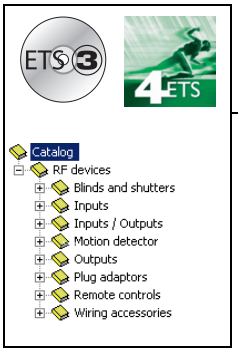
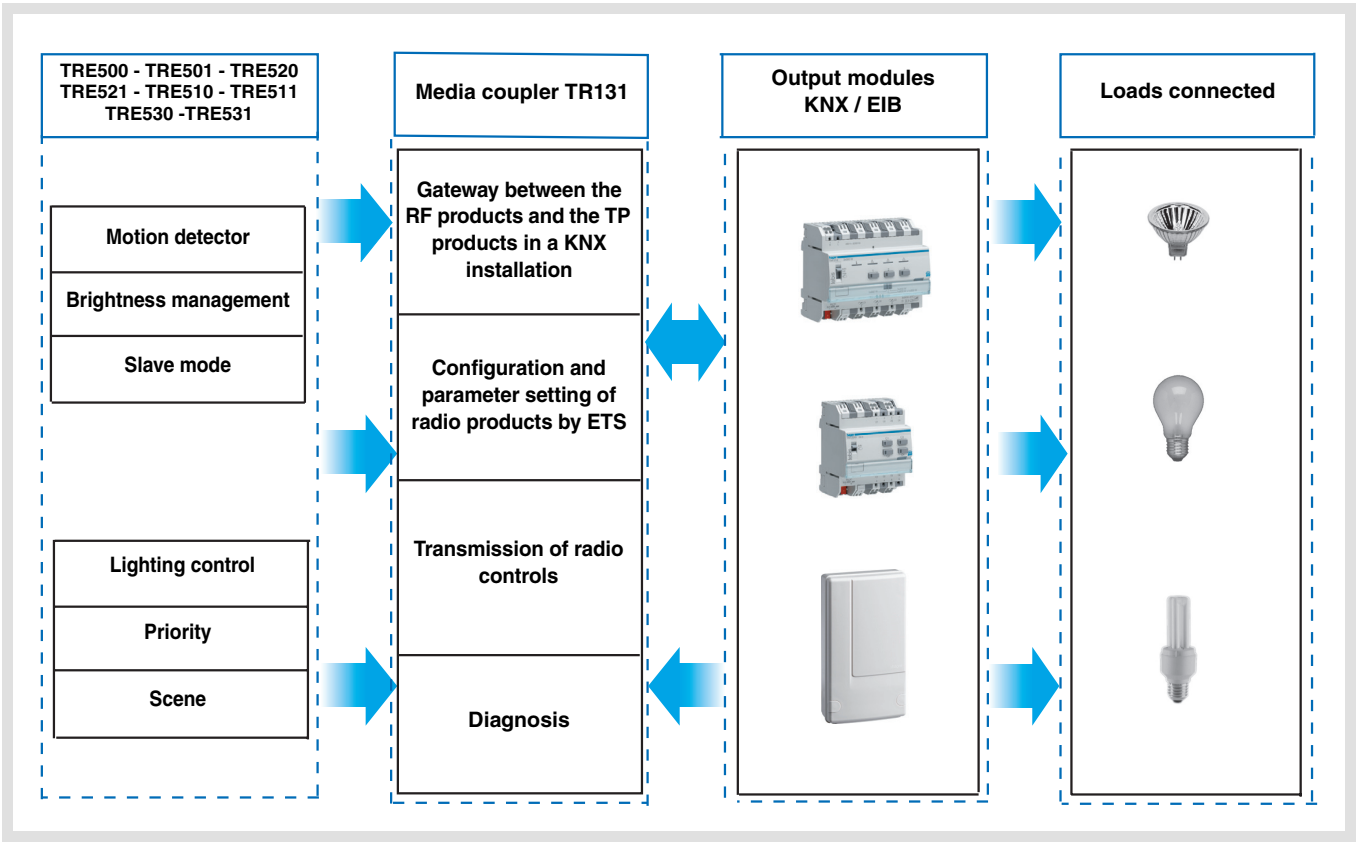



