



KNXperience 2023 - Latest KNX Products and News

ABB RoomTouch® 4"

Thorsten Reibel - Global Training Specialist

Overview

ABB RoomTouch® 4"

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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 push button
 - 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

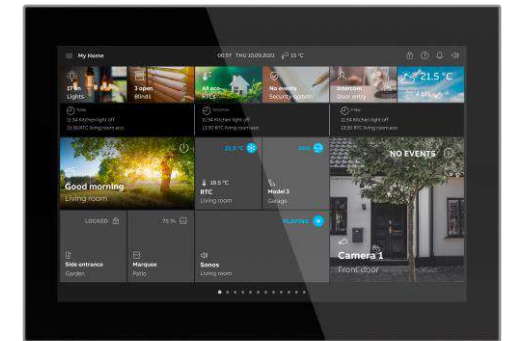


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... at a glance

- Operation of typical room functions like Light, Shutter, Room temperature control or scenes via a touch surface
- Smooth operation by swiping or clicking on the touch screen
- High resolution state of the art colored 4" display
- Fits in a standard installation box
- Easy to commission via DCA in the ETS
- White or black

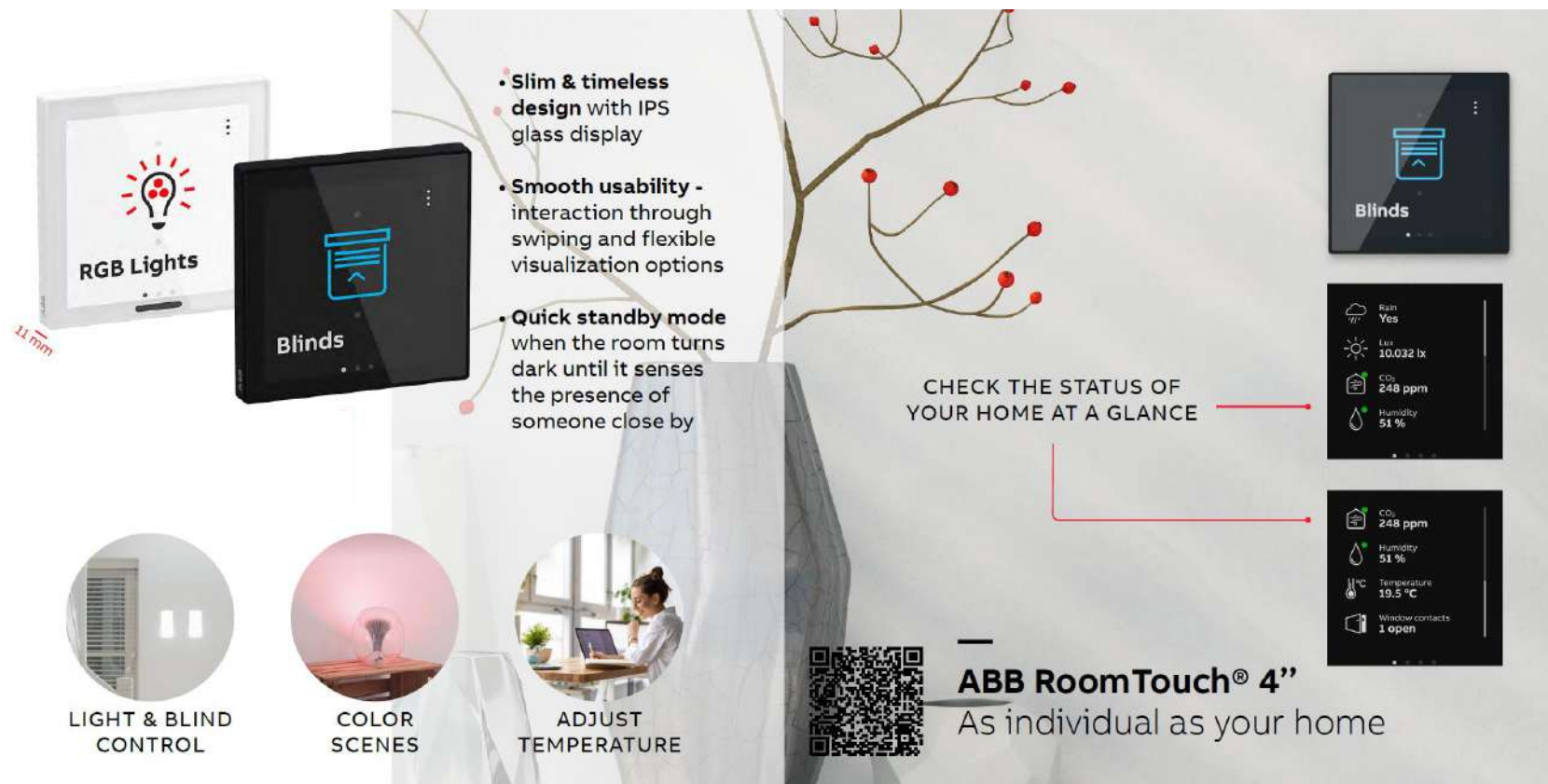


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Impressions - Operation

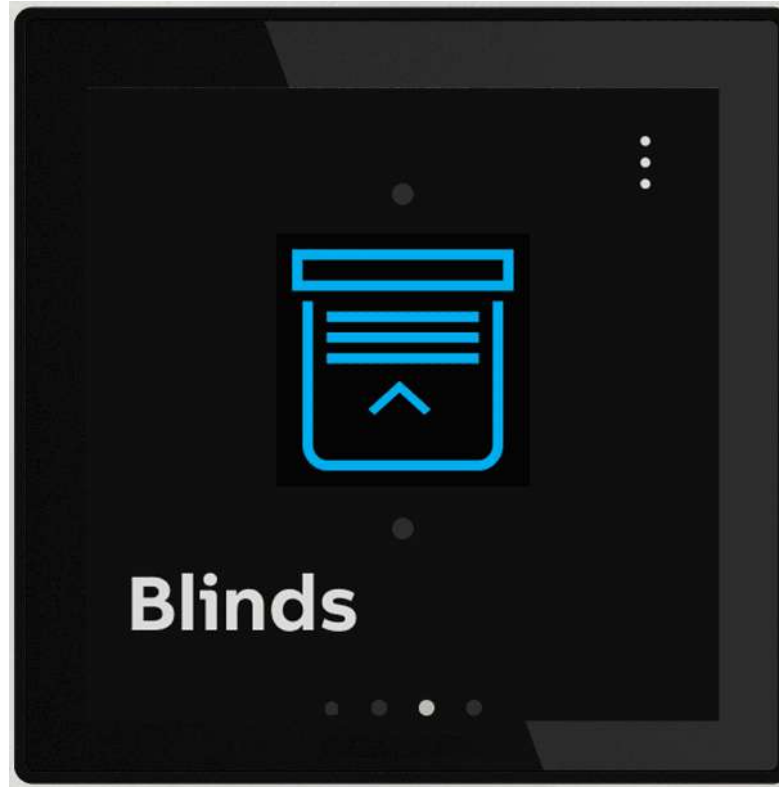


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Impressions - Indication

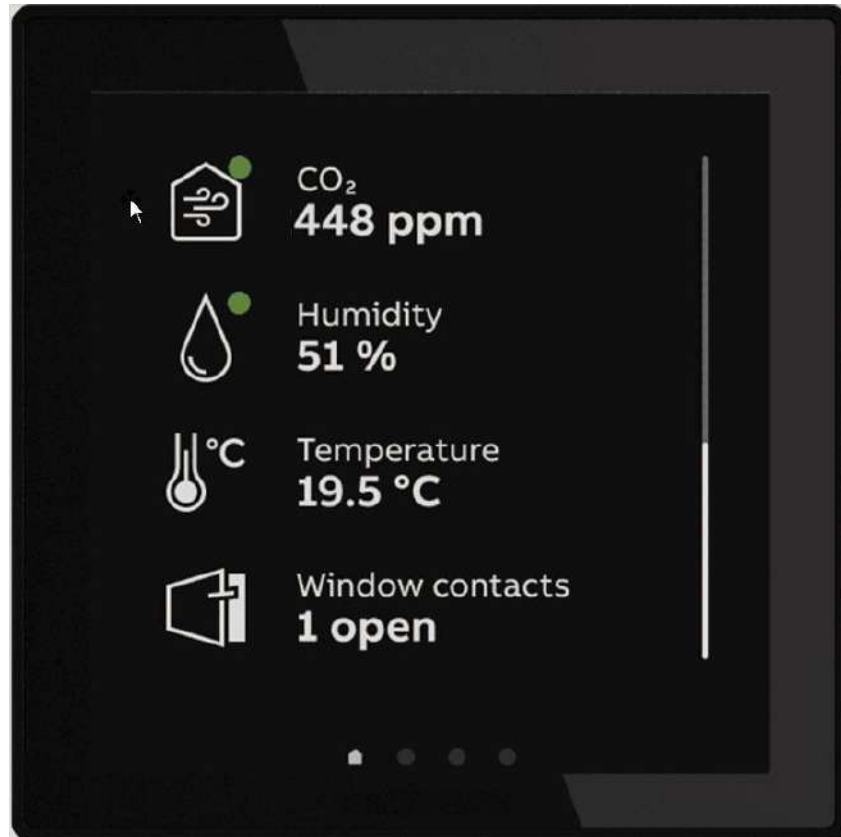


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ABB RoomTouch® 4" aligns perfectly with ABB's new design language for hardware and software like the other panels



ABB RoomTouch® 4"



ABB RoomTouch® 5" KNX



ABB SmartTouch® 10"

ABB RoomTouch® 4"

Coming soon...

