Tebis application software

ETS3
4ETS
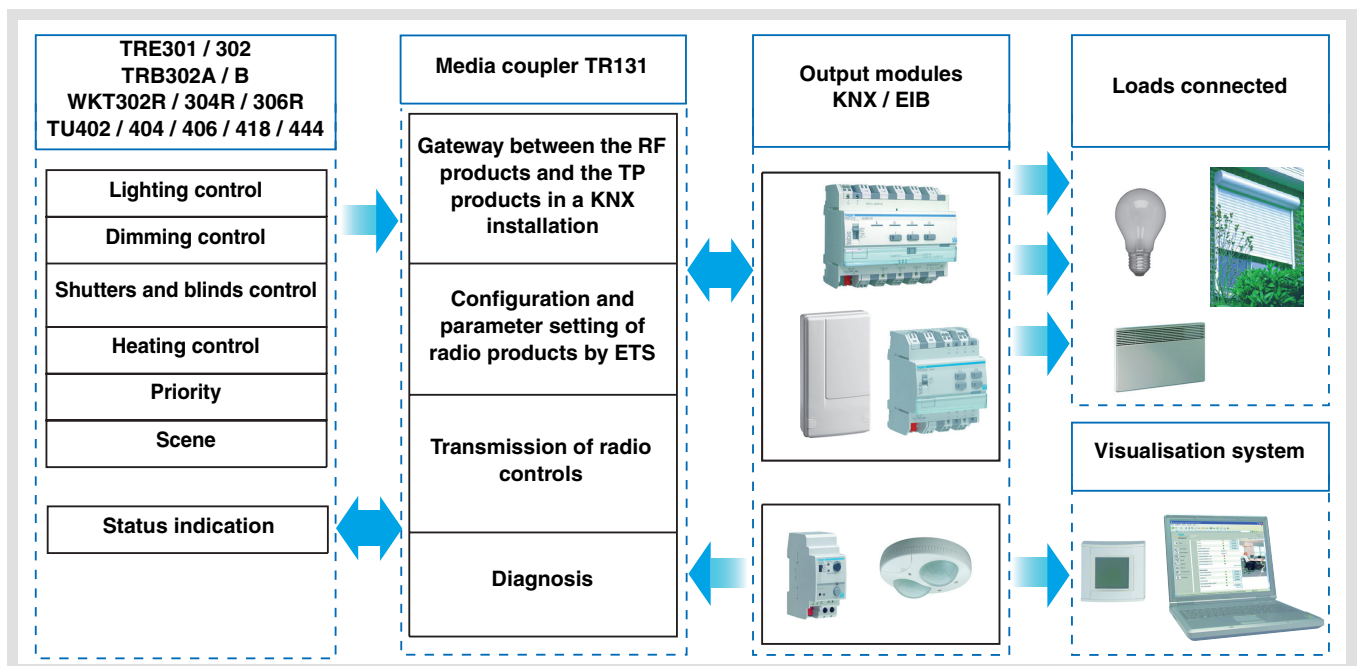
Catalog
RF devices
  Blinds and shutters
  Inputs
  Inputs / Outputs
  Motion detector
  Outputs
  Plug adaptors
  Remote controls
  Wiring accessories

quicklink Radio input products

Electrical / Mechanical characteristics: see product information

Product reference	Product designation	Application software ref.	TP device RF device
TRE301 TRE302	Push button IP55 1 input Push button IP55 2 inputs	STRE301 STRE302	
TRB302A TRB302B	2-input modules embedded - battery 2-input modules embedded - mains	STRB302A STRB302B	
WKT302R WKT304R WKT306R	Push button radio 2 Inputs Push button radio 4 Inputs Push button radio 6 Inputs	SWKT302R1 SWKT304R1 SWKT306R1	
TU402 TU404 TU406 TU418 TU444	Remote control RF 2 Inputs Remote control RF 4 Inputs Remote control RF 6 Inputs Remote control RF 18 Inputs Remote control RF LS radio 4 inputs	STU402 STU404 STU406 STU418	

TRE301 / 302 TRB302A / B WKT302R / 304R / 306R TU402 / 404 / 406 / 418 / 444	Media coupler TR131	Output modules KNX / EIB	Loads connected
Lighting control	Gateway between the RF products and the TP products in a KNX installation		
Dimming control			
Shutters and blinds control	Configuration and parameter setting of radio products by ETS		
Heating control			
Priority			
Scene	Transmission of radio controls		
			Visualisation system
Status indication	Diagnosis		

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 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.

