Product manual | **21.10.2026**

Busch-Installationsbus® KNX

Busch-IQTouch 10



BUSCH-JAEGER

1 Notes on the instruction manual 5

2 Safety 6
2.1 Information and symbols used 6
2.2 Intended use 7
2.3 Improper use 7
2.4 Target group / Qualifications of personnel 8
2.4.1 Operation 8
2.4.2 Installation, commissioning and maintenance 8
2.5 Cyber security 9
2.5.1 Secure commissioning of KNX Secure devices 11
2.5.2 Device certificate 12
2.5.3 KNX Secure 12
2.5.4 Preventing unauthorized access 13
2.6 Safety instructions 14

3 Information on protection of the environment 15
3.1 Environment 15

4 Product Overview 16
4.1 Device overview 17

5 Technical data 18
5.1 Dimensional drawings 19

6 Connection, installation / mounting 20
6.1 Safety instructions 20
6.2 Requirements for the electrician 20
6.3 Preparatory steps 20
6.4 Mounting / dismantling 21
6.4.1 Mounting 21
6.4.2 Connection 22
6.4.3 Dismantling 23

7 KNX control elements and application parameters 24
7.1 System settings in panel 25
7.1.1 Scroll down menu 25
7.1.2 Wi-Fi 25
7.2 Device settings 35
7.2.1 Global settings 35
7.2.2 SIP & IP-camera 37
7.2.3 Security settings 46
7.2.4 Night mode settings 48
7.2.5 Location settings 51
7.2.6 Summer time settings 53
7.2.7 Proximity output settings 55
7.3 Control elements 57
7.3.1 KNX Control elements 58
7.3.2 Element X: Push button 60
7.3.3 Element X: Switch 62
7.3.4 Element X: Dimmer 64

7.3.5 Element X: Dimmer-slider 66
7.3.6 Element X: Relative + Slider Dimmer 68
7.3.7 Element X: RGB Control 70
7.3.8 Element X: RGBW Control 72
7.3.9 Element X: RGB + Tunable white control 74
7.3.10 Element X: Tunable white control 78
7.3.11 Element X: Curtain step move 81
7.3.12 Element X: Shutter move/step 83
7.3.13 Element X: Curtain position 85
7.3.14 Element X: Shutter position 87
7.3.15 Element X: Blinds position 89
7.3.16 Element X: Air conditioner 91
7.3.17 Element X: Room temperature control 96
7.3.18 Element X: Fan 103
7.3.19 Element X: Audio control 108
7.3.20 Element X: Audio control (play mode + track information) 111
7.3.21 Element X: Audio control (play mode) 114
7.3.22 Element X: Audio control (track information) 116
7.3.23 Element X: Audio control (track information + playlist) 119
7.3.24 Element X: Energy display 122
7.3.25 Element X: Temperature display 125
7.3.26 Element X: Humidity display 127
7.3.27 Element X: PM2.5 display 129
7.3.28 Element X: PM10 display 131
7.3.29 Element X: VOC display 133
7.3.30 Element X: CO2 display 135
7.3.31 Element X: Brightness display 137
7.3.32 Element X: Wind display 139
7.3.33 Element X: Status display 142
7.3.34 Element X: Value sender 144
7.4 Home page 148
7.4.1 Overwrite the home page settings by a download 148
7.4.2 Number of controls 148
7.4.3 Drop Down Box 149
7.5 Open page settings 152
7.5.1 Number of pages 152
7.5.2 Layout 153
7.5.3 Floor plan 153
7.5.4 Page X 155
7.5.5 Name of page 155
7.5.6 Number of controls 155
7.5.7 Drop Down Box 155
7.6 Scene page 156
7.6.1 Number of Scenes 156
7.6.2 Name of Scene 156
7.6.3 Background for scene 156
7.6.4 Scene number 157
7.6.5 Store scene by long press 157
7.7 Internal sensors 158
7.7.1 Temperature sensor 159
7.7.2 Humidity sensor 160
7.8 HCL-Control 161
7.8.1 When are the values send 161
7.8.2 HCL behavior after voltage recovery 161

7.8.3 HCL behavior after receiving a new preset value ... 162
7.8.4 Colour temperature control type ... 162
7.8.5 Time 1 ... 10 ... 162
7.9 Time programs ... 164
7.9.1 General parameters ... 164
7.9.2 Time program X ... 164
7.10 Alarm messages ... 167
7.10.1 General settings ... 167
7.10.2 Alarm message X ... 168
7.11 Logic functions ... 169
7.11.1 General settings ... 169
7.11.2 Logical function X: AND, OR, XOR ... 169
7.11.3 Logical function X: Gate forwarding ... 171
7.11.4 Logical function X: Value comparator ... 172
7.11.5 Logical function X: Format converter ... 174
7.11.6 Logical function X: Gate ... 175
7.11.7 Logical function X: Output delay ... 177
7.11.8 Logical function X: Staircase lighting ... 178
7.12 Scene actuator ... 180
7.12.1 General settings ... 180
7.12.2 Group X ... 180

8 Maintenance ... 183
8.1 Cleaning ... 183

9 Notes ... 184

10 Index ... 185

1 Notes on the instruction manual

Please read through this manual carefully and observe the information it contains. This will assist you in preventing injuries and damage to property and ensure both reliable operation and a long service life for the device.

Please keep this manual in a safe place.

If you pass the device on, also include this manual along with it.

ABB AG – BUSCH-JAEGER accepts no liability for any failure to observe the instructions in this manual.

If you require additional information or have questions about the device, please contact ABB AG – BUSCH-JAEGER or visit our Internet site at:

www.BUSCH-JAEGER.de/en

2 Safety

The device has been constructed according to the latest valid regulations governing technology and is operationally reliable. It has been tested and left the factory in a technically safe and reliable state.

However, residual hazards remain. Read and adhere to the safety instructions to prevent hazards of this kind.

ABB AG – BUSCH-JAEGER accepts no liability for any failure to observe the safety instructions.

2.1 Information and symbols used

The following Instructions point to particular hazards involved in the use of the device or provide practical instructions:



Danger

Risk of death / serious damage to health

– The respective warning symbol in connection with the signal word "Danger" indicates an imminently threatening danger which leads to death or serious (irreversible) injuries.