ABB Trevion® with 2,4" display – like a classical push button with a frame, similar functionality as ABB RoomTouch® 4"

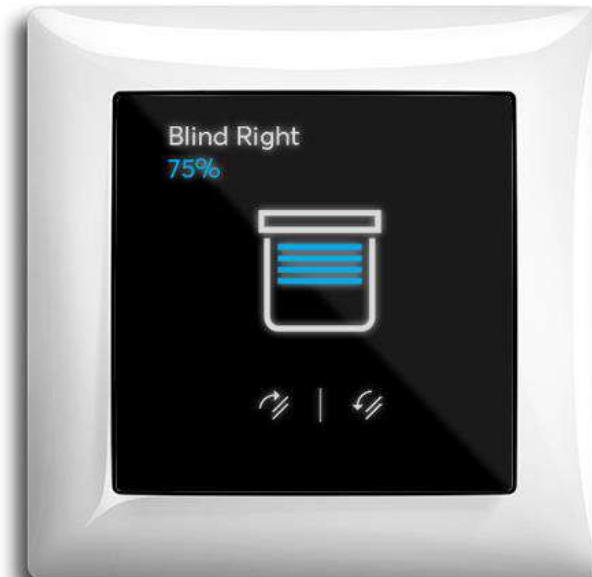


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Main technical data (Hardware)

- Touch screen with IPS display, 4" (10,16 cm), square format
- Display resolution: 480 x 480 pixel
- Max. brightness: +/- 240cd/m²
- External Power supply 20-32 V =
- Rating current 24 V =, 100 mA
- Dimensions (L x W x D): (86mm x 86mm x 11mm)
- 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



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Further features

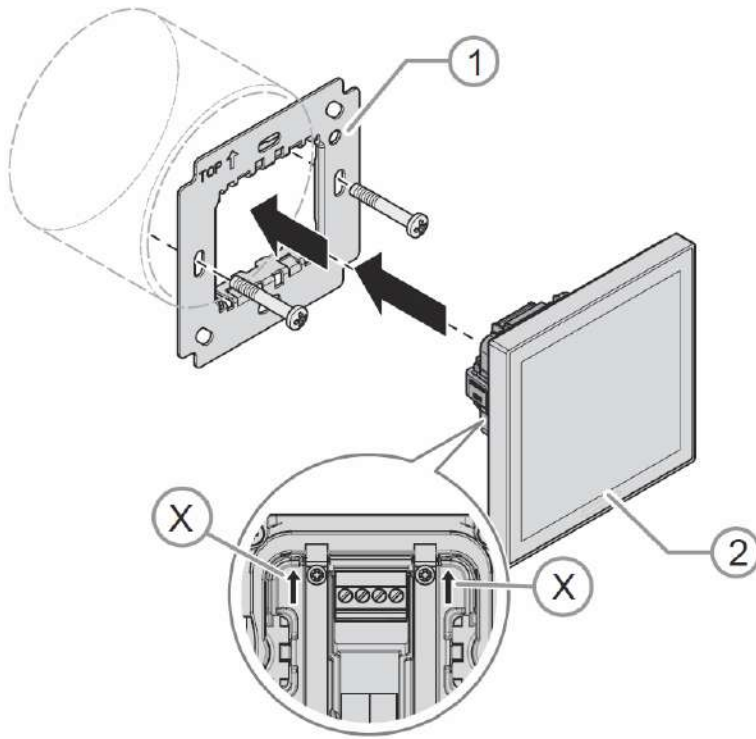
- Monoblock device (integrated Bus coupling unit)
- Glass surface and frame in black or white available
- Integrated proximity sensor
- Integrated brightness sensor
- Haptic feedback
- Global use in VDE and British Standard markets
- ABB and Busch-Jaeger Brand available (depending on market)



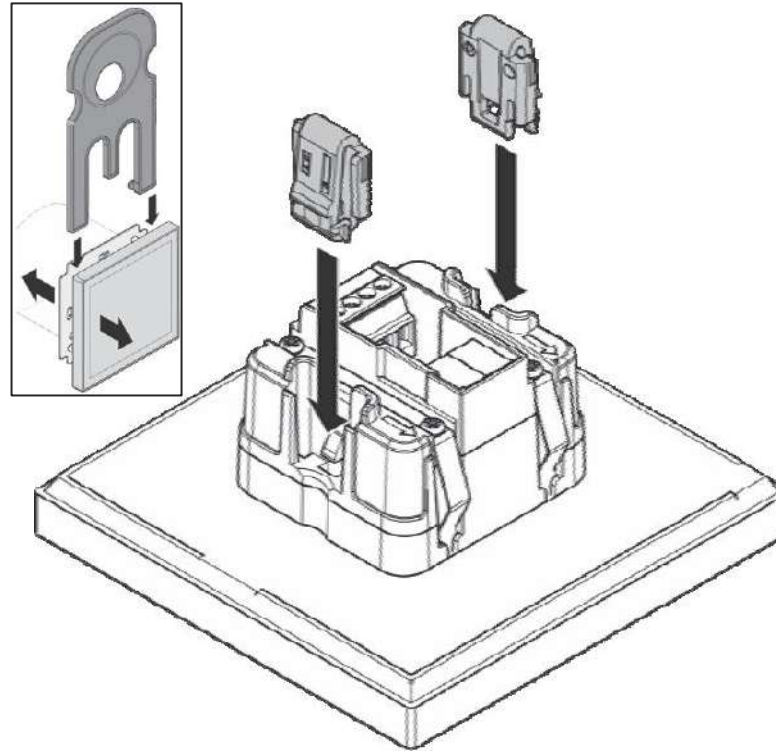
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Installation



Anti theft protection



Installation hints

- Installation in a standard flush mounting box
- Mounting frame (1) (part of delivery)
- Snap ABB RoomTouch (2) on the frame in the right position
 - See arrows up (X) on the rear side
- Option: Anti theft protection clamps
 - Removal via special plastic tool

KNX Programming

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Software features

- 12 pages, each 1,2 or 4 functions
 - → easy and fast to operate
- 12 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



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Software features

- 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



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Programming KNX

- Configuration via Touch DCA in the ETS
- 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