# Tebis application software

## Infrared battery / solar Radio quicklink detector

*Electrical / Mechanical characteristics: see product information*

| | Product reference | Product designation | Application software ref. | TP device<br>RF device |
|---|---|---|---|---|
|  | TRE500<br>TRE501<br>TRE520<br>TRE521 | Battery infrared Radio detector | STRE500<br>STRE501<br>STRE520<br>STRE521 | |
| | TRE510<br>TRE511<br>TRE530<br>TRE531 | Solar infrared Radio detector | STRE510<br>STRE511<br>STRE530<br>STRE531 | |



# Summary

# 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.

## 1.2 Function Description

The main functions are the following:

### Movement detector and light measurement device

The TRE50x 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. These radio detectors cannot be configured as a master.

### Scene and Scene Presence / Absence functions

The Scene function sends group controls to different kinds of outputs to create ambiences 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.

### Status indication

The status indication function enables them to send an object **low battery** to an output.

# 2. Configuration and settings

## 2.1 Objects List

| Object \ Function | ON / OFF | Toggle switch | Timer | Brightness value | Brightness value Presence / Absence | Scene | Scene Presence / Absence |
|---|---|---|---|---|---|---|---|
| ON / OFF | X | X | | | | | |
| Timer | | | X | | | | |
| Absolute dimming | | | | X | X | | |
| Scene | | | | | | X | X |
| Battery Status | X | X | X | X | X | X | X |

## 2.2 Setting parameters

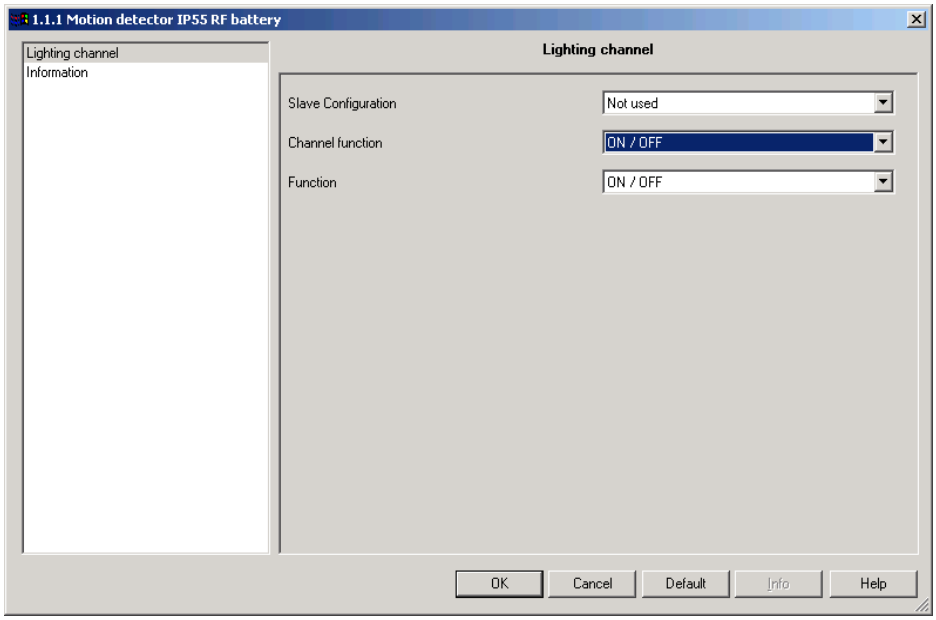
When the Slave function is not used, the lighting channel parameters appear.
The Slave function enables a link to be established between a Master detector and a slave detector. The Radio detector cannot be configured as a master.

### Functions of the Lighting channel

The **Channel function** makes it possible to select the command sent after valid movement detection ("presence" of person) and, if necessary, the command sent after the lighting time delay ("absence" of person).

- Detection of valid movement:
  For the lighting channel, detecting movement and ambient light below an adjustable light level.
- Time delay: Adjustable via a potentiometer on the product.

➜ Parameter Setting screen




### ON / OFF channel function, Timer

Thee functions are used to control switching a lighting circuit or any other load on or off.
The ON / OFF function sends the **ON / OFF** object.
The Timer function sends the **Timer** object.

