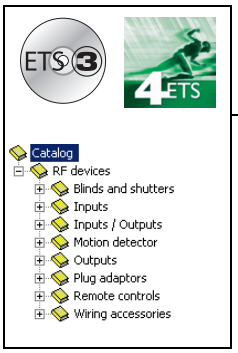
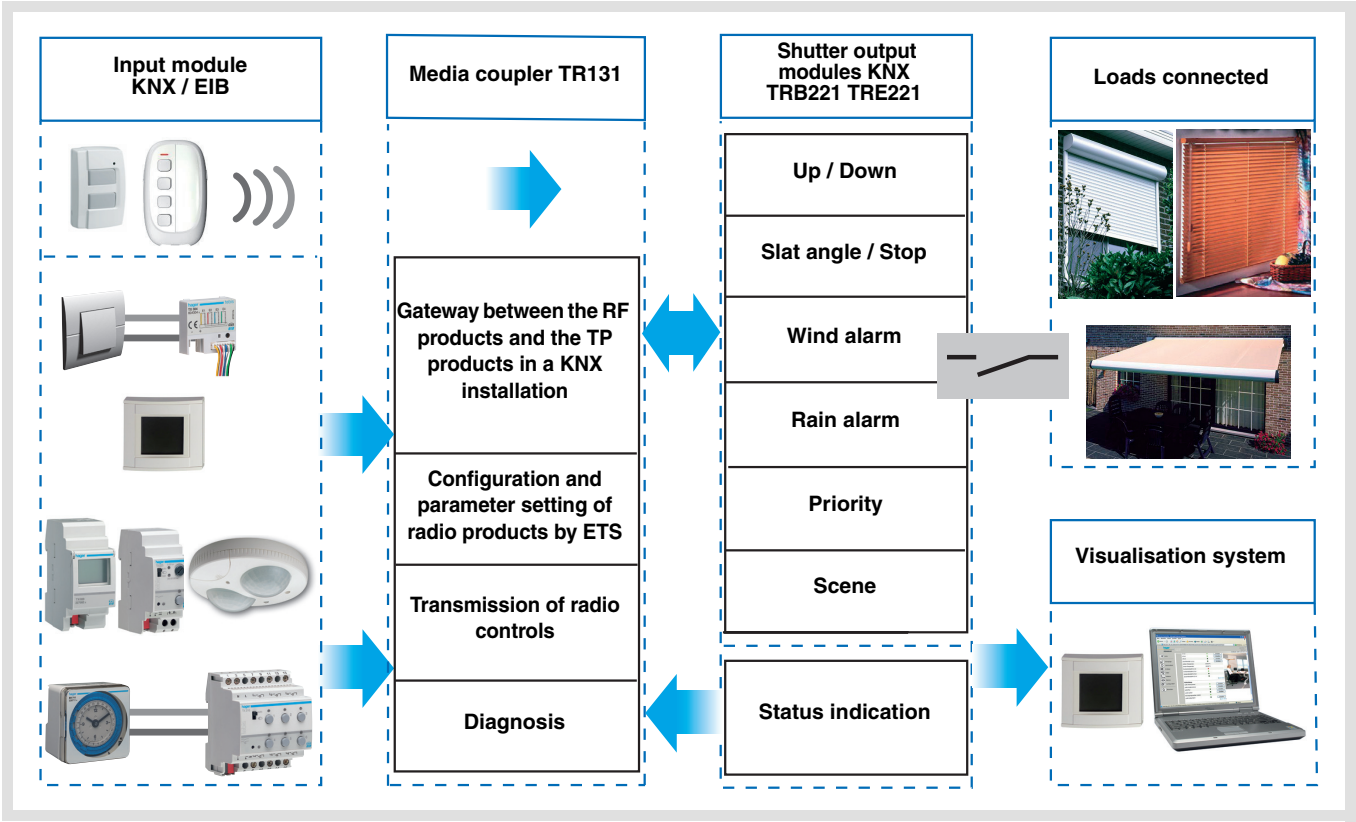


Tebis application software

quicklink radio shutters / blinds outputs

Electrical / Mechanical characteristics: see product information

	Product reference	Product designation	Application software ref.	TP device RF device
	TRB221	Module 1 output shutters / blinds to be built in	STRB221	
	TRE221	Module 1 output shutters / blinds, IP55	STRE221	



