

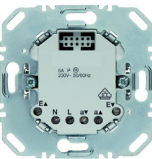

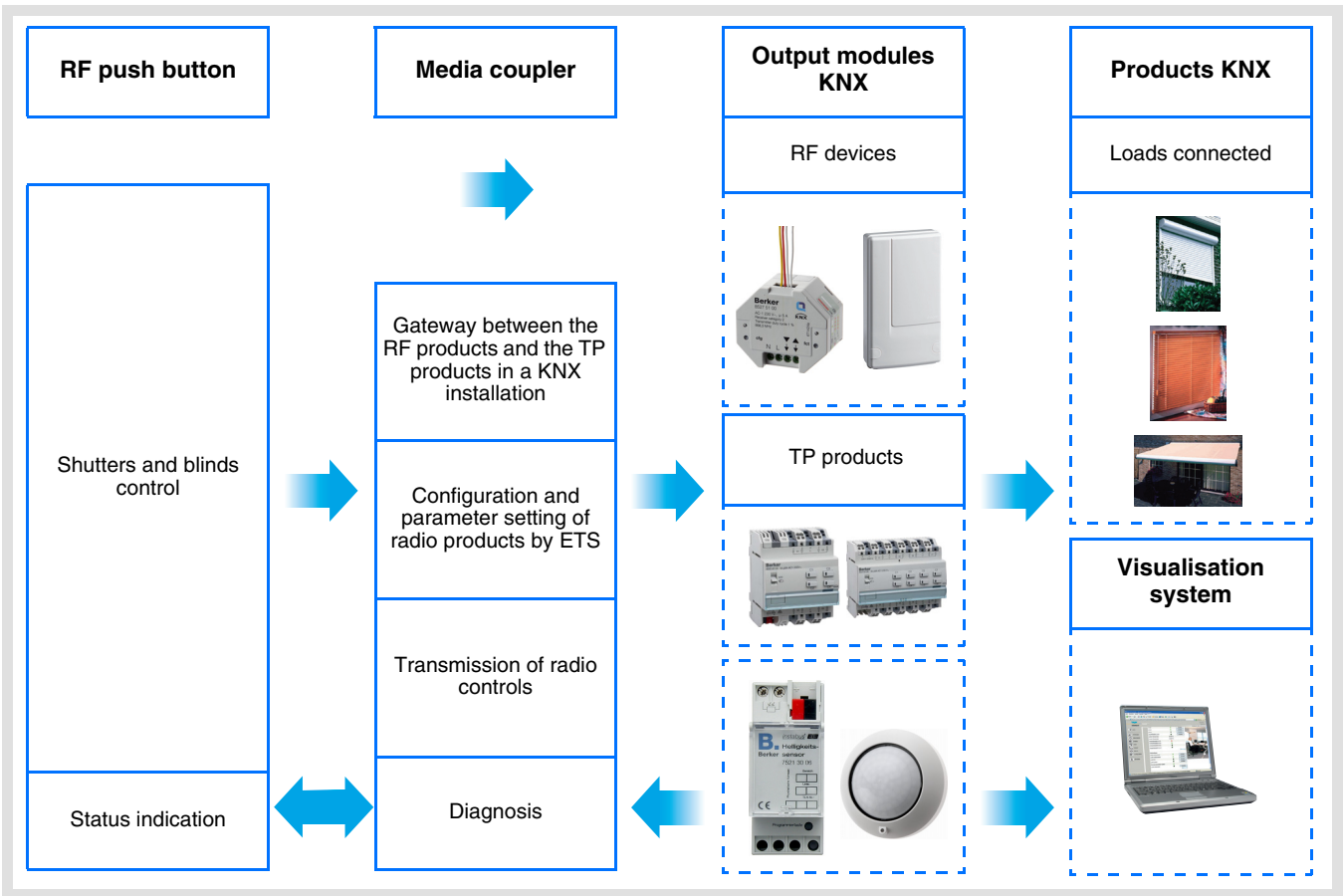


application software

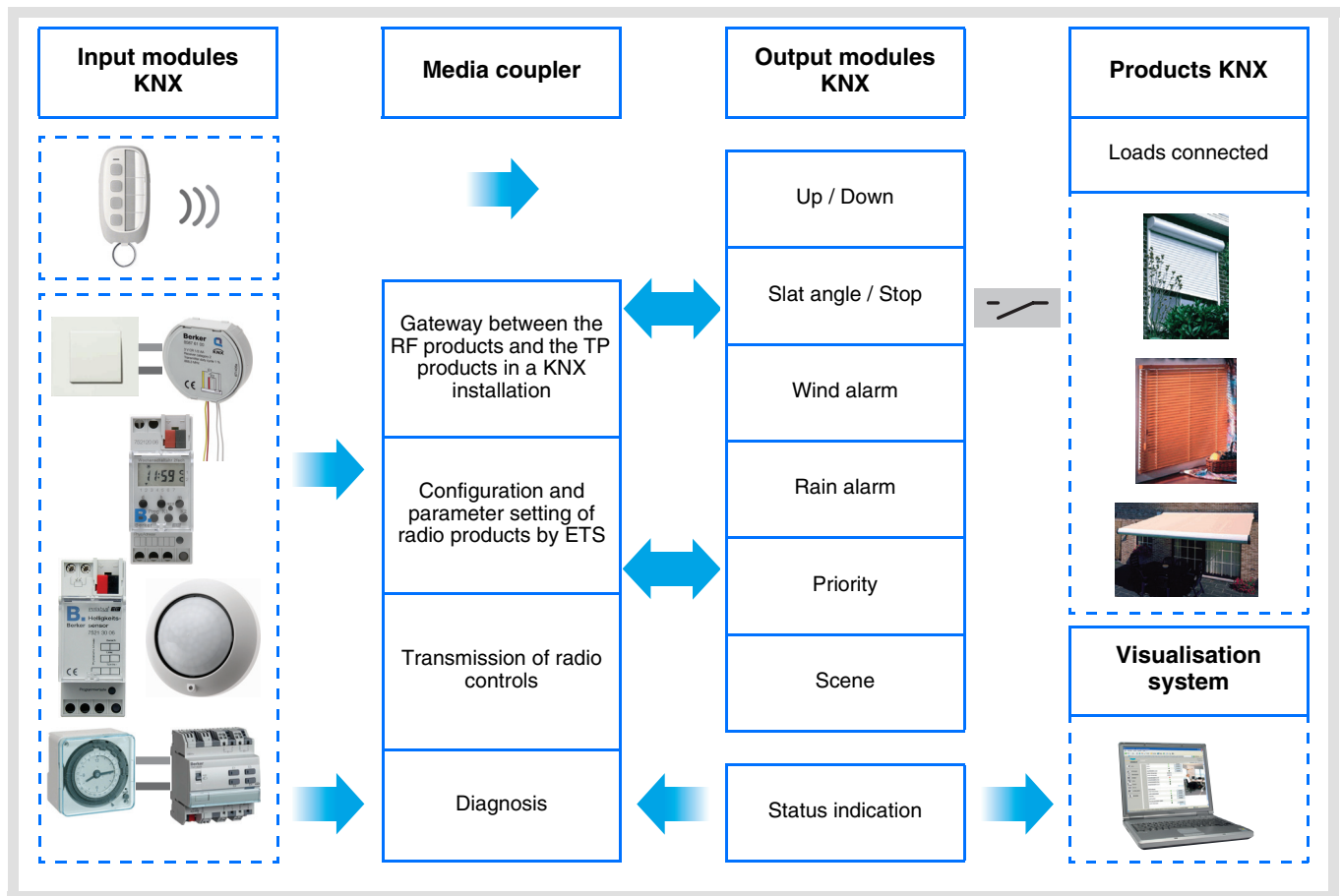
Input products / Shutter Output / RF output
Electrical / Mechanical characteristics: see product user manual

