

tebis Configurator TX100

Ⓒ GB Operating manual



Summary

- 1. General information about the Tebis installations and their configuration 3
 - 1.1 The various product types 3
 - 1.2 The different installation types 3
 - 1.3 General information about the configuration and the management of the Tebis installations 4
 - 1.4 Presentation of the configuration tool TX100 5
 - 1.4.1 General view 5
 - 1.4.2 Easy and Expert configuration modes 5
 - 1.4.3 On-line and Off-line configuration 5
 - 1.5 Tools and accessories required to configure and store a project 5
 - 1.5.1 Configuring and saving a new project 5
 - 1.5.2 Continuing or modifying the configuration of a saved project 6
- 2. Commissioning, start-up and basic settings of the TX100 6
 - 2.1 Commissioning the TX100 6
 - 2.1.1 Inserting rechargeable batteries or dry-cell batteries 6
 - 2.1.2 Battery life and load 6
 - 2.1.3 USB connector (only on TX100 USB) 7
 - 2.1.4 Smartcard reader (only on TX100 SM) 7
 - 2.2 Starting up the TX100 8
 - 2.3 Basic settings 8
 - 2.3.1 Access to the setting 8
 - 2.3.2 Time and day setting 9
 - 2.3.3 Activation of the sounds 9
 - 2.3.4 Language selection 9
 - 2.3.5 Format of the ETS group addresses 10
 - 2.3.6 Activation of the display backlight 10
 - 2.3.7 Activation of the ETS mode 10
 - 2.3.8 Coupler selection 11
 - 2.3.9 Setting of the display contrast 11
- 3. Projects management 12
 - 3.1 Loading or creating a project when starting up the TX100 12
 - 3.1.2 New project 12
 - 3.1.1 Current project 12
 - 3.1.3 "Project name" 12
 - 3.1.4 Old format project 13
 - 3.2 Projects management 14
 - 3.2.1 Access to the projects management 14
 - 3.2.2 Saving a project 14
 - 3.2.3 Creation of an installation 16
 - 3.2.4 Loading of a project 16
 - 3.2.5 Deletion of a project 18
 - 3.2.6 Display of the basic data of a project file 19
- 4. Choice of the On-line or Off-line configuration mode 20
- 5. On-line configuration in Easy mode of a new installation 21
 - 5.1 The various steps of the configuration 21
 - 5.2 Check of the installation and of the material required for the configuration 21
 - 5.3 Coupling and assigning the TX100 to the installation 22
 - 5.4 Learning of the installation and numbering of the inputs and outputs 24
 - 5.5 Assigning a function to an input 29
 - 5.6 Creation of links and input of additional parameters 31
 - 5.7 Creation of links and input of additional parameters 34
 - 5.8 Vizualizing the links 36
- 6. Off-line configuration of a new installation in Easy mode 36
- 7. Modifying the configuration of an installation 37
 - 7.1 General indications about the modifications of a KNX installation 37
 - 7.2 Removing links 37
- 8. On-line configuration of a new installation in Expert mode 39
 - 8.1 General points 39
 - 8.2 Description of the Expert mode 40
 - 8.3 Configuring in Expert mode 43
- 9. Maintenance and adjustment help tools 46
 - 9.1 Management of the products of an installation 46
 - 9.2 Installation management 49
 - 9.3 Updating the software of the TX100 51
 - 9.4 Learning an installation 54
 - 9.5 Measuring tools 60
 - 9.6 Simulation 62

1. General information about the Tebis installations and their configuration

A Tebis installation is an electrical installation in which the products communicate with each other by means of a wired bus or by radio to send or receive commands.

1.1 The various product types

A Tebis installation includes different product types, which can be classified:

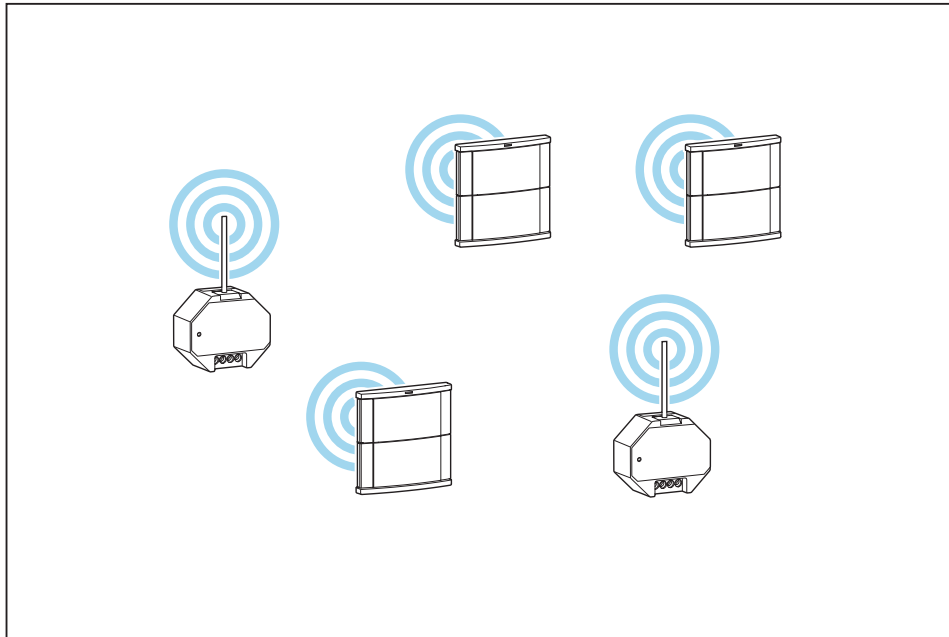
- According to their link to the KNX bus:
 - TP products: they are linked to the KNX bus by means of a wire meeting the KNX specifications.
 - RF products: they are linked to the bus by means of a radio link meeting the KNX radio specifications. The radio communication can be:
 - a) Unidirectional: the products are only emitters.
 - b) Bidirectional: the products are both emitters and receivers.
- According to their function in the installation
 - Input products: they send commands (pushbuttons, switches, presence detector, etc.). An input product can have several input channels: pushbuttons with several keys, etc.
 - Output products: they receive commands and control the connected applications (lighting, Roller shutters, etc.). An output product can have several output channels: 6-channel lighting output module to control 6 lighting channels, etc.
 - System products: they are necessary for the good operation of the installation: bus power supply, TP / RF bus media coupler, etc.

The attached table shows a classification of the various product types

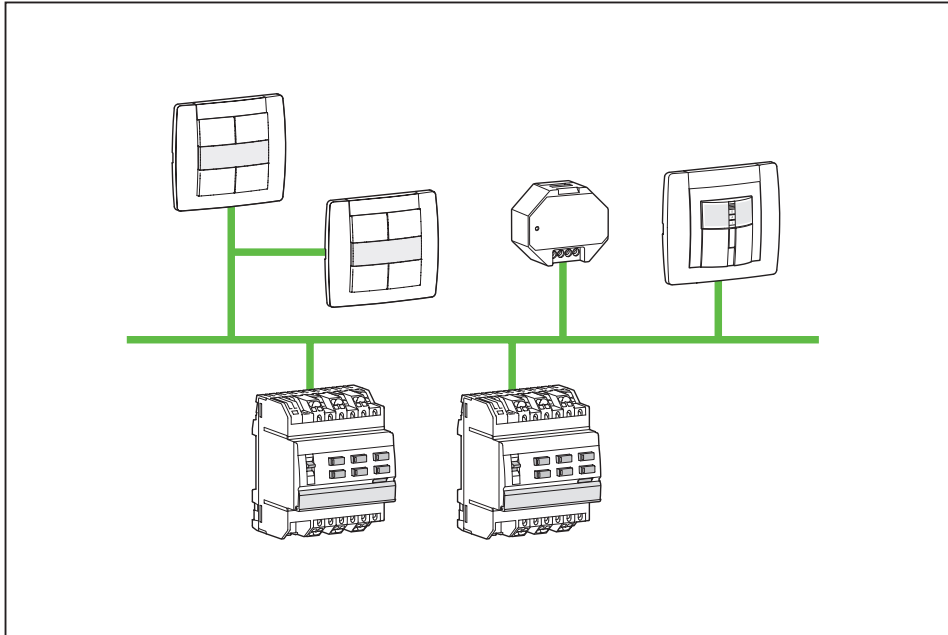
1.2 The different installation types

A Tebis installation can be:

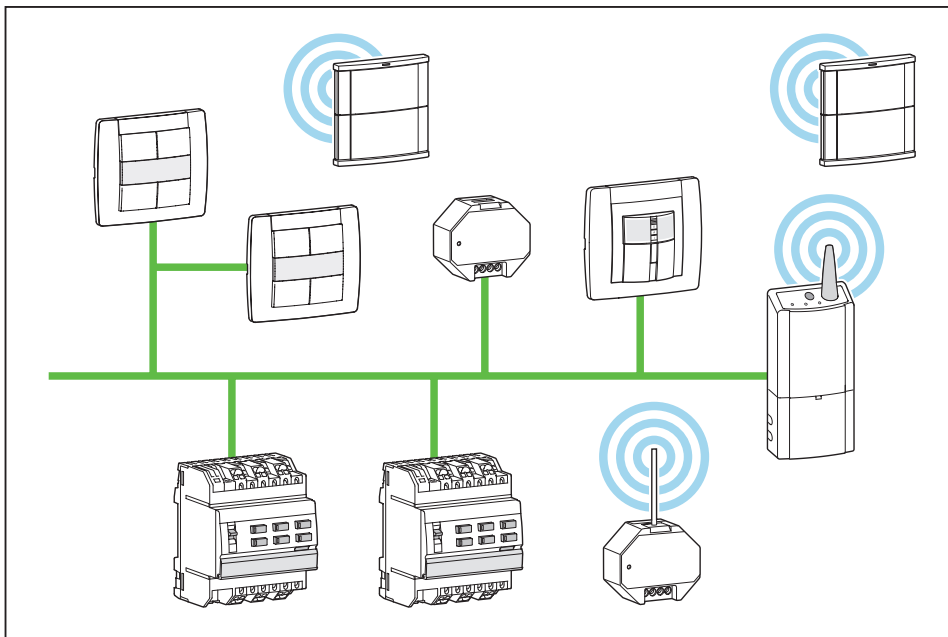
- Totally radio: all products (unidirectional or bidirectional) of the installation communicate by radio waves.



- Totally wired: all products of the installation communicate through the KNX cable



- Mixed: the installation includes both RF and TP products:



It is indispensable to install a media coupler in a mixed installation. This media coupler allows TP products and RF products to communicate with each other.

1.3 General information about the configuration and the management of the Tebis installations

After mounting and connecting all products making up the Tebis installation, the latter must be configured. This configuration is carried out using a tool: the TX100.

Configuring a Tebis installation consists in:

- Identifying and finding the various products present in the installation: pushbuttons, lighting output modules, etc.
- Numbering each input and output channel: giving a number to each of the 4 keys of a 4-key pushbutton, giving a number to each of the 6 output channels of a product with 6 lighting outputs, etc.
- Assigning a function to each input, for example for a pushbutton: switch on the light, move up a shutter, switch the heating to Comfort, etc.
- Creating links between inputs and outputs to define which input(s) control which output(s). It is possible this way to define that one single input controls several outputs and thus create group or scene commands.

The configuration must then be stored as a file (called project file) in an external memory:

- USB stick or PC (TX100s with USB connector).
- SmartMedia (SM) card (old TX100s with card reader).

1.4 Presentation of the configuration tool TX100

1.4.1 General view



1.4.2 Easy and Expert configuration modes

The TX100 configuration tool has 2 configuration modes:

- **The Easy mode**, it allows a quick and simple configuration of a TP, RF or mixed Tebis installation, without requiring particular KNX knowledge (ETS software, objects, group addresses, etc.).
- **The Expert mode**, it grants access to the objects and group addresses and it allows extending the installation with advanced Hager applications (visualisation, Internet gateway, weather station, etc.), creating complex logical functions or integrating the installation in systems configured with the ETS software.

1.4.3 On-line and Off-line configuration

The TX100 configuration tool has 2 modes to load the configuration into the installation:

- **On-line**: the TX100 communicates permanently with the installation. The download occurs as the configuration is performed. The installation can be tested at each step, but the configuration requires more time because of the time required for downloading.
- **Off-line**: the TX100 does not communicate permanently with the installation. The complete download is carried out at the end of the configuration. The configuration is faster, but the installation can only be tested at the end of the configuration.

1.5 Tools and accessories required to configure and store a project

1.5.1 Configuring and saving a new project

Depending on the type of installation, the tools required for the configuration and the storage are the following:

| Installation type | Material required for the configuration | Storage memory |
|--|---|---|
| RF installation (without media coupler) | TX100 | USB stick or PC (TX100s with USB connector) |
| TP installation (without media coupler) | TX100 + Media coupler tool TR130 | |
| Mixed installation (with media coupler) | TX100 | Smartcard (TX100s with SM card reader) |

- The data about the current project can be saved in the TX100.
Working on several projects requires the creation of a backup file for each project in an external memory.

1.5.2 Continuing or modifying the configuration of a saved project

The tools are the same than for the creation of a new project, but, in addition, the file containing the project data must be available.

The project file is either:

- in the TX100, this is the last project created with this tool.
- or in an external memory (USB stick, PS, SM card) if it is a previous project or a project configured with another TX100. This project file will then be loaded in the internal memory of the TX100.

Note: In this case, the project file that is possibly present in the TX100 will be lost and replaced by the loaded file.

ⓘ If the project file is lost, the TX100 has advanced functions allowing to learn again an installation.

