



THORSTEN REIBEL & JUERGEN SCHILDER – MAY 2024

ABB RoomTouch® 4” and ABB Trevion®

Webinar – Building Academy Smart Buildings

Agenda

- ABB RoomTouch® 4”
- ABB Trevion® Display 2.4”
- ABB Trevion® Keypad

ABB RoomTouch® 4”

**ABB Trevion® Touch
Display 2.4”**

ABB RoomTouch® 4” and ABB Trevion® Introduction

Operation and interaction in a smart room

- The way to interact as a user with smart buildings is as various as the functionality of modern and intelligent buildings
 - Conventional push button (with interface to KNX)
 - KNX control element
 - Touch Panel
 - App on Smart phone
 - Visualization on PC
 - Voice Control
- Even a local and mostly used powerful KNX pushbutton is limited
 - Number of operations
 - Showing status, values or text information
 - Missing, unclear or fixed description of the buttons
 - Button assignment flexible, but overall design determined

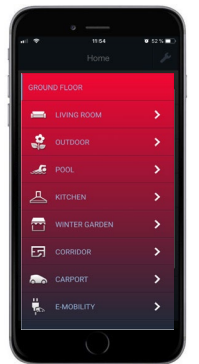
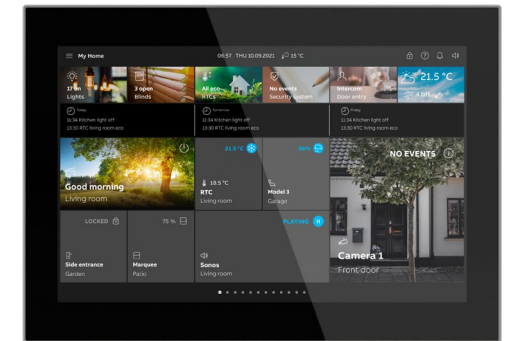
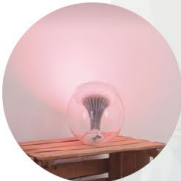


ABB RoomTouch® 4" and ABB Trevion®

Overview

... the solution

- Operation of typical room functions like Light, Shutter, Room temperature control or scenes
- Smooth operation by swiping on the touch screen to the functions
- Showing values or text information
- High resolution state of the art colored display
- Fits in a standard installation box
- Easy to commission via DCA in the ETS
- White or black



Light & Blind Control

Color Scenes

Adjust Temperature

- Slim & timeless design with IPS glass display
- Smooth usability - interaction through swiping and flexible visualization options
- Quick standby mode when the room turns dark until it senses the presence of someone close by

CHECK THE STATUS OF YOUR HOME AT A GLANCE

Blinds

Rain Yes
Lux 10.032 lx
CO₂ 448 ppm
Humidity 51 %

CO₂ 448 ppm
Humidity 51 %
Temperature 19.5 °C
Window contacts 1 open

ABB RoomTouch® 4"
As individual as your home



ABB RoomTouch® 4" and ABB Trevion®

Impressions ABB RoomTouch® 4" - Operation

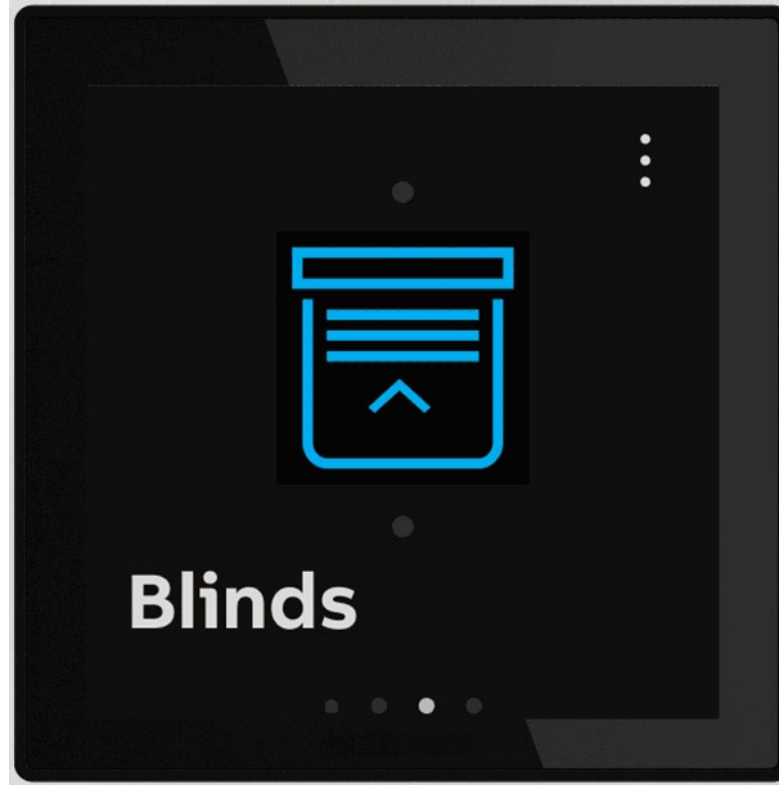


ABB RoomTouch® 4" and ABB Trevion®

Impressions ABB RoomTouch® 4" - Indication

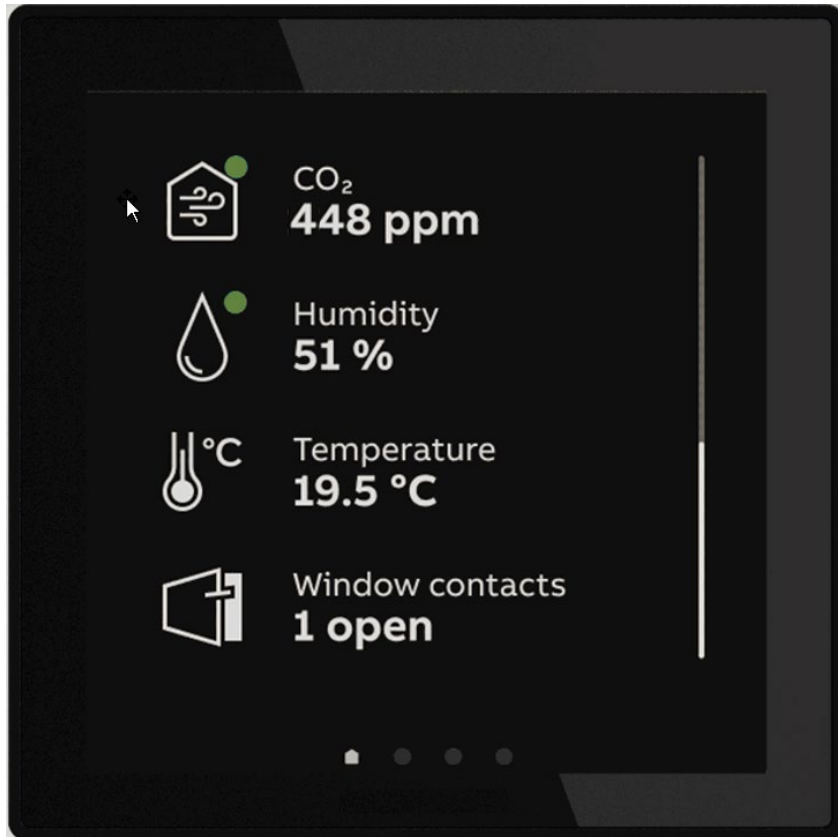


ABB RoomTouch® 4" and ABB Trevion® Impressions – ABB Trevion® Display 2.4"

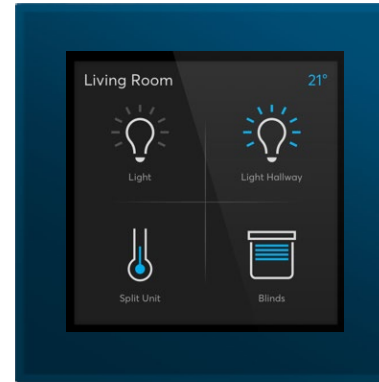


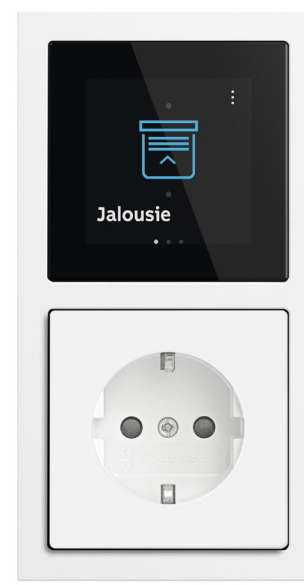
ABB RoomTouch® 4" and ABB Trevion® ABB Trevion® Display 2.4"

Product variants

- Depending on the type of Trevion display selected, the use with different design lines from ABB range is possible
- The dimensions depend on the selected design
 - SD/U12.55.1-825: 55mm
Busch-art Balance® SI, ABB SAGA
 - SD/U12.63.1-825: 63mm
future® linear, Solo®, Carat®, Pure stainless steel, Busch-axcent®, Dynasty®
 - SD/U12.70.1-4015: 70mm
Busch-art linear®
- 55/63/70mm is related to width/height of the black area (frame and display)
- Please note: The size of the LCD display is the same, only the black area ("glass frame") around the display is different. Due to the black theme/background hardly visible and pretending a bigger screen, especially with LCD off



55mm e.g.
Busch-balance® SI



63mm e.g.
future® linear



70mm e.g.
Busch-art linear®

ABB RoomTouch® 4" and ABB Trevion®

Trevion Display 2.4" & ABB RoomTouch® 4" / 5" & ABB SmartTouch®

Perfect alignment of ABB's touch panels with the same design language for hardware and software



ABB Trevion® Display 2.4"



ABB RoomTouch® 4"



ABB RoomTouch® 5"



ABB SmartTouch® 10"

ABB RoomTouch® 4" and ABB Trevion®

Overview

Main technical data (Hardware)

- Touch screen with IPS display, 2.4" / 4" (6,1 / 10,16 cm), square format
- Display: 240 x 240 / 480 x 480 pixel
- Max. brightness: +/- 240cd/m²
- External Power supply 20-32 V =
- Rating current 24 V =, 75/100 mA
- SD card slot for firmware update, optional import configuration from ETS, photos for screensaver
- Integrated temperature sensor
- Bus connection: KNX or ABB-free@home
- Terminals for a binary input or external temperature sensor input (PT1000 / 6226/T)
- Life cycle: 20,000h with max brightness > 125cd/m²



ABB RoomTouch® 4" and ABB Trevion®

Overview

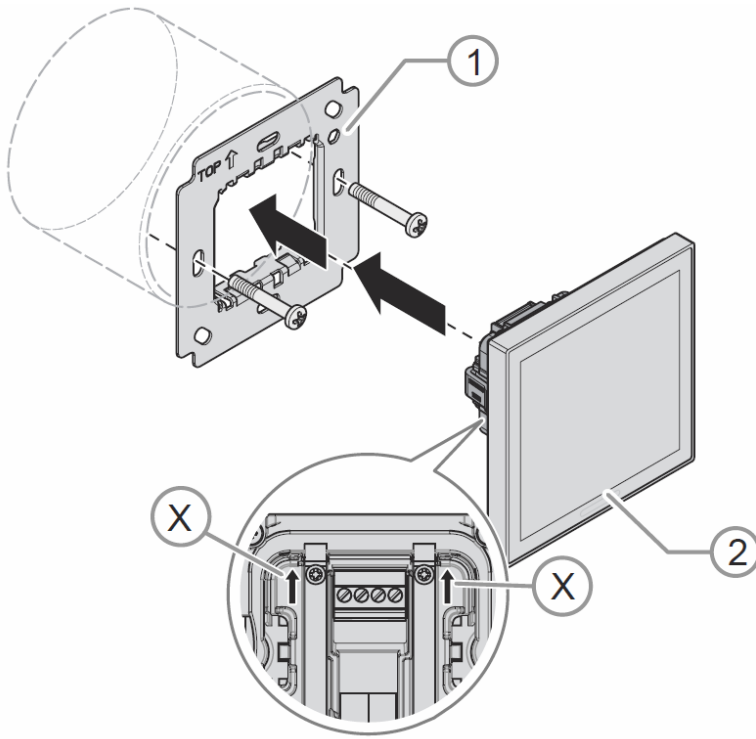
Further features (Hardware)

- Monoblock device (integrated Bus coupling unit)
- Glass surface and frame in black available, RoomTouch 4" also in white
- Integrated proximity sensor
- Integrated brightness sensor
- Haptic feedback
- Global use in VDE and British Standard markets
- ABB and Busch-Jaeger Brand available (depending on market)

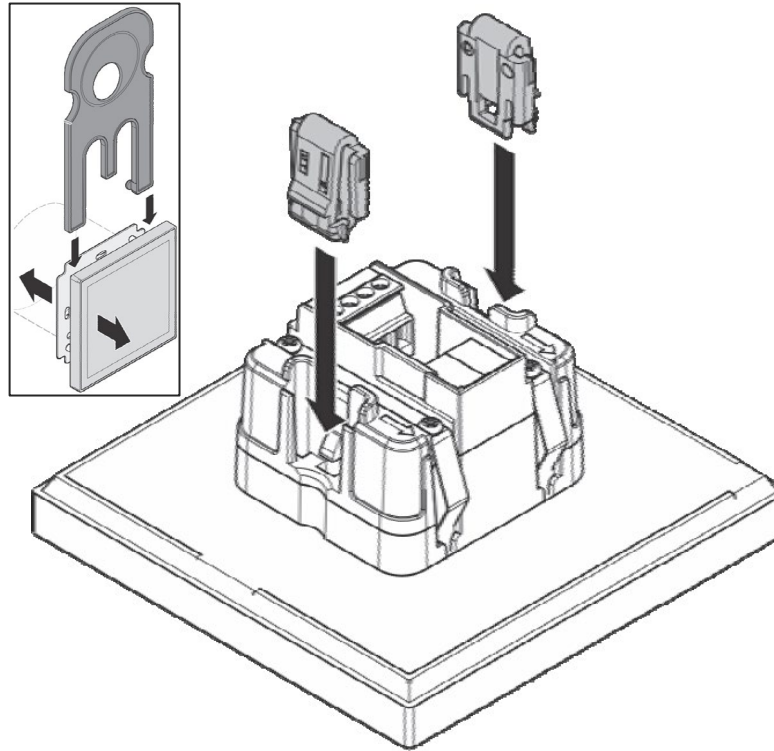


ABB RoomTouch® 4" and ABB Trevion® Installation

Installation



Anti theft protection



Installation hints

- Installation in a standard flush mounting box
- Mounting frame (1) (part of delivery)
- Snap ABB RoomTouch® or ABB Trevion® Display (2) on the frame in the right position
- See arrows up (X) on the rear side
- Option: Anti theft protection clamps, same as for ABB Tenton® or RoomTouch® 5"
 - Removal via special plastic tool,

KNX Programming

ABB RoomTouch® 4" and ABB Trevion® Software

Main software features

Same features in the ETS and the same look and feel for the user in ABB Trevion® Display and ABB RoomTouch® 4"

- 12 pages, each 1,2 or 4 functions
 - → easy and fast to operate
- 13 control functions including Room Temperature Control
 - → all room functions in one device
- Additional information page with up to 12 status information
 - → Get important status at a glance
- Integrated adaptable proximity sensor
 - → when approaching wake up the device and send a command
- Primary function
 - → Activate with 3 fingers or more the main room function
- KNX data secure capable 
 - → prepared for secured communication on twisted pair cable



ABB RoomTouch® 4" and ABB Trevion® Software

Main software features

- 12 messages (Information, Error, Alarm)
- 10 logic functions
- 10 weekly timers for RoomTouch functions, adjustable by user
- 4 scene functions (10 different scenes with up to 15 participants)
- 13 different control elements
 - Switch/Rocker switch
 - Dimmer/Dimmer slider
 - RGBW Control
 - Value Slider
 - Blind
 - Fan Switch/Room Temp. Control/Split Unit- and VRV Control
 - Scene
 - Audio Control



ABB RoomTouch® 4” and ABB Trevion® DCA

Programming KNX

- Configuration via DCA SmartTouch in the ETS 5/6
- DCA (Device Configuration App) available on product homepage (abb.com/knx) or KNX App store <https://my.knx.org/de/shop/ets-apps> free of charge and to be imported into ETS
- Principle of parametrization and commissioning in the DCA is identical to ABB's RoomTouch® 5” or SmartTouch® 10” with similar functions
- DCA for ABB Trevion® Display: ABB DCA 2.4“ Display
- DCA for ABB RoomTouch 4”: ABB Touch DCA

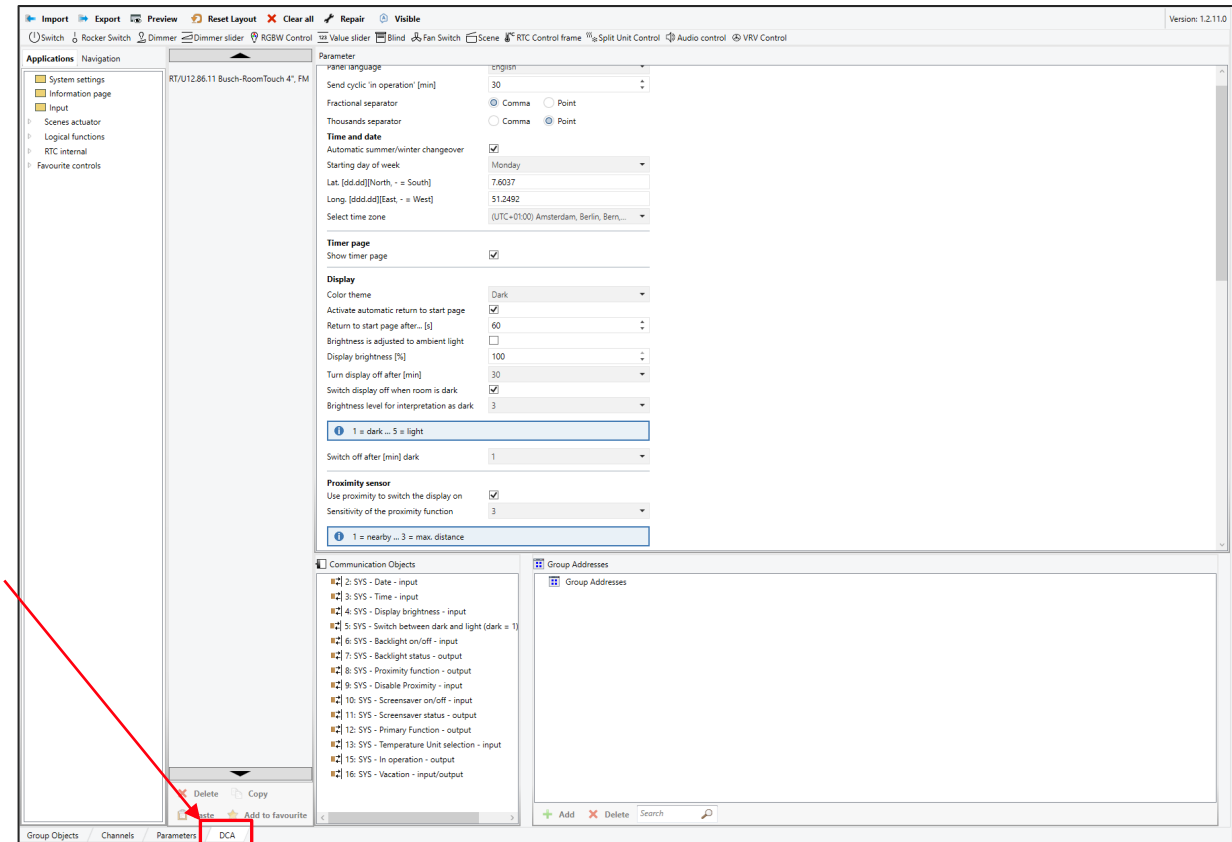




ABB RoomTouch® 4” and ABB Trevion®

DCA

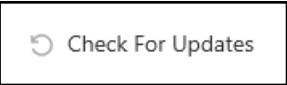
Overview ETS DCA’s for ABB’s Touch Panels

Device	Device Configuration App (DCA)
ABB Trevion Display 2.4“ 	ABB DCA 2.4“ Display (1.1.1.0)*
ABB RoomTouch 4“  ABB RoomTouch 5“ 	ABB Touch DCA (1.3.3.0)*
SmartTouch10” 	ABB DCA SmartTouch 10 (1.1.16.0)*

ETS Settings/ETS Apps

ABB	ABB DCA 2.4" Display	1.1.1.0
ABB	ABB DCA SmartTouch 10	1.1.16.0
ABB	ABB Touch DCA	1.3.3.0

Please note: Check your ETS APPs for Updates, it is not an automatic process



*App Version Status May 2024



ABB RoomTouch® 4" and ABB Trevion®

Overview DCA

Superior Functions:
Import ... Visible

Applications:
System settings ...
Favourite controls

Group Objects:
Here from system
settings

Parameters:
Here from selected
system settings

Group Addresses:
Possible to add,
delete, cut,
copy/paste, rename
and search

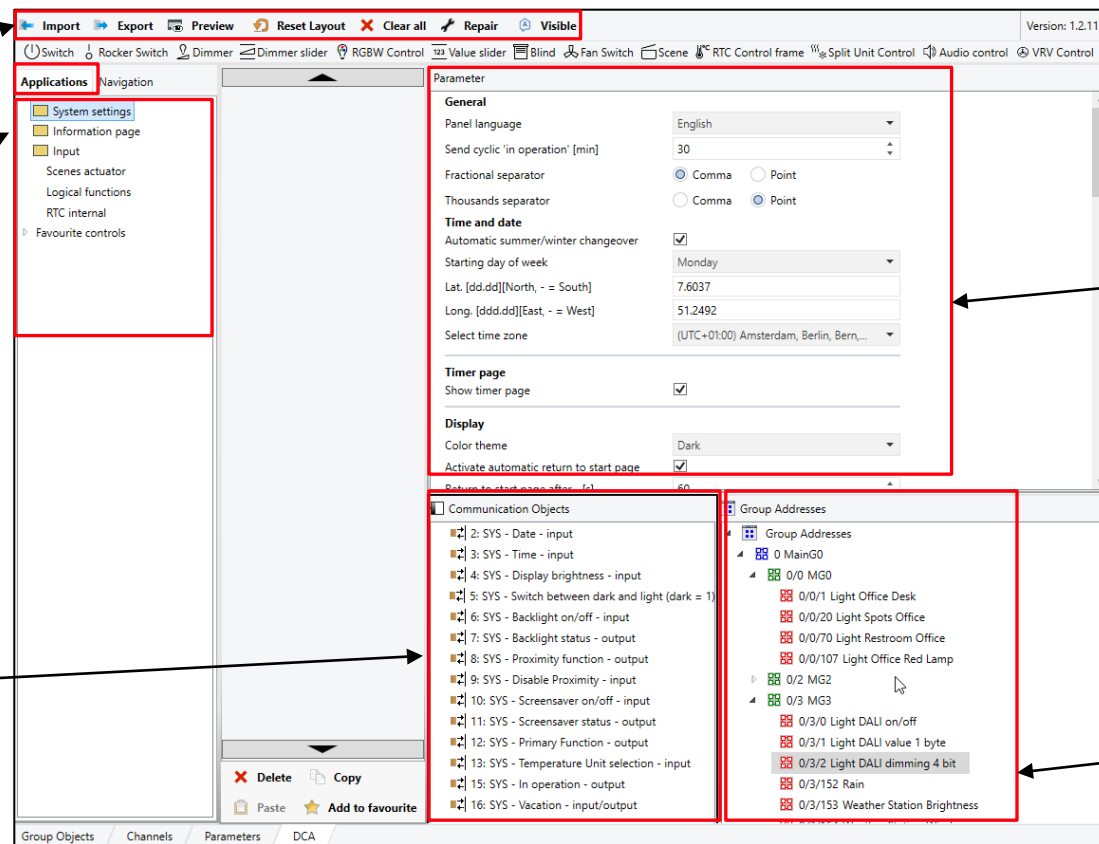


ABB RoomTouch® 4" and ABB Trevion®

Overview DCA

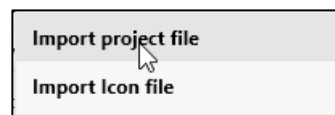
The screenshot shows the ABB RoomTouch software interface. The top menu bar includes options like Import, Export, Preview, Reset Layout, Clear all, Repair, and Visible. Below this is a toolbar with various control element icons. The main workspace is divided into several panels. On the left, the 'Navigation' panel shows a tree view of pages (Page 1 to Page 11) and a preview of the selected page (Page 2). The 'Parameters' panel on the right shows settings for the selected control element (DALI Dimmer), including its name, optional label, extra value/status objects, manner of dimming, and communication object settings. The 'Communication Objects' panel at the bottom left lists various DALI objects and their addresses. The 'Group Addresses' panel at the bottom right lists group addresses and their associated objects. A red arrow points from the 'Group Addresses' panel to the 'Communication Objects' panel. Annotations with arrows point to specific parts of the interface:

- Navigation: Overview of pages** points to the 'Navigation' panel on the left.
- Overview selected page** points to the preview of Page 2 in the 'Navigation' panel.
- Group Objects: Here from selected function DALI Dimmer** points to the 'Communication Objects' panel.
- Selection function buttons** points to the toolbar at the top.
- Parameters: Here from selected function button blind** points to the 'Parameters' panel.
- Group Addresses: Drag and drop within DCA Possible to add, delete, cut, copy/paste, rename and search** points to the 'Group Addresses' panel.

ABB RoomTouch® 4" and ABB Trevion®

Overview DCA

Superior functions of DCA in ETS - Import



- .stpl-file:
Import ETS
Project file
- .icondac-file:
Icon file

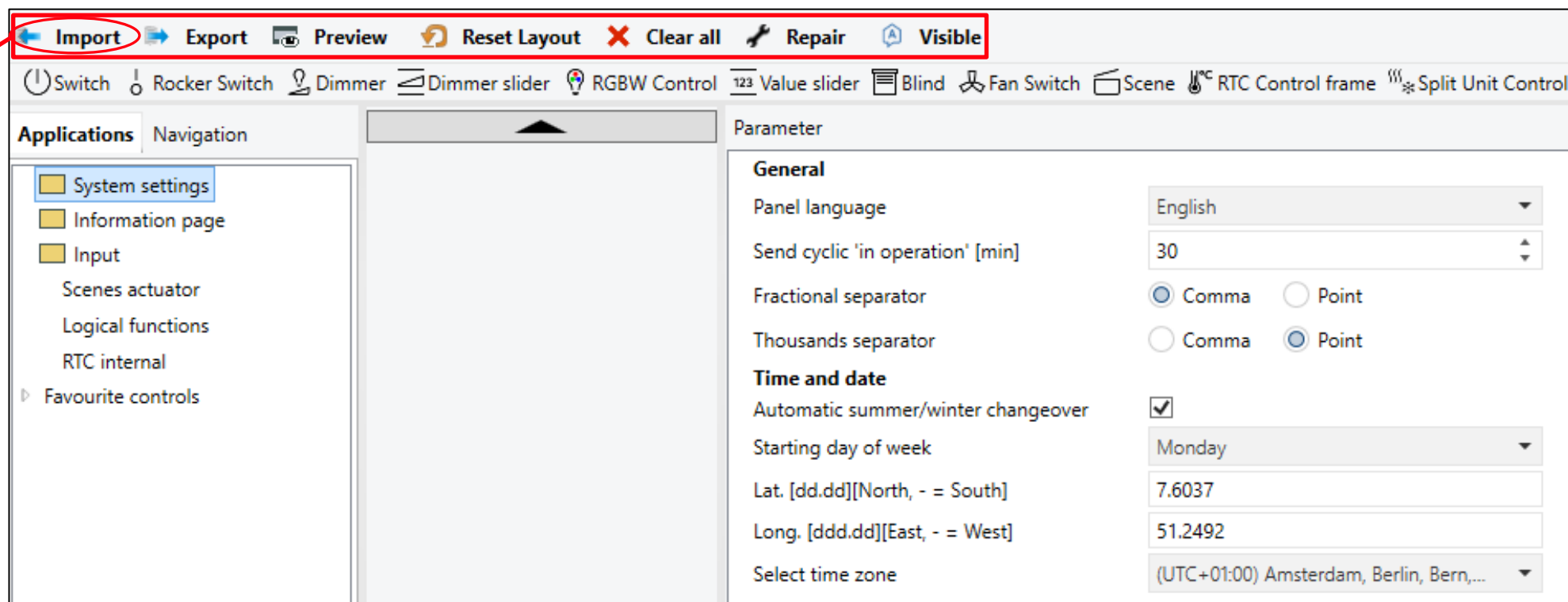


ABB RoomTouch® 4" and ABB Trevion®

Overview DCA

Superior functions of DCA in ETS - Export

Export image to pid file
Export to project file

- .pid-file:
to import configuration via
SD-card instead
of ETS download
- .stpl-file:
to create back-
up of the
configuration
(for import)

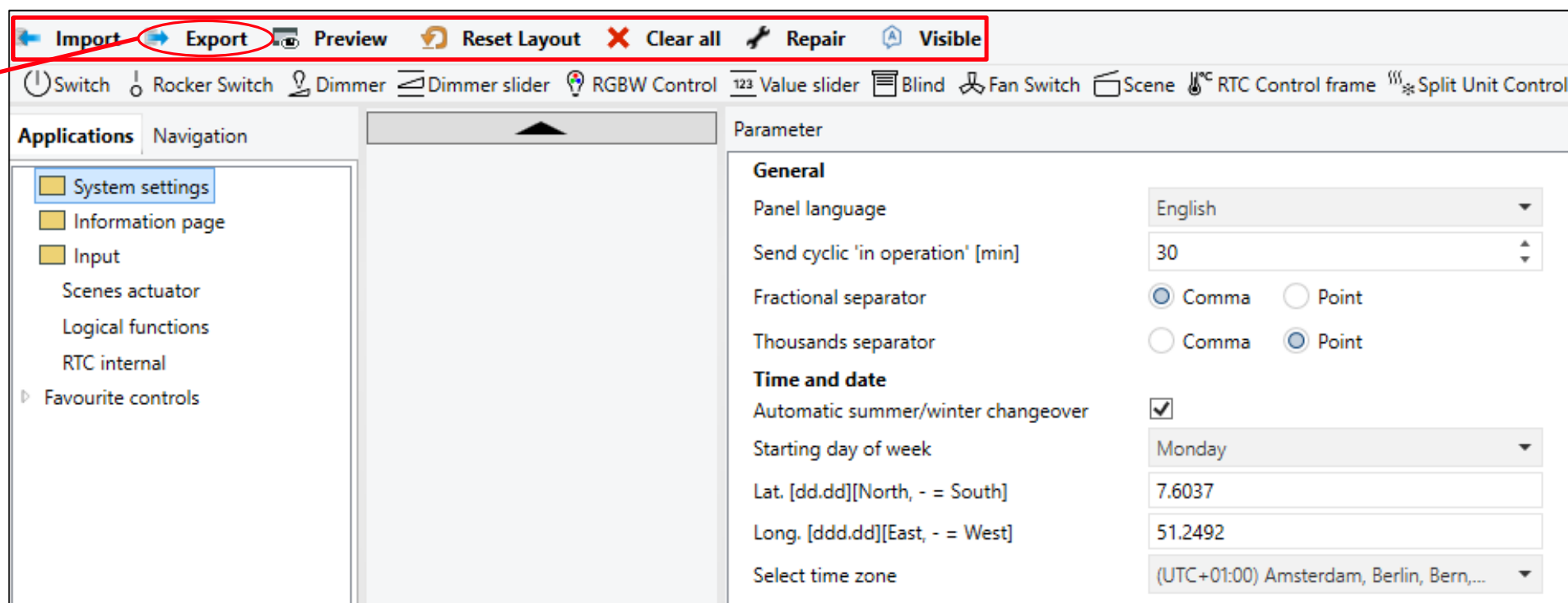


ABB RoomTouch® 4" and ABB Trevion®

Overview DCA

Superior functions of DCA in ETS - Preview of your configuration in the ETS

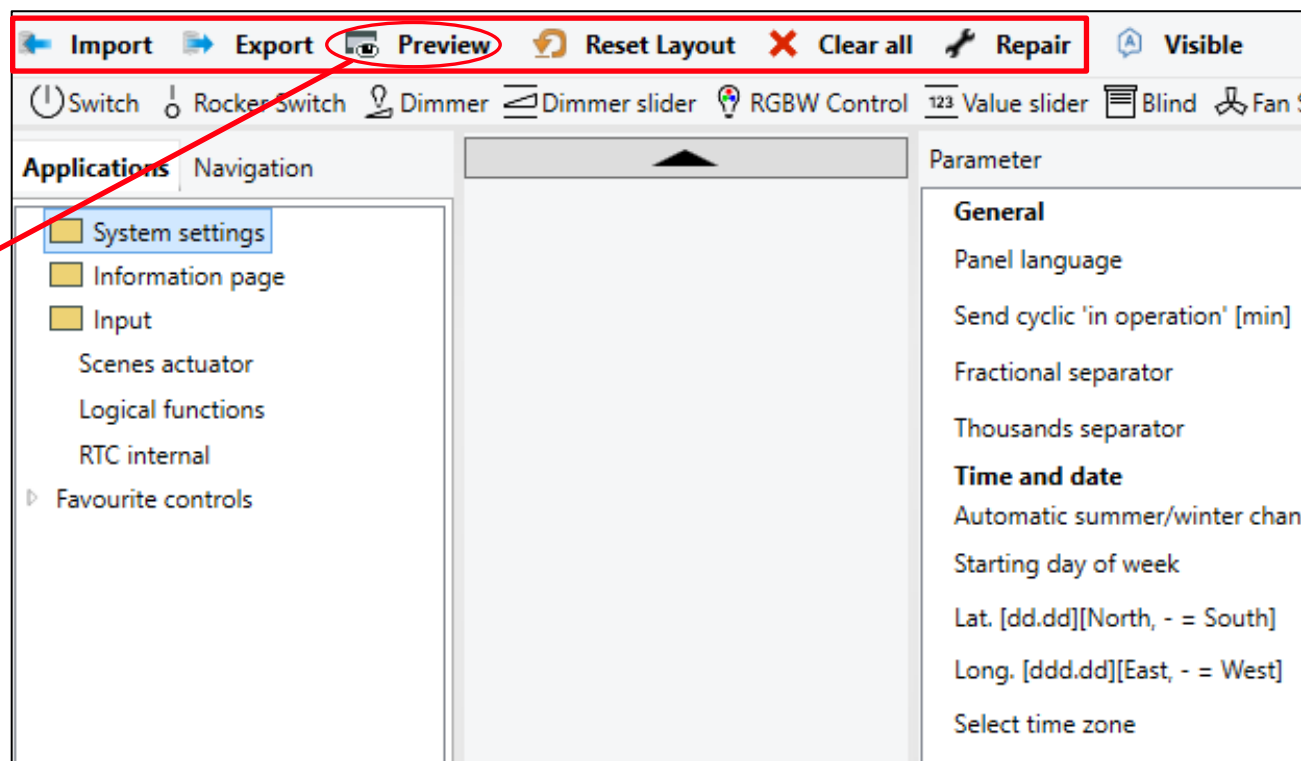
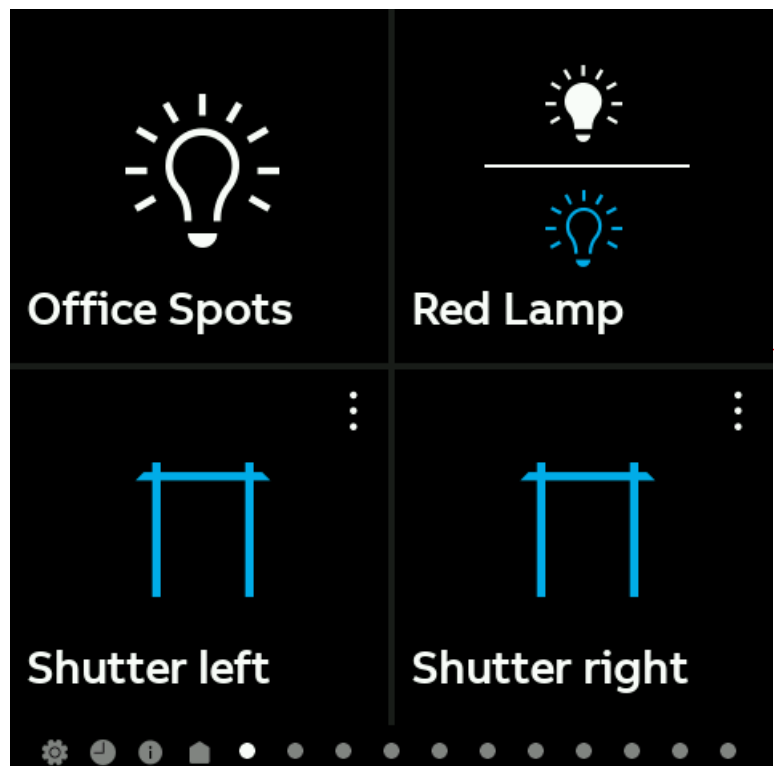


ABB RoomTouch® 4” and ABB Trevion®

Overview DCA

Superior functions of DCA in ETS – Reset layout

- Reset (standard arrangement) of windows layout in DCA

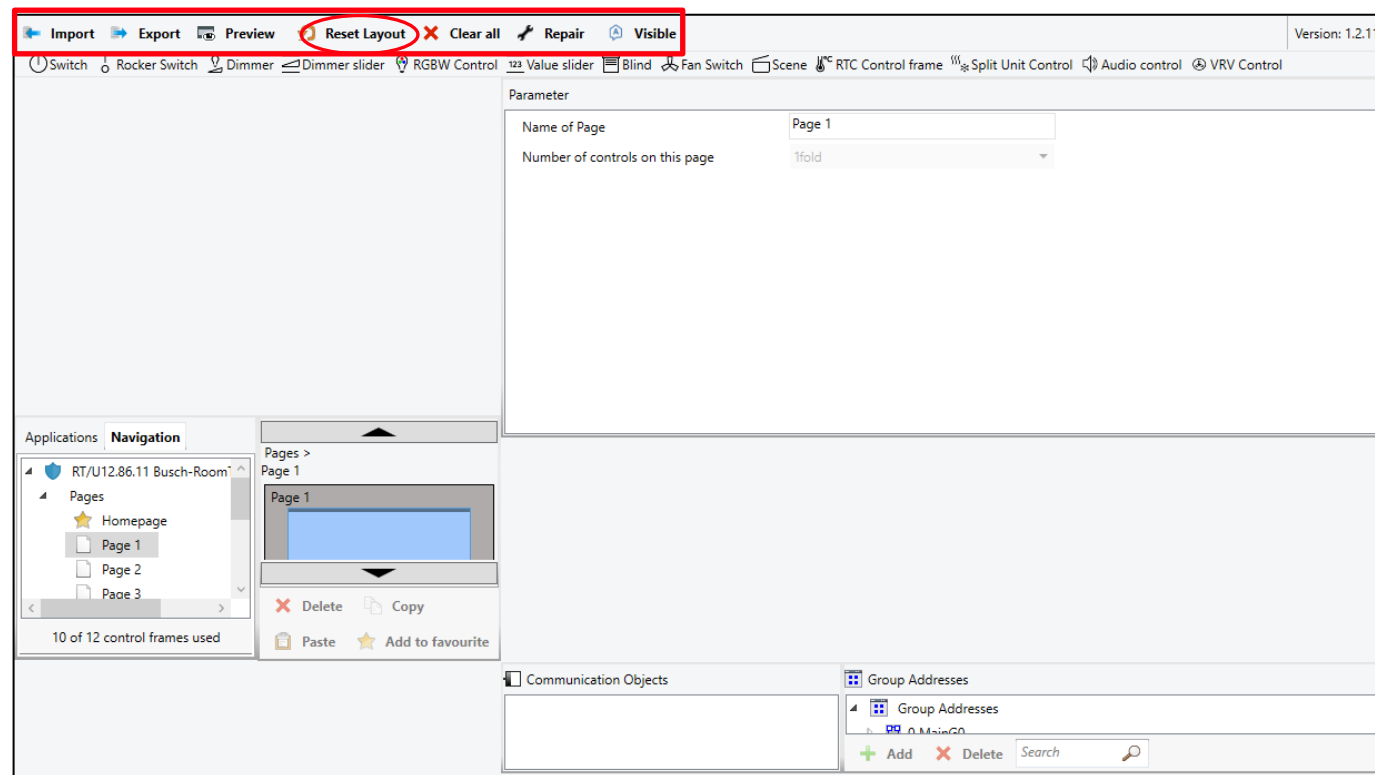


ABB RoomTouch® 4" and ABB Trevion®

Overview DCA

Superior functions of DCA in ETS – Clear all

- Reset/delete (Default adjustment) of all functions, pages, parameter etc.