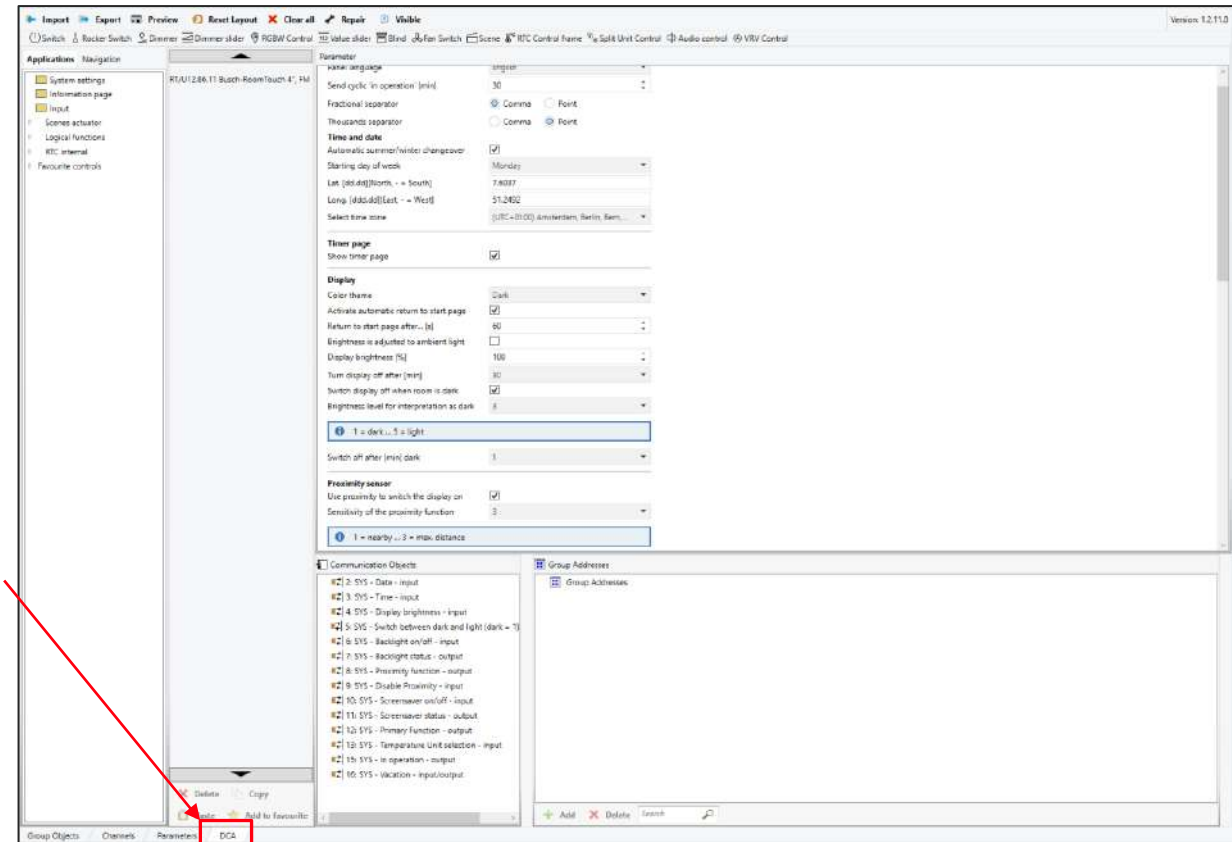


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Overview DCA

Superior Functions:
Import ... Visible

Applications:
System settings ...
Favourite controls

Group Objects:
Here from system
settings

Parameters:
Here from selected
system settings

Group Addresses:
Drag and drop within
DCA
Possible to add,
delete, cut,
copy/paste, rename
and search

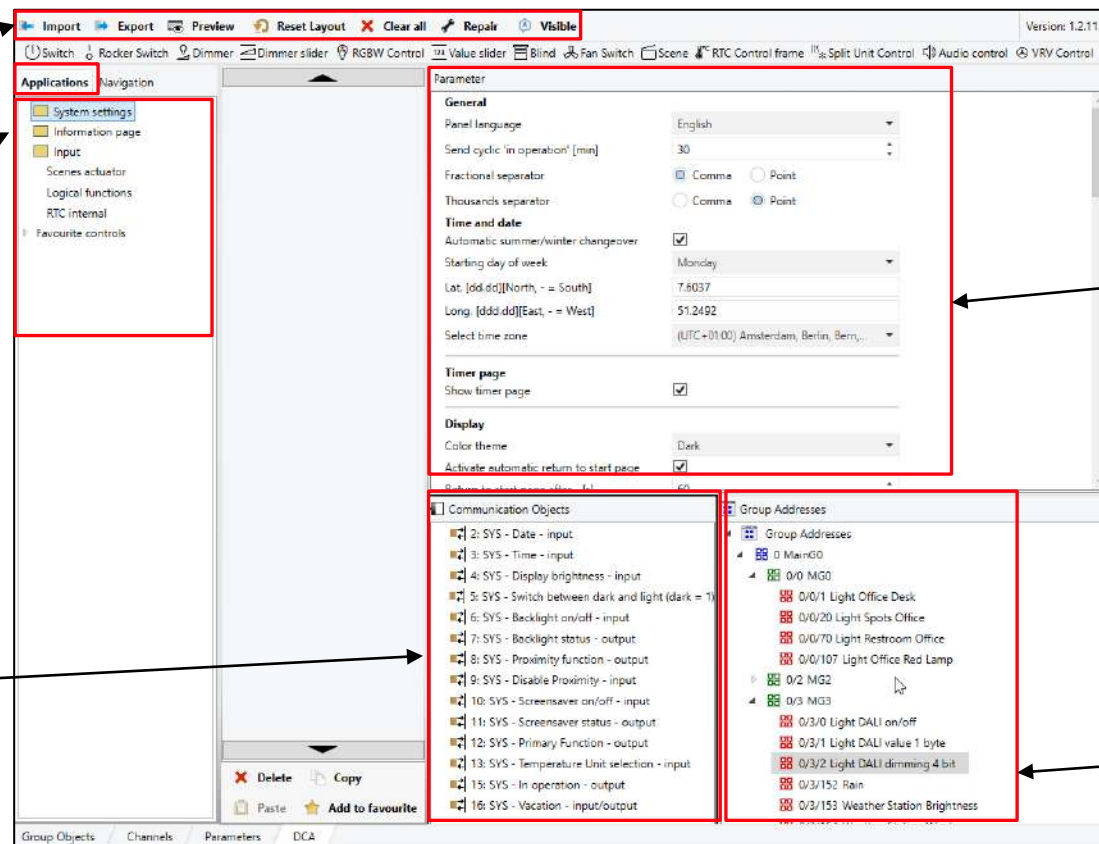


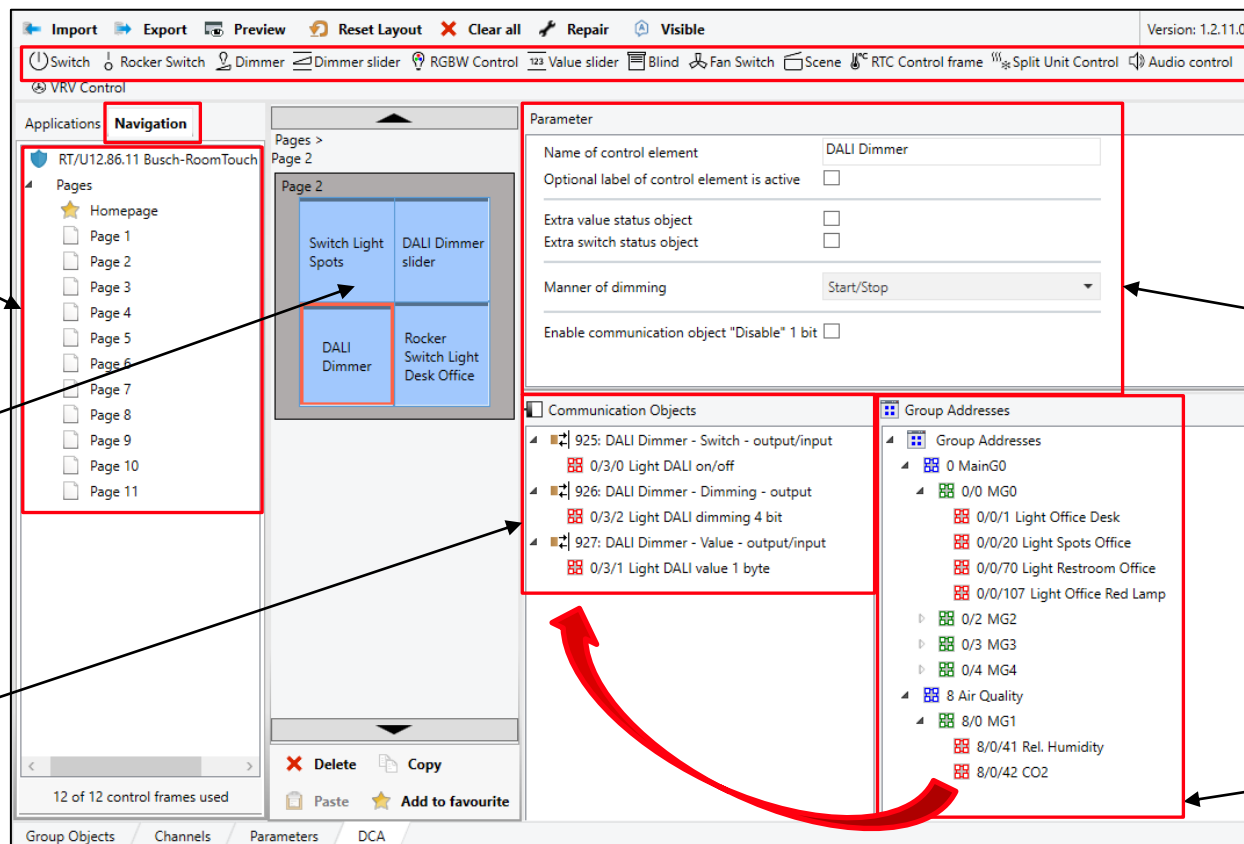
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Overview DCA