Specifics for quicklink 🔲 radio transmitters
Pressing the **cfg** button acrivates configuration mode. In this mode, the dialogue product is bi-directional. For numbering or programming operations, it will therefore no longer be necessary to approach the transmotterd to be configured for TR131. It is only necessary to remain within radio range.

The radio transmitters described in this document are produced from typical inputs:
- Push button only (TU4x ; WKT30xR),
- The TRE301 / 2 push buttons or the TRB302A / B input modules to which it is possible to connect free potential contacts such as push buttons or switches.

1.2 Function Description

The radio transmitter application software enables each input to be configured individually. The puch buttons or the control units connected to the inputs (switch, automatic control) enable commands for lighting, rolling shutters and blinds, heating, and scenes.

The main functions are the following:

■ Emission of commands
The inputs allow commands for lighting, shutters and blinds, heating settings and scenes to be transmitted.
Emission of commands:
- Lighting control
  - Toggle switch, ON, OFF, ON / OFF, Timer, Priority
  - 1 button or 2 button dimmer
- Shutters / Blinds control
  - Up, Down, Stop, Slat angle, Priority, Wind alarm, Rain alarm
  - 1 button or 2 button control
- Set point selection (Heating)
  - Comfort / Night set-point, Comfort, Night set-point, Frost protection / Auto, Frost protection, Auto, Standby, Comfort / Standby, Priority

■ Scene
The Scene function sends group controls to different kinds of outputs to create ambiences or scenarios.
Example of scene 1: Leaving the house (centralised lighting control OFF, shutters on south side 3 / 4 closed, the other shutters open, heating switched over to Reduced mode).

■ Priority
The Priority function allows an input to be forced to a defined status. The forcing action depends on the type of application controlled: Lighting, Shutters / blinds, Heating.

■ Alarms
The Alarm 1 and Alarm 2 functions enable alarms to be sent to the bus from the automatic controls (anemometer, rain sensor, twilight switch, etc.). Alarm 1 has a higher priority than Alarm 2.

2. Configuration and settings

2.1 Objects List

Object \ Function	ON / OFF	Toggle switch	Timer	1-button dimmer	2-button dimmer	1-button shutters / blinds	2-button shutters / blinds	Heating	Scene
ON / OFF	X	X		X	X				
Status indication		X		X		X			
Timer			X						
Dimming				X	X				
Stop / Angle						X	X		
Up / Down						X	X		
Set point selection								X	
Scene									X
Priority	X					X	X		
Alarm 1 / 2						X	X		
Battery Status	X	X	X	X	X	X	X	X	X

2.2 Setting parameters

■ Parameter setting: Channel function
The input products enable commands to be sent for lighting, rolling shutters and blinds, heating, scenes, priorities and alarms.

Push button input

➜ Parameter Setting screen

Parameter	Description	Value
Channel function	This parameter allows selecting the function associated with each input.	Not used Toggle switch ON / OFF 1-button dimmer 2-button dimmer Shutters / blinds Heating Scene Timer Default value: Not used

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Switch input

Parameter	Description	Value
Channel function	This parameter allows selecting the function associated with each input.	Not used Toggle switch* ON / OFF 1-button dimmer* 2-button dimmer Shutters / blinds Alarm 1 Alarm 2 Heating Scene Timer Priority Default value: Not used

* These functions are not suitable for a switch control.

■ Channel function: Toggle switch

This function is used to switch the lighting circuit or any other load ON or OFF. Each new key-press modifies the output status.

Description: After pressing the connected pushbutton, depending on the **Status indication** object, an **ON or OFF** command will be sent to the bus via the **ON / OFF** object.

■ Channel function: ON / OFF

This function is used to switch the lighting circuit or any other load ON or OFF. The ON or OFF command will be transmitted to the bus via the **ON / OFF** object. The command to be sent (ON or OFF) can be defined in the parameters.