Summary

1. Presentation 3
   1.1 General points 3
   1.2 Function Description 3
2. Configuration and settings 4
   2.1 Objects List 4
   2.2 Parameter setting 4
   2.3 Configuration with TR131 (ETS version > 3.0f) 7
3. Factory reset 9
   3.1 Factory reset by ETS via TR131 9
   3.2 Factory reset on the product 9
4. Characteristics 9

1. Presentation

1.1 General points

All the radio receivers referred to in this document are quicklink RF devices. 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 to E mode by the TX100 or in S mode by ETS via the media coupler TR131.

In this case, the version of the TR131 must fulfill the following characteristics:
- Firmware: ≥ 1.2.5
- Plug-in: ≥ 1.0.11

This document describes the configuration principle with the software ETS via the coupler TR131 and the functions available in this mode.

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

To reuse a product that has already been programmed in another installation by TX100 or quicklink, with ETS, it is necessary to perform a factory reset for the product.

1.2 Function Description

The application softwares allow each output to be individually configurated for Shutter / Blind applications.

The main functions are the following:

Up / Down

The Up / Down Function allows moving up or down a shutter, a blind with inclinable slats, an awning, a Venetian blind, etc. This function also allows opening and closing electric curtains. The command may come from switches, pushbuttons or automatic controls.

Slat angle / Stop

The Slat angle / Stop function allows inclining the slats of a blind or stopping its current movement. This function allows modifying the occultation or the direction of the light beams coming from outside.
The control comes from push buttons: Press briefly the Up / Down push button.

Priority

The Priority function allows forcing a shutter or a blind into a predefined position. This command has priority, but at a lower level than the alarms. No other command is taken into account if a priority is active. Only end of priority or alarm commands will be taken into consideration.

Alarm 1 (Wind) and Alarm 2 (Rain)

The Alarm functions allow putting a shutter or a blind in a parametrisable predefined status. These functions have the highest priority. No other command is taken into consideration if an Alarm is active. Only the end of the alarm enables again the other commands.

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 may be integrated into 8 different scenes.

Status indication

The 1 Bit status indication function is used to send the last movement of the shutter or blind.

2. Configuration and settings

2.1 Objects List

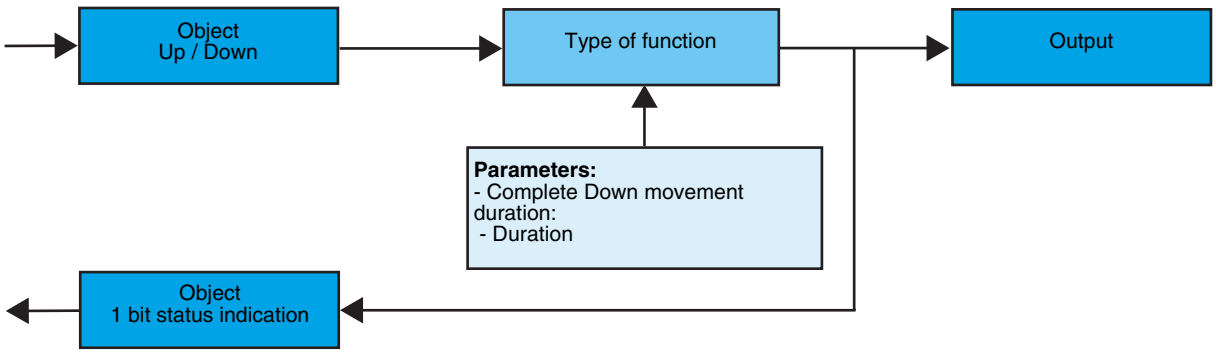
Nu...	Name	Object Function	Length	C	R	W	T	U	Priority
0	Output 1	Up / Down	1 bit	C	R	W	-	U	Low
1	Output 1	Slat angle / Stop	1 bit	C	R	W	-	U	Low
2	Output 1	Priority	2 bit	C	R	W	-	U	Low
3	Output 1	Alarm 1	1 bit	C	R	W	-	U	Low
4	Output 1	Alarm 2	1 bit	C	R	W	-	U	Low
5	Output 1	Scene	1 Byte	C	R	W	-	U	Low
6	Output 1	Status indication	1 bit	C	R	-	T	U	Low

2.2 Parameter setting

Up / Down and status indication

The Up / Down Function allows moving up or down a shutter, a blind with inclinable slats, an awning, a Venetian blind, etc. This function also allows opening and closing electric curtains. The command may come from switches, pushbuttons or automatic controls.