Navigation:
Overview of pages

Overview
selected page

Group Objects:
Here from selected
function DALI Dimmer



Selection
function buttons

Parameters:
Here from selected
function button blind

Group Addresses:
Drag and drop within
DCA
Possible to add,
delete, cut,
copy/paste, rename
and search

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

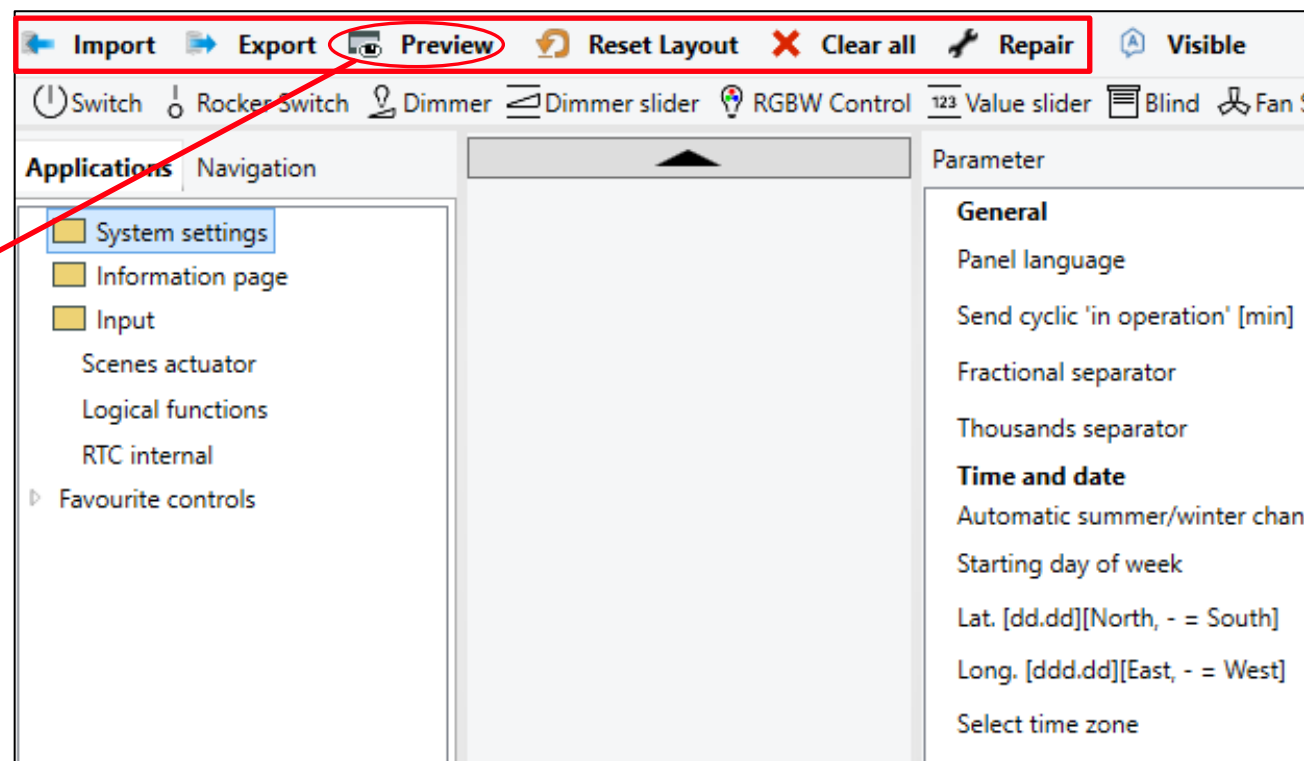
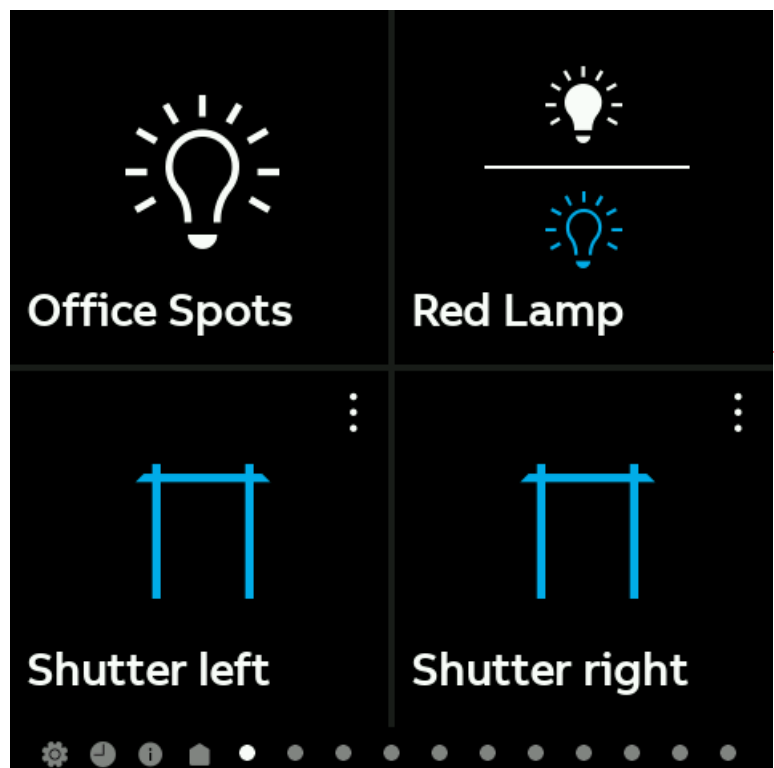