Warning

Serious damage to health

– The respective warning symbol in connection with the signal word "Warning" indicates a threatening danger which can lead to death or serious (irreversible) injuries.



Caution

Damage to health

– The respective warning symbol in connection with the signal word "Caution" indicates a danger which can lead to minor (reversible) injuries.



Attention

Damage to property

– This symbol in connection with the signal word "Attention" indicates a situation which could cause damage to the product itself or to objects in its surroundings.



NOTE

This symbol in connection with the word "Note" indicates useful tips and recommendations for the efficient handling of the product.



This symbol alerts to electric voltage.

2.2 Intended use

The Busch-IQTouch 10 is a KNX touch panel which can be freely programmed. The device serves as a comprehensive control and message unit for the entire KNX installation as well as the representation and operation of KNX standard functions. The touch panel can be used as terminal device (indoor video station) for communication with an intercom/SIP-system.

The device is intended for the following:

- Operation according to the listed technical data
- Installation in dry interior rooms
- Use with the connecting options available on the device

The intended use also includes adherence to all specifications in this manual.

2.3 Improper use

Each use not listed in “Intended use“ on page 7 is deemed improper use and can lead to personal injury and damage to property.

ABB AG – BUSCH-JAEGER is not liable for damages caused by use deemed contrary to the intended use of the device. The associated risk is borne exclusively by the user/operator.

The device is not intended for the following:

- Unauthorized structural changes
- Repairs
- Outdoor use
- The use in bathroom areas

2.4 Target group / Qualifications of personnel

2.4.1 Operation

No special qualifications are needed to operate the device.

2.4.2 Installation, commissioning and maintenance

Installation, commissioning and maintenance of the device must only be carried out by trained and properly qualified electrical installers.

The electrical installer must have read and understood the manual and follow the instructions provided.

The electrical installer must adhere to the valid national regulations in his/her country governing the installation, functional test, repair and maintenance of electrical products.

The electrical installer must be familiar with and correctly apply the "five safety rules" (DIN VDE 0105, EN 50110):

1. Disconnect
2. Secure against being re-connected
3. Ensure there is no voltage
4. Connect to earth and short-circuit
5. Cover or barricade adjacent live parts

2.5 Cyber security

The industry faces intensifying cyber security risks. In order to increase stability, safety and robustness of its solutions, ABB AG – BUSCH-JAEGER has formally established cyber security robustness testing as part of the product development process.

The following measures are prerequisite for the safe operation of your system. ABB AG – BUSCH-JAEGER accepts no liability for non-observance.

Access control and limitation

The careful isolation of the system against unauthorized access is the basis for every protective concept. Only authorized persons (fitter, caretaker, tenant) are allowed physical access to the IP network or bus system and its components. This also includes the device described in this instruction manual.

The best possible protection of the IP or network media (WiFi) and the transfer nodes must be guaranteed already during planning and installation. Sub-distributions with fieldbus devices must be lockable or be in rooms to which only authorized persons have access.

Bus cabling

- The ends of the bus cables must not be visible, i.e. they must not project out of walls or channels, either inside or outside of the building.
- Bus cables in outdoor areas or in areas with limited protection represent an increased safety risk. The physical access should be made exceptionally difficult.

IP Network

The local network represents a sensitive component for safe communication. That is why unauthorized access to the local network should be prevented. The normal safety mechanisms for IP networks are to be used, e.g.:

- Safe encryption of wireless networks
- Use of complex passwords and protection of these against unauthorized persons
- Physical access to network interfaces (Ethernet interfaces) and network components (routers, switches) should only be possible in protected areas.
- MAC filter (table with certified device addresses)

Connection to the Internet or the local IP network

To prevent improper use, no router ports from the Internet into the building network or home network are to be opened to the display. A VPN tunnel is suitable for safe remote control.

The stable and reliable function of the device also depends on the reliability of the local IP network to which the server is connected. For this reason, additional network components are to be used to repel the DoS attacks (denial of service) from the Internet. Such attacks can overload the local IP network or the individual components and make them inaccessible.

Safety of user accounts

Set a strong access password during initial commissioning. Use passwords that you have received from the administrator only for the first login.

Keep passwords secret and use a password manager with two-factor login as memory aid, e.g. Keepass.

Updates

The device supports various update options. A detailed overview is available in .

Solutions for protection against malware

The product is not susceptible to malware, because a user-defined code cannot be executed on the system. The only option of updating the software is the update of the firmware. Only a firmware signed by ABB AG – BUSCH-JAEGER is accepted.

Password rules

Preset passwords should be changed by the user during the first use of the device.

2.5.1 Secure commissioning of KNX Secure devices

Note
ETS version 6 or later is required when using KNX Secure. The use of the latest ETS version is recommended. Using older ETS versions can cause errors during project planning, problems during commissioning (e.g. while replacing devices), or while undertaking diagnostics on group addresses and devices.

Note
In order to commission or program a KNX Data Secure device in Secure mode, the interface used (e.g. USB/S 1.2 or IPS/S 3.x.1) must support "Extended/Long Frames".

To commission the device securely, note the following points:

- A project password must be assigned while importing a KNX Secure device into a KNX project. By assigning the project password, the project is protected against unauthorized access.
- If no password is assigned, none of the devices in the project can be operated as KNX Secure devices. This means the security of the whole project will be that of a conventional KNX network (KNX Plain).
- The project password must be kept in a safe place. Access to the project is not possible without it. Not even the KNX Association or ABB AG – BUSCH-JAEGER will be able to access it.
- A device certificate is required while commissioning a KNX Secure device. This device certificate includes the FDSK (Factory Default Setup Key) and the device's KNX serial number.
- The device certificate is located on two detachable stickers applied to the device. The stickers should be removed from the device and kept in a safe place.
- When adding the device from the ETS product catalog, a window opens in ETS, prompting the user to enter the device certificate. The device certificate can be entered using a webcam, a barcode scanner or manually.
- The device certificates of all KNX Secure devices integrated in the project can be entered in advance in ETS, → Properties/Settings/"Add Device Certificate". Because the device certificate contains the FDSK and the KNX serial number of the device, ETS can automatically manage the assignment of the certificates to the correct device during commissioning.
- If the device certificate was entered in ETS, the physical address of the device can be assigned via the KNX serial number:
  → Properties/Pending Operations/"Use Device Certificate".
- The device certificate is only required for initial encryption and authentication of communication between KNX Secure devices and ETS. As it is read, the device certificate is resolved into the FDSK and KNX serial number.
- During commissioning, ETS assigns a device key (Tool Key) to the device. The device certificate will be required again only if the device is reset to its factory settings