- ON: Emission of the ON command when the input contact is closed (or when the input push button is pressed),
- OFF: Emission of the OFF command when the input contact is closed (or when the input push button is pressed),
- ON / OFF: Emission of the ON command when the input contact is closed (or when the input push button is pressed) and emission of the OFF command when the input contact is opened (or when the input push button is released),
- OFF / ON: Emission of the OFF command when the input contact is closed (or when the input push button is pressed) and emission of the ON command when the input contact is opened (or when the input push button is released).

■ Channel function: Dimming

This function is used to control lighting circuits using one or two buttons.
The 1 button dimmer and 2 buttons dimmer functions send the **ON / OFF** object after a short press.
A long press send the **Dimmer** object.
There are 2 different function types: 1-button dimmer or 2-button dimmer.

Channel function: 1-button dimmer
This function allows ON / OFF or Increase / Decrease controls using one push button.

Channel function: 2-button dimmer
This function allows ON or Increase controls using one push button, and OFF or decrease controls using a second push button.

■ Channel function: Shutters / blinds

This function controls shutters and blinds (Up, Down and slat angle adjustment for blinds).

There are 3 different functions:
- 1-button,
- 2-buttons,
- Automatic controls.

Type of function: 1-button
This function controls shutters or blinds using one push buttons (Input).
Function change after each press (Down, Stop, Up, Stop). Slat angle adjustment is not possible here.

Type of function: 2-buttons
This function controls shutters or blinds using two push buttons (Input). One button for Up and one button for down.
The function transmit the **Up / Down** object (long key press) and the **Slat angle adjustment / Stop** object (short key press).

Type of function: Automatic controls
This function is used to control shutters or blinds (without slat angle adjustment) using automatic controls (Switch, etc.).
The automatic controls transmits the **Up / Down** object.
The command to be sent (up or down) must be defined in the parameters.

- Up: Emission of the **Up** command when the input contact is closed,
- Down: Emission of the **Down** command when the input contact is closed,
- Up / Down: Emission of the **Up** command when the input contact is closed and emission of the **Down** command when the input contact is opened,
- Down / Up: Emission of the **Down** command when the input contact is closed and emission of the **Up** command when the input contact is opened.

■ Channel function: Alarm 1, Alarm 2
The Alarm 1 and Alarm 2 functions allow alarms coming from automatic controls to be periodically emitted (anemometer, Rain detector, Light-sensitive switch, etc.).
To place the shutters in safety position in case of bad weather: link the Alarm 1 and Alarm 2 functions with the **Alarm 1** and **Alarm 2** object of the **Shutter / Blind output modules**.
These functions have the highest priority. Alarm 1 has a higher priority than Alarm 2.

■ Channel function: Heating mode selection
This function is used select a heating setpoint. The operating modes are sent via the **Set point selection** object. The set point selection to be sent must be defined in the parameters.

- Comfort / Night set-point: Emission of the **Comfort** control when the input contact is closed and emission of the **Night set-point** control when the input contact is opened,
- Comfort: Emission of the **Comfort** command when the input contact is closed (or when the input push button is pressed)
- Night set-point: Emission of the **Night set-point** command when the input contact is closed (or when the input push button is pressed),
- Frost protection / Auto: Emission of the **Freeze protection** command when the input contact is closed and emission of the **Auto** command when the input contact is opened,
- Frost protection: Emission of the **Frost protection** command when the input contact is closed (or when the input push button is pressed),
- Auto: Emission of the **Auto** command when the input contact is closed (or when the input push button is pressed),
- Standby: Emission of the **Standby** command when the input contact is closed (or when the input push button is pressed),
- Comfort / Standby: Emission of the **Comfort** command when the input contact is closed and emission of the **Standby** command when the input contact is opened.

■ Channel function: Scene
The Scene function sends group controls to different kinds of outputs to create ambiences or scenarios (Panic switch, Television, etc.).
The value of the **Scene** object is defined by the **Scene number** parameter.

■ Channel function: Timer
This function operates like a staircase light function. The timer duration is set on the output module.

