
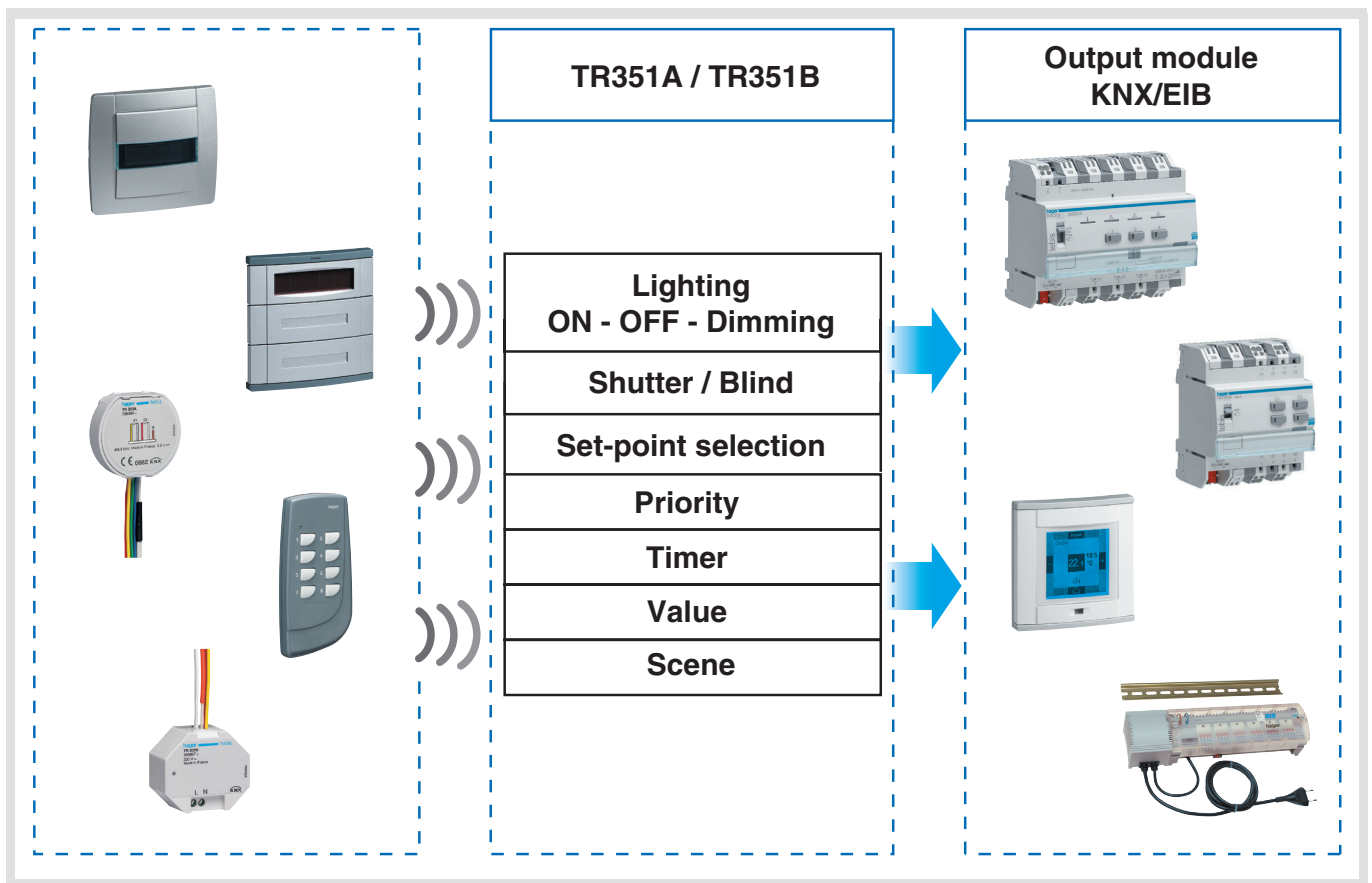




Tebis Application software

V1.0 RF unidirectional input concentrator

	Product reference	Product designation
	TR351A	RF unidirectional input concentrator white
	TR351B	RF unidirectional input concentrator silver



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1. Presentation of channels functions on the TL351A application

The TL351A application software allows configuring individually each channel of the TR351. The main functions are the following :

■ Sending commands

The pushbuttons allow sending commands for lighting, blinds and shutters, heating, scenes.