2.5.2 Device certificate

The device certificate is located on two detachable stickers applied to the device. Each sticker contains the following information:

- Device certificate as QR code
- Device certificate as a 36-character combination of numbers and letters
- The device certificate is required for securely commissioning the device in a KNX Secure project and contains the following information:
- KNX serial number of the device
- FDSK (Factory Default Setup Key)

For secure commissioning of the device, the device certificate must be entered in ETS (scan the QR code or enter the combination of numbers and letters directly, → Properties/Settings/"Add Device Certificate").

2.5.3 KNX Secure

Note
ETS version 6 or later is required when using KNX Secure. The use of the latest ETS version is recommended. Using older ETS versions can cause errors during project planning, problems during commissioning (e.g. while replacing devices), or while undertaking diagnostics on group addresses and devices.

KNX Secure is an encryption technology that guarantees data protection in a KNX twisted pair network. KNX Secure is based on end-to-end encryption that ensures all data exchanged between KNX devices are encrypted and can only be read by authorized users.

In conventional KNX networks (colloquially termed "KNX Plain"), data are sent unencrypted on the bus. The data could be read by anyone with access to the bus and can be intercepted or falsified by unauthorized individuals.

Using KNX Secure protects transmitted data against unauthorized access, ensures data integrity and minimizes potential security risks. KNX Secure helps to increase security and privacy in KNX-based smart home or building automation systems. KNX devices that only support KNX Plain can be used in the same installation with the aid of a suitable coupler.



Fig. 1: KNX secure logo

A KNX Secure product is identifiable by the KNX Secure logo on the packaging or the product. This logo indicates that the product meets the KNX Secure security standard and supports KNX Secure encryption technology.

KNX Secure distinguishes between two types of encrypted KNX telegrams:

- KNX IP Secure encrypts communication specifically at the IP network layer. It secures the connection between KNX IP devices and is particularly important when the KNX installation connects to external IP networks, such as the internet.
- KNX Data Secure encrypts telegrams at the data layer and works across all KNX media (TP, RF, IP). It protects communication throughout the entire KNX installation, regardless of the transmission medium.

Both protocols can be used independently or together for comprehensive security. KNX Data Secure protects the data content itself, while KNX IP Secure protects the IP communication channel.

The industry is increasingly faced with cyber security risks. To increase the stability, security and robustness of its solutions, ABB AG – BUSCH-JAEGER has introduced cyber security robustness tests as part of the product development process.

In addition, the sections below include guidelines and mechanisms that you can use to improve the security of KNX systems.

2.5.4 Preventing unauthorized access

The basis for any protection concept is the careful shielding of the system against unauthorized access. The following points must be taken into consideration when planning and installing a KNX system:

- Only authorized persons (installers, custodians, users) should be allowed to have physical access to the KNX system.
- Sub-distributions with KNX devices should be closed, or in rooms to which only authorized persons have access.
- If available, use the anti-theft features on the KNX devices.
- All components in a KNX system should be permanently installed and protected from unauthorized access.
- The bus cable (Busch-Installationsbus® KNX) should not be visible inside or outside the building. Cables outdoors are an increased risk. Physical access should be made particularly difficult here.
- Devices installed in areas with limited protection (e.g. outdoor areas, underground parking lots, rest-rooms, etc.) should be designed using a line coupler as a separate line.
- If possible, KNX DATA Secure should be used for data transmission in KNX networks.
- The system should be divided into security segments that are based on the available security functions of the devices used. This is done by using segment couplers.

2.5.4.1 IP cabling inside the building

For building automation, use a separate LAN or WiFi network with its own hardware (routers, switches, etc.). Regardless of the KNX system, apply the usual security mechanisms for IP networks:

- MAC filter
- Encryption of wireless networks
- Usage of strong passwords and password protection against access by unauthorized persons

2.5.4.2 Using filter tables

Filter tables are used to improve system security and ensure that only authorized telegrams are forwarded.

2.6 Safety instructions



Danger - Electric voltage!

Electric voltage! Risk of death and fire due to electric voltage of 100 … 240 V.

Dangerous currents flow through the body when coming into direct or indirect contact with live components. This can result in electric shock, burns or even death.

- Work on the 100 … 240 V supply system may only be performed by authorised and qualified electricians.
- Disconnect the mains power supply before installation / disassembly.
- Never use the device with damaged connecting cables.
- Do not open covers firmly bolted to the housing of the device.
- Use the device only in a technically faultless state.
- Do not make changes to or perform repairs on the device, on its components or its accessories.
- Keep the device away from water and wet surroundings.



Caution! - Risk of damaging the device due to external factors!

Moisture and contamination can damage the device.

- Protect the device against humidity, dirt and damage during transport, storage and operation.

3 Information on protection of the environment

3.1 Environment



Consider the protection of the environment!

Used electric and electronic devices must not be disposed of with domestic waste.

– The device contains valuable raw materials which can be recycled. Therefore, dispose of the device at the appropriate collecting depot.

All packaging materials and devices bear the markings and test seals for proper disposal. Always dispose of the packaging material and electric devices and their components via the authorized collecting depots and disposal companies.

The products meet the legal requirements, in particular the laws governing electronic and electrical devices and the REACH ordinance.

(EU Directive 2012/19/EU WEEE and 2011/65/EU RoHS)

(EU REACH ordinance and law for the implementation of the ordinance (EC) No.1907/2006).

4 Product Overview

The Busch-IQTouch 10 is a 10.1-inch KNX smart control panel with a screen resolution of up to 1280 x 800 pixels. It not only enables control of KNX devices but also supports seamless door communication through integration with a SIP intercom system.

