

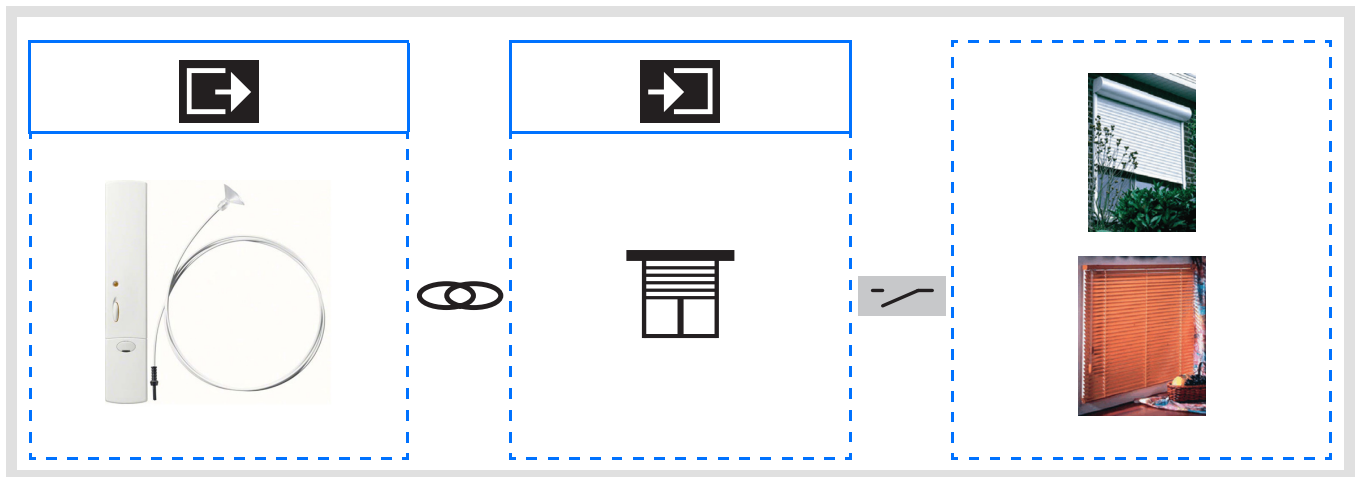
Tebis TX100 Configurator



Luminosity detector RF quicklink

Electrical / Mechanical characteristics: see product user's instructions

	Product reference	Product designation	TX100 version	TP device	RF device
	TRC321B	Luminosity detector RF	≥ 2.7.0		



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1. Presentation

1.1 General points

The luminosity detector RF this document refers to is a quicklink[®] RF product. It can be recognised by its **cfg** configuration push button. Quicklink[®] indicates the configuration without tools mode.

These products can also be configured to E mode by the TX100 or in S mode by ETS via the media coupler TR131.

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

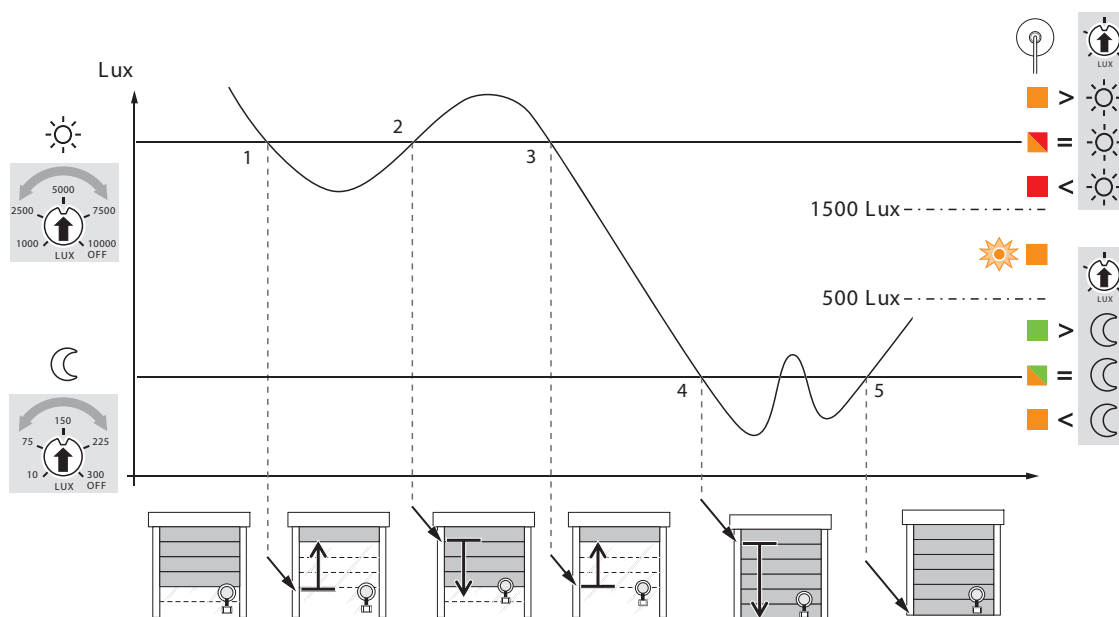
Within the same installation, a single configuration mode may be used.