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Programming KNX

- 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

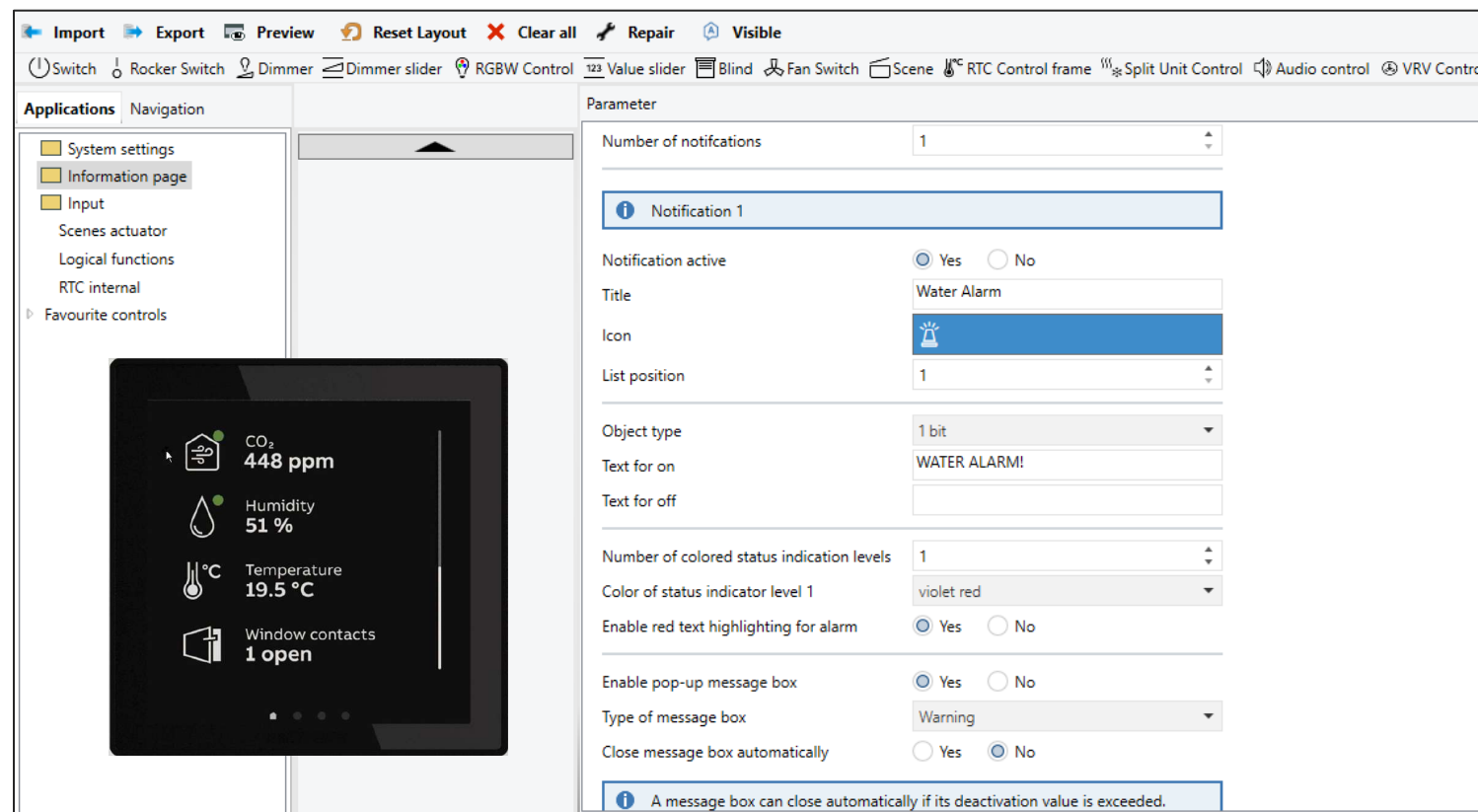
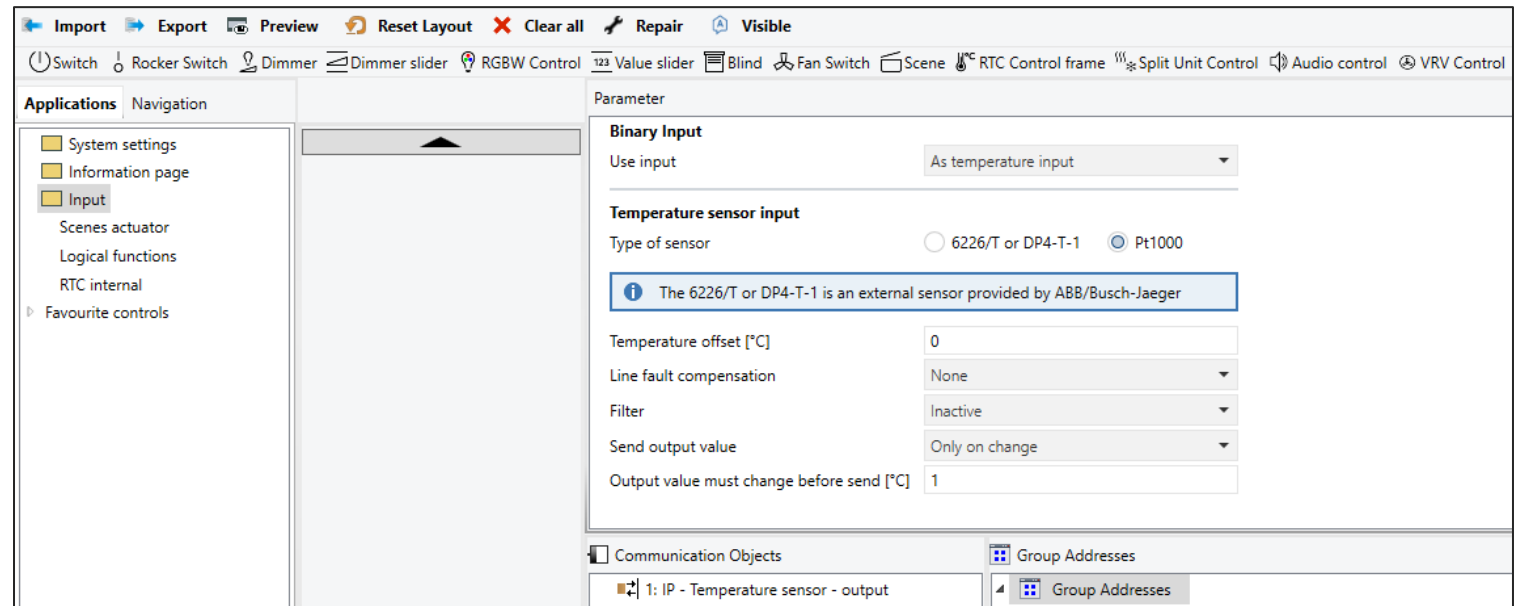


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Programming KNX

- 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 application:
 - Window contact of the room
 - Conventional push button
 - Temperature sensor floor (Floor heating)
 - Weighted measurement with 2nd room temperature sensor



KNX Control Elements

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Selection of KNX control elements in ETS via drag and drop

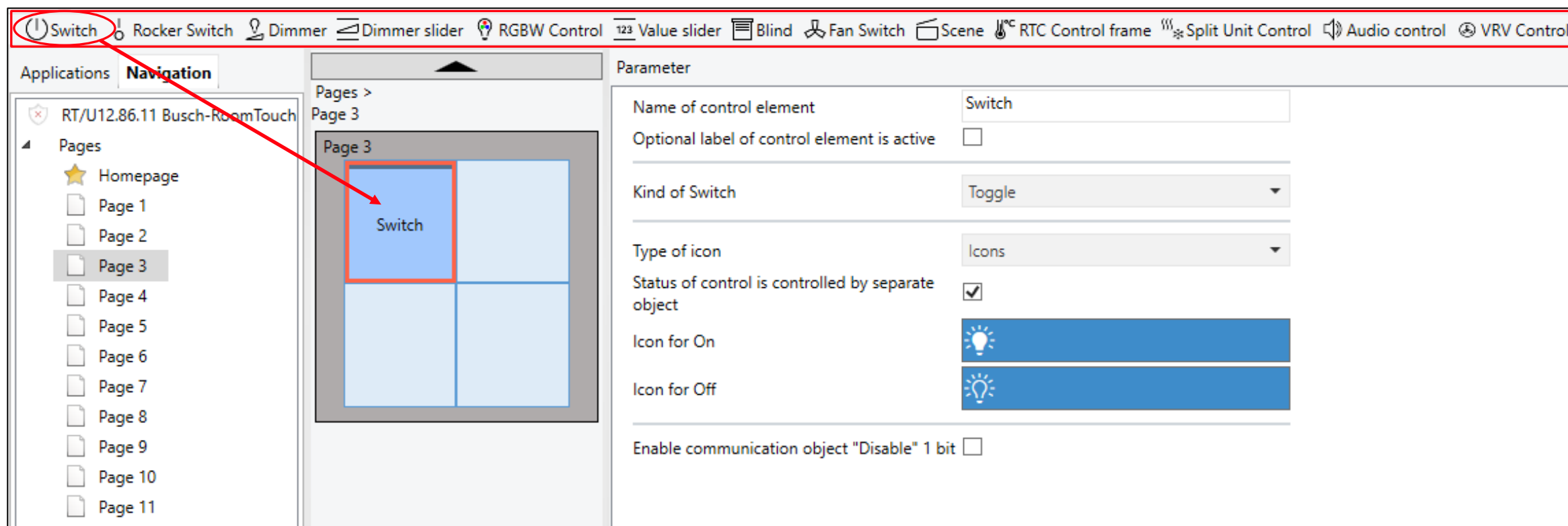




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Control element ‘Switch’

- ‘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	<input checked="" type="checkbox"/>
Optional label of control element	Description
Kind of Switch	Toggle
Type of icon	Icons
Status of control is controlled by separate object	<input checked="" type="checkbox"/>
Icon for On	
Icon for Off	
Enable communication object "Disable" 1 bit	<input checked="" type="checkbox"/>

User interface



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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	<input checked="" type="checkbox"/>
Optional label of control element	Color LED
Extra switch status object	<input checked="" type="checkbox"/>
Type of Color/White lamp	RGB
Switching On/Off via	<input checked="" type="radio"/> Switch object <input type="radio"/> RGB Feedback
Brightness change [%]	1
Telegram is repeated every [s]	0.5s
Switched on -> preset value	<input checked="" type="checkbox"/>
Switched off -> RGB value 0,0,0	<input checked="" type="checkbox"/>
Enable communication object "Disable" 1 bit	<input checked="" type="checkbox"/>