This smart control panel integrates various functions, including lighting control, shading control, value sending, tunable white and colour control (RGB, RGBW, RGBCW), audio control, room temperature regulation, air conditioning, and ventilation system control.

Features:

- Display of air quality, energy metering, and device status
- Equipped with sensors for proximity, brightness, temperature and humidity
- As an intercom indoor unit: wired network access, contact management, SIP visual intercom calls, voice messaging, security monitoring
- Lock screen and password protection
- powered by the KNX bus, requires a 12-30V DC auxiliary power supply
- You can assign the physical address and configure parameters using engineering design tools such as ETS, with the .knxprod file format (compatible with ETS version 5.7 or higher).

4.1 Device overview

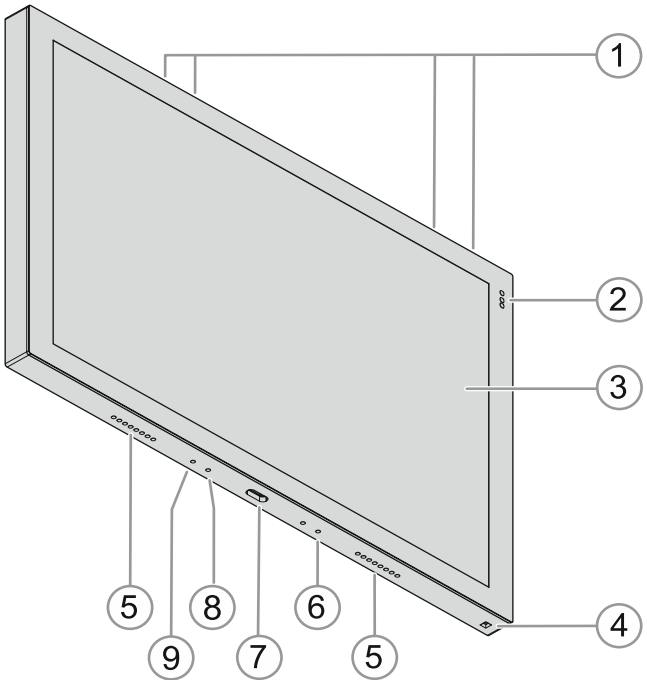


Fig. 2: Structural diagram

[1] Microphones
[2] Proximity sensor and brightness sensor
[3] Touch display
[4] Internal temperature and humidity sensor
[5] Speakers
[6] Reset button
[7] USB-C port
[8] Programming LED
[9] Programming button

5 Technical data

Power Supply	Bus voltage	21-30 V DC，via the KNX bus
	Bus current	<3.8 mA/24 V，<3.4mA/30V
	Bus consumption	<0.1 W
Auxiliary Supply	Voltage	12-30 V DC
	Current	12 V DC, < 1400 mA; 24 V DC, < 700 mA; 30 V DC, < 600 mA
	Consumption	<16.8 W
Connection	KNX	Bus connection terminal (red/black)
	Auxiliary supply	Bus connection terminal (yellow/white)
	RJ45	For access to intercom system or connect ethernet
	USB	Type C (for USB flash drives only) supported formats: FAT32 or exFAT (up to 128 GB) output rating: 5 V DC, max. 300 mA
Operation and display	Programming button & LED	For assigning the physical address
Proximity sensor	– Normal: +/-30 cm – Maximum: +/- 60 cm	
Temperature sensor	– 40 °C ... + 80 °C	
Humidity sensor	0 - 100 %	
Temperature	Operation	– 5 °C ... + 45 °C
	Storage	– 25 °C ... + 55 °C
	Transport	– 25 °C ... + 70 °C
Environment	Humidity	< 93 %, except dewing
Installation	In a standard wiring box (VDE, BS or CH)	
Dimensions/weight	240*154.6*36 mm / 0.695 kg	

Tab. 1: Technical data



Note

USB Type C port for use with USB drives only (5 V DC, max. 300 mA). Do not connect other USB devices or use this port for charging.

5.1 Dimensional drawings

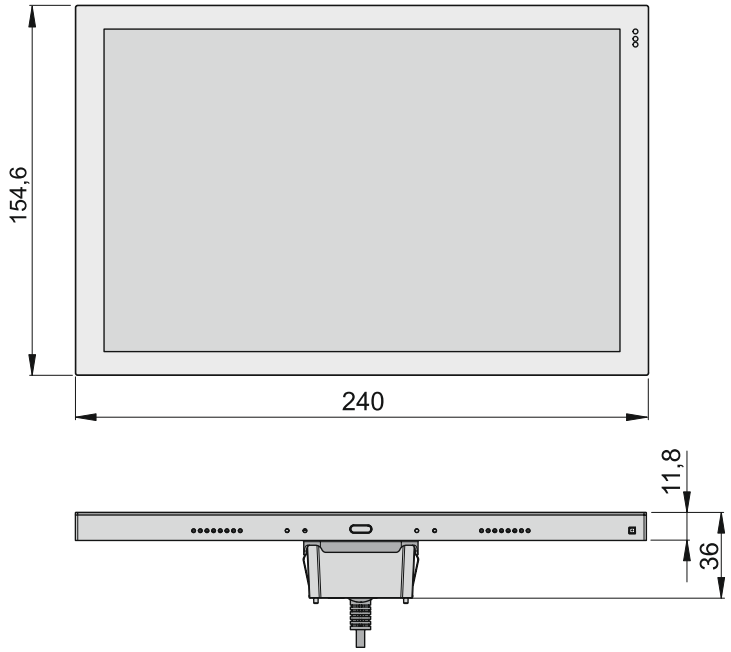


Fig. 3: Dimensions

All dimensions are in millimetres.

6 Connection, installation / mounting

6.1 Safety instructions



Danger - Electric voltage!

Risk of death due to electrical voltage of 100 … 240 V during short-circuit in the low-voltage conduit.

– Low-voltage and 100 … 240 V conduits must not be installed together in a flush-mounted box!

6.2 Requirements for the electrician



Danger - Electric voltage!