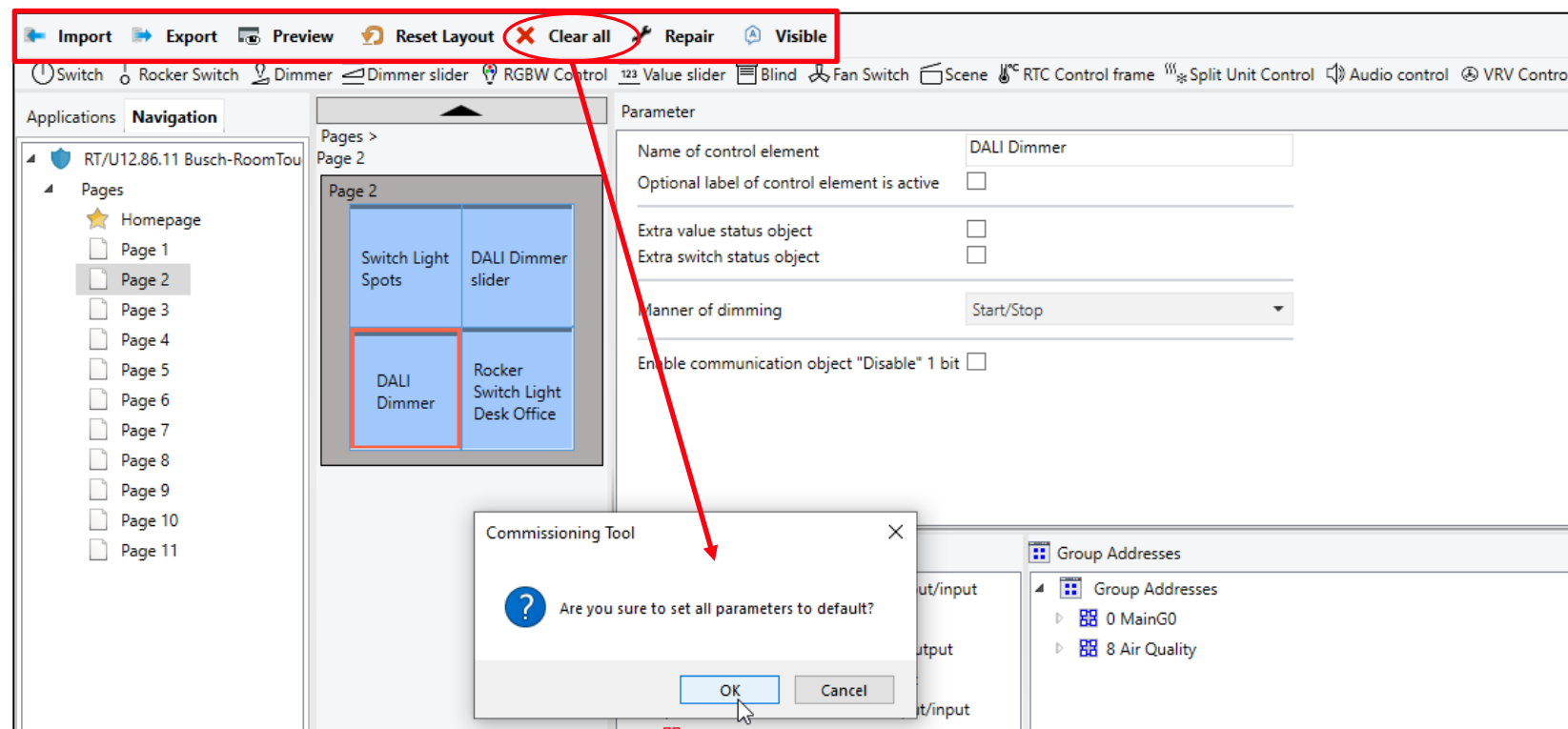


ABB RoomTouch® 4" and ABB Trevion®

Overview DCA

Superior functions of DCA in ETS – Repair

- If something went wrong, it can be repaired with this button

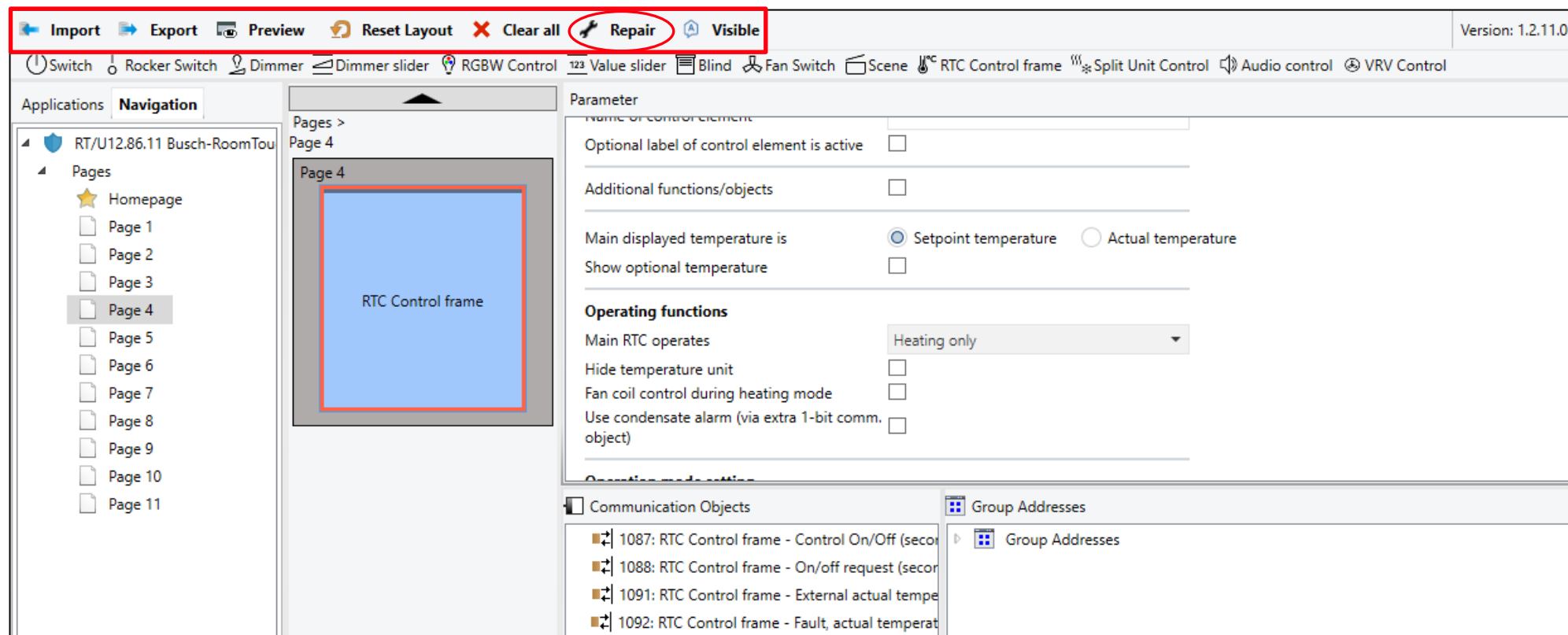


ABB RoomTouch® 4" and ABB Trevion®

Overview DCA

Superior functions of DCA in ETS – Visible/Invisible

- Visible/Invisible turns on or off useful hints for some parameters

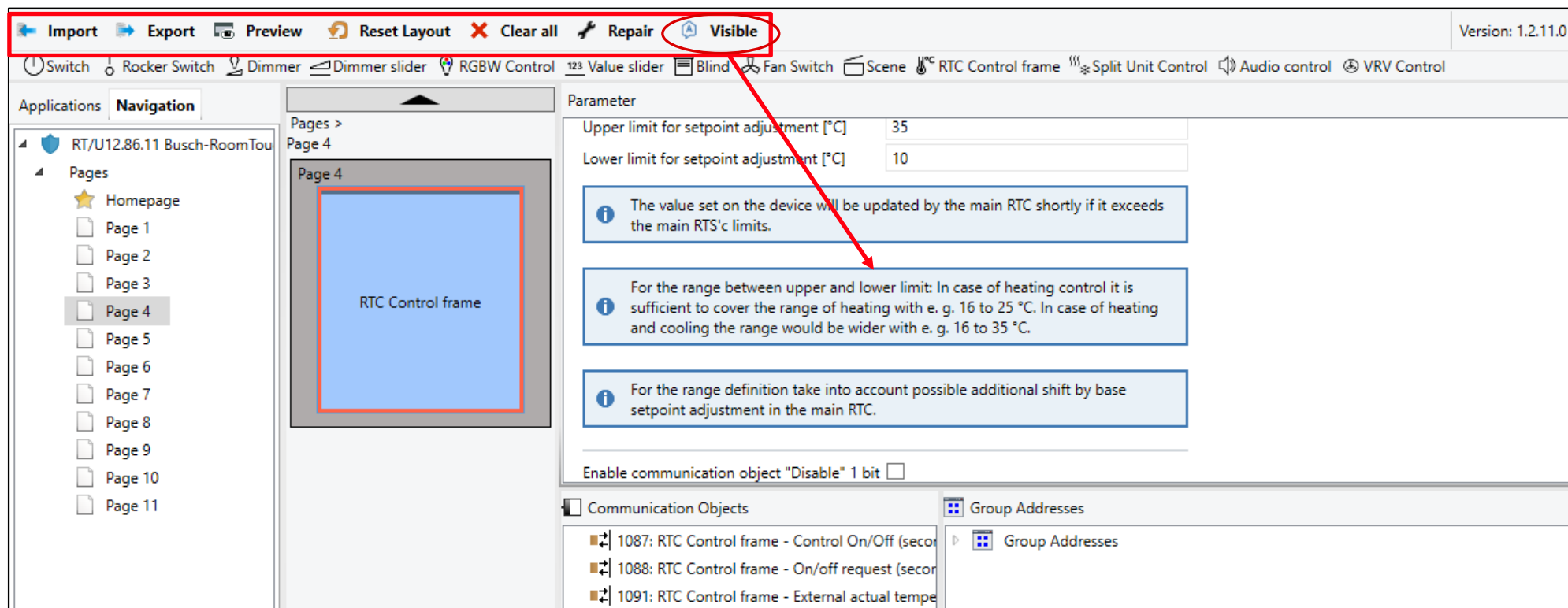


ABB RoomTouch® 4” and ABB Trevion®

Overview DCA

Programming

- Navigation
 - Pages can be added and named, up to 12 pages (one home-page, 11 pages)
 - When clicking on a page, 1, 2 or 4 control elements are selectable
 - Cut, Copy and paste, delete and rename
 - Page order can be adapted (up and down)
 - Overview of the pages under ‘Pages’

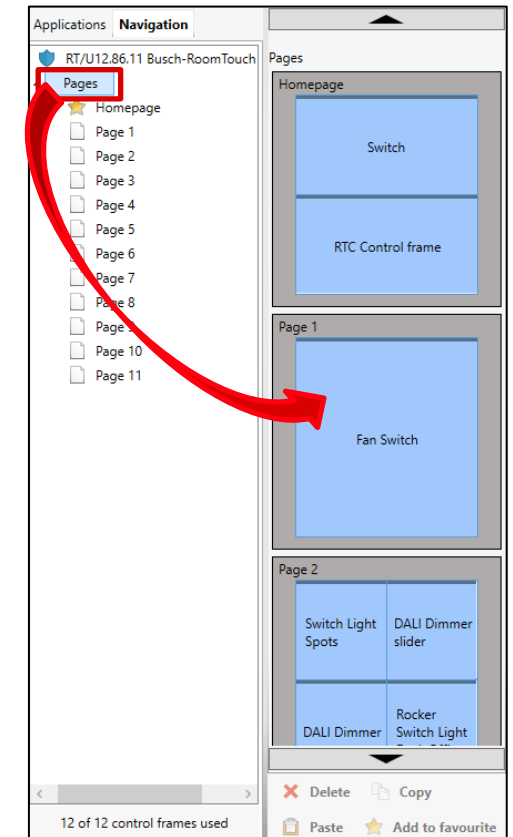
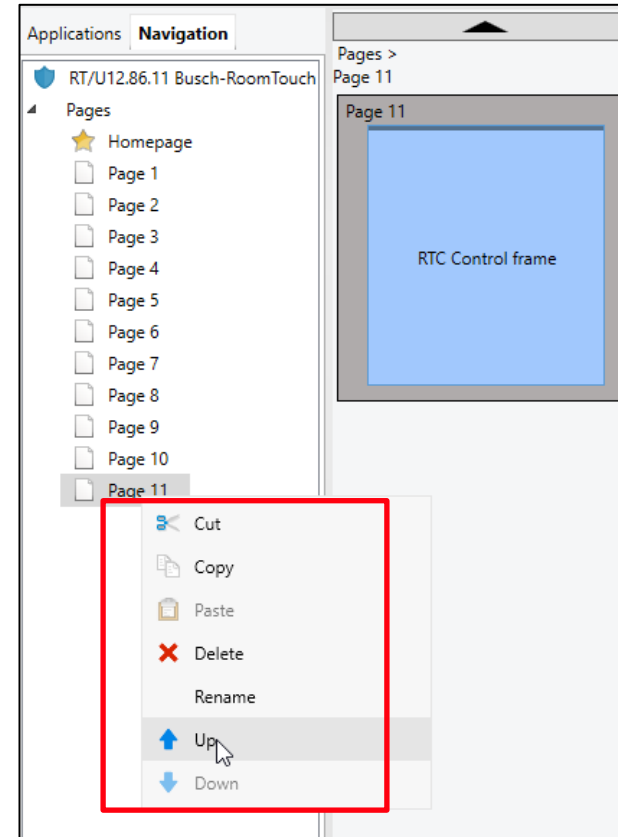
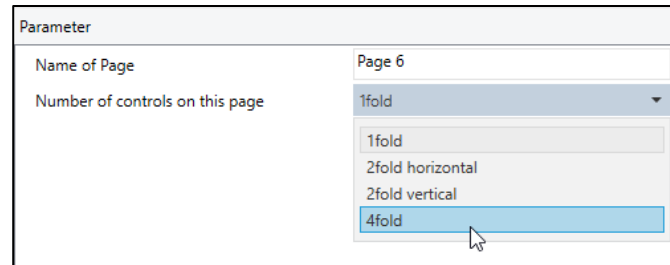


ABB RoomTouch® 4" and ABB Trevion®

Overview DCA

Programming

- Application/System Settings
 - System Settings with typical adjustments like language, time and date, display, proximity sensor, temperature, screensaver, primary function or security
 - Some of these functions can be also adapted directly in the panel by the user in the system settings

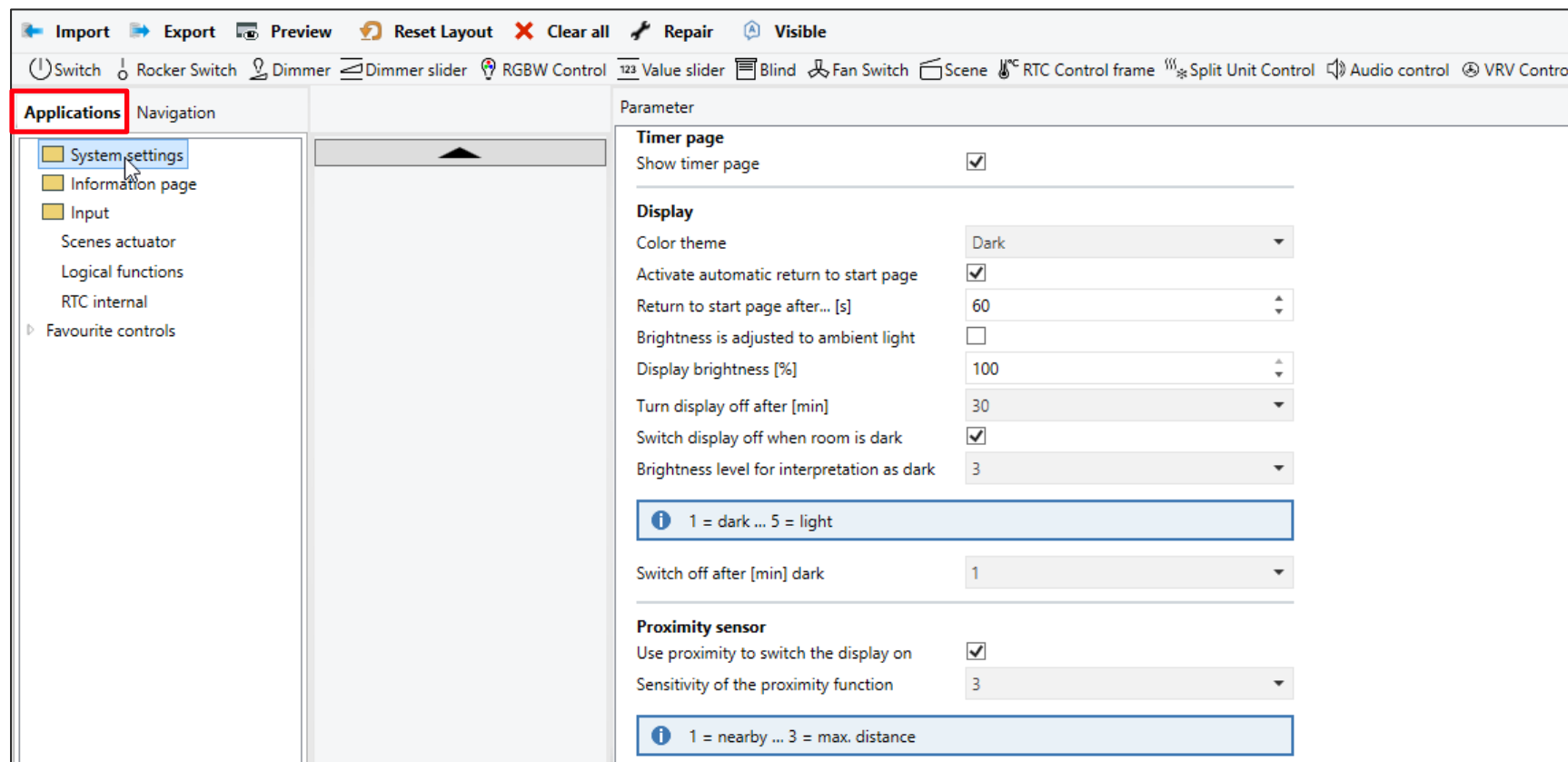


ABB RoomTouch® 4" and ABB Trevion®

Overview DCA

Programming

- Applications/Information Page
 - Up to 12 information, warnings or error
 - Evaluation of values with threshold
 - 1bit...1byte...2byte...
4byte...14 byte (Text)
 - Visible on information page
 - Pop up message box possible to inform at once
 - Colored status indication
 - List position, to put the most important information on top

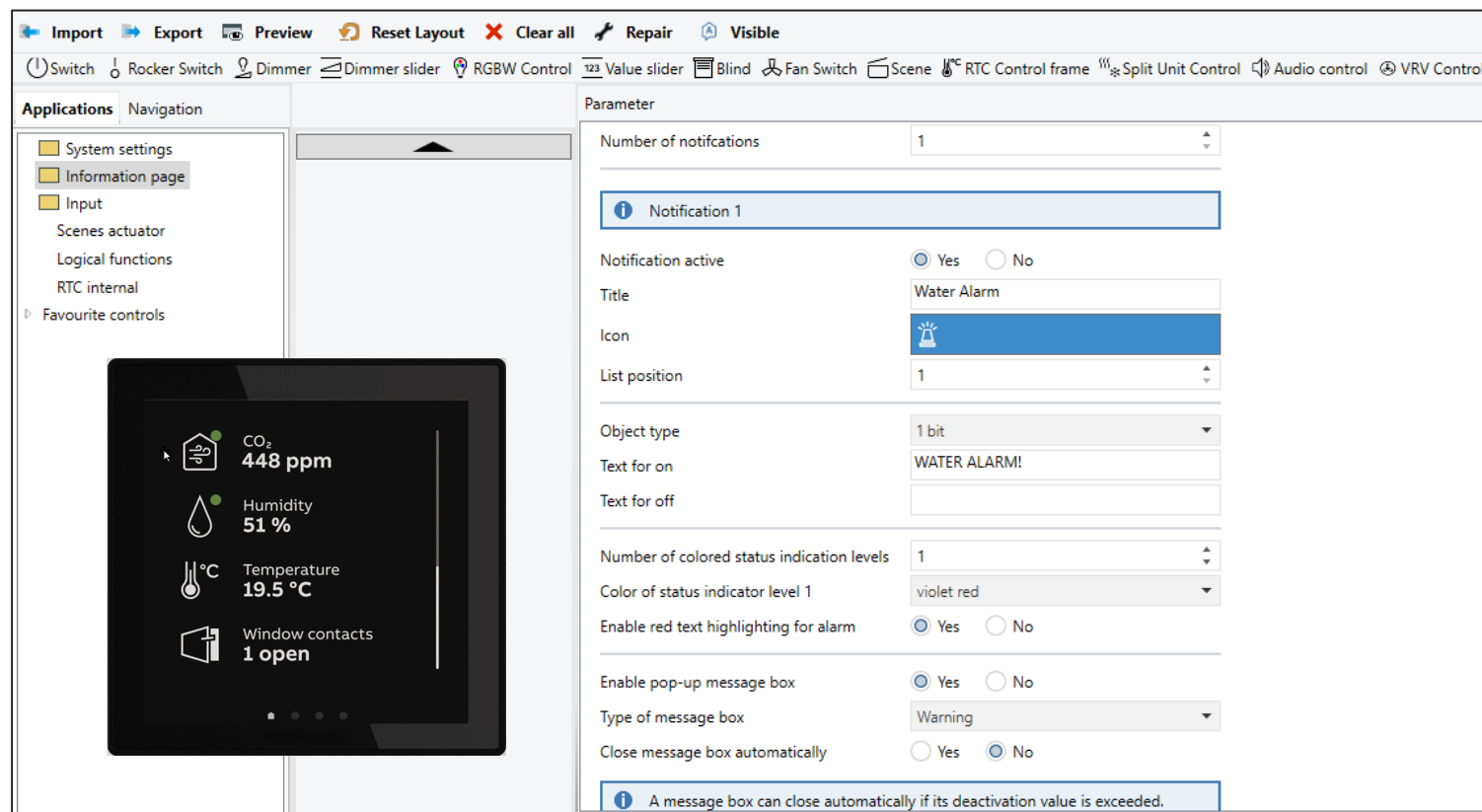


ABB RoomTouch® 4” and ABB Trevion®

Overview DCA

Programming

- Applications/Input
 - Enabling and adjustment of binary input or temperature sensor input of the panel
 - Connection terminals at the device
 - Either any PT1000 sensor or 6226/T from ABB
- Practical applications:
 - Window contact of the room
 - Conventional push button
 - Temperature sensor floor (Floor heating)
 - Weighted measurement with further room temperature sensor

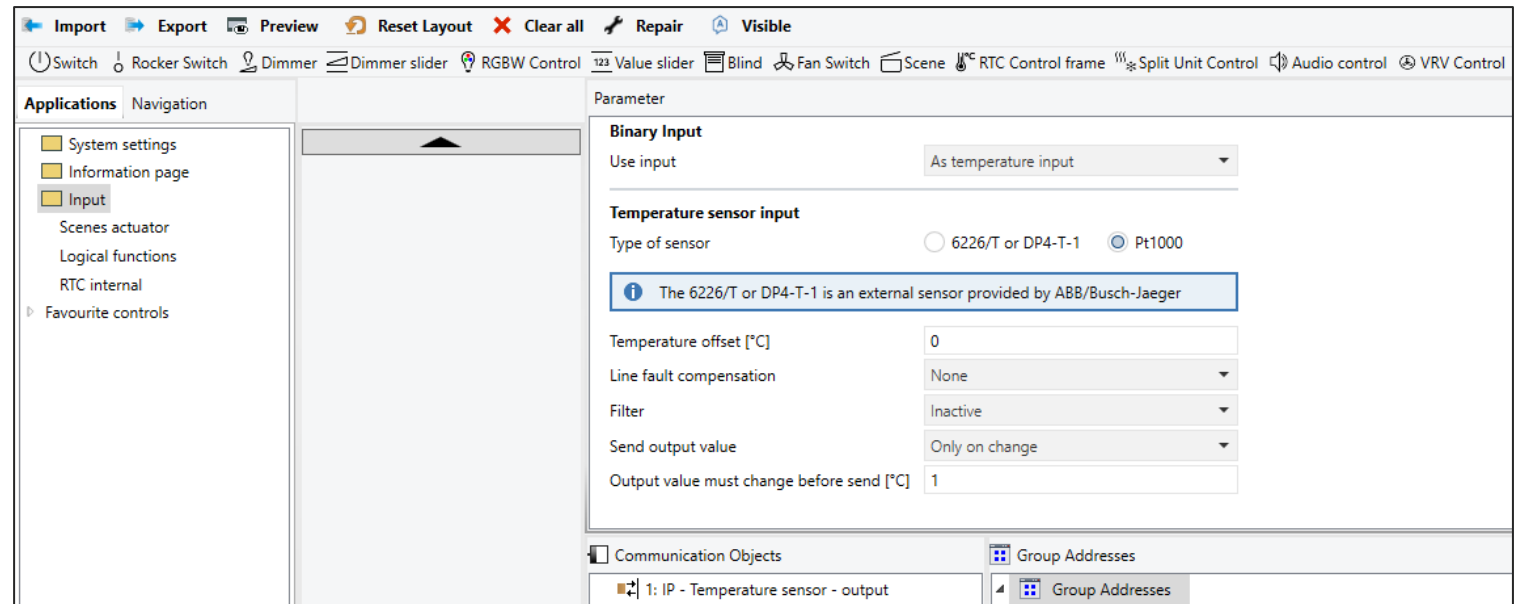


ABB RoomTouch® 4” and ABB Trevion®

Overview DCA

Programming

- Applications/Scene actuator
 - 1 bit trigger, values with different types sent out
 - 1 Byte telegram with scene number (send and receive)
 - 4 scene actuators
 - Each with up to 15 participants
 - Per scene actuator up to 10 individual scenes

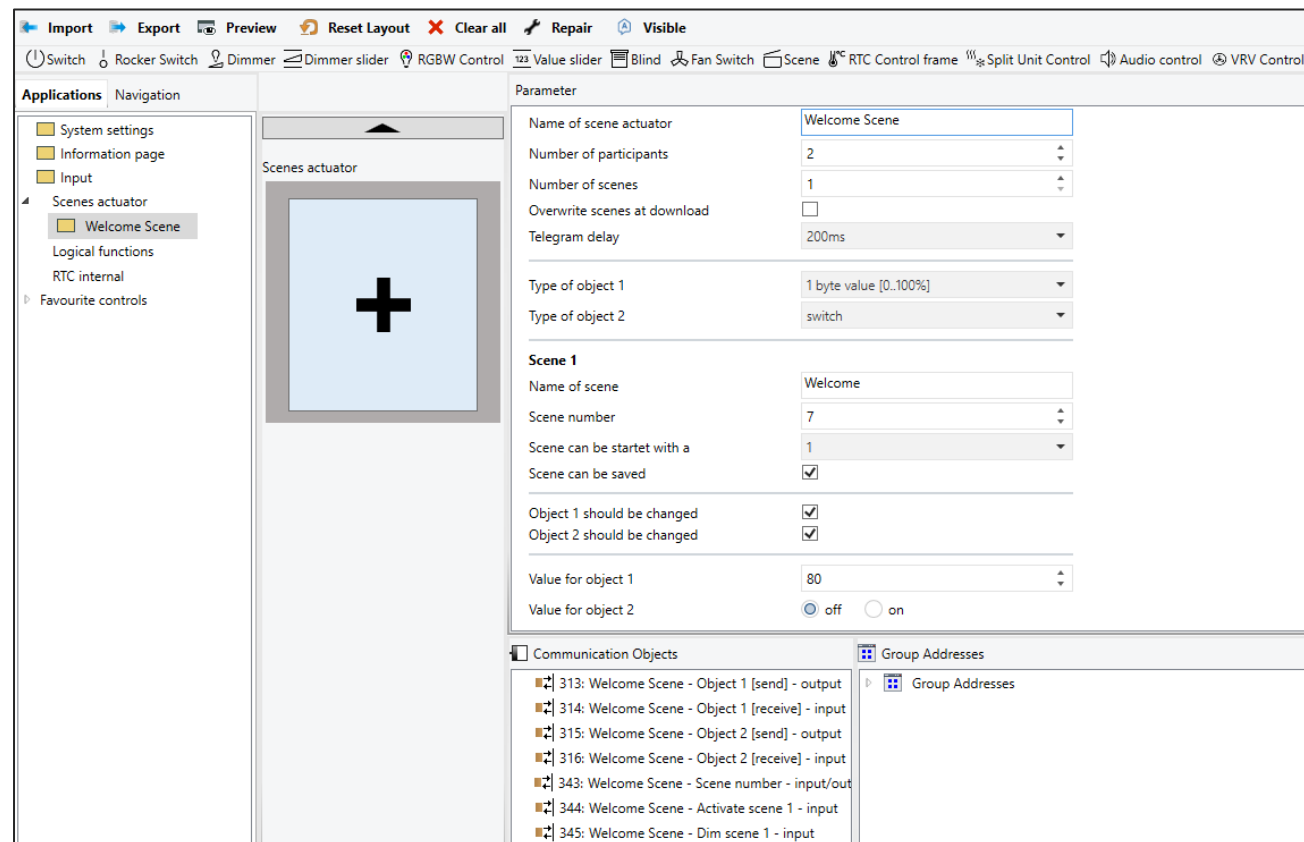


ABB RoomTouch® 4” and ABB Trevion®

Overview DCA

Programming

- Applications/Logical functions
 - Logic gate, Multiplexer, Multiplier, Gate, Temperature comparator, State converter (e.g. 1bit → text or 1 byte → 8x1 bit) and time function (staircase light and on/off delay)
 - per logic gate up to 10 inputs

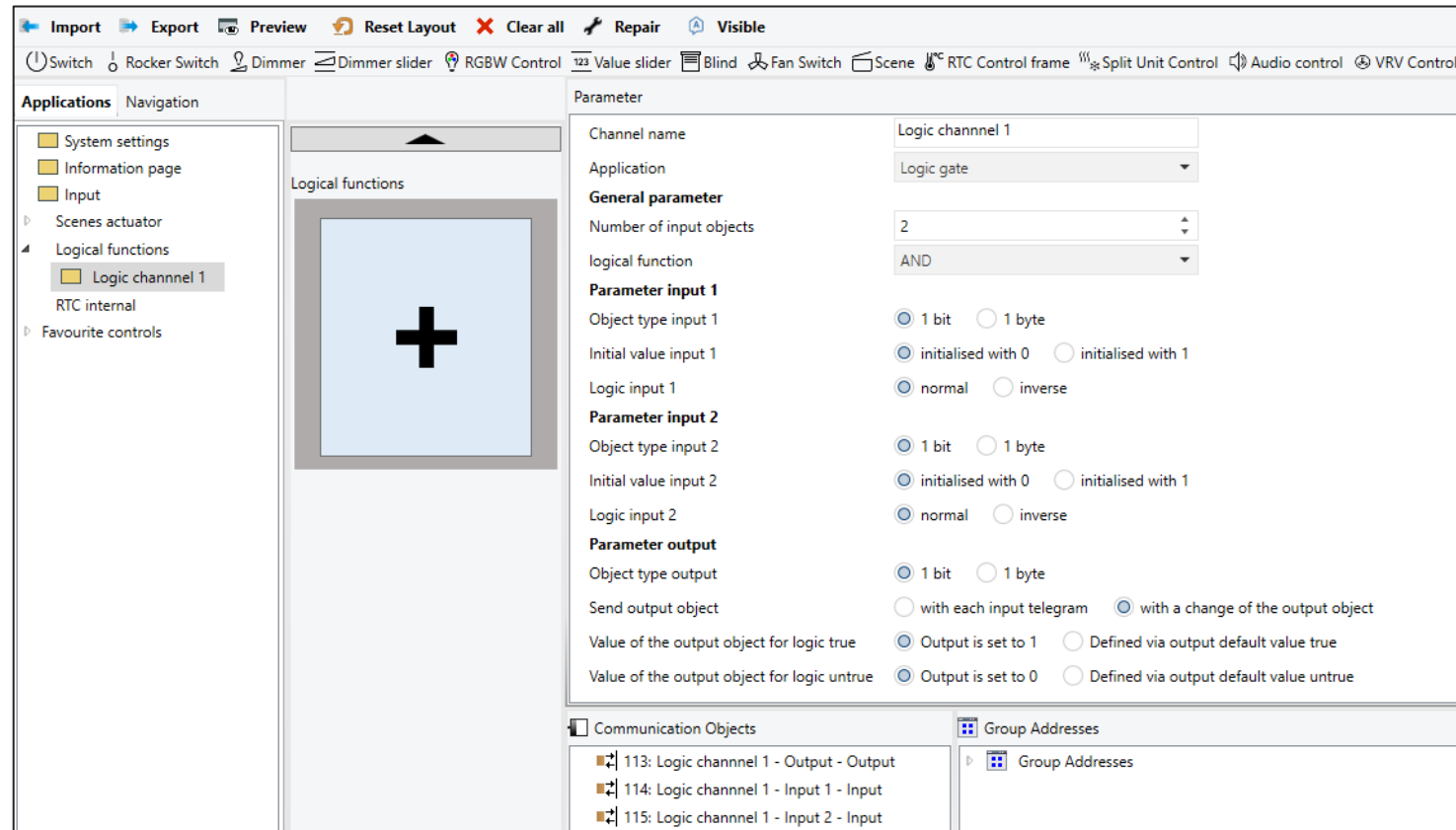


ABB RoomTouch® 4” and ABB Trevion®

Overview DCA

Programming

- Applications/RTC internal
 - Functionality Room temperature control for the room installed, based on internal or external temperature sensor
 - Further RTC's for another room possible with local temperature measurement
 - For operation RTC control frame to be used

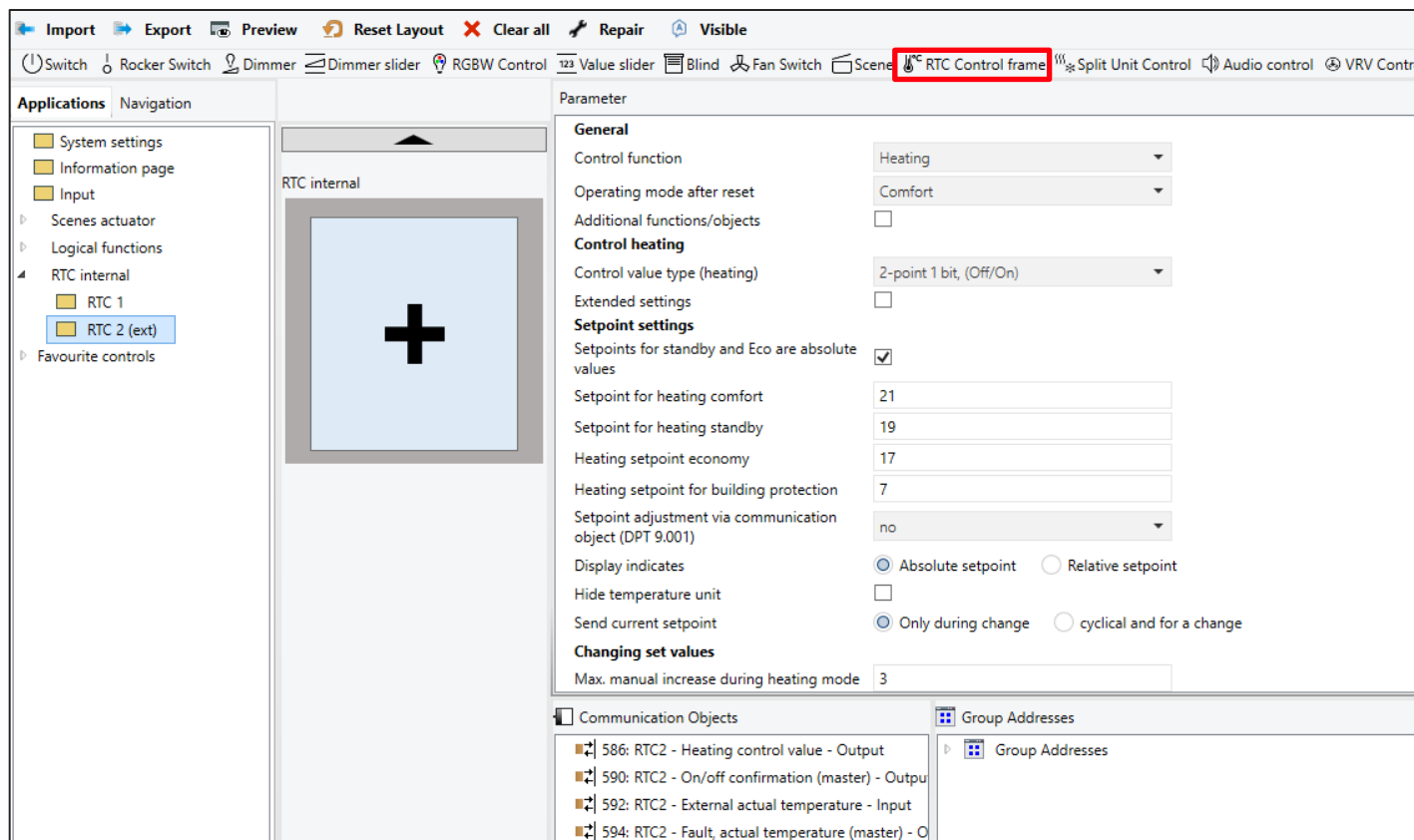
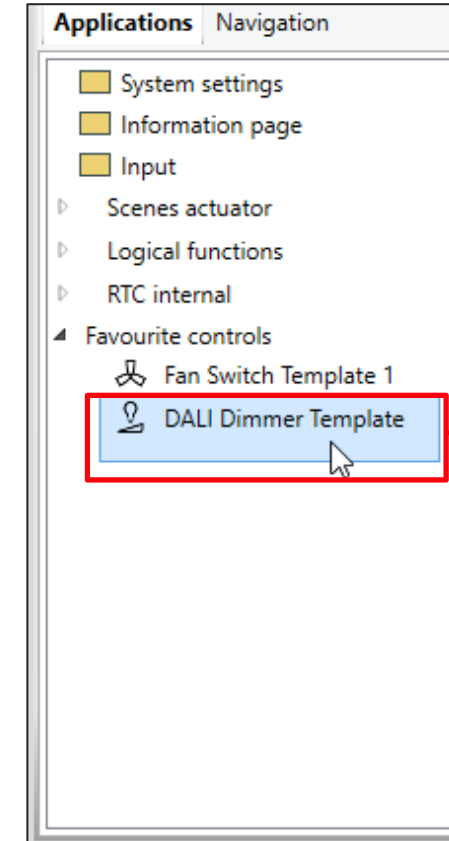
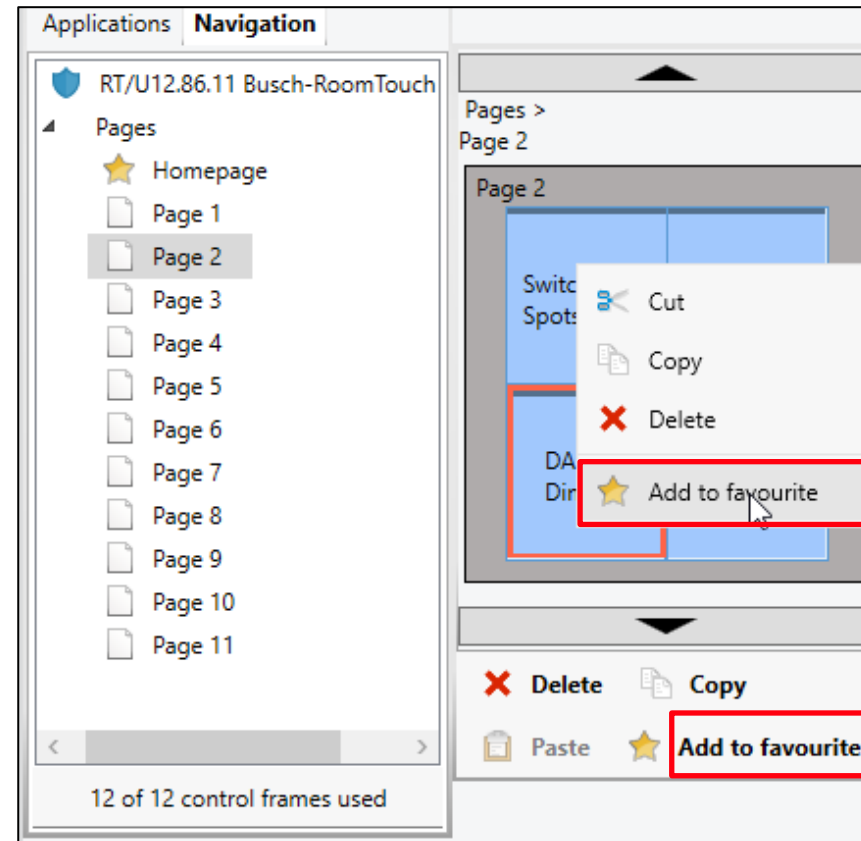