User interface RGBW

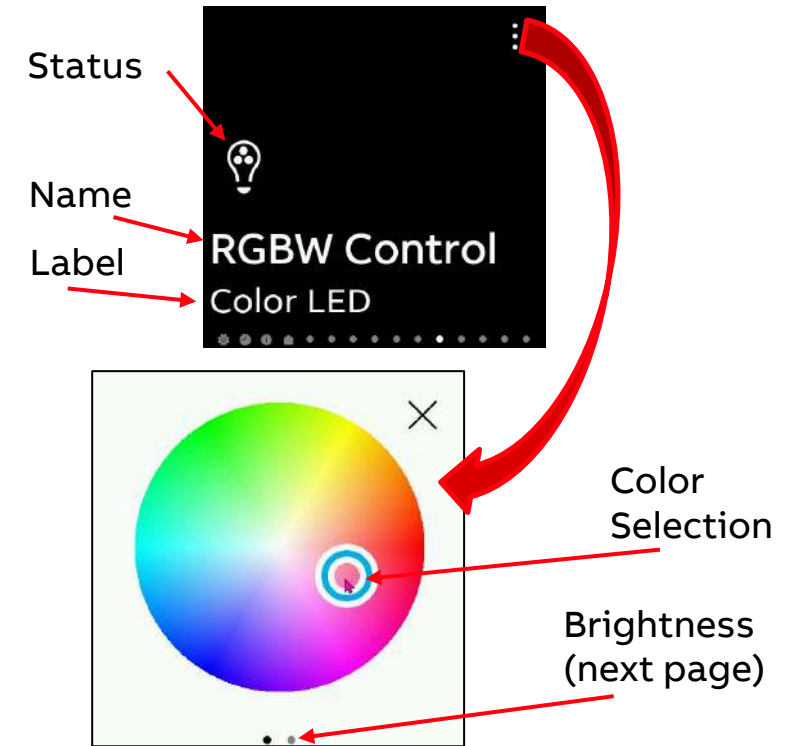


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Control element 'Split Unit Control'

- Split Unit Control
 - 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
 - Suitable actuator:
ABB Split Unit Gateway SUG/U 1.1

Parameter

Name of control element	Split Unit
Optional label of control element is active	<input checked="" type="checkbox"/>
Optional label of control element	Office 21
Main displayed temperature is	<input type="radio"/> Setpoint temperature <input checked="" type="radio"/> Room temperature
Show optional temperature	<input checked="" type="checkbox"/>
Optional displayed temperature is	<input checked="" type="radio"/> Setpoint temperature <input type="radio"/> 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	<input checked="" type="checkbox"/>
Use modus: Automatic	<input checked="" type="checkbox"/>
Use modus: Heating	<input checked="" type="checkbox"/>
Use modus: Cooling	<input checked="" type="checkbox"/>
Use modus: Drying	<input checked="" type="checkbox"/>
Use modus: Fan	<input checked="" type="checkbox"/>
Use horizontal swing	<input checked="" type="checkbox"/>
Use vertical swing	<input checked="" type="checkbox"/>
Additional operating modes	
Use extra mode: Silence Mode	<input type="checkbox"/>
Use additional modus: Boost	<input checked="" type="checkbox"/>
Use additional modus: Forced operation	<input checked="" type="checkbox"/>
Use additional modus: Scene	<input type="checkbox"/>
Use additional modus Window contact	<input type="checkbox"/>
Use additional modus Presence	<input type="checkbox"/>
Enable communication object "Disable" 1 bit	<input type="checkbox"/>

User interface

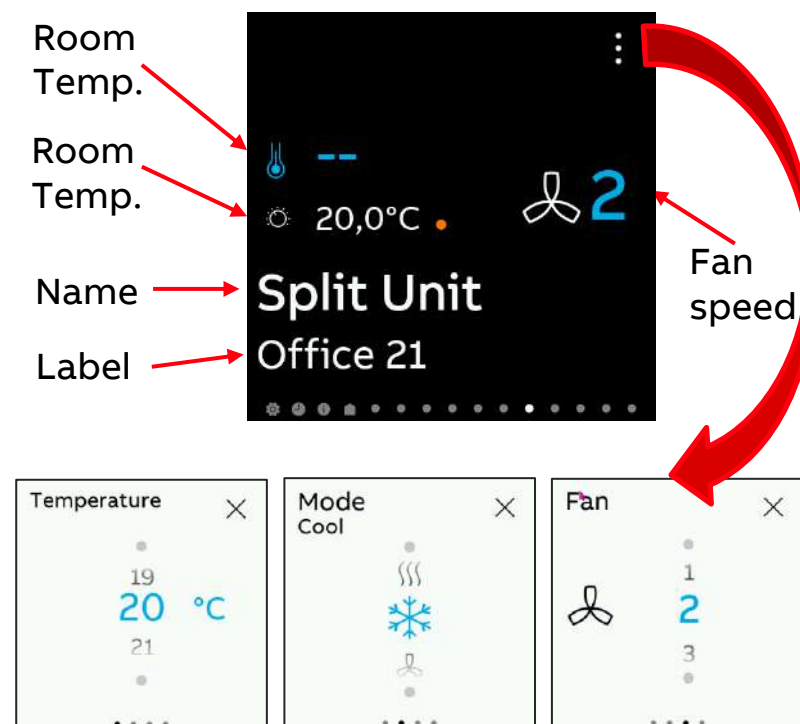


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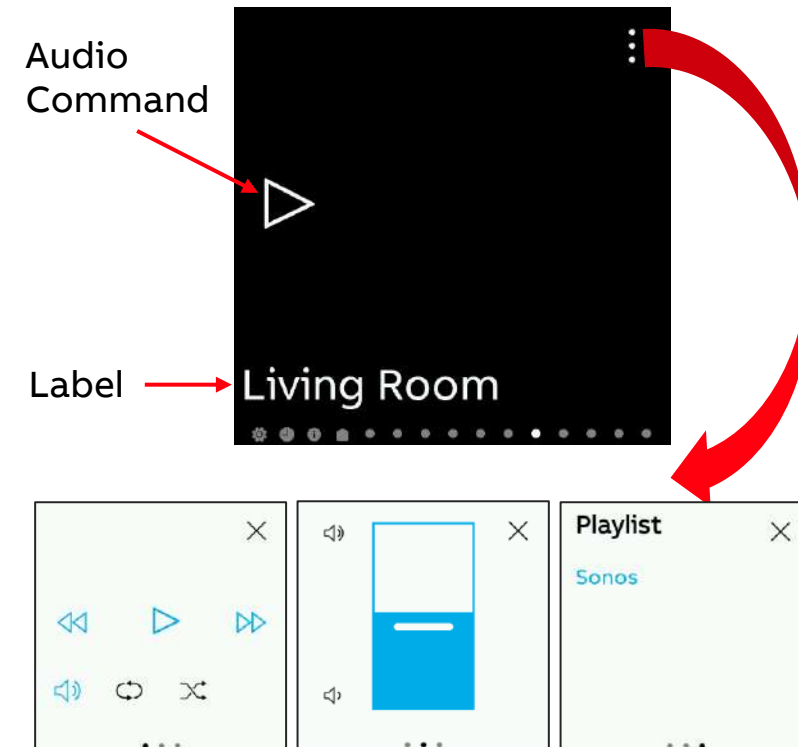
Control element 'Audio Control'

- 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

Parameter

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

User interface



Operation

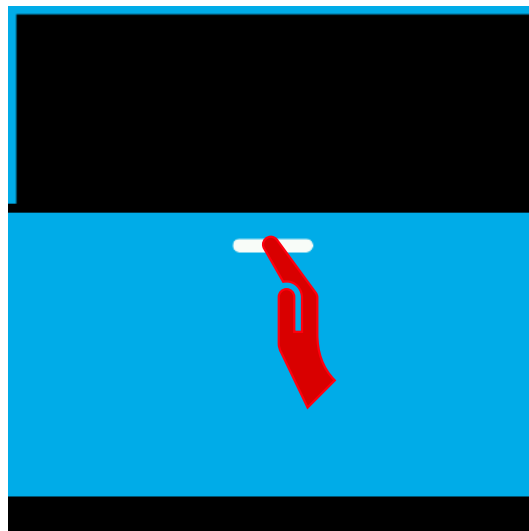
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Tap to switch or activate