- Lighting control
 - Pushbutton, ON, OFF, ON/OFF, Timer.
 - Dimming on 1 or 2 pushbuttons.
- Control of blinds/shutters
 - Up, Down, Stop, Blind slat angle, Secured down.
- Heating control
 - Comfort, Reduced, Frost protection, Stand-by, Auto.

■ Priority

The priority function allows priority start or priority stop controls to be sent.

The action of the Priority depends on the type of applications controlled : lighting, shutters, heating, etc.

■ Scene

The Scene function allows group controls to be sent to different kinds of outputs to create ambiances or scenarios (leaving home scenario, reading ambience, etc.).

■ Value

The Value function allows sending 2-byte type values like percentages, temperatures, luminosity levels, illuminations values or any other value having this format.

2. Configuration and parameterising of the functions

2.1 Objects list

Function \ Object name	ON/OFF	Pushbutton	Time limited toggle switch	Timer	1 button dimmer	2-buttons dimmer	1-button Shutters / Blinds	2-buttons Shutters / Blinds	Heating	Priority	Scene	Value
ON/OFF	X	X			X	X						
Status indication		X	X		X		X					
Time limited toggle switch			X									
Timer				X								
Dimming					X	X						
Stop / Angle							X	X				
Up / Down							X	X				
Set-point selection									X			
Priority										X		
Scene											X	
Value												X

■ Hold down durations

→ Parameters setting screen : see "Screen 1".

→ Parameters

Designation	Description	Values
Hold down duration Dimming, Shutters / Blinds	This parameter defines for the dimmer and shutters/blinds function the detection time of a hold down pressure.	400 ms, 500 ms, 600 ms, 700 ms, 800 ms, 900 ms, 1 s. Default value : 500 ms.
Hold down duration 2 channels mode	Parameter not used.	

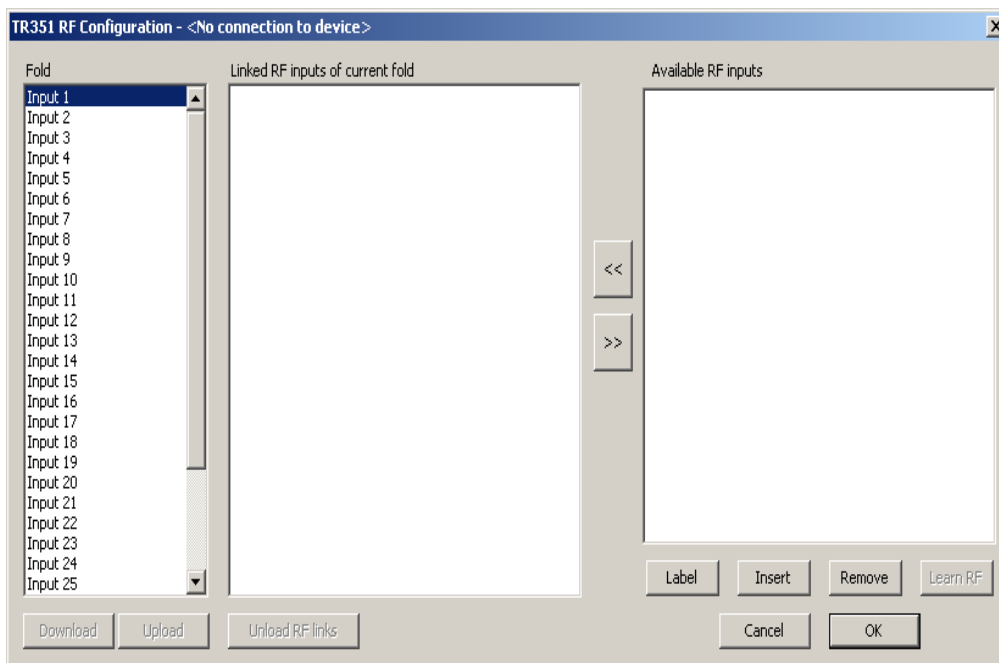
2.2 General settings on channels parameters

■ Function

The Function parameter allows selecting the function type associated with a channel.

