



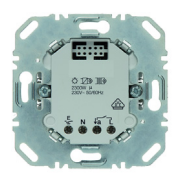



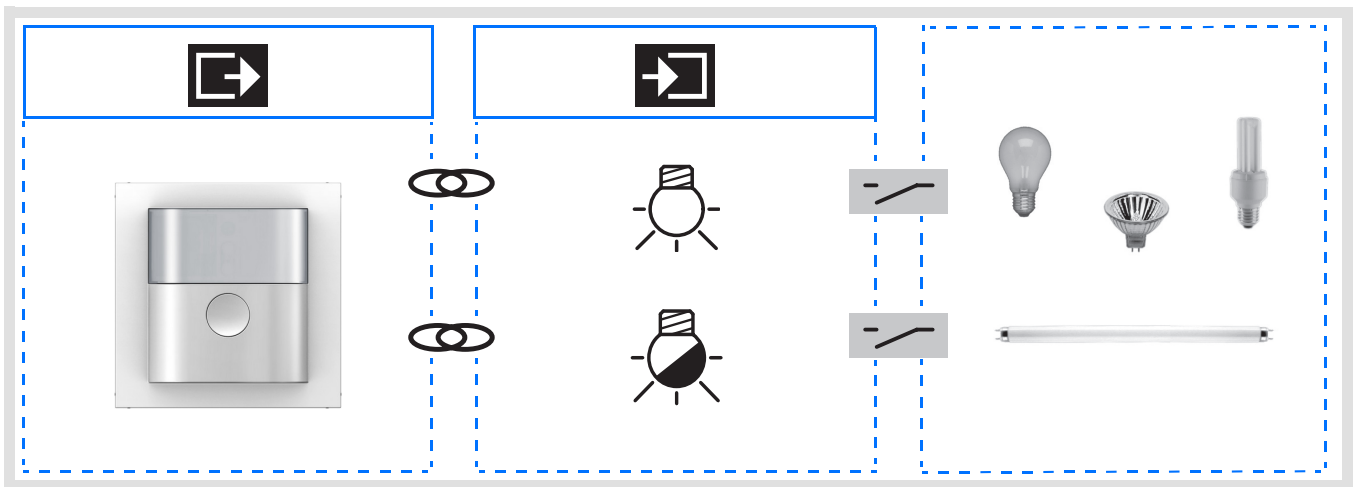
## Tebis TX100 Configurator



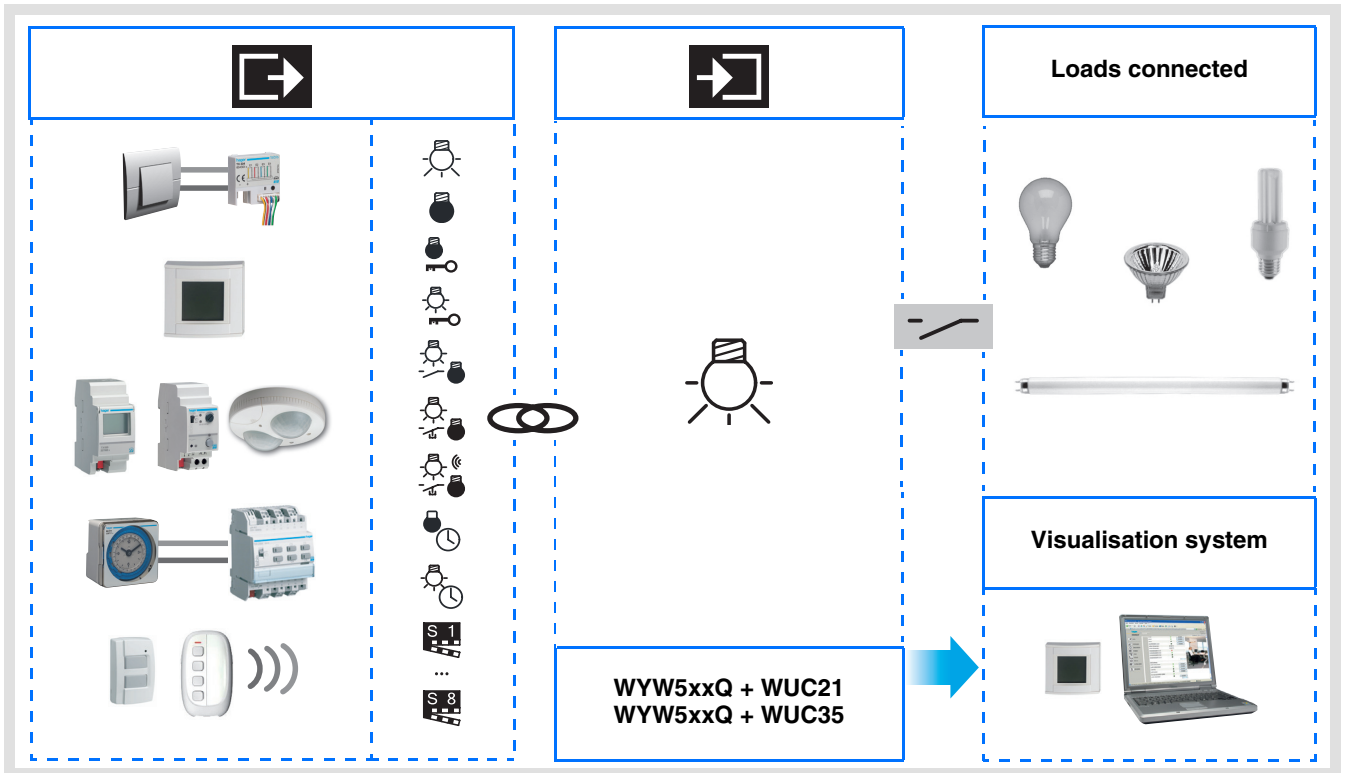
Input products / ON / OFF output / RF dimmer  
 Electrical / Mechanical characteristics: see product user manual