ABB RoomTouch® 4" and ABB Trevion®

Overview DCA

Programming

- Applications/Favourite controls
 - Each created function element can be defined as a favourite
 - Right mouse button → Add to favourite or click on the bottom on 'Add to favourite'
 - Favourite controls can be used again on other pages with drag and drop



Drag and drop

ABB RoomTouch® 4" and ABB Trevion®

Overview DCA

Search Group Address

- Option to find where a group address is used
 - Right mouse button on group address, click 'Search'
- Valid page is shown in green, by activating the page the function button and finally the object with group address is detected, marked in green
- Entered group address in the search field detects address in the list

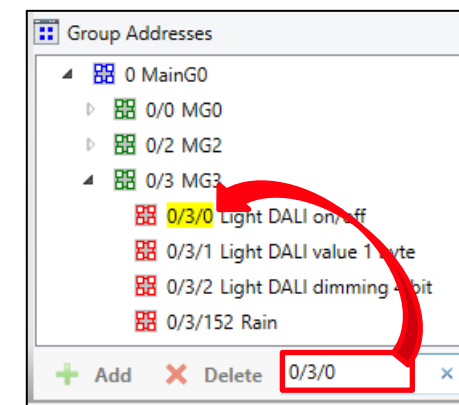
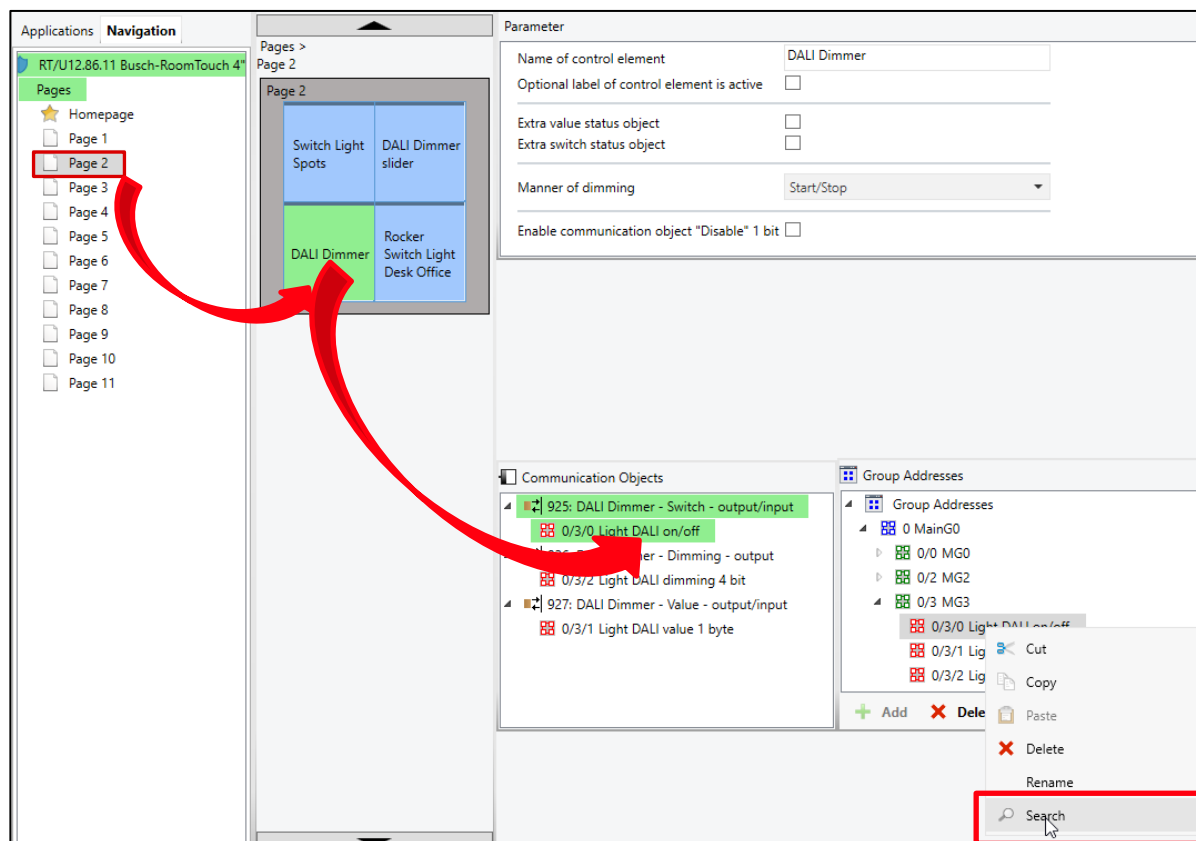


ABB RoomTouch® 4” and ABB Trevion®

Overview DCA

Details System settings

- General
 - 19 panel languages
 - Cyclical sending In operation to monitor the device
 - Separators
- Time and date
 - Automatic Summer/Winter time changeover
 - Starting day of the week
 - Latitude and longitude for Astro function and weather forecast
 - Time zone

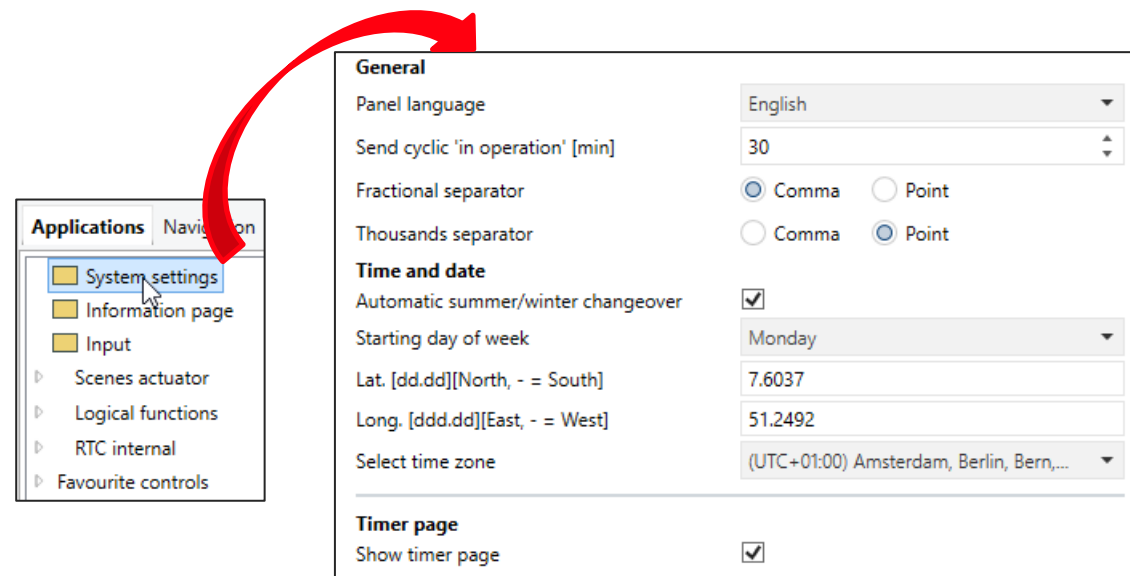


ABB RoomTouch® 4” and ABB Trevion®

Overview DCA

Details System settings

- Display
 - Color theme dark/light/daylight dependent
 - **Please note:** ABB Trevion® Display has no option to change the color theme, its always dark.
This is the only difference in the DCA between Trevion display and RoomTouch 4”
 - Brightness can be adjusted to ambient light (integrated brightness sensor)
 - Automatic turn off of the display after time or in case of darkness

Display	
Color theme	Dark
Activate automatic return to start page	☒
Return to start page after... [s]	60
Brightness is adjusted to ambient light	☒
Display brightness [%]	100
Turn display off after [min]	30
Switch display off when room is dark	☒
Brightness level for interpretation as dark	3
 1 = dark ... 5 = light	
Switch off after [min] dark	1

ABB RoomTouch® 4" and ABB Trevion®

Overview DCA

Details System settings

- Proximity
 - When approaching RoomTouch display is turned on
 - Adjustable sensitivity
 - KNX 1bit command can be sent, e.g. to activate room light or scene
 - When going away from panel a telegram can be sent as well
 - Function can be disabled via KNX telegram
- Temperature
 - Measurement of temperature, used for temperature control in the room
 - Offset to adjust correct temperature

Proximity sensor

Use proximity to switch the display on

☒

Sensitivity of the proximity function

3

i

1 = nearby ... 3 = max. distance

Use 1-bit output object from proximity function

☒

Switch-on value

☐ Off ☒ On

Switch-off value

☒ Off ☐ On

Enable communication object "Disable Proximity" 1 bit

☒

Temperature

Temperature unit

☒ °C ☐ °F

Offset for temperature measurement (x 0,1K) [K]

0

Send internal sensor temperature

At change

ABB RoomTouch® 4” and ABB Trevion®

Overview DCA

Details System settings

- Haptic and acoustic feedback
 - Operating a function on the screen can be accompanied by a haptic feedback (vibration and sound)
- Screensaver
 - Clock (digital/analogue)
 - Slide with pictures from the SD card with adjustable parameters like interval time
 - Information page to show important messages and status

Haptic feedback
Enable haptic feedback ☒

Screensaver
Show screensaver [min] 10
Screensaver mode Slide show

i You have to put your pictures on a Micro SD card in the directory: photo

ABB RoomTouch® 4" and ABB Trevion®

Overview DCA

Details System settings

- Primary function
 - By touching the screen with 3 fingers or more a first function can be executed, e.g. switching on the light in the room
 - Object type 1 bit, 1 byte, scene and RTC operating mode
 - Even action when releasing the touch is possible, e.g. light in the room is only turned on as long as the user touches the screen, enough for short observation
- Security
 - PIN-code with 4-6 digits to access System Settings at the panel by the user
 - Code could be also changed at the display by user

Primary function	
Use Primary function	☒
 The primary function is triggered when you touch the screen with 3 fingers or more	
Icon for Primary function	
Object type	1-byte value [0..255] ▼
Reaction on press	Value 1 ▼
Reaction on release	Inactive ▼
Value 1	180 ▲▼
Security	
Enable system settings for end customer	☐ Always ☒ With code
Length of PIN-Code	4 digits ▼
PIN-Codes can be changed on the device	☒
Code for system settings [0000..9999]	0000

KNX Control Elements

ABB RoomTouch® 4" and ABB Trevion®

Control Elements

Selection of KNX control elements in ETS via drag and drop (1...4 elements each page)

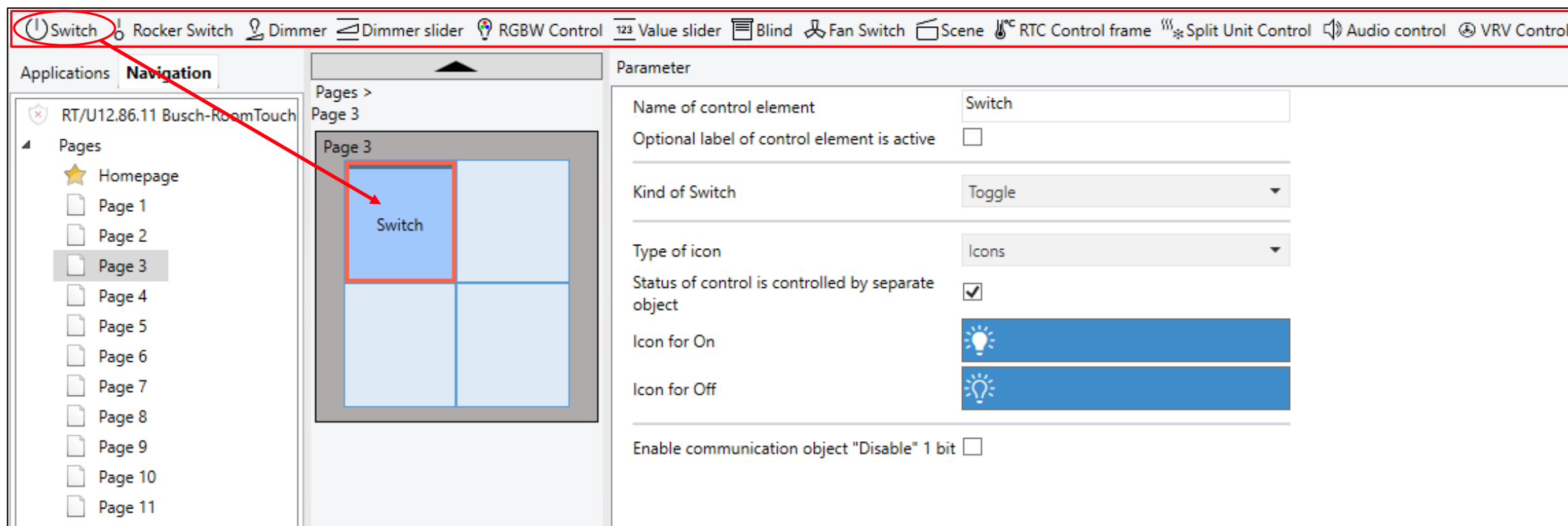


ABB RoomTouch® 4” and ABB Trevion®

Control Elements

Control element ‘Switch’

- ‘Standard’ switch operation
 - Toggle, short/long operation or press/release operation, each with two values and different data types
 - Label, e.g. for function description
 - 1 bit sent to KNX
 - Icon or text for function and status
 - Status information via separate status object possible
 - Enable/disable

Parameter

Name of control element	Ceiling
Optional label of control element is active	☒
Optional label of control element	Description
Kind of Switch	Toggle
Type of icon	Icons
Status of control is controlled by separate object	☒
Icon for On	
Icon for Off	
Enable communication object "Disable" 1 bit	☒

User interface



ABB RoomTouch® 4” and ABB Trevion® Control Elements

Control element ‘Rocker Switch’

- ‘Enhanced’ switch operation
 - Rocker with two parts (top/bottom) with individual commands but only one group object
 - 1 bit ... 14 byte object sent to KNX
 - Icon or text for the function
 - Status information via separate status object possible
 - Enable/disable

Parameter

Name of control element	Light Ceiling
Type of Icon	☒ Icons ☐ Text
Icon for Up / Value 1	
Icon for Down / Value 2	
Status of control (Icon/Text) is controlled by separate object	☒
 Button Up => Value 1 Button Down => Value 2	
Object type	1 byte value [0%..100%]
sent value 1 [0%..100%]	90
sent value 2 [0%..100%]	10
Enable communication object "Disable" 1 bit ☒	

User interface



ABB RoomTouch® 4" and ABB Trevion®

Control Elements

Control element 'Dimmer'

- 'Standard' dimmer operation
 - Start/Stop, stepwise or value dimming (1 byte)
 - 1 bit on/off and 4 bit or 1 byte dimming
 - Label, e.g. for function description
 - Status information via separate status object possible (on/off and dim value)
 - Enable/disable
 - Operation: By pressing on the upper right corner (3 dots) screen with arrows to dim up and down appears

Parameter

Name of control element	TV Light
Optional label of control element is active	☒
Optional label of control element	dimnable
Extra value status object	☒
Extra switch status object	☒
Manner of dimming	Start/Stop
Enable communication object "Disable" 1 bit	☒

User interface

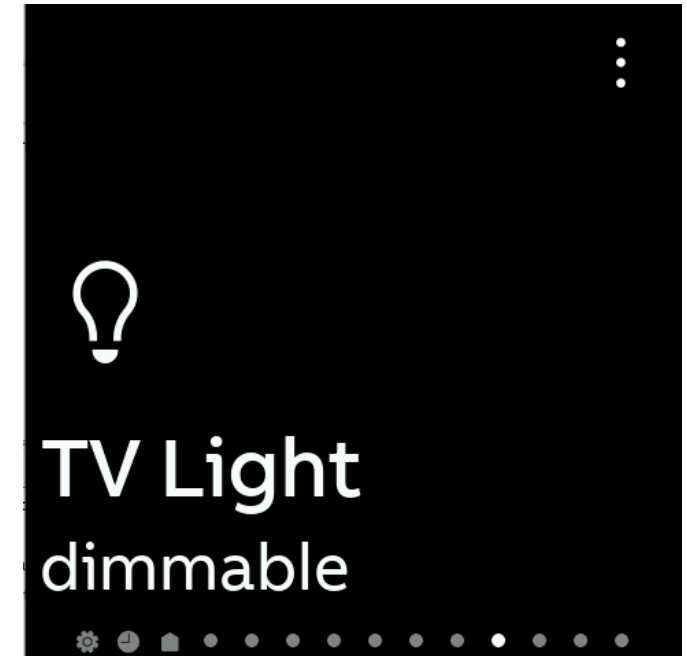


ABB RoomTouch® 4” and ABB Trevion®

Control Elements

Control element ‘Dimmer slider’

- ‘Enhanced’ dimmer operation
 - Value dimming (1 byte)
 - Label, e.g. for function description
 - Status information via separate status object possible (on/off and dim value)
- Slider sends when released with parametrizable brightness change or cyclically
- Enable/disable
- Operation: By pressing on the upper right corner (3 dots) screen with slider to dim up and down appears

Parameter

Name of control element	Dinner Light
Optional label of control element is active	☒
Optional label of control element	dimmable
Extra value status object	☒
Extra switch status object	☒
Slider sends	☒ When slider is released ☐ cyclically
Brightness change [%]	1
 While the slider sends telegrams with every Brightness change or cyclically after every repeat time, the received telegrams are ignored.	
Enable communication object "Disable" 1 bit	☒

User interface

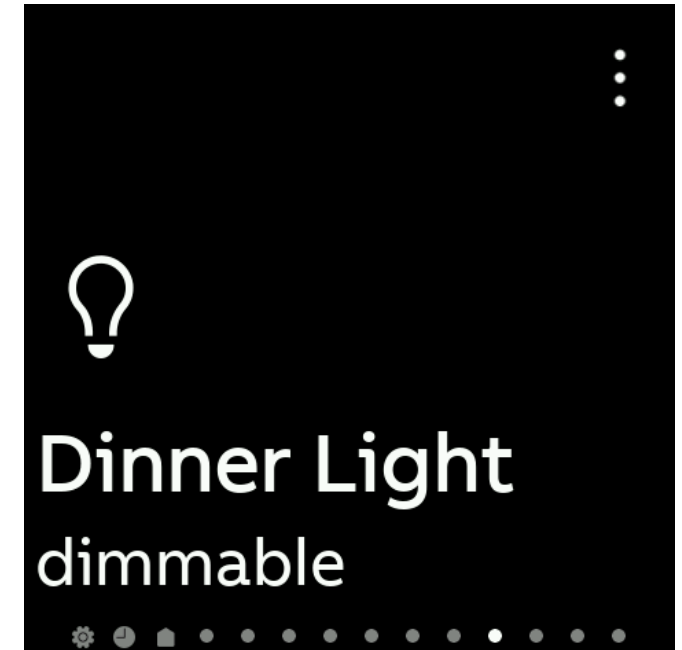


ABB RoomTouch® 4" and ABB Trevion®

Control Elements

Control element 'RGBW Control'

- Color Control e.g. DG/S x.64.5.1
- RGB
 - 1 byte per color (RGB) or 3 byte obj.
- RGB+W
 - 1 byte per color (RGBW) or 6 byte obj.
- RGB+Tunable White
 - 1 or 3 byte per color (RGB/CW/WW)
 - CW/WW via temp./brightness object
- Tunable white
 - 1 or 2 byte brightness/color temp.
- HSV
 - 1 byte each for **H**ue, **S**aturation and **V**alue or 6 byte

Parameter

Name of control element	RGBW Control
Optional label of control element is active	☒
Optional label of control element	Color LED
Extra switch status object	☒
Type of Color/White lamp	RGB
Switching On/Off via	☒ Switch object ☐ RGB Feedback
Brightness change [%]	1
Telegram is repeated every [s]	0.5s
Switched on -> preset value	☒
Switched off -> RGB value 0,0,0	☒
Enable communication object "Disable" 1 bit	☒

User interface RGBW

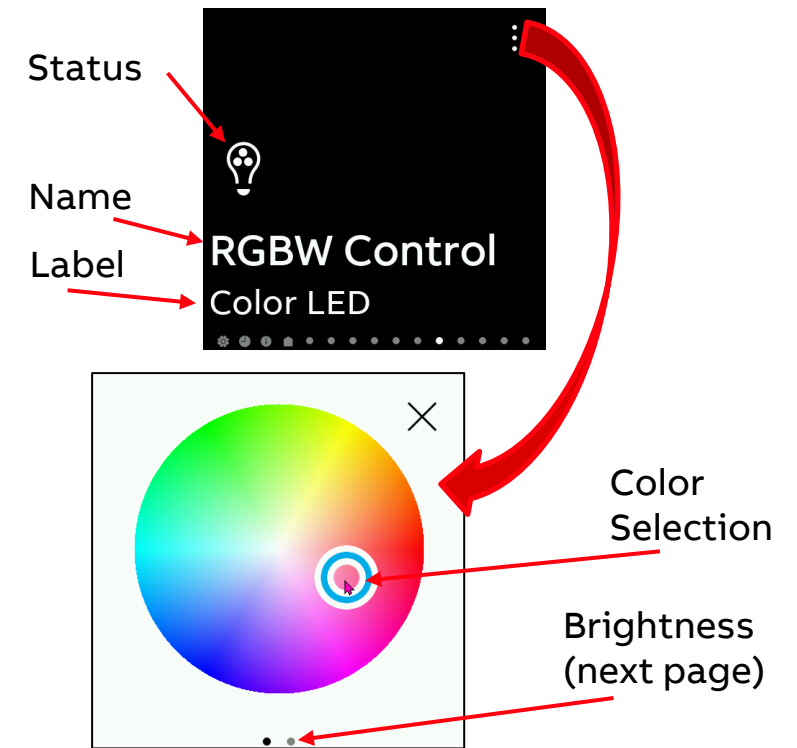


ABB RoomTouch® 4” and ABB Trevion®

Control Elements

Control element ‘Value slider’

- 1/2/4 byte values
- Label, e.g. for function description
- Function icon selectable
- Unsigned, signed, floating (2/4 byte), 0-100% (1 byte)
- Assignment of min/max object value to min/max display value
- Status information via separate value status object possible
- Enable/disable
- Object also input for value display only
- Operation: By touching the screen a slider appears to change the value. Return to former screen after some sec.

Parameter

Name of control element	Brightness
Optional label of control element is active	☒
Optional label of control element	Staircase
Function icon (For normal control frame)	
Show value in Control	☒
Status value is controlled by separate object	☒
Unit	%
Decimal places	0
Slider sends	☐ When slider is released ☒ cyclically
Telegram is repeated every [s]	0.5s
 While the slider sends telegrams with every Brightness change or cyclically after every repeat time, the received telegrams are ignored.	
Object type	1 byte value [0..100%]
Value change [%]	1
Minimum object value	0
Maximum object value	100
Minimum displayed value	0
Maximum displayed value	100
Enable communication object "Disable" 1 bit ☒	

User interface

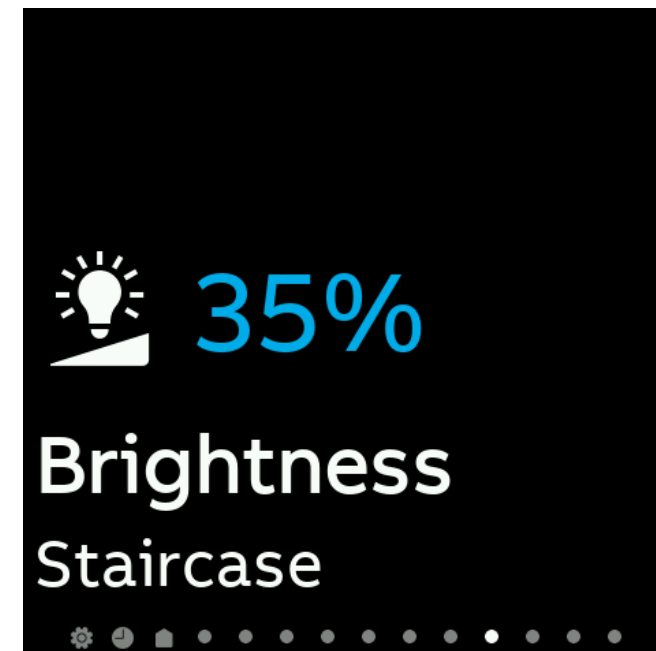


ABB RoomTouch® 4” and ABB Trevion®

Control Elements

Control element ‘Blind’

- Label, e.g. for function description
- Optional 1 byte object for positioning
- Function icon open/closed selectable
 - Blind, Shutter Marquee, Hang and user defined (various icons)
- With/without slat adjustment
- Separate status object (1 bit for end positions or 1 byte for height and slat)
- Wind alarm input
- Enable/disable
- Operation: By touching the screen arrows to move up and down plus stop button appear.
2nd screen for slat adjustment available

Parameter

Name of control element	Blind
Optional label of control element is active	☒
Optional label of control element	<Label>
Use 1 byte positioning	☒
Type of icons	User-defined
Icon for open	
Icon for closed	
Feedback type	1 byte [0..100%]
Icon for intermediate	
Type of control	☒ With Slat adjustment ☐ Without Slat adjustment
Status of control (Icon) is controlled by separate object	☒
Enable communication object "Disable" 1 bit	☒

User interface

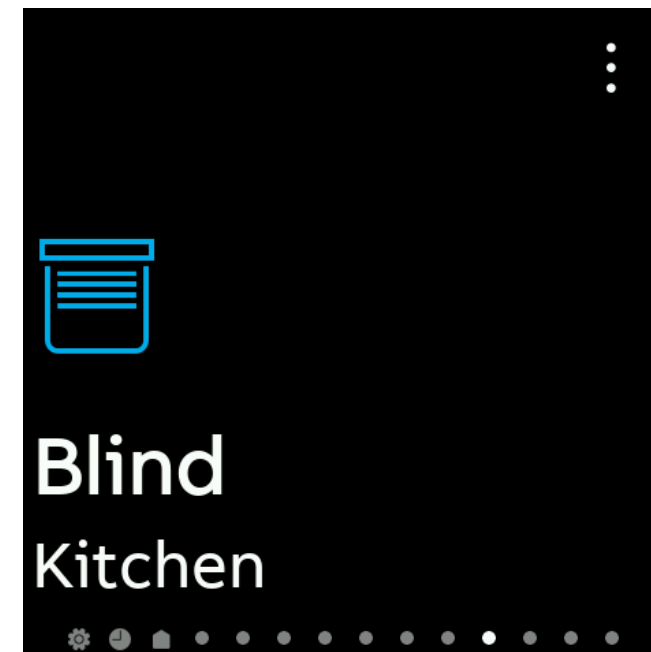


ABB RoomTouch® 4” and ABB Trevion® Control Elements

Control element ‘Fan Switch’

- Label, e.g. for function description
- Disable off control (no Fan off)
- 1...8 steps
- Object type fan speed control either 1 byte or separate 1 bit objects
 - 1 bit: 1 of n, x of n and gray code
- Separate status object when using 1 byte object
- Enable/disable
- Operation: By touching the screen fan turned on (stage 1) and off. Pressing long and moving the finger up and down changes the speed

Parameter

Name of control element	Fan
Optional label of control element is active	☒
Optional label of control element	Master Bedroom
Disable Off control	☐
Number of steps	3
Object type	☒ 1 bit [0/1] ☐ 1 byte unsigned [0..255]
Send also the 0 bits	☒
Switch pattern	1 of n
Enable communication object "Disable" 1 bit	☒

User interface



ABB RoomTouch® 4" and ABB Trevion®

Control Elements

Control element 'Scene'

- 1 byte scene
- 1 scene
- Scene number (1...64) adjustable
- Label, e.g. for function description
- Function icon selectable
- Store scene by long press
- Enable/disable
- Operation: By touching the screen scene is active.
Pressing long shows a blue screen with a marker confirming successful scene storage

Parameter

Name of control element	Scene
Optional label of control element is active	☒
Optional label of control element	Dining
Function icon	
Status of control is controlled by separate object	☒
Scene number [1..64]	1
Store scene by long press	☒
Long operation after ...	0.6 s
Enable communication object "Disable" 1 bit	☒

User interface

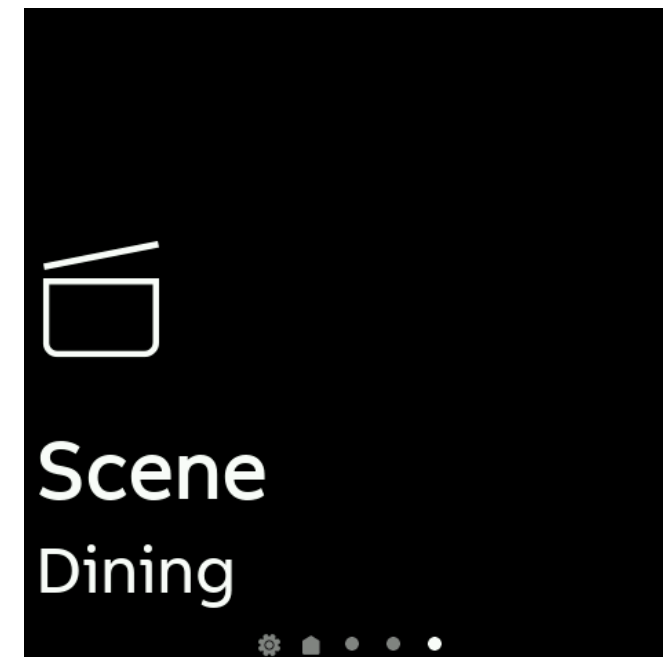


ABB RoomTouch® 4" and ABB Trevion® Control Elements

Control element 'RTC control'

- Pure operating element, e.g. as slave
- Controller to be parametrized separately as RTC internal in the DCA
- Connection of corresponding group addresses from Master (RTC internal) to slave (RTC Control)
- ... further parameters
- Operation: By touching the screen further screens appear to adjust operating mode, fan speed, setpoint etc.

Parameter

Name of control element	Room temperature
Optional label of control element is active	☒
Optional label of control element	Living Room
Additional functions/objects	☒
Delay time for reading telegrams after reset	5
Main displayed temperature is	☒ Setpoint temperature ☐ Actual temperature
Show optional temperature	☐
Operating functions	
Main RTC operates	Heating and cooling
Hide temperature unit	☐
Fan coil control during heating mode	☒
Fan coil control during cooling mode	☒
Use condensate alarm (via extra 1-bit comm. object)	☐
Operation mode setting	
Setting of Comfort mode	☒
Setting of Standby mode	☐
Setting of Economy mode	☒
Setting of Building Protection mode	☐
Changing setpoint	
Step size of setpoint adjustment	0.5 °C

User interface

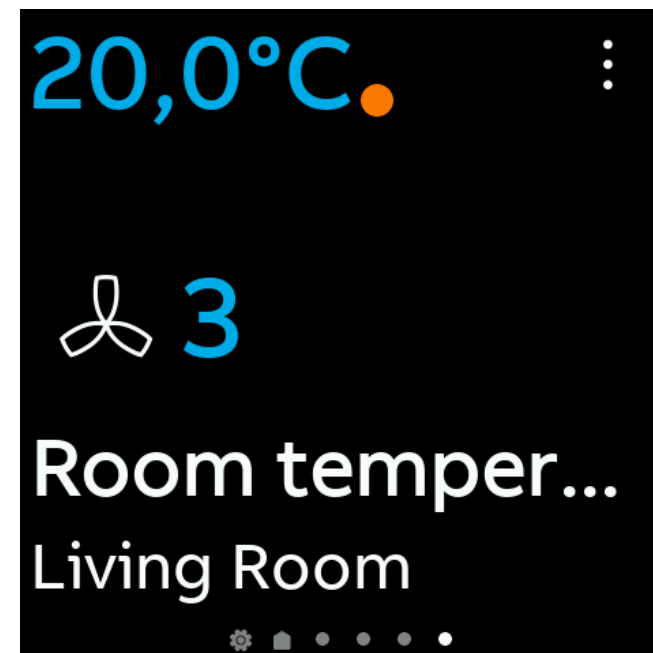


ABB RoomTouch® 4" and ABB Trevion® Control Elements

Control element 'Split Unit Control'

- Pure operating element
- Minimum/Maximum setpoint
- Display of setpoint and room temperature
- Number of fan levels
- Enabling of different modes like Cooling and operating modes like Scene to access the related group objects
- ... further parameters
- Suitable actuator:
ABB Split Unit Gateway SUG/U 1.1
- Operation: By touching the screen further screens appear to adjust operating mode, fan speed, setpoint

Parameter

Name of control element	Split Unit
Optional label of control element is active	☒
Optional label of control element	Office 21
Main displayed temperature is	☐ Setpoint temperature ☒ Room temperature
Show optional temperature	☒
Optional displayed temperature is	☒ Setpoint temperature ☐ Room temperature
Setpoints	
Minimum Setpoint value	16
Maximum Setpoint value	32
Step size of setpoint adjustment	1.0°C
Fan	
Number of Fan speeds (without Auto)	3
Operating modes	
Use Automatic Mode for Fan	☒
Use modus: Automatic	☒
Use modus: Heating	☒
Use modus: Cooling	☒
Use modus: Drying	☒
Use modus: Fan	☒
Use horizontal swing	☒
Use vertical swing	☒
Additional operating modes	
Use extra mode: Silence Mode	☐
Use additional modus: Boost	☒
Use additional modus: Forced operation	☒
Use additional modus: Scene	☐
Use additional modus: Window contact	☐
Use additional modus: Presence	☐
Enable communication object "Disable" 1 bit ☐	

User interface

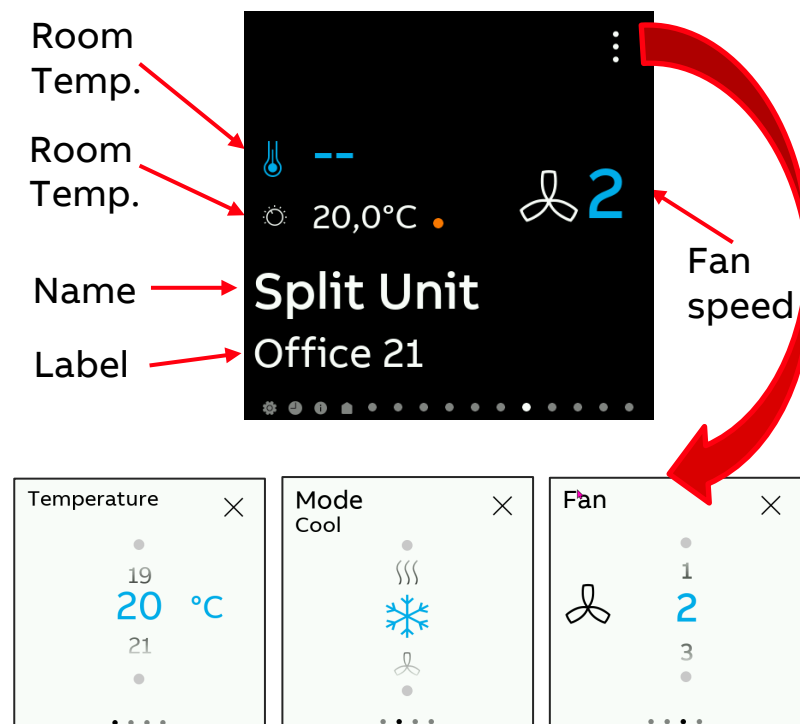


ABB RoomTouch® 4” and ABB Trevion® Control Elements

Control element ‘VRV control’

- Pure Operating element
- Number of fan levels (1 byte)
- Minimum/Maximum setpoint
- Enabling of different modes with allocation of 1 byte values
- Function icon
- Enable/disable
- ... further parameters
- Suitable actuator: KNX Gateway to VRV Control
- Operation: By touching the screen further screens appear to adjust operating mode, fan speed, setpoint etc.