Install the device only if you have the necessary electrical engineering knowledge and experience.

- Incorrect installation endangers your life and that of the user of the electrical system.
- Incorrect installation can cause serious damage to property, e.g. due to fire.

The minimum necessary expert knowledge and requirements for the installation are as follows:

- Apply the "five safety rules" (DIN VDE 0105, EN 50110):
  1. Disconnect
  2. Secure against being re-connected
  3. Ensure there is no voltage
  4. Connect to earth and short-circuit
  5. Cover or barricade adjacent live parts.
- Use suitable personal protective clothing.
- Use only suitable tools and measuring devices.
- Check the type of supply network (TN system, IT system, TT system) to secure the following power supply conditions (classic connection to ground, protective earthing, necessary additional measures, etc.).

6.3 Preparatory steps

- Terminate all branches of the wiring system with a connected bus device
- Do not install the cables of the system bus together with 100 - 240 V cables.
- Do not use joint cables for the connecting lines of door openers and lines of the system bus.
- Avoid bridges between different wire types.
- In a four- or multi-core cable, use only two wires for the system bus.
- During looping, never install the incoming and outgoing bus within a wire.
- Never install the internal and external bus within a conduit.
- Never install a 24 V power supply directly behind the panel (e.g. in an existing FM box of a previously installed panel that is to be replaced).

6.4 Mounting / dismantling

6.4.1 Mounting

Attach the metal plate to the junction box using the provided mounting screws.

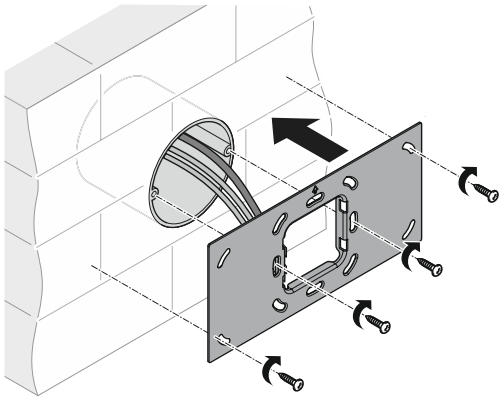


Fig. 4: Attach the metal plate

– Remove the metal plate from the panel and the screws from the junction box. Thread the cable through the metal plate, then secure the metal plate to the junction box using the screws.
– Install the metal plate.
– Take care not to overtighten the screws during installation, as excessive force may cause deformation of the metal plate.
– The recommended torque strength for installation is between 0.6 to 0.8 N.M (6 to 8 Kgf.cm).

6.4.2 Connection

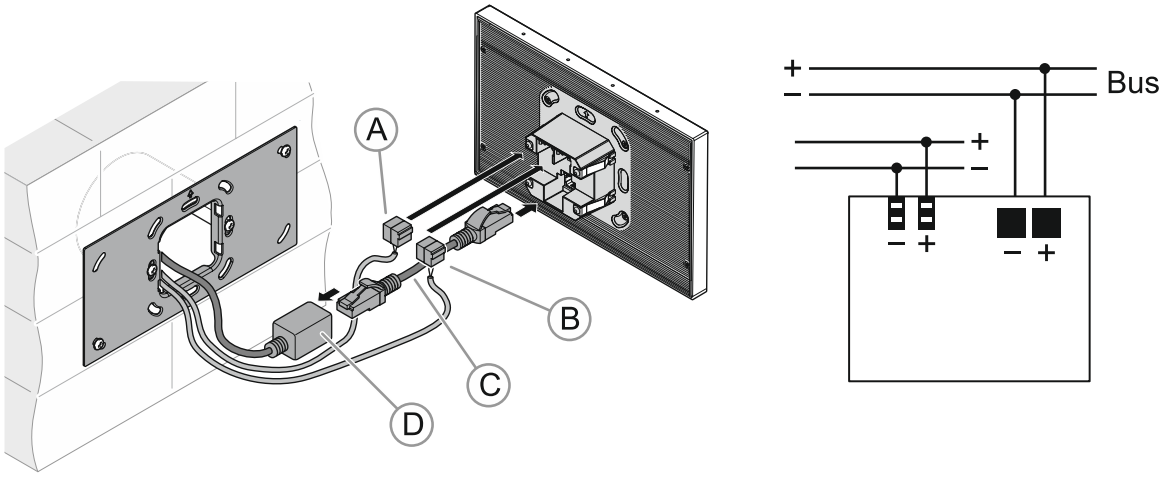


Fig. 5: Connection

[A] Auxiliary supply (yellow/white)

[B] KNX-bus power supply (red/black)

[C] Network patch cable (included)

[D] Ethernet port

– Remove the KNX bus connection terminal from the device and connect it according to the wiring instructions.

– After completing the wiring, insert the KNX bus connector of the connected wires into the installation.

– Connect the network cable to the installation to complete the wiring. This step is optional for general use, but necessary to enable certain features.

After the device connections are complete

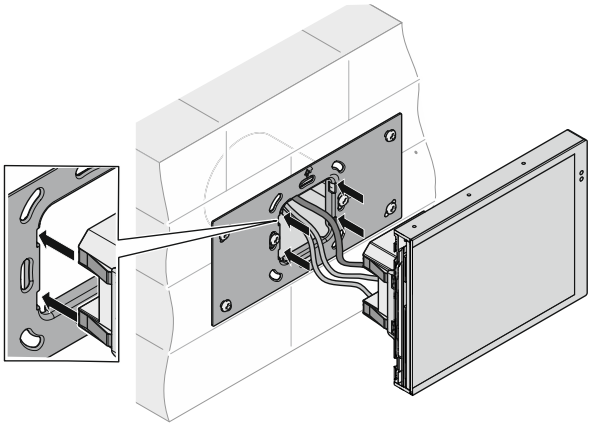


Fig. 6: Installation of the device

– Align the back of the installation with the mounting hole positions of the metal plate, ensuring that the device is parallel to the wall or the metal plate.
– Push the installation into the metal plate, taking care to properly align the shrapnel installation holes on the metal plate.
– Continue until the shrapnel on the installation is securely clamped into the metal plate.
– The installation is complete.

