object enables a timer to be activated or stopped.
Forced	Priority	2 bit	The <b>Forced</b> object enables an output to be forced.
Scene	Scene	1 byte	The <b>Scene</b> object enables a scene to be activated or memorised.
IOnOff	Status indication ON / OFF	1 bit	The <b>IOnOff</b> object enables the status of the output to be sent each time the status changes.

## 4. Restore Factory Configuration function

This function enables the product to be returned to its initial configuration (factory reset). After a device reset, the device can be re-used in a new installation. The factory reset can be performed either directly on the device or via the Product Management / Factory Reset menu of TX100. The latter solution is recommended if the product is part of the installation configured by TX100.

### 4.1 Factory reset using the TX100

The device belongs to the installation: it appears in the Reset menu's list of devices that can be reset to Factory configuration.

- Select the product in the list,
- Press  and confirm the erasing.


After a device reset, the installation must be learnt again in order to relocate the devices reset to Factory configuration.

### 4.2 Factory reset on the product

The factory reset can be performed on the product, if the data of the TX100 project has been lost or if the product is not part of the installation.

Factory reset on the product:

- Press and hold the "Cfg" button (> 10 seconds), release the button as soon as the "Cfg" LED starts to flash,
- Wait for the "Cfg" LED to go out, indicating that the factory reset is complete.

**To reuse with TX100, a product that has already been programmed in another installation whatever the initial configuration (quicklink , TX100 or ETS), it is necessary to carry out a factory reset on the device.**

## 5. Characteristics

Max. number of group addresses	84
Max. number of links	95

