











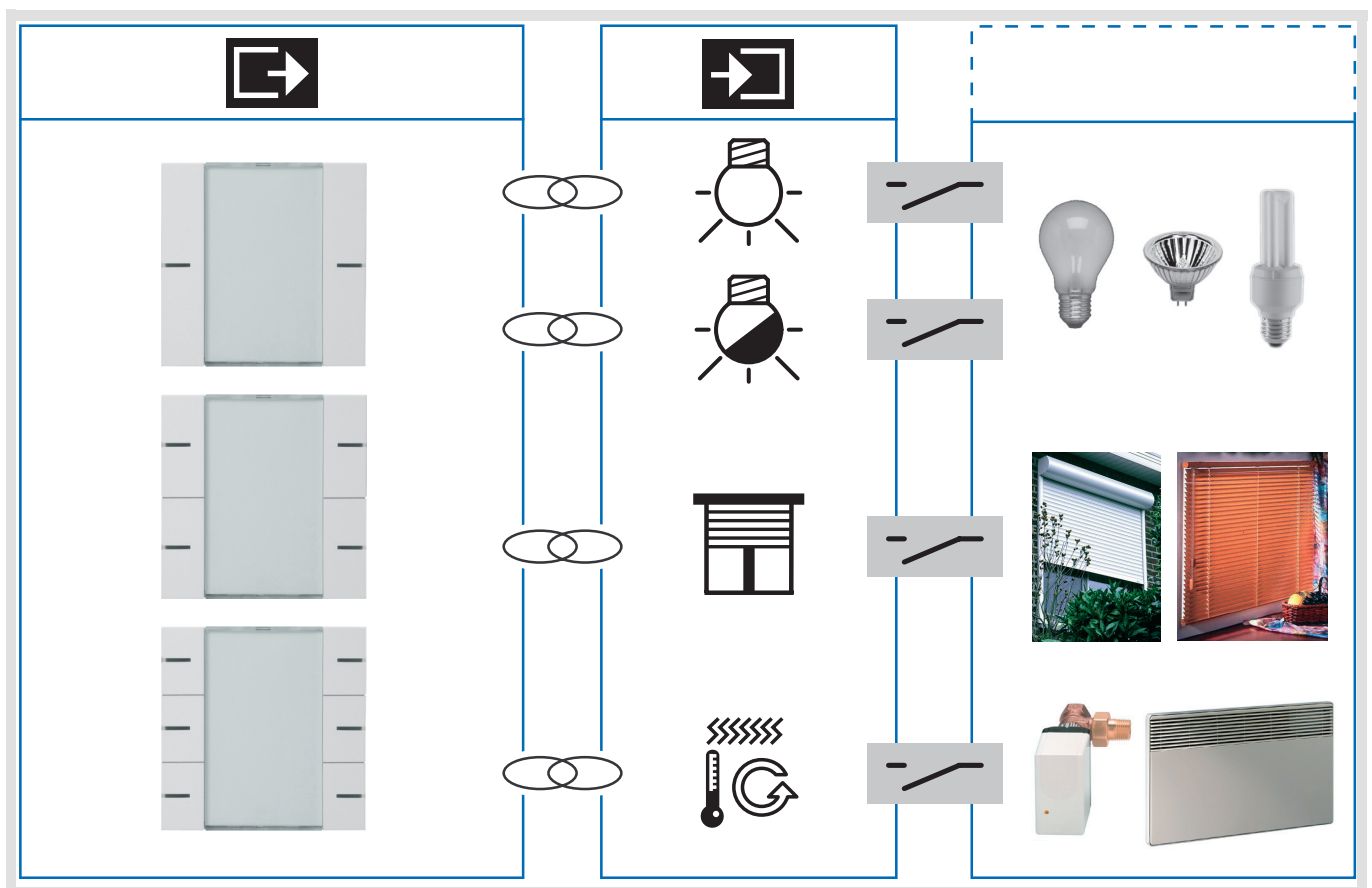
Operation with the Tebis TX TX100 link

Operation of the Tebis pushbuttons

Electrical/Mechanical characteristics: see user's instructions

	Product reference	Product designation	TX100 version	TP device  RF device 
	WYT32x, 34x, 36x	Tebis universal pushbuttons KNX 1-, 2-, 3-key pairs	≥ 1.6.0	
	WYT36xIR	Tebis universal pushbuttons KNX 3-channels with infrared receiver	≥ 1.6.0	
	WUT03	BCU for WYT32x, 34x, 36x pushbuttons and automatic switch WYT51xx	≥ 1.6.0	

x: colour of the buttons



Summary

- 1. Presentation of the functions of the tebis pushbuttons 3
- 2. Configuration and parameterising of the Pushbutton functions 4
 - 2.1 Lighting control function 4
 - 2.2 Lighting dimming function 7
 - 2.3 Shutters / Blinds control function 10
 - 2.4 Heating / Cooling setpoint selection function 13
 - 2.5 Scene function 16
- 3. Configuration and parameterising of the label holder lighting 17
 - 3.1 The various possible settings of the label holder lighting 17
 - 3.2 Link with an input (setting upon status indication) 19
 - 3.3 Indicate the status of an output (setting upon status indication) 19
- 4. Configuration and setting of the indicators 20
 - 4.1 The various possible settings for the indicators 20
 - 4.2 Display the Status indication of the controlled outputs on the indicators 22
- 5. Configuration and parameters of the infrared channels 22
- 6. Characteristics 22
- 7. Bus presence test 22
- 8. Expert mode programming 23
 - 8.1 ON/OFF function 23
 - 8.2 Dimming function 24
 - 8.3 Timer function 25
 - 8.4 Shutters / blinds control function 25
 - 8.5 Heating setpoint selection function 26
 - 8.6 Priority function 27
 - 8.7 Scene control function 27
 - 8.8 Label holder lighting function 28

1. Presentation of the functions of the tebis pushbuttons

The WYT32x, WYT34x, WYT36x and the WYT36xIR pushbuttons must be used with the WUT03 bus coupler.

■ ON/OFF, Dim, Shutters/Blinds, Heating / Cooling setpoint selection

The Pushbuttons send commands to output devices so as to control lighting (ON/OFF, dim), shutters/blinds (up/down, slat angle/stop), heating/cooling (set point selection).

■ Timer function

This function is used to switch on or off a switching output (lighting) for an adjustable period of time (time setting while establishing the link with the TX100).

■ Priority

The Priority function sends priority-start or priority-stop commands. The operation of the Priority depends on the output module: lighting, shutters/blinds, heating, etc..

■ Scene

This function is used to call and to store scenes for different kinds of outputs. Example of scene 1: Leaving the house (with centralised lighting control OFF, shutters on South side lowered to 3/4, the other shutters open, heating set to Economy (Absence)).

■ Label holder backlight

The products include a backlight for the label holder. A dedicated output is available to switch this lighting on and off.

■ Status indication by indicator

Each of the keys is equipped with an indicator, the function of the indicator can be selected in the Product information menu among the following options:

- Permanent ON (green) or permanent OFF (off).
- Status indication of the controlled outputs (permanent or blinking). Default setting is indicator off.