	Product reference	Product designation	TP device RF devices
	8524 52 xx	Control module 1-fold push button shutters / blinds RF	
	8522 11 00 8502 01 00	Power module 1 shutter / blind output Power supply	

Inputs



Shutter / blind output





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1. Description of the system

1.1 General overview

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.

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

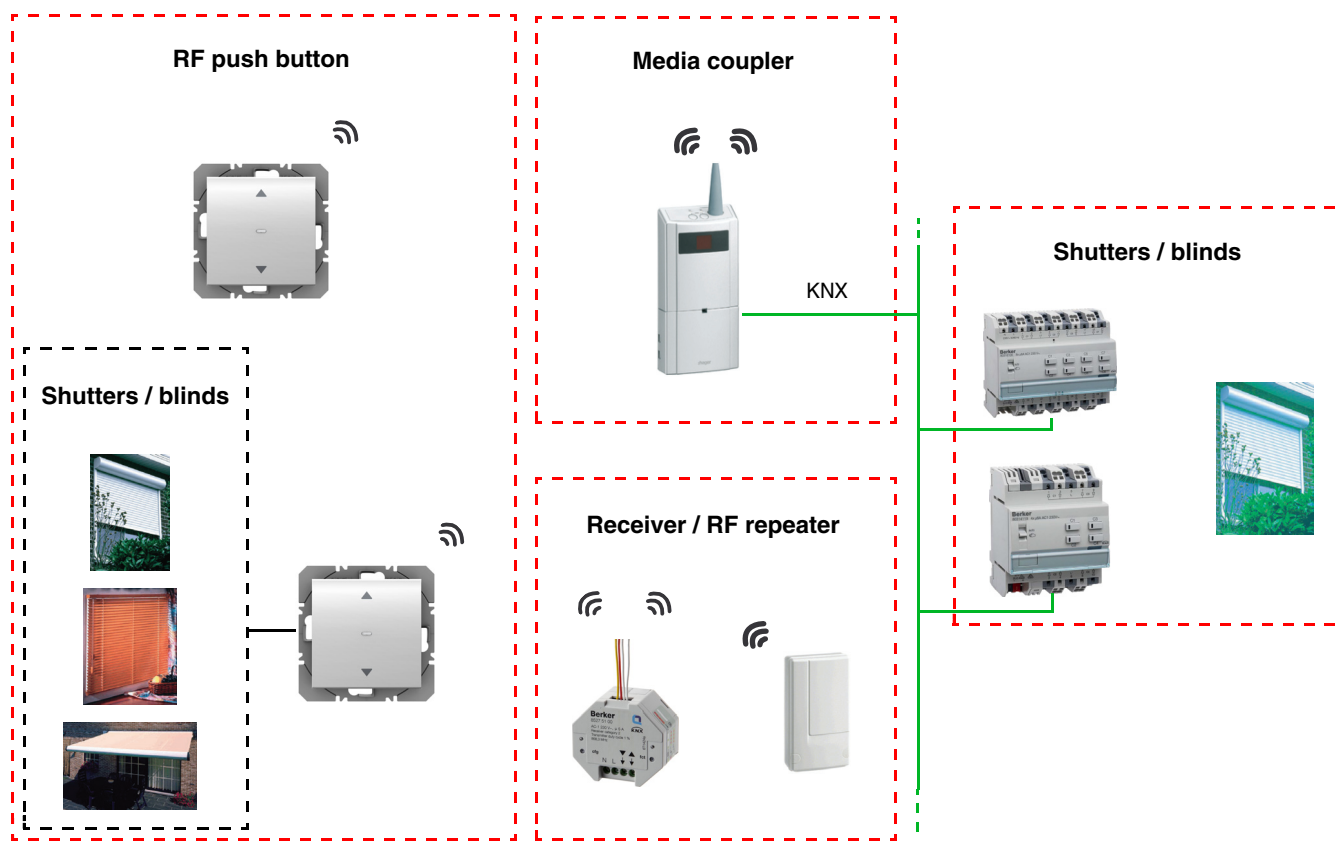
Within the same installation, a single configuration mode may be used.

To re-use a product which has already been programmed in another installation, whatever the configuration mode, a factory reset must be performed on the product.