|   | Product reference                         | Product designation   | TX100 version | TP device <br>RF device  |
|---|---|---|---------------|--|
|  | WYW5xxQ                                   | <b>Control module</b><br>Motion detector RF   | ≥ 2.7.0       |   |
|  | WUC35<br>WUC21<br>WUD86<br>WUD87<br>WUC18 | <b>Power module</b><br>1 changeover output<br>1 changeover output<br>1 dimmer output<br>1 dimmer output<br>Power supply |               |   |

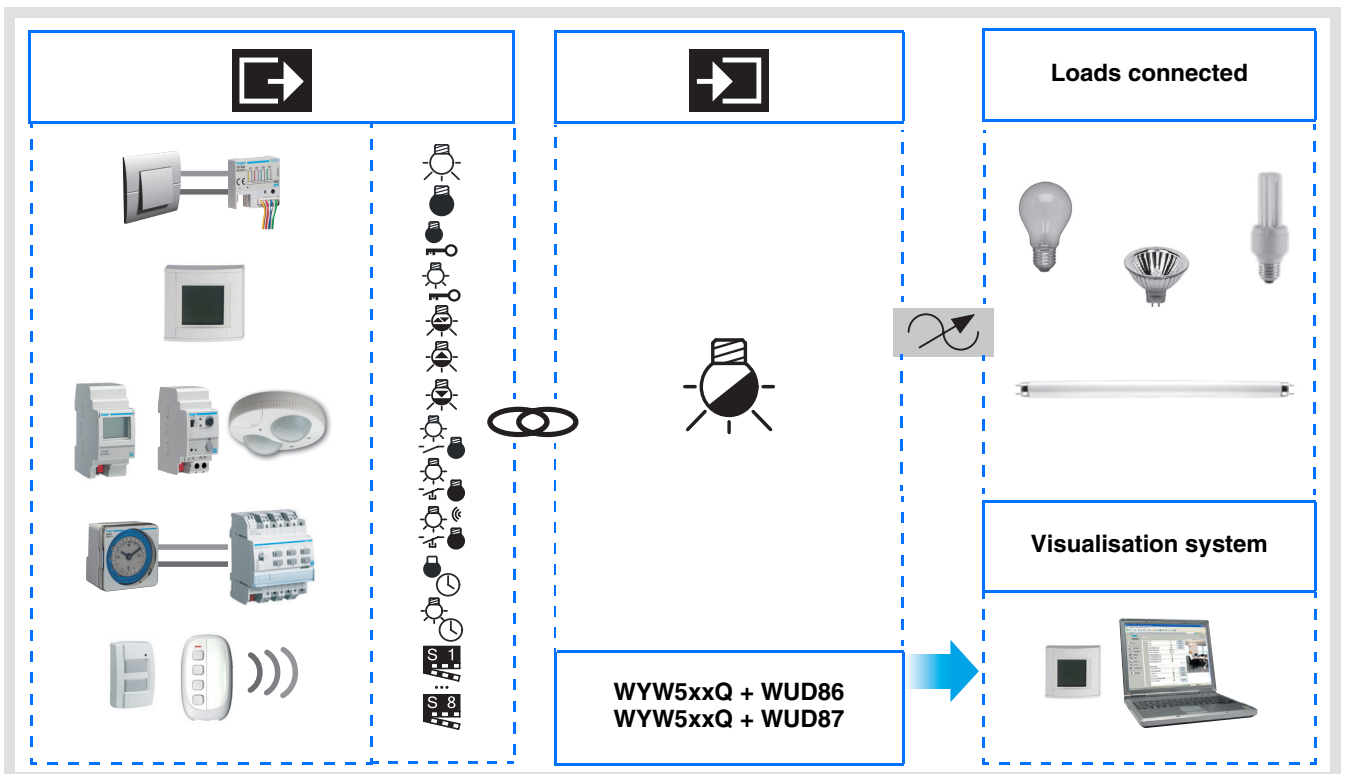
### Inputs



ON / OFF output



Dimming output



## Summary

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# 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:

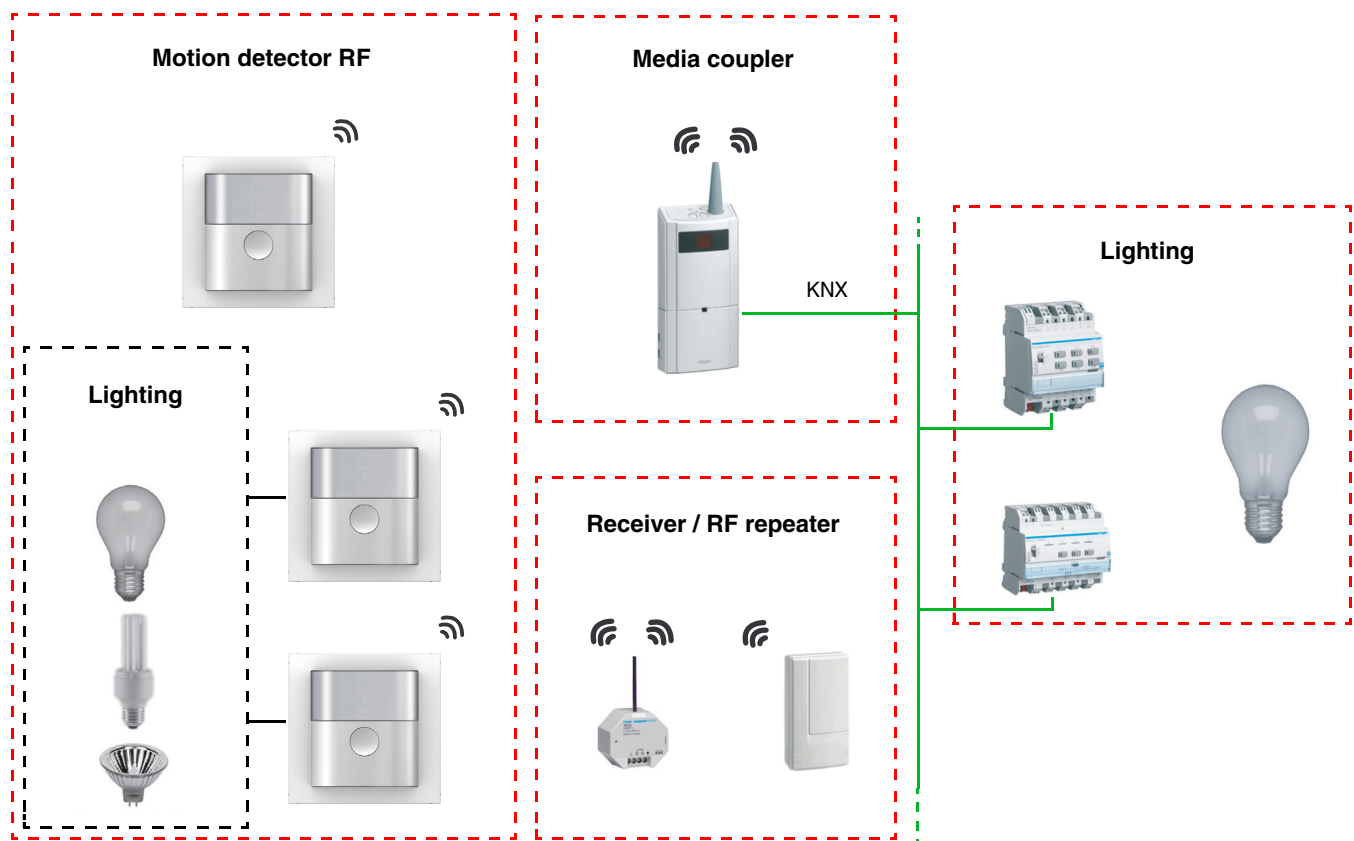
- Firmware:  $\geq 1.2.5$
- Plug-in:  $\geq 1.0.11$