A. ON/OFF functions : ON/OFF, Pushbutton, Timer

These functions allow switching ON or OFF a lighting circuit or any other load.
 The ON/OFF and pushbutton functions are performed by sending the ON/OFF object.
 The time delayed remote switch function is performed by sending the time delayed switch object.
 The Timer function is performed by sending the Timer object.
 The status of the controlled output is received on the Status indication object.
 The available functions depend on the value of the parameters.



Screen 1

→ Parameters setting screen : see "Screen 1"

- ON/OFF

Designation	Description	Values
Function: press and release	This parameter defines the commands to be sent when pressing and releasing the pushbutton of the RF input or the pushbutton connected with the RF input.	ON/-, OFF/-, ON/OFF, OFF/ON, -/ON, -/OFF. Default value : ON/-. Command when pressing / Command when releasing (" - " = No action).

- Pushbutton

Designation	Description	Values
Function: press and release	This parameter defines the commands to be sent when pressing and releasing the pushbutton of the RF input or the pushbutton connected with the RF input.	Toggle / -, Time delayed remote switch / -, -/Toggle. Default value : Toggle / -. Command when pressing / Command when releasing (" - " = No action).

B. Dimming function

This function allows dimming a light using one or two pushbuttons.
 The ON/OFF function is performed by sending the ON/OFF object (press briefly).
 The Dimming function emits the Dimming object (press for a long time).

→ Parameters setting screen : see "Screen 1"

Designation	Description	Values
Function	This parameter allows selecting the using mode : 1 button dimmer or 2-buttons dimmer.	1 button dimmer, 2-buttons dimmer. Default value : 1 button dimmer.
Dimmer direction*	This parameter defines the dimming direction associated with the button.	Increase, Reduction. Default value : Increase.

* This parameter is only visible if the parameter "Function" has the value : 2-buttons dimmer.

C. Shutters / Blinds control function

This function allows controlling a shutter or a blind using one or two pushbuttons.
 The Up/Down function emits the Up/Down object (press for a long time).
 The Stop/Angle function emits the Stop/Angle object (press briefly).

→ Parameters setting screen : see "Screen 1"

Designation	Description	Values
Function	This parameter allows selecting the using mode : 1 button, 2 buttons, 2 buttons Safety.	1-button Shutters / Blinds, 2-buttons Shutters / Blinds, 2-buttons Safety Shutters / Blinds. Default value : 1-button Shutters / Blinds.
Control type*	This parameter defines the movement associated with the button.	Up, Down. Default value : Up.

* This parameter is only visible if the parameter "Function" has the value : 2-buttons Shutters / Blinds or 2-buttons Safety Shutters / Blinds.

D. Heating functions

This function allows selecting a heating or air-conditionning set-point using one or two pushbuttons.
 The Heating function emits the Set-point selection object.

→ Parameters setting screen : see "Screen 1"

Designation	Description	Values
Function	This parameter allows selecting the set-point associated with the button.	Comfort, Reduced, Frost protection, Auto, Stand-by. Default value : Comfort.

E. Priority function

The priority function allows priority start or priority stop controls to be sent.
 The action of the Priority depends on the type of applications controlled : lighting, shutters, heating, etc.
 The Priority function emits the Priority object.

→ Parameters setting screen : see "Screen 1"

Designation	Description	Values
Priority type	This parameter allows selecting a Priority type. It depends on the type of application.	ON priority, OFF priority. Default value : ON priority

F. Scene function

The Scene function allows group controls to be sent to different kinds of outputs to create ambiances or scenarios (leaving home scenario, reading ambience, etc.).

The Scene function emits a Scene object.

→ Parameters setting screen : see "Screen 1"

Designation	Description	Values
Scene number	This parameter defines the scene number.	Scene 1 to scene 32. Default value : Scene 1.
Scenes modification via long key-press	This parameter authorises or forbids the learning of the scene.	Authorized, Forbidden. Default value : Authorized.

G. Value function

The Value function allows the command of a luminosity level, a temperature, an illumination value, etc.

The Value function emits a Value object.