6.4.3 Dismantling

After completing the installation, if disassembly is required, please follow these steps:

– Carefully pull the installation out in a horizontal direction until the spring buckle and magnetic attraction disengage.
– Unplug the Auxiliary supply, the KNX-bus power supply and the network cable.
– This will complete the disassembly process.

7 KNX control elements and application parameters



Notice

The respective standard values in the description of application and parameters are underlined.

These standard values are used when neither a value is entered nor a setting is made.

Examples:

Options:	Deactivated
	Activated

Default value: Parameter activated

Options:	0 - 2

Default value: “0”

7.1 System settings in panel

7.1.1 Scroll down menu

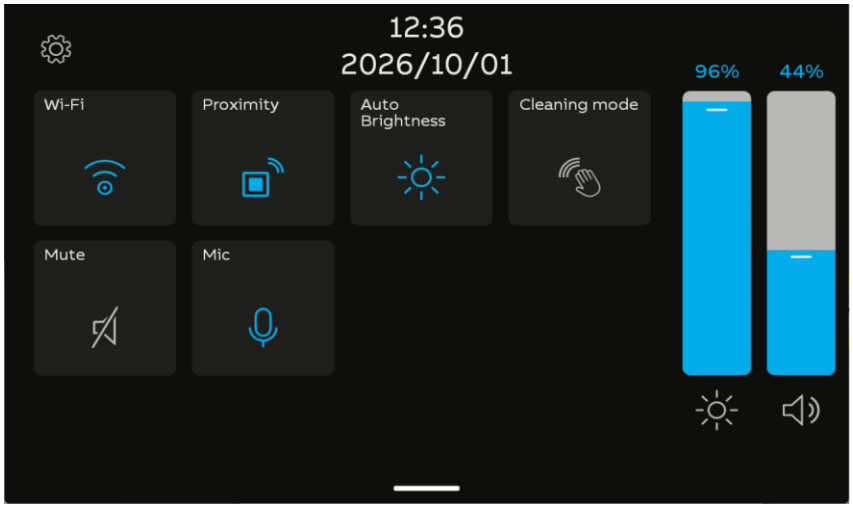


Fig. 7: Scroll down menu

The scroll-down menu can be opened by swiping down from the top edge of the display. Here, you can enable or disable various functions such as Wi-Fi, auto brightness, and proximity. You can also adjust the volume and screen brightness.

7.1.2 Wi-Fi

Options:	Enable
	Disable

If disabled, the panel will not establish any Wi-Fi connection.

7.1.2.1 Proximity

Options:	Enable
	Disable

The panel has a proximity function that wakes the panel when proximity is detected. If this function is disabled, the screen only wakes up when it is touched.

7.1.2.2 Auto-Brightness

Options:	Enable
	Disable

The panel features an auto-brightness function that automatically adjusts the screen brightness based on ambient light levels. To set a fixed brightness level, disable the auto-brightness function.

7.1.2.3 Cleaning mode

Options:	Enable
	Disable

Tapping the cleaning mode displays a timer adjustable from 5 to 60 seconds to clean the panel without operating it accidentally.

7.1.2.4 Mute

Options:	Enable
	Disable

The panel generates sounds for door communication, alarms, and other functions. When mute mode is enabled, all sounds are disabled.

7.1.2.5 Mic

Options:	Enable
	Disable

The panel uses an internal microphone for internal calls, voice messages, and intercom functions. You can mute or unmute it here.

7.1.2.6 Vibration

Options:	Enable
	Disable

The panel provides haptic feedback for each operation. You will feel a short vibration when touching the screen. Use this setting to enable or disable haptic feedback.

7.1.2.7 Brightness slider

Options:	0 … 100%

If auto-brightness is disabled, you can set a fixed brightness level for the panel screen.

7.1.2.8 Volume slider

Options:	0 … 100%

If the panel is not set to mute, you can adjust a fixed volume level. This volume level applies to door communication, alarms, and other functions.

7.1.2.9 Extended panel settings

Tapping the gear icon opens the extended panel settings, where you can configure:

- System settings
- Smart Building
- Custom settings (appearance and personal settings)
- Intercom
- Security
- Project settings (detailed configuration for device, connection and administration)

System settings

The system settings include a range of basic panel configurations, such as display, language, sound, date and time, and connectivity via Wi-Fi and KNX. Additionally, this section provides access to privacy information and panel details, such as firmware version, IP addresses, and other system information.

- Display settings:

  In the display settings, you can adjust the screen brightness or enable the auto-brightness function, similar to the scroll-down menu. Additionally, you can configure separate switch-off times for day and night. If the time is set to zero, the display will remain on.



Note
Not switching off the display after a certain period can significantly reduce its lifespan.



Note
The switch-off timer starts after the screensaver timeout and depends on the ETS settings for night mode.

- Volume settings:

  In the volume settings, you can adjust the panel’s sound volume, similar to the scroll-down menu. Additionally, you can configure three system sounds: touch, alarm, and ringtone. For each tone type, you can choose from five different sounds.

- Time and date settings:

  In the time and date settings, you can choose between 12-hour (with AM/PM) or 24-hour time format. Additionally, you can select from four different date formats. If the device has an internet connection, the panel uses a time server to obtain the correct time based on your location and time zone settings in the ETS. If you disable the time server, you can manually adjust the time and date.

- Language settings:

  In the language settings, you can set the panel language. Additionally, the panel language can also be configured in ETS under “general settings”.

- Wi-Fi:

  The Wi-Fi settings allow you to enable or disable the panel's Wi-Fi connection. Please note that the panel can use either a Wi-Fi or a LAN connection, but not both simultaneously for the same network. As with other IP devices, select the desired network and enter the password to connect.

- Status bar:

  You can enable or disable the status bar. The status bar appears at the top of the panel and displays important information, such as the Wi-Fi connection, KNX connection, microphone status, and active time programs.

- KNX settings:

  In the KNX settings, you can view the device's current KNX firmware version and physical address. The panel also features a physical programming button, as shown in the image, and you can enable or disable the programming mode in these settings.