2. Commissioning, start-up and basic settings of the TX100

2.1 Commissioning the TX100

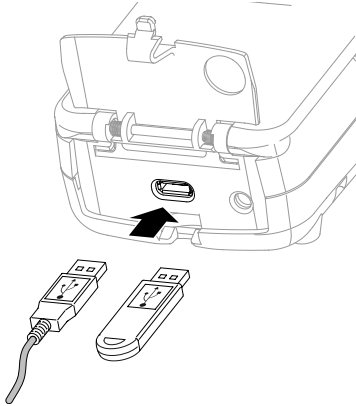
2.1.1 Inserting rechargeable batteries or dry-cell batteries

| | |
|--|---|
| | <ul style="list-style-type: none"> • Remove screw A. • Open cover B to access the battery compartment.. • Position switch C according to the power supply being used: <ul style="list-style-type: none"> - Position 1: Powered by dry-cell batteries. - Position 2 (by default at delivery): Powered by rechargeable batteries (supplied). • Insert dry-cell batteries or rechargeable batteries ensuring that the polarities are respected, then close and screw down the cover. |
|--|---|

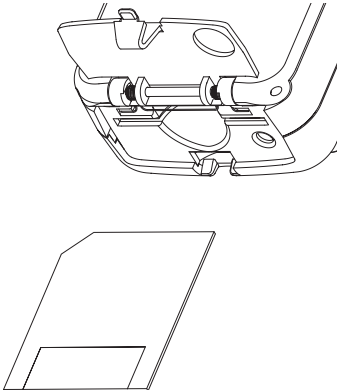
2.1.2 Battery life and load

| | |
|--|---|
| | <p>If you are using rechargeable batteries, connect the mains charger provided to socket D.</p> <p>The battery level indicator is displayed during loading:</p> <p>⚠ If the charger is connected to the device when it is operating on dry-cell batteries and the selection switch is still in the rechargeable battery position, there is a risk of destroying the Tebis TX100 configurator.</p> <p>⚠ Charge the battery completely before the first use (3 h 30 min approximately).</p> |
|--|---|

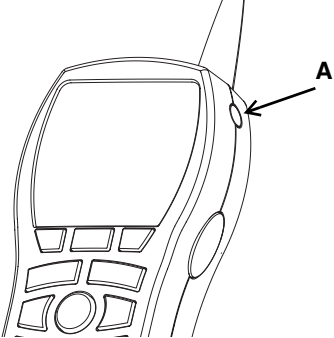
2.1.3 USB connector (only on TX100 USB)

| | |
|---|---|
|  | <p>Observe the direction of insertion of the USB connector: the USB symbol must always be directed upwards</p> <ul style="list-style-type: none"> • Open flap A. • A USB connector allows connecting the TX100 with: <ul style="list-style-type: none"> - A USB stick (a stick is supplied with the TX100) using the 15 cm long cord supplied. - A PC through a USB port, using the 1 m long cord supplied <p>ⓘ The sticks with write protection cannot be used</p> <p>The TX100 can process the two following file types:</p> <ul style="list-style-type: none"> - project files with the .TXH extension: to load a project in the TX100. - software update files with the .UPD extension: to download a new version of the software in order to take advantage of the latest improvements made for the configurator. |
|---|---|

2.1.4 Smartcard reader (only on TX100 SM)

| | |
|--|---|
|  | <ul style="list-style-type: none"> • Open flap A. • Insert a smartcard into the configurator in accordance with the figure shown opposite. <p>The TX100 can process the two following file types:</p> <ul style="list-style-type: none"> - project files with the .TXH extension: to load a project in the TX100. - software update files with the .UPD extension: to download a new version of the software in order to take advantage of the latest improvements made for the configurator. |
|--|---|

2.2 Starting up the TX100



Language




- English
- Deutsch
- Français
- Italiano

External memory

- TX100A-SM-V251
- TX100A-usb-V211
- TX100B-SM-V211
- TX100B-usb-V212**
- TX100C-usb-V221
- TX100D-usb-V211

- Press the A button until the sound signal is activated in order to start or stop the configurator.
- The TX100 displays temporarily a screen showing the software version.
- The Project selection screen is displayed.

First start-up:
At the first start-up, the TX100 asks for the selection of the working language:

- Select the language to be used with the  or  keys.
- Press the  key to confirm your selection.

English is the default language. This setting can be changed at any time.

If the desired language is not displayed, carry out an update using the USB stick supplied with the product.

- Insert the USB stick.
- The following screen is displayed.

The following updates are available:


| | |
|------------------|--|
| tx100A-usb-Vxyz | English, French, German, Dutch. |
| tx100B-usb-Vxyz | English, French, German, Italian. |
| tx100C-usb-Vxyz | English, Italian, Portuguese, Spanish. |
| tx100D-usb-Vxyz | English, Norwegian, Swedish, Danish. |
| tx100E-usb-Vxyz | English, Polish, Finnish. |
| tx100RU-usb-Vxyz | English, Russian. |

Refer to the Update of the TX100 software chapter to carry out an update with an external memory.
When the update is finished, switch on the TX100 and select your working language.

2.3 Basic settings


2.3.1 Access to the setting




To have access to the basic settings of the TX100.



- Press the menu key of the keypad  or the "menu access" key located on the right side of the TX100.

The Menu screen is displayed.

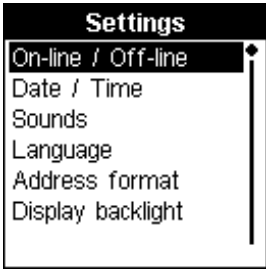





Screen  / Menu



- Press the  or  key to select Settings.
- Press the  key to confirm your selection.







 The  key allows you to return to the previous screen.

Screen  / Menu / Settings


| | |
|---|---|
|  | <p>This screen allows selecting a specific setting.</p> <ul style="list-style-type: none"> • Press the  or  key to select the setting to be carried out. • Press the  key to confirm your selection. <p> The  key allows you to return to the previous screen.</p> |
|---|---|

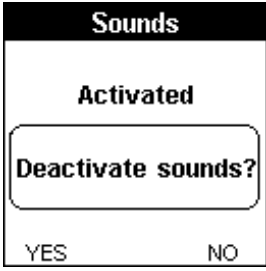
2.3.2 Time and day setting

Screen  / Menu / Date and Time


| | |
|---|--|
|  | <p>This function allows you to set the date and the time.</p> <ul style="list-style-type: none"> • Press the left  keys to move from one field to the next. • Press the right  keys to increase or decrease the value of the selected field. • Press the  key to confirm your selection. <p> The  key allows you to return to the previous screen.</p> |
|---|--|






2.3.3 Activation of the sounds

Screen  / Menu / Settings / Sounds


| | |
|---|---|
|  | <p>Activating the sounds allows you to obtain a confirmation beep sound for certain actions.</p> <ul style="list-style-type: none"> • Press the YES or NO screen key to activate or deactivate the sounds. |
|---|---|




2.3.4 Language selection

Screen  / Menu / Settings / Language


| | |
|---|--|
|  | <p>The language used is selected during the initial start up. It is however possible to change it at a later stage.</p> <ul style="list-style-type: none"> • Select the language with the  or  keys. • Press the  key to confirm your selection. <p> If the desired language is not displayed, carry out an update using the USB stick supplied with the product.</p> |
|---|--|

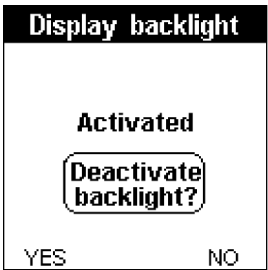
2.3.5 Format of the ETS group addresses

Screen  / Menu / Settings / Address format:


| | |
|---|---|
|  | <p>This function allows selecting the display or input format of the group addresses (on 2 or 3 levels).</p> <ul style="list-style-type: none"> • Press the screen key corresponding to the desired format. <p> The  screen key allows you to return to the previous screen.</p> |
|---|---|

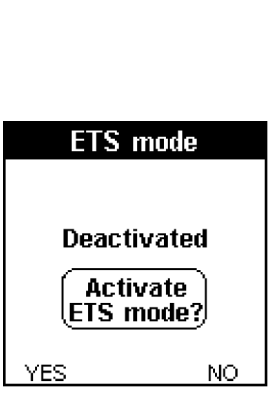



2.3.6 Activation of the display backlight

Screen  / Menu / Settings / Backlight

| | |
|--|--|
|  | <p>This function allows you to activate or deactivate the display backlight.</p> <ul style="list-style-type: none"> • Press the YES or NO screen key to activate or deactivate the display backlight. |
|--|--|

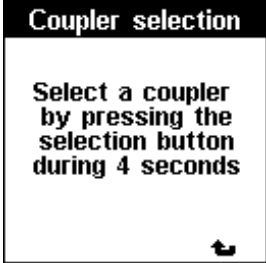



2.3.7 Activation of the ETS mode

Screen  / Menu / Settings / ETS mode


| | |
|---|--|
|  | <p>This function allows activating or deactivating the use of the ETS group addresses:</p> <ul style="list-style-type: none">  To be taken into consideration, the activation or deactivation of the ETS mode must be carried out before the first learning of the installation.  Any later modification will remain without effect. <ul style="list-style-type: none"> • Press the YES or NO screen key to activate or deactivate the ETS mode. <p>The ETS mode is activated by default.</p> <p>Any installation carried out in active ETS mode can be extended later with the ETS configuration software. Any installation carried out in inactive ETS mode cannot be extended later with the ETS configuration software.</p> <p> The activation or deactivation of the ETS mode changes the group address range assigned by the TX100.</p> <p>14/0/0 to 15/7/255 in activated ETS mode (default value). 28/0/0 to 29/7/255 in deactivated ETS mode.</p> |
|---|--|



2.3.8 Coupler selection

Screen  / Menu / Settings / Coupler selection

| | |
|---|--|
|  | <p>This function allows associating a media coupler tool to the TX100. The coupler will be recognised automatically, avoiding the selection procedure.</p> <ul style="list-style-type: none"> • Select the media coupler to be used by pressing its  button until the red indicator turns on (4 s). • Release the button. <p>A Download wait screen is displayed for some seconds. A sound signal is emitted when the selection is done.</p> <p> The  screen key allows you to return to the previous screen.</p> |
|---|--|

2.3.9 Setting of the display contrast


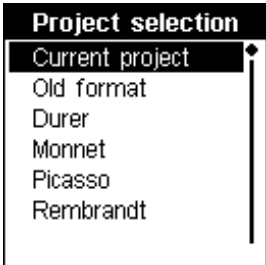



Screen  / Menu / Settings / Contrast

| | |
|--|---|
|  | <p>This function allows setting the contrast of the display.</p> <ul style="list-style-type: none"> • Press the + or - screen key to increase or reduce ths contrast. • Press the  screen key to confirm. |
|--|---|

3. Projects management

3.1 Loading or creating a project when starting up the TX100

When starting up the TX100, a Project selection screen is displayed: it allows creating a new project or selecting an existing project. The content of the Project selection screen depends on whether an external memory is connected or not:

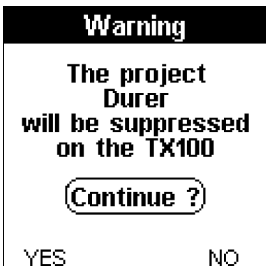
| | |
|---|---|
| <p>Project selection screen when no external memory is connected:</p>  <p>Example of a Project selection screen if an external memory containing projects is connected:</p>  | <ul style="list-style-type: none"> • Press the  or  key to select: <ul style="list-style-type: none"> • Current project to go on with the configuration of the current project which is in the internal memory of the TX100. • New project to configure a new installation. • "Project name" to load a project identified by a name contained in an external memory (is only displayed when an external memory is connected). • Old format project to load a project stored in an old format (is only displayed when an external memory containing a project of this type is connected). • Press the  key to confirm your selection. <p>① An Old format project corresponds to the project file of an installation started with a TX100 with a version lower than V2.0.</p> |
|---|---|

3.1.1 Current project

The TX100 then loads the current project to go on with its configuration.

① In the case of a TP or a mixed installation with a media coupler, the TX100 recognises automatically the media coupler and the Auto screen is displayed.

3.1.2 New project

| | |
|---|---|
|  | <p>The TX100 creates a new project in its internal memory. The current project possibly present in the internal memory will be deleted.</p> <p>A Warning screen allows authorising or not the deletion of the current project:</p> <ul style="list-style-type: none"> • Press the NO screen key to retain the current project and return to the Project selection screen. • Press the YES screen key to delete the current project and authorise the creation of the new project. <p>The configuration procedure then starts.</p> |
|---|---|

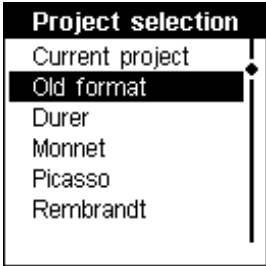


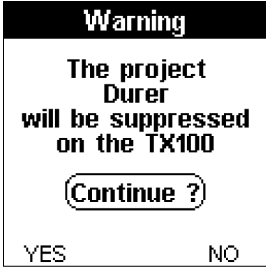

3.1.3 "Project name"

The TX100 loads the project "Project name" to go on with its configuration.

① In the case of a TP or a mixed installation with a media coupler, the TX100 recognises automatically the media coupler and the Auto screen is displayed.

3.1.4 Old format project

this project name corresponds to an old project format. The stored configuration was created with a TX100 with a version lower than V2.0.

| | |
|---|---|
|  | <ul style="list-style-type: none"> • Select Old format. • Press the  key to confirm your selection. |
|  | <p>The "Warning" screen is displayed.</p> <ul style="list-style-type: none"> • Press the YES screen key to convert the project to the new format. • Press the NO screen key to return to the previous screen. <p>The following screen is displayed when the YES screen key is pressed.</p> |
|  | <p>After having accepted to convert the project to the new format. The TX100 creates a new project in its internal memory. The current project possibly present in the internal memory will be deleted.</p> <p>A Warning screen allows authorising or not the deletion of the current project:</p> <ul style="list-style-type: none"> • Press the NO screen key to retain the current project and return to the Project selection screen. • Press the YES screen key to delete the current project and authorise the creation of the new project. |
|  | <p>A wait screen is displayed during the conversion procedure.</p> <p>The TX100 loads the project in its internal memory.</p> <p>i In the case of a TP or a mixed installation with a media coupler, the TX100 recognises automatically the media coupler and the Auto screen is displayed.</p> |


3.2 Projects management





3.2.1 Access to the projects management

The TX100 is a tool that allows configuring and managing products:





- Creation of new projects.
- Storage of the current project in an external memory.
- Loading of a project in the TX100 from an external memory.
- Visualisation of a project.
- Deletion of a project.

To have access to the Project management functions:

Press the menu key of the keypad  or the "menu access" key located on the right side of the TX100.

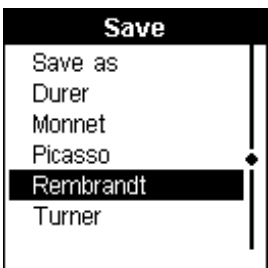



| | |
|---|--|
|  | <ul style="list-style-type: none"> • Press the  or  key to select Project management. • Press the  key to confirm your selection. |
|---|--|

The Project management screen is displayed:


| | |
|---|---|
|  | <ul style="list-style-type: none"> - Save allows saving the current project file of the TX100 in an external memory (USB stick or PC for the TX100 USB, SM card for the old TX100s with SM card reader). - Creation allows creating a new project file. The current project of the TX100 is then deleted. - Project selection allows loading a project file in the TX100. The current project of the TX100 is then deleted. - Deletion allows deleting a project file. - Visualisation allows displaying the main features of a project file <ul style="list-style-type: none"> • Press the  or  key to select an item • Press the  key to confirm your selection. |
|---|---|

3.2.2 Saving a project

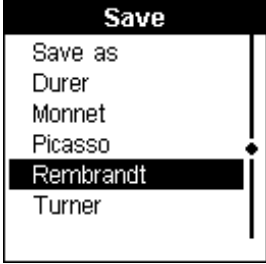




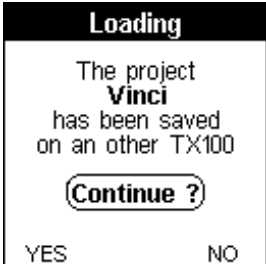
Screen Menu / Project management / Save

| | |
|---|--|
|  | <p>The TX100 displays a Save screen.</p> <ul style="list-style-type: none"> • Select using the  or  key: <ul style="list-style-type: none"> - Save as: to save a new project file (is selected automatically if the installation does not have a name yet). - Name of a project: to save the project name under an existing name (the name of the current project is automatically selected if it exists in the external memory) • Press the  key to confirm your selection. |
|---|--|

Menu selection / Project management / Save / Save as:


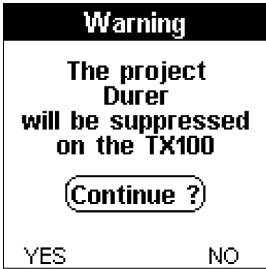
| | |
|---|---|
|  | <p>This screen allows creating a new project file. A Project saving confirmation screen is displayed and a new project file is created under a name assigned automatically (here: Installation 001).</p> <ul style="list-style-type: none"> • Press the NO screen key to return to the Save screen. • Press the YES screen key to save the project under the suggested name (A Project saving wait screen is displayed). <p>❗ The name of the project file can be modified from a PC.</p> |
|---|---|