Specifics for quicklink radio transmitters:

Pressing the **cfg** button activates configuration mode. In this mode, the dialogue product is bi-directional. For numbering or programming operations, it will therefore no longer be necessary to bring the transmitters to be configured up to the media coupler. It is only necessary to remain within radio range.

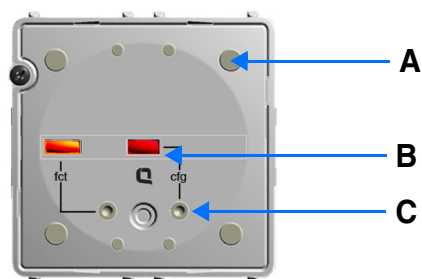
1.2 General outline



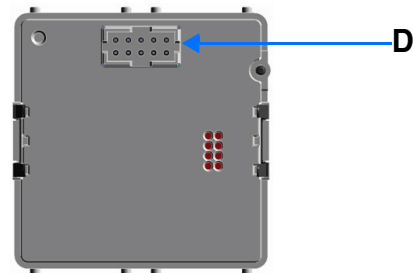
1.3 Description of the product

- Control module

Front face



Rear face

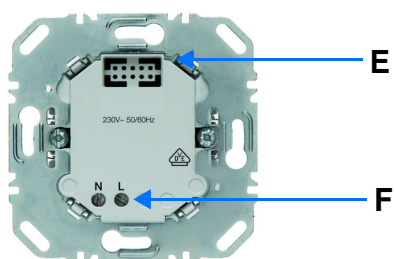


A: Button
B: Configuration LED
C: Configuration button

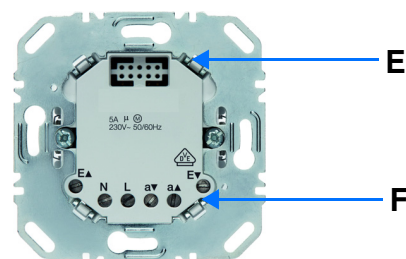
D: Connector

- Power module

Power supply 230V~



1 shutter / blind output



E: Connector
F: 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	
Power module	8524 52 xx
	8522 11 00
	8502 01 00

1-fold push button shutters / blinds RF
1 shutter / blind output
1-fold push button shutters / blinds RF

1.5 Function Description

1.5.1 Inputs

The push buttons are used to send shutter and blind controls.

The main functions are the following:

■ Emission of commands

- Shutters / Blinds control
 - Up, Down, Stop, Slat angle

1.5.2 Shutter / blind output

The application software allows you to configure individually the outputs.

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.

■ Position in %

The Position function is used to bring a shutter or blind to a desired position, which is entered in % lock.

■ 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.

■ 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.

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

Using the Status indication function, the following can be sent via the bus:

- Position indication in %: Indicates the position of the shutter or blind.
- Slat angle indication in %: Indicates the slat pitch of the blind.

1.6 Hardware and software required for configuration

- Windows PC with the ETS software,
- Media coupler. The software version must meet the following characteristics:
 - Firmware: > 1.2.5
 - Plug-in: > 1.0.11

(Check that you have administrator rights under Windows. If not you will not be able to install the media coupler plug-in.)

- Programming interface.

2. Configuration and settings

2.1 Inputs

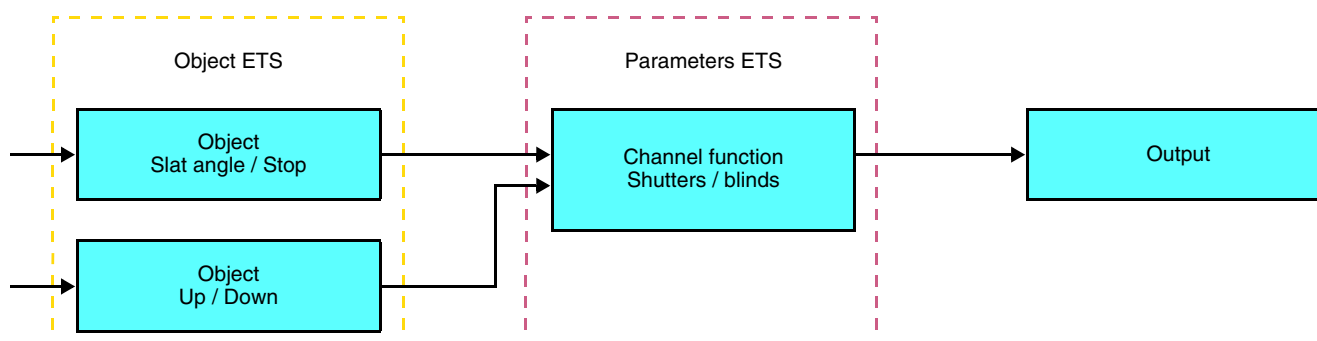
2.1.1 Objects List

Parameters	N°	Name	Function of the object	Length	C	R	W	T
Shutters / blinds	0	Input	Up / Down	1 bit	C	R	-	T
	1	Input	Slat angle / Stop	1 bit	C	R	-	T

2.1.2 Setting parameters

■ Channel function: Shutters / blinds

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



This function is used to control a shutter or blind using two push buttons (Inputs). 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).

Remark:

- short key-press: < 0.4 s
- long key-press: >= 0.4 s

2.2 Shutter / blind output

2.2.1 Objects List

N°	Name	Function of the object	Length	C	R	W	T
2	Output	Up / Down	1 bit	C	R	W	-
3	Output	Slat angle / Stop	1 bit	C	R	W	-
4	Output	Priority	2 bit	C	R	W	-
5	Output	Alarm 1	1 bit	C	R	W	-
6	Output	Alarm 2	1 bit	C	R	W	-
7	Output	Scene	1 byte	C	R	W	-
8	Output	Status indication	1 bit	C	R	-	T
9	Output	Position in %	1 byte	C	-	W	-
10	Output	Slat angle in %	1 byte	C	-	W	-
11	Output	Position indication in %	1 byte	C	-	W	-
12	Output	Slat angle indication in %	1 byte	C	-	W	-

2.2.2 Setting parameters

Participant: 1.1.1 1-fold push button shutters / blinds RF

Output
Information

Type of function: Blind

Status after priority: Maintain status

Position on alarm 1: Up

Position on alarm 2: Down

Complete up movement duration: 120

Complete down movement duration: 120

Relay closing time for slat positioning (x50 ms): 5

Total number of slat angles: 12

Memo function (not active=compatibility mode): Inactive

■ 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 indication** object:

0: last up movement,

1: last down movement.