Swipe up/down to change values



Tap the upper right corner for further operations

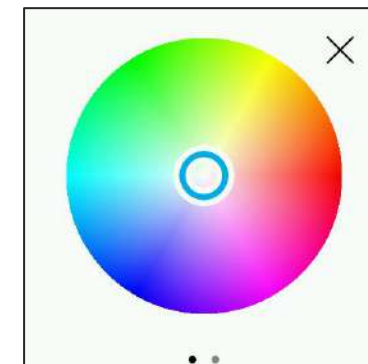
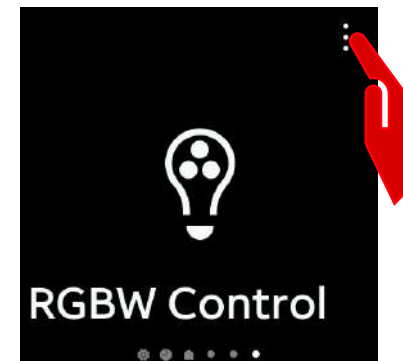


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Quick and user friendly access to all pages and functions behind by scrolling the pages to left and right

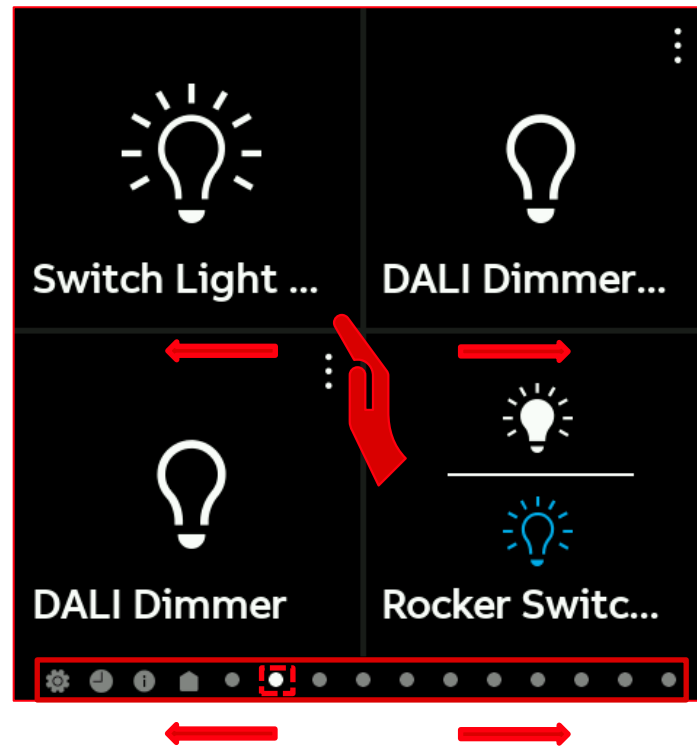


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Click on gear to enter System Settings. Type in PIN code (when activated in ETS)

System Settings

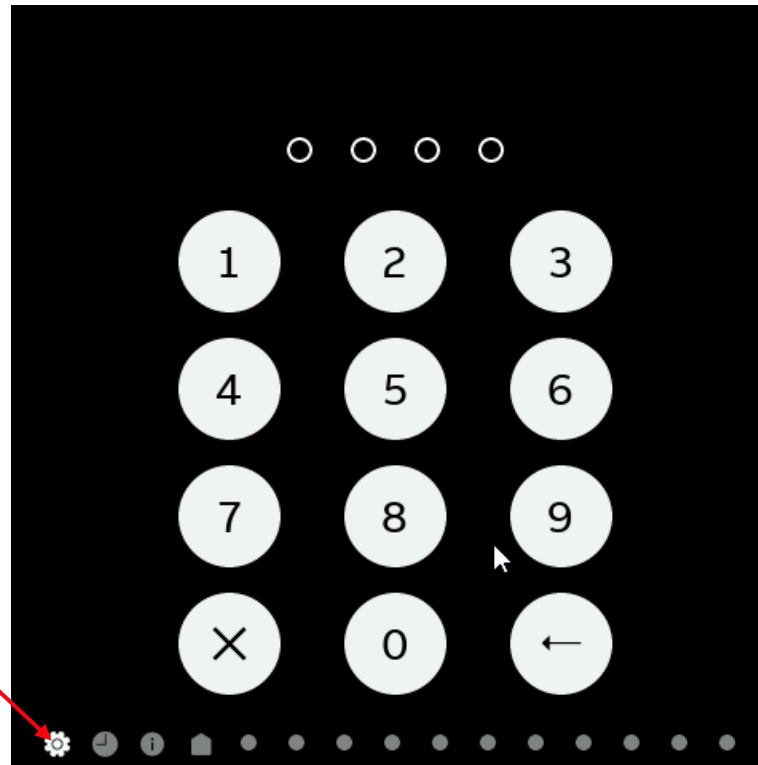


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System Settings: 9 different menu entries to select

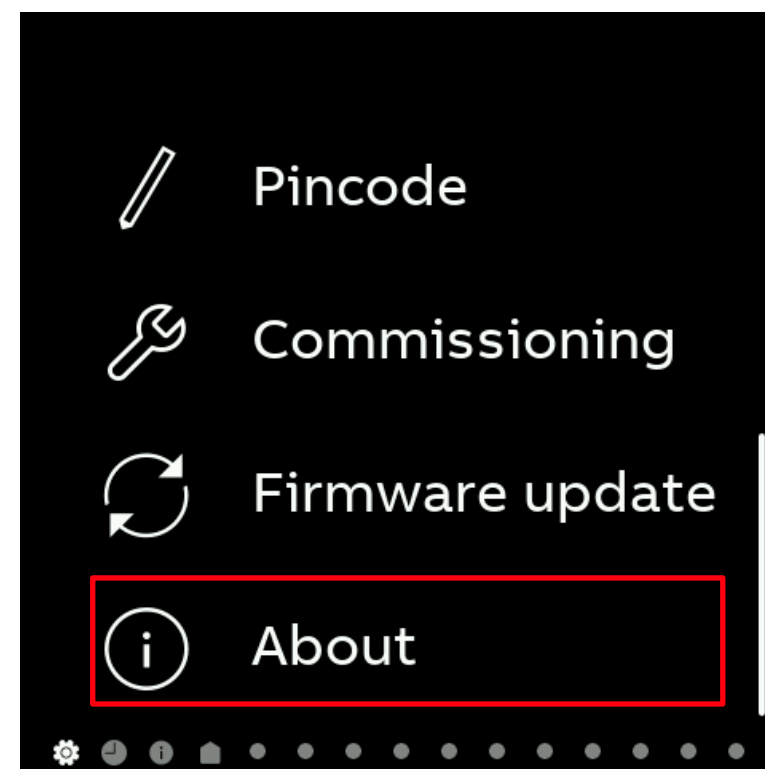
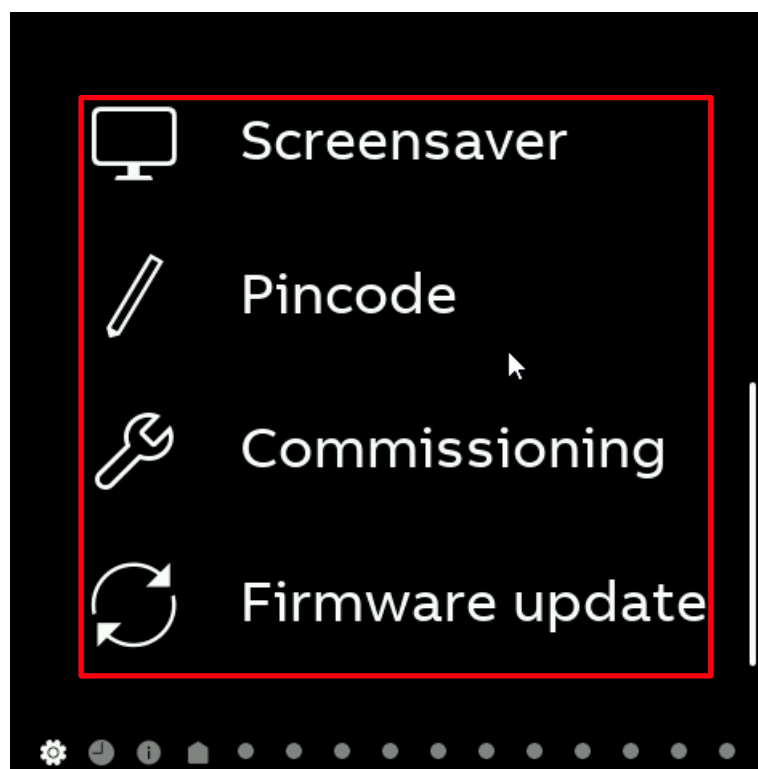
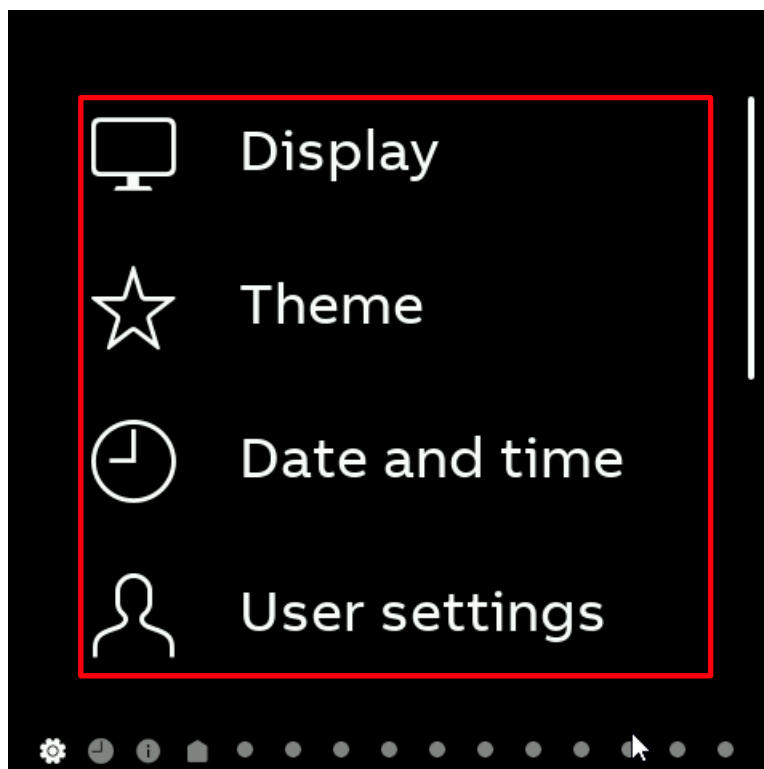