Feature:
- short key press (rising edge): Timer start,
- long key press (falling edge): Timer end.

The time is retriggered in the output by a recurrent short key press. Successive presses on the control button for the timer increase the timer's duration. The effective length will then be multiplied by the number of presses made during the 10 s following the first press.

■ Channel function: Priority
This function sends priority-start or priority-stop commands.
No other command is taken into account if a priority is active. Only end of priority or alarm commands will be taken into consideration.

The command to be sent must be defined in the parameters:
- Priority ON - Up - Comfort: Emission of the **Priority ON - Up - Comfort** command when the input contact is closed and emission of the cancellation of this priority when the input contact is opened,
- Priority OFF - Down - Freeze protection: Emission of the **Priority OFF - Down - Freeze protection** command when the input contact is closed and emission of the cancellation of this priority when the input contact is opened.

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. For normal operation, the radio transmitters operate in a one-direction mode. Configuration takes place 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 of the radio transmitters:
- Click on the button **Physical addressing** to display the physical addressing screen for the plug in,
- Select the device to be addressed, then click on the field **Addressing** in the menu line at the upper left of the window,
- Press the **cfg** button for each transmitter to be addressed, then click **Device search** (if the device is not found by the search, perform a **RESET device out of installation**, or manually on the device by pressing the cfg > 10 s button),
- Select the device to be addressed and click on **Attribute address**. The physical addressing of the product is performed. The product is now part of the installation.

- After downloading the physical address, the ((᠂)) symbol appears in front of the product,

- Repeat this operation for the other radio transmitters.

Caution: After an interruption in the above operations greater than 10 mn, it is necessary to press the **cfg** button again on the transmitter devices to be programmed.
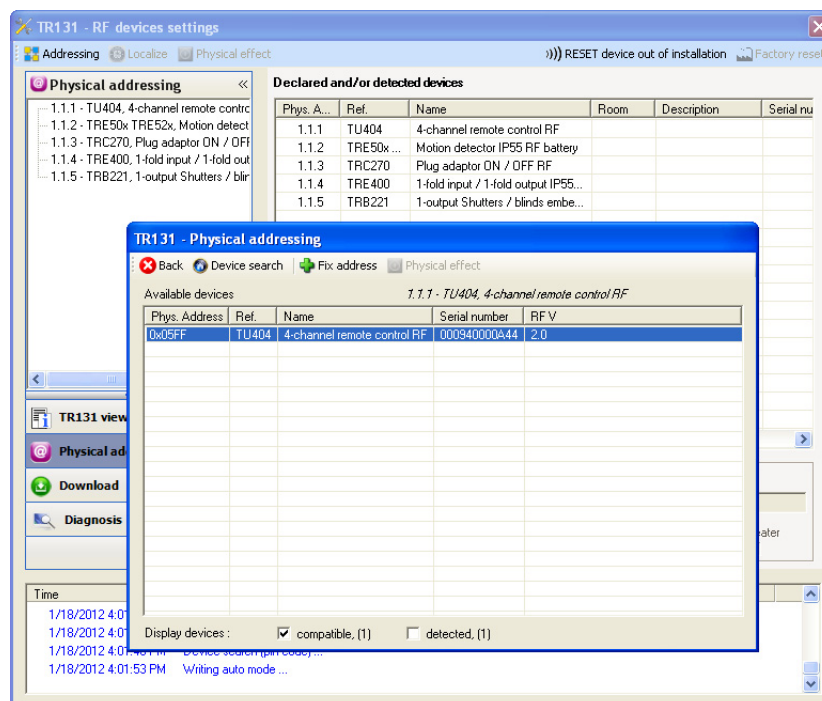
■ Downloading the program and the parameters:

This operation is performed on the **Download** screen of the plug in,
- Click on **Download** and follow the instructions on the screen.
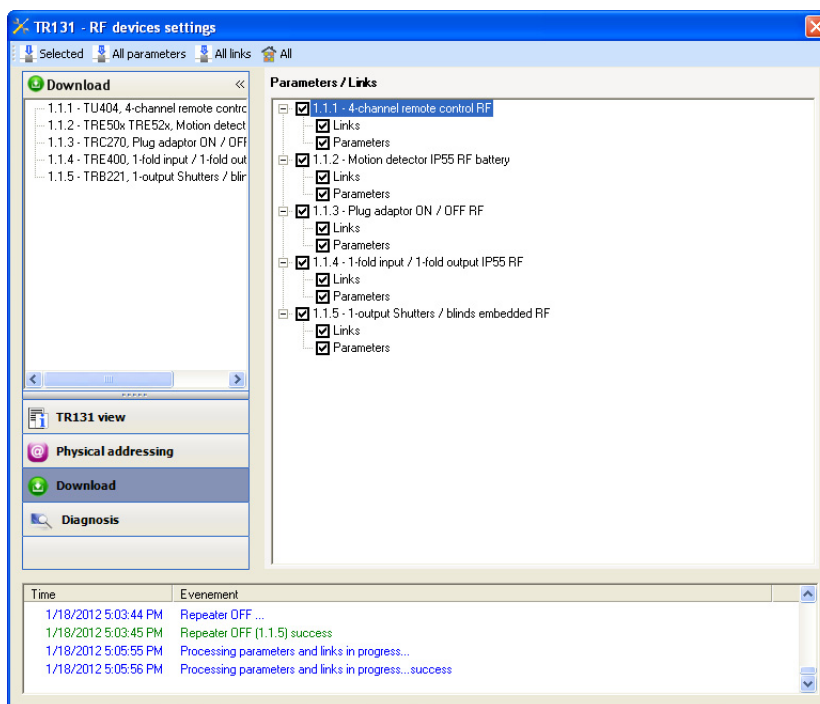
To test the functions and the KNX radio communication, return to normal use mode and wait 15 s before pressing a control button on a transmitter.

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.

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. This last solution is recommended if the product is part of an installation configured by ETS, thus the device is erased 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 menu **Physical addressing**, select **RESET device out of installation**, then **Unidirectional device with Addr. button**.
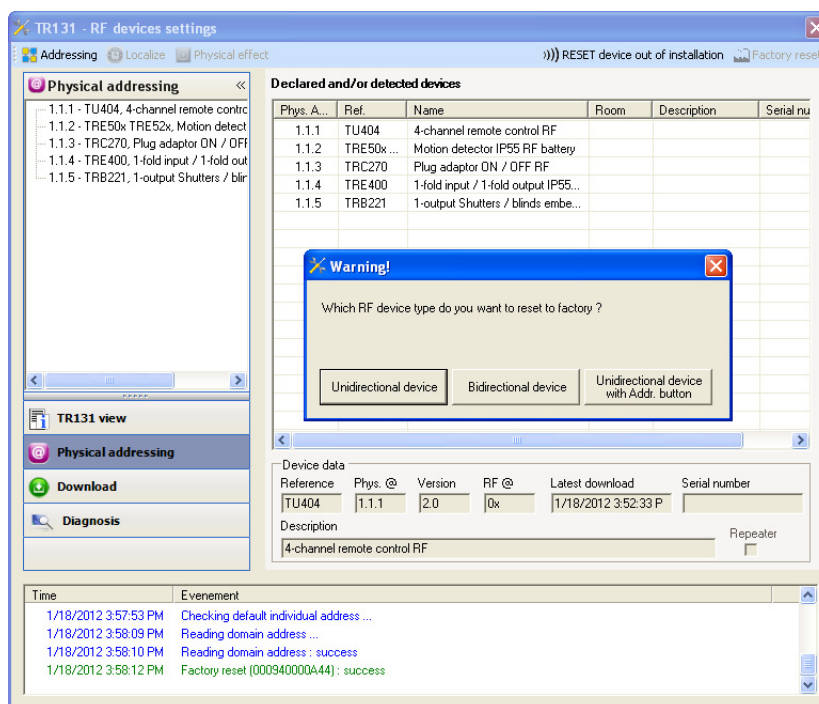
3.2 Factory reset on the product

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	TRB302A TRB302B	TRE301	TRE302 WKT302R TU402	WKT304R TU404 TU444	WKT306R TU406	TU418
Max. number of group addresses	87	90	86	79	72	60
Max. number of links	95	95	95	95	95	95