Configuration and settings

Description of the **Position indication in %** object:

This object allows the status of the position to be sent over the KNX bus. It is sent after the position of the blind or shutter has been achieved.

Object value: 0 - 225

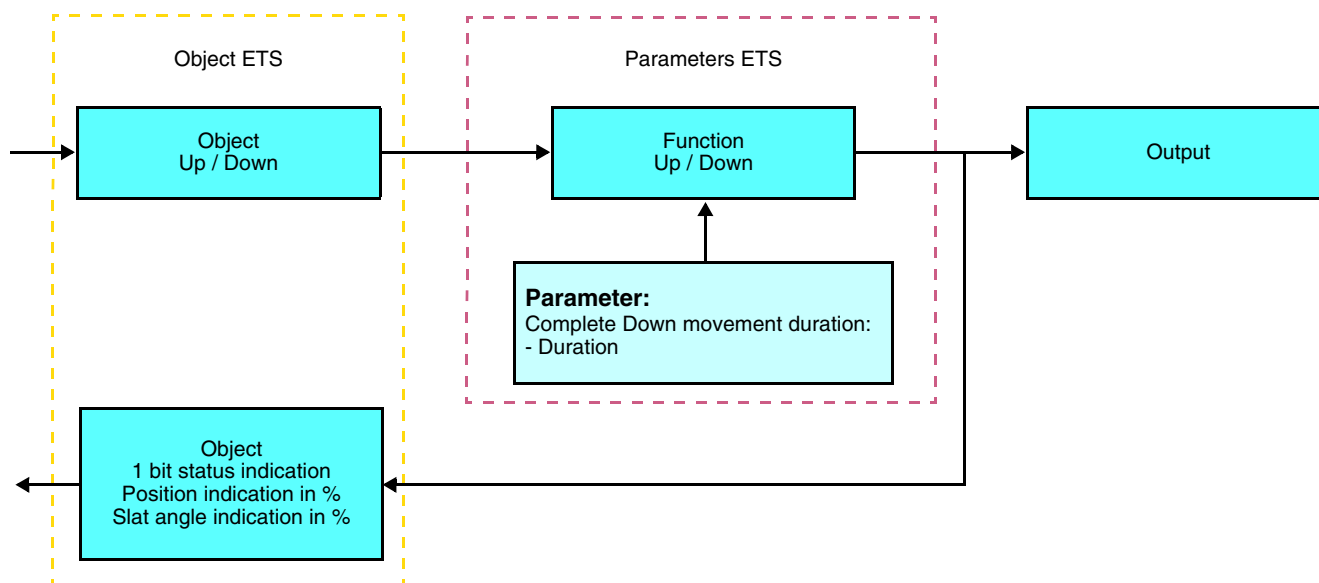
- 0 (0%): Upper position
- 255 (100%): Lower position

Description of the **Slat angle indication in %** object:

This object allows the status of the slat angle to be sent over the KNX bus. It is sent after the tilting of the blind has been achieved.