■ Infrared receiver

The WYT36xIR products have a 12 channel infrared receiver. They can be controlled using an infrared Tebis remote control. The functions available on the keys of the infrared remote control are the same as those of the pushbuttons.

■ Breakdown of functions by product reference

Function	WYT32x, WYT34x, WYT36x	WYT36xIR
Number of inputs	2, 4, 6 independent inputs	6 independent inputs
ON/OFF, Shutters/Blinds, Dim	✓	✓
Timer function	✓	✓
Heating/Cooling Setpoint selection	✓	✓
Priority	✓	✓
Scene	✓	✓
Label holder backlight	✓	✓
Status indication by indicator	✓	✓
Infrared receiver 12 channels	No	✓

✓ : The product is equipped with this function

2. Configuration and parameterising of the Pushbutton functions

The Pushbuttons can send commands to the Tebis TX plant to carry out the following functions:

Lighting control:


Remote pushbutton (switch over every time when depressed), ON, OFF, ON/OFF (pressed = ON, released = OFF), Timer function, Dimming on 1 or 2 pushbuttons.

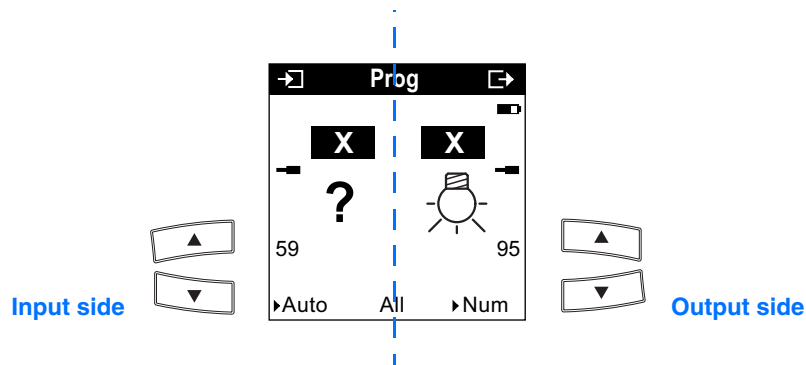
- Roller shutter / Blind control:
Up, Down, Stop, Blind slat angle, 1-button or 2-button control
- Heating control (Setpoint selection):
Comfort (Day), Economy (Absent), Reduction (Reduced), Frost-free, Timed Comfort, Comfort/Eco (Present/Absent).
- Scene controls (8 selectable scenes per pushbutton).
- Priority

These functions are set up in the standard configuration mode of the TX100 and linked with the appropriate output products.



Note: before carrying out a configuration, the pushbutton must be mounted on the WUT03 bus coupler.


2.1 Lighting control function








After push button numbering, the following functions can be selected for the  output type (switching output).





X symbolizes a possible input or output number.

The inputs and outputs can easily be selected using the TX100's  and  keys.


The  key allows switching from the **X** input number zone to ? function selection

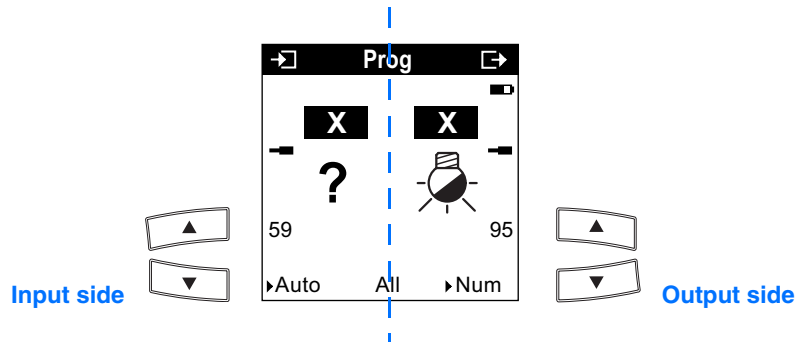
Key's possible functions		Description	Operation
	Not used	Default value	Selection of available pushbutton functions using the TX100's scroll keys.
	ON	The ON function switches the output channel (lighting) ON. For ex.: Central ON command	Press on the key: Closing of the output contact. (No change after new key-press).
	OFF	The OFF function switches the output channel (lighting) OFF. For ex.: Central OFF command	Press on the key: Opening of the output contact. (No change after new key-press).
	Toggle (toggle)	The toggle function will after each key press invert the status of the output circuit (lighting).	Press on the key: Status change of the output contact. The status changes after each new key-press.
	Switch Impulse output	The switch function is required on the pushbutton to be able to carry out a pulse output. The switching output only closes as long as the key is pressed.	Press on the key: Closing of the output contact. Release the key: Opening of the output contact.
	Timer ON (Staircase timer)	The Timer ON function switches the output channel (lighting) to ON for an adjustable time. The ON timer duration is defined after link validation: * Setting range [0 s 24 h]: Not used, 1 s, 2 s, 3 s, 5 s, 10 s, 15 s, 20 s, 30 s, 45 s, 1 min, 1 min 15 s, 1 min 30 s, 2 min, 2 min 30 s, 3 min, 5 min, 15 min, 20 min, 30 min, 1 h, 2 h, 3 h, 5 h, 12 h, 24 h. The output automatically switches to OFF when the delay has expired.	Short (<0.5-s) key press: The output contact switches to ON for the set time. Long (>0.5 s) push button press: - End of the current delay and opening of the output contact (switching OFF). Pressing the key briefly (<0.5 s) one or more times within the first 10 s after switching ON: Every time the key is pressed, the ON-switching time is increased by the time set for our TXA switching outputs. For example: ON duration 1 min within the first 10 s 5 key-presses (5+1) → 6 min ON-switching time Pressing the key briefly after the first 10 s of the ON-switching time: New start of the timer operation (retriggering).
	Timer OFF	The OFF Timer function switches the output channel (lighting) to OFF for an adjustable time. The OFF timer duration is defined after link validation: * Setting range [0 s 24 h]: Not used, 1 s, 2 s, 3 s, 5 s, 10 s, 15 s, 20 s, 30 s, 45 s, 1 min, 1 min 15 s, 1 min 30 s, 2 min, 2 min 30 s, 3 min, 5 min, 15 min, 20 min, 30 min, 1 h, 2 h, 3 h, 5 h, 12 h, 24 h. The output automatically switches to ON when the delay has expired	Short (<0.5-s) key press: The output contact switches to OFF for the set time. The OFF timer duration is defined after link validation. Long (>0.5 s) push button press: - Ending of the current Timer operation and closing of the output contact (switching ON). Pressing the key once or more times (<0.5 s) within the first 10 s after switching OFF: Every time the key is pressed, the OFF-switching time of our TXA switching outputs is increased by the time set. For example: OFF-switching time 1 min within the first 10 s 5 key-presses (5+1) → 6 min OFF-switching time Pressing the key briefly after the first 10 s of the OFF-switching time: New start of the timer operation (retriggering).

* To change the timer duration, erase the input/output link and create it again. When various pushbuttons are linked with the same output, the timer value applied is the last value input.