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System settings, information page, time functions, homepage and up to 11 pages

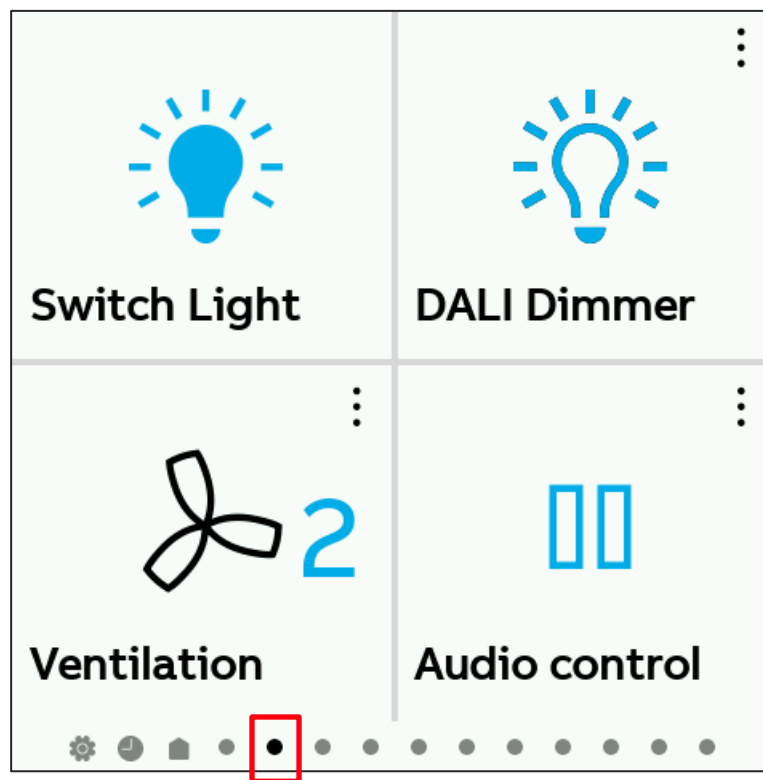
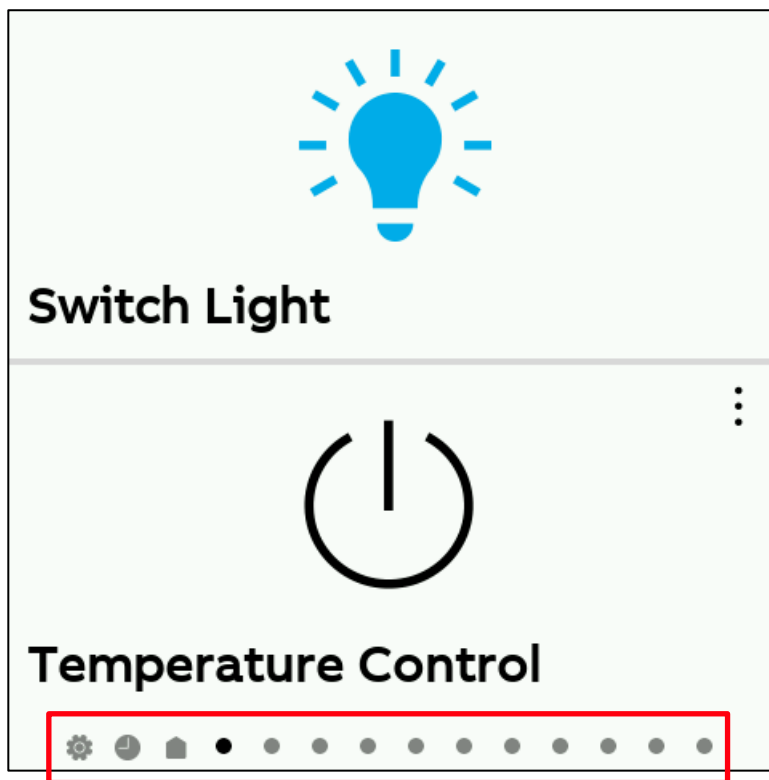
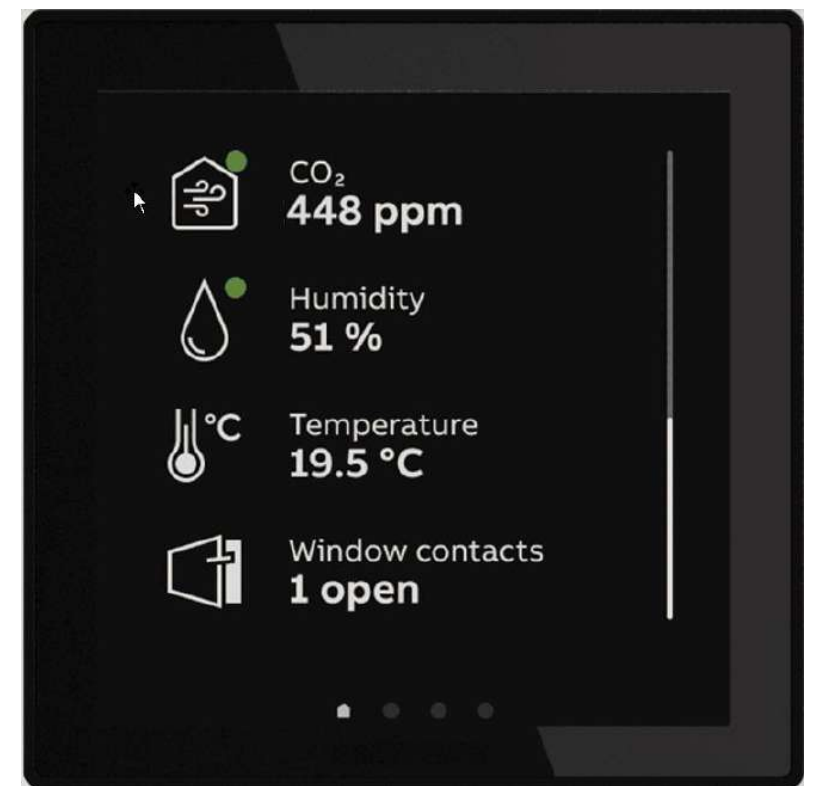


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Questions???



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