Object value: 0 - 225

- 0 (0%): Slats open
- 255 (100%): Slats closed

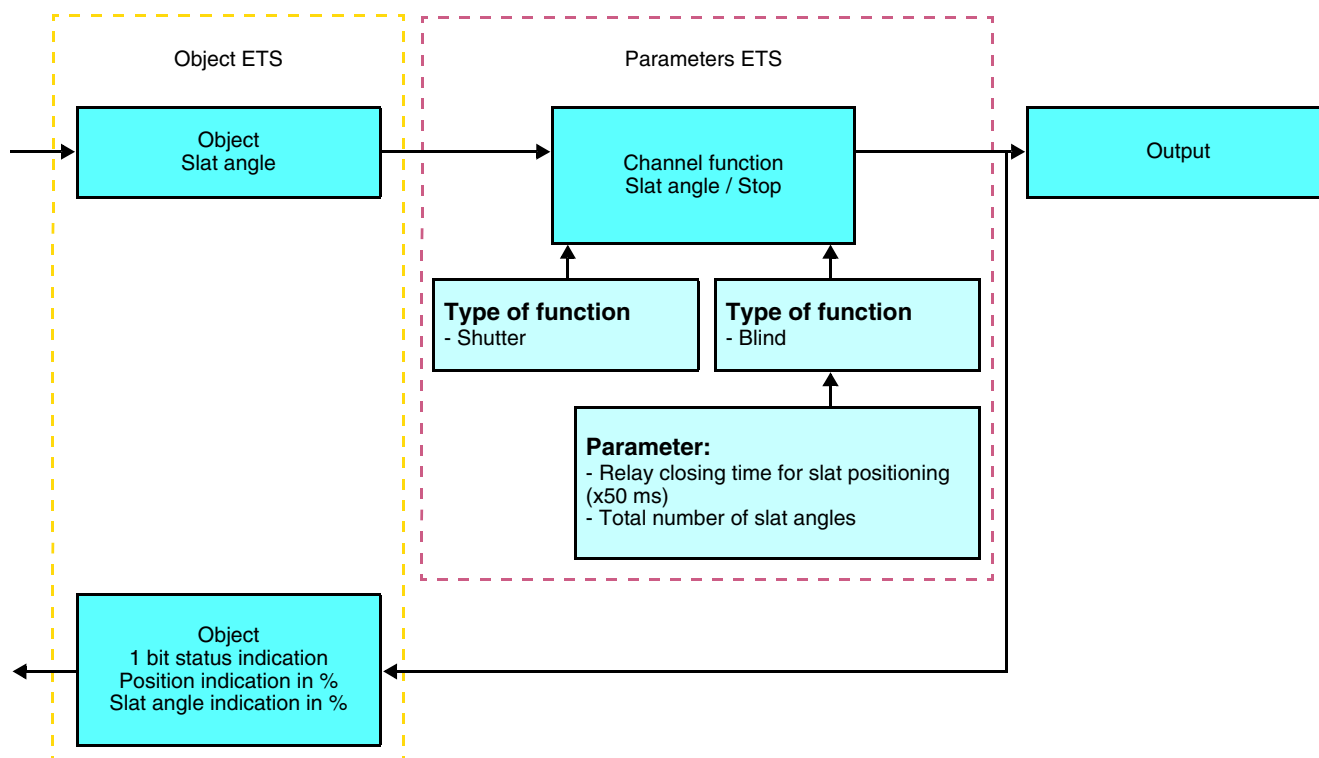


Parameter	Description	Value
Complete Up movement duration	This parameter defines the time taken, during which the contact must be closed, to reach the upper position.	0 to 500 s in 1 s steps Default value: 120 s
Complete Down movement duration	This parameter defines the contact closing time for a complete 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.

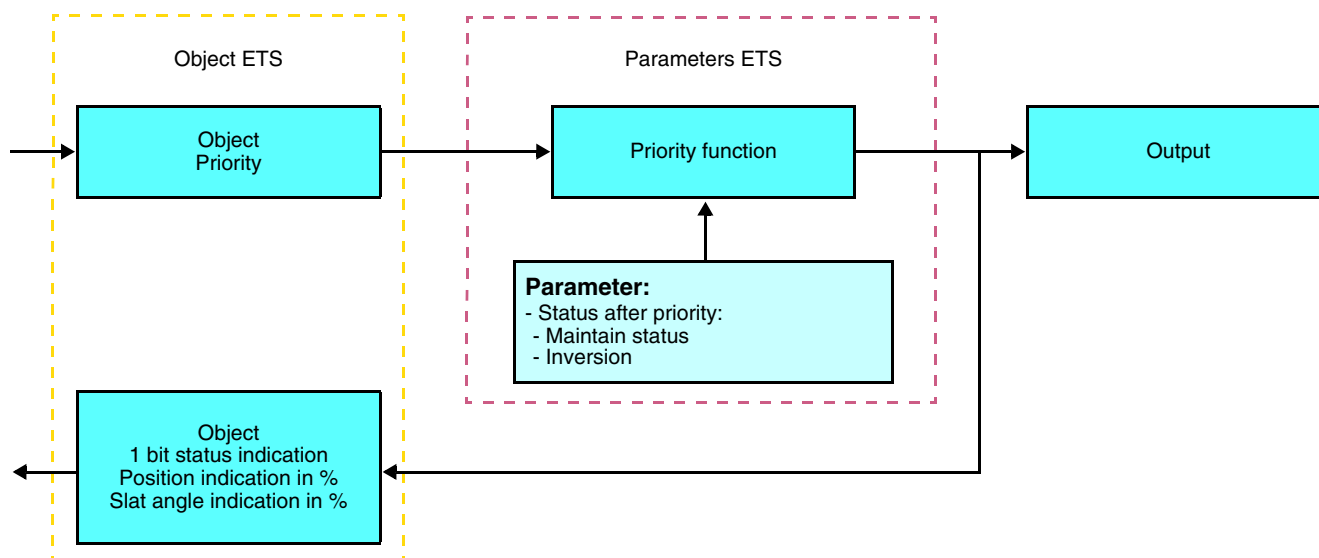
The settings consist of programming the length of a press command that defines the number of presses to move from a slat angle of 0% to a slat angle of 100%.



Parameter	Description	Value
Relay closing time for slat positioning Value (x50 ms)	This parameter allows defining the closing time of the contacts to carry out one slat step.	1 - 50 Default value: 5
Total number of slat angles	This parameter defines the total number of basic slat angles for the slats to pass from the position angled toward the bottom to the position angled toward the top.	1 - 60 Default value: 12

■ 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.



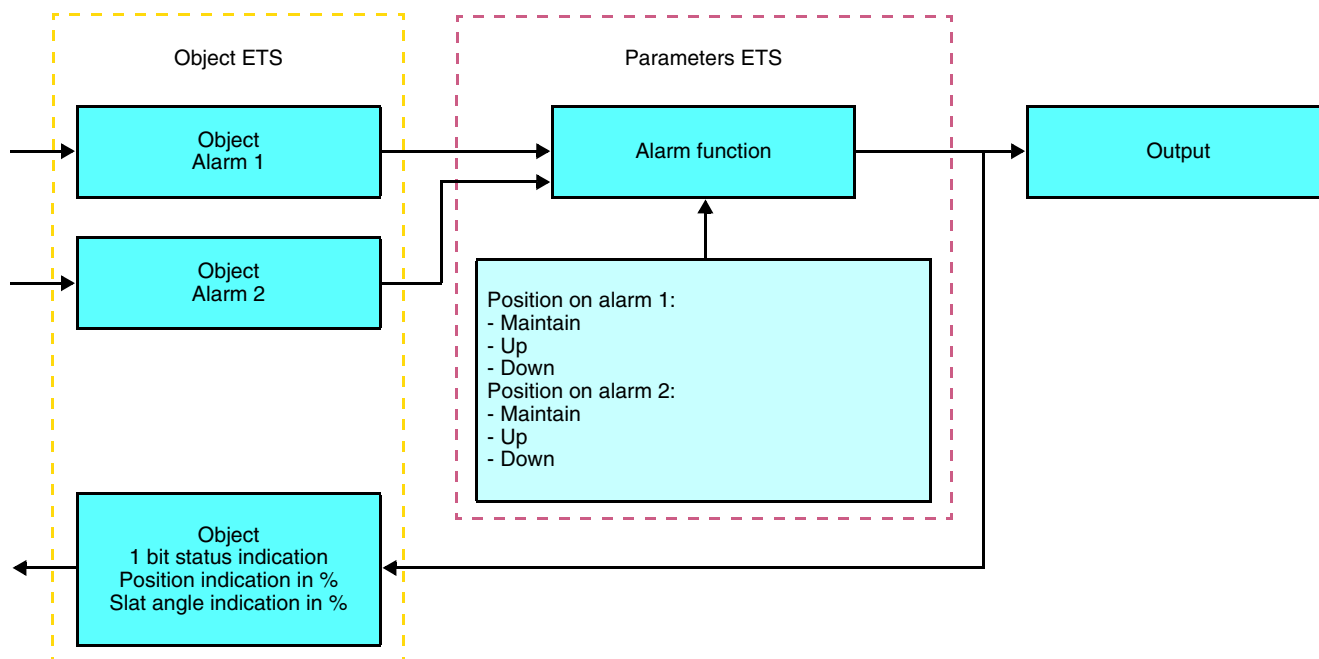
→ Description of the **Priority** object