Parameter

Name of control element	VRV Control
Optional label of control element is active	☒
Optional label of control element	Bedroom
Main displayed temperature is	☒ Setpoint temperature ☐ Room temperature
Show optional temperature	☐
Operating mode	
Value [1-byte 0..255] for Heating mode	1
Value [1-byte 0..255] for Cooling mode	2
Use Fan Only mode	☒
Value [1-byte 0..255] for Fan Only mode	3
Use Dehumidification mode	☐
Use Auto mode	☒
Value [1-byte 0..255] for Auto mode	5
i For VRV secondary devices, it's not possible to switch between Heating and Cooling mode automatically	
i The value for different modes should not be the same!	
Fan	
Fan speed levels	3
Value [1-byte 0..255] for Fan Speed 1	1
Value [1-byte 0..255] for Fan Speed 2	2
Value [1-byte 0..255] for Fan Speed 3	3
Use Auto Fan Speed	☐

User interface

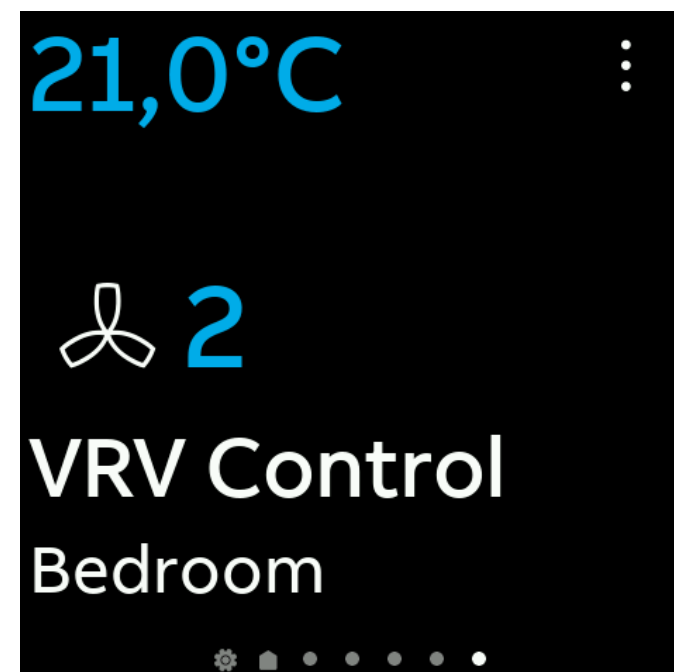


ABB RoomTouch® 4" and ABB Trevion®

Control Elements

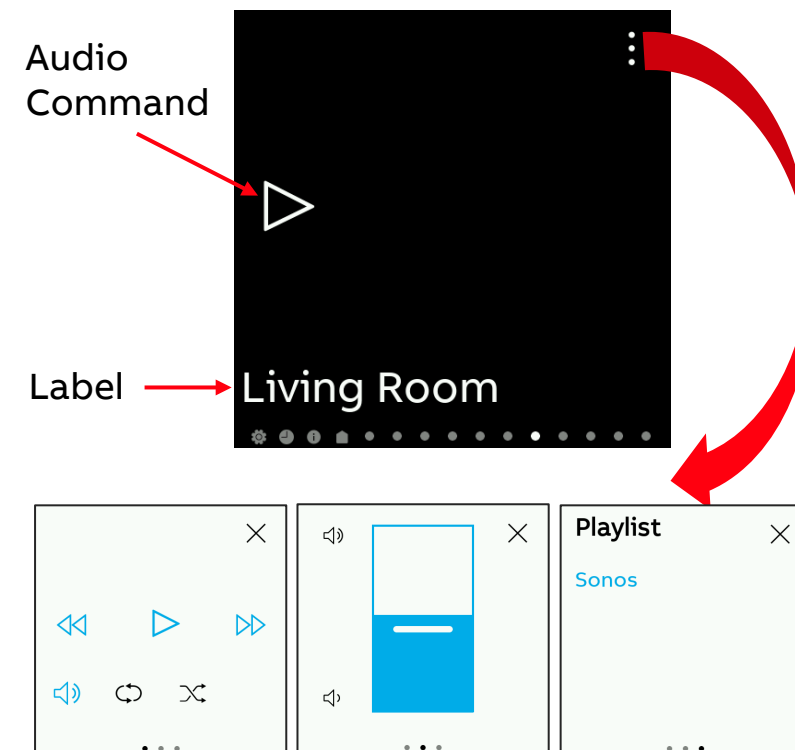
Control element 'Audio Control'

- Up to 8 audio sources selectable
- Audio commands like play, stop, forward mute, volume, ...
- Data point types either 1 bit or 1 byte
- Enable/disable
- Used in combination with ABB's ControlTouch linked to Sonos sound system or external KNX audio actuator
- Operation: By touching the screen further screens appear to adjust audio functions

Parameter

Title of control element	Audio title
Optional label of control element is active	☒
Subtitle of control element	Fixed text
Optional label of control element	Living Room
Number of sources	1
Source 1 name	Sonos
Source 1 type	☒ 1 bit ☐ 1 byte value [0..255]
Object type play/pause control	☒ 1 bit ☐ 1 byte value [0..255]
Value for play	☐ 0 ☒ 1
Value for pause	☒ 0 ☐ 1
Use skip forward/backward control	☒
Object type skip forward/backward control	☒ 1 bit ☐ 1 byte value [0..255]
Value for skip forward	☐ 0 ☒ 1
Value for skip backward	☒ 0 ☐ 1
Use mute control	☐
Use shuffle control	☐
Use repeat control	☐
Use volume control	☒
Object type volume control	1 byte value [0..100%]
Volume change [%]	5
Telegram is repeated every [s]	0.5s
Use on/off control	☐
Enable communication object "Disable" 1 bit	☐

User interface



General Operation

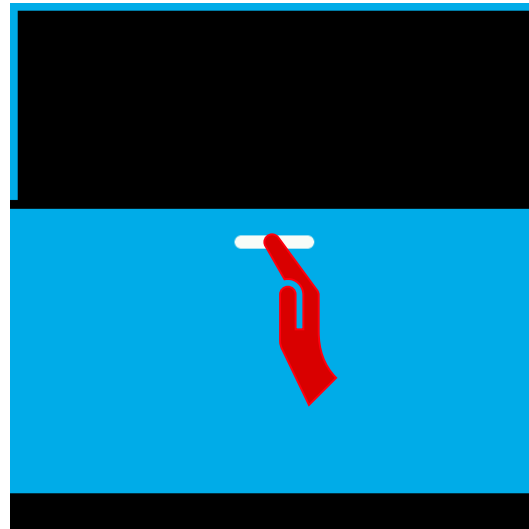
ABB RoomTouch® 4” and ABB Trevion®

Operation

Tap to switch or activate



Swipe up/down to change values



Tap the upper right corner for further operations

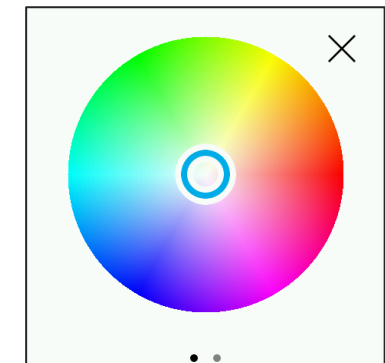
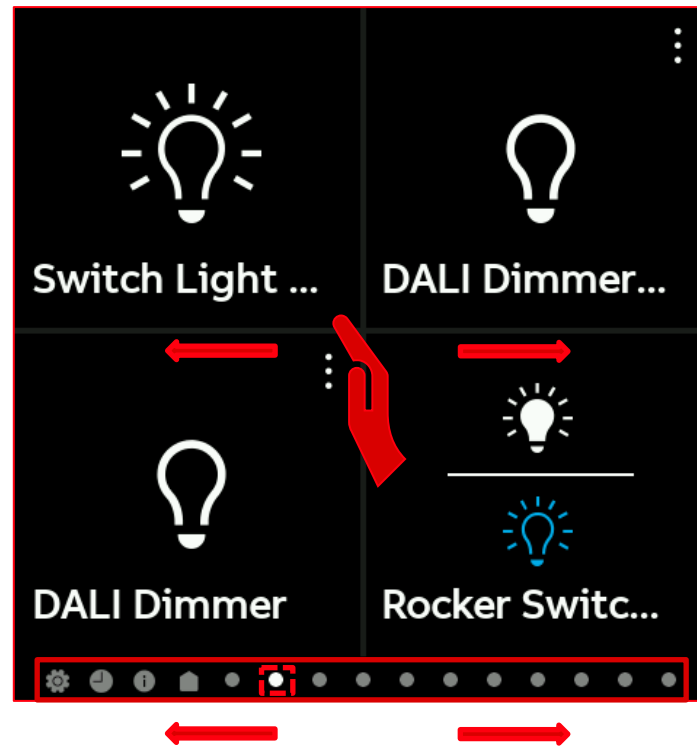


ABB RoomTouch® 4" and ABB Trevion® Operation

Quick and user friendly access to all pages and functions behind by scrolling the pages to left and right



System Settings

ABB RoomTouch® 4” and ABB Trevion® Operation

Click on gear to enter System Settings. Type in PIN code (when activated in ETS)

System Settings

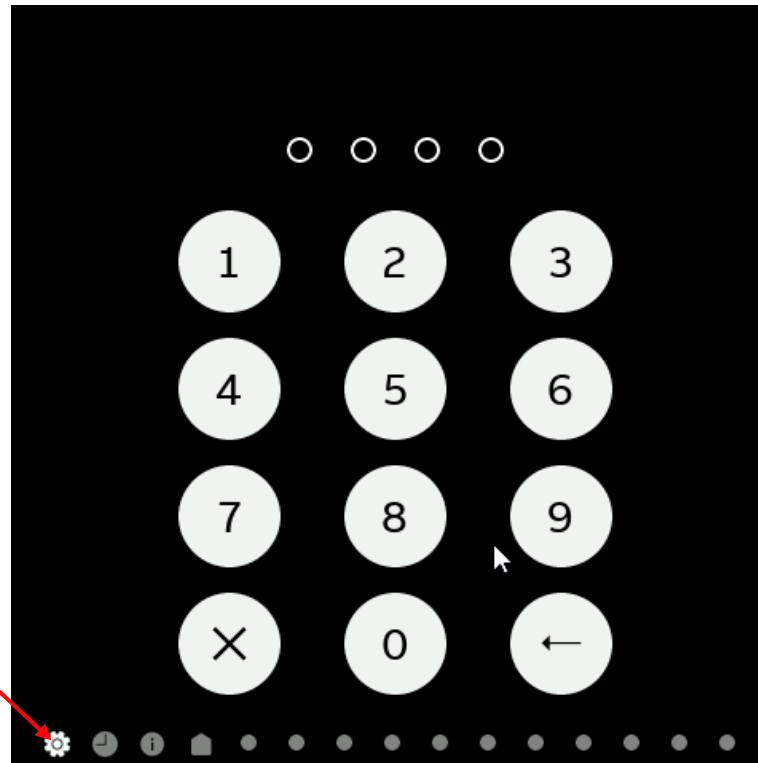


ABB RoomTouch® 4" and ABB Trevion®

System Settings

9 different menu entries to select

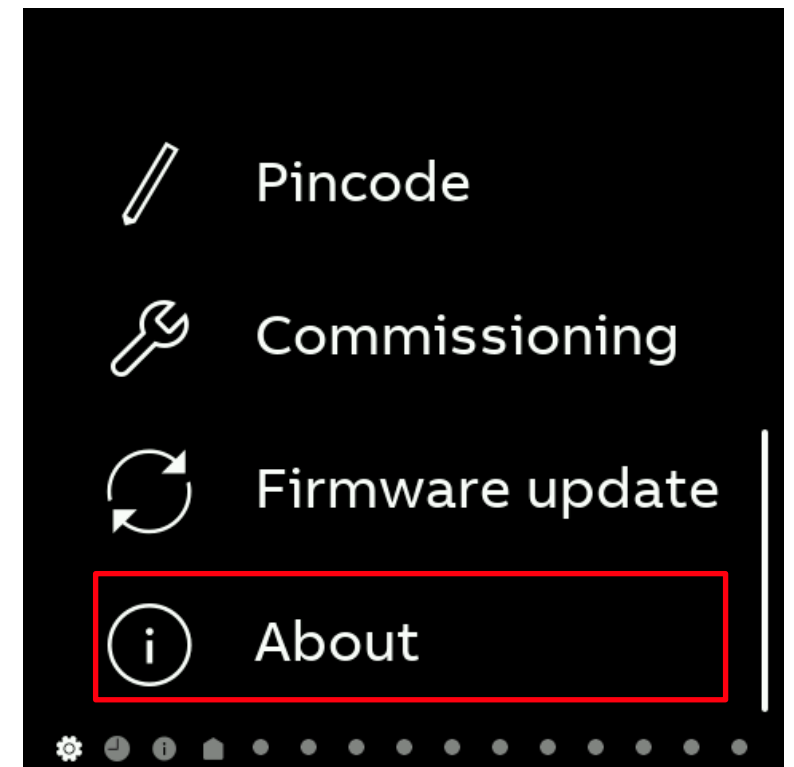
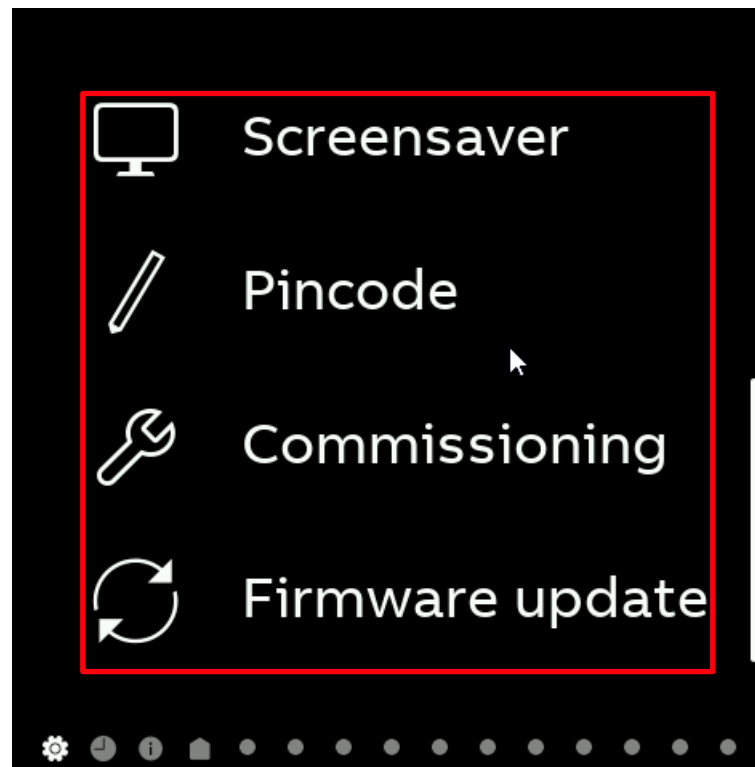
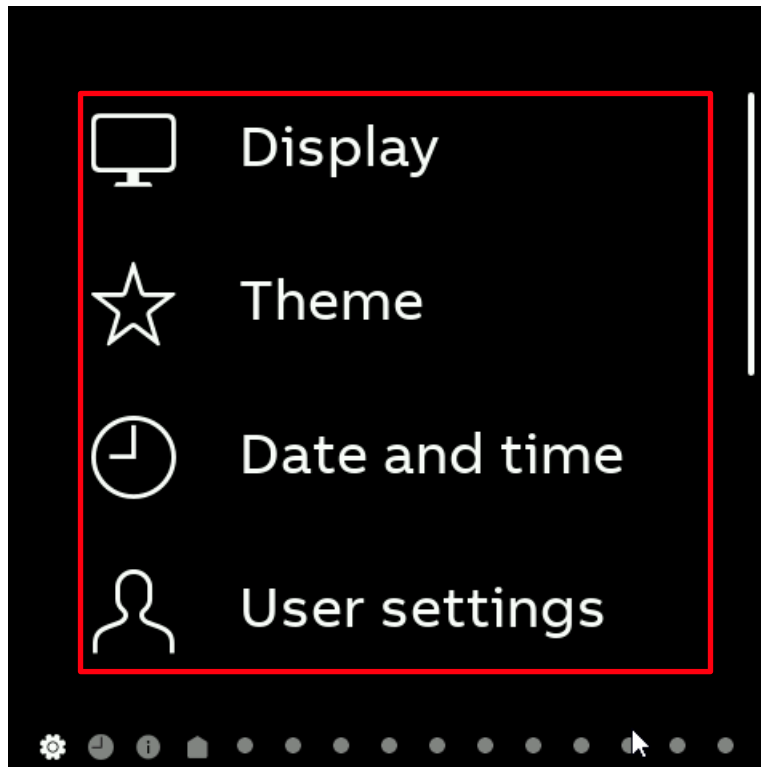


ABB RoomTouch® 4" and ABB Trevion®

System Settings

Display

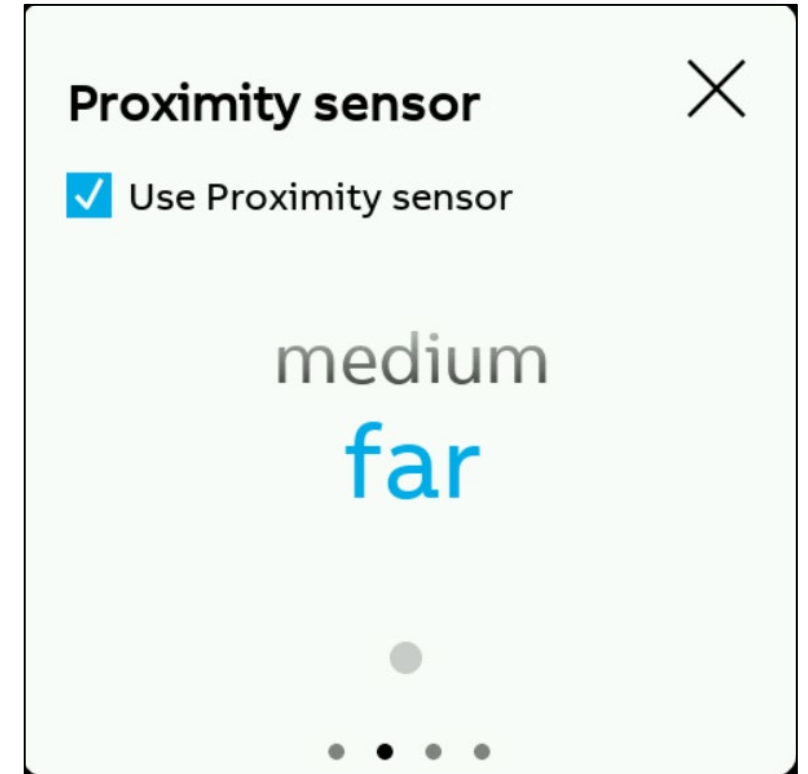
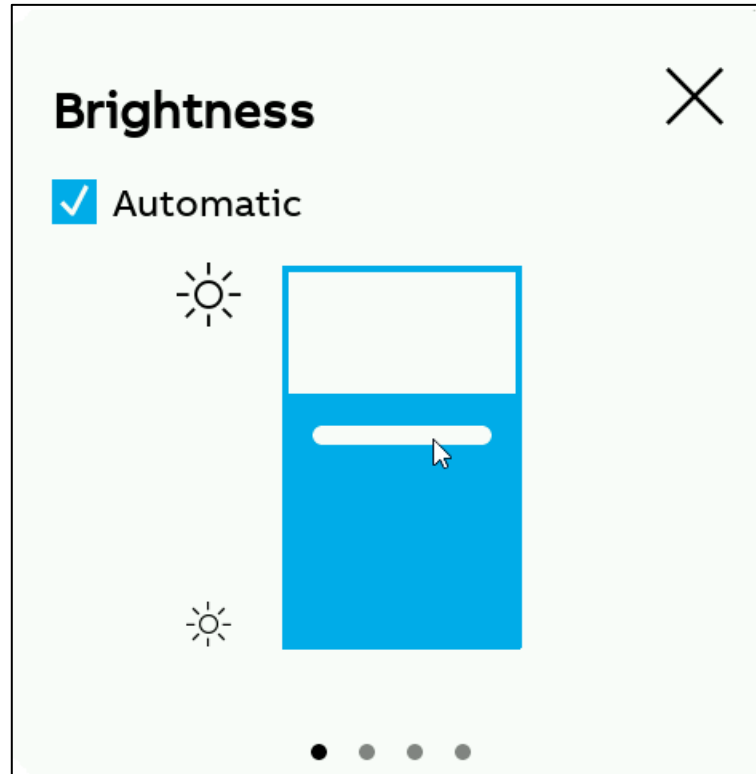
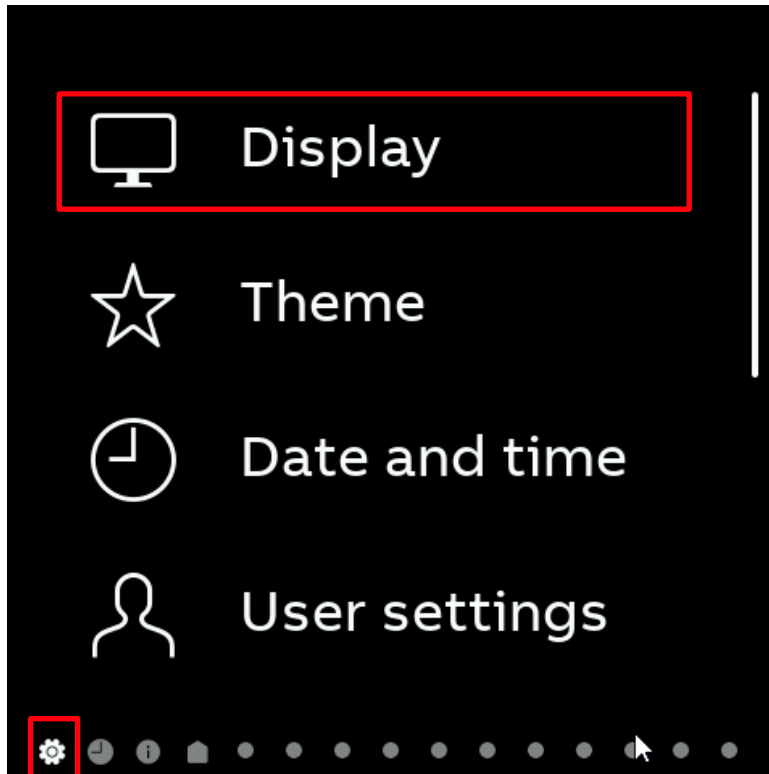


ABB RoomTouch® 4" and ABB Trevion®

System Settings

Display

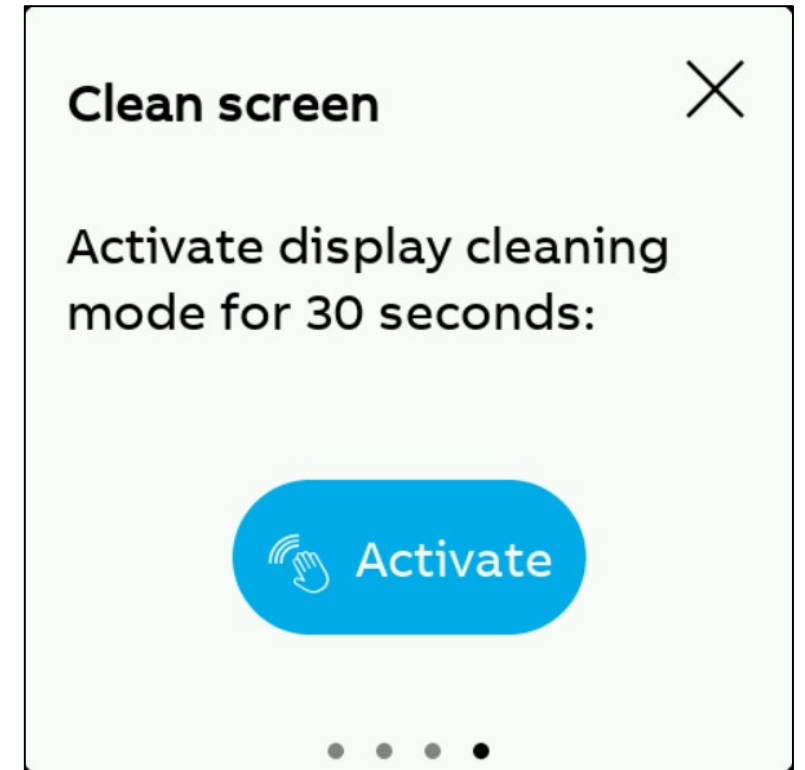
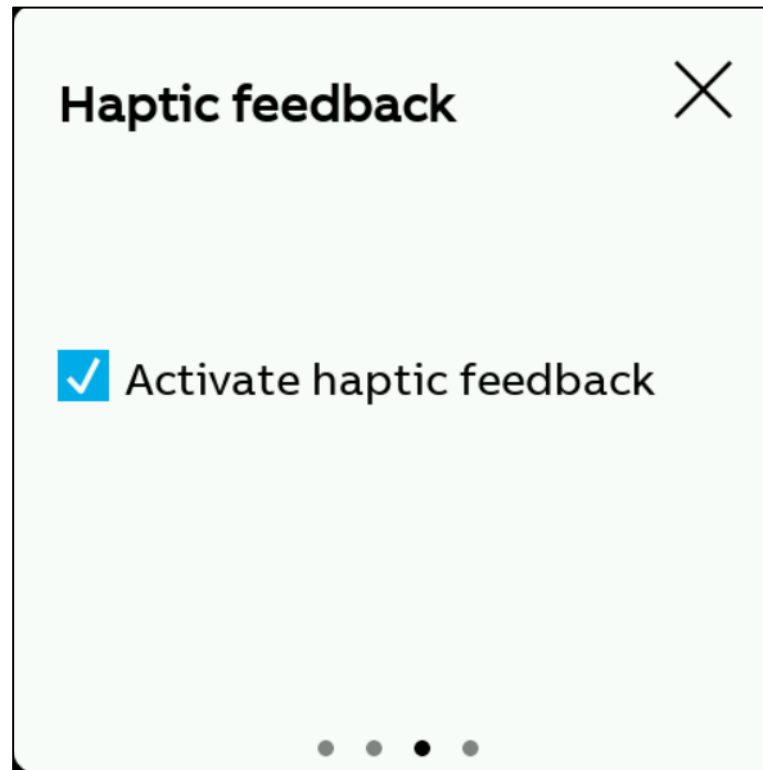
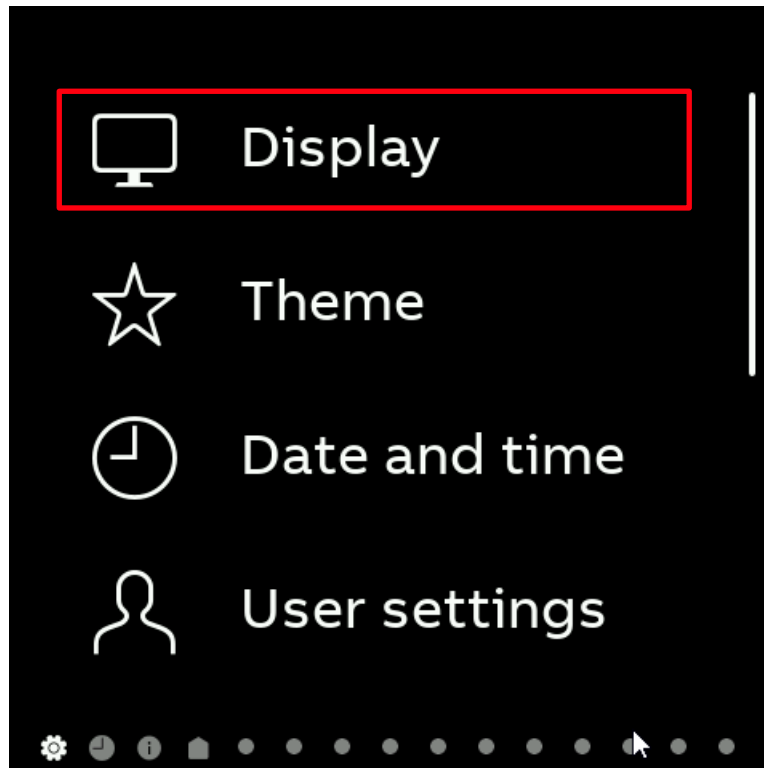
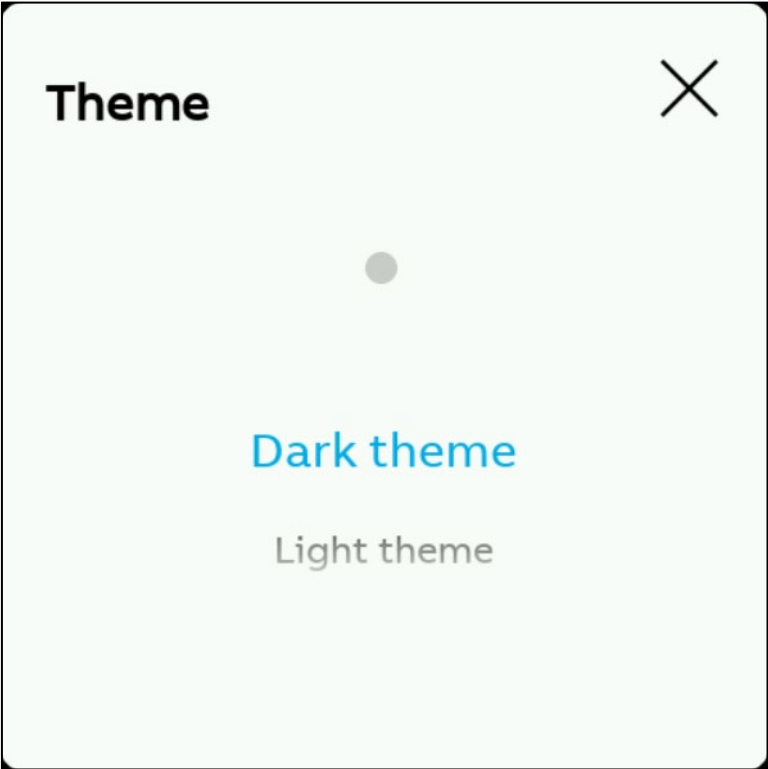
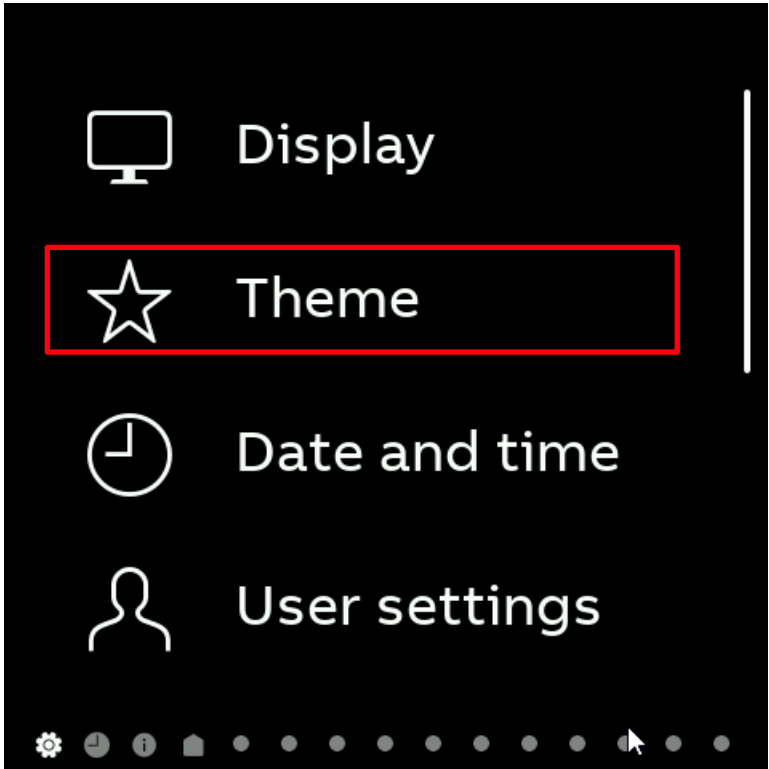


ABB RoomTouch® 4” and ABB Trevion®

System Settings

Theme* (dark, light, daylight dependent)



* Only for RoomTouch 4”

ABB RoomTouch® 4” and ABB Trevion®

System Settings

Date and Time

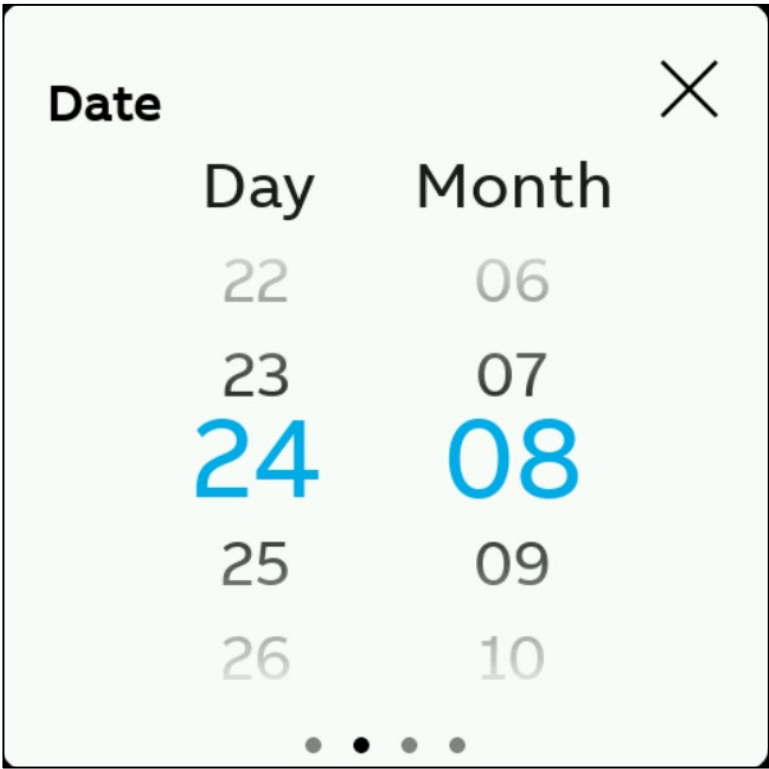
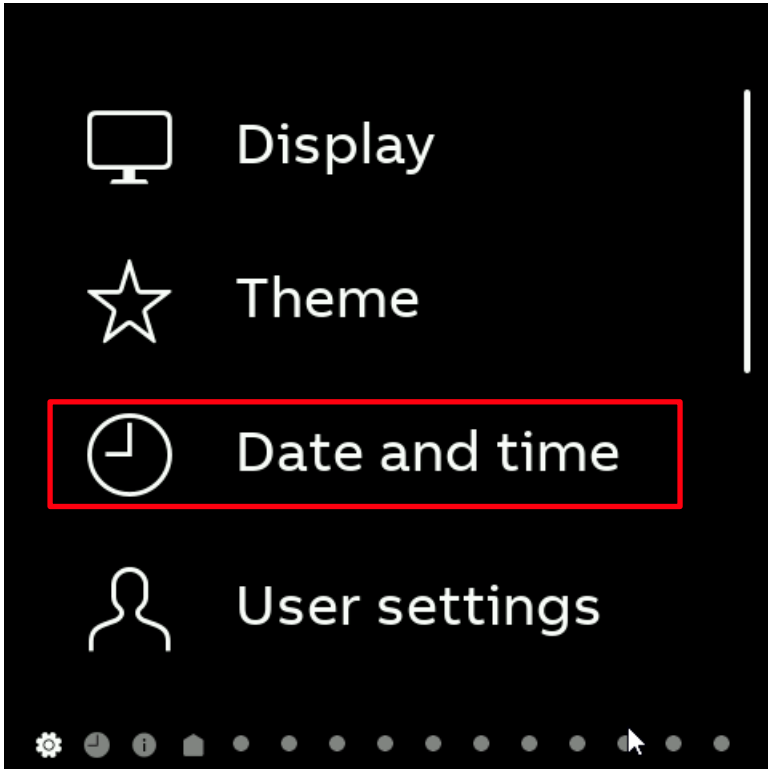


ABB RoomTouch® 4” and ABB Trevion®

System Settings

Date and Time

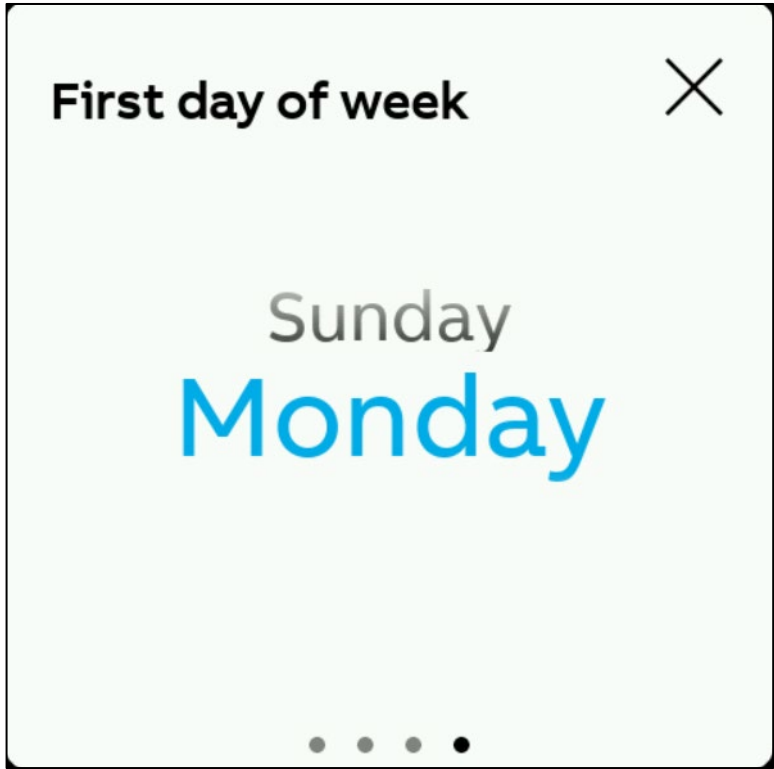
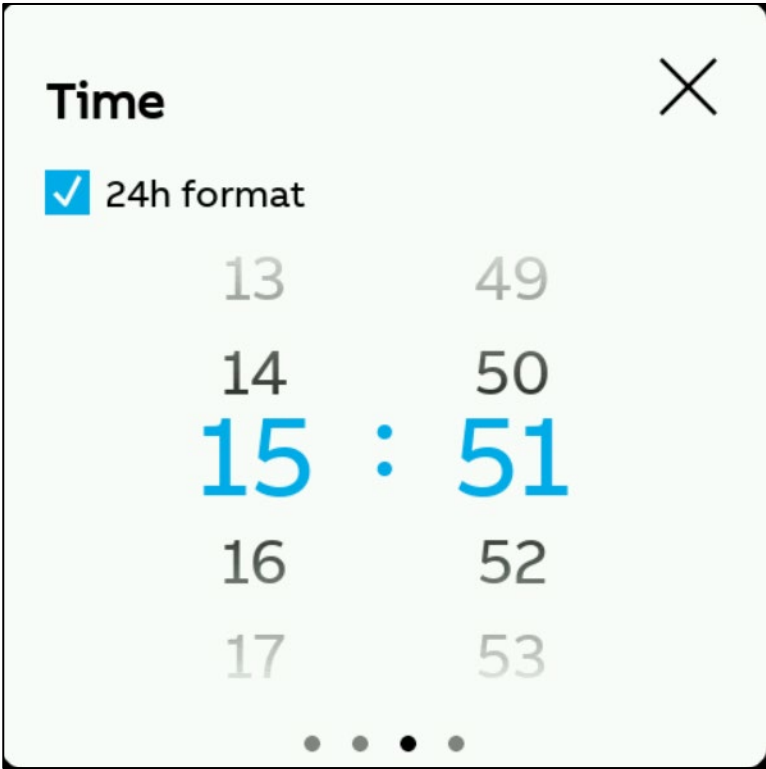
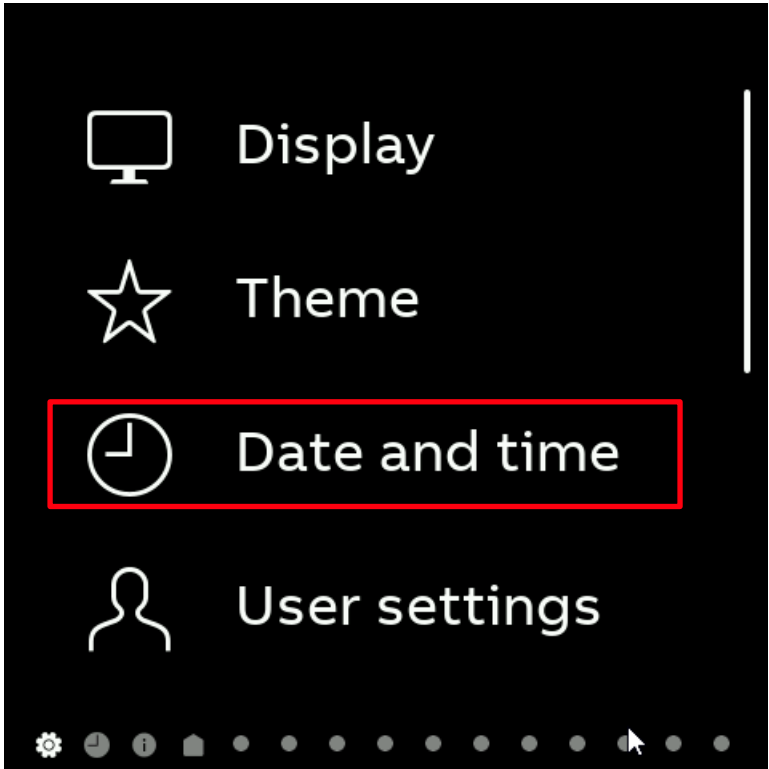


ABB RoomTouch® 4” and ABB Trevion®

System Settings

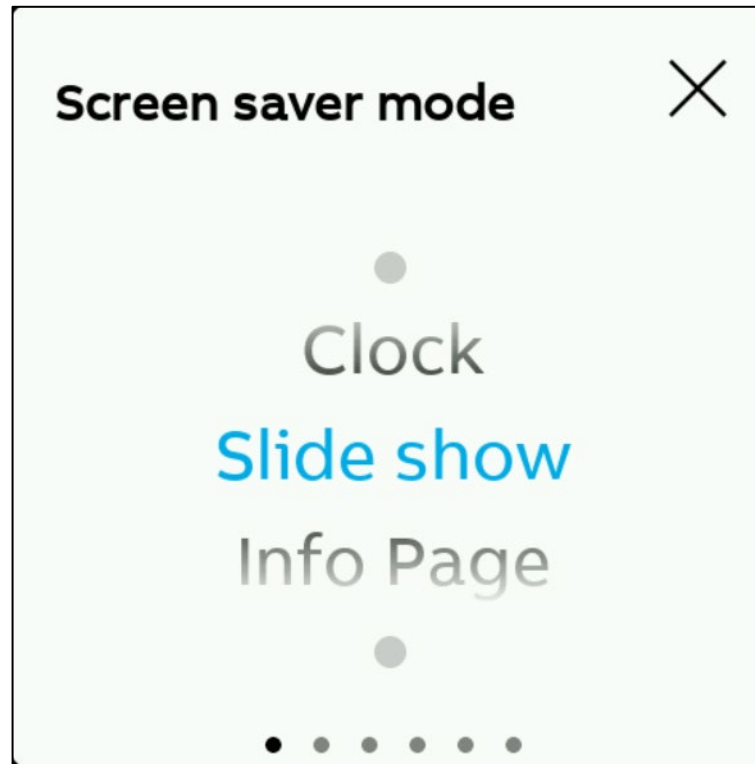
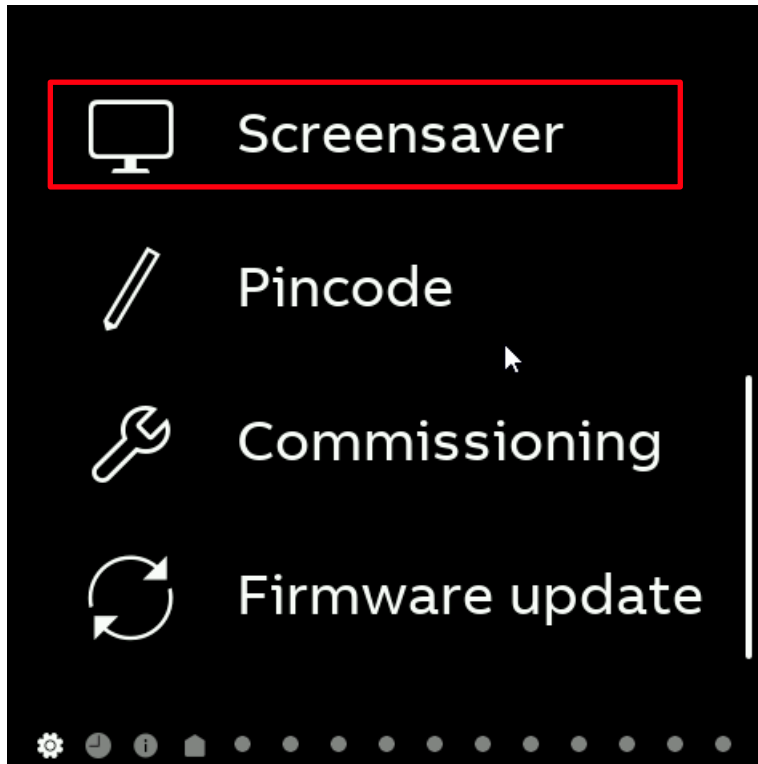
User Settings (Language)



ABB RoomTouch® 4" and ABB Trevion®

System Settings

Screensaver



... further adjustments how to present the screen saver like...