Description of the **1 Bit status indiction** object:
0: last up movement
1: last down movement

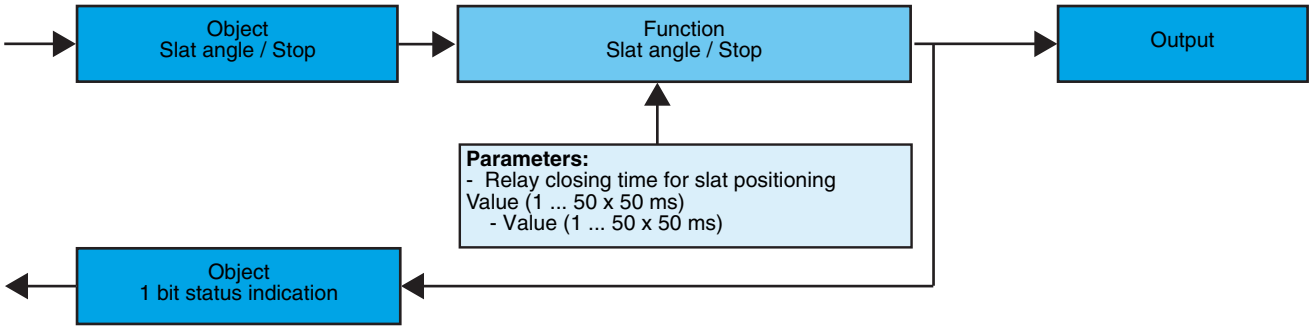


➜ Parameters

Designation	Description	Values
Complete Down movement duration	This parameter defines the contact closing time for a complete down movement.	0 to 500 s in 1 s steps Default value: 120 s

Slat angle / Stop function

The Slat angle / Stop function allows inclining the slats of a blind or stopping its current movement. This function allows modifying the occultation or the direction of the light beams coming from outside. This function is started by the **Slat angle / Stop object**.
The desired slant angle is obtained by a succession of control pulses.
The settings consist of programming the length of a press command that defines the number of presses to move from a slat angle of 0% to a slat angle of 100%.

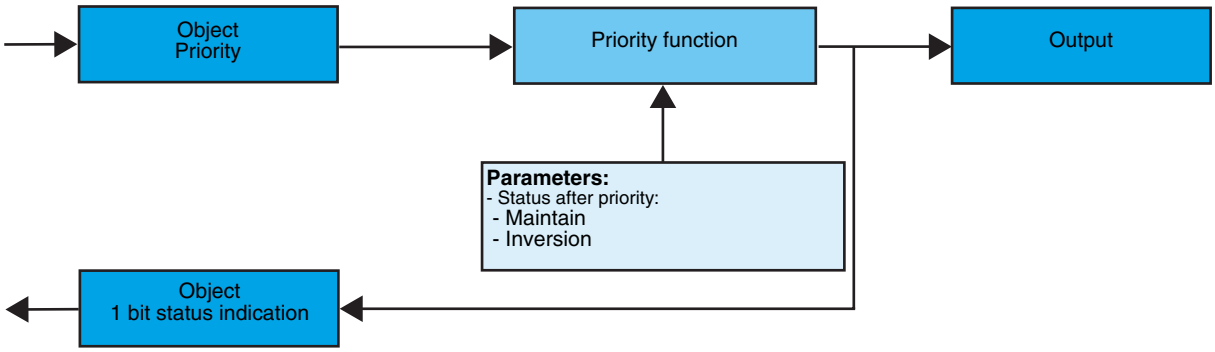


➜ Parameters

Designation	Description	Values
Relay closing time for slat positioning Value (1 ... 50 x 50 ms)	This parameter allows defining the closing time of the contacts to carry out one slat step: 50 ms x multiplier.	1 - 50 Default value: 3

Priority function

The Priority function allows forcing a shutter or a blind into a predefined position. This function is started by the **Priority** object.
This command has priority, but at a lower level than the alarms. No other command is taken into account if a priority is active.
Only end of priority or alarm commands will be taken into consideration.