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.

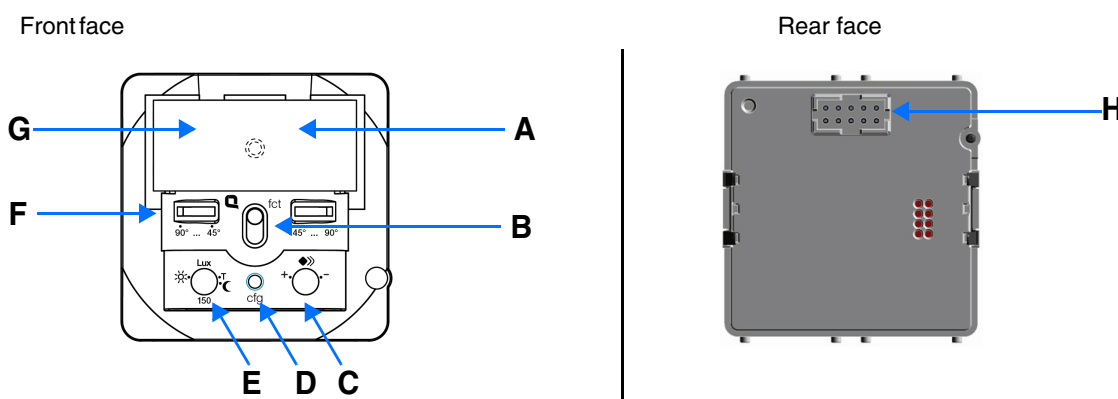
**To reuse with TX100, a product that has already been programmed in another installation whatever the initial configuration (quicklink , TX100 or ETS), it is necessary to carry out a factory reset on the device.**