Menu selection / Project management / Save / Name of a project:

| | |
|---|--|
|  | <p>This screen allows saving the current evolutions and modifications under a project name.</p> <ul style="list-style-type: none"> • Select the project name with the  or  keys. • Press the  key to confirm your selection. |
|  | <p>The file is saved automatically if the name of the current project is the same as the name of the selected project.</p> <p>If the name of the current project is different from the name of the selected project, a confirmation screen is displayed</p> <ul style="list-style-type: none"> • Press the NO screen key to return to the Save screen. • Press the YES screen key to continue. (A Saving wait screen is displayed) |
|  | <p>If the installation was configured with another TX100, a confirmation is required.</p> <ul style="list-style-type: none"> • Press the NO screen key to return to the Save screen. • Press the YES screen key to continue. (A Saving wait screen is displayed). <p>❗ The time required for saving the file is variable according to the size of the project and the type of stick</p> <p>❗ The sticks with write protection cannot be used</p> <p>❗ Only connect USB sticks. Other memory types might not operate.</p> |

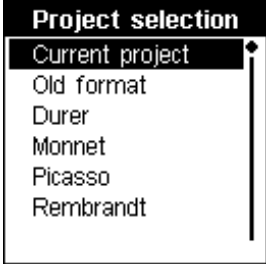
3.2.3 Creation of an installation

Screen Menu/ Project management / Create:

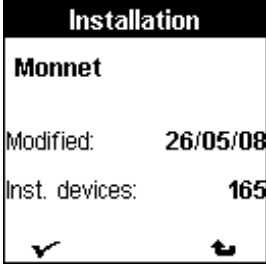
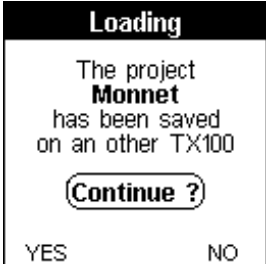
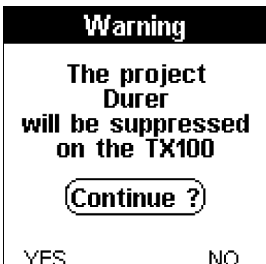
| | |
|---|---|
|  | <p>This screen allows creating a new project. A New project screen is displayed and a name is assigned automatically to the new project: here: Installation 001. The name of the project file can be modified from a PC.</p> <ul style="list-style-type: none"> • Press the ✓ screen key to confirm. A new project is created both in the memory of the TX100 and in the connected external memory. |
|  | <p>ⓘ The ↶ screen key allows you to return to the previous screen.</p> <p>A Warning screen allows authorising or not the deletion of the current project of the TX100:</p> <ul style="list-style-type: none"> • Press the NO screen key to retain the current project and return to the previous screen. • Press the YES screen key to delete the current project and authorise the creation of the new project. <ul style="list-style-type: none"> - The new project is then created in the internal memory of the TX100 under the name Installation 001 (A Saving wait screen is displayed). - The new project is also stored in the external memory with the same name (A Saving wait screen is displayed). |

3.2.4 Loading of a project

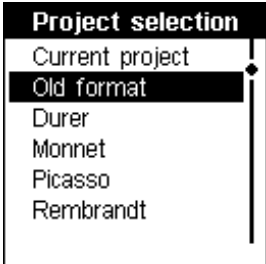
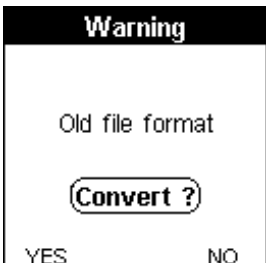
Screen Menu/ Project management / Project selection:


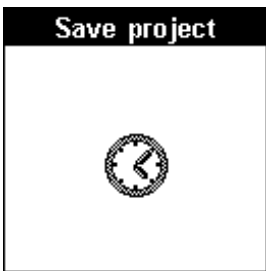
| | |
|---|--|
|  | <p>This function allows loading in the TX100 a project contained in an external memory. A Project selection screen is displayed:</p> <p>Select using the ⏶ or ⏷ key:</p> <ul style="list-style-type: none"> - "Project name" to load a project identified by a name contained in the connected external memory. - Old format: this project name corresponds to an old project format. (is only displayed if an external memory containing such a project is connected) <p>Press the ✓ key to confirm your selection.</p> <p>The project will be loaded in the TX100. The current project possibly present in its internal memory will be deleted</p> |
|---|--|

"Project name" selection

| | |
|--|---|
|  | <p>A screen showing the project type (Installation or Learning) and its features is displayed.</p> |
|  | <ul style="list-style-type: none"> • Press the ✓ screen key to confirm. <p>① The ↶ screen key allows you to return to the previous screen.</p> |
|  | <p>If the installation was configured with another TX100, a Warning screen asks for confirmation before continuing:</p> <ul style="list-style-type: none"> • Press the NO screen key to return to the Project selection screen. • Press the YES screen key to continue. <p>A Warning screen allows authorising or not the deletion of a current project possibly present in the memory of the TX100:</p> <ul style="list-style-type: none"> • Press the NO screen key to retain the current project and return to the previous screen. • Press the YES screen key to authorise the replacement of the current project with the new project: <ul style="list-style-type: none"> - The new project is then loaded in the internal memory of the TX100 under "Project name" (display of the Read running screen). <p>The procedure then continues with the detection of the coupler (display of the Coupler screen).</p> |






Old format selection

| | |
|---|--|
|  | <p>this project name corresponds to an old project format. The stored configuration was created with a TX100 with a version lower than V2.0.</p> <ul style="list-style-type: none"> • Select Old format. • Press the ✓ key to confirm your selection. |
|  | <p>The "Warning" screen is displayed.</p> <ul style="list-style-type: none"> • Press the YES screen key to convert the project to the new format. • Press the NO screen key to return to the previous screen. <p>The following screen is displayed when the YES screen key is pressed.</p> |

| | |
|---|--|
|  | <p>The TX100 creates a new project in its internal memory. The current project possibly present in the internal memory will be deleted.</p> <p>A Warning screen allows authorising or not the deletion of the current project:</p> <ul style="list-style-type: none"> • Press the NO screen key to retain the current project and return to the previous screen. • Press the YES screen key to delete the current project and authorise the creation of the new project. |
|  | <p>A wait screen is displayed during the conversion procedure.</p> <p>The TX100 loads the project in its internal memory.</p> <ul style="list-style-type: none"> • In the case of a TP or a mixed installation with a media coupler, the TX100 recognises automatically the media coupler and the Auto screen is displayed. |

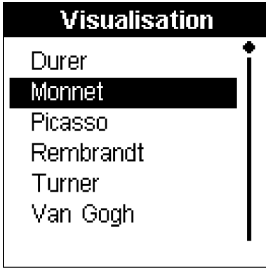
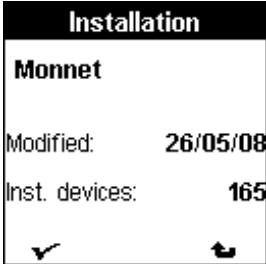





3.2.5 Deletion of a project

Screen Menu / Project management / Delete:

| | |
|---|---|
|   | <p>This function allows deleting the project file from an external memory.</p> <p>A Delete screen is displayed with a list of "Project names":</p> <ul style="list-style-type: none"> • Press the  or  key to select a "Project name". • Press the  key to confirm your selection. <p>A Warning screen allows confirming the deletion of the project:</p> <ul style="list-style-type: none"> • Press the NO screen key to cancel and to return to the previous screen. • Press the YES key screen to delete the project. |
|---|---|

3.2.6 Display of the basic data of a project file

Screen Menu / Project management / Visualisation:

| | |
|---|---|
|  | <p>This function allows displaying the data of the project files present in the external memory. This visualisation has no effect on the file of the current project, which is present in the internal memory of the TX100.</p> |
|  | <p>A Visualisation screen is displayed with a list of "Project names":</p> <ul style="list-style-type: none"> • Press the  or  key to select a "Project name". • Press the  key to confirm your selection. <p>The basic data of the project is displayed.</p> <ul style="list-style-type: none"> • Press the  screen key to return to the Project management screen <p>i The symbol  underneath the project name indicates that it was created with another TX100.</p> |

4. Choice of the On-line or Off-line configuration mode

After learning the installation and numbering the inputs and the outputs, the following operations are required:

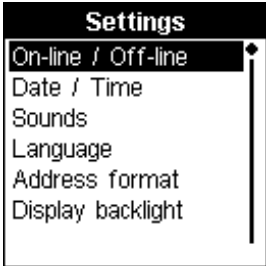
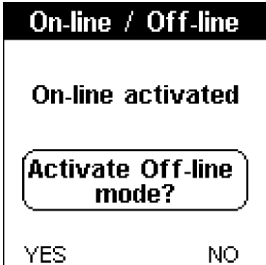




- Assign functions to the inputs.
- Create links between the inputs and the outputs.

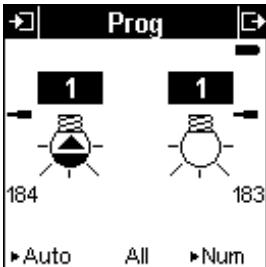
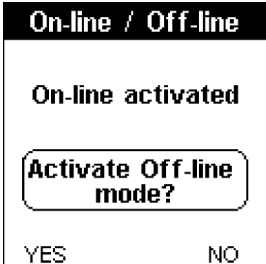
These two operations can be performed both in On-line and Off-line mode:

- In On-line mode, the configuration is downloaded as the functions are assigned to the inputs and the links are created: the installation may be tested at each step of the configuration in Auto mode.
- In Off-line mode, the functions are assigned to the inputs and the links are created only in the TX100, without connection with the installation. All functions assigned and links created are then downloaded together to the installation, in one single operation, at the end of the configuration or when switching to On-line mode: the configuration is globally faster.

To select the On-line or Off-line mode, press the menu key  of the keypad or the "Menu access" key located on the right side of the TX100. Select the following menu:

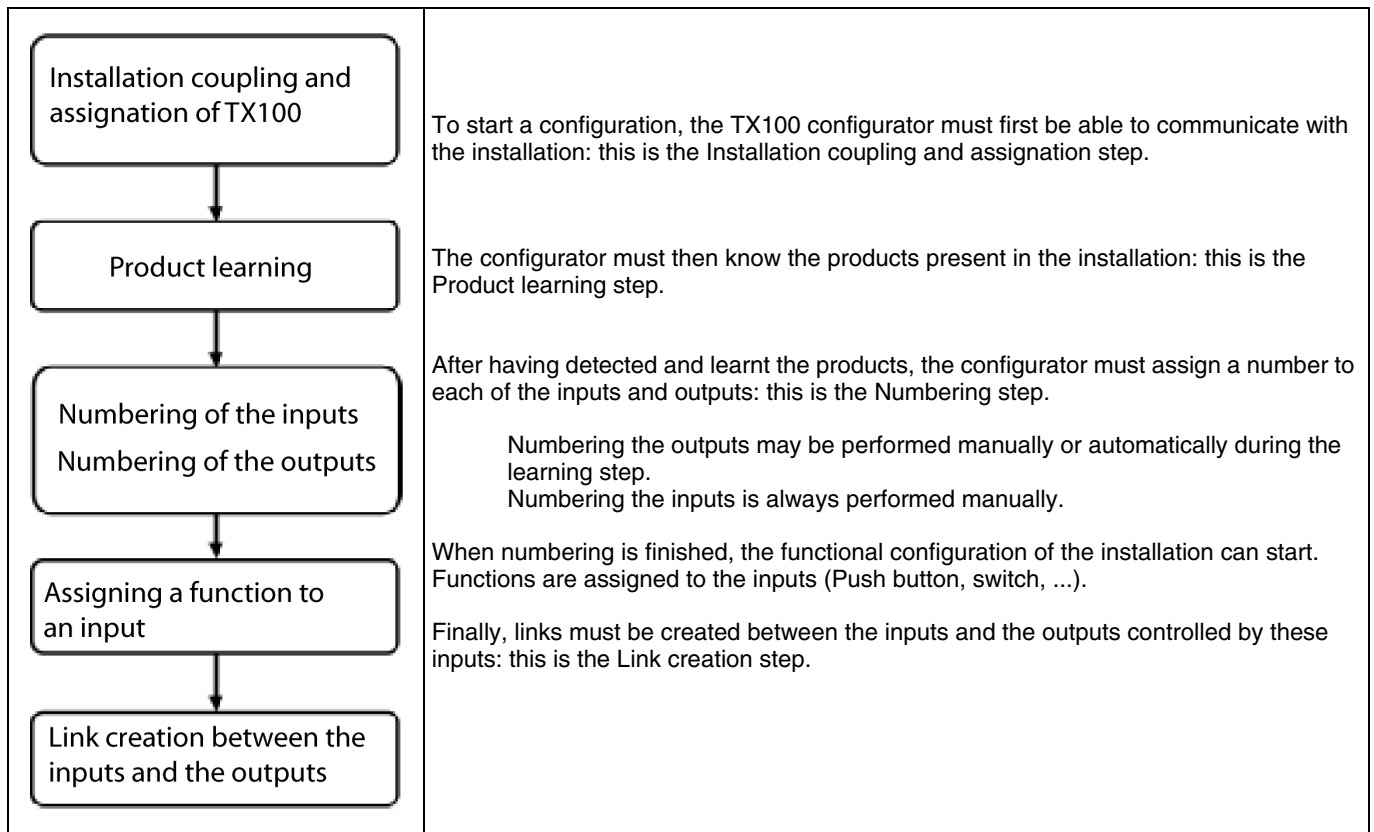
Screen  Menu / Settings / On-line / Off-line:

| | |
|--|--|
|   | <ul style="list-style-type: none"> • Press the  or  key to select On-line / Off-line • Press the  key to confirm your selection. <p>The  key allows you to return to the previous screen.</p> <p>The On-line mode is active by default.</p> <ul style="list-style-type: none"> • Press the YES screen key to activate the Off-line mode. • Press the NO screen key to remain in On-line mode. |
|--|--|

| | |
|--|--|
|   | <p>In Prog mode, the Off-line mode is symbolized in the title bar by two white lines separating the PROG title from the two inputs / outputs arrow symbols.</p> <p>To switch back to On-line mode, return to the Settings menu (Menu / Settings / Online / Offline) and activate the On-line mode.</p> |
|--|--|

5. On-line configuration in Easy mode of a new installation

5.1 The various steps of the configuration



① It is not necessary to number all inputs to start the Function assignment or Link creation steps, only the concerned inputs have to be numbered.

① The unidirectional RF products are not detected during the Learning step. A special procedure must be carried out.

Before starting, check the installation and make sure that all the required material is present.

5.2 Check of the installation and of the material required for the configuration

5.2.1 Determination of the installation type, of the material and accessories required for the configuration

- Determine the installation type: TP, RF or mixed installation.
- In the case of TP or mixed installations, make sure that a bus power supply and a media coupler are installed. The media coupler is indispensable to allow the TX100 to interact with the TP products. If the installation includes no RF product, this coupler is only required during configuration, it can be removed afterwards.
- To save the configuration, make sure that you have an external memory (USB stick) and the necessary material to connect it to the TX100.
- Identify the required RF repeater products.


5.2.2 Electrical check of the installation

- Make sure that all products are correctly powered. (TP products, RF products, bus power supply, mains power supply, battery power supply: refer to the attached table).
- Make sure that all TP products are connected to the bus wire and that the bus is powered.

5.2.3 Switching the installation on

- The indicator of the bus power supply module must turn on.
- The 230V indicator of the media coupler must turn on.