➜ Description of the **Priority** object

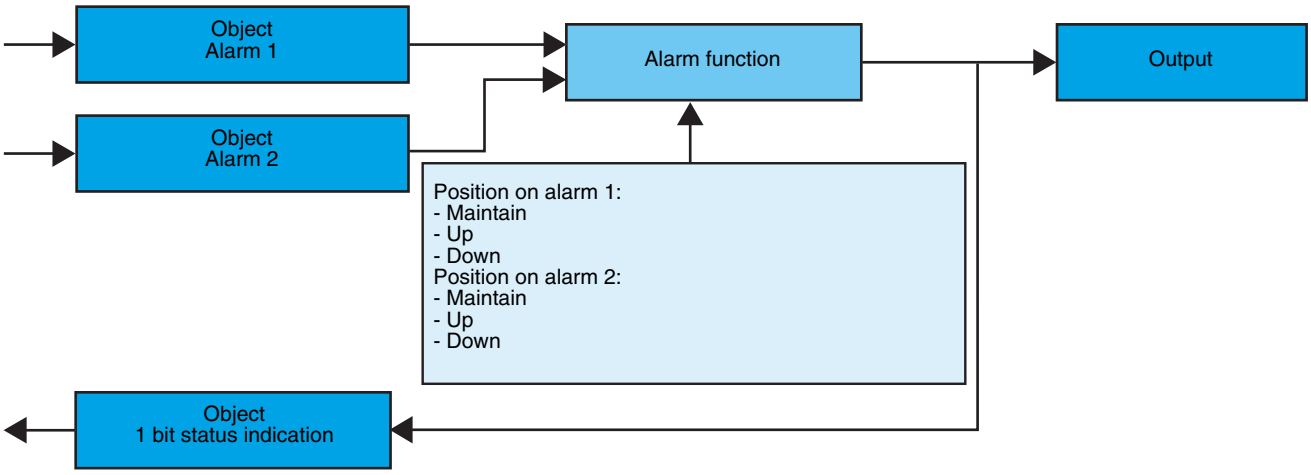
Value	Output behaviour
00	Priority end
01	Priority end
10	Priority ON (Up)
11	Priority OFF (Down)

➜ Parameter

Designation	Description	Values
Priority	This parameter defines the status of the output applied during a priority.	Maintain, Inversion • Maintain: The output is maintained in the status which was active before the priority. • Inversion: Reversal of the status of the output in relation to that which existed before the priority (Down as opposed to Up, and Up as opposed to Down). Default value: Maintain

Alarm 1 and Alarm 2 functions

The Alarm functions allow putting a shutter or a blind in a parametrisable predefined status. The wind alarm is triggered by the **Alarm 1** object and the rain alarm by the **Alarm 2** object. These functions have the highest priority. Alarm 1 has a higher priority than Alarm 2. No other command is taken into consideration if an Alarm is active. Only the end of the alarm enables again the other commands.



➜ Parameter

Designation	Description	Values
Position on alarm 1	This parameter defines the position of the shutter or blind when the Wind alarm is activated.	Maintain Up Down Default value: Up
Position on alarm 2	This parameter defines the position of the shutter or the blind when the Rain alarm function is active.	Maintain Up Down Default value: Down