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 Description of the product

The luminosity detector is a battery-powered KNX radio transmitter. It is designed for the automatic control of shutters or blinds (see Figure 1). According to the measured luminosity and the thresholds set on the product, it controls the raising or lowering of the shutters and blinds to provide sun protection and/or a dusk function. Luminosity is measured sensor attached to the window with a suction cup.

Figure 1



- 1: Lux < threshold ☀ = Shutter up
- 2: Lux > threshold ☀ = Shutter descends to the level of the sensor then rises for 1 s to ensure detection again
- 3: Lux < threshold ☀ = Shutter up
- 4: Lux < threshold ☾ = Shutter fully lowered
- 5: Lux > threshold ☾ = No automatic raising

The KNX Up or Down controls are completely dependent:

- On the choice of the function selected on the potentiometers: sun protection (Threshold > 1500 lux) and/or dusk function (threshold < 500 lux),
- On the configuration of the luminosity threshold(s).

These choices and settings are only accessible on the product.

A button on the front of the product allows the user to interrupt automatic operation (no more radio transmissions except for the **Status indication - Battery status** object).

Compatibility

The luminosity detector can control all the KNX shutter actuators, RF or wired, according to the automatic control function described in figure 1. The product does not transmit luminosity values.

Test function

This mode is used to run an accelerated test of your programming (see the product user manual).

Time delay

When the shutter is completely shut, the frequency at which the luminosity is measured switches to 20 mn. During the day, this time delay changes to approximately 15 mn before a control is sent when the threshold is passed.

1.3 Function Description

The luminosity detector is designed for automatic shutter control. It only offers the following 2 objects:


- Input - Up / Down. The automatic control also performs the "Stop" function. The slat angle control is not available with the light detector.
- Status indication - Battery Status.

2. Configuration and settings


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

→ Activating configuration mode

- Press successively on each **cfg** push button on each transmitter to be programmed, put it into "listening" mode for configuration. When pressing, the cfg LED of the transmitter concerned shows a solid red light, which will turn off when the cfg push button on the next transmitter is pressed, and so on. All the transmitters selected will then switch to bi-directional mode for the remainder of the configuration. The output from this mode is automatic after 10 min of inactivity or a change to "auto" on the TX100. Once the cfg push button is pressed on a transmitter, the output modules automatically switch to 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 and allocate a function to the light detector radio input:

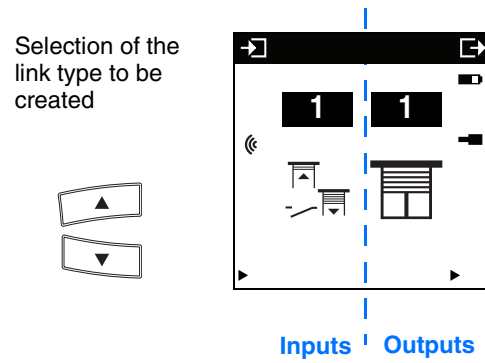
- Check that configuration mode is still active on your transmitter and press the cfg button again if not,
- Go to the Num numbering menu → Inputs → ✓ ,
- Numbering of the detector input by a short press on the button on the front of the product:
Short press = Input .
- A beep will sound when the input is detected, the configurer will automatically allocate a number to it. The switch-type Up/Down function is selected directly. The product is dedicated to the automation described in chapter 1.2. No other function can therefore be selected.

2.1 Shutters / Blinds function

The Shutters / Blinds function commands Shutters / Blinds outputs symbolized by the icon in the right part of the display.

Refer to the configuration manuals for the various Shutters / Blinds output devices for information on installing and configuring these devices.

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 below presents the only type of link compatible with the light detector.

Possible link type	Link description	Output operation
Up / Down	The Up / Down function raises or lowers a roller shutter or a blind.	Up and Down movements are performed in accordance with the description in chapter 1.2.

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

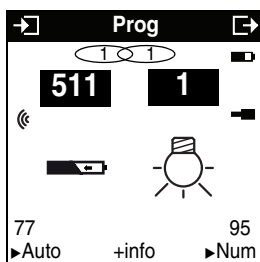
3.1 Mode + Info

■ Low battery

For the battery-powered radio transmitters, an additional entry provides information: Low battery. It is indicated by the symbol on the TX100 screen. This input is numbered in decreasing order starting from 511. It is accessible from the "+ Info" filter in TX100 "prog" mode.

■ Create a link "Low battery"

- Press the or keys to select the low battery input and an output,
- Press for a long time to confirm the link.



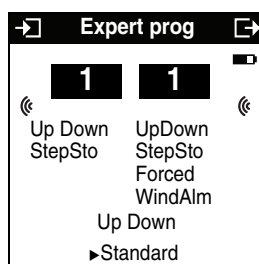
3.2 Expert Prog mode

■ General points

The Expert mode allows:

- Non-configurable EIB 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


Designation TX100	Function	Format	Description
UpDown	Up / Down	1 bit	the UpDown object is used to switch the output to raise or lower the rolling shutter.
StepStop	Slat angle / Stop	1 bit	The Stop object is used to switch the output to stop the Up or Down movement (no slat angle).

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	TRC321B
Max. number of group addresses	60
Max. number of links	85