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

Parameter	Description	Values
Status after priority	At the end of the priority, the output is:	
	Not changed.	<ul style="list-style-type: none"> Maintain status: The output is maintained in the status which was active before the priority.
	Switch to the opposite status.	<ul style="list-style-type: none"> 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 status		

■ 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.

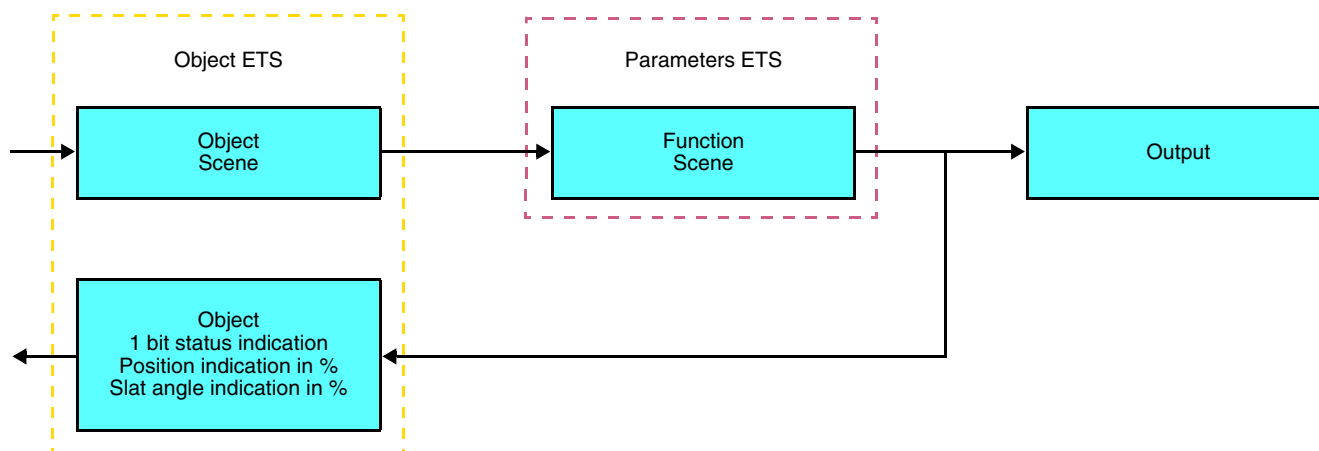


Parameter	Description	Value
Position on alarm 1	This parameter defines the position of the shutter or blind when the Wind alarm is activated.	Maintain, Up, Down Default value: Up
Position on alarm 2	This parameter defines the position of the shutter or the blind when the Rain alarm function is active.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

■ Scene function

A scene is used to control a group of outputs. Each of the outputs in the group will be set to a status pre-defined for the scene. A scene has been initiated by the object **Scene**.

The group of outputs is created in advance by establishing the link between the outputs that are to be part of the scene and the push button which initiates the scene. Each output can be integrated in 8 different scenes.



→ Description of the **Scene** object (1 byte)

7	6	5	4	3	2	1	0
Learn	x	Scene number					

Learning and storing in the room

This procedure modifies and stores a scene by local action on the push buttons located in the room:

- Activate the scene by pressing briefly on the room push button that triggers the scene,
- Set the outputs to the desired status using the push buttons that control them individually,
- Store the output statuses by pressing the room push button that triggers the scene for longer than 5 s.

Storage is indicated by the inversion of the status of the outputs concerned for 3s.

Memory function and Scene object

To use the Memory function, this must be activated via the corresponding parameter. When Memory function is active this is controlled via the scene object (scene 8). If scene 8 is called up via object 7 (scene), the execution of the recorded 24-hour programme will be started, resp. stopped depending on the value of the Learn bit.

A description of the Memory function and information about recording, resp. local operation can be taken from the operating instructions.

Parameter	Description	Value
Memo function	Definition if the scene object (scene 8) can be used for controlling the Memory function.	Not active * Active
Memo polarity ¹	Definition at which value of the Learn bit the 24-hour programme (Memory function) will be started.	ON = *1 ON = 0

* Default value

¹ Only visible if **Memo function is active**

Example 1 – Memory function is **active** – Memory polarity is **On = 1**:

- Receipt of scene 8 with Learn bit value **1** → Start of the 24-hour programme
- Receipt of scene 8 with Learn bit value **0** → Stop of the 24-hour programme

Example 2 – Memory function is **active** – Memory polarity is **On = 0**:

- Receipt of scene 8 with Learn bit value **0** → Start of the 24-hour programme
- Receipt of scene 8 with Learn bit value **1** → Stop of the 24-hour programme