Key's possible functions	Description	Operation
 <p>Priority ON - Down - Comfort</p>	<p>The ON priority function allows overriding the lighting output to ON and maintaining it in this status.</p> <p>After confirming the link, select the end of priority behaviour:</p> <p>Mode</p> <ul style="list-style-type: none"> - Maintain - Invert <p>Pressing the key a second time cancels the Priority.</p>	<p>Press on the key: The output switches to ON. Another key press: Priority is cancelled.</p> <p>Note: The Priority end behaviour is defined after confirming the link:</p> <ul style="list-style-type: none"> - Maintain: ON. - Invert: OFF. <p>Priority is the function with the highest priority. Only a priority-end command ends the Priority and re-authorizes the bus commands to be taken into consideration.</p> <p>A new Priority command overrides the previous one (the latest command is valid).</p> <p>If the indicator of the key is set to status indication, it indicates whether Priority is active or not, it does not indicate the status of the output.</p>
 <p>Priority OFF - Up - Frost protection (Switch function)</p>	<p>The OFF priority function allows overriding the lighting output to OFF and maintaining it in this status.</p> <p>After confirming the link, select the end of priority behaviour:</p> <p>Mode</p> <ul style="list-style-type: none"> - Maintain - Invert <p>Pressing the key a second time cancels the Priority.</p>	<p>Press on the key: The output switches to OFF. Another key press: Priority is cancelled.</p> <p>Note: The Priority end behaviour is defined after confirming the link:</p> <ul style="list-style-type: none"> - Maintain the output value: OFF - Invert the output value: ON <p>Priority is the function with the highest priority. Only a priority-end command ends the Priority and re-authorizes the bus commands to be taken into consideration.</p> <p>A new Priority command overrides the previous one (the latest command is valid).</p> <p>If the indicator of the key is set to status indication, it indicates whether Priority is active or not, it does not indicate the status of the output.</p>


2.2 Lighting dimming function









After numbering the pushbuttons, the following functions may be selected for the output type  (dimming output).







X symbolizes a possible input or output number.

The inputs and outputs can easily be selected using the TX100's  and  keys.


The  key allows switching from the **X** input number zone to **?** function selection

Key's possible functions		Description	Operation
	Not used	Default value	Selection of available pushbutton functions using the TX100's scroll keys.
	ON	The ON function switches on the lighting circuit. For ex...: Central ON command	Press on the key: Switching ON (on the last value) (No change after new key-press).
	OFF	The OFF function switches off the lighting circuit. For ex...: Central OFF command	Press on the key: Switching OFF. (No change after new key-press)
	Toggle (toggle)	The toggle function will, after each key press, invert the status of the lighting circuit. (ON - OFF ; OFF - ON).	Press on the key: Switching ON (at the last lighting value) or switching OFF. The status is inverted after each new key-press.
	1 button dimmer	The 1-button Dimmer function allows dimming the light with one single pushbutton.	A short pushbutton press: Switching ON (at the last lighting value) or switching OFF. A long pushbutton press: Dimming up or down (dimming direction changes every time the key is pressed for a long time).
	2-buttons dimmer: Increase	The Increase Function allows increasing the output level.	A short pushbutton press: Switching ON (last dimming value). A long pushbutton press: Increase of the lighting level.
	2-buttons dimmer: Reduction	The Reduction function allows decreasing the output level.	A short pushbutton press Switching OFF (last dimming value). A long pushbutton press Decrease.
	Switch	The Switch function switches the lighting circuit ON or OFF	Press on the key: Switching ON (last dimming value). Release the key: Switching OFF.

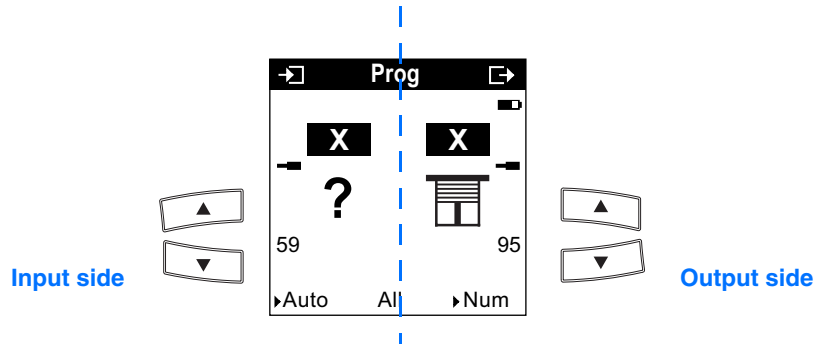
Key's possible functions	Description	Operation
	<p>Timer ON (toggle function like on a staircase timer)</p>	<p>The Timer ON function switches on the lighting circuit for an adjustable time. The ON timer duration is defined after link validation:</p> <p>Setting range [0 s 24 h]: Not used, 1 s, 2 s, 3 s, 5 s, 10 s, 15 s, 20 s, 30 s, 45 s, 1 min, 1 min 15 s, 1 min 30 s, 2 min, 2 min 30 s, 3 min, 5 min, 15 min, 20 min, 30 min, 1 h, 2 h, 3 h, 5 h, 12 h, 24 h.</p> <p>The output switches to OFF when the delay has expired</p> <p>Short (<0.5 s) key press: Switching ON (last dimming value). The dimming output is switched OFF at the end of the timer delay.</p> <p>Another short key press: The timer operation starts again. The set time starts running again (retriggering).</p> <p>Long (>0.5 s) push button press: Stop of the current delay and switching OFF.</p> <p>Pressing the key briefly (<0.5 s) one or more times within the first 10 s after switching ON: Every time the key is pressed, the ON-switching time is increased by the time set for our TXA switching outputs.</p> <p>For example: ON duration 1 min within the first 10 s 5 key-presses (5+1) → 6 min ON-switching time</p> <p>Pressing the key briefly after the first 10 s of the ON-switching time: New start of the timer operation (retriggering).</p>
	<p>Timer OFF</p>	<p>The Timer OFF function switches the lighting circuit off for an adjustable time. The OFF timer duration is defined after link validation.</p> <p>Setting range [0 s 24 h]: Not used, 1 s, 2 s, 3 s, 5 s, 10 s, 15 s, 20 s, 30 s, 45 s, 1 min, 1 min 15 s, 1 min 30 s, 2 min, 2 min 30 s, 3 min, 5 min, 15 min, 20 min, 30 min, 1 h, 2 h, 3 h, 5 h, 12 h, 24 h.</p> <p>The output switches to ON when the delay has expired</p> <p>Short (<0.5 s) key press: Switching OFF. The dimming output is switched ON at the end of the timer delay (last dimming value).</p> <p>Another short key press during the OFF-switching time: The timer operation starts again. The set time starts running again (retriggering).</p> <p>Long (>0.5 s) push button press: Stop of the current delay and switching ON (last dimming value).</p> <p>Pressing the key once or more times (<0.5 s) within the first 10 s after switching OFF:</p> <p>Every time the key is pressed, the OFF-switching time of our TXA switching outputs is increased by the time set.</p> <p>For example: OFF-switching time 1 min within the first 10 s 5 key-presses (5+1) → 6 min OFF-switching time</p> <p>Pressing the key briefly after the first 10 s of the OFF-switching time: New start of the timer operation (retriggering).</p>