- Slide transition effect
- Slide interval
- Slide order
- Start after ... min
- Display off after ... min

ABB RoomTouch® 4” and ABB Trevion®

System Settings

Pincode

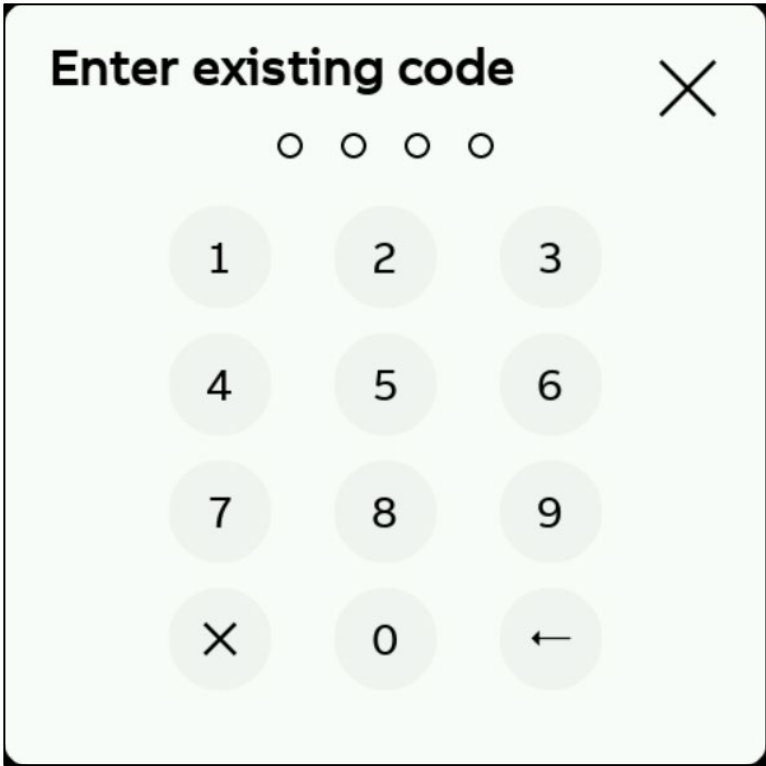


ABB RoomTouch® 4" and ABB Trevion®

System Settings

Commissioning

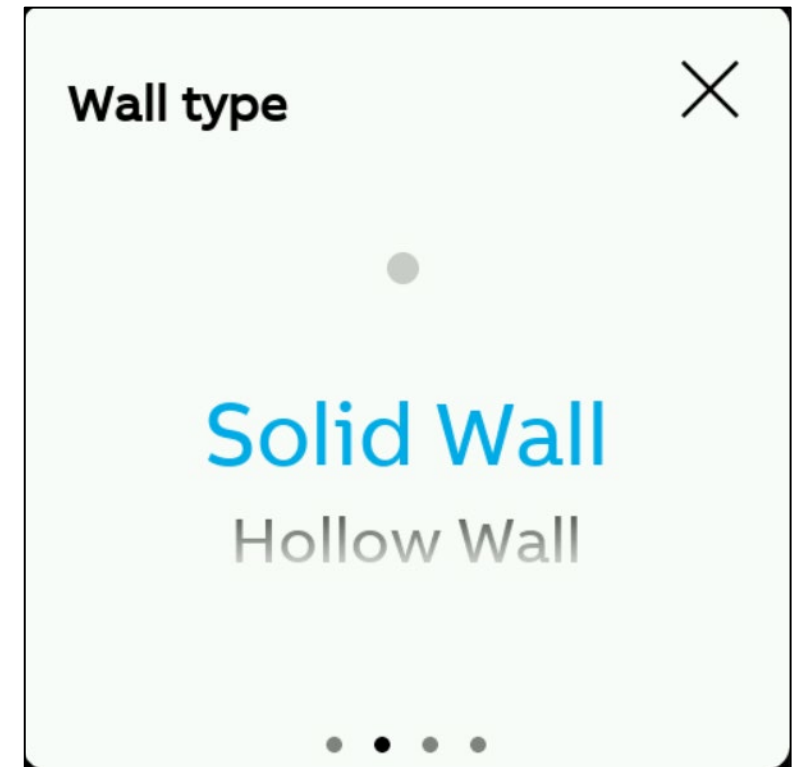
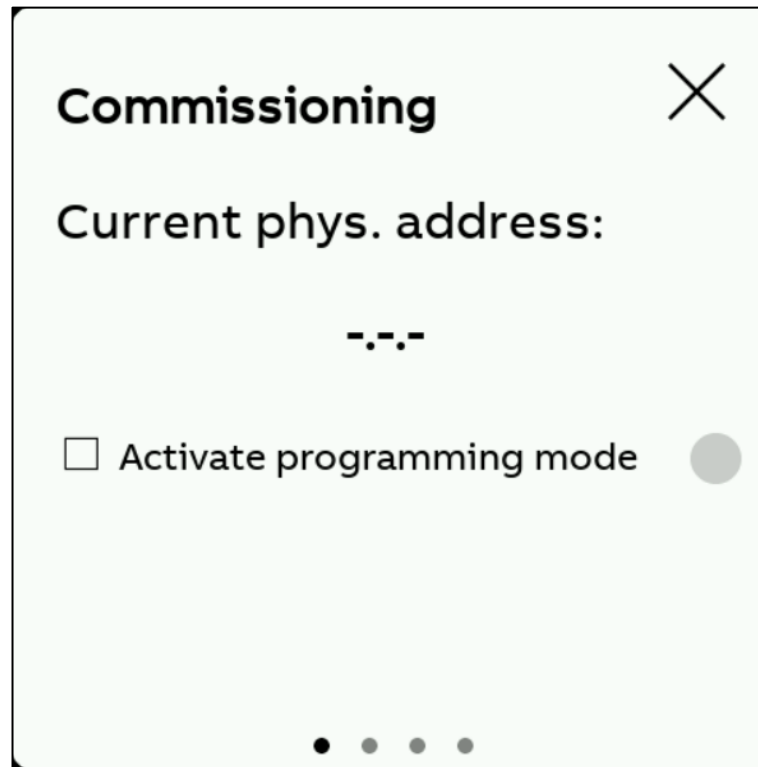
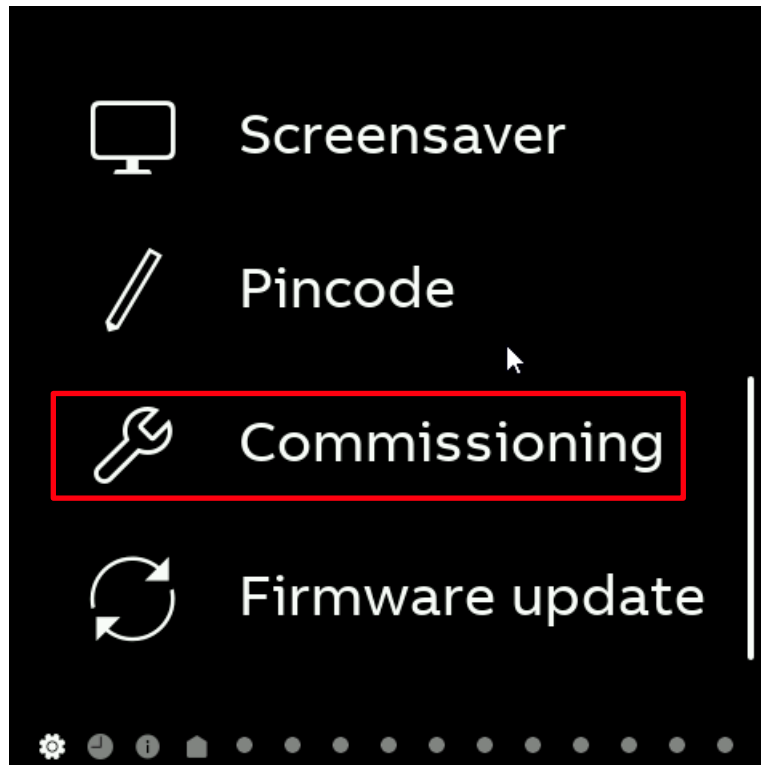


ABB RoomTouch® 4" and ABB Trevion®

System Settings

Commissioning

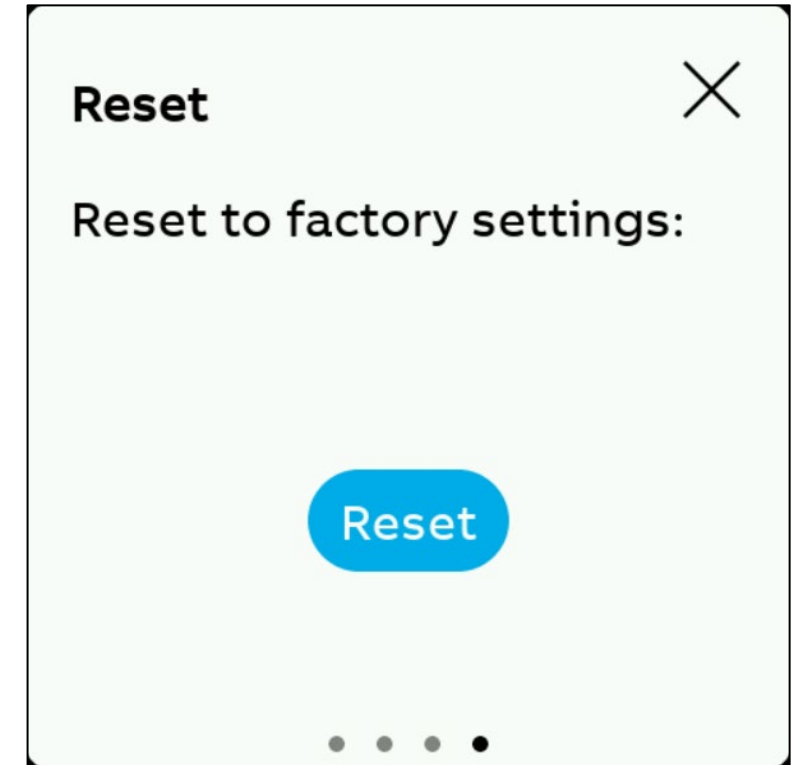
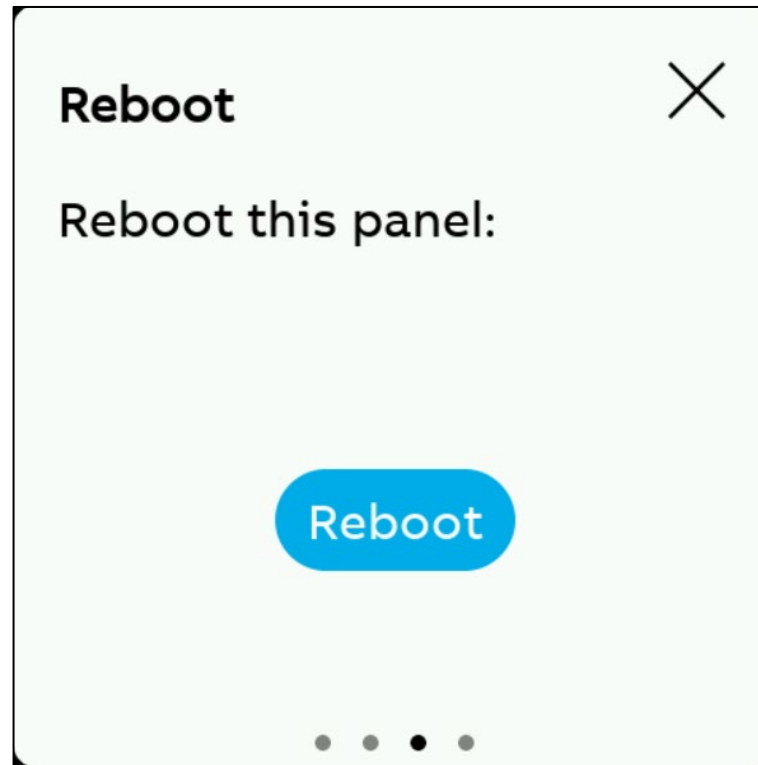
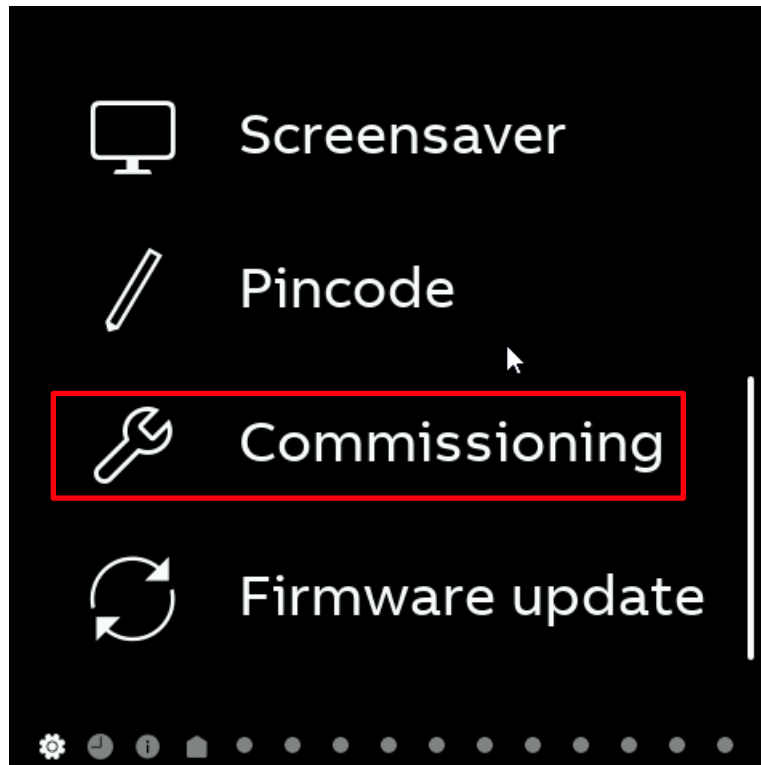


ABB RoomTouch® 4” and ABB Trevion®

System Settings

Firmware update



ABB RoomTouch® 4” and ABB Trevion®

System Settings

About

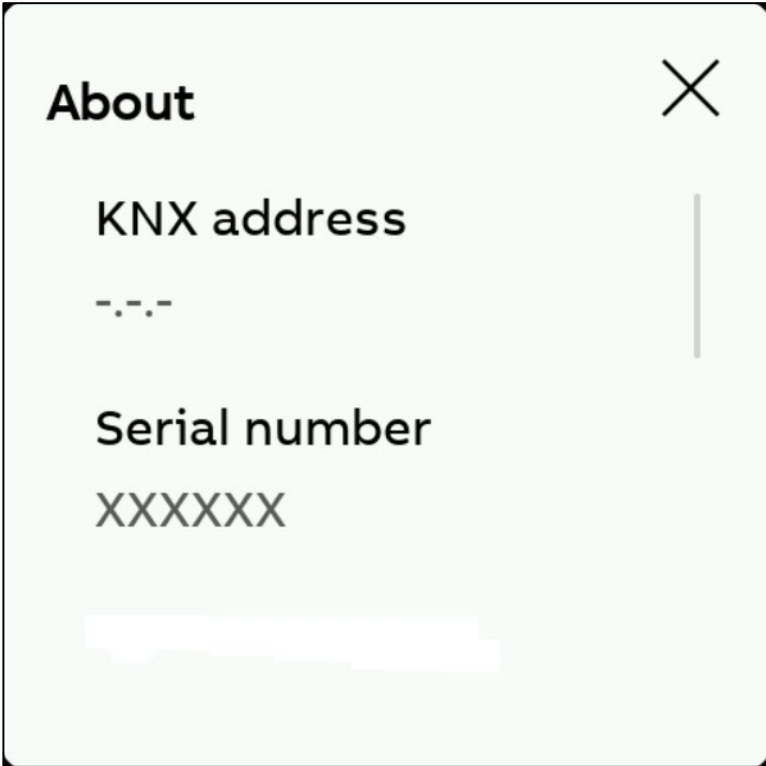
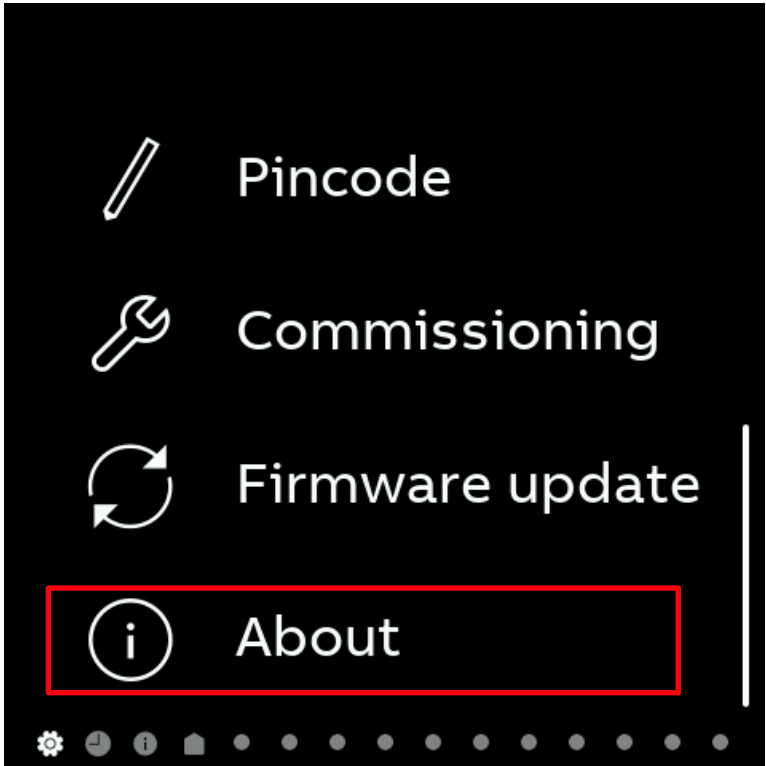
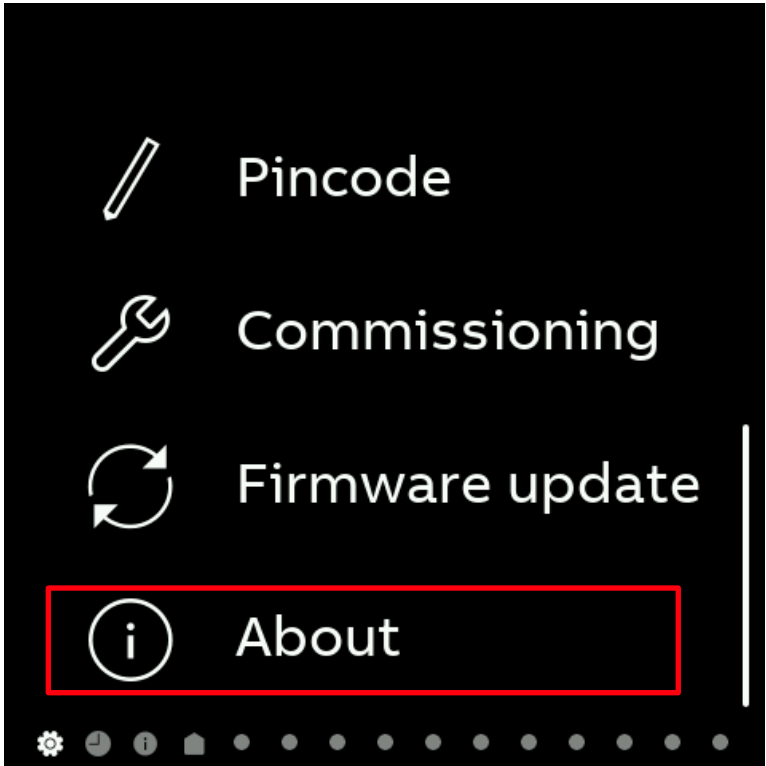


ABB RoomTouch® 4” and ABB Trevion®

System Settings

About



DMC – Access product page with ABB Product Scanner App

QR CODE – FDSK for KNX Data Secure

ABB RoomTouch® 4” and ABB Trevion®

Time Functions

Timer

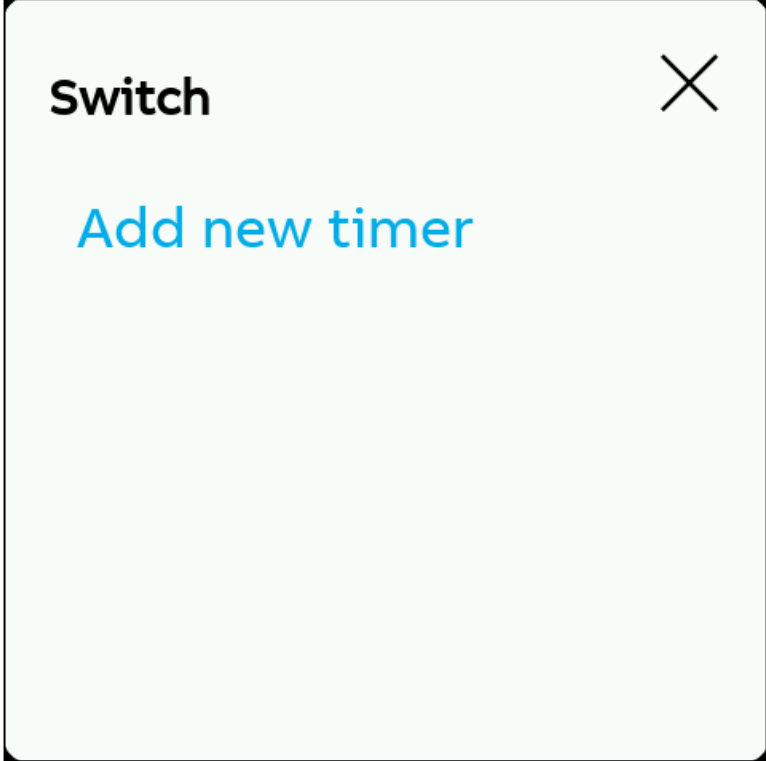
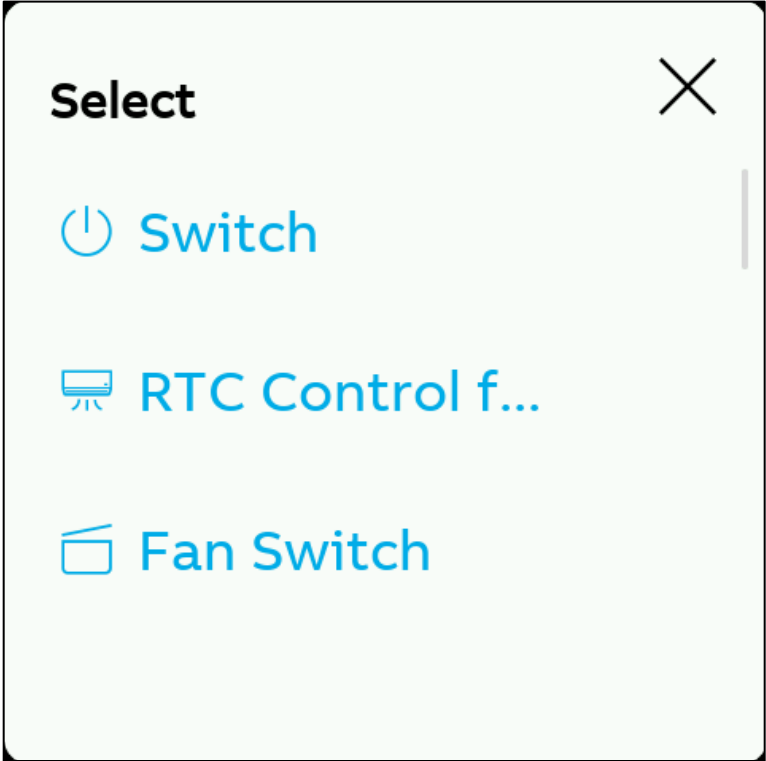
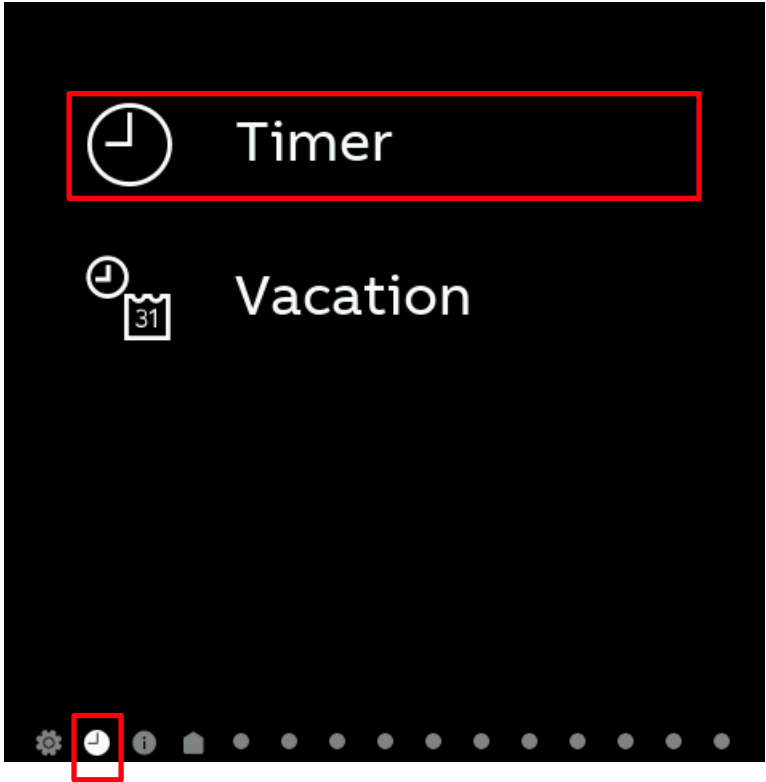


ABB RoomTouch® 4” and ABB Trevion®

Time Functions

Timer

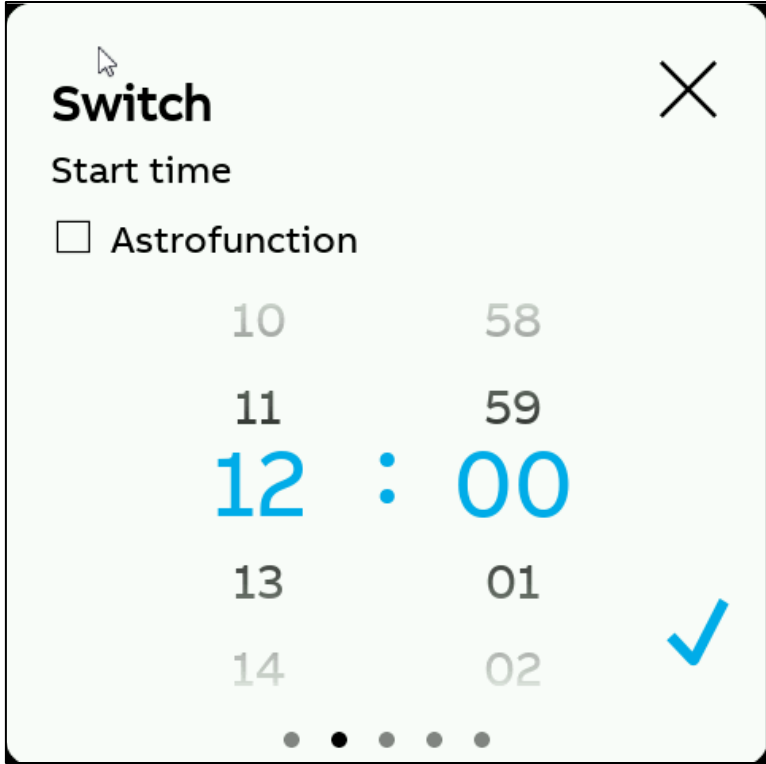
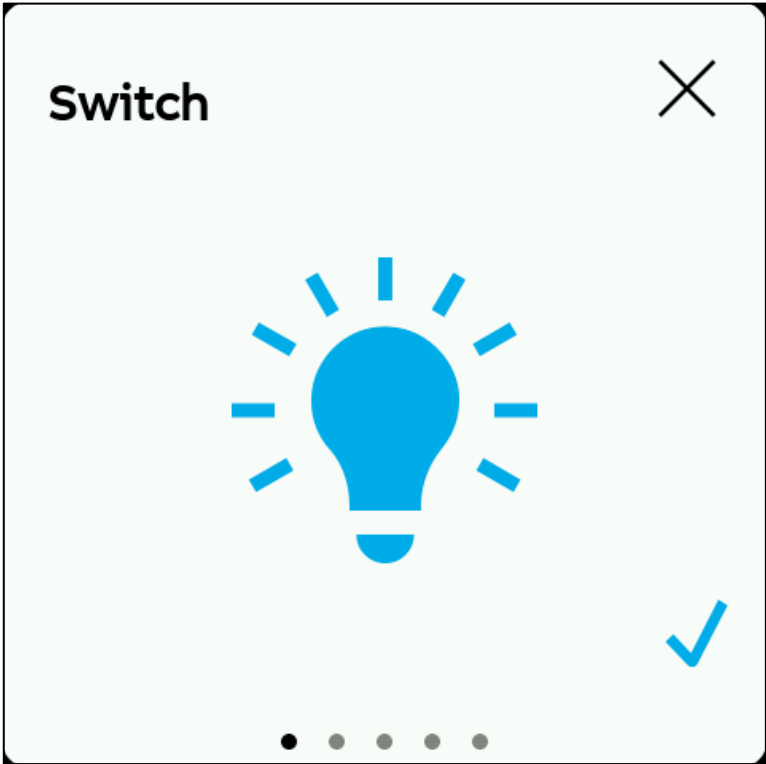
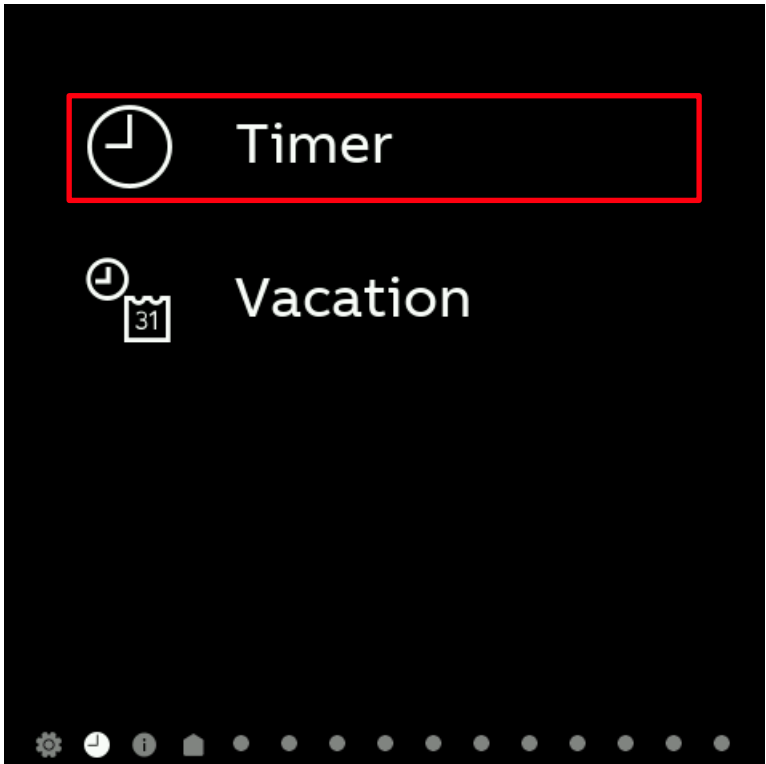


ABB RoomTouch® 4” and ABB Trevion®

Time Functions

Timer

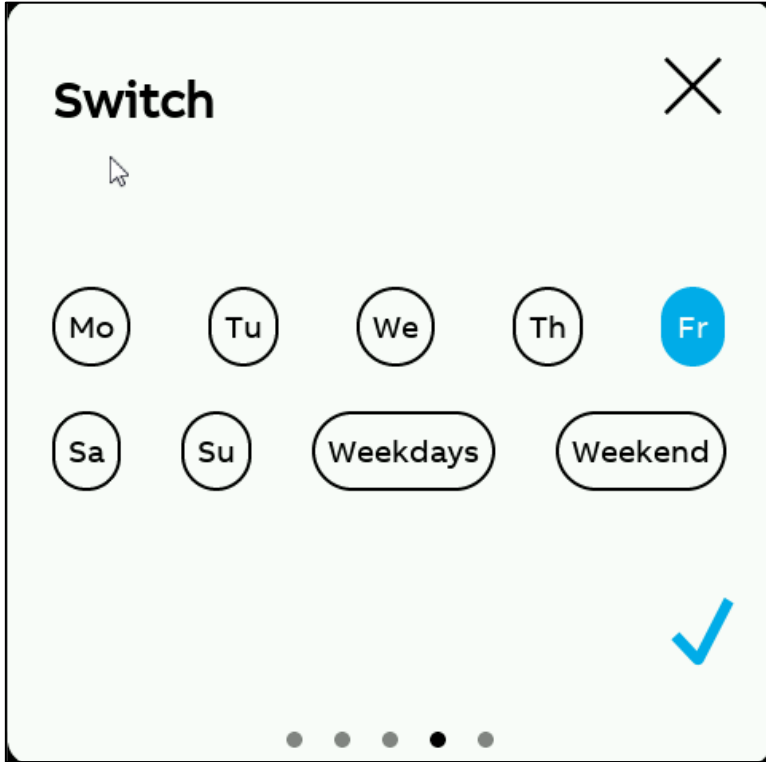
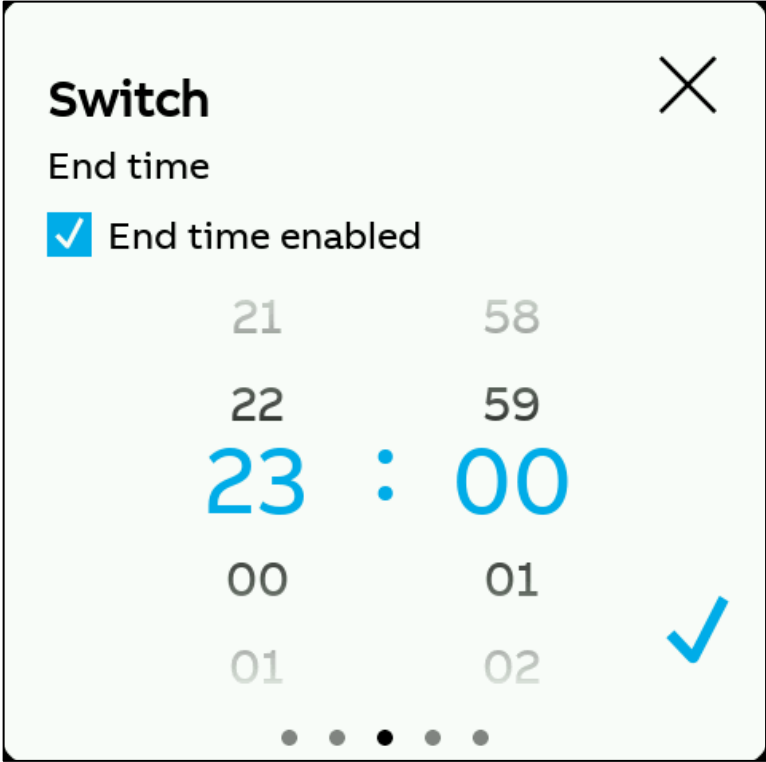
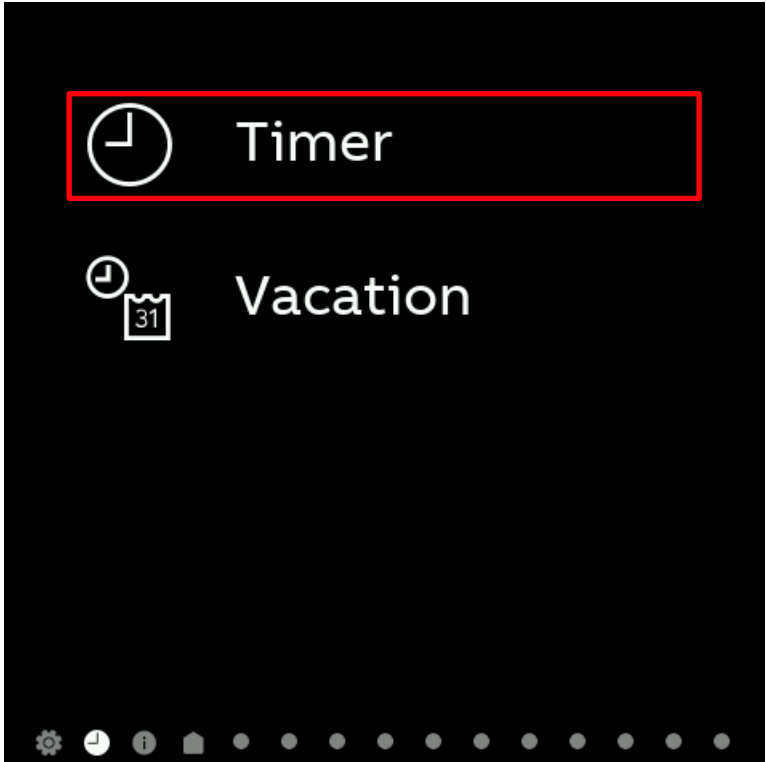