➜ Parameters

| Parameter | Description | Value |
|---|---|---|
| ON / OFF channel function | This parameter defines the command sent after valid movement detection * and, if necessary, the end of the time delay.** | OFF, ON, OFF / ON, ON / OFF<br><br>Default value: ON / OFF |
| Timer channel function | In the case of a timer, the time delay for turning on the light is managed by the output pilot. | |

* Detection of valid movement (Presence):
For the lighting channel: movement detected and ambient light below the threshold.
** Time delay:
For the lighting channel: Adjustable via a potentiometer on the product.

## Brightness value channel function, Brightness value Presence / Absence

These functions enable commands to be sent to dim the lighting on 1 or 2 levels: A value after movement has been detected and another value at the end of the lighting time delay.
The Brightness value functions send the **Absolute dimming**.
The output status commanded is received on the object **Status indication**.

➜ Parameters

| Parameter | Description | Value |
|---|---|---|
| Brightness value (Presence) | Defines the absolute level of variation of the output after detection of a valid movement. | 0% to 100% in 1% steps<br>Default value: 100% |
| Brightness value (Absence) | Defines the absolute level of variation of the output at the end of the time delay. | 0% to 100% in 1% steps<br>Default value: 0% |

## Scene channel function and Scene Presence / Absence

The Scene fonction can be used to send group commands to different sorts of outputs to create atmospheres or scenarii (leave scenario, reading atmosphere, etc.).

The Scene function sends an object **Scene**.

➜ Parameters

| Parameter | Description | Value |
|---|---|---|
| Scene number (Presence) | This parameter defines the number of the scene after detection of a valid movement. | Scene 1 to Scene 8<br>Default value: Scene 1 |
| Scene number (Absence) | This parameter defines the number of the scene at the end of the time delay. | Scene 1 to Scene 8<br>Default value: Scene 2 |

Scene learning must be done from another transmitter.

## 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.

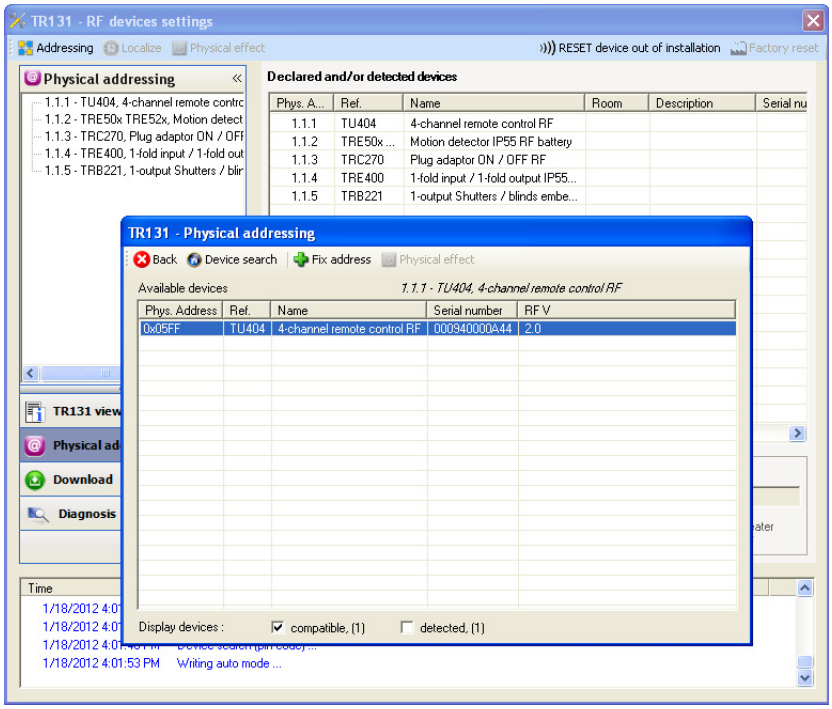
**Procedure:**

- 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.