## 1.2 General outline



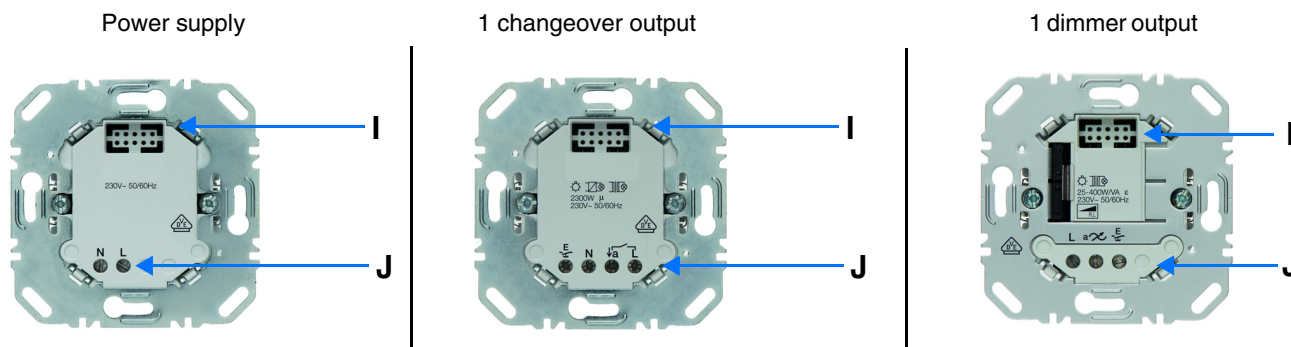
## 1.3 Description of the product

- Control module



- A: Function LED
- B: Button
- C: Sensitivity
- D: Button and LED configuration
- E: Brightness threshold
- F: Adjustment of the detection angle
- G: Light guide for the brightness cell
- H: Connector

- Power module



- I: Connector
- J: Connection terminal block

## 1.4 Compatibility between the control module and the power module

The table below shows the possible interconnections between the modules:

| Control module      | WYW5xxQ                                   |
|---------------------|---|
| <b>Power module</b> |   |
| WUC35<br>WUC21      | Motion detector RF<br>1 changeover output |
| WUD86<br>WUD87      | Motion detector RF<br>1 dimmer output     |
| WUC18               | Motion detector RF                        |

## 1.5 Function Description

### 1.5.1 Inputs

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

#### ■ Emission of commands

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

### 1.5.2 ON / OFF output

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.

### 1.5.3 Dimming output

The main functions of the dimming lighting application are as follows:

#### ■ Function ON / OFF

The ON / OFF function is used to switch a lighting circuit ON or OFF.

ON: switching on at the last level memorised.

OFF: switching OFF.

The control can come from push buttons.

#### ■ Dimming

The dimming enables the level of lighting to be increased or decreased progressively by a long key-press on the push button.

#### ■ 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.

#### ■ Priority

The Priority function enables the output to be forced to 100% 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.

#### ■ Status indication

The Status indication function displays the status of the output contact.

## 2. Configuration and settings

### 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

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 automaticallu allocate a number to it,
- Proceed the same way for the other inputs.

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

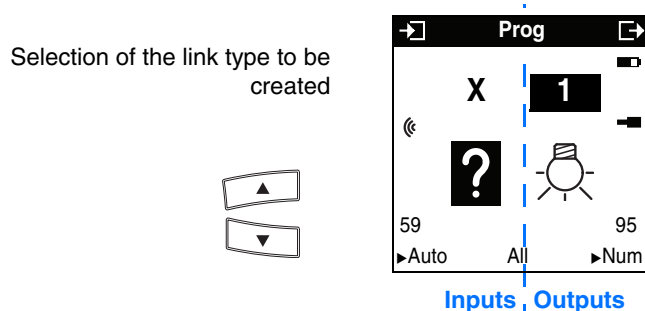
- Go to the Num numbering menu,
- Select the number of the input key required,
- Press ,
- Select the function and validate using .

### 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   | The Switch function switches the lighting circuit ON or OFF.  | <p>A valid movement detection causes the output contact to close.*</p> <p>Each valid detection restarts the turn-off time delay.*</p> <p>At the end of the time delay, if no movement has been detected, the output contact opens.</p> |
|  | 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:<br/>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 timed closing of the output contact.*</p> <p>At the end of the timer's time delay, the contact opens.</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.

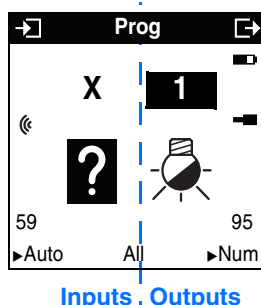
## 2.3 Dimmer Lighting functions

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.