Key's possible functions		Description	Operation
	<p>Priority ON - Down - Comfort (Switch function)</p>	<p>The Priority ON function forces the lighting circuit ON and maintains it ON.</p> <p>After confirming the link, select the end of priority behaviour:</p> <p>Mode</p> <ul style="list-style-type: none"> - Maintain - Invert <p>Pressing the key a second time cancels the Priority.</p>	<p>Press on the key: The output switches to ON (at the last lighting level).</p> <p>Another key press: Priority is cancelled.</p> <p>Note: The end of priority behaviour is defined after confirming the link:</p> <ul style="list-style-type: none"> - Maintain: ON - Invert: OFF <p>Priority is the function with the highest priority. Only a priority-end command ends the Priority and re-authorizes the bus commands to be taken into consideration.</p> <p>A new Priority command overrides the previous one (the latest command is valid).</p> <p>If the indicator of the key is set to status indication, it indicates whether Priority is active or not, it does not indicate the status of the output.</p>
	<p>Priority OFF - Up - Frost protection (Switch function)</p>	<p>The OFF Priority function forces the lighting circuit OFF and maintains it OFF.</p> <p>Pressing the key a second time cancels the Priority.</p> <p>After confirming the link, select the end of priority behaviour:</p> <p>Mode</p> <ul style="list-style-type: none"> - Maintain - Invert 	<p>The output switches to OFF.</p> <p>Another key press: Priority is cancelled.</p> <p>Note: The end of priority behaviour is defined after confirming the link:</p> <ul style="list-style-type: none"> - Maintain: OFF - Invert: ON <p>A new Priority command overrides the previous one (the latest command is valid).</p> <p>If the indicator of the key is set to status indication, it indicates whether Priority is active or not, it does not indicate the status of the output.</p>



2.3 Shutters / Blinds control function


After pushbutton numbering, one of the following functions can be selected to control  output modules (shutters/blinds).


Important: The position of the shutters or blinds can be integrated in the definition of a scene. For that purpose, the Up and Down speed (closing of the TXA22x output contact) must be defined on the TX100 (selection of the parameters, refer to chapter 9). A download is necessary to finish this setting (refer to chapter 9). The rest of the programming work is done in the Prog mode of the TX100.








X symbolizes a possible input or output number.

The inputs and outputs can easily be selected using the TX100's  and  keys.

The  key allows switching from the **X** input number zone to ? function selection

The table below describes the functionalities which can be obtained combining the Pushbuttons with the  outputs:


Key's possible functions	Description	Operation
	<p>Up/Stop</p> <p>The Up/Stop function allows moving up or stopping a shutter or a blind, or inclining the slats of a blind.</p>	<p>Shutters mode: *</p> <p>Short (<0.5 s) key press: Stop</p> <p>Long (>0.5 s) push button press: Shutter Up</p> <p>Blinds mode: *</p> <p>Short (<0.5 s) key press: Stop or Blind slat angle</p> <p>Long (>0.5 s) push button press: Blind Up</p>
	<p>Down/Stop</p> <p>The Down function allows moving down or stopping a shutter or a blind, or inclining the slats of a blind.</p>	<p>Shutters mode: *</p> <p>Short (<0.5 s) key press: Stop</p> <p>Duration of long key-press (>0.5 s) Shutter Down</p> <p>Blinds mode: *</p> <p>Short (<0.5 s) key press: Stop or Blind slat angle</p> <p>Long (>0.5 s) push button press: Blinds Down</p>
	<p>Up/Down/Stop</p> <p>The Up/Down function allows moving up, down or stopping a shutter or a blind with one single pushbutton.</p>	<p>Only the functions of the Shutters mode are active, the slat angle function of a blind is not possible*.</p> <p>Repeated key press: closing of the Up/Down output contacts for a limited time in the order Up, Stop, Down*.</p>
	<p>Priority Up</p> <p>The Priority up function forces the Up movement of a roller shutter or a blind.</p> <p>After confirming the link, select the end of priority behaviour:</p> <p>Mode</p> <ul style="list-style-type: none"> - Maintain - Invert <p>Pressing the key a second time cancels the Priority.</p>	<p>Press on the key: Closing of the Up output contact for a limited duration * → The shutters or blinds move up</p> <p>Another key press: Priority is cancelled.</p> <p>Priority is the function with the highest priority after the Rain/Wind alarm. Excepted the Rain/Wind alarm, no other command is taken into consideration when a Priority is active.</p> <p>Note: The end of priority behaviour is defined after confirming the link:</p> <ul style="list-style-type: none"> - Maintain: no movement command will be started. - Invert: The Down output contact will be closed for a limited duration.* <p>A new Priority command overrides the previous one (the latest command is valid).</p> <p>If the indicator of the key is set to status indication, it indicates whether Priority is active or not.</p>

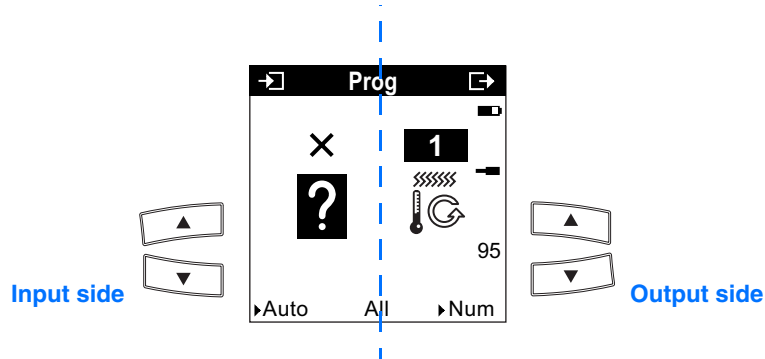
Key's possible functions	Description	Operation
	<p>Down priority</p>	<p>The Down Priority function forces the Down movement of a roller shutter or a blind.</p> <p>After confirming the link, select the end of priority behaviour.</p> <p>Mode</p> <ul style="list-style-type: none"> - Maintain - Invert <p>Pressing the key a second time cancels the Priority.</p> <p>Press on the key: Closing of the Down output contact for a limited duration * → The shutters or blinds are lowered. Another key press: Priority is cancelled.</p> <p>Priority is the function with the highest priority after the Rain/Wind alarm. Only a priority-end command ends the Priority and re-authorizes the bus commands to be taken into consideration.</p> <p>The end of priority behaviour is defined after confirming the link:</p> <ul style="list-style-type: none"> - Maintain: no movement command will be started. - Invert: The Up output contact will be closed for a limited duration.* <p>A new Priority command overrides the previous one (the latest command is valid).</p> <p>If the indicator of the key is set to status indication, it indicates whether Priority is active or not.</p>

* Note: The operating mode and the running times for Up and Down (closing of the outputs) can be found in the TX100 under >> Device management / Device information → Select the device → Param. << setting. To finish, realize a download.



2.4 Heating / Cooling setpoint selection function


The pushbuttons WYTxxx allow controlling the setpoints (Comfort, Reduced, etc.), e.g. TX460A, WYT61x. For the setpoint selection, the thermostat will be represented by the symbol  displayed on the right side of the TX100 in Prog mode.

After pushbutton numbering, one of the following functions can be selected to control  output modules (thermostats).













X symbolizes a possible input or output number.

The inputs and outputs can easily be selected using the TX100's  and  keys.