2.3 Configuration with TR131 (ETS version ≥ 3.0f)

Configuration principle

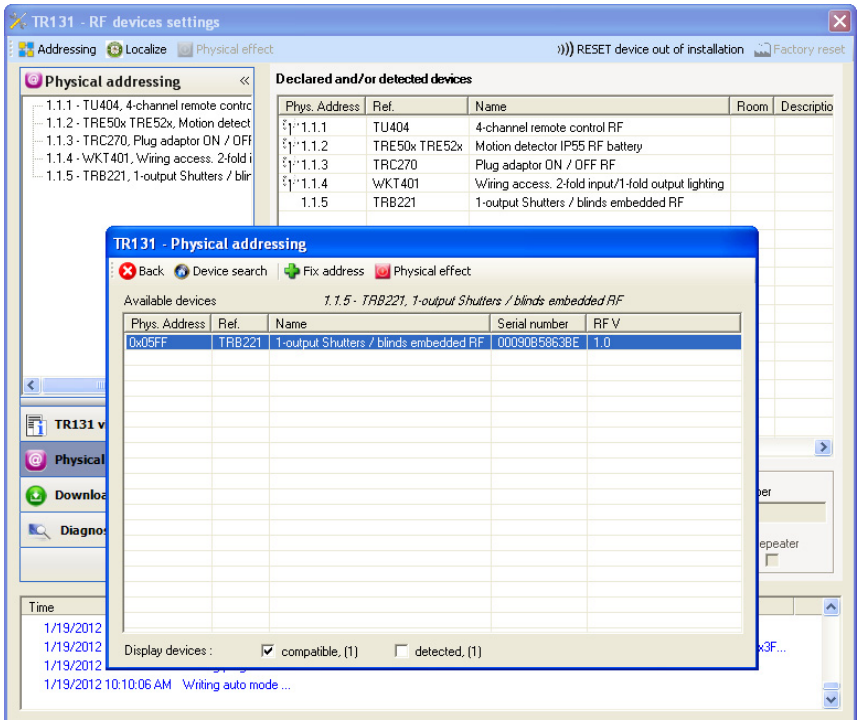
The TR131 media coupler enables confuguration by ETS of RF devices for a KNX radio installation or a mixed KNX installation including RF devices and wired buses. The radio receivers always function in bi-directional mode.

Procedure:

- Create a line reserved for RF devices in your ETS plan. First add the TR131 coupler to this line, then add the other RF devices to this line,
- Perform programming, parameter setting and group addressing for all the RF devices except for the TR131,
- Download the physical address of the TR131, which should be of the type 1.1.0. (should always end in zero),
- Install the Plug in for TR131: Right-click on the product in the ETS tree structure, then select **edit the parameters**. Windows Administrator rights are necessary to install the plug in.

Physical addressing:

- Click on the button **Physical addressing** to display the physical addressing screen for the plug in,
- Choose a product from the list and click on the **Addressing** button in the menu line at the top of the window,
- Click on **Product search**, the list of compatible products within radio range will be displayed. If the product is not found by the search, perform a **RESET device out of installation**. The factory reset may also be performed manually on a product by pressing the cfg button for >10 s,
- Select the desired product from the list generated by the search, then click the button **Fix address**,
- The physical addressing of the product is performed. The product is now part of the installation.



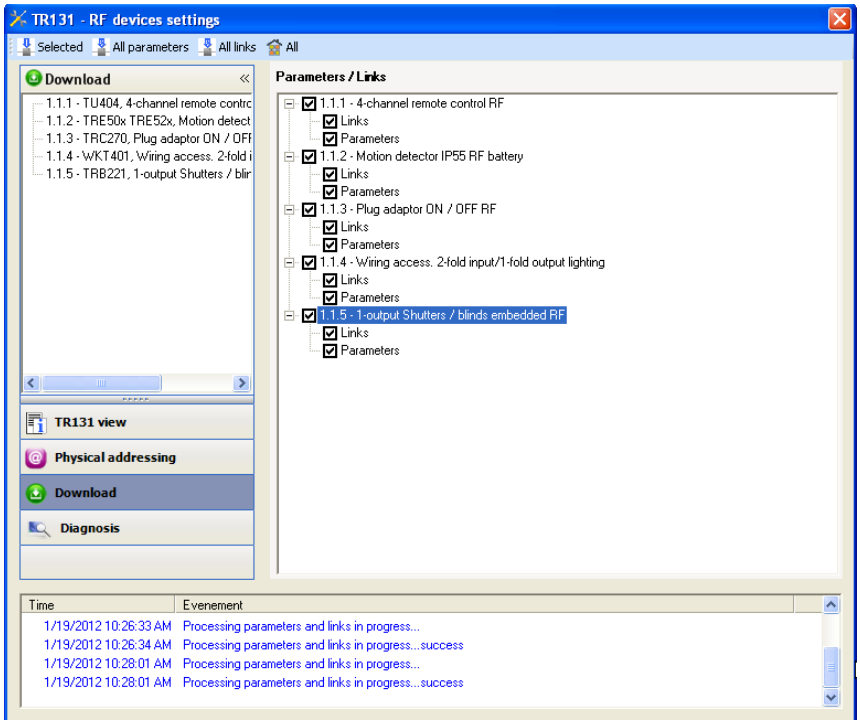
The **Physical effect** button enables the selected product to be identified and located.