5.2.4 Checking the operating mode and the configuration status of the products

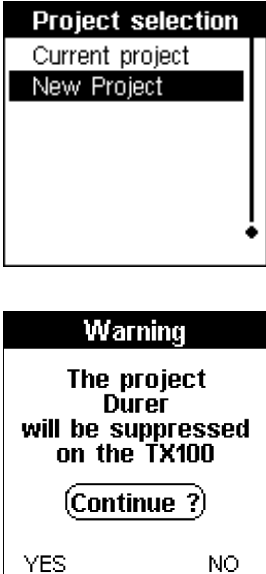



- Make sure that all modular products equipped with Manu / Auto selection switches are in Auto mode.
-  Make sure that all products are in the Factory Reset status:
 - New products, which never have been configured, are in this status.
 - Products which already were configured may be in a different status. In this case, reset them to the factory settings.

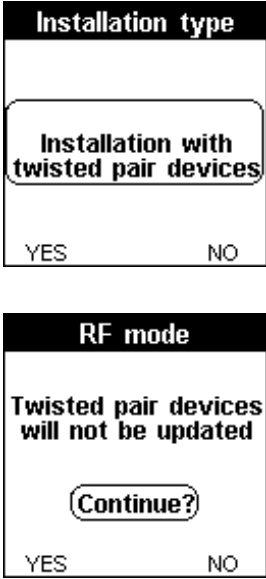
5.3 Coupling and assigning the TX100 to the installation

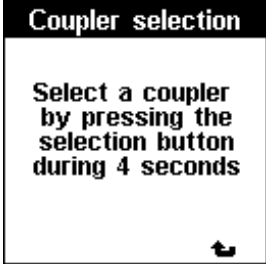


5.3.1 Case of TP and mixed installations


In the case of a TP or mixed installation, the first phase of the configuration consists in creating the project and assigning the media coupler to the TX100.

| | |
|---|---|
|  | <ul style="list-style-type: none"> • Switch the installation on. • Start the TX100. <p>After some seconds, the Project selection screen is displayed:</p> |
|---|---|

| | |
|--|--|
|  | <ul style="list-style-type: none"> • Press the  or  key to select New project. • Press the  key to confirm your selection. <p>A Warning screen allows authorising or not the deletion of the current project possibly present in the TX100:</p> <ul style="list-style-type: none"> • Press the YES screen key to delete the current project and authorise the creation of the new project. • Press the NO screen key to retain the current project and return to the previous screen. <p>A Write running... wait screen is displayed. The TX100 creates the project in its internal memory and starts the first phase of the configuration procedure.</p> |
|--|--|

| | |
|---|--|
|  <p>The image shows two screenshots from a device's configuration menu. The first screenshot, titled 'Installation type', displays the option 'Installation with twisted pair devices' with 'YES' and 'NO' buttons below it. The second screenshot, titled 'RF mode', displays the message 'Twisted pair devices will not be updated' and a 'Continue?' button with 'YES' and 'NO' buttons below it.</p> | <p>After some seconds, the Installation type screen is displayed:</p> <ul style="list-style-type: none"> • Press the YES screen key if the installation is a TP or mixed one. • Press the NO screen key if the installation is entirely a RF one. In this case, the Auto screen is displayed and switching to the Auto mode allows starting the configuration of the RF products. <p>① If NO is selected, a screen reminds that the configuration of the TP products will not be possible.</p> |
|---|--|


| | |
|--|---|
|  <p>The image shows a screenshot titled 'Coupler selection' with the instruction 'Select a coupler by pressing the selection button during 4 seconds'. A small icon of a button is visible in the bottom right corner of the screen.</p> | <p>In case of a TP or mixed installation: A screen indicates that the TX100 searches for the media coupler that will allow it to communicate with the installation.</p> <p>To detect and assign the media coupler</p> <ul style="list-style-type: none"> • Select the media coupler to be used by pressing its  button until the red indicator turns on (4 sec). • Release the button. <p>A Download wait screen is displayed for some seconds. A sound signal is emitted when the selection is done.</p> <p>① If the configurator is outside of the radio range, the title bar blinks on the screen.</p> <p>① To cancel the assignment, press the  screen key, a RF Mode screen is displayed and informs that only the RF products will be updated.</p> |
|--|---|

| | |
|--|--|
|  <p>The image shows a screenshot titled 'Auto' with the text 'You can now use your Tebis installation. For further config. press on 'Prog''. At the bottom, there are three navigation options: 'Prog', 'Visu', and 'Num', each preceded by a right-pointing arrow.</p> | <p>The Auto screen is displayed at the end of the assignment phase.</p> <p>This screen indicates that:</p> <ul style="list-style-type: none"> - The project was created in the memory of the TX100. - The media coupler of the installation was detected and assigned. <p>The configuration of the products of the installation is now possible.</p> |
|--|--|

5.3.2 Creation of a coupler tool for the configuration of entirely TP installations


When an installation only includes TP products, the media coupler may be removed after the configuration and it may be used to configure other TP installations. In this case, the media coupler is only used as a configuration tool associated with the TX100. This coupler is called "Coupler tool".

A specific assignment procedure allows turning a media coupler into a "Coupler tool". When mounted in an installation, it will be recognised automatically at the start of the configurator, and no additional assignment procedure will be required.

- Press the menu key of the keypad  or the "menu access" key located on the right side of the TX100.
- Select the following menu: Menu / Settings / Coupler selection / Coupler selection.


5.3.3 Case of entirely RF installations

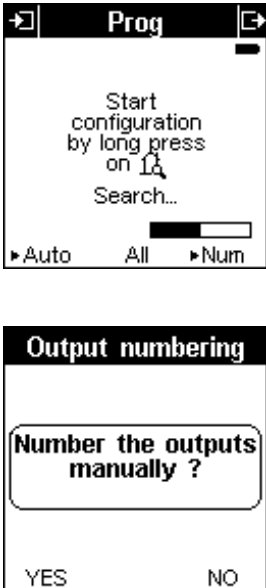

No media coupler is required in this case: the TX100 can communicate directly with the RF products. The beginning of the configuration procedure is the same as for the mixed installations:

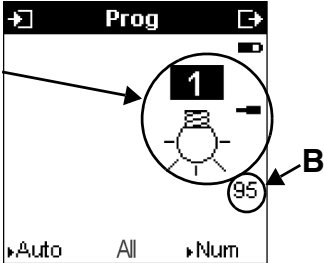



| | |
|---|--|
|  | <ul style="list-style-type: none"> • In the Installation type screen, press the NO screen key, since it is an entirely RF installation. • Go to the following step of the configuration. |
|---|--|

5.4 Learning of the installation and numbering of the inputs and outputs

5.4.1 Learning of the installation with automatic numbering of the outputs.

| | |
|---|---|
|  | <p>After the start of the TX100 and the creation of a new project, the Auto screen is displayed.</p> <ul style="list-style-type: none"> • Press the Prog screen key to enter the Programming mode. |
|---|---|

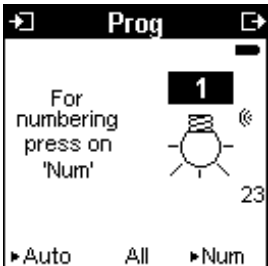
| | |
|---|---|
|  | <p>The Prog screen allows starting the learning phase of the products of the installation.</p> <ul style="list-style-type: none"> • Press the  key of the TX100 for a long time to start the configuration. <p>An Output numbering screen is displayed in order to define the way of numbering the outputs: manually or automatically.</p> <ul style="list-style-type: none"> • Press NO to start the automatic numbering of the outputs (the manual numbering will be explained later in this document). <p>A progress bar shows the progress of this operation and the number of output channels detected.</p> <p>ⓘ This step may require several minutes, depending on the number of products present in the installation.</p> <p>At the end of this operation, all TP products and all bidirectional RF products were detected, and a number was assigned automatically to each output.</p> |
|---|---|

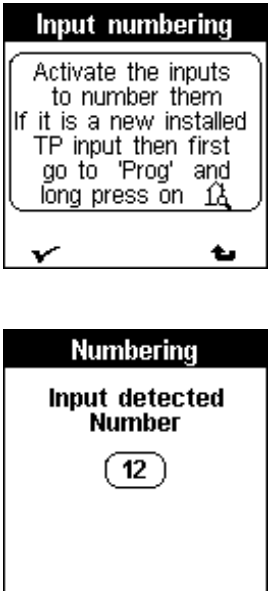
| | |
|---|---|
|  <p>A</p> <p>B</p> | <p>At the end of the device-learning phase, the screen displays the characteristics of the first output as well as the number of outputs detected:</p> <p>A indicates that output 1 (1) belongs to a TP product (symbol ) and that it has a lighting ON / OFF function (symbol ) .</p> <p>B indicates that 95 outputs were detected in the installation.</p> <p>To display the other outputs:</p> <ul style="list-style-type: none"> • Press the right  keys to scroll the output numbers and their function symbols. <p>① The meaning of all function symbols is given in the attachment.</p> |
|---|---|

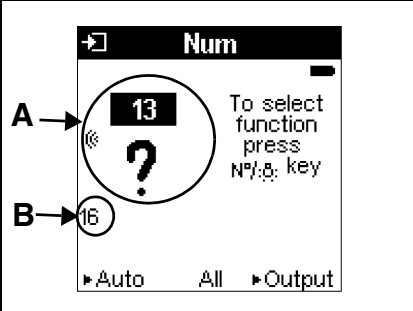
5.4.2 Numbering of the inputs of the TP and bidirectional RF products

⚠ The inputs numbering phase is only possible after carrying out the Learning phase.

A Prog screen is displayed at the end of the Learning step:

| | |
|--|---|
|  | <p>The numbering of the inputs is performed in Num mode</p> <ul style="list-style-type: none"> • Press the screen key Num. |
|--|---|

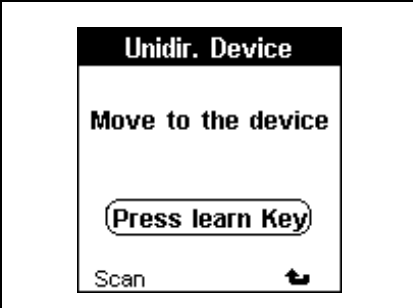
| | |
|---|--|
|  | <p>The Num screen is displayed, the TX100 is ready to number the inputs:</p> <p>Input numbering is not automatic, each input must be activated to allow the TX100 to assign it a number.</p> <ul style="list-style-type: none"> • Activate each input. <ul style="list-style-type: none"> • For a pushbutton: press the keys successively, each key will be given an input number. • For a switch: toggle the switch. <p>(refer to the attached table or to the start-up manual of the products for more details).</p> <p>A temporary screen indicates that the input has been detected and shows the number it will be given. Then the installation is updated.</p> |
|---|--|

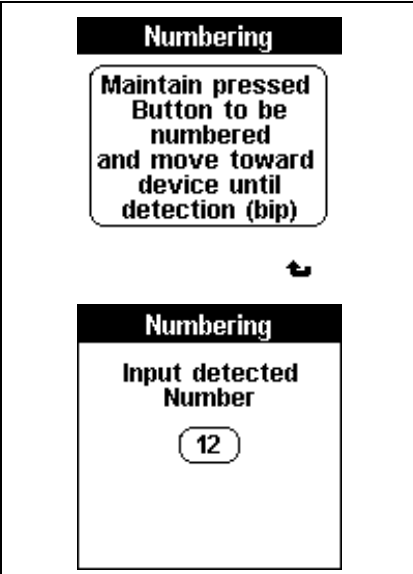
| | |
|---|---|
|  | <p>A Indicates that input 17 (17) is a RF input (symbol (()) and that no function was assigned yet (symbol ?).</p> <p>B Indicates the number of numbered inputs.</p> |
|---|---|

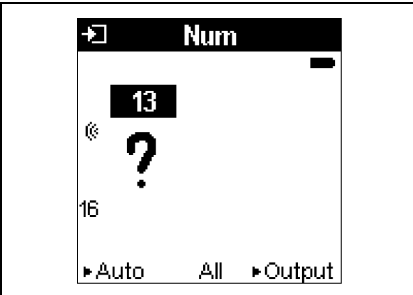
5.4.3 Numbering of the inputs of the unidirectional RF products

Follow the procedure below to number unidirectional RF input products:

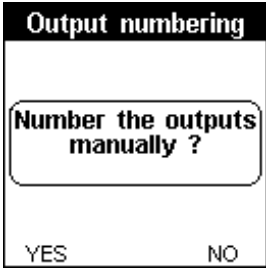
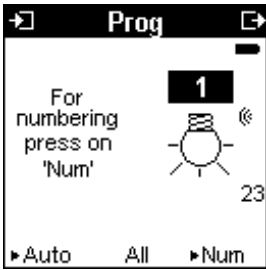
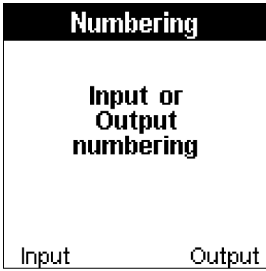
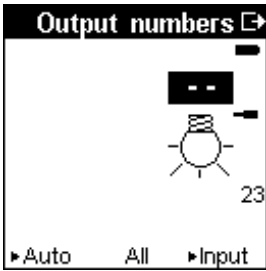
- Select the Num (numbering) mode.
- Activate the input to be numbered (the action to carry out depends on the product, refer to the attached table).

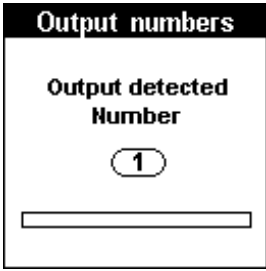
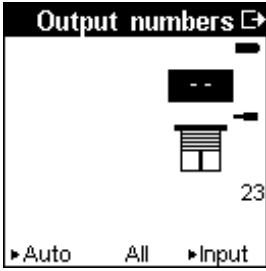



| | |
|---|--|
|  | <p>When the TX100 detects an unidirectional RF product, it displays specific instructions to number the input.</p> <ul style="list-style-type: none"> • Place the TX100 configurator within immediate reach of the input to be numbered. • Press the Learn screen key. |
|---|--|

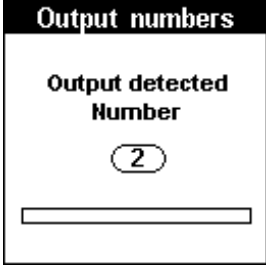
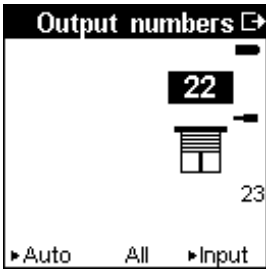
| | |
|---|--|
|  | <ul style="list-style-type: none"> • Activate the input to be numbered. • The ↶ screen key allows you to return to the previous screen. • A sound signal confirms that the input was detected. The configurator automatically assigns a number to it. |
|---|--|

| | |
|---|--|
|  | <p>After each input detection, a screen displays the characteristics of the input: RF input number 17, no function assigned.</p> |
|---|--|

5.4.4 Learning of the installation with manual numbering of the outputs and inputs

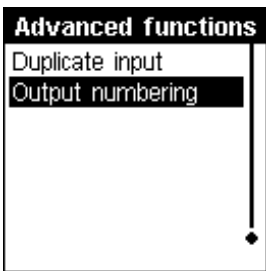

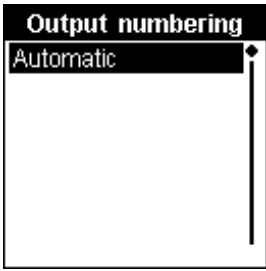

| | |
|---|--|
|  | <ul style="list-style-type: none"> • Proceed according to the beginning of the above described procedure Learning with automatic numbering of the outputs. • When the Output numbering screen is displayed, press the YES screen key to start the learning procedure with manual numbering of the outputs. <p>At the end of the Installation learning phase, all TP products and all bidirectional RF products were detected. No number has been assigned.</p> |
|  | <ul style="list-style-type: none"> • Press the screen key Num |
|  | <ul style="list-style-type: none"> • Press the Inputs screen key to start the inputs numbering procedure. • Press the ✓ screen key to confirm. • Activate each input. (The whole procedure to follow to number the inputs is described in section 5.4.2 of this document). |
|  | <p>Press the Outputs screen key to start the outputs numbering procedure.</p> <p>A screen similar to the opposite is displayed.</p> <p>The output symbol is displayed with a non-defined number.</p> |

| | |
|---|---|
|  | <p>There are 2 methods to number an output:</p> <ul style="list-style-type: none"> - Method 1: <ul style="list-style-type: none"> • Press the pushbutton of the output to be numbered. <p>A temporary screen indicates that the output has been detected and shows the number it will be given.</p> |
|  | <p>If the output has no pushbutton, use method 2.</p> <ul style="list-style-type: none"> - Method 2: <ul style="list-style-type: none"> Press the right  keys to select the output. To find the output in the installation, press the  key: the action of the product is explained in detail in the Annex 1 Here, for example, a shutter output. • Press the  key to confirm your selection. <p>A temporary screen indicates that the output has been detected and shows the number it will be given.</p> |


| | |
|---|---|
|  | <p>Repeat this operation for all outputs of the installation:</p> |
|  | <p>To number an input: press on the Inputs screen key.</p> |

At any time, the automatic numbering mode can be selected in order to finalize the numbering of the outputs.