→ Parameters setting screen : see "Screen 1"

Designation	Description	Values
Value type	This parameter defines the kind of value to be sent.	Value in %, Temperature, Luminosity level, Illumination value, Value 2 Bytes. Default value : Illumination value.
Value	This parameter defines the value to be emitted on the bus.	Possible values : Value in % 0% to 100% by steps of 1%. Default value : 0%. Temperature 0°C to 40°C by steps of 0.5°C. Default value : 20°C. Luminosity level 0 lux to 1000 lux by steps of 50 lux. Default value : 300 lux. Illumination value 0% to 100% by steps of 1%. Default value : 0%. Value 2 Bytes 0 to 65535 by steps of 1. Default value : 0.


3. Management of the unidirectional RF inputs

3.1 Compatible RF products

- Products compatible with TX100 without previous programming :

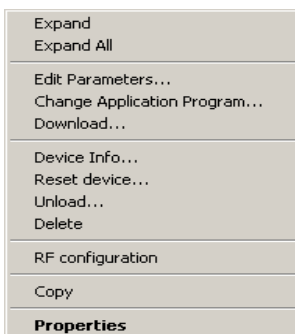
Reference	Manuf. date	Reference	Manuf. date
TU 204A	≥ 12.6	TD 300	≥ 10.6
TU 208A	≥ 14.6	TD 301	≥ 13.6
TU 224A	≥ 10.6	TD 310	≥ 13.6
TR 302A	≥ 10.6	TD 311	≥ 14.6
TR 304A	≥ 12.6	TD 250	≥ 19.6
TR 302B	≥ 10.6	TD 251	≥ 10.6
TR 304B	≥ 12.6	TK 301	≥ 35.6
TD 100	≥ 11.6	TK 302	≥ 35.6
TD 101	≥ 13.6	WKT 302 R	≥ 09.6
TD 110	≥ 11.6	WKT 304 R	≥ 09.6
TD 111	≥ 12.6	WKT 306 R	≥ 09.6
TD 200	≥ 12.6	WKT 312 R	≥ 09.6
TD 201	≥ 19.6	WKT 314 R	≥ 13.6
TD 210	≥ 14.6	WKT 316 R	≥ 09.6
TD 211	≥ 14.6		

- Products compatible with TX100 with previous programming :

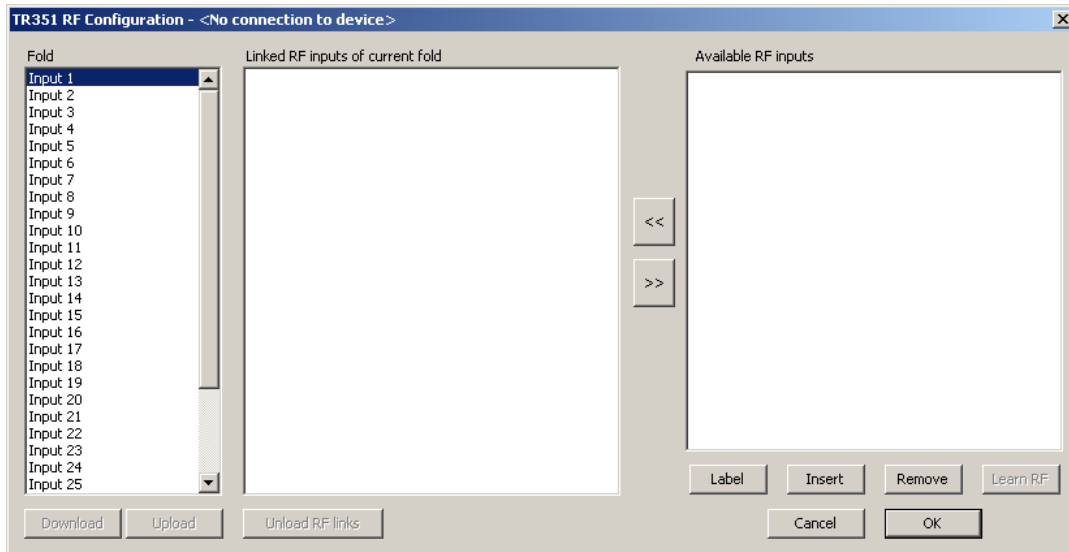
Any unidirectional RF input programmed with a  switch function is compatible with the TR351 whatever its manufacturing date.