The  key allows switching from the **X** input number zone to **?** function selection

Also refer to the following table with the symbols of the operating modes for the various thermostats

Key's possible functions		Description	Operation
	Not used	Default value	Selection of available pushbutton functions using the TX100's scroll keys.
	Comfort - Presence	This function activates the Comfort mode of a thermostat.	Press on the key: Comfort mode activation. This activation is cancelled by any other mode activation.
	Reduced	This function activates the Reduced mode of a thermostat.	Press on the key: Activation of the Reduced mode. The activation of this mode will be cancelled by any other mode activation.
	Timed Comfort	The Delayed Comfort function activates the Comfort setpoint for an adjustable time. The duration of the activation is selected after validation of the link: Setting range [0 s 24 h]: Not used, 1 s, 2 s, 3 s, 5 s, 10 s, 15 s, 20 s, 30 s, 45 s, 1 min, 1 min 15 s, 1 min 30 s, 2 min, 2 min 30 s, 3 min, 5 min, 15 min, 20 min, 30 min, 1 h, 2 h, 3 h, 5 h, 12 h, 24 h. Default value: 30 min.	Short (<0.5-s) key press: Activation of the Timed reduced mode for the set time. Long (>0.5 s) push button press: Back to the original mode. When the activation time has elapsed, the thermostat switches back automatically to the original mode. This setpoint will be cancelled by any other mode activation command.
	Timed reduced	The Timed reduced function activates the Reduced mode for an adjustable time. The duration of the activation is selected after validation of the link: Setting range [0 s 24 h]: Not used, 1 s, 2 s, 3 s, 5 s, 10 s, 15 s, 20 s, 30 s, 45 s, 1 min, 1 min 15 s, 1 min 30 s, 2 min, 2 min 30 s, 3 min, 5 min, 15 min, 20 min, 30 min, 1 h, 2 h, 3 h, 5 h, 12 h, 24 h. Default value: 30 min.	Short (<0.5-s) key press: Activation of the Timed reduced mode for the set time. Long (>0.5 s) push button press: Back to the original mode. When the activation time has elapsed, the thermostat switches back automatically to the original mode. This setpoint will be cancelled by any other mode activation command.

Key's possible functions		Description	Operation
	Eco - Absence	This function selects the Economy setpoint of a thermostat.	<p>Press on the key: Activation of the Economy mode.</p> <p>This setpoint will be cancelled by any other mode activation command</p>
	Comfort/Eco	The Comfort/Eco function allows switching between these two modes	<p>Press on the key: Setpoint switching between Comfort and Eco. The setpoint changes at every keypress.</p> <p>This setpoint will be cancelled by any other mode activation command.</p>
	Frost-free	The Frost-free function is used to select, when heating, the Frost-free function and, when cooling, the Equipment protection function.	<p>Press on the key: Selection of the Frost-free or Equipment protection mode.</p> <p>This setpoint will be cancelled by any other mode activation command.</p>
	Comfort priority	The Comfort priority function allows activating and maintaining the Comfort setpoint.	<p>Press on the key: Priority of the Comfort setpoint.</p> <p>Another key press: Priority is cancelled.</p> <p>Priority has the highest priority. Only a priority-end command ends the Priority and re-authorizes the bus commands to be taken into consideration.</p> <p>After Priority cancellation, back to the original mode.</p> <p>This command can possibly be cancelled by another priority command (Frost protection) or by a Stop command. If the indicator of the key is set to status indication, it indicates whether Priority is active or not.</p> <p>The indicator associated with the pushbutton indicates whether a Priority is active or not, it does not indicate the status of the output.</p>
	Frost Protection Priority	The Frost protection Priority function allows activating and maintaining the Frost protection setpoint.	<p>Press on the key: Priority of the Frost protection setpoint.</p> <p>Another key press: Priority is cancelled.</p> <p>Priority has the highest priority. Only a priority-end command ends the Priority and re-authorizes the bus commands to be taken into consideration.</p> <p>After Priority cancellation, back to the original mode.</p> <p>This command can possibly be cancelled by another priority command (Comfort) or by a Stop command. If the indicator of the key is set to status indication, it indicates whether Priority is active or not.</p>

The following table shows, for each of the setpoints, the symbols used on the various thermostats.

Set point	Icon		
	WYT61X	TX460	TX320
Comfort			
Economy			
Reduced			
Frost-free			
Equipment protection			Function not available


2.5 Scene function

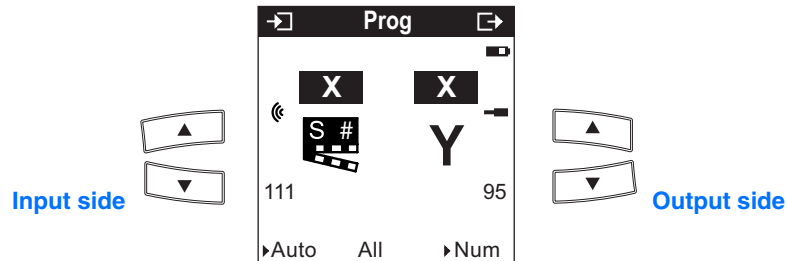
The Scene function allows calling and storing predefined output values.

The outputs can be of the same type or different types (lighting, shutters/blinds, heating, etc.).

Example of scene 1: Leaving the house (with centralised lighting control OFF, shutters on South side lowered to 3/4, the other shutters open, heating set to Economy (Absence)).

Example of scene 2: Shutters lowered, light on, heating set to Comfort.

To assign the Scene function to a key, select the symbol  (x represents a scene number between 1 and 8).









x represents a scene number between 1 and 8

X stands for an input or output number

Y represents the output type (switch, dim, shutter/blind or heating/cooling setpoint selection)

The table below describes possible link types

Key's possible scene function	Function	Description	Possible action on output	Output operation
?	Not used	Default value	Selection of available pushbutton functions using the TX100's scroll keys.	?
 to 	Scene 1 to 8	Various output types (lighting, shutters/blinds, heating setpoint selection, etc.) can be linked to all scenes (No. 1 to 8). Up to 8 scenes can be associated to each key.	ON/OFF  Relative or absolute dimming  Roller shutters Up / Down  Heating/Cooling adjustment 	Short (<0.5-s) key press: The devices linked with this scene set themselves to the values stored in the devices for this scene: Long (>6 s) push button press: The current values for the outputs (lighting, Sshutters status, heating setpoint, etc..) are stored in the actuator for this scene.

3. Configuration and parameterising of the label holder lighting

The label holder lighting (FPL=Front Panel Light) of the pushbutton device may be defined as permanently on or off, or it may operate as a status indicator (ON/OFF).