Go to the screen Menu / Advanced functions / Output numbering

| | |
|---|--|
|  | <ul style="list-style-type: none"> • Select Output numbering. • Press the  key to confirm your selection. |
|  | <ul style="list-style-type: none"> • Select Automatic. • Press the  key to confirm your selection. |

A Write running... wait screen is displayed. The numbering of the outputs not numbered yet is finished automatically.

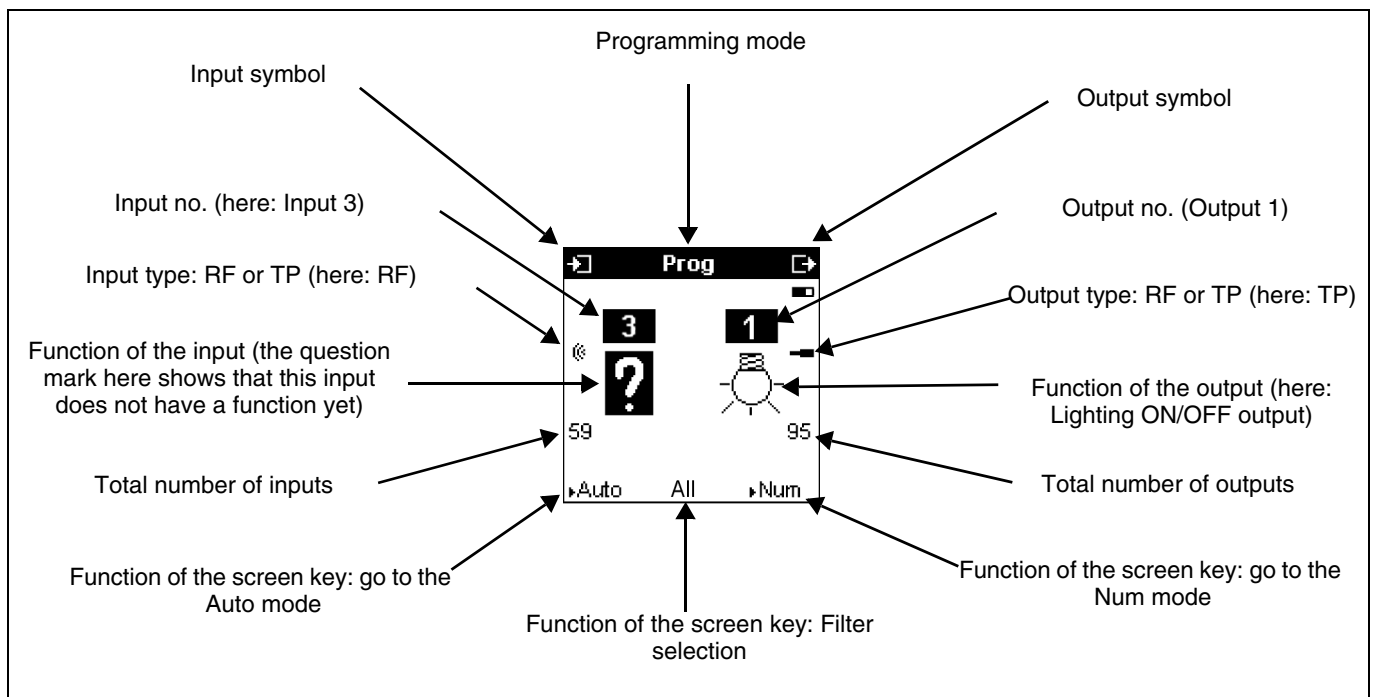
Press the  key to switch back to Prog mode.

① Inputs can be numbered all along the configuration of the products. Only the numbered inputs are displayed.

5.5 Assigning a function to an input

In order to be able to create a link between an input and an output, it is necessary to assign a function to the input.




After the Product learning and Input / output numbering phases, the Prog screen is similar to the screen below.

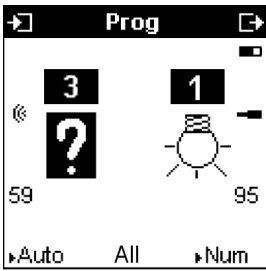




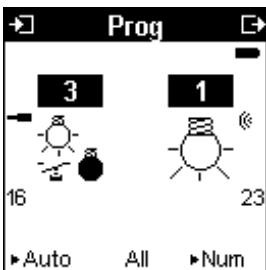



The left part of the screen concerns the inputs.
The right part of the screen concerns the outputs.

5.5.1 Assigning a function to a TP or bidirectional RF input


As soon as an input is numbered, a function can be assigned:

- Select the Prog mode (or the Num. mode).
- Press the left  keys to select the input.
 - ① To select an input, it is also possible to activate the input directly on the product: its number is then displayed on the screen.
- Press the  key to assign a function to this input. The symbol  is selected.

| | |
|---|---|
|  | <ul style="list-style-type: none"> • Press the left  keys to select a function among the displayed functions. • Press the  key to confirm your selection. <p>① The list of the function symbols and their meanings are given in the attachment.</p> |
|---|---|




| | |
|--|--|
|  | <p>Example: A pushbutton function was assigned to input number 3.</p> <p>To change the assigned function.</p> <ul style="list-style-type: none"> • Press the key . • Press the left  keys to select another function. • Press the  key to confirm your selection. |
|--|--|

① The central screen key facilitates function selection by allowing you to activate a function filter to limit scrolling to a family of functions.
The All filter corresponds to all functions.
Selecting the Lighting, Shutters, Heating filter allows displaying only the functions of the selected type.


 The links must be removed before being able to modify the function of an already linked input.

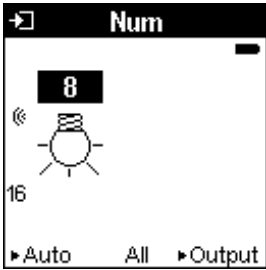
5.5.2 Assigning a function to an input of an unidirectional input product

The input has been numbered.

- Select the Prog mode (or the Num. mode).
- Press the  key to assign a function to this input.
- Press the left  keys to select a function among the displayed functions.
- Press the  key to confirm your selection.

The following screen is displayed:

| | |
|---|---|
|  | <p>Follow the same procedure as when numbering a unidirectional RF input.</p> <ul style="list-style-type: none"> • Place the TX100 configurator within immediate reach of the input to be numbered. • Press the Learn screen key. • Activate the input to be configured. If the activated input does not correspond to the displayed input, a screen asks to activate the correct input. <p>A simple sound signal is emitted when the download is successful, else a double sound signal is emitted (a fault symbol is displayed next to the input).</p> |
|---|---|

| | |
|---|--|
|  | <p>Example: A pushbutton ON function was assigned to the unidirectional RF input number 8.</p> |
|---|--|

5.6 Creation of links and input of additional parameters

After the Product learning, Inputs/outputs numbering and Inputs function assignment phases, the Input/output links creation phase can begin.

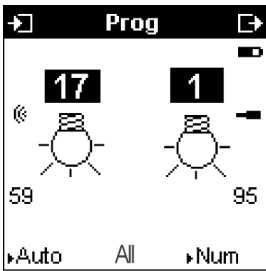



The TX100 offers several possibilities to create links:

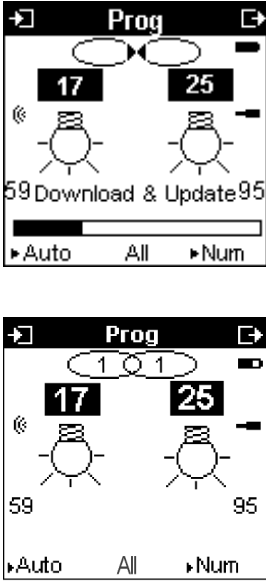








- Creating a simple link: a link is created between an input and an output.
- Creating a multiple link: a link is created between an input and several outputs in one single operation.
- Creation of a link by means of Copy/Paste of an input into another input.
- Creation of a link using the +Info filter.

The creation of a link may require setting an additional parameter (for example a lighting delay).

5.6.1 Creating a simple link

The creation of links is performed in the Programming mode.
The Prog screen is similar to the screen below.

| | |
|---|---|
|  | <p>Select an input.</p> <ul style="list-style-type: none"> • Press the left  keys to select the input to be linked. or • Activate the input to be linked. • The number and the function of this input are then displayed. <p>Select an output.</p> <ul style="list-style-type: none"> • Press the right  keys to select the output to be linked. <p>① When the output is equipped with manual command pushbuttons (modular products), press the pushbutton, the corresponding output is selected.</p> <ul style="list-style-type: none"> • To find and locate physically an output, press briefly : The selected output is activated (the action depends on the product). <p>① The central screen key facilitates function selection by allowing you to activate a function filter to limit scrolling to a family of functions. The All filter corresponds to all functions. Selecting the Lighting, Shutters, Heating filter allows displaying only the functions of the selected type.</p> |
|---|---|





| | |
|---|---|
|  | <p>After having selected an input and an output.</p> <p>To create a simple link between this input and this output (for example between input 17 - pushbutton function and output 25 - lighting ON/OFF function).</p> <ul style="list-style-type: none"> • Press briefly key  <p>The symbol  appears to indicate that a link is to be created.</p> <p> Pressing briefly a second time erases the link being created.</p> <p> If the function of the input is not compatible with the output, the TX100 emits a sound signal and the symbol  does not appear.</p> <ul style="list-style-type: none"> • Press the  key for a long time to confirm the link. <p>A download bar indicates that the link is being downloaded into the products. In case of a radio range problem, the download bar blinks.</p> <p>At the end of the download, the  symbol is changed in : the figures indicate that a link was created between 1 input and 1 output.</p> |
|---|---|

5.6.2 Creating a multiple link

The system allows you to link an input to several outputs (for example a pushbutton which controls several lamps). A multiple link can be created on 2 ways.

- Repeat several times the creation of a simple link described previously, selecting every time a new output to be linked with the same input.

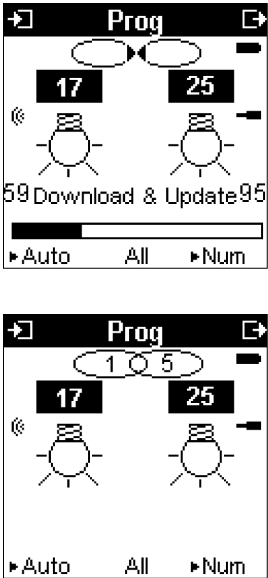



or

- Select an input.
- Select an output.
- Prepare the link by briefly pressing the  key.
- The symbol  is displayed.
- Select another output.
- Press briefly the  key to display the link to be created: The symbol  is displayed.

No long pressure on  key shall be done before all links have been prepared.


Continue selecting another output.

Repeat the procedure for each new output to be linked.

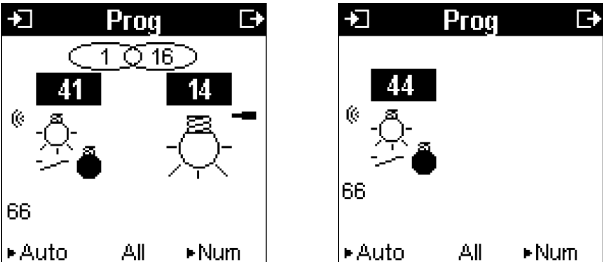
| | |
|---|---|
|  | <p>Example: Preparation of 5 links. The last output selected is number 25.</p> <p>When all links have been prepared, press the  key for a long time to confirm.</p> <p>At the end of the download, the  symbol is changed in : the figures indicate that a link was created between 1 input and 5 output</p> |
|---|---|

5.6.3 Creating links by means of Copy/Paste of an input

The Copy/Paste function allows copying all links of an input into another input. This method is particularly interesting in case of multiple command points which all must control the same outputs in an installation.

 To Copy/Paste an input, the new input must previously be assigned the same function as the one assigned to the input which is to be copied.

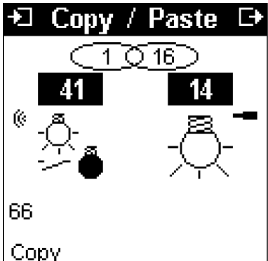

Example:

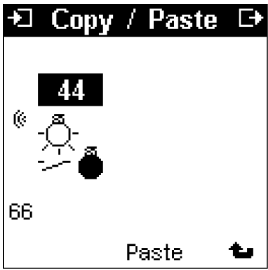


| | |
|---|--------------------------------------|
|  | <p>Copying input 41 to input 44.</p> |
|---|--------------------------------------|

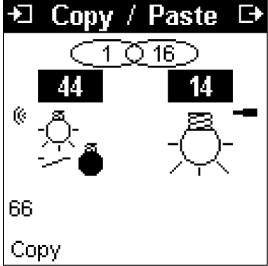

- Input 41 is linked with 16 lighting outputs.
- Input 44 has the same function.

Go to Menu / Advanced functions / Copy / Paste.

The following screen is displayed:

| | |
|---|--|
|  | <p>This screen indicates that you are in the Copy/Paste mode and reminds that input 41 is linked to 16 outputs: press the right  keys to scroll the linked outputs.</p> <p>This input is now to be copied on input 44.</p> <ul style="list-style-type: none"> • Press the Copy screen key. |
|---|--|

| | |
|---|--|
|  | <ul style="list-style-type: none"> • Press the left  keys to select input 44. • Press the Paste screen key. <p>i The  screen key allows you to return to the previous screen Copy</p> |
|---|--|

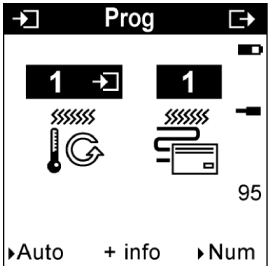




| | |
|---|--|
|  | <p>After an update time delay, the following screen is displayed.</p> <p>Input 44 is now linked to 16 outputs. Copying is finished.</p> <p>If necessary other copies may be done.</p> <p>i Press the  key to exit the Copy/Paste mode and return to the Prog mode.</p> |
|---|--|

5.6.4 Creating links using the +Info filter

The +Info filter allows creating advanced functions (status indications, logical functions, etc...). All available functions are described in the Annex 1.