3.2 Management interface

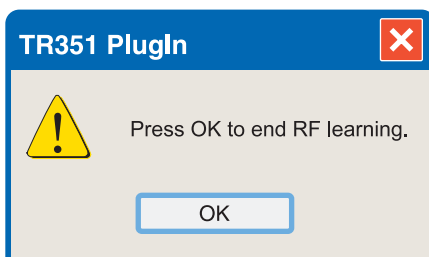
The unidirectional RF inputs are managed by means of a plug-in directly integrated in the ETS 3 software. To start the management interface, it is necessary to open in ETS 3 a project containing the TR351 to be configured or to create a project adding a TR351. Click with the right mouse button on the TR351 to be configured. When the following screen is displayed, click on RF Configuration.



The TR351 connects itself to the KNX/EIB bus and the following screen is displayed :



- The Inputs List window contains all inputs of the TR351.
 - The Links List window for the selected channel contains, if applicable, all unidirectional inputs linked with the selected channel.
 - The Available RF inputs window contains all unidirectional RF inputs learned by the TR351.
 - The Links reading button allows reading the configuration contained in the TR351.
 - The Write links button allows downloading the configuration (channels / RF inputs association) into the TR351. (the configuration contained in the TR351 will be overwritten when downloading).
 - The << button allows adding one or more unidirectional inputs to a channel.
 - The >> button allows erasing one or more unidirectional inputs associated with a channel in case of a wrong association.
 - The Edit button allows editing a unidirectional RF input (serial number, group address and designation).
 - The Insert button allows inserting manually a unidirectional RF input.
 - The Erase button allows erasing one or more unidirectional inputs from the interface.
 - The Learn button allows storing one or more unidirectional RF inputs.
 - The Cancel button allows returning to the menu.
 - The OK button allows confirming the whole configuration and storing it in the ETS project. (pressing the OK button will not download the configuration into the ETS).
- Learning one or more unidirectional RF inputs
- Click on the Learn button
 - The following screen is displayed :



- Activate, one by one, all unidirectional RF inputs to be learnt, then click on the OK button.
- All unidirectional RF inputs are now displayed in the Available RF inputs window.

■ Adding manually a unidirectional RF input in the interface

- Click on the Insert button
- The following screen is displayed :

- Fill in the serial number of the unidirectional RF input in the Serial number line :
Format : hexadecimal 12 digits.
- Fill in the emission group address of the unidirectional RF input in the Address of line :
Format : xx/yy/zzz (from 0/0/1 to 7/7/255).
- If required, fill in a description of the input in the Designation line.
Format : text, 20 characters maximum recommended because of the legibility of the elements in the window.

■ Linking the channels of the TR351 with one or more unidirectional RF inputs

- Select the desired channel in the Inputs list window.
- Select one by one the unidirectional RF inputs in the Available RF inputs window.
- Click on the << button to associate the unidirectional input(s) with the selected channel. (The >> button allows erasing one or more unidirectional inputs associated with a channel in case of a wrong association).
- Proceed the same way for all channels.
- Once the association operation is completed, click on the Write links button to download the configuration into the TR351.

■ Editing a universal RF input

- Select the unidirectional RF input in the Inputs list window.
- Click on the Edit button.
- The following screen is displayed :

- Modify the serial number and/or the group address and/or the designation of the selected RF input.
- Click on the Cancel button to cancel the changes or click on the Yes button to confirm them.
- Once the association operation is completed, click on the Write links button to download the configuration into the TR351.

4. Main characteristics

Max. number of group addresses	252
Max. number of links	254
Objects	197

5. Physical addressing

To perform physical addressing or check for the presence of the bus, press simultaneously the + and - pushbuttons on top of the product.

Indicator on = bus present and product in physical addressing.

The product remains in physical addressing until the physical address is transmitted by ETS. Pressing a second time allows leaving the physical addressing mode.

Ⓕ HAGER Electro S.A.S.
132, boulevard d'Europe
B.P. 3
F - 67215 Obernai Cedex
<http://www.hagergroup.fr>
Tel. : 03.88.04.78.54