Selection of the link type to be created



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.  | The activation of the input causes the light at the last memorised level to turn on.<br>Successive activations keep the light at the last memorised level on.  |
|                    | OFF                 | The OFF function switches the lighting circuit OFF.  | The activation of the input causes the light to be turned off to 0%.<br>Successive activations will keep 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% | Toogle between two levels of adjustable dimming x% and y%.<br>Each value can be adjusted: 0% to 100% in 10% steps.<br>The dimming value is defined on the TX100 after validation of the link.<br>Default value: 0% | A valid movement detection causes the light to turn on to x%.*<br>Each valid detection restarts the turn-off time delay.<br>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.*<br>Each valid detection restarts the turn-off time delay.<br>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  |
|---|---|---|
|  <p>Timer ON</p> | <p>The Timer ON function switches the lighting circuit ON for an adjustable time.</p> <p>Select the time delay after confirming the link:<br/>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>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> |

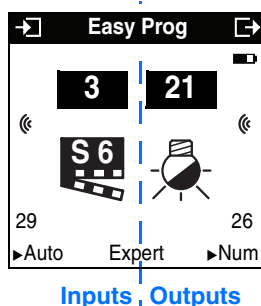
\* Detection of valid movement: movement detected and ambient light below the threshold.

## 2.4 Scene Functions

### ■ Link creation

It is possible to create links between a push-button and the outputs which are to be part of the scene by selecting a Scene function (number 1 to 8).

Selection of the link type to be created



Inputs , Outputs

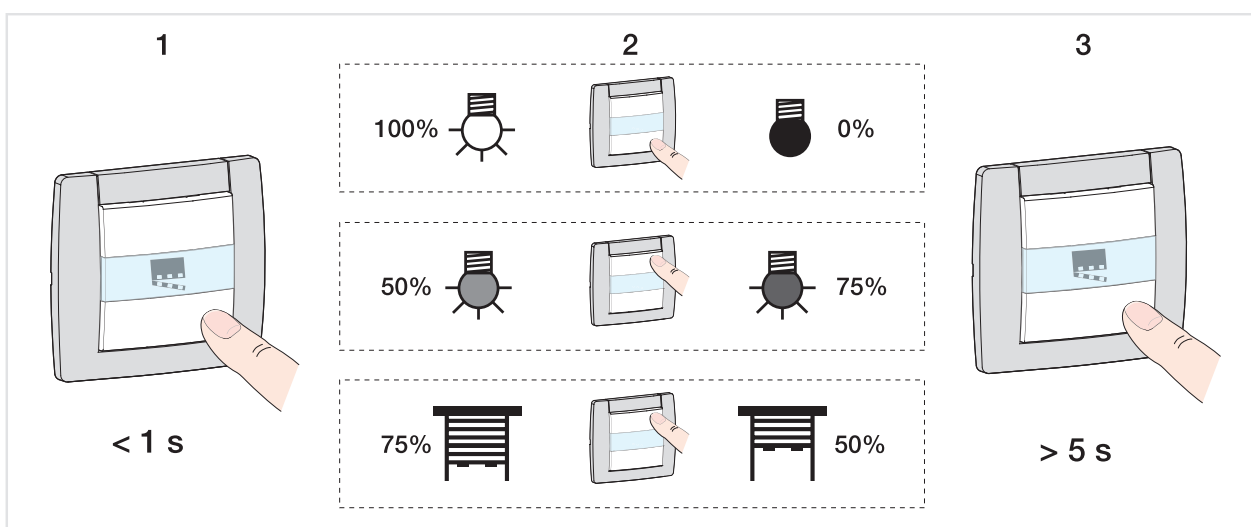
| Possible link type | Link description   | Output operation  |
|--------------------|--|---|
| S 1<br>...<br>S 8  | Scene 1 to 8<br><br>The Scene function groups a set of outputs.<br>These outputs can be set to an adjustable predefined status.<br>Pressing a push button activates a scene.<br>Each output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

\* 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.




### 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. |

**ON / OFF 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. |

**Dimming output**


| Designation TX100 | Function                   | Format | Description  |
|-------------------|----------------------------|--------|--|
| OnOff             | ON / OFF                   | 1 bit  | The <b>OnOff</b> object enables the output to be switched.   |
| DimCtrl           | Dimming command            | 1 bit  | Allows changing the output level of a dimmer.  |
| DimVal            | Absolute dimming           | 1 byte | Used to establish the output level of a dimmer in %.   |
| 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. |
| IDimVal           | Absolute dimming info      | 1 byte | Used to know the lighting level of the output in %.  |

## 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

|                                |         |
|--------------------------------|---------|
| Product                        | WYW5xxQ |
| Max. number of group addresses | 84      |
| Max. number of links           | 95      |