ABB RoomTouch® 4” and ABB Trevion®

Time Functions

Timer

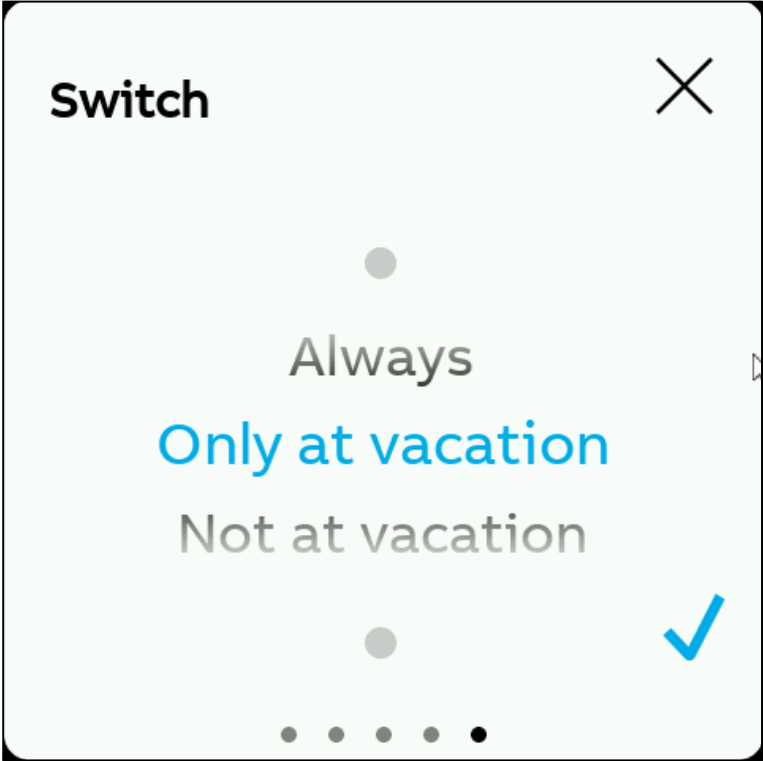
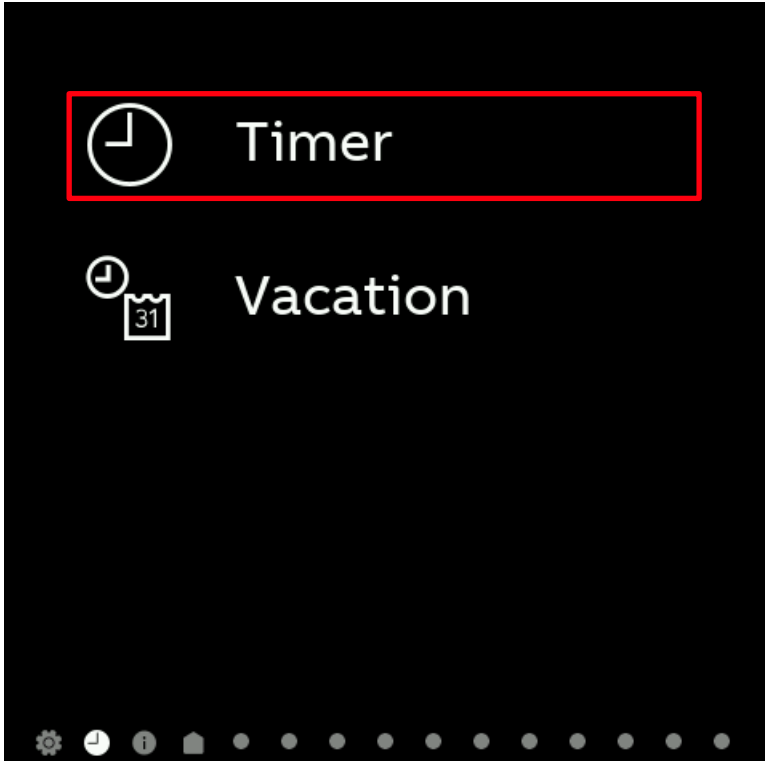


ABB RoomTouch® 4” and ABB Trevion®

Time Functions

Vacation

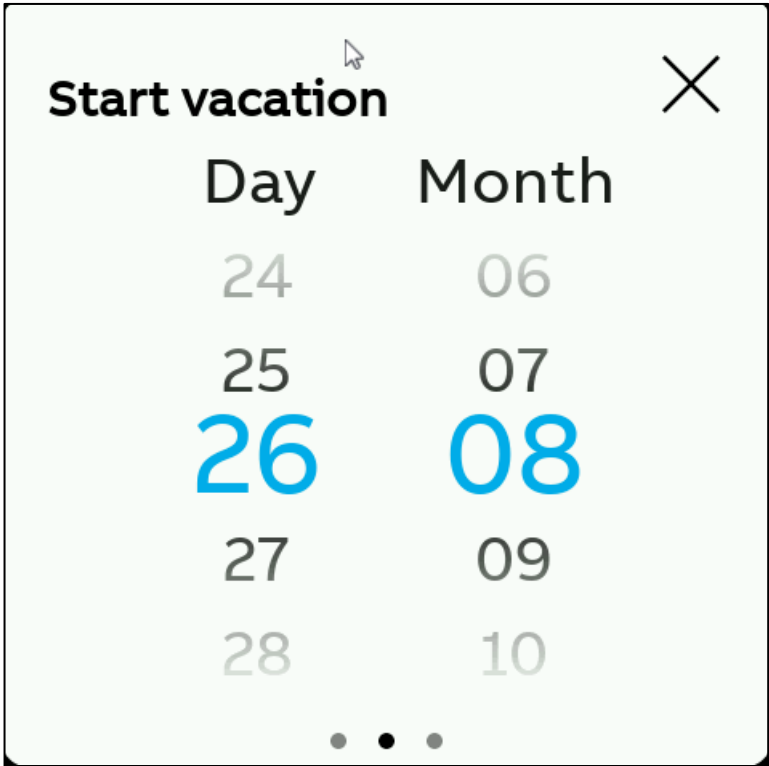
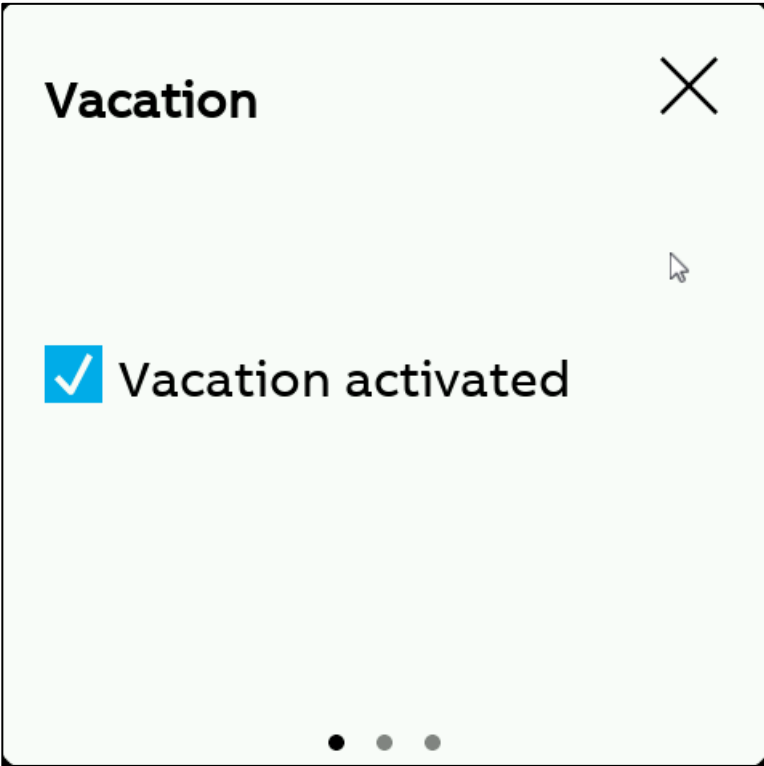
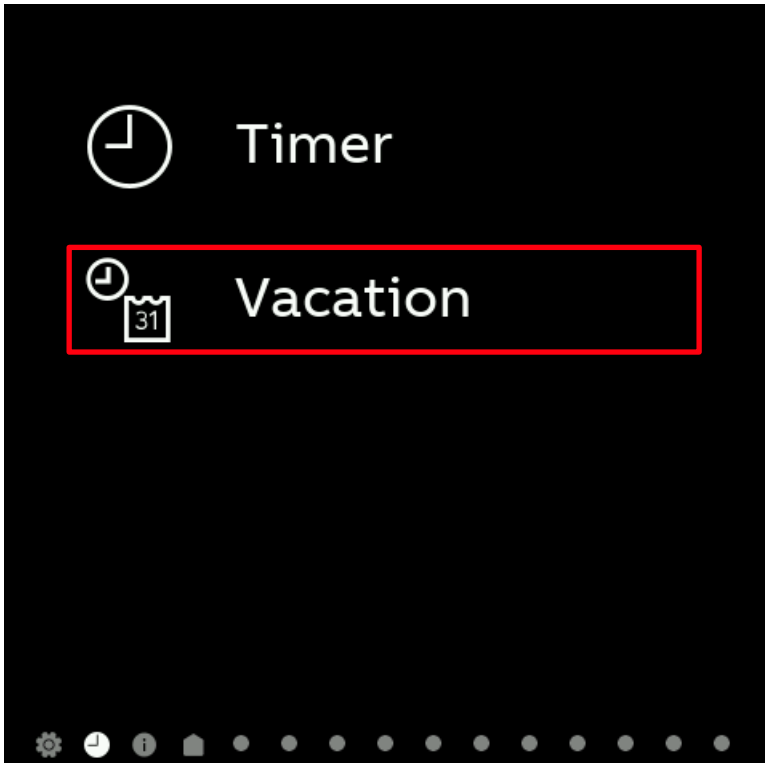


ABB RoomTouch® 4” and ABB Trevion®

Time Functions

Vacation

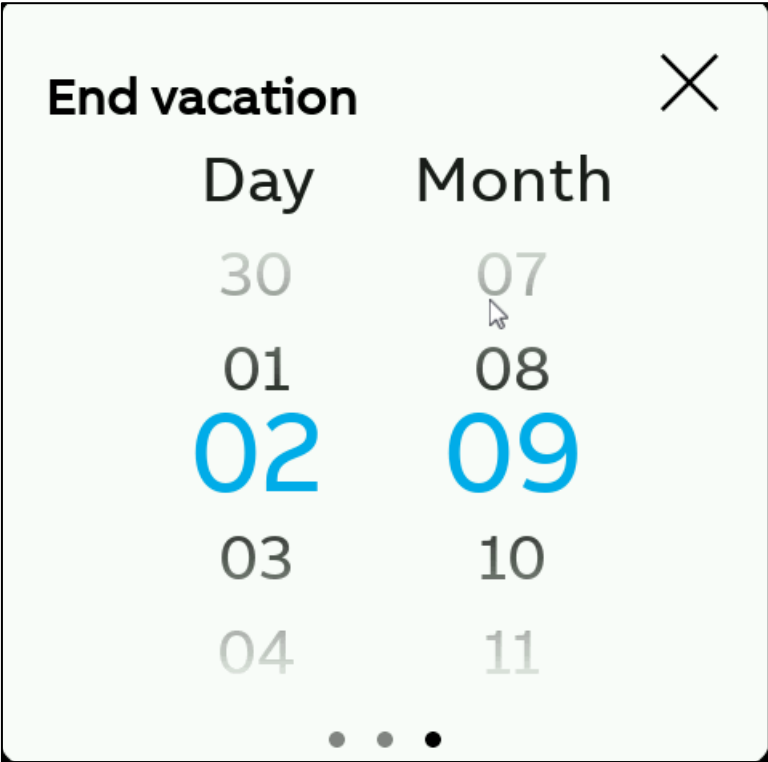
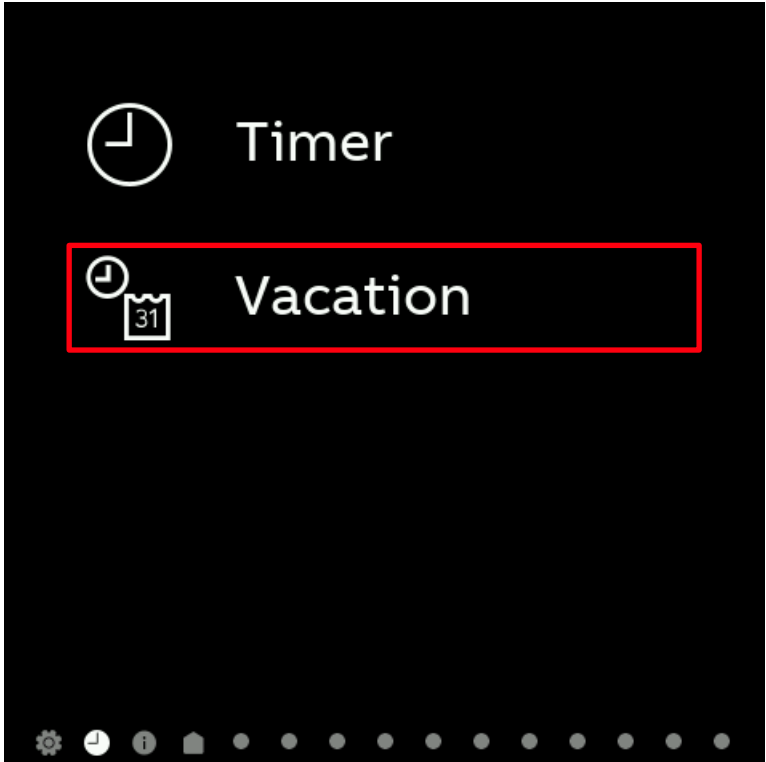


ABB RoomTouch® 4” and ABB Trevion®
Information Page

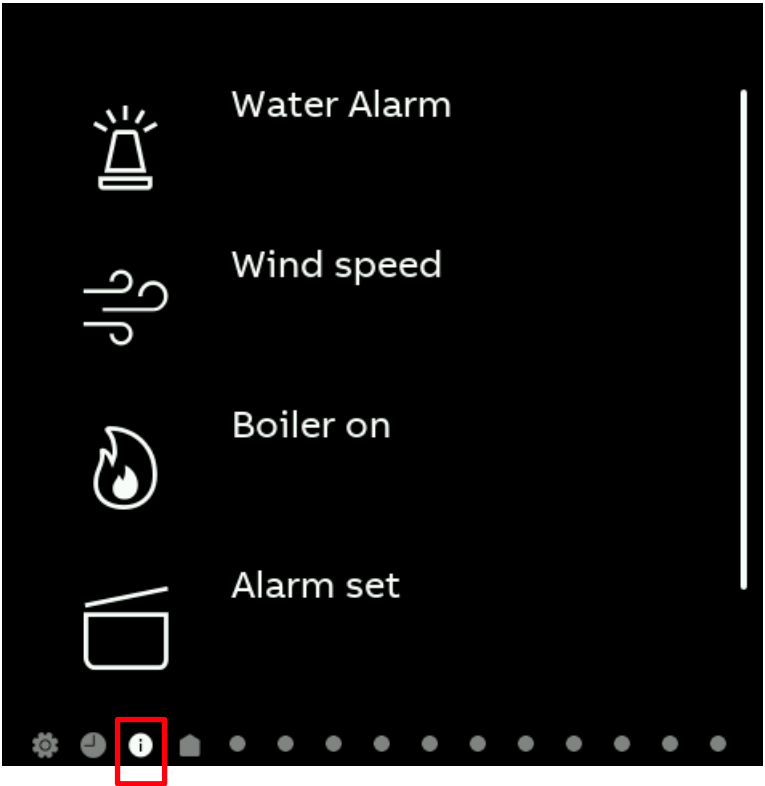


ABB RoomTouch® 4” and ABB Trevion®

Overview Pages

System settings, time functions, homepage and up to 11 pages

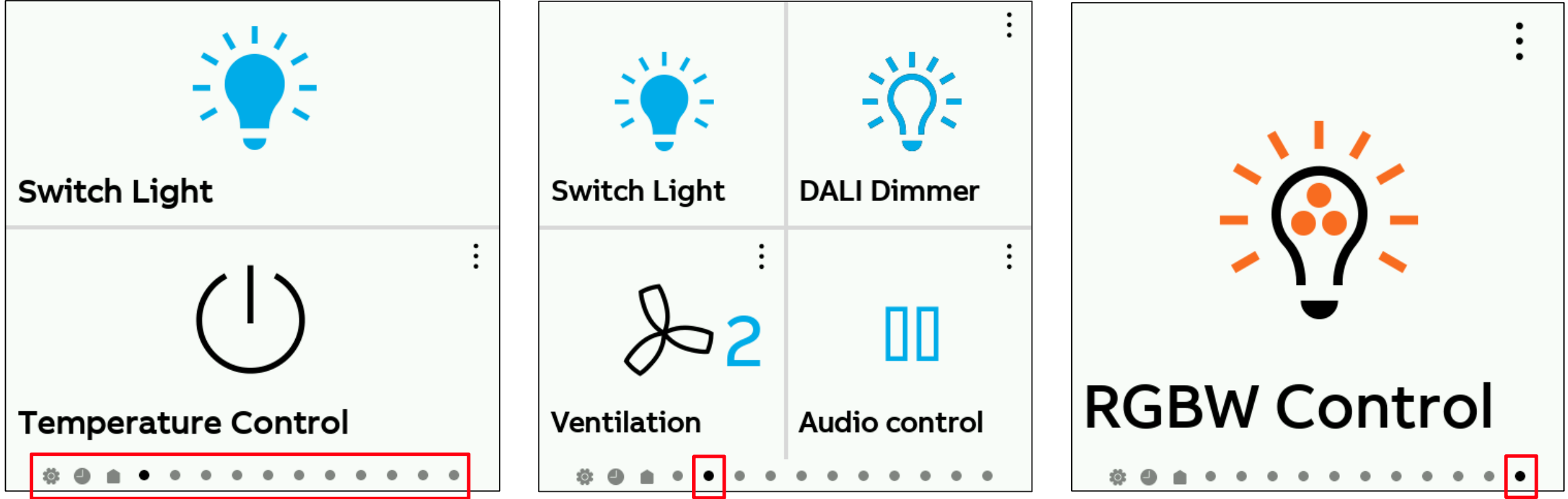


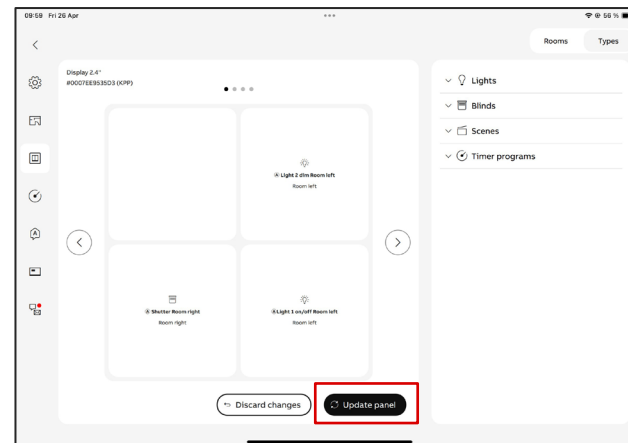
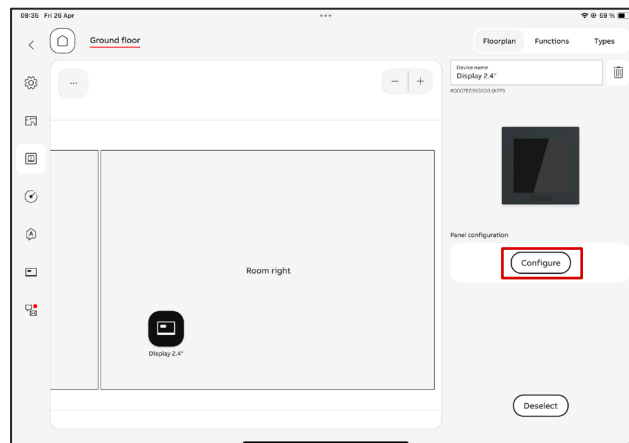
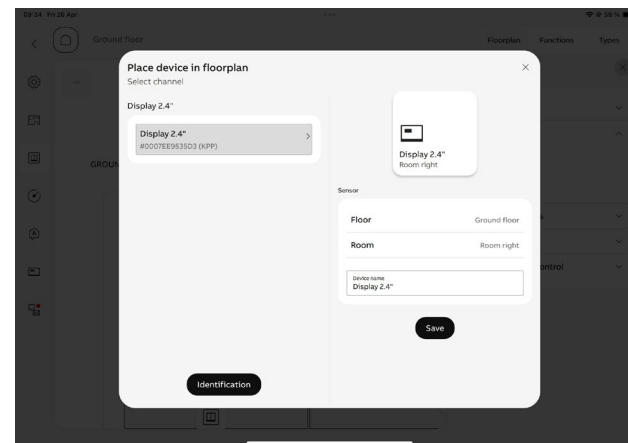
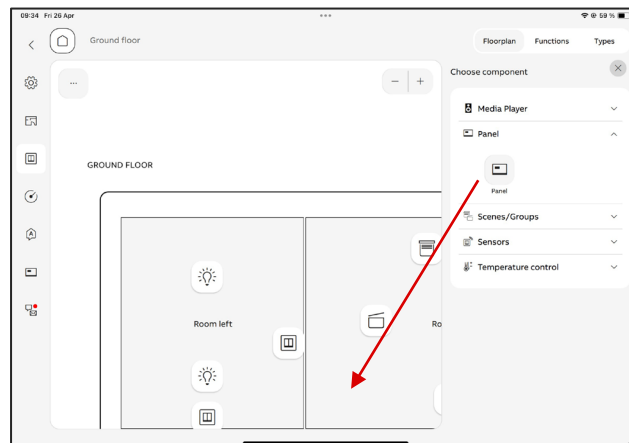
ABB-free@home®

ABB RoomTouch® 4" and ABB Trevion®

ABB-free@home® Integration

ABB-free@home®

- Both devices can be used as well in with free@home
- Standard mode when turned on is ABB i-bus® KNX
- Under 'System Settings/ Reset System Selection' it can be changed to free@home and vice versa, available 30min after start of the device
- Connect the device to a free@home installation and configure the device as usual
 - Device is in free@home automatically detected, add the panel to your project
 - Go to 'Configure' and select the function to assign via drag and drop
 - Update the panel - Ready
- Up to 16 functions on 4 pages
- Each page up to 4 functions



Commercial Aspects

ABB RoomTouch® 4” and ABB Trevion®

Commercial Aspects

Overview with Order Details – ABB RoomTouch® 4”

Frame	ABB		Busch-Jaeger	
Black	RT/U12.86.1-825	2TMA310011B0003	RT/U12.86.11-825	2TMA310010B0004
White	RT/U12.86.1-811	2TMA310011W0001	RT/U12.86.11-811	2TMA310010W0001
Anti-theft protection	TZE/U.0.1.CK	2CKA006300A1633	TZE/U.0.11.CK	2CKA006300A1632
Anti-theft protection tool	TZW/U.0.1.CK	2CKA006300A1611	TZW/U.0.11.CK	2CKA006300A1610



ABB RoomTouch® 4” and ABB Trevion® Commercial Aspects

Overview with Order Details – ABB Trevion® Display 2.4”

Dimension	ABB		Busch-Jaeger	
55 x 55mm	SD/U12.55.1-825	2TMA310011B0001	SD/U12.55.11-825	2TMA310010B0001
63 x 63mm	SD/U12.63.1-825	2TMA310011B0002	SD/U12.63.11-825	2TMA310010B0003
70 x 70mm	SD/U12.70.1-4015	2TMA310011B0004	SD/U12.70.11-4015	2TMA310010B0006
Anti-theft protection	TZE/U.0.1.CK	2CKA006300A1633	TZE/U.0.11.CK	2CKA006300A1632
Anti-theft protection tool	TZW/U.0.1.CK	2CKA006300A1611	TZW/U.0.11.CK	2CKA006300A1610

Don't forget the frames, are to be ordered separately

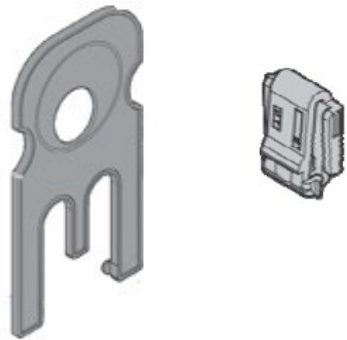


ABB Trevion® Keypad

ABB RoomTouch® 4" and ABB Trevion®

ABB i-bus® KNX – History of design ranges

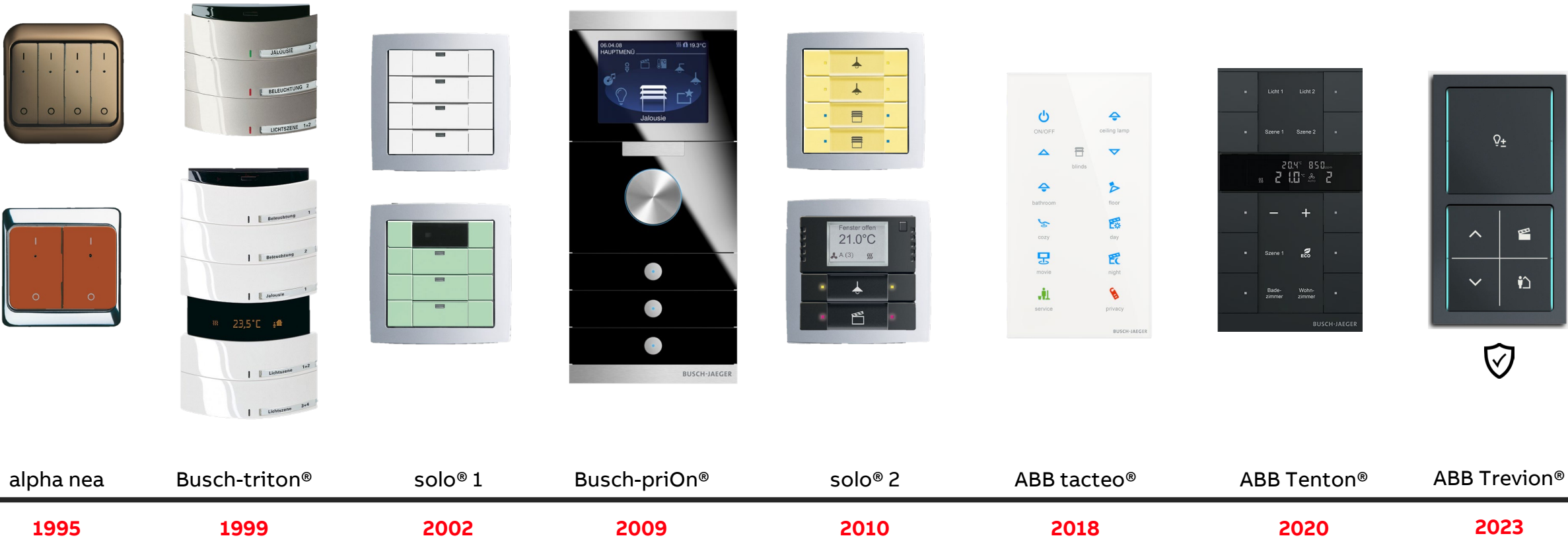


ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad

Introduction

- ABB Trevion® Keypad is the new and modern control element that is compatible with
 - ABB-free@home®
 - ABB flexTronics®
 - ABB i-bus® KNX
- ABB Trevion® combines a modern, flat and straight design with flexibility and functionality
- With a new and modern operating concept based on capacitive surfaces in conjunction with LED light guides, ABB Trevion® creates a completely new operating experience
- ABB Trevion® can be color-integrated into many design ranges

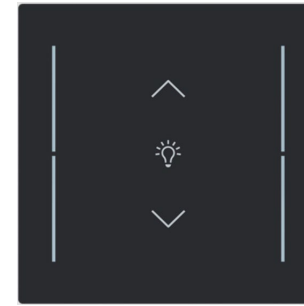


ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad KNX

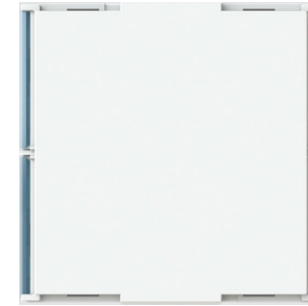
Product Overview

- The design cover with keypad and KNX bus coupler results in a multifunctional control element with different performance features for controlling building functions in ABB i-bus® KNX systems
- Various functions can be controlled
 - Lighting control
 - Blind and shutter control
 - Heating & air-conditioning
 - Scenes
- New usability concept
 - No mechanical push buttons → capacitive surface
 - Operation via touch as usual (on/off, up/down, short/long, ...)
 - Operation via swiping , e.g. dimming or blind control
 - Horizontal or vertical rockers



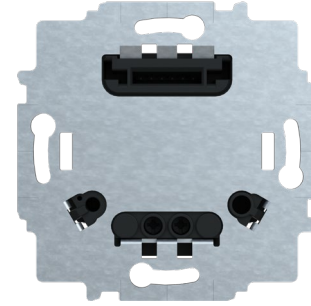
Design Cover

+



Keypad

+



KNX Bus Coupler



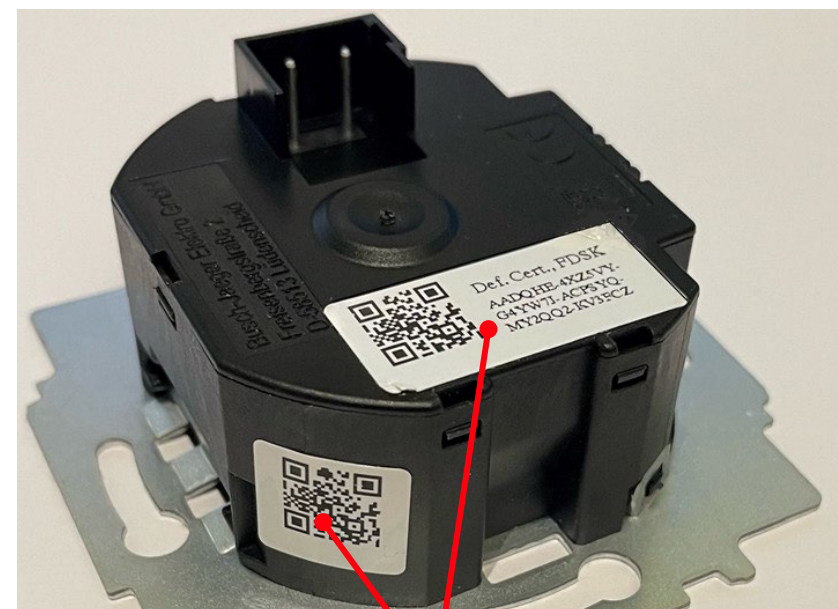
ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad KNX

Product Overview

KNX Data Secure

- The ABB RoomTouch® 4", ABB Trevion Display and Keypad are "KNX Data Secure" devices
- A secure device can communicate with both secure and plain group addresses
 - A secure group address can only be linked with secure group objects
 - A plain group address can only be linked with standard group objects
- The KNX Bus Coupler is delivered with a "Device Certificate"
- Further information
 - KNX Association <https://knxsecure.knx.org>
 - ABB Training & Qualification Database: Webinar "KNX Data Secure"
[→ Link PDF](#) [→ Link Video](#)



Device Certificate

ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad KNX

Product Overview

The ABB Trevion® Keypads can be configured flexibly as a 1-fold up to 4-fold touch sensor with

- Animated light guide with RGB color concept
- Orientation light
- Day/night mode
- Optical and acoustic alarm function
- Primary function
- Blocking of individual operating areas
- Acoustic feedback
- Internal temperature sensor
- Additional functions (logic gates, sequencer, min/max, ...)
- ... and more



ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad KNX

Product Overview

- These parts are required for the complete control element
 - Design Cover
 - Keypad
 - Removal protection (optional)
 - Design frame e.g. future® linear
 - KNX Bus Coupler



ABB RoomTouch® 4” and ABB Trevion®

ABB Trevion® Keypad KNX

Product Overview

- The following design covers are available
 - without icons in the desired colour
 - with standard icons and in the desired colour directly from the catalogue
 - individually labelled via web configurator and can be ordered in the desired colour via the generated design ID
- Keypad and design cover must be ordered separately
- A removal protection is available as an accessory

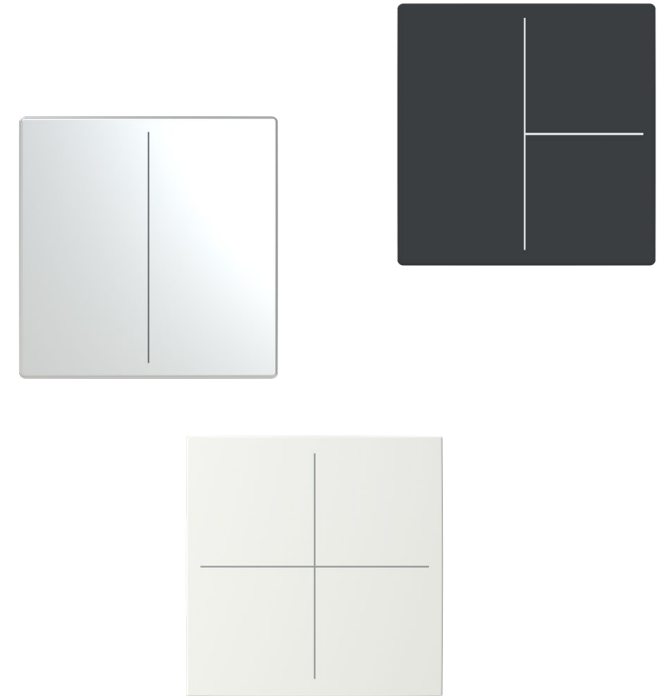


ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad KNX

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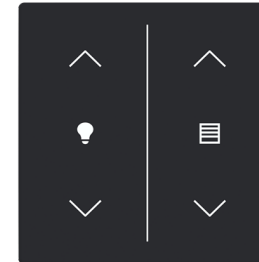


ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad KNX

Product Overview

- The following design covers are available
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- Keypad and design cover must be ordered separately
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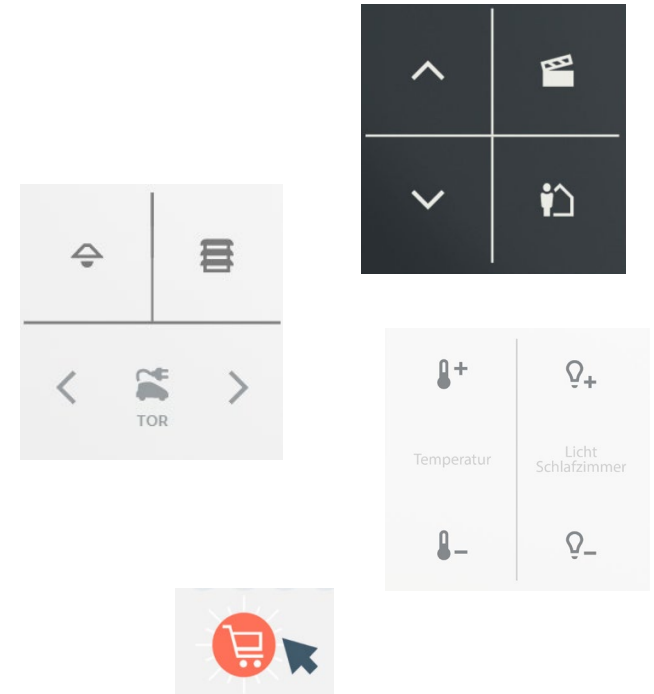


ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad KNX

Product Overview

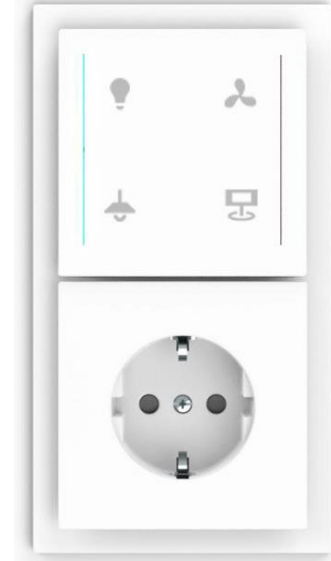
- Depending on the type of keypad selected, the use with different design lines from ABB range is possible
- The dimensions of the keypad depend on the selected design
 - KK/U4.55.1: 55mm
Busch-art Balance® SI, ABB SAGA
 - KK/U4.63.1: 63mm
future® linear, Solo®, Carat®, Pure stainless steel, Busch-axcent®, Dynasty®
 - KK/U4.70.1: 70mm
Busch-art linear®, ALBA



55mm e.g.
Busch-balance® SI



63mm e.g.
future® linear



70mm e.g.
Busch-art linear®

ABB RoomTouch® 4” and ABB Trevion®

ABB Trevion® Keypad KNX

Can be flexibly parameterized as...

- 1-gang button or 1-gang rocker horizontal
- 1-gang button or 1-gang rocker vertical
- 2-gang button or 2-gang rocker vertical
- 2-gang button or 2-gang rocker horizontal
- 3-gang button or 2-gang button & 1-gang rocker horizontal
- 3-gang button or 2-gang button & 1-gang rocker vertical
- 4-gang button

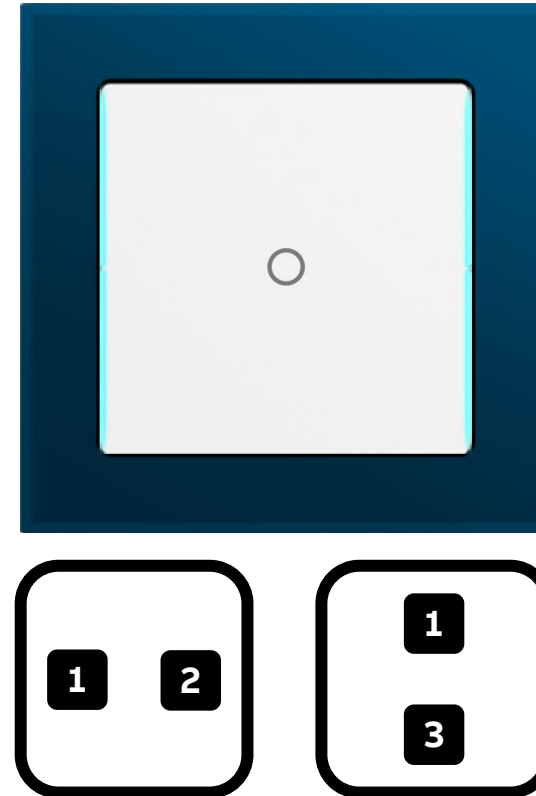


ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad KNX

Can be flexibly parameterized as...