2.3 Configuration with media coupler

■ Configuration principle

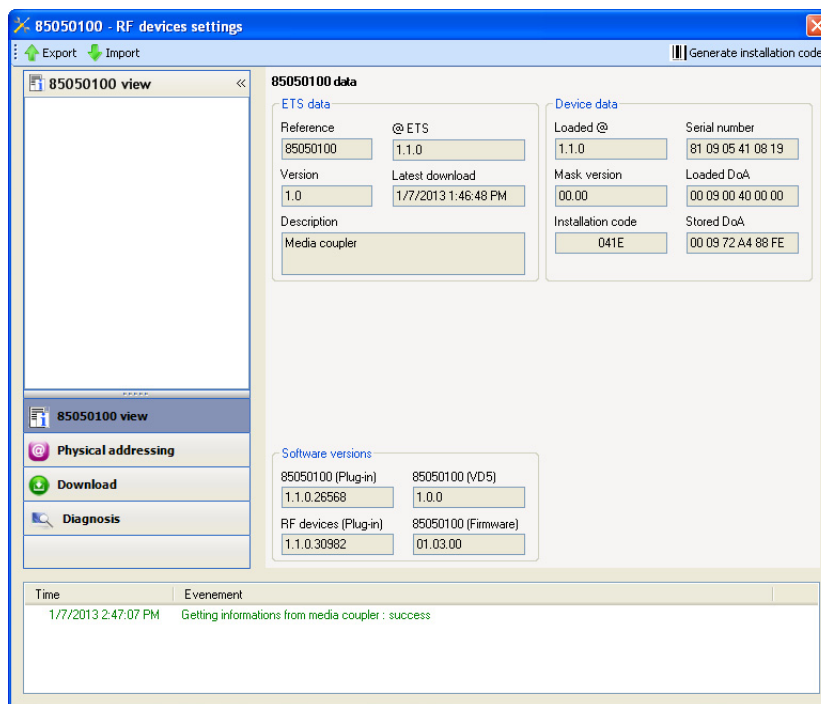
The 8505 01 00 media coupler enables configuration by ETS of RF devices for a KNX radio installation or a mixed KNX installation including RF devices and wired buses. For normal operation, the radio transmitters operate in a one-direction mode. Configuration takes place in bi-directional mode.

■ Implementation recommendations


1. The Media coupler must remain in place after configuration. It sends the commands between the radio products and the wired products in auto mode.
2. The coupler must be at the head of the line: **x.y.0** type physical address.
3. The coupler must be in a different line than the USB / series / IP interface.
4. Separate the radio and TP lines:
 - The radio line must not contain TP products: the views of the line in ETS and in the plug-in would contain inconsistencies.
 - The TP lines must not contain radio products: it would be impossible to configure these radio products.
5. Only use the plug-in to program the physical addresses and download the products. As ETS cannot program radio products, it is not possible to use the usual configuration menus.
6. The product copy function must not be used in ETS for radio products. It causes inconsistencies in the projects leading to plug-in malfunctions.
7. Copying projects which already contain a configured media coupler leads to plug-in malfunctions.
8. The use of the "default" button in the ETS parameter setting window is not recommended. This results in:
 - The loss of the parameters of a product which has already been configured.
 - Desynchronisation between the plug-in data and the radio products which have already been configured.
9. During the physical addressing, the download or the factory reset procedures of unidirectional radio products, several attempts may be needed for a successful completion of the procedure.
10. Changing the line of a media coupler which is already configured leads to plug-in malfunctions.
11. Do not use ETS Software function **Unload / Unload application**.

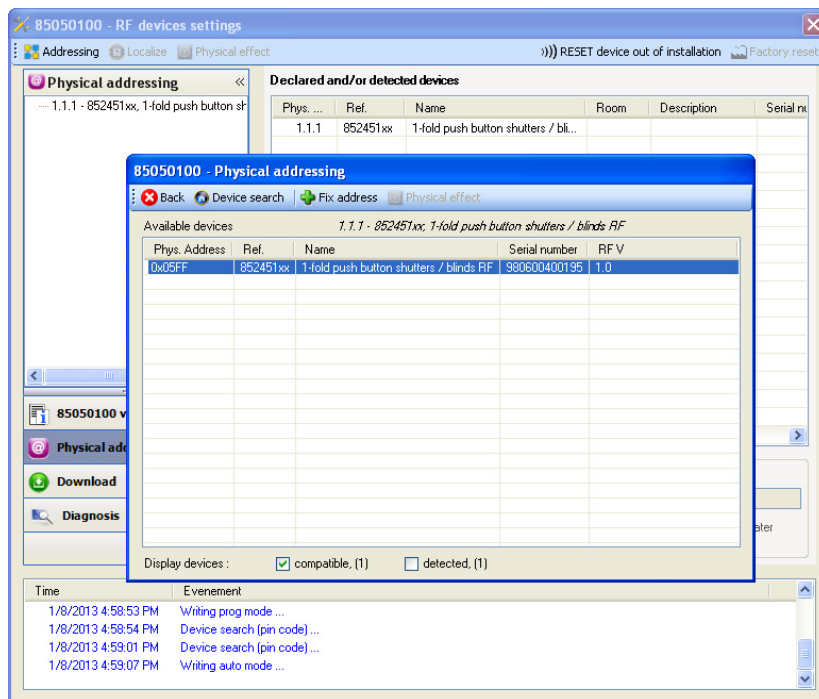
■ Installation procedure

- Create a line reserved for RF devices in your ETS plan,
- First insert the media coupler into this line, then insert the other RF devices into this line,
- Perform the programming, parameter settings and group addressing for all the RF products except for the media coupler,
- Download the physical address of the media coupler. This must be of the type 1.1.0. (always end with a zero),
- Install the media coupler plug-in: 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