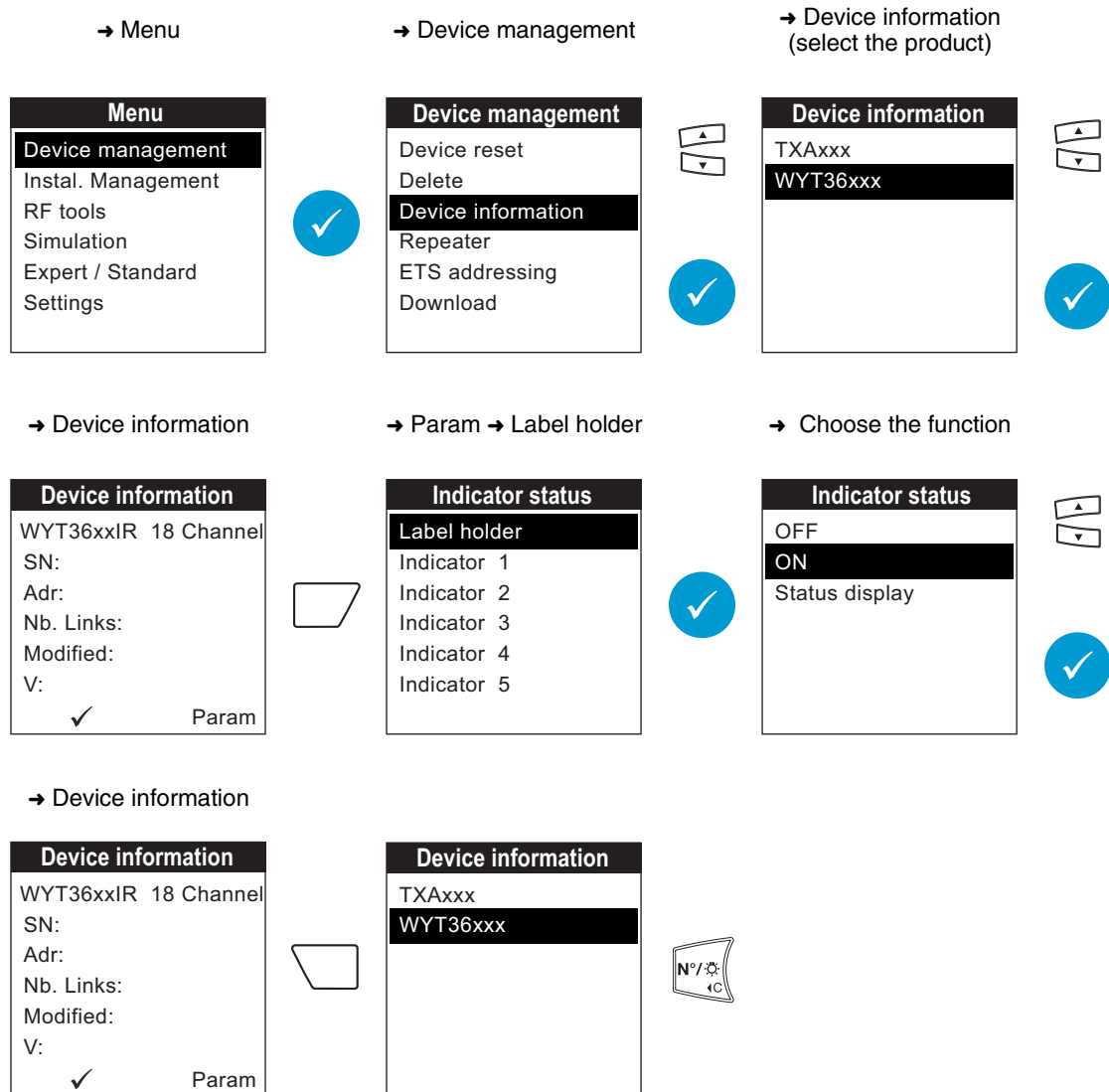
3.1 The various possible settings of the label holder lighting

The operation of the label holder lighting is set on the TX100 in the Product information menu of the pushbutton.

Function	Description
OFF	The label holder is permanently off (default setting).
ON	The label holder is permanently on
Status display	The label holder indicates the status of an output or of an input.

When the chosen operation is Status indication, the label holder lighting can be linked with an input (pushbutton, dimmer key, switch clock) or with an output (switching, dimming...).

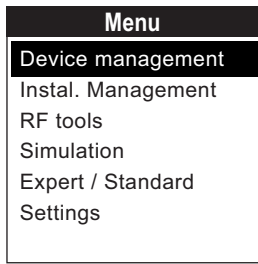
Access to the setting:
Press the right key of the TX100



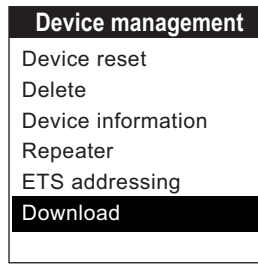
Note: A download must be performed after choosing the parameter.

Access to the download:

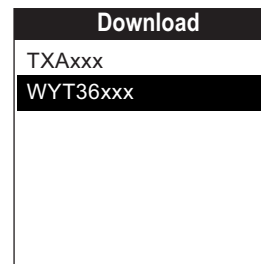
→ Menu



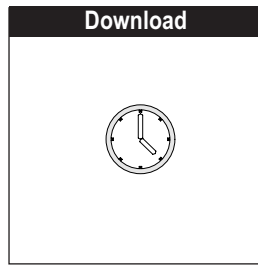
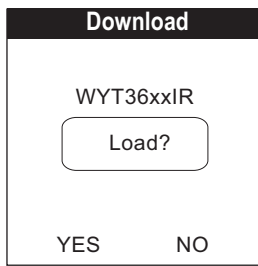
→ Device management



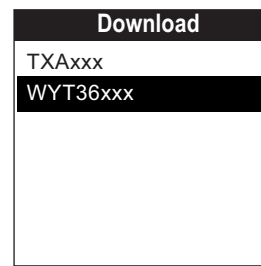
→ Download



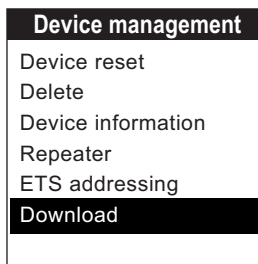
→ Confirm the download



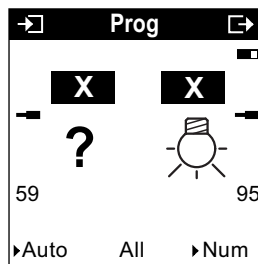
→ Back to the download




→ Back to device management

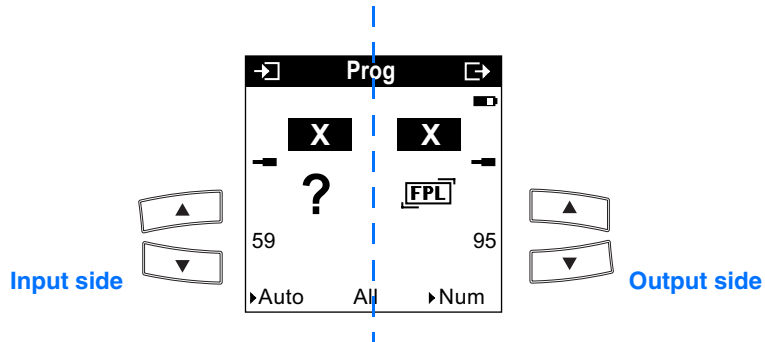


→ Menu before setting





3.2 Link with an input (setting upon status indication)


The output channel for the label holder lighting is represented on the right side of the display of the TX100 by the symbol  and by an output number:










X represents a possible number on the input or output side

The inputs and outputs can easily be selected using the TX100's  and  keys.

Link with an input:

1. The  key allows switching from the X input number zone to ? function selection
2. Select a function (see the following table)
3. Set up the link with a long key press on TX100

The following table lists the functions of the inputs that can be linked with the lighting of the label holder () in order to obtain the corresponding operation.