- 1-gang button or 1-gang rocker horizontal
- 1-gang button or 1-gang rocker vertical
- 2-gang button or 2-gang rocker vertical
- 2-gang button or 2-gang rocker horizontal
- 3-gang button or 2-gang button & 1-gang rocker horizontal
- 3-gang button or 2-gang button & 1-gang rocker vertical
- 4-gang button

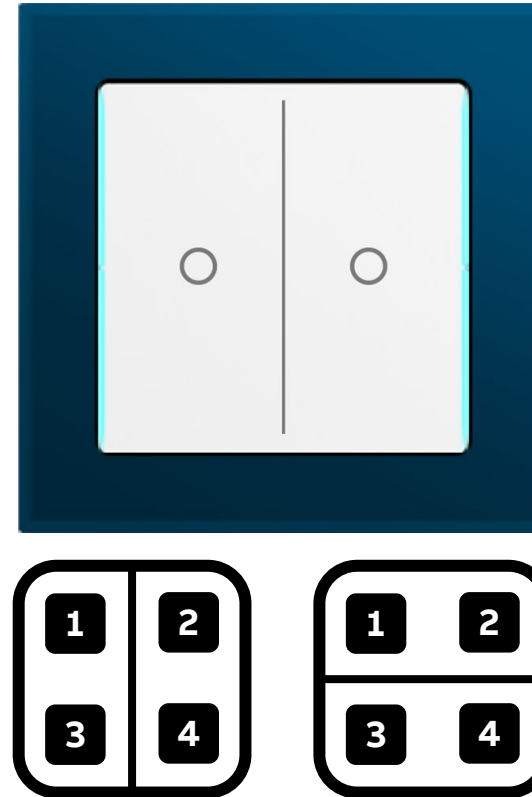


ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad KNX

Can be flexibly parameterized as...

- 1-gang button or 1-gang rocker horizontal
- 1-gang button or 1-gang rocker vertical
- 2-gang button or 2-gang rocker vertical
- 2-gang button or 2-gang rocker horizontal
- 3-gang button or 2-gang button & 1-gang rocker horizontal
- 3-gang button or 2-gang button & 1-gang rocker vertical
- 4-gang button

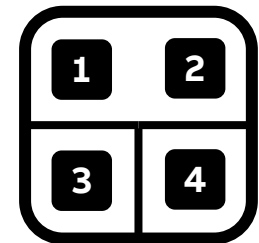
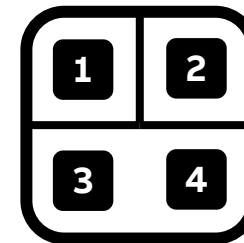
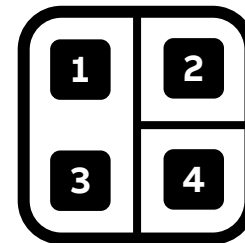
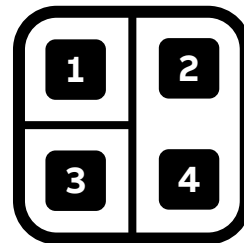
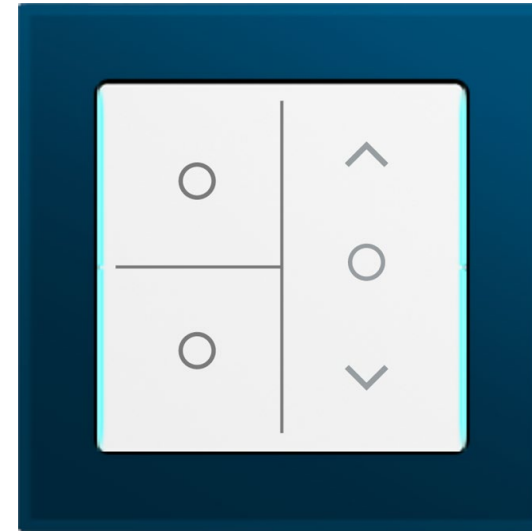


ABB RoomTouch® 4” and ABB Trevion®

ABB Trevion® Keypad KNX

Can be flexibly parameterized as...

- 1-gang button or 1-gang rocker horizontal
- 1-gang button or 1-gang rocker vertical
- 2-gang button or 2-gang rocker vertical
- 2-gang button or 2-gang rocker horizontal
- 3-gang button or 2-gang button & 1-gang rocker horizontal
- 3-gang button or 2-gang button & 1-gang rocker vertical
- 4-gang button

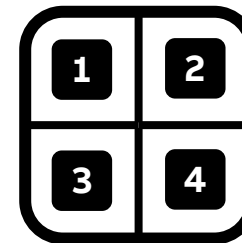
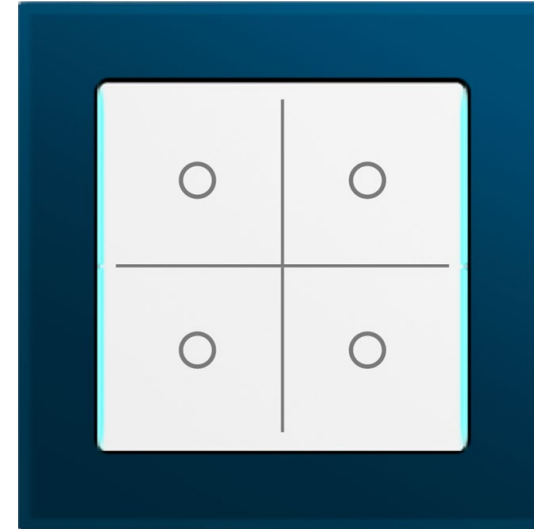


ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad KNX

ETS Parameter

- Configuration

5.7.7 Trevion KK/U Keypad 4-fold > Configuration

Configuration

Layout: Layout 9



Configuration

	Application	Description
Primary function	deactivated	
Operating area 1	Switch	
Operating area 2	Switch	
Operating area 3	Switch	
Operating area 4	Switch	
Sensor	☒ deactivated ☐ Temperature sensor	
Function 1	deactivated	
Function 2	deactivated	
Function 3	deactivated	
Function 4	deactivated	
Function 5	deactivated	

Layout 5

- Layout 1
- Layout 2
- Layout 3
- Layout 4
- Layout 5 ✓
- Layout 6
- Layout 7
- Layout 8
- Layout 9

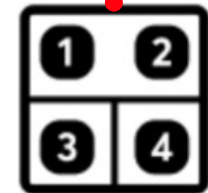


ABB RoomTouch® 4” and ABB Trevion®

ABB Trevion® Keypad KNX

ETS Parameter

- Device settings

5.7.7 Trevion KK/U Keypad 4-fold > Device settings > ...

Configuration

Device settings

Device settings

Device settings

Operating area 1/3:

Operating area 1/3:

LED 1/3

Operating area 2/4:

Device settings

Enable Group Object "In operation" No

LED settings

User color 1 #90E740

User color 2 #F363D4

User color 3 #79C4E9

User color 4 #E9D624

Enable day/night switching

LED brightness 100%

Enable orientation light

Enable alarm function

Acoustic feedback

Key tones Quiet

Touch sensitivity

Operating area high

#90E740

R 144

G 231

B 64

H 91 °

S 72 %

V 90 %

ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad KNX

ETS Parameter

- Configuration
→ Touch operation “Switch”

5.7.7 Trevion KK/U Keypad 4-fold > Configuration

Configuration Layout Layout 9

+ Device settings

+ Operating area 1: Light - ceiling

+ Operating area 2: Light - wall

+ Operating area 3: Socket outlet

+ Operating area 4: xyz

Configuration

	Application	Description
Primary function	deactivated	
Operating area 1	Switch	Light - ceiling
Operating area 2	Switch	Light - wall
Operating area 3	Switch	Socket outlet
Operating area 4	Switch	xyz
Sensor	☒ deactivated ☐ Temperature sensor	
Function 1	deactivated	
Function 2	deactivated	
Function 3	deactivated	
Function 4	deactivated	
Function 5	deactivated	

Switch

Blind/Shutter

Switch/Dim

Scenes

Switching sequence

Send value/Multiple operation

deactivated

Numt	Linked wit	Name	Object Function
14		Operating area 1 - Switch	Switch
23		LED 1 - LED RGB: Light - ceiling	LED status

ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad KNX

ETS Parameter

- Configuration
→ Touch operation "Switch"



5.7.7 Trevion KK/U Keypad 4-fold > Operating area 1: > Operating area 1:

Configuration	Switch
+ Device settings	
- Operating area 1:	
Operating area 1:	
LED 1	
+ Operating area 2:	
+ Operating area 3:	
+ Operating area 4:	

Distinction between short and long operation	☐
Reaction on touch	Toggle
Reaction on release	No reaction
Extended settings	☒
Block operating area	On value 1
State after ETS download or bus voltage recovery	Last state

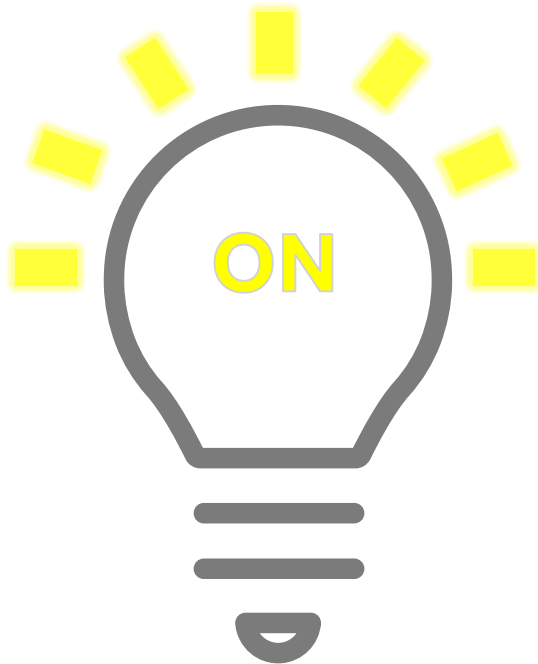
ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad KNX

Touch operation "Switch"

ETS Parameter "LED"

- Standard colors and four customizable RGB colors
- Function illumination
- Status illumination
 - 1-bit
 - 1-byte (five zones)



Switch ON (toggle)



ETS Parameter "Operating"

- Reaction on touch and release
- Distinction between short and long

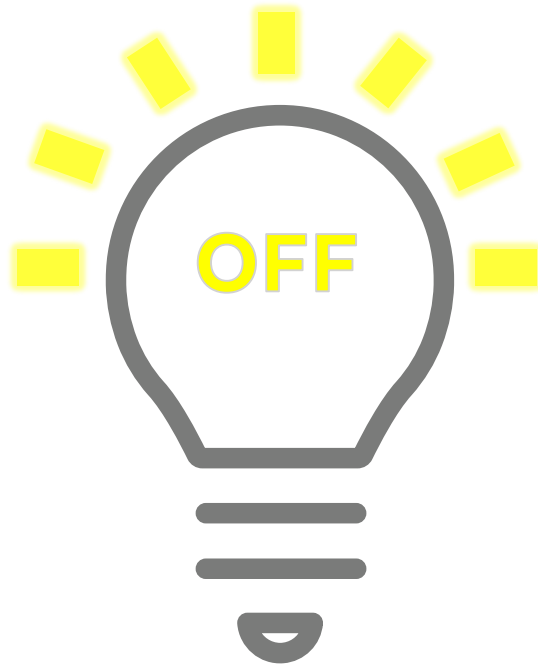
ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad KNX

Touch operation "Switch"

ETS Parameter "LED"

- Standard colors and four customizable RGB colors
- Function illumination
- Status illumination
 - 1-bit
 - 1-byte (five zones)



Switch OFF (toggle)



ETS Parameter "Operating"

- Reaction on touch and release
- Distinction between short and long

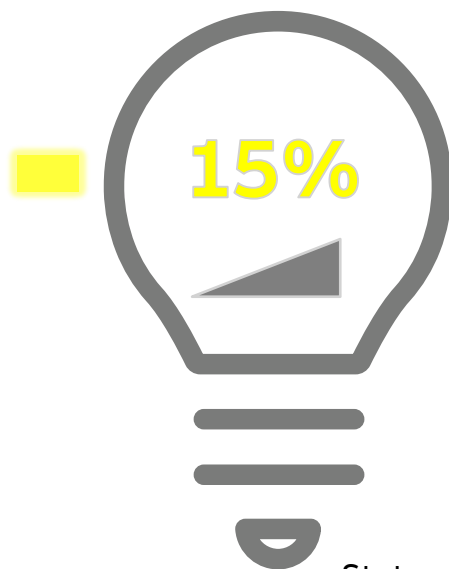
ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad KNX

Touch operation “Switch/Dim (2-button)”

ETS Parameter “LED”

- Standard colors and four customizable RGB colors
- Function illumination
- Status illumination
 - 1-bit
 - 1-byte (five zones)
Static light or bar graph



Status illumination
e.g. bar graph



ETS Parameter “Operating”

- Short operation on/off/toggle
- Long operation dim brighter/darker
- LED animation during dimming (any color)

ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad KNX

ETS Parameter

- Configuration
→ Touch operation
“Switch/Dim (2-button)”

5.7.7 Trevion KK/U Keypad 4-fold > Configuration

Configuration Layout Layout 3

+ Device settings

+ Operating area 1/3:

+ Operating area 2/4:

Configuration

	Application	Description
Primary function	deactivated	
Operating area 1/3	Switch/Dim (2-button)	
Operating area 2/4	Switch	
Sensor	☒ deactivated ☐ Temperature sensor	
Function 1	deactivated	
Function 2	deactivated	
Function 3	deactivated	
Function 4	deactivated	
Function 5	deactivated	

Switch
Switch (2-button)
Blind/Shutter
Blind/Shutter (2-button)
Blind/Shutter (Slider)
Switch/Dim
Switch/Dim (2-button) ✓
Switch/Dim (Slider)
Switching sequence
Switching sequence (2-button)
Scenes
Send value/Multiple operation
deactivated

ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad KNX

ETS Parameter

- Configuration
→ Touch operation
“Switch/Dim (2-button)”



5.7.7 Trevion KK/U Keypad 4-fold > Operating area 1/3: > Operating area 1/3:

Configuration	Switch/Dim (2-button)
+ Device settings	
- Operating area 1/3:	
Operating area 1/3:	
LED 1/3	
+ Operating area 2/4:	

Operating area 1

On short operation: On

On long operation: ☒ Brighter ☐ Darker

Operating area 3

On short operation: Off

On long operation: Darker

Enable LED animation: ☒

Color of animation: Yellow

User colors are adjustable on the parameter window "Device settings".

Extended settings: ☒

Dimming method: ☒ Start-stop-dimming ☐ Step dimming

Long operation after: 00.4 ss.f

Block operating area: Deactivated

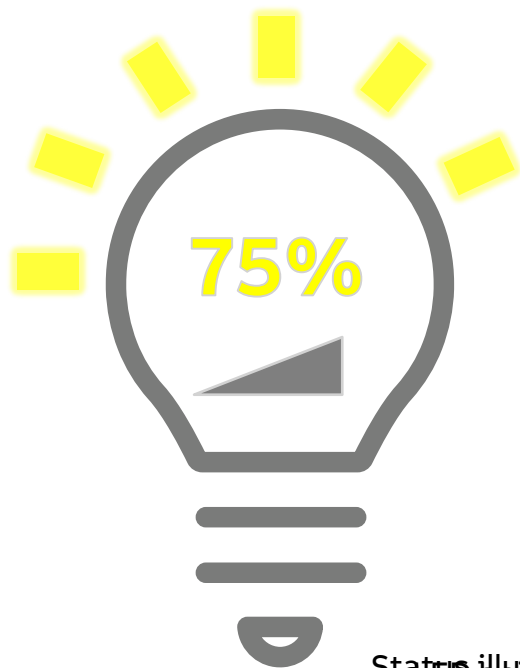
ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad KNX

Touch operation “Switch/Dim (2-button)”

ETS Parameter “LED”

- Standard colors and four customizable RGB colors
- Function illumination
- Status illumination
 - 1-bit
 - 1-byte (five zones)
Static light or bar graph



Status illumination
e.g. bar graph

Dim brighter (long)



ETS Parameter “Operating”

- Short operation on/off/toggle
- Long operation dim brighter/darker
- LED animation during dimming (any color)

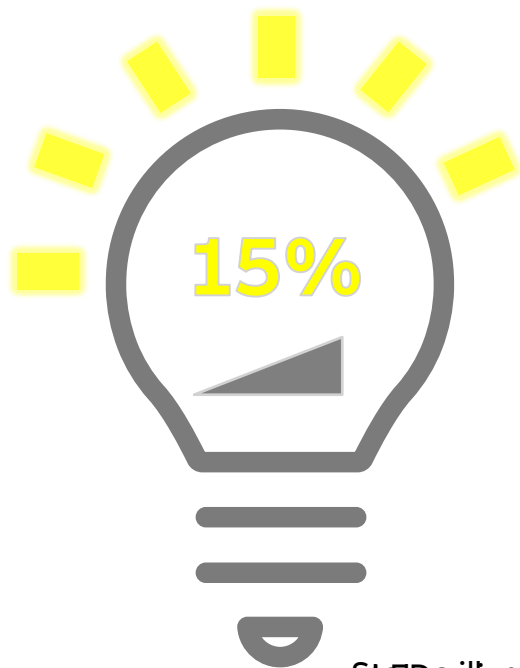
ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad KNX

Touch operation “Switch/Dim (2-button)”

ETS Parameter “LED”

- Standard colors and four customizable RGB colors
- Function illumination
- Status illumination
 - 1-bit
 - 1-byte (five zones)
Static light or bar graph



Status illumination
e.g. bar graph

Dim darker (long)



ETS Parameter “Operating”

- Short operation on/off/toggle
- Long operation dim brighter/darker
- LED animation during dimming (any color)

ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad KNX

Swipe operation “Switch/Dim – Slider”

The dimming function is available as a swipe/slide function

- Fast swiping
 - Turning the lights on or off, e.g. switching on the lights when entering the room
 - A value telegram with 0% or 100% is sent
- Slow swiping
 - The lights are dimmed to the desired brightness level
 - A value telegram between 0% and 100% is sent
 - The value of the brightness is directly displayed via the status LEDs (static light or bar graph)
- Short tap
 - The lights will be turned on or off
- Optionally, LEDs can visualize the dimming of the lights

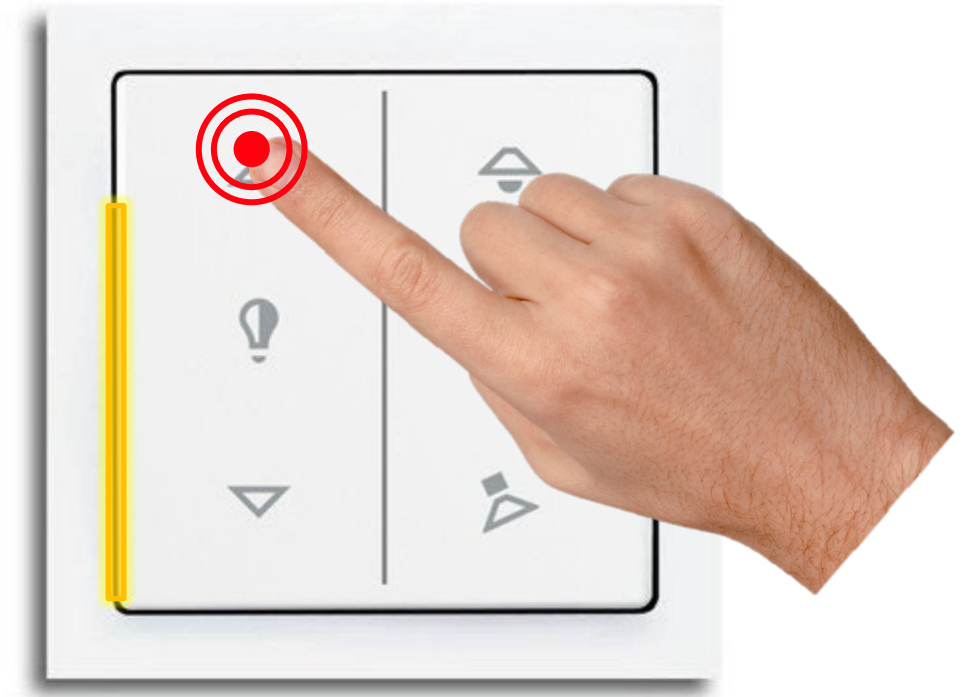


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ABB Trevion® Keypad KNX

ETS Parameter

- Configuration
→ Swipe operation
“Switch/Dim – Slider”

5.7.7 Trevion KK/U Keypad 4-fold > Configuration

Configuration Layout Layout 3

+ Device settings

– Operating area 1/3:

Operating area 1/3:

LED 1/3

+ Operating area 2/4:

Configuration

	Application	Description
Primary function	deactivated	
Operating area 1/3	Switch/Dim (Slider)	
Operating area 2/4	Switch	
Sensor	☒ deactivated ☐ Temperature sensor	
Function 1	deactivated	
Function 2	deactivated	
Function 3	deactivated	
Function 4	deactivated	
Function 5	deactivated	

Switch
Switch (2-button)
Blind/Shutter
Blind/Shutter (2-button)
Blind/Shutter (Slider)
Switch/Dim
Switch/Dim (2-button)
Switch/Dim (Slider) ✓
Switching sequence
Switching sequence (2-button)
Scenes
Send value/Multiple operation
deactivated

ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad KNX

ETS Parameter

- Configuration
→ Swipe operation
“Switch/Dim – Slider”



5.7.7 Trevion KK/U Keypad 4-fold > Operating area 1/3: > Operating area 1/3:

Configuration	Switch/Dim (Slider)		
+ Device settings			
- Operating area 1/3:			
Operating area 1/3:			
LED 1/3			
+ Operating area 2/4:			

	Short push	Fast slide	Slow slide
Enable	☒	☒	☒

Short push operation will trigger a switch on/off telegram.

Fast slide

Send dimming value ☐ 1% or 100% ☒ 0% or 100%

Slow slide

Update dimming value ☐ On release ☒ During slide

Telegram is repeated every ss.f

Enable LED animation ☒

Foreground color

Background color

User colors are adjustable on the parameter window "Device settings".

Advanced parameters ☒

Block input

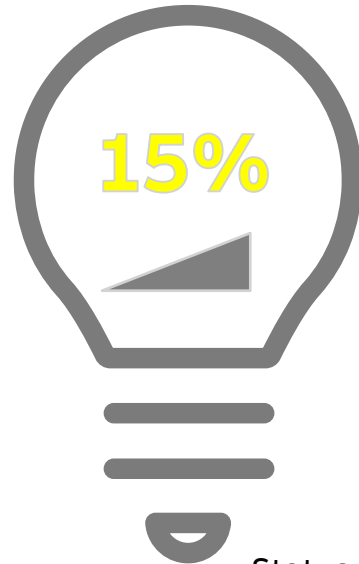
ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad KNX

Swipe operation "Switch/Dim – Slider"

ETS Parameter "LED"

- Standard colors and four customizable RGB colors
- Function illumination
- Status illumination
 - 1-bit
 - 1-byte (five zones)
Static light or bar graph



Status illumination
e.g. bar graph



ETS Parameter "Operating"

- Short push: On/off
- Fast slide: Value 0/100%
- Slow slide: Dimming value 0...100%
- LED animation during dimming (any color)

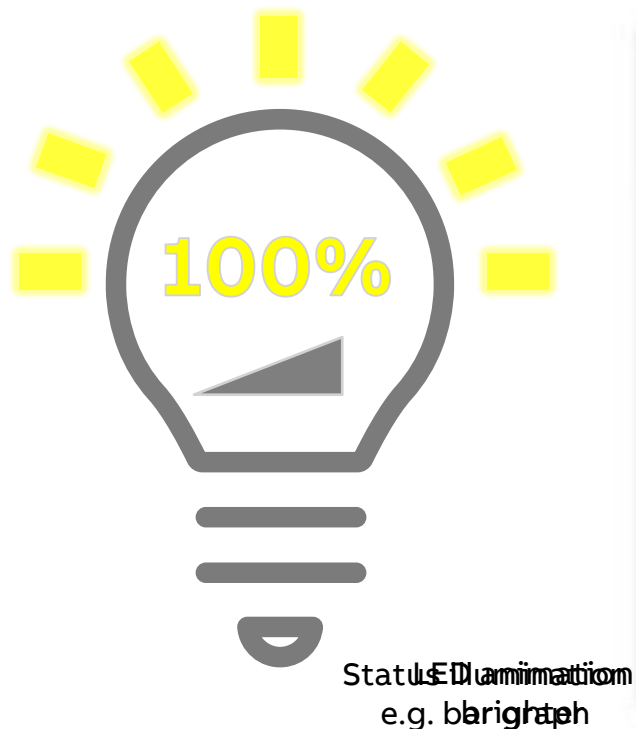
ABB RoomTouch® 4" and ABB Trevion®

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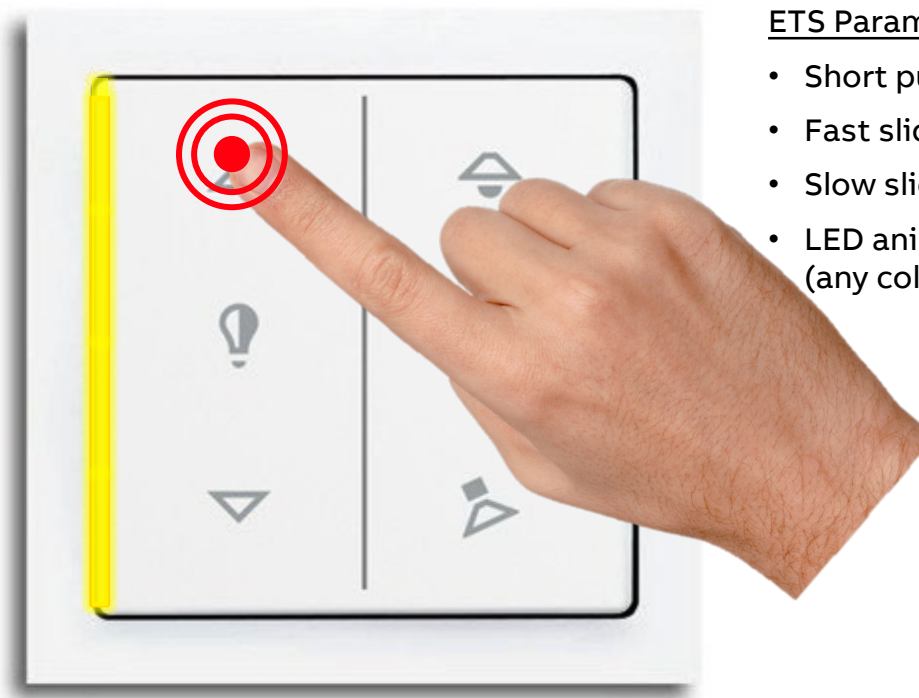
Swipe operation "Switch/Dim – Slider"

ETS Parameter "LED"

- Standard colors and four customizable RGB colors
- Function illumination
- Status illumination
 - 1-bit
 - 1-byte (five zones)
Static light or bar graph



Fast slide up: Value 100%



ETS Parameter "Operating"

- Short push: On/off
- Fast slide: Value 0/100%
- Slow slide: Dimming value 0...100%
- LED animation during dimming (any color)

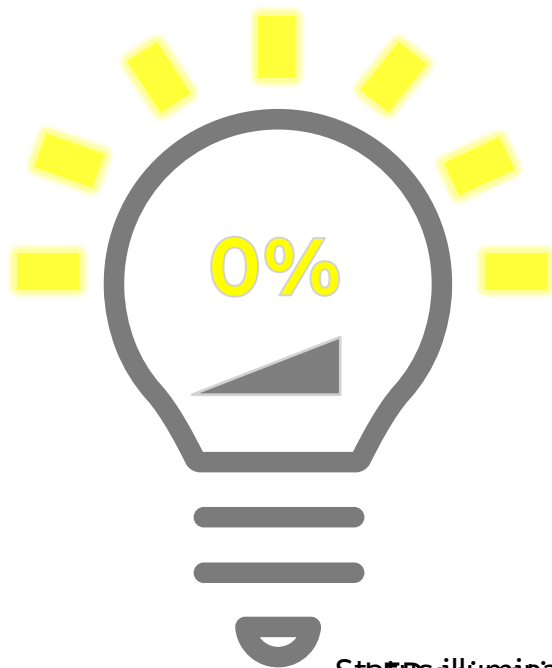
ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad KNX

Swipe operation "Switch/Dim – Slider"

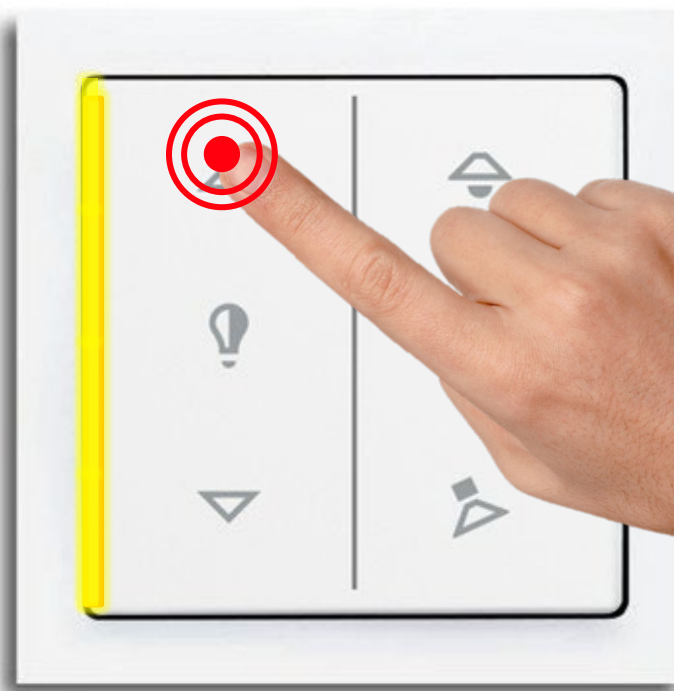
ETS Parameter "LED"

- Standard colors and four customizable RGB colors
- Function illumination
- Status illumination
 - 1-bit
 - 1-byte (five zones)
Static light or bar graph



Status illumination
e.g. bar graph

Fast slide down: Value 0%



ETS Parameter "Operating"

- Short push: On/off
- Fast slide: Value 0/100%
- Slow slide: Dimming value 0...100%
- LED animation during dimming (any color)

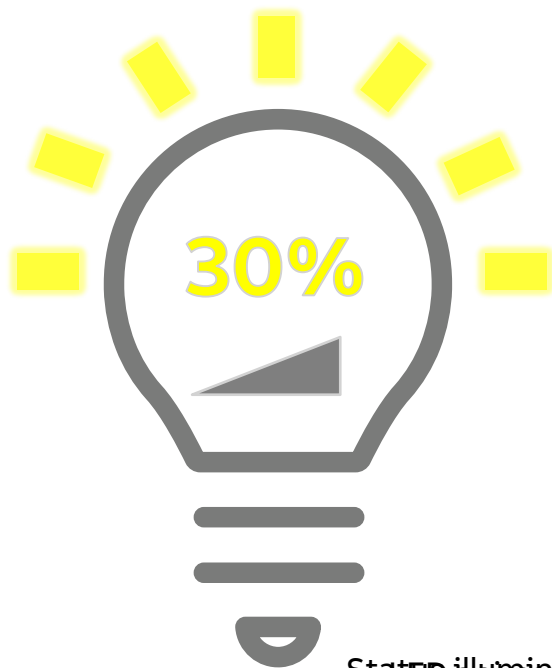
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ABB Trevion® Keypad KNX

Swipe operation "Switch/Dim – Slider"

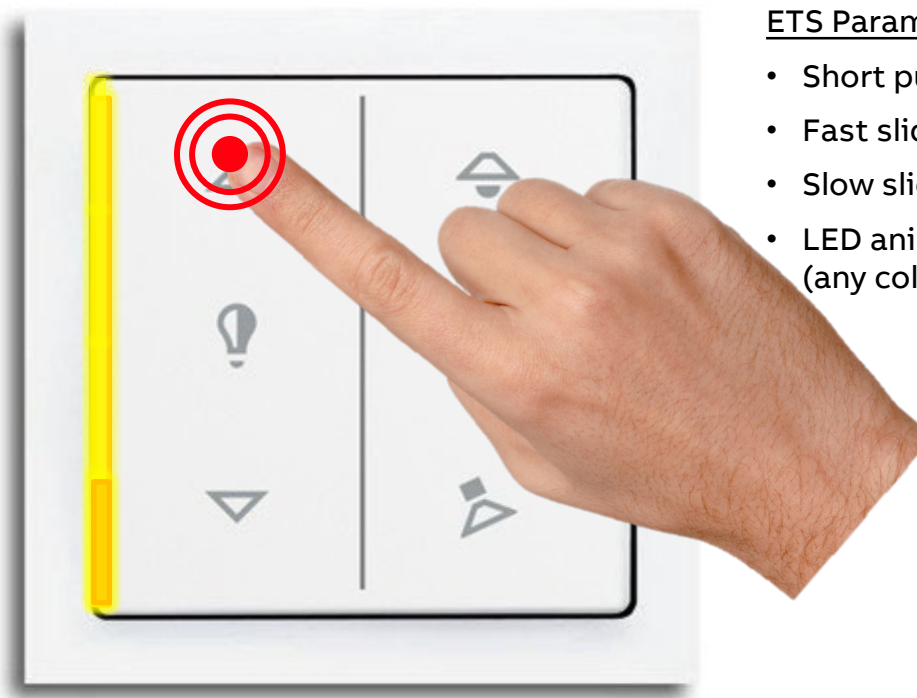
ETS Parameter "LED"

- Standard colors and four customizable RGB colors
- Function illumination
- Status illumination
 - 1-bit
 - 1-byte (five zones)
Static light or bar graph



Status illumination
e.g. bar graph

Slow slide down: Dim value → darker



ETS Parameter "Operating"

- Short push: On/off
- Fast slide: Value 0/100%
- Slow slide: Dimming value 0...100%
- LED animation during dimming (any color)

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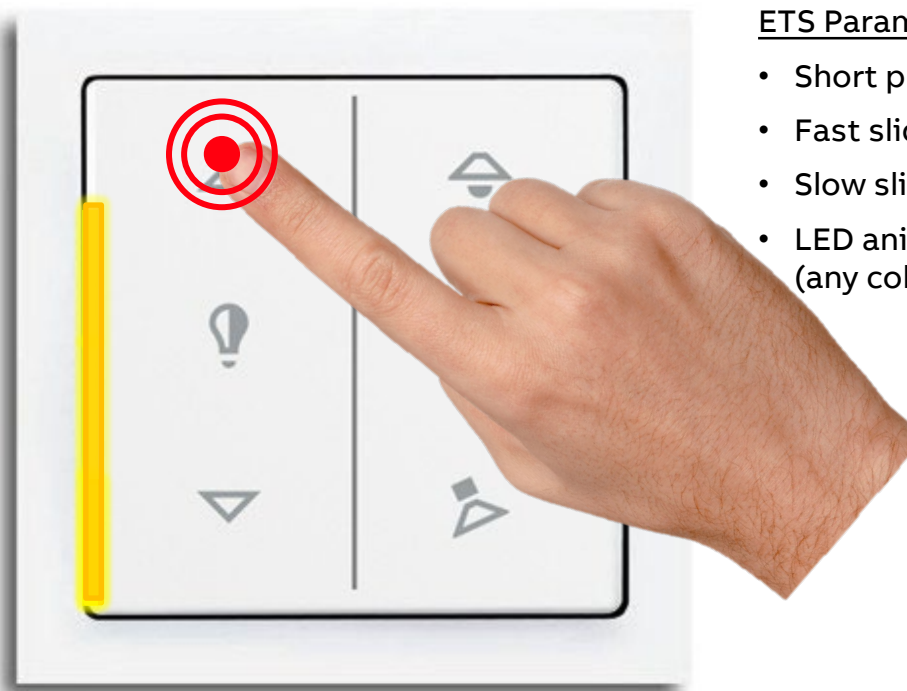
Swipe operation "Switch/Dim – Slider"

ETS Parameter "LED"

- Standard colors and four customizable RGB colors
- Function illumination
- Status illumination
 - 1-bit
 - 1-byte (five zones)
Static light or bar graph



Slow slide up: Dim value → brighter



ETS Parameter "Operating"

- Short push: On/off
- Fast slide: Value 0/100%
- Slow slide: Dimming value 0...100%
- LED animation during dimming (any color)

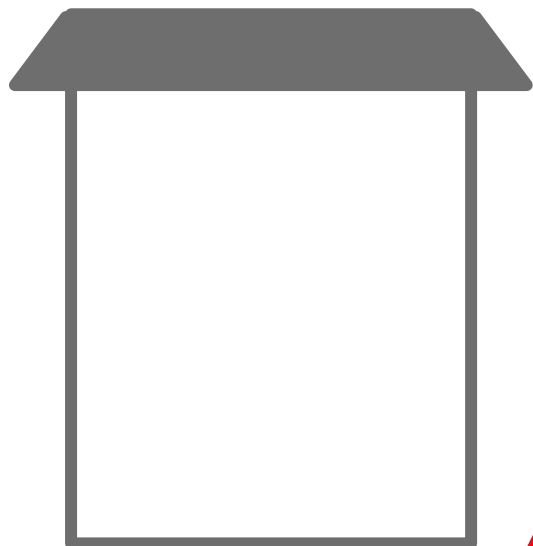
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Touch operation “Blind/Shutter (2-button)”

ETS Parameter “LED”

- Standard colors and four customizable RGB colors
- Function illumination
- Status illumination
 - 1-bit
 - 1-byte (five zones)
Static light or bar graph



Status height
e.g. bar graph



ETS Parameter “Operating”

- Short operation stop/lamella
- Long operation Blind up/down
- LED animation during moving (any color)

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ABB Trevion® Keypad KNX

ETS Parameter

- Configuration
→ Touch operation
“Blind/Shutter (2-button)”

5.7.7 Trevion KK/U Keypad 4-fold > Configuration

Configuration Layout Layout 3

+ Device settings

– Operating area 1/3:

Operating area 1/3:

LED 1/3

+ Operating area 2/4:

Configuration

	Application	Description
Primary function	deactivated	
Operating area 1/3	Blind/Shutter (2-button)	
Operating area 2/4	Switch	
Sensor	☒ deactivated ☐ Temperature sensor	
Function 1	deactivated	
Function 2	deactivated	
Function 3	deactivated	
Function 4	deactivated	
Function 5	deactivated	

Switch
Switch (2-button)
Blind/Shutter
Blind/Shutter (2-button) ✓
Blind/Shutter (Slider)
Switch/Dim
Switch/Dim (2-button)
Switch/Dim (Slider)
Switching sequence
Switching sequence (2-button)
Scenes
Send value/Multiple operation
deactivated

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ABB Trevion® Keypad KNX

ETS Parameter

- Configuration
→ Touch operation
“Blind/Shutter (2-button)”



5.7.7 Trevion KK/U Keypad 4-fold > Operating area 1/3: > ...

Configuration	Blind/Shutter (2-button)
+ Device settings	
- Operating area 1/3:	
Operating area 1/3:	
LED 1/3	
+ Operating area 2/4:	

Operating mode ☒ Blind ☐ Shutter

Operating area 1

Direction of movement ☒ up ☐ down

Operating area 3

Direction of movement down

Enable LED animation ☒

Color of animation Blue

Color of animation background White

User colors are adjustable on the parameter window "Device settings".

Animation timeout 01:00 mm:ss

Extended settings ☒

Blind operation Short: Step/Stop, long: move

Short operation: Step/Stop, long operation: move Up/Down.