To activate the +Info filter:

- Select the Prog mode.
- Press repeatedly the central screen key Filter to display +Info.

| | |
|---|---|
|  | <p>The Prog screens, with the +Info filter, allow displaying additional inputs and outputs. The inputs are marked with the symbol . The outputs are numbered decreasingly, starting from 511.</p> <ul style="list-style-type: none"> • Press the  or  key to select an input and an output. • Press  for a long time to confirm the link. |
|---|---|

5.7 Creation of links and input of additional parameters

Some functions and some products require the setting of additional parameters. There are 2 types of additional parameters.

- Parameters linked to the function: they must be set when creating the links (for example the duration of a timer, the behaviour at the end of a priority, etc.).
- Parameters linked to the application: they must be set in the Product management menu (function of the indicator of a pushbutton, label holder backlight, duration of the up/down stroke of a shutter, etc.).

5.7.1 Setting the parameters which appear when creating a link.

For some functions, a parameterizing screen is displayed when the link is confirmed.

For example, for a link with a timer function, the following screen is displayed.

| | |
|--|--|
| | <p>This screen asks to set the duration of the timer.</p> <ul style="list-style-type: none"> • Press the or key to select a value. • Press the key to confirm your selection. <p> Refer to the start-up manuals of the products for a detailed description.</p> |
|--|--|

5.7.2 Setting of the application-specific parameters

Some applications require setting additional parameters. (Duration of the stroke of a shutter, operation of the indicator of a pushbutton).

- Press the menu key of the keypad or the "menu access" key located on the right side of the TX100.
- Select Menu / Device management / Device information / "Product reference".
- Select the reference of the product to be parameterized in the list.
- Press the key to confirm your selection.

A product information screen is displayed:

| | |
|--|--|
| | <p>This screen displays information about the product.</p> <ul style="list-style-type: none"> • Press the screen key to return to the previous screen. • Press the Param screen key to have access to the parameters. <p> Refer to the start-up manuals of the products for a detailed description.</p> |
|--|--|

| | |
|--|--|
| | <p>This screen allows for example choosing the closing duration of the contacts controlling the up move of a shutter.</p> <ul style="list-style-type: none"> • Press the or key to select a value. • Press the key to confirm your selection. |
|--|--|

The parameter is now set, but not downloaded to the product. The change is shown in the screen Menu / Device management / Device information: the symbol "!" is displayed in front of the product reference.

To download the parameter to the product:

- In Menu / Product management, select Doxndownload.
- Select the reference of the product to be downloaded.
- Press the key to confirm the download.
- When downloading is finished, press to return to the initial mode.

5.8 Visualizing the links

This mode allows seeing all links of an installation.

To have access to the visualisation mode from the Prog mode:

- Press the Auto screen key to go to the Auto mode.
- In Auto mode, press the central screen key Visu.

| | |
|--|--|
| | <p>The links can be visualized:</p> <ul style="list-style-type: none"> - via the inputs: by selecting the no. or by directly pressing the button corresponding to an input. Use the right keys to scroll the outputs linked to the current input. - via the outputs: by selecting the no. or by directly pressing the button corresponding to an output. Use the left keys to scroll the inputs linked to the current output. <p>To switch between Input Visu mode and Output Visu mode, press the right screen key Input (in case of Output Visu active) or the left screen key Output (in case of Input Visu active).</p> <p>① The central screen key All allows activating a filter to:</p> <ul style="list-style-type: none"> - restrict the display of the inputs and the outputs to the selected applications (Lighting, Shutters, Heating filters) or, at the contrary. - display additional links with status information inputs (+Info filter). |
|--|--|

6. Off-line configuration of a new installation in Easy mode

The Off-line configuration is similar to the On-line configuration with the following specific feature:

- The Learning step and the Outputs and inputs numbering step are identical to those of the On-line configuration.
- The Input functions assignment step and the Links creation step can be performed out of the installation: the downloads are no more made as the configuration progresses, one single global download at the end of the procedure allows downloading the configuration.

| | |
|--|---|
| | <ul style="list-style-type: none"> • Press the menu key of the keypad or the "menu access" key located on the right side of the TX100. • Select the following menu: Screen Menu / Instal. Management / Download) <ul style="list-style-type: none"> - Press the YES screen key to download the installation. - Press the NO screen key to return to the Installation management screen. |
|--|---|

- ① Setting up links in Expert mode is only possible in On-line mode.
- ① In Off-line mode, downloading a product will lead to the complete download of the links already configured.
- ① In Off-line mode, finishing a manual numbering in automatic leads to a complete download of all links already configured.

7. Modifying the configuration of an installation

7.1 General indications about the modifications of a KNX installation

A KNX installation is made up of 3 elements.

- A physical installation: pushbuttons, output modules, wires, ...
- A configuration, which is memorised in the products of the installation.
- A project file.

These 3 elements must be consistent. Thus any modification must be made maintaining this consistency.

The TX100 tool has two main functions to manage the installation modifications.

- The Factory reset (Reset): this function allows resetting a product. It can then be recognised again by the TX100.
- The Download, which allows restoring the consistency between the configuration of the installation and the project file of the TX100.

It is important to make the difference between the physical modifications of the installation and the configuration modifications.

| Physical modification | Configuration modification |
|--|---|
| Adding a product. Removing a product. Replacing a product. | Creating or removing a link. Modifying a parameter. Removing or modifying a function. Removing or modifying an input or an output. External memory lost or defective. |

⚠ After any configuration modification in Prog mode, the TX100 downloads the modification to the installation. In case of a download fault, the Prog screen indicates faults. A download must then be re-started to make the modification effective in the installation.

Example of a screen showing download faults:

This symbol indicates that there are a total of 5 faults

This symbol indicates that input 17 is faulty

This symbol indicates that output 25 is faulty

7.2 Removing links

7.2.1 Removing a simple link or a multiple link

- Select the Prog mode.
- Use the and keys to select the concerned input and output.
- The link is displayed.
- Press the key for a long time to remove the link.

The symbol changes into and the bar appears to indicate that the removal of the link is downloaded to the products.

i To remove a multiple link, remove the links of each output.

7.2.2 Removing all links of an installation

⚠ This function removes all programmed links.




Go to the screen Menu / Instal. Management / Delete links:

| | |
|--|--|
| | <ul style="list-style-type: none"> • Press the YES key screen to remove all links. <p>A sound signal indicates that all links have been removed. A double sound signal indicates an error.</p> <p>⚠ The unidirectional products are not taken into account.</p> |
|--|--|



7.2.3 Modification of the function of an input


⚠ To modify the function of an input, the links that connect this input with outputs must previously be removed. Else, the TX100 emits a sound signal and refuses selecting another function.

The modification is carried out the same way as the assignment of a function:

- Select the Prog mode (or Num).
- Select the concerned input.
- Press the key .
- Select a new function using the left  keys.
- Press the  key to confirm your selection.

7.2.4 Removing an input

| | |
|--|---|
| | <ul style="list-style-type: none"> • Select the Num (numbering) mode • Select the input to be removed either: <ul style="list-style-type: none"> - using the left  keys. - activating the input on the product. • Press the  key for a long time. • Press the YES screen key to confirm the removal of the input. • At the next numbering, the numbers removed by this operation will be re-assigned first. |
|--|---|

⚠ If the input was linked with outputs, this removal will lead to faults: the outputs which were linked with this input and the corresponding products are displayed as faulty. So this operation must be followed by a download (go to Menu / Product management / Download) : the faulty product is marked with a !, select the product and confirm with  to start the download.

7.2.5 Removing a product from the project

Removing a product consists in resetting it to its factory status and removing it from the products list displayed in the Menu / Product management / Product information screen. A removed product can be removed physically from the installation and re-used in another installation.

To remove a product, go to the screen Menu / Device management / Delete:

| | |
|--|--|
| | <ul style="list-style-type: none"> • Select the product to be removed using the key or . • Press the key to confirm your selection. • Press the YES screen key to confirm the removal of the product. |
| | <p>i At the next numbering, the numbers of the inputs or outputs of the removed product will be re-assigned first.</p> |

⚠ If inputs or outputs of the product were linked with other inputs or outputs, this modification will lead to faults and must be followed by a download. (Go to Menu / Device management / Download): the faulty product is indicated by !, select the product and confirm with to start the download).

8. On-line configuration of a new installation in Expert mode

8.1 General points


Programming in expert mode requires basic KNX knowledge (for example, ETS software).


Expert mode includes the following functions:

- Extension of the communication system:
Grants access to the group address given during programming in Standard mode in order to set up links between a Tebis TX installation (TP, radio KNX) and Hager devices such as technical alarms, displays, Internet gateways.
- Programming of mixed installations (KNX and Tebis).
Expert mode allows integrating KNX RF products in an installation parameterised with ETS.
- Programming of additional functions:
To maintain ease of programming in Standard mode, certain of the device's functions may not be available in that mode. Therefore, certain specific solutions are reserved for Expert mode.

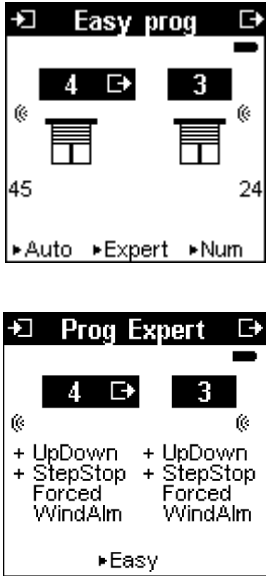
8.2 Description of the Expert mode

8.2.1 Activation and access to the Expert mode

Press the menu key of the keypad  or the "menu access" key located on the right side of the TX100.

| | |
|---|---|
|  | <ul style="list-style-type: none"> • Select Expert / Standard to activate the Expert mode. • Press the YES screen key to confirm. |
|---|---|

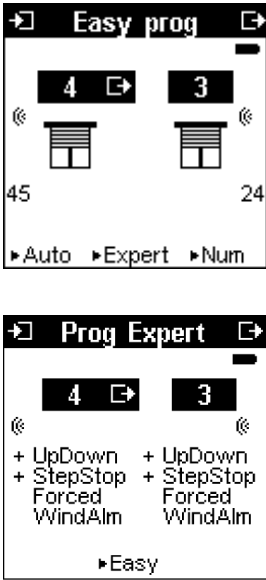



When switching to the Prog mode, the Easy Prog screen is displayed:

| | |
|--|--|
|  | <p>i The central screen key Expert allows switching between the Prog Easy screen and the Prog Expert screen.</p> <p>The Prog Expert screen displays a list of KNX communication objects underneath the numbers of the inputs and outputs. The designation of the selected object is displayed at the centre of the bottom line of the screen.</p> |
|--|--|






8.2.2 Inputs, outputs and object selection

- Inputs and outputs selection


This selection may be done either in Prog Expert or in Prog Easy.

| | |
|---|--|
|  | <ul style="list-style-type: none"> Press the left  keys to select an input. Press the right  keys to select an output. <p>The list on the input side is of the +Info type: it displays both the inputs and the status indications of the outputs (the outputs are marked with the  symbol following the output number).</p> |
|---|--|






- Selection of the object to be displayed or modified

| | |
|---|---|
|  | <ul style="list-style-type: none"> Select the Prog Expert mode. Press the  key to switch between the objects list and the inputs/outputs numbers. Press the left  keys to select an input object. Press the right  keys to select an output object. <p>i Only one object will be selected on this screen: the one on which the scrolling has stopped.</p> <ul style="list-style-type: none"> Press the  key to display the list of the group addresses associated with this object. |
|---|---|

8.2.3 Display and edition of the group addresses of the communication objects



- Select a communication object (input or output).
- Press the  key to display the list of the group addresses associated with this object.



The Group Address screen is displayed:


| | |
|---|---|
|  | <ul style="list-style-type: none"> i An address preceded by the  symbol is a locked address, which cannot be modified. It has been assigned by the TX100. i The  screen key allows you to return to the previous screen. <ul style="list-style-type: none"> Select a group address with the  or  keys. Press the Del screen key to delete a group address (not displayed if the address is locked). A screen asks for confirmation before deleting. Press the Add screen key to add an address to the list. |
|---|---|

In this case, the Group address screen is displayed (the exact display of the address depends on the format).



The group addresses can be set using the  and  keys or with the numerical keypad of the TX100.

- Press the left  keys to select a field of the address.
- Press the right  keys to increment or decrement the value, or set the value directly using the numerical keypad.




ⓘ Pressing briefly  allows deleting a digit, pressing for a long time sets the field to 0.

ⓘ The accessible address values depend on whether the ETS mode is activated or not.

- Press the Confirm screen key to confirm the address and to add it to the addresses list.

ⓘ An added address is never locked.

To activate the added group addresses:

- Select the Prog Expert mode.
- Select the input or the output with the ,  and  keys.

- Press the  key for a long time.

The Update screen is displayed.










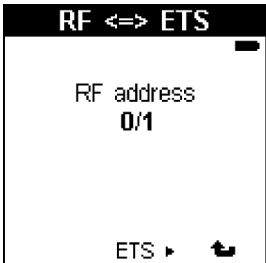
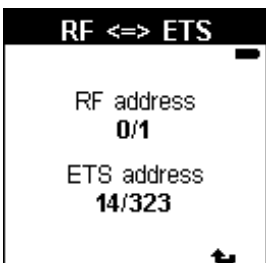
A sound signal confirms the activation of the group addresses.



8.3 Configuring in Expert mode

The Expert mode allows 2 types of extended configurations.

- Use an object configured with the TX100 in another application: Visualisation, etc.
- Configure special links with the TX100.

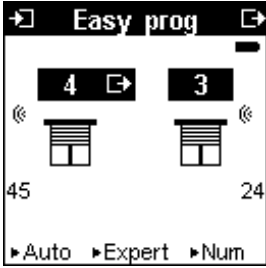

8.3.1 Using a RF product object in another application



| | |
|---|---|
|  | <ul style="list-style-type: none"> • Select the Prog Expert mode. • Select the object with the ,  and  keys. • Press briefly key . |
|  | <ul style="list-style-type: none"> • The Group Address screen is displayed. • Select the group address with the  or  keys. • Press briefly key . |
|  | <ul style="list-style-type: none"> • The RF <=> ETS screen is displayed. • Press briefly the ETS screen key. |
|  | <ul style="list-style-type: none"> • Write down the ETS address generated. • Use this address in the application. • Return to the Prog Expert screen. |


| | |
|---|---|
|  | <ul style="list-style-type: none"> • Press the  key for a long time • An Update screen is displayed. • A sound signal confirms the addition of the group address. • Return to Auto mode. |
|---|---|



8.3.2 Creating links in Expert mode

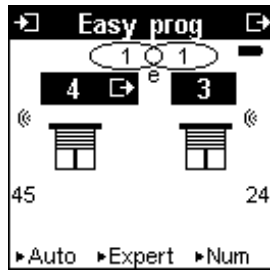
To create a link in Expert mode, objects must be linked assigning them the same group address.



| | |
|--|---|
|  | <ul style="list-style-type: none"> • Select the input and the output for which an expert link must be created. • Press the screen key  Expert. |
|--|---|

| | |
|---|---|
|  | <ul style="list-style-type: none"> • Select the object to be linked for the input. • Press briefly key . |
|---|---|

| | |
|---|---|
|  | <ul style="list-style-type: none"> • Display the address. • Press the Add screen key. |
|---|---|

| | |
|---|---|
|  | <ul style="list-style-type: none"> • Add an address: For example 4/122. • Press the Confirm screen key to return to the Prog Expert screen. • Download the address with a long key press on . |
|---|---|



- Select the object to be linked for the output.
- Press briefly key .
- Press the Add screen key.
- Add the same address 4/122.
- Press the Confirm screen key to return to the Prog Expert screen.
- Download the address with a long key press on .
- The creation of the 2 identical addresses and their download set up the link between the 2 objects.