Possible input functions		Description	Operation 
	Not used	Default value	Selection of available pushbutton functions using the TX100's scroll keys.
	ON	The ON function switches the output channel (lighting) ON.	The label holder's lighting switches ON upon receipt of an input of this type. (No change after new key-press)
	OFF	The OFF function switches the output channel (lighting) OFF.	The label holder's lighting switches OFF upon receipt of an input of this type. (No change after new key-press).
	Toggle (toggle)	The Pushbutton function allows inverting the status of the lighting.	The label holder's lighting switches ON upon receipt of an input of this type. The status (ON/OFF) changes at every new key press.
	Switch	The Switch function allows switching the lighting ON or OFF.	Upon receipt of an input of this type, the label holder lighting goes ON when the contact is closed and goes OFF when the contact is open.

3.3 Indicate the status of an output (setting upon status indication)

In Expert mode, the status return information of an output can control the label holder lighting.

4. Configuration and setting of the indicators

The Tebis pushbutton device has one indicator per key. The indicator can be set as always on, always off or be used as a status indication.

In Status indication operation, the status (ON/OFF) of the lighting output modules can be displayed. It is also possible to indicate whether a Priority is active or not.

In lighting outputs status indication mode, the indicator will indicate the status of the outputs controlled by its pushbutton.

For example:

Push button 1 controls output 7

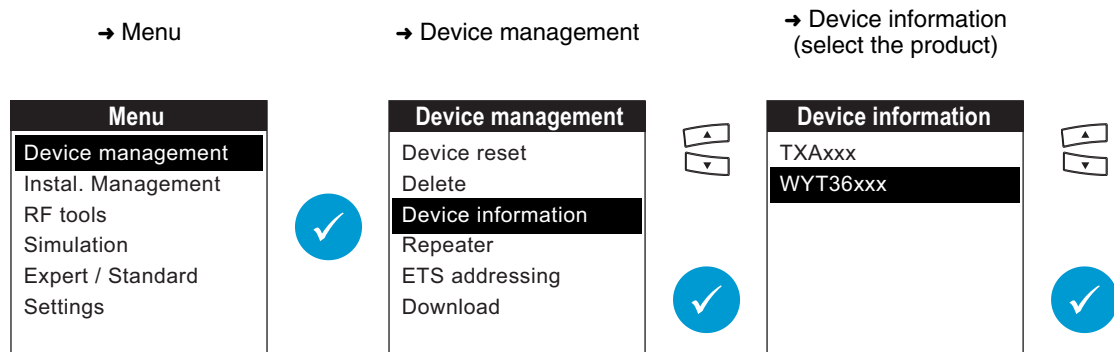
The indicator of key 1 indicates the status of the output 7 (refer to 4.2).

4.1 The various possible settings for the indicators

The function of the indicators can be set individually for each of the keys. The function of the indicators is set on the TX100, in the Product information menu of the pushbutton (see below).

Function	Description
OFF	The indicator is always OFF.
ON	The indicator is always ON - Indicator-colour green, e. g.: staircase, entrance.
Status display	indicator-colour red: Output OFF Status indication. Indicator-colour green: Output ON Status indication. For the Priority function indicator-colour red: Priority not active. Indicator-colour green: Priority active.
Blinking status indication.	indicator-colour red: Output OFF Status indication alternatively red and green indicator: Output ON Status indication For the Priority function indicator-colour red: Priority not active. alternatively red and green indicator: Priority active

Access to the setting:
Press the right key of the TX100



→ Device information

Device information	
WYT36xxIR 18 Channel	
SN:	
Adr:	
Nb. Links:	
Modified:	
V:	
✓	Param

→ Param
→ Indicators

Indicator status	
Label holder	
Indicator 1	
Indicator 2	
Indicator 3	
Indicator 4	
Indicator 5	

→ Choose the function

Indicator status	
OFF	
ON	
Status display	



Device information	
WYT36xxIR 18 Channel	
SN:	
Adr:	
Nb. Links:	
Modified:	
V:	
✓	Param

Device information	
TXAxxx	
WYT36xxx	



If a download is not necessary → Press the key repeatedly to leave the menu
Access to the download:

→ Device management

Device management	
Device reset	
Delete	
Device information	
Repeater	
ETS addressing	
Download	



→ Download

Download	
TXAxxx	
WYT36xxx	



→ Confirm the download

Download	
WYT36xxIR	
Load?	
YES	NO

→ Back to the download

Download	

→ Back to device management

Download	
TXAxxx	
WYT36xxx	



Device management	
Device reset	
Delete	
Device information	
Repeater	
ETS addressing	
Download	



→ Menu before setting

Prog	
X	X
?	
59	95
▶Auto	All ▶Num



4.2 Display the Status indication of the controlled outputs on the indicators

When the indicators are used as Status indication, this information must be set in the Product information menu (refer to previous page). If the Status indication information was registered before creating the link, the function is directly available. If the Status indication information was registered after creating the link, a download is necessary (refer to the previous page).

The indicator is ON when at least one of the outputs linked with the pushbutton is operating. The indicated status takes into consideration in particular the action of the other inputs or pushbuttons controlling this output, e. g. inverter/toggle, switch, group or central commands.

Note:

- The Status indication function can only be used on ON/OFF or dimming outputs (no direction for shutter outputs, setpoint, heating or scene selection).
- When the key has the Priority function, the indicator does not show the status of the output, but it indicates whether a Priority is active or not.

5. Configuration and parameters of the infrared channels

The WYT36xIR devices have 12 infrared channels. These channels can be controlled by a Tebis (TK106, TK124) infrared remote control or by a universal remote control (e. g. pronto Philipps, take the manufacturer's data into consideration).

The numbering of the keys of the infrared remote control is carried out in Num mode, in a similar way as the pushbuttons: Direct the remote control towards the pushbutton mechanism (receiver) and press on the keys to perform the numbering. For the infrared channels, the choice of available functions is similar to that for pushbuttons.

Operations to carry out:

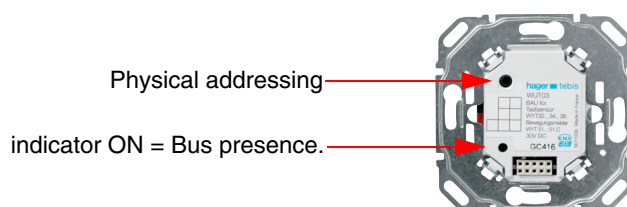
- Perform the numbering
- Select the function
- Create the link with the output

6. Characteristics

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

7. Bus presence test

To check for the presence of the bus, press the pushbutton located on the mechanism:



Caution: press again on the key. This is indispensable to be able to select the function of the device.

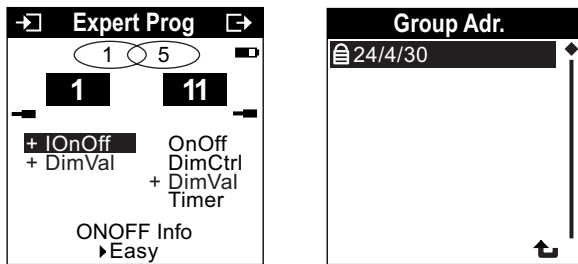
8. Expert mode programming

Basic EIB/KNX knowledge (for example, ETS = EIB software) is required to perform programming in Expert mode.