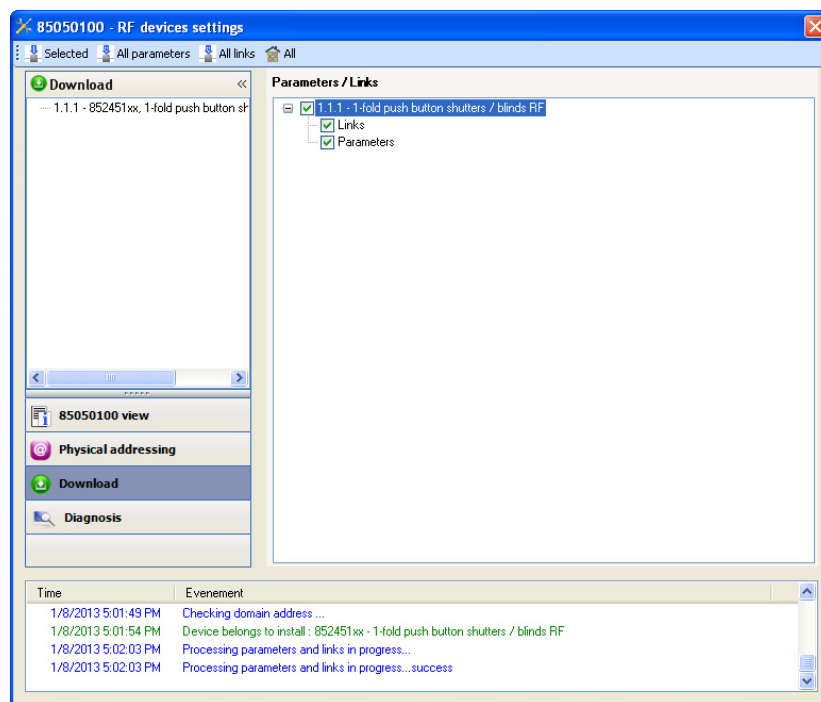
- Click on the button **Physical addressing** to display the physical addressing screen for the plug in,
- Select the device to be addressed, then click on the field **Addressing** in the menu line at the upper left of the window,
- Click on **Product search**, if the product is not found by the search, perform a factory reset on the product outside the installation,
- 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.



■ Downloading the program and the parameters

This operation is performed using the plug-in. There are 2 ways of accessing the **Download** view:

- From the media coupler
 - Right-click on the product in the ETS tree structure, then select **edit the parameters**,
 - Click on **Download** and follow the instructions on the screen.
- From the RF product to be downloaded
 - Right click on the product in the ETS tree structure, then select **Download RF product...** and follow the instructions on the screen.



The right-hand window allows you to select the parameters and / or links to be downloaded for each product.

Finalise the download by selecting the type of download in the upper bar:

- **Selected** to download the selected parameters and links,
- **All parameters** to download all the parameters of all the products displayed,
- **All links** to download all the links for all the products displayed,
- **All** to download all the parameters and all the links of all the products displayed.

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 media coupler plug-in must be deactivated during the functional tests.

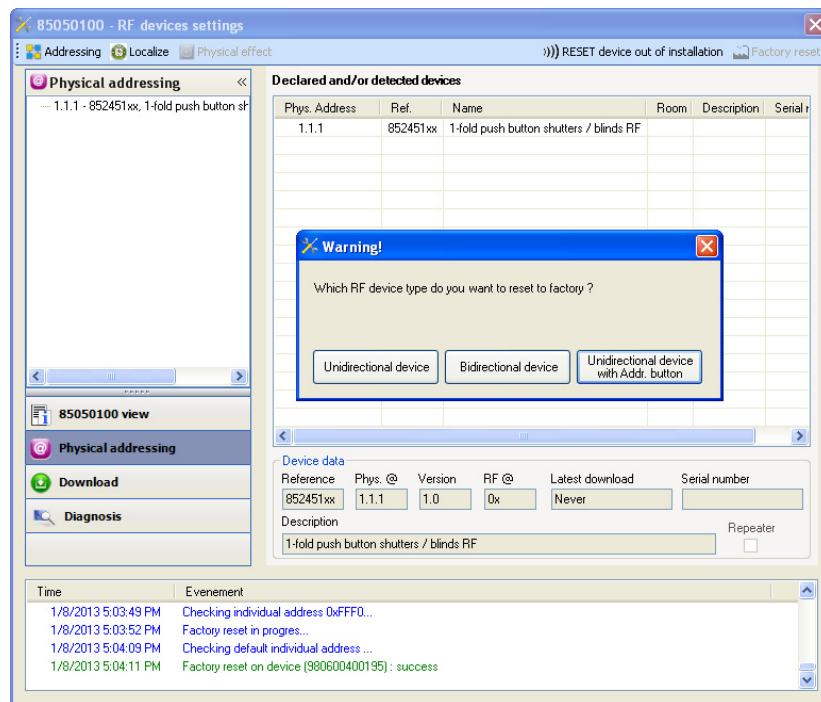
NB: For more information, refer to the description for the 8505 01 00 application software.

3. Factory reset

This function enables the device to be returned to its initial configuration (configuration when it came out of the factory). After a device reset, the device can be re-used in a new installation. A factory reset can be performed either directly on the product or by the media coupler 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 the media coupler

- For a product which is part of the installation (known by the media coupler): In the **Physical addressing** menu, select **Factory reset** and then follow the instructions which appear on the screen,
- For a product which is not part of the installation (unknown by the media coupler): 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 re-use a product which has already been programmed in another installation, whatever the configuration mode, a factory reset must be performed on the product.

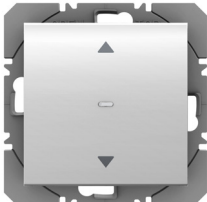
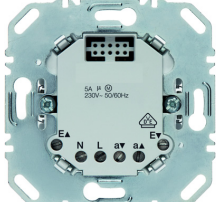

4. Example of application

Module 8524 52 xx controls module 8522 11 00 and the 4 shutter outputs module.

Operation:

- Press on the push button 1: Shutter up,
- Press on the push button 2: Shutter Down.

Equipment:

1x 8524 52 xx	1x 8522 11 00	1 4 shutter outputs module
		

Object KNX

N°	8524 52 xx		N°	8522 11 00
	Object name			Object name
0	Input - Up / Down	→	2	Output - Up / Down
1	Input - Slat angle / Stop	→	3	Output - Slat angle / Stop

N°	8524 52 xx		4 shutter outputs module
	Object name		Object name
0	Input - Up / Down	→	Output - Up / Down
1	Input - Slat angle / Stop	→	Output - Slat angle / Stop

Parameters KNX

	8522 11 00		8524 52 xx	4 shutter outputs module
	Output			
Channel function	Blind	Default settings	Default settings	Default settings
Complete Down movement duration	50			

Comment:

- A short press on push button 1 or 2 stops the shutter or tilts the slats of the blind,
- A long press on push button 1 raises the shutters,
- A long press on push button 2 lowers the shutters.

5. Main characteristics

Product	8524 52 xx
Max. number of group addresses	80
Max. number of links	90

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