The link is displayed in the Prog Easy screen with a letter e indicating that the link was created in Expert mode.


9. Maintenance and adjustment help tools

The TX100 has several installation maintenance and configuration help tools for:

- The management of the products of an installation.
- The management of the installations.
- Carrying out measurements.
- Making simulations.
- Updating the software of the TX100.
- Learning an installation.

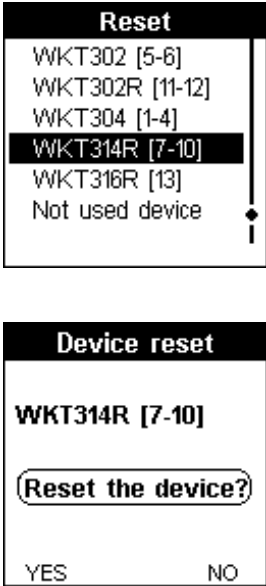



9.1 Management of the products of an installation

Screen Menu / Device management:

| | |
|---|--|
|  | <p>This screen gives access to the following items:</p> <ul style="list-style-type: none"> - Reset: allows resetting a product, which may belong or not to the installation, into its factory condition. - Delete: allows removing a product from the installation and resetting it to its factory condition. - Device information: gives information about a product and gives access to additional parameters. - Repeater: allows activating or inhibiting the repeater function of a bidirectional RF product. - ETS addressing: allows setting a product in the physical addressing mode. - Download): allows starting a download for a given product. |
|---|--|

9.1.1 Resetting a product to its factory condition

Screen  Menu / Device management / Reset

| | |
|---|---|
|  | <p>The Device reset screen displays:</p> <ul style="list-style-type: none"> - The list of the products of the installation. - The "not used device" allows resetting products which do not belong to the installation. <ul style="list-style-type: none"> - To reset a product belonging to the installation: <ul style="list-style-type: none"> • Select a product with the  or  key. • Press the  key to confirm your selection. <p>A confirmation screen is displayed.</p> <ul style="list-style-type: none"> • Press the YES screen key to confirm the device reset. • Press the NO screen key to return to the previous screen. |
|---|---|

| | |
|--|---|
| | <p>To reset a product which does not belong to the installation:</p> |
| | <ul style="list-style-type: none"> • Select Not install. with the or key. • Press the key to confirm your selection. <p>A Reset screen with the list of the product types is displayed:</p> <ul style="list-style-type: none"> • Select the type of the product: RF or TP <p>Depending on the product, a specific status must be activated (refer to the start-up manual of the products or to Annex 1):</p> <ul style="list-style-type: none"> - TP device: press on the physical addressing button and confirm. - RF bidir product: switch the power supply off and on again. - RF unidir product: go close to the product and activate an input, the tool detects the product, activate the input again to reset the product. <p> This procedure does not allow resetting several products at a time.</p> |

9.1.2 Product information




Screen / Menu / Device management / Device information:

| | |
|--|--|
| | <p>This screen displays the list of the products of the installation, the figures between brackets correspond to the numbers of the inputs or outputs.</p> <ul style="list-style-type: none"> - Only the products detected during the Learning step are displayed. - The number does not appear for non numbered inputs. If no input was numbered, only the product reference is displayed. - When a product includes both inputs and outputs, the numbers of the inputs are displayed on the left inside of the parentheses, separated by a comma from the numbers of the outputs, which are displayed on the right. <p> An symbol ! in front of a reference indicates a product configuration fault.</p> |
| | <ul style="list-style-type: none"> • Select a reference with the or keys. Press the key to confirm your selection. <p>A product information screen showing the reference of the product is displayed:</p> <ul style="list-style-type: none"> • Press the screen key to return to the previous screen • Press the Param screen key to display the product parameters setting screen. |

9.1.3 Creation of a RF repeater

This function allows activating or inhibiting the repeater function of a bidirectional RF product.





Screen  / Menu / Device management / Repeater

| | |
|--|---|
| | <p>The list of the bidirectional RF products of the installation is displayed.</p> <ul style="list-style-type: none"> • Select a reference with the  or  keys. • Press the  key to confirm your selection. |
| | <ul style="list-style-type: none"> • Press the YES or NO screen key to activate or deactivate the repeater function. |

9.1.4 Downloading products


This function allows downloading a product and removing the download errors reported in the Prog screens or in the screens displaying products lists.


• Screen  / Menu / Device management / Download).

| | |
|--|--|
| | <p>This screen displays the list of the products of the installation.  Only the products detected during the Learning step are displayed. The ! symbol in front of a reference indicates a product configuration fault.</p> |
| | <ul style="list-style-type: none"> • Select a reference with the  or  keys. • Press the  key to confirm your selection. <p>A Download screen showing the reference of the product is displayed and asks for a confirmation for the download.</p> <ul style="list-style-type: none"> • Press the YES screen key to start the download. • Press the NO screen key to return to the previous screen. |

Note: if the product is equipped with indicator leds, they switch on.

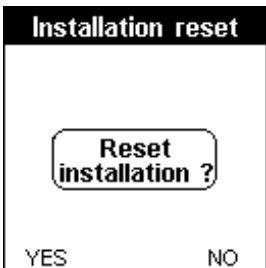
9.2 Installation management

Screen  / Menu / Instal. Management:

| | |
|---|--|
|  | <p>This screen gives access to the following items:</p> <ul style="list-style-type: none"> - Reset: allows resetting all products of the installation into their factory condition. - Coupler selection: allows assigning any coupler to the installation. - Installation update: allows deleting from the project files the products which are not used in the current installation. - Information: gives information about the installation. - Download: allows starting or resuming a download for all products of the installation. - Delete links: allows removing all links from the installation. - Learn Installation: allows re-learning an installation. |
|---|--|

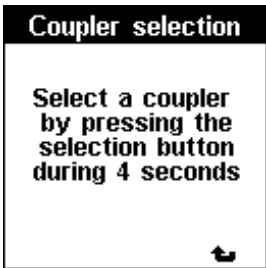




9.2.1 Resetting an installation to its factory condition

Screen  / Menu / Instal. Management / Reset

| | |
|--|---|
|  | <p>This function allows deleting all RF bidirectional and TP products from the installation. These products are reset to their factory condition. Unidirectional products must be deleted individually. (See. Reset (product)).</p> <ul style="list-style-type: none"> • Press the YES screen key to confirm the reset. • Press the NO screen key to return to the previous screen. |
|--|---|


9.2.2 Coupler selection

Screen  / Menu / Instal. Management / Coupler selection:


| | |
|---|--|
|  | <p>This function allows selecting a media coupler in an installation.</p> <ul style="list-style-type: none"> • Select the media coupler to be used by pressing its  button until the red indicator turns on (4 sec). • Release the button. <p>A Download wait screen is displayed for some seconds. A sound signal is emitted when the selection is done.</p> <p> If the bar of the Download wait screen blinks, the coupler is outside of the radio range, you must go closer to the coupler.</p> <p> The key  allows you to return to the previous screen.</p> |
|---|--|


9.2.3 Updating an installation

Screen  / Menu / Instal. Management / Installation update:


| | |
|---|--|
|  | <p>This function allows erasing from the project file the products which were detected, but not linked. The number of products without link is displayed.</p> <ul style="list-style-type: none"> • Press the YES screen key to carry out the update. • Press the NO screen key to return to the previous screen. |
|---|--|


9.2.4 Information about the installation

Screen  / Menu / Instal. Management / Information.

| | |
|---|--|
|  | <p>This function gives general information about the installation.</p> |
|---|--|

9.2.5 Downloading an installation


Screen  / Menu / Instal. Management / Download):

| | |
|--|---|
|  | <p>This function allows starting or resuming a download for all products of the installation.</p> <ul style="list-style-type: none"> • Press the YES screen key to download all products of the installation. • Press the NO screen key to return to the previous screen. |
|--|---|


9.3 Updating the software of the TX100







The software of the TX100 can be updated from an update file stored on an external memory, USB, SM, or on a PC. Follow the steps below:

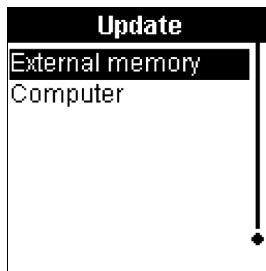
- Switch the TX100 off if it is on by pressing the ON/OFF pushbutton for a long time.
- Switch the TX100 on by pressing the ON/OFF pushbutton for a long time.
 - When the Project selection screen appears.

Press the menu key of the keypad  or the "menu access" key located on the right side of the TX100.

The Menu screen is displayed.

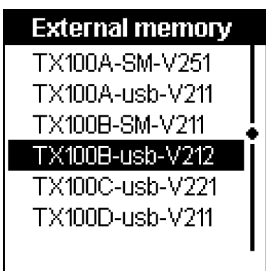





Screen  / Menu / Update


| | |
|---|---|
|  | <ul style="list-style-type: none"> • Select Update with the  or  keys. • Press the  key to confirm your selection. <p> The key  allows you to return to the previous screen.</p> |
|---|---|

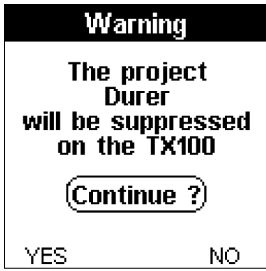
| | |
|--|---|
|  | <p>This screen allows selecting the location of the software update file: from an external memory (USB stick, SM card), or from a computer.</p> |
|--|---|


9.3.1 Updating the software from an external memory

Screen  / Menu / Update / external memory


| | |
|---|---|
|  | <ul style="list-style-type: none"> • Select the update file with the  or  key. • Press the  key to confirm your selection. <p> The key  allows you to return to the previous screen.</p> |
|---|---|

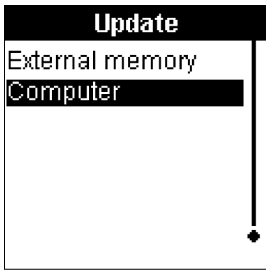



| | |
|---|--|
|  | <p>The screen displays:</p> <ul style="list-style-type: none"> • the current version of the installed software. • the new version, which will replace it. • Press the YES screen key to confirm. • Press the NO screen key to cancel and to return to the previous screen. |
|---|--|

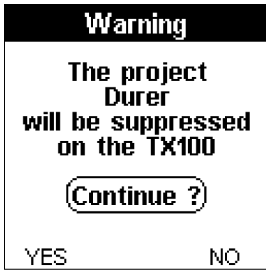
| | |
|---|---|
|  | <p>The update procedure is started when the YES screen key is pressed. A Warning screen informs that the current project stored in the TX100 will be deleted:</p> <ul style="list-style-type: none"> ① Press the YES screen key to confirm. ① Press the NO screen key to cancel and to return to the previous screen. |
|---|---|




| | |
|---|---|
|  | <p>A wait screen is displayed until the end of the update:</p> <ul style="list-style-type: none"> • Remove the external memory and confirm to complete the update. <p>The update is completed, the TX100 restarts.</p> |
|---|---|

9.3.2 Updating the software from a PC

Screen  / Menu / Update / Update with computer

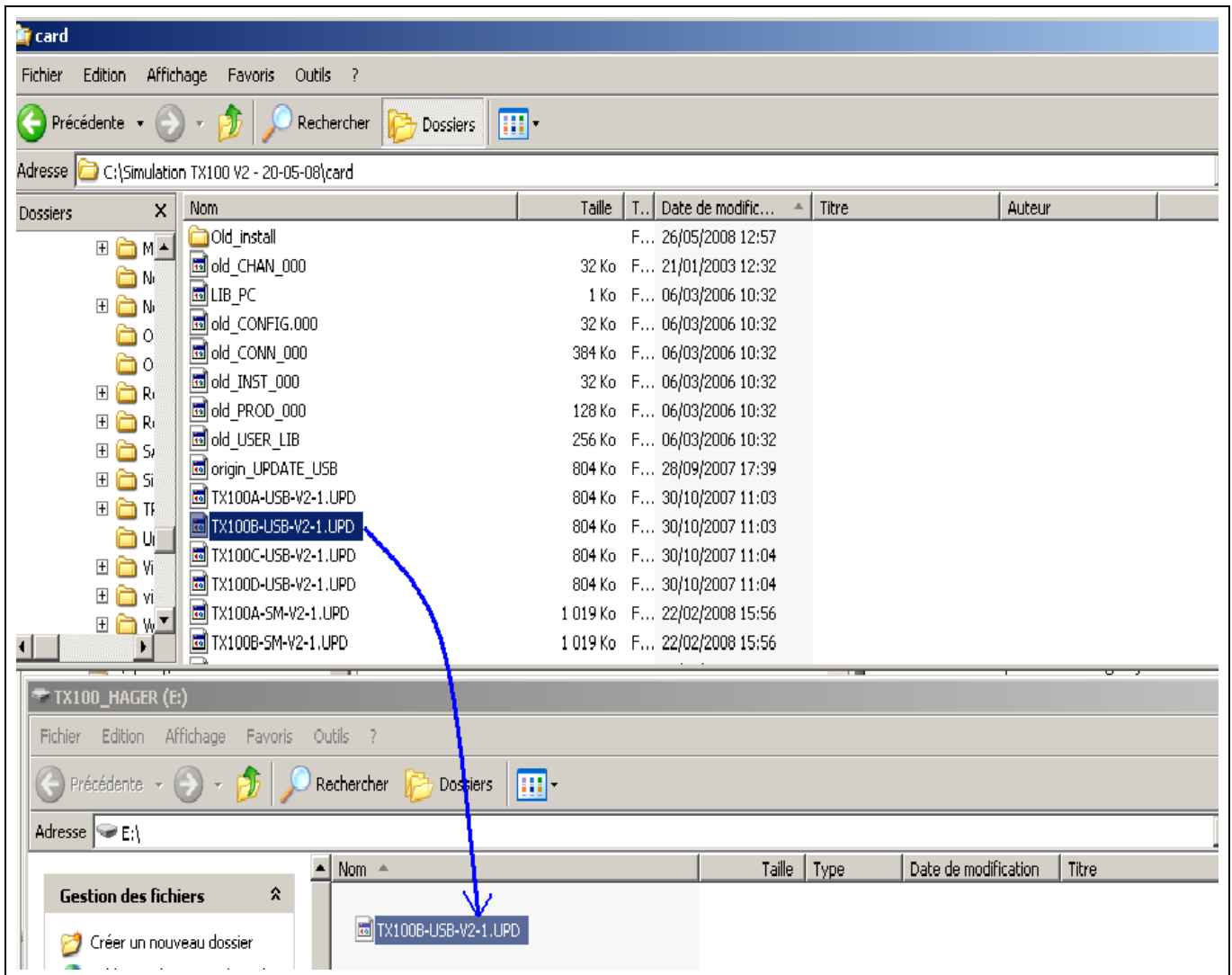
| | |
|--|--|
|  | <ul style="list-style-type: none"> • Press the key  or . • Select Update with computer. • Press the  key to confirm your selection <p>① Do not use a USB hub to carry out the TX100 - PC connection.</p> |
|--|--|


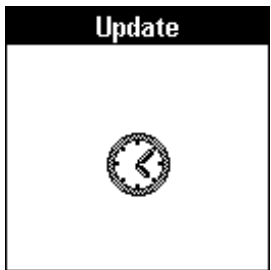


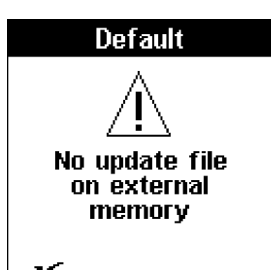
| | |
|---|---|
|  | <p>A Warning screen informs that the current project stored in the TX100 will be deleted:</p> <ul style="list-style-type: none"> • Press the YES screen key to confirm. • Press the NO screen key to cancel and to return to the previous screen. |
|---|---|

| | |
|---|---|
|  | <p>After the confirmation, a screen asks to connect the TX100 to the PC.</p> <ul style="list-style-type: none"> • Carry out the connection. • Press the  screen key to confirm. <p>① The  screen key allows you to return to the previous screen.</p> |
|---|---|

| | |
|--|--|
| <p style="text-align: center;">Update</p> <p style="text-align: center;">Connection....</p> <p style="text-align: center;">PC < > TX100</p> | <p>The following screen indicates that the link from the TX100 to the PC is being established.</p> |
| <p style="text-align: center;">Update</p> <p style="text-align: center;">Communication running.....</p> <p style="text-align: center;">At the end of copy disconnect the tool</p> | <p>The following screen is displayed when the link is established:</p> |

On the PC, paste the update file in directory TX100 HAGER.



| | |
|---|---|
|  | <p>Deactivate the link from the TX100 to the PC using the "Remove USB Mass Storage device" function.</p> <p>When the disconnection is confirmed, remove the cable between the TX100 and the PC.</p> <p>The TX100 displays the following screen.</p> <ul style="list-style-type: none"> • Press the YES screen key to confirm. • Press the NO screen key to cancel and to return to the previous screen. |
|  | <p>After the confirmation, a wait screen is displayed until the end of the update:</p> |
|  | <p>When the update is completed, press the  key to restart the TX100.</p> |
|  | <p>i If there is no update file in the TX100 HAGER directory, the following screen is displayed.</p> |

9.4 Learning an installation

This function allows "re-learning" an installation.
In case of loss of the project file, learning allows to re-create it.


i An external memory (USB stick) must be connected to allow the item Learn installation to appear in Menu / Installation management.