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,Funk KNX) and Hager devices such as technical alarms, displays, Internet gateways.
- Programming of mixed installations (EIB/KNX and Tebis TX): 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.

Example of an Expert mode display:



The following pages describe the pushbutton objects visible in Expert mode. The objects visible depend on the parameterised functions. Basic information on Expert mode operation can be found in specific documentation.







8.1 ON/OFF function

This function is used to switch On and Off switching and dimming outputs:

Tebis Tx		ETS WDL361A application			Function
Icon	Object name	Object designation	Length	Flags	
	IOnOff	Key Status indication ON/OFF	1 bit	CRW-U	When the status LED is configured for Status indication in the product information (refer to 4.2), this object allows switching the LED On and Off.
	OnOff	Key ON/OFF	1 bit	CR-TU	According to the defined function, a 1, a 0 or alternately a 1 and a 0 will be output. (Refer also to 2.2)

8.2 Dimming function



This function allows dimming / switching lighting circuits. A short key-press sends ON or OFF commands to the bus via the OnOff object. With a long key press, the Pushbutton outputs a dimming Up or dimming Down command via the DimCtrl object.

Tebis Tx		ETS WDL361A application			Function
Icon	Object name	Object designation	Length	Flags	
	IOnOff	Key Status indication ON/OFF	1 bit	CRW-U	When the status LED is configured for Status indication in the product information (refer to 4.1), this object allows switching the LED On and Off.
	OnOff	Key ON/OFF	1 bit	CR-TU	A short pushbutton press: If the value of the OnOff object is 1, a 0 is sent on the Bus and conversely.
	DimCtrl	Key Relative or absolute dimming	4 bit	CR-TU	A long pushbutton press: The dimming Up command or the dimming Down command is sent on the bus. The dimming direction changes with every long key press.
	OnOff	Key ON/OFF	1 bit	CR-TU	A short pushbutton press: During setting:  , a 1  , a 0 will be sent on the bus.
	DimCtrl	Key Relative or absolute dimming	4 bit	CR-TU	A long pushbutton press: During setting:  a dim Up command  a dim Down command will be sent on the bus.

8.3 Timer function


This function allows starting the Timer operation. In standard programming mode with the TX100, the duration of the delay is defined after link validation. The defined delay is transferred to the output module when downloading the TX100 programming. The delay cannot be set in Expert mode; for that, a standard link has first to be set up between an input with the Timer function and an output. When the link is broken, the delay downloaded to the output remains stored in memory.





In Timer ON and Timer OFF operation, the delay is initiated by the emission of a 1 to the Timer object. The action to be performed, output module switched to ON or OFF for the set time, is stored in the output module. To save the function in the output, you must first create a link with a parameterised input with the desired ON or OFF function. The selected function remains stored in memory, even after link breakage.

Tebis Tx		ETS WDL361A application			Function
Icon	Object name	Object designation	Length	Flags	
	IOnOff	Key Status indication ON/OFF	1 bit	CRW-U	When the status LED is configured for Status indication in the product information (refer to 4.1), this object allows switching the LED On and Off.
	Timer	Key Timer	1 bit	CR-TU	A short key-press sends a 1 via the Timer object. A long key-press sends a 0 via the Timer object.

8.4 Shutters / blinds control function






This function controls shutters/blinds. A long key-press sends raising or lowering commands to the bus via the Up/Down object. A short key-press sends stop or slat angle value commands to the bus via the Stop/Angle object.









Tebis Tx		ETS WDL361A application			Function
Icon	Object name	Object designation	Length	Flags	
	IOnOff	Key Status indication ON/OFF	1 bit	CRW-U	When the status LED is configured for Status indication in the product information (refer to 4.1), this object allows switching the LED On and Off.
	Stepstop	Key Slat angle/stop	1 bit	CR-TU	Every key-press sends alternately 0 and 1 via the StepStop and UpDown objects.
	Updown	Key Shutters/Blinds	1 bit	CR-TU	

Tebis Tx		ETS WDL361A application			Function
Icon	Object name	Object designation	Length	Flags	
	Stepstop	Key Slat angle/stop	1 bit	CR-TU	A short key-press sends a 1 command to the bus via the StepStop object.
	Updown	Key Shutters/Blinds	1 bit	CR-TU	With a long key press, the Pushbutton outputs, with the setting  a 0  a 1 on the bus.

8.5 Heating setpoint selection function

This function is used to select the setpoint for heating/air-conditioning.
 The 1-octet heating setpoint object sends the following values:

Values	Product designation	Icon
0	Auto	
1	Comfort	
2	Economy	
3	Reduced (night)	
4	Frost-free	

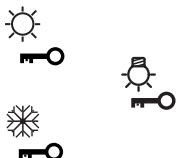

Tebis Tx		ETS WDL361A application			Function
Icon	Object name	Object designation	Length	Flags	
       	HvacMod	Key Setpoint selection	1 byte	CR-TU	Depending on the selected function, the Auto, Comfort, Economy, Reduced or Frost-free commands are sent on the bus (refer to the following table). In case of double symbols, switching between the two setpoints is possible.

8.6 Priority function

The Priority function sends priority-start or priority-stop commands. Pressing the push button sends the Priority object. The operation of the Priority depends on the output module: lighting, shutters/blinds, heating, etc.. The 2-bit priority object sends the following values:

Values		Output behaviour
Bit 1	Bit 0	
0	0	Priority-end
0	1	Priority-end
1	0	Priority OFF - Up - Frost protection
1	1	Priority ON - Down - Comfort

The indicator indicates whether a Priority is active (green) or inactive (red). It cannot be controlled via the bus.

Tebis Tx	ETS WDL361A application				Function
Icon	Object name	Object designation	Length	Flags	
	IOnOff	Key Status indication ON/OFF	1 bit	K L - - A	The IOnOff object has the value 1 when Priority is active and 0 when Priority is not active
	Forced	Key Priority	1 bit	CR-TU	A key press sends this object on the bus with a Priority command (see the table).

8.7 Scene control function


A short key-press sends a Scene object with a value of between 0 and 31 (value 0 = scene 1, value 31 = scene 32) to the bus. The command is sent when the pushbutton is released.

With a long key press (>6s), the Pushbutton sends a value between 128 and 159 [(scene number-1) + 128] on the bus.

Construction of the 1-octet scene object:


Bit no.							
7	6	5	4	3	2	1	0
Store	X	Scene number (0 means Scene 1)					

X = Not significant

Tebis Tx	Object name	ETS WDL361A application			Function
		Object designation	Length	Flags	
	Scene	Key Scene	1 byte	CRW-U	<p>A short key-press sends the selected scene call on the bus via the Scene object.</p> <p>A key-press longer than 6 s sends the storage command for the selected scene on the bus.</p>

8.8 Label holder lighting function

The lighting of the label holder can be switched on/off by the OnOff object.

Tebis Tx	Object name	ETS WDL361A application			Function
		Object designation	Length	Flags	
	OnOff	Label holder Label holder backlight	1 bit	CRW-U	The OnOff object allows switching the lighting on and off