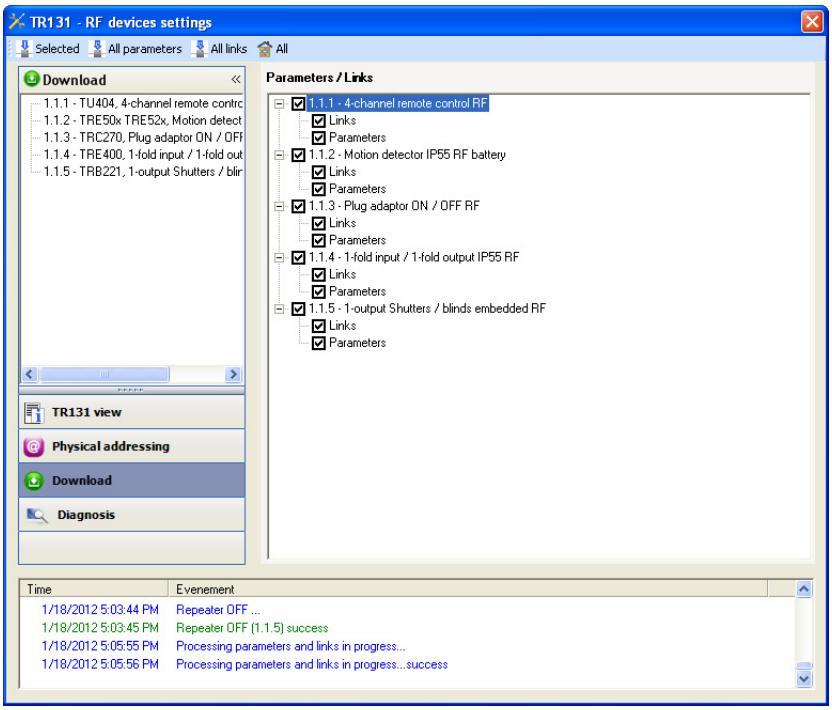
Caution: After an interruption in the above operations greater than 10 mn, it is necessary to press the **cfg** button again on the transmitter devices to be programmed.



## 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.

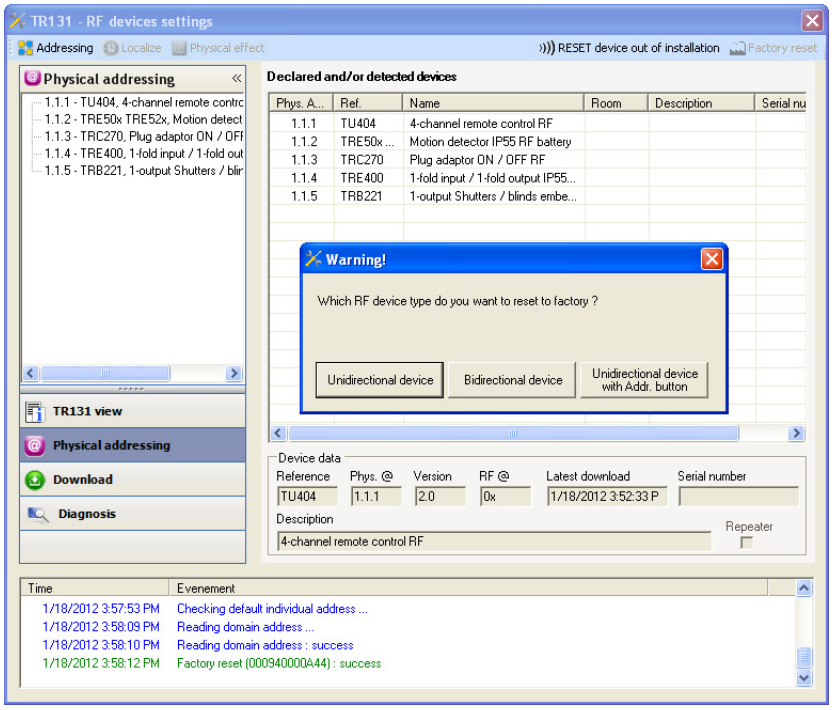
NB: For more information, refer to the description for the TR131 application software.

# 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

| | |
|---|---|
| Max. number of group addresses | 60 |
| Max. number of links | 85 |