Downloading the program and the parameters

This operation is performed on the **Download** screen of the plug in.

- Click on **Download** and follow the instructions on the screen.

To test the radio KNX functions and communication, return to normal use mode and wait 15 s before executing a command.

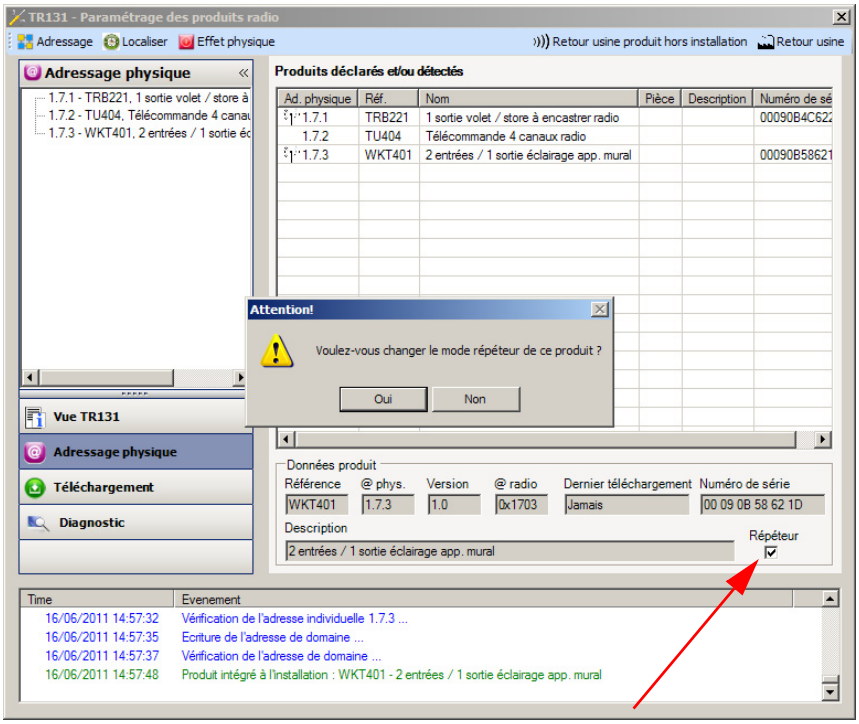


Caution: The plug in for TR131 must be deactivated during functional testing.

NB: For more information, refer to the description for the TR131 application software.

Repeater Function

It increases the radio range of the system by re-sending the messages received by the product.



To activate the Repeater function, tick the repeater box on the physical addressing screen of the product concerned.

3. Factory reset

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 either be performed directly on the device, or via the TR131 plug in. The latter solution is recommended if the product is part of the installation configured by ETS, which erases the product from the project.

3.1 Factory reset by ETS via TR131

- For a device that is part of the installation (known by the TR131): In the **Physical addressing** menu, select **Factory reset** and then follow the instructions which appear on the screen,
- For a device that is not part of the installation (not known by the TR131): In the **Physical addressing** menu, select **RESET device out of installation**, then select **Bi-directional product**.

3.2 Factory reset on the product

It is always possible to perform the factory reset directly on the device.

Factory reset on the product:

- Do a long key press (> 10 seconds) on the **cfg** push button, release the button when the **cfg** LED blinks,
- Wait for the **cfg** LED to switch off, indicating that the factory reset has been completed.

Remark:

To reuse a product that has already been programmed in another installation by TX100 or quicklink, with ETS, it is necessary to perform a factory reset for the product.

4. Characteristics

Product	TRB221 / TRE221
Max. number of group addresses	32
Max. number of links	50