Learning a project is performed in 3 steps:

- **Project creation:** the procedure is the same as the creation of a new project in the Project management menu, but the created project has the Learning type.
- **Storing:** the TX100 learns the products of the installation with their configuration. The learning procedure may be started several times (Learning resume procedure).
- **Validation:** the TX100 validates the learnt project file and converts it into a "normal" project file.

i To regenerate their links, the unidirectional inputs must be numbered after validation of the installation.








To start learning an installation.

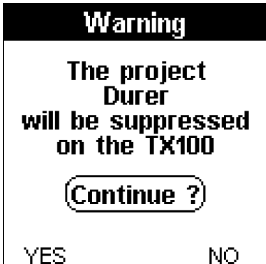
Screen  / Menu / Instal. Management

| | |
|---|--|
|  | <ul style="list-style-type: none"> • Select Learn installation with the  or  key. • Press the  key to confirm your selection. |
|  | <p>The Learn installation screen is displayed: 3 items are available:</p> <ul style="list-style-type: none"> - Creation to create a project of the Learning type. - Resume to go on learning an already started project. - Validation to validate the project. |


9.4.1 Create

Screen  / Menu / Instal. Management / Learn Installation:

| | |
|---|--|
|  | <ul style="list-style-type: none"> • Select Creation to create a new project <p> This project remains a Learning-type project until the final validation of the Learn installation process.</p> <ul style="list-style-type: none"> • Press the  key to confirm your selection. |
|  | <p>The TX100 displays a New project screen and assigns it a name: here Installation 002.</p> <p> The  screen key allows you to return to the previous screen.</p> <ul style="list-style-type: none"> • Press the  screen key to confirm. |

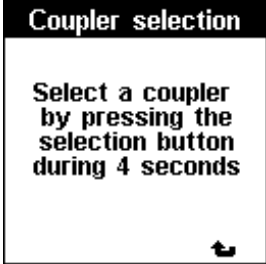

| | |
|---|---|
|  | <p>A Warning screen allows authorising or not the deletion of the current project of the TX100.</p> <ul style="list-style-type: none"> • Press the NO screen key to retain the current project and return to the previous screen. • Press the YES screen key to delete the current project and create the new project: The new project is then created under the name Installation 002 (the Write running... wait screen is displayed). <p>The new project is also saved in the external memory, with the same name. (the Save installation screen is displayed).</p> |
|---|---|

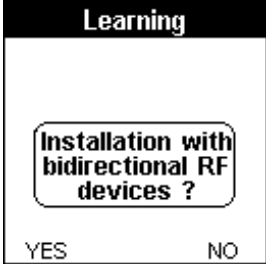
The Learning project is now created. The Installation type screen is displayed:

| | |
|---|---|
|  | <ul style="list-style-type: none"> • Press the YES screen key if the installation is a TP or mixed one. • Press the NO screen key if the installation is entirely a RF one: See. "Case of an entirely RF installation". |
|---|---|



9.4.2 Case of a TP or mixed installation

The Coupler selection screen is displayed when YES is pressed:

| | |
|---|--|
|  | <p>This screen indicates that the TX100 is ready to detect a media coupler and to assign it.</p> <ul style="list-style-type: none"> - To detect and assign the media coupler. • Press the  button of the media coupler until the red indicator lights up (4 sec). • Release the button. <p>A Download wait screen is displayed for some seconds. A sound signal is emitted when the selection is done.</p> |
|---|--|

| | |
|---|--|
|  | <ul style="list-style-type: none"> • Press the YES screen key if the installation includes one or more bidirectional RF products. • Press the NO screen key if the installation includes no bidirectional RF products. |
|---|--|

The following screen is displayed:

| | |
|---|---|
|  | <p>The Learn installation screen displays:</p> <ul style="list-style-type: none"> • the total number of RF products found. • the total number of TP products found. • the Error lines indicate the number of products which are only partly learnt. • Press the Retry screen key to re-start the procedure. This option is interesting when errors occur. • Press the  screen key to confirm. <p>An Update screen is displayed.</p> |
|---|---|

The Auto screen is displayed at the end of the update:

| | |
|--|---|
| | <p>At this point, the installation has been completely learnt, but it is not validated yet. The Prog mode is not accessible.</p> <ul style="list-style-type: none"> • Press the Visu screen key to display the inputs, the outputs, the functions and the links. |
|--|---|

The new installation with the Learning type, can now:

- Be validated definitively so as to have the same status as a normal installation.
- Be used to resume the Learning, to correct possible errors.

9.4.3 "Case of an entirely RF installation"

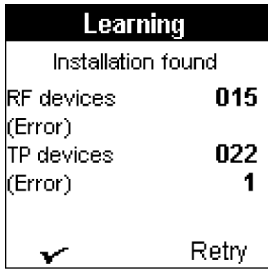

| | |
|--|---|
| | <p>The Installation type screen is displayed. The following Learn installation screen is displayed when the NO screen key is pressed.</p> |
| | <ul style="list-style-type: none"> • Press the YES screen key if the installation includes one or more bidirectional RF products. • Press the NO screen key if the installation only includes unidirectional RF products. |

9.4.4 Installation including bidirectional RF products

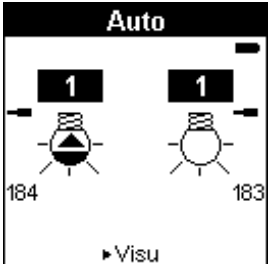
| | |
|--|---|
| | <p>The RF section of an installation is identified with one single RF product. Switch a bidirectional RF product off and on again.</p> <ul style="list-style-type: none"> • Press the ✓ screen key to continue learning the installation. <p>The Learn installation running... screen is displayed.</p> <ul style="list-style-type: none"> • Press the ↻ screen key to go to the Auto mode. |
|--|---|

| | |
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| | <p>The TX100 searches for the products of the installation.</p> <p>An Update screen is displayed every time a product is detected. The Learn installation screen is refreshed after every update to show the number of learnt products.</p> |
|--|---|

The following screen is displayed:

| | |
|---|---|
|  | <p>The Learn installation screen displays:</p> <ul style="list-style-type: none"> • the total number of RF products found. • the total number of TP products found. • the Error lines indicate the number of products which are only partly learnt. • Press the Retry screen key to re-start the procedure. This option is interesting when errors occur. • Press the  screen key to confirm. <p>An Update screen is displayed.</p> |
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The Auto screen is displayed at the end of the update:

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|  | <p>At this point, the installation has been completely learnt, but it is not validated yet. The Prog mode is not accessible.</p> <ul style="list-style-type: none"> • Press the Visu screen key to display the inputs, the outputs, the functions and the links. |
|---|---|





The new installation with the Learning type, can now:

- Be validated definitively so as to have the same status as a normal installation.
- Be used to resume the Learning, to correct possible errors.

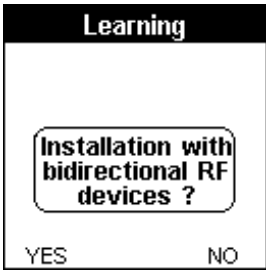
9.4.5 Resume

Resuming allows to continue learning an installation of the Learning type. Resuming the learning allows correcting possible errors which appeared during the first learning.

 Go to Screen  / Menu / Instal. Management / Learn Installation

| | |
|---|---|
|  | <ul style="list-style-type: none"> • Select Resume using the  or  key. • Press the  key to confirm your selection. |
|---|---|








The Learn installation screen is displayed:

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|---|--|
|  | <ul style="list-style-type: none"> • Press the YES screen key if the installation only includes bidirectional RF products. • Press the NO screen key if the installation only includes TP and/or unidirectional RF products. |
|---|--|

9.4.6 Validation

The validation allows to finalise the learning and to turn the Learning-type installation into a normal installation.

① Go to Screen  / Menu / Instal. Management / Learn Installation


| | |
|---|--|
|  | <ul style="list-style-type: none"> • Select Validation with the  or  key. • Press the  key to confirm your selection. |
|  | <p>A screen indicates that the validation turns the installation definitively into a normal installation. It will not be possible any more to start an additional learning loop or to resume in case of errors.</p> <ul style="list-style-type: none"> • Press the  screen key to validate the learning process definitively and to turn the installation into a normal installation. <p>The Auto screen is displayed with all options.</p> <p> If the installation includes unidirectional products:</p> <ul style="list-style-type: none"> • Select the Num (numbering) mode • Number each unidirectional input one after the other. An Update screen is displayed at each numbering. => The inputs are displayed in the inputs list. => The links are displayed in the Visu mode and in the Num mode. • Go to the Auto mode to test the installation. |

9.5 Measuring tools

Various measurements can be performed in an installation to adjust or to optimise the installation:

- Measurement of the RF noise.
- Measurement of the Konnex traffic.
- Measurement of the transmitting power of a RF emitter and of the reception sensitivity of a RF receiver.







RF noise and Konnex traffic measurement is accessible via the Menu key.

The transmission power and receiving sensitivity measurement is accessible in the Prog mode, for a given emitter-receiver link, by pressing the  key of the keypad.

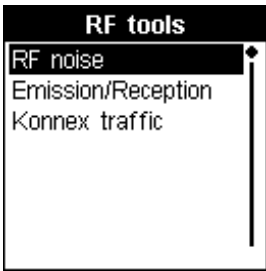





9.5.1 Access to the measurement tools

To have access to the measurement screens, press the "Menu access" key located on the right side of the TX100.


Screen  / Menu

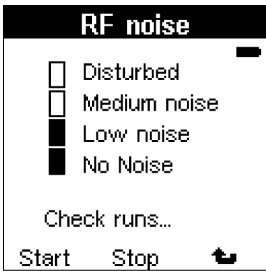


| | |
|---|---|
|  | <ul style="list-style-type: none"> • Select RF tools using the  or  key. • Press the  key to confirm your selection. <p> The key  allows you to return to the previous screen.</p> |
|---|---|

Screen  / Menu / RF tools

| | |
|---|--|
|  | <ul style="list-style-type: none"> • Select the measurement to be performed using the  or  key. • Press the  key to confirm your selection. <p> The key  allows you to return to the previous screen.</p> |
|---|--|

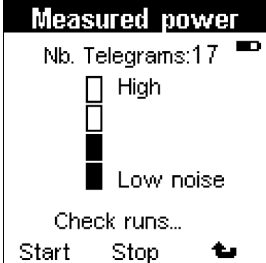


9.5.2 RF noise measurement

Screen  / Menu / RF tools / RF noise


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|---|--|
|  | <p>This function allows you to detect any possible RF disruptions using the same frequency band as the devices present in the installation. A measuring cycle starts as soon as the function is selected. At the end of the cycle, the configurator displays the noise level and automatically takes a new measurement.</p> <ul style="list-style-type: none"> • Press the Start screen key to restart the measuring cycle. • Press the Stop screen key to stop the measuring cycle. <p> The key  allows you to return to the previous screen.</p> |
|---|--|

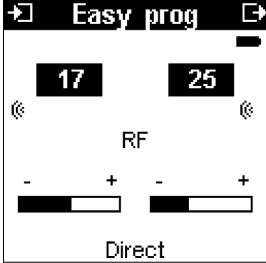

9.5.3 Measurement of the Konnex traffic

Screen  / Menu / RF tools / Konnex traffic

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|---|--|
|  | <p>This function allows you to measure the RF level emitted by any Konnex transmitter. A measuring cycle starts as soon as the function is selected. At every receipt of a telegram, the configurator displays:</p> <ul style="list-style-type: none"> - the serial number of the emitting device. - the signal level. - the total number of telegrams received since the start of the measuring cycle. - if necessary, a low battery alert for the active transmitter. <ul style="list-style-type: none"> • Press the Start screen key to restart the measuring cycle. • Press the Stop screen key to stop the measuring cycle. <p> The key  allows you to return to the previous screen.</p> |
|---|--|

9.5.4 Emission / Reception measurement

Screen  / Menu / RF tools / Emission / Reception


| | |
|--|---|
|  | <p>This function allows measuring the transmitting power of a RF emitter and of the reception sensitivity of a RF receiver.</p> <p>Only accessible from the Prog mode by pressing the  key.</p> <p>The reception sensitivity is displayed either:</p> <ul style="list-style-type: none"> - as a direct measurement from the transmitter to the concerned receiver. - as a repeated signal. In this case, the measurement indicates the sensitivity of the receiver with respect to the signal sent by a repeater. - |
|--|---|

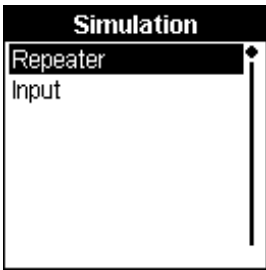





9.6 Simulation

The Simulation function allows to:

- Simulate a repeater:
In this case, the TX100 behaves like a repeater. It is possible to determine the ideal location of a repeater product.
- Simulate an input:
In this case, the TX100 behaves like an input. It is possible to test the links set up with this input.

There are 2 ways to start a simulation:

- In Prog mode, press the  key of the keypad for a long tyme
- Press the "Menu access" key located on the right side of the TX100 and select Simulation:

| | |
|---|--|
|  | <ul style="list-style-type: none"> • Press the key  or . • Select Repeater or Input. • Press the  key to confirm your selection. |
|  | <p>Simulation is started.</p> |
|  | <p>Repeater Simulation screen.</p> |
| | <p>Input Simulation screen.</p> |