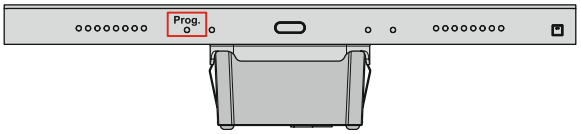


Fig. 8: Programming button

- Privacy:

  In the Privacy tab, you can read the software license agreement as well as other terms and conditions.

About

Under About, you can find all firmware-related information and important panel details, such as storage space, MAC address, KNX serial number, IP address, SIP account, and device ID. From this menu, you can also update the system, software, and KNX firmware. At the bottom of the page, you can restore default settings of the panel.

- System update:

  For the system, software, and KNX firmware, you can check the currently installed versions. If the device is connected to the internet, you can download the latest versions from the cloud. If the device is not connected to the internet, you can install the new versions from a USB-C drive.

Note
The USB-C drive must be formatted as FAT32 or exFAT (up to 128 GB).

Smart Building settings

In the Smart Building settings, you can upload a floor plan for the page layout, change the order and names of the pages, and adjust the time programs.

- Floor plans:

  You can add as many floor plans as the panel's storage capacity allows. Supported file formats are .png and .jpg/.jpeg, with a maximum file size of 10 MB per image.

  To add a floor plan, either:

  – Connect a USB-C storage device and select the image you want to upload, or

  – Upload an image from a smartphone or tablet by tapping the phone icon.

  Note
  Uploading from a smartphone or tablet is only available when the panel is connected via Wi-Fi network.

  When you tap the phone icon, a QR code is displayed on the panel. Scan the QR code with your mobile device and select the image you want to upload.

  The selected image must be an existing .png or .jpg/.jpeg file stored on the mobile device. Images cannot be uploaded directly from the device camera when adding a floor plan.

  To remove a floor plan, swipe the floor plan frame to the left until a trash icon appears, then tap the icon and confirm the deletion.

- Sort pages:

  You can change the page order configured in ETS by dragging and dropping the pages. For example, you can move the first page to the third position. Save your changes by clicking "OK", or return to the settings menu, where the changes will be saved automatically.

- Page names:

  In the Page names tab, you can enable or disable the display of page names in controls. By default, the page name is displayed below the control name.

- Time programs:

  In the Time Programs settings, you can adjust the time programs that were preset in ETS. You can enable or disable programs and change the day and time of program execution. However, you cannot delete existing time programs or create new ones, as this can only be done in ETS.

Custom settings

The custom settings include all panel-, appearance-, and user management-related settings.

- Screen saver:

  In the Screensaver settings, you can enable or disable the screensaver, select the type, and adjust the time between images. If the panel is not operated or no presence is detected for the selected time, the screensaver will start. The screensaver will remain visible for the duration set in the Switch Off Time, which can be configured for day and night in the Display settings. You can choose from four different screensaver types: digital clock, analog clock, weather data, and slide show. It is possible to upload custom screensaver images via USB C or with mobile phone connection.

Note

Pictures can only be uploaded by mobile phone if the panel is connected via WiFi.

Note

The USB-C drive must be formatted as FAT32 or exFAT (up to 128 GB).

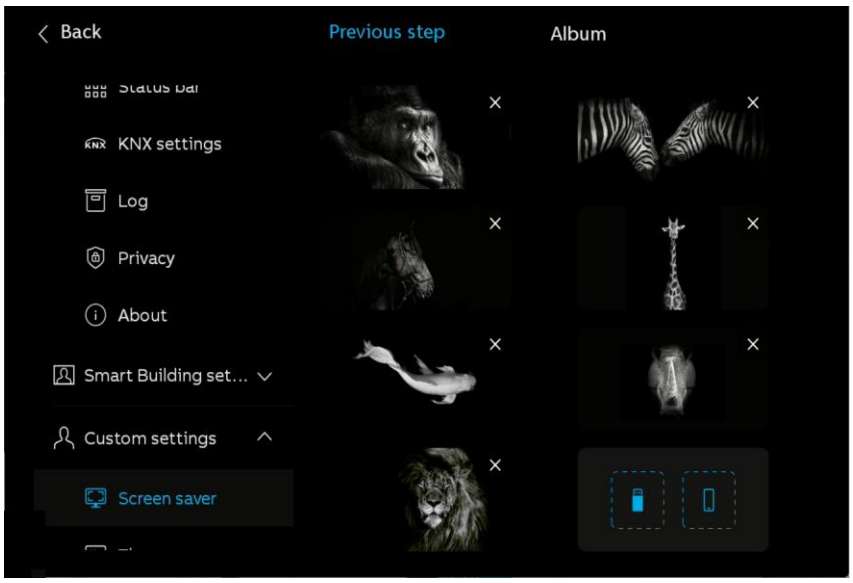


Fig. 9: Screen saver settings

- Theme:

  The panel offers two different themes that can be adjusted in the Theme settings or via ETS. You can choose between a light and a dark theme.

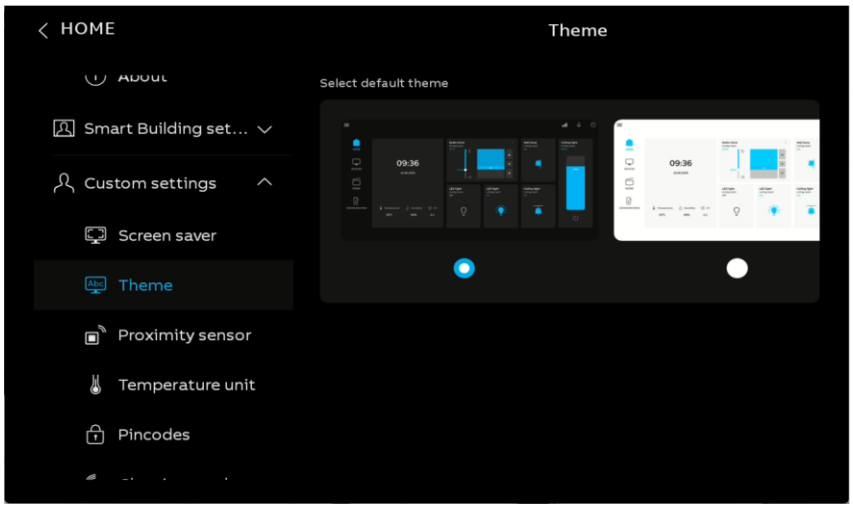


Fig. 10: Theme settings

- Proximity sensor:

  Similar to ETS and the scroll-down menu, you can also disable the proximity sensor and adjust the detection range. The “Normal”-setting sets the range to +/- 30 cm, while the “Maximum”-setting extends it to +/- 60 cm.