Long operation after 00.4 ss.f

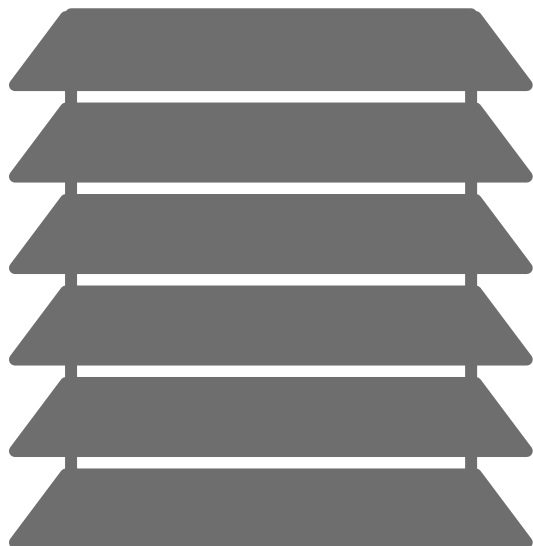
ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad KNX

Touch operation “Blind/Shutter (2-button)”

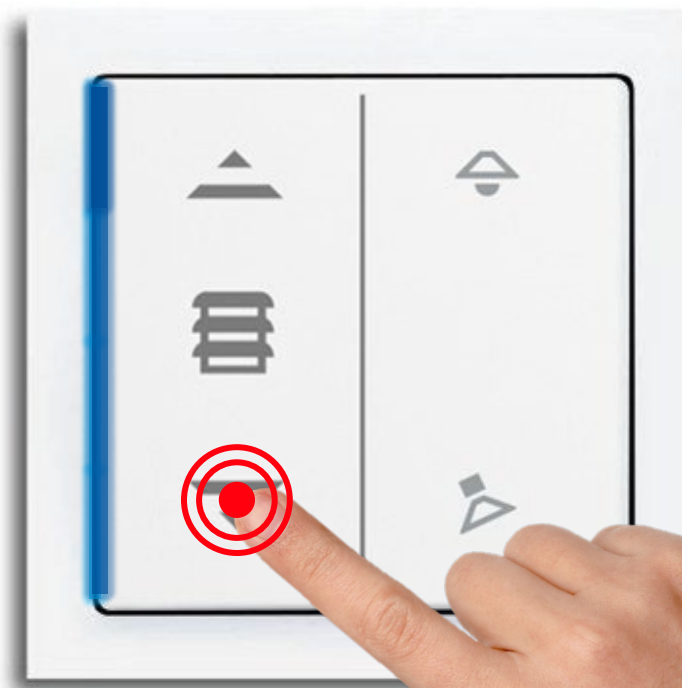
ETS Parameter “LED”

- Standard colors and four customizable RGB colors
- Function illumination
- Status illumination
 - 1-bit
 - 1-byte (five zones)
Static light or bar graph



LED as line graph
e.g. bar graph

Blind down (long)



ETS Parameter “Operating”

- Short operation stop/lamella
- Long operation Blind up/down
- LED animation during moving (any color)

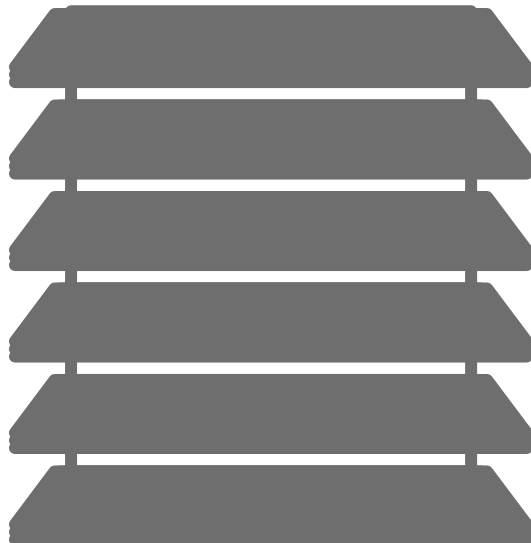
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Touch operation “Blind/Shutter (2-button)”

ETS Parameter “LED”

- Standard colors and four customizable RGB colors
- Function illumination
- Status illumination
 - 1-bit
 - 1-byte (five zones)
Static light or bar graph



Status height
e.g. bar graph

Lamella open (short)



ETS Parameter “Operating”

- Short operation stop/lamella
- Long operation Blind up/down
- LED animation during moving (any color)

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Swipe operation “Blind/Shutter – Slider”

The blind function is available as a swipe/slide function

- Fast swiping
 - Moving to the lower or upper end position, e.g. opening the curtain when entering the room
 - A value telegram with 0% or 100% is sent
- Slow swiping
 - Moving to a target position
 - A value telegram between 0% and 100% is sent
 - The position of the height is directly displayed via the status LEDs
- Short tap
 - The blind can be stopped and the slats adjusted
- Optionally, running LEDs can visualize the movement of blinds

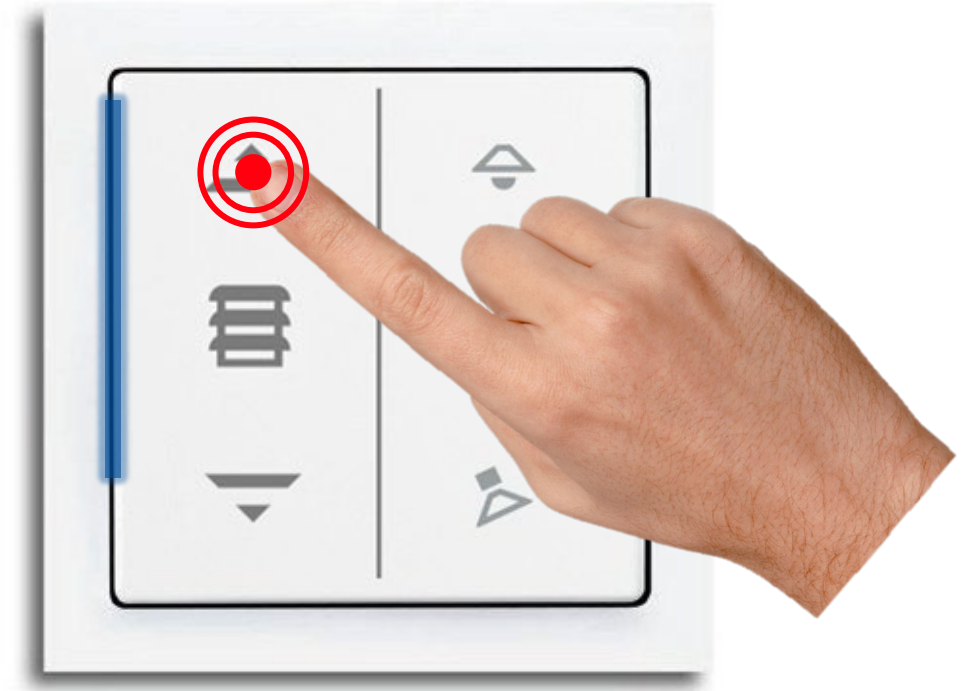


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ETS Parameter

- Configuration
→ Swipe operation
“Blind/Shutter – Slider”

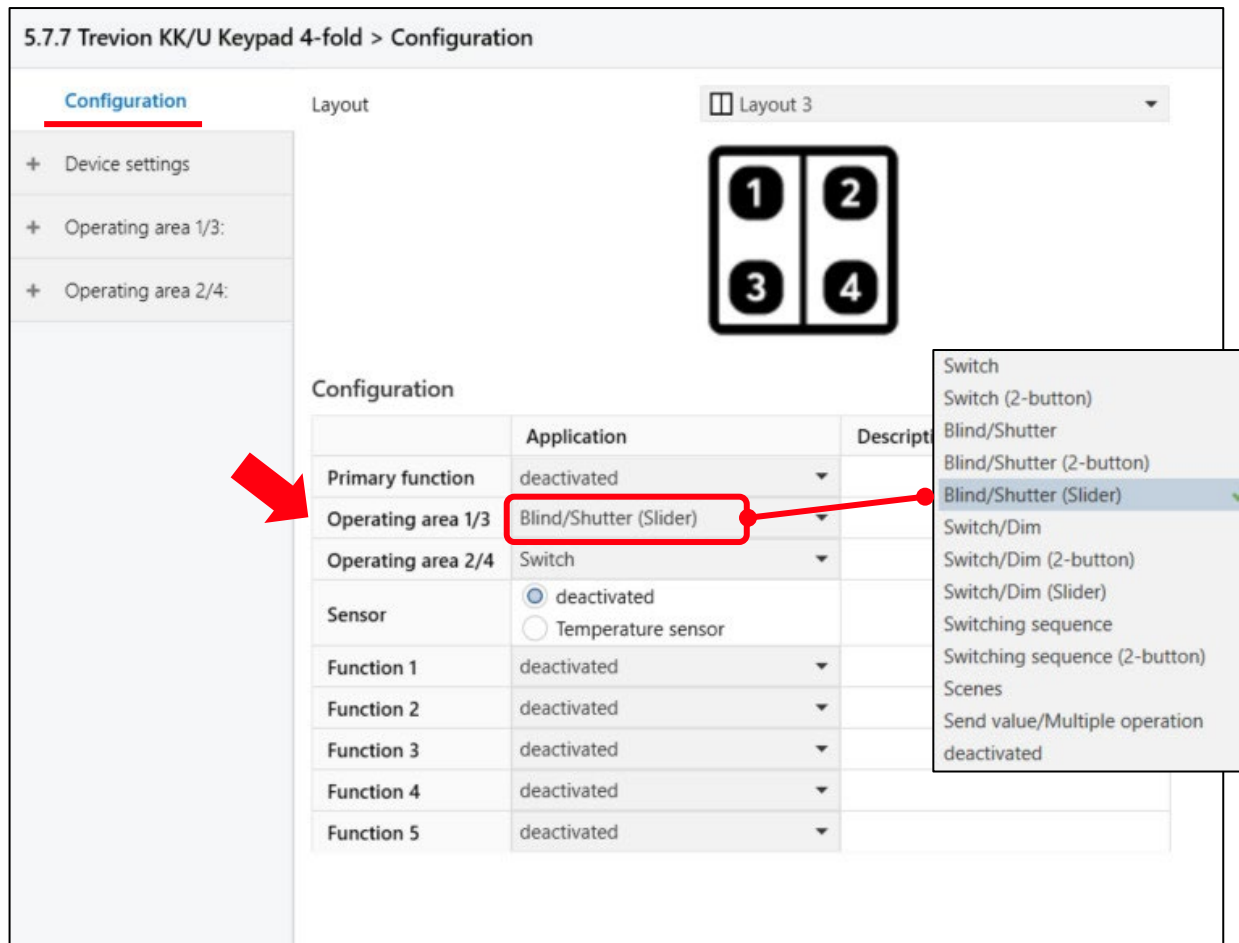


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ABB Trevion® Keypad KNX

ETS Parameter

- Configuration
→ Swipe operation
“Blind/Shutter – Slider”



5.7.7 Trevion KK/U Keypad 4-fold > Operating area 1/3: > Operating area 1/3:

Configuration	Blind/Shutter (Slider)
+ Device settings	
- Operating area 1/3:	
Operating area 1/3:	
LED 1/3	
+ Operating area 2/4:	

Operating mode ☒ Blind ☐ Shutter

	Short push	Fast slide	Slow slide
Enable	☒	☒	☒

Short push operation will trigger a step/stop telegram.

Fast slide

Move to end position ☒ Height ☐ Slat

Slow slide

Move to position ☒ Height ☐ Slat

LED animation Adjustment ▼

Foreground color Blue ▼

Background color White ▼

User colors are adjustable on the parameter window "Device settings".

Advanced parameters ☒

Block input Deactivated ▼

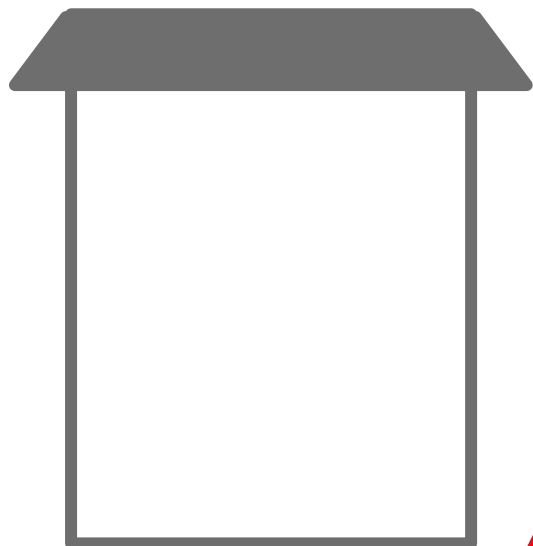
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ABB Trevion® Keypad KNX

Swipe operation “Blind/Shutter – Slider”

ETS Parameter “LED”

- Standard colors and four customizable RGB colors
- Function illumination
- Status illumination
 - 1-bit
 - 1-byte (five zones)
Static light or bar graph



Status height
e.g. bar graph



ETS Parameter “Operating”

- Short push: Stop/lamella
- Fast slide: Move to end position
- Slow slide: Move to position 0...100%
- LED animation during moving
(any color)

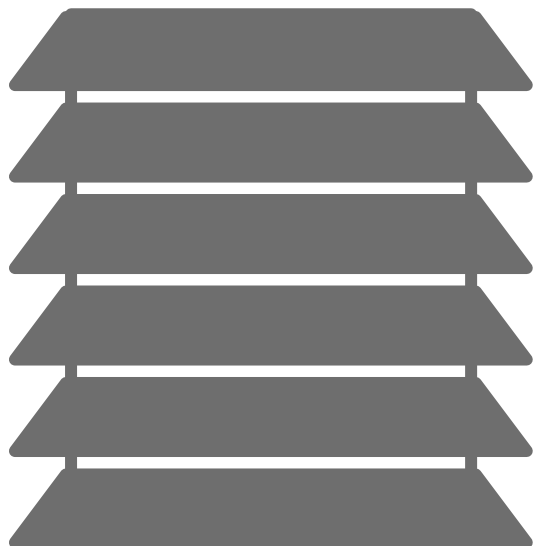
ABB RoomTouch® 4" and ABB Trevion®

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Swipe operation “Blind/Shutter – Slider”

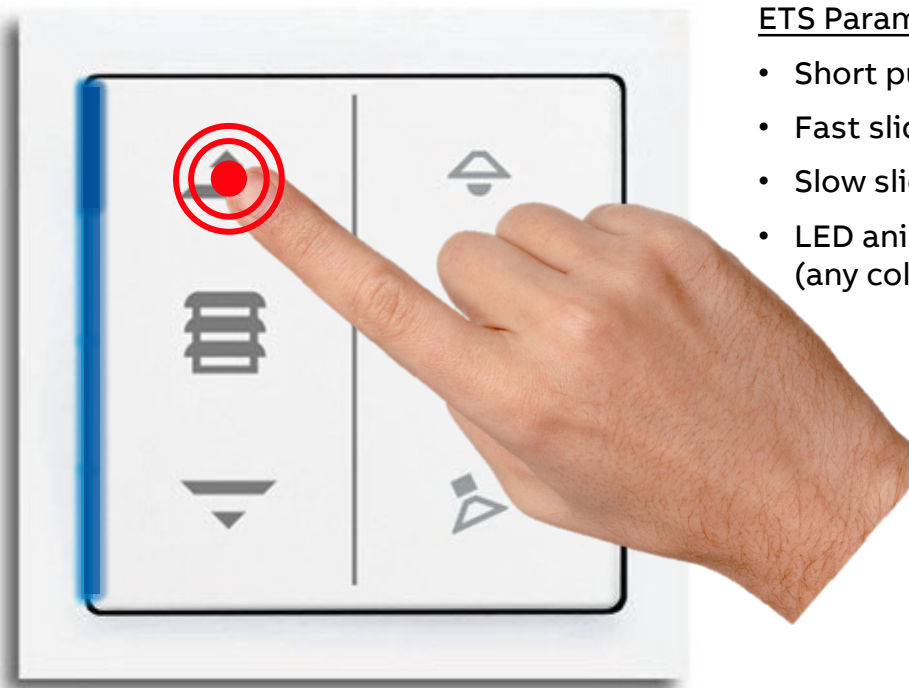
ETS Parameter “LED”

- Standard colors and four customizable RGB colors
- Function illumination
- Status illumination
 - 1-bit
 - 1-byte (five zones)
Static light or bar graph



Status illumination
e.g. bar graph

Fast slide down: Move to the lower end position



ETS Parameter “Operating”

- Short push: Stop/lamella
- Fast slide: Move to end position
- Slow slide: Move to position 0...100%
- LED animation during moving (any color)

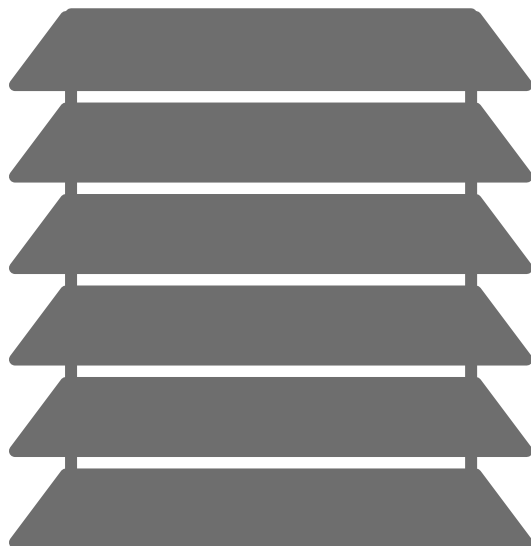
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ABB Trevion® Keypad KNX

Swipe operation “Blind/Shutter – Slider”

ETS Parameter “LED”

- Standard colors and four customizable RGB colors
- Function illumination
- Status illumination
 - 1-bit
 - 1-byte (five zones)
Static light or bar graph



LED illumination
e.g. bar graph

Fast slide up: Move to the upper end position



ETS Parameter “Operating”

- Short push: Stop/lamella
- Fast slide: Move to end position
- Slow slide: Move to position 0...100%
- LED animation during moving
(any color)

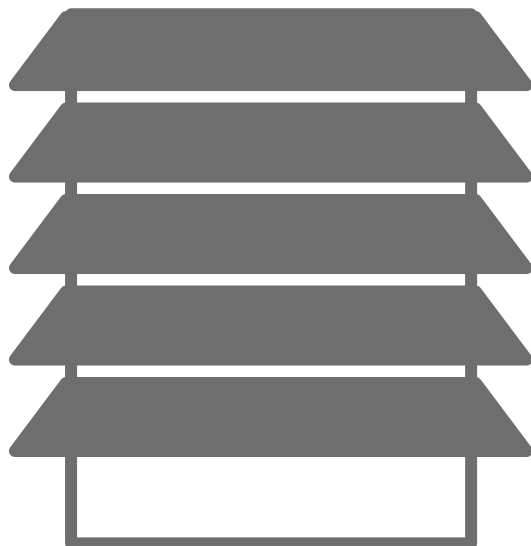
ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad KNX

Swipe operation "Blind/Shutter – Slider"

ETS Parameter "LED"

- Standard colors and four customizable RGB colors
- Function illumination
- Status illumination
 - 1-bit
 - 1-byte (five zones)
Static light or bar graph



LED illumination
e.g. up/down

Slow slide down: Move to position "X" → down



ETS Parameter "Operating"

- Short push: Stop/lamella
- Fast slide: Move to end position
- Slow slide: Move to position 0...100%
- LED animation during moving
(any color)

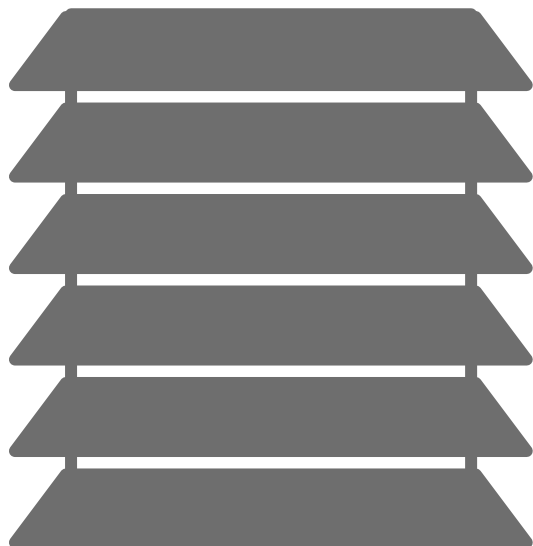
ABB RoomTouch® 4" and ABB Trevion®

ABB Trevion® Keypad KNX

Swipe operation "Blind/Shutter – Slider"

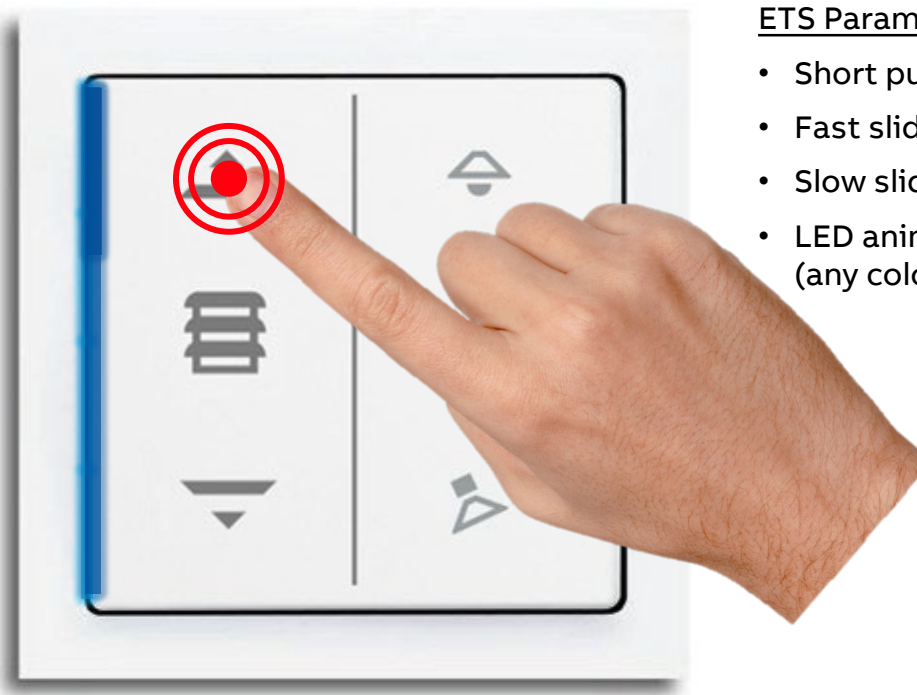
ETS Parameter "LED"

- Standard colors and four customizable RGB colors
- Function illumination
- Status illumination
 - 1-bit
 - 1-byte (five zones)
Static light or bar graph



LED illumination
e.g. up/down

Slow slide up: Move to position "X" → up



ETS Parameter "Operating"

- Short push: Stop/lamella
- Fast slide: Move to end position
- Slow slide: Move to position 0...100%
- LED animation during moving
(any color)

ABB RoomTouch® 4" and ABB Trevion®

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Light guide with RGB color concept

- The light guide supports operation, returns the status in an animated manner and enhances the design
- It does not only support status feedback
- Running lights visualize the movement of blinds or brightness values
- 4 LED's for each side for a homogeneous illumination from start to end and visual slider function
- Neutral white orientation light in idle state
- Different RGB colors for different functions are possible

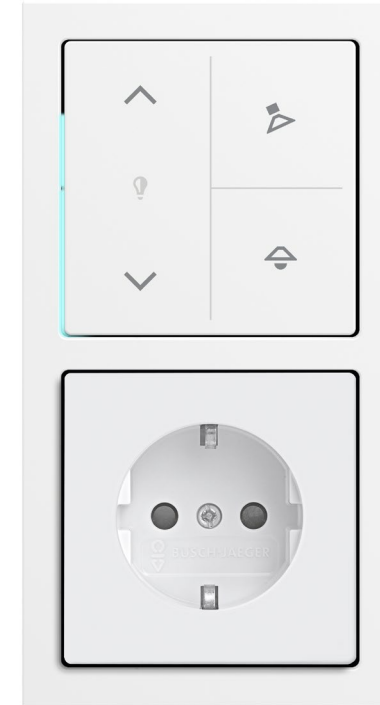


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ABB Trevion® Keypad KNX

ETS Parameter

- LED
 - Status illumination
 - Static light
 - Bar graph
 - Function illumination

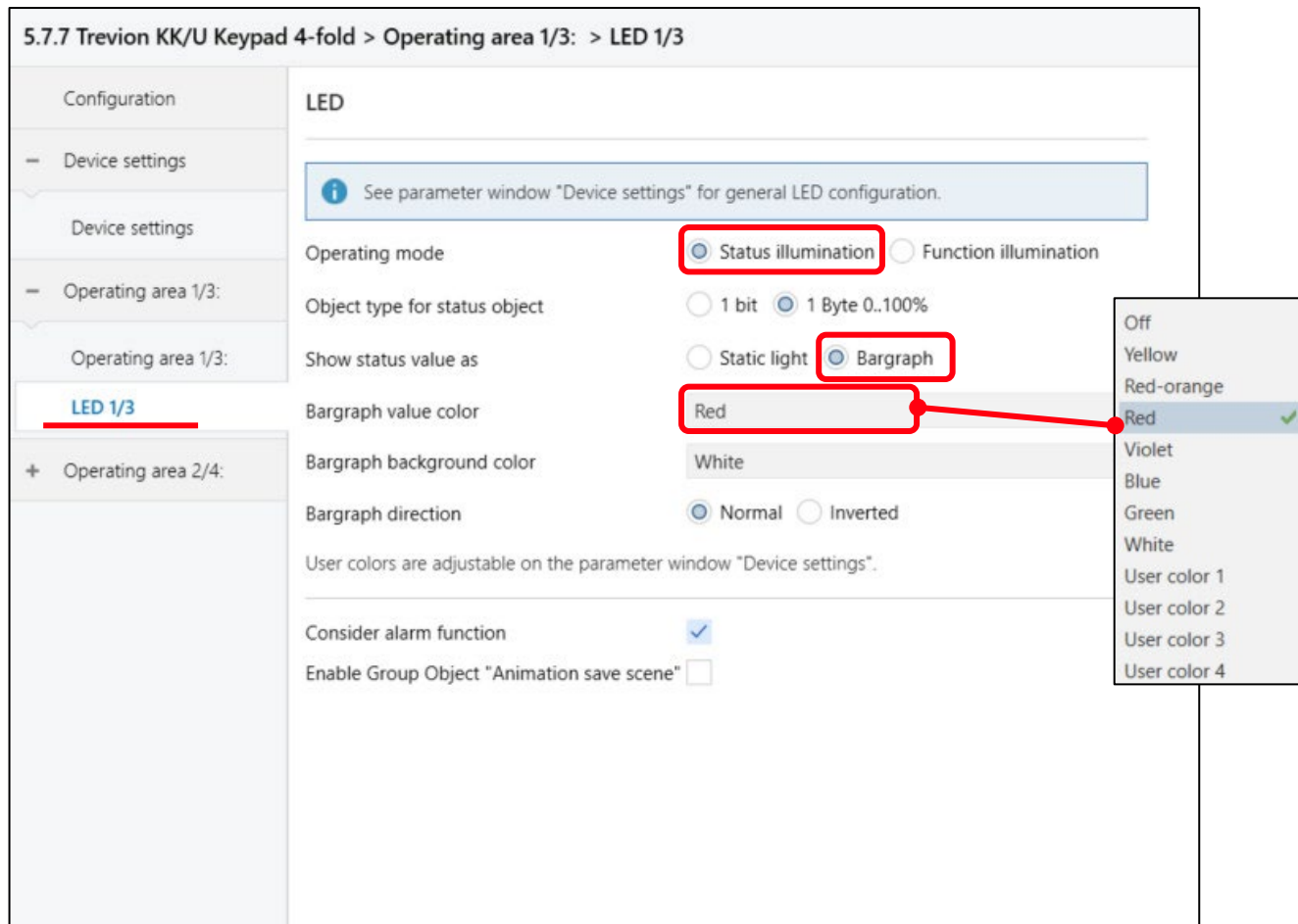


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ABB Trevion® Keypad KNX

ETS Parameter

- LED Animation
 - Dimming
 - Blind/shutter

5.7.7 Trevion KK/U Keypad 4-fold > Operating area 1/3: > Operating area 1/3:

Configuration

Switch/Dim (Slider)

	Short push	Fast slide	Slow slide
Enable	☒	☒	☒

Short push operation will trigger a switch on/off telegram.

Fast slide

Send dimming value ☐ 1% or 100% ☒ 0% or 100%

Slow slide

Update dimming value ☐ On release ☒ During slide

Telegram is repeated every ss.f

Enable LED animation ☒

Foreground color

Background color

User colors are adjustable on the parameter window "Device settings".

Advanced parameters ☒

Block input

LED 1/3

Operating area 2/4:

Operating area 1/3:

Off
Yellow ✓
Red-orange
Red
Violet
Blue
Green
White
User color 1
User color 2
User color 3
User color 4

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ETS Group Objects

Layout

Layout 3

1

2

3

4

Configuration

	Application	Description
Primary function	Scenes	Welcome Scene
Operating area 1/3	Switch/Dim (Slider)	Light - Living room
Operating area 2/4	Blind/Shutter (Slider)	Shutter - Living room
Sensor	deactivated Temperature sensor	
Function 1	deactivated	
Function 2	deactivated	
Function 3	deactivated	
Function 4	deactivated	
Function 5	deactivated	

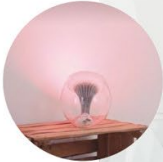


	Num	Name	Object Function	Length	C	R	W	T	U	I	Data Type
	1	Device - Settings	In operation	1 bit	C	-	-	T	-	-	boolean
	2	Device - Settings	Alarm	1 bit	C	-	W	-	U	-	alarm
	3	Device - Settings	Alarm acknowledgement	1 bit	C	-	W	-	U	-	trigger
	4	Device - Settings	Day/Night	1 bit	C	-	W	-	U	-	day/night
	5	Device - Settings	Orientation light	1 bit	C	-	W	-	U	-	occupancy
	9	Primary function - Scene: Welcome Scene	Scene 1...64	1 byte	C	-	-	T	-	-	scene control
	58	Operating area 1/3 - Switch/Dim: Light - Living room	Switch	1 bit	C	-	W	T	U	-	switch
	59	Operating area 1/3 - Switch/Dim: Light - Living room	Dimming value	1 byte	C	-	W	T	U	-	percentage (0..100%)
	61	Operating area 1/3 - Switch/Dim: Light - Living room	Block	1 bit	C	-	W	-	U	-	enable
	67	LED 1/3 - LED RGB: Light - Living room	LED status	1 byte	C	-	W	T	U	I	percentage (0..100%)
	91	Operating area 2/4 - Blind/Shutter: Shutter - Living room	Step/Stop	1 bit	C	-	-	T	-	-	step
	92	Operating area 2/4 - Blind/Shutter: Shutter - Living room	Move to height	1 byte	C	-	-	T	-	-	percentage (0..100%)
	94	Operating area 2/4 - Blind/Shutter: Shutter - Living room	Status Height	1 byte	C	-	W	-	U	-	percentage (0..100%)
	96	Operating area 2/4 - Blind/Shutter: Shutter - Living room	Status Move up/down	1 bit	C	-	W	-	U	-	boolean
	97	Operating area 2/4 - Blind/Shutter: Shutter - Living room	Status Upper end position	1 bit	C	-	W	-	U	-	state
	98	Operating area 2/4 - Blind/Shutter: Shutter - Living room	Status Lower end position	1 bit	C	-	W	-	U	-	state
	99	Operating area 2/4 - Blind/Shutter: Shutter - Living room	Block	1 bit	C	-	W	-	U	-	switch
	100	LED 2/4 - LED RGB: Shutter - Living room	LED status	1 byte	C	-	W	T	U	I	percentage (0..100%)
	146	Sensor - Temperature sensor:	Temperature	2 bytes	C	-	-	T	-	-	temperature (°C)

ABB RoomTouch® 4” and ABB Trevion®

Questions ???





- Slim & timeless design with IPS glass display
- Smooth usability - interaction through swiping and flexible visualization options
- Quick standby mode when the room turns dark until it senses the presence of someone close by

CHECK THE STATUS OF YOUR HOME AT A GLANCE

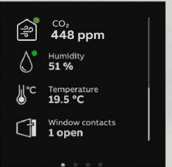




ABB RoomTouch® 4”
As individual as your home

ABB RoomTouch® 4” and ABB Trevion®

2D code

- The packaging and the front/back of the device are marked with a 2D code
- These codes are used for unique identification of the device and include the following information:
 - Link to the product page (datasheet, downloads, ...)
 - Order code
 - Device serial number
- By scanning the 2D codes with the [ABB Product Scanner](#) (available as Android and iOS App), you can open additional digital services
- The 2D codes can be read using any mobile device with an appropriate 2D code reader



ABB RoomTouch® 4” and ABB Trevion®

Scanning the 2D code with the app “ABB Product Scanner”

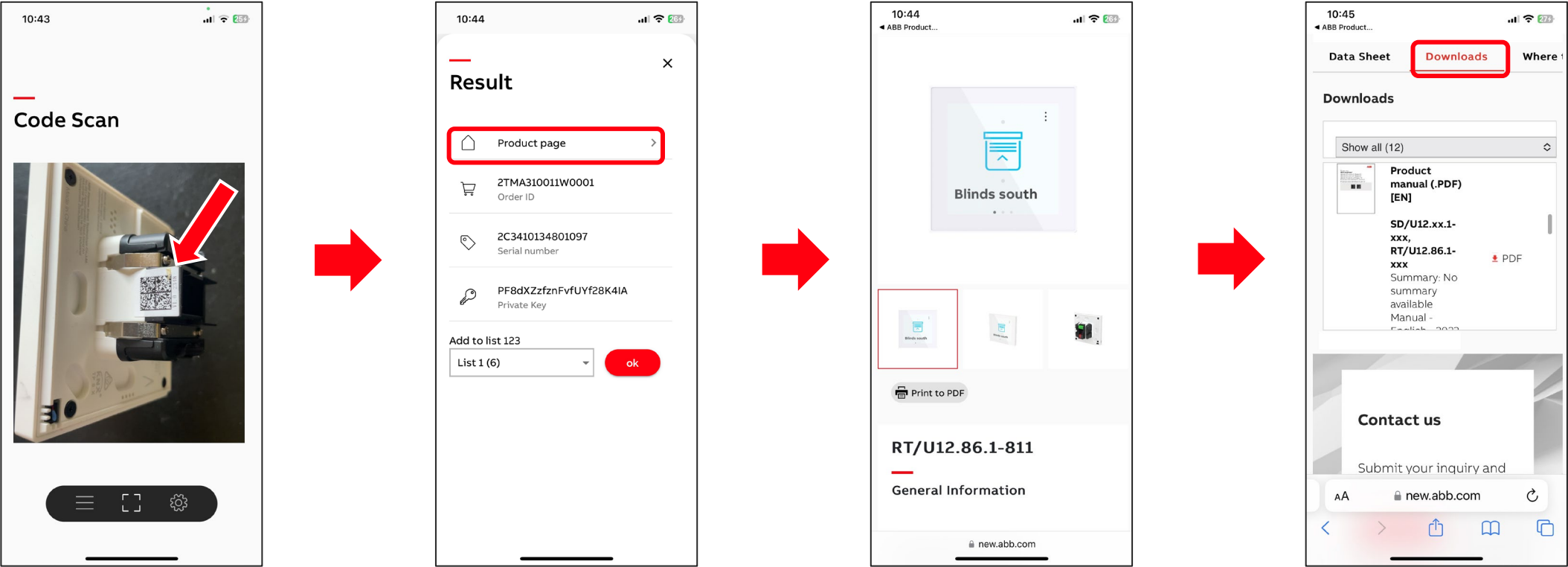


ABB RoomTouch® 4” and ABB Trevion®

Homepage

www.abb.com/KNX

→ Products and Downloads

→ User Operation – Design Ranges

→ ABB Trevion® Touch Display 2.4” and Keypad

→ Visualisation, Display and Signalling ABB RoomTouch® 4”

- ETS Application
- ETS Device Configuration App (DCA)
- Product Manual
 - for Trevion Display and RoomTouch 4”
separate manuals for free@home and KNX
- ...

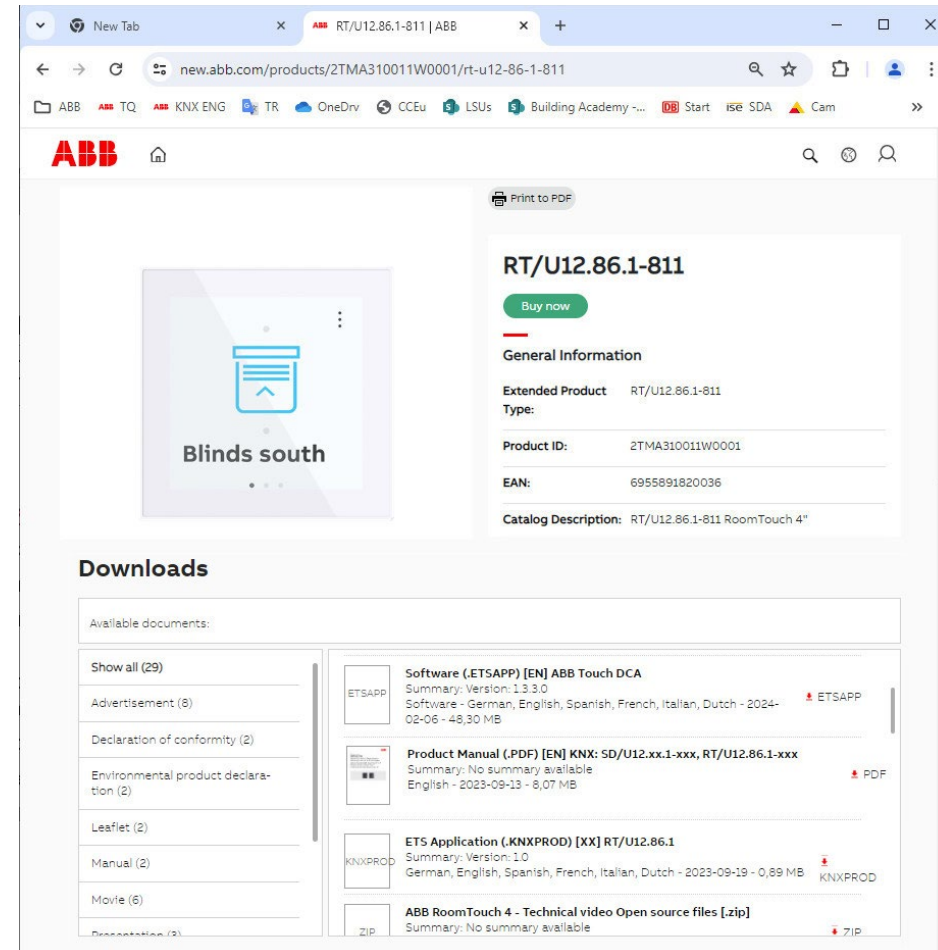


ABB RoomTouch® 4” and ABB Trevion®

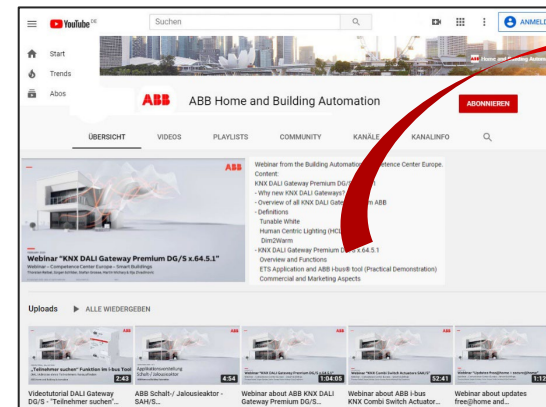
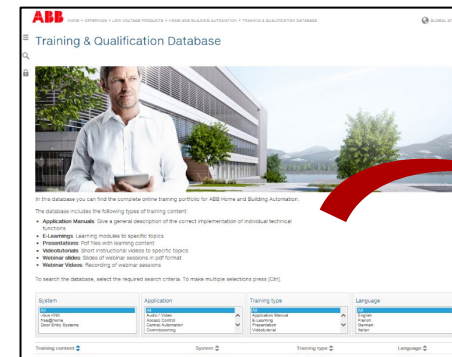
Training Material

Training & Qualification Database

- The database contains extensive training content
 - Presentations
 - Video tutorials
 - Webinar slides and videos
 - and more ...
- <https://go.abb/ba-training>
- www.abb.com/knx (→ Services & Tools → Training and Qualification → Training Database)

YouTube

- Channel “ABB Home and Building Automation”
- <https://www.youtube.com/user/ABBibusKNX>



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