- Temperature unit:

  Similar to ETS, it is possible to change the temperature unit between °C and °F. The selected unit is applied to the weather data, the temperature display, and all room temperature user interfaces.

- Pincodes:

  To limit access to the panel and prevent unauthorized use, you can configure up to three different user PIN codes. By selecting a PIN code, you can define permissions for administration, page editing, intercom access, and PIN code management.

- Cleaning mode:

  To clean the panel without operating it accidentally, you can enable Cleaning Mode either from the scroll-down menu or in the System settings. The duration can be adjusted between 10 and 60 seconds.

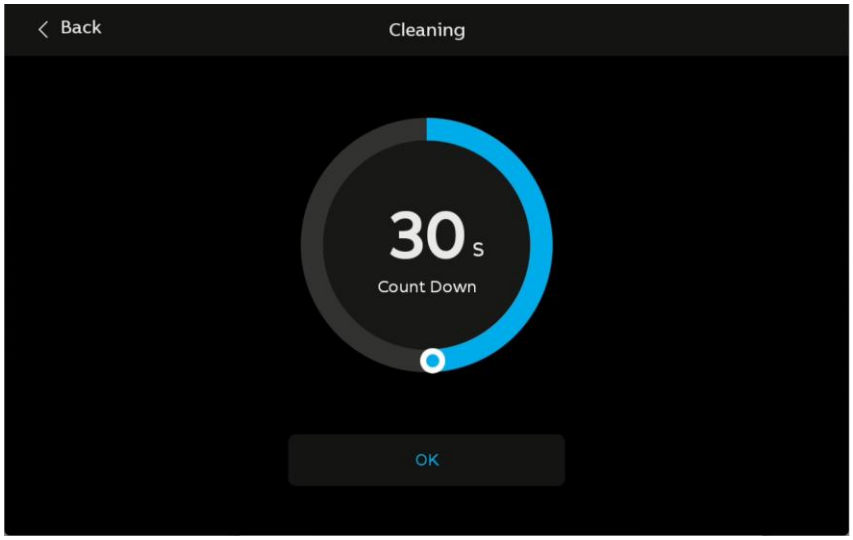


Fig. 11: Cleaning mode

Intercom settings

In the Intercom settings, you can activate or deactivate call forwarding to one of the addresses created in the intercom address book.

Security settings

In the security settings it is possible to add IP cameras, therefore you can add a single IP camera via the link or upload a file for multiple cameras. For further information about setting up an IP camera, refer to

Project Settings

In the Project Settings, you can change the network settings, device name, and administrator PIN code, as well as configure additional settings for Smart Buildings and Intercom.

During initial commissioning, the panel prompts you to create an administrator PIN-code to protect these settings.

- Device Settings:

  You can change the panel name at any time. The panel name is used for the intercom function. Additionally, you can enable or disable different layouts to control which layouts are available for selection in the Device tab.

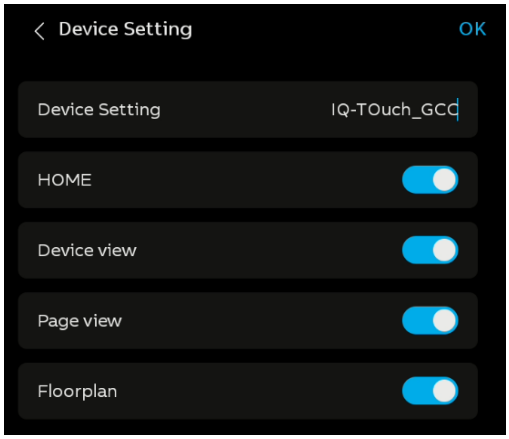


Fig. 12: Device settings

- Network Settings (LAN):

  In the Network settings (LAN), you can choose to enable or disable DHCP. If DHCP is disabled, you can configure a static IP address, including the subnet mask, gateway, and DNS settings.

- Smart Building Settings:

  In the Smart Building settings, you can change the order of the device view and select which controls preset in the ETS should be hidden. To change the order of the device view, go to the Sort Device Types tab. You can drag and drop the groups to reorder them.

- Hide Devices Settings:

  In the Hide Devices Setting, you can choose to show or hide the preset controls. After changing these settings, click “OK” to save the changes. The panel will then restart.

- SIP Account:

  SIP accounts are used to configure intercom functionality on the panel. The panel provides three SIP account settings:

  – Local SIP Account

  – SIP Account 1

  – SIP Account 2

  The Local SIP Account is intended for peer-to-peer communication between IQTouch devices within the same installation.

  Configure the SIP account settings according to your telephony or intercom system requirements.

- Wrong PIN code lock:

  With the Wrong PIN Code Lock setting, you can enable or disable an additional security feature that locks the panel for 5 minutes after five incorrect password entries.

- Import themes:

  It is possible to upload customized themes using the import function via USB stick.

- Administrator PIN code:

  During initial commissioning, the panel prompts you to create an administrator PIN-code to protect these settings. You can change the PIN-code at any time in the project settings.

- Project setting:

  With the Factory Reset setting, you can easily perform a factory reset, which deletes all settings and configurations.

7.2 Device settings

7.2.1 Global settings

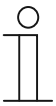
This parameter window is primarily used for configuring various general settings of the device. This includes options for day/night mode, summertime adjustments, proximity settings, and security settings, among others.

7.2.1.1 Delay before sending after voltage recovery

Options:	0 ... 15 s

This parameter defines the sending delay for all read requests after KNX voltage recovery, after a download, and after an ETS reset for the internal KNX section. The timing refers to the startup of the internal KNX component, not to the startup of the entire panel.

The read flag for status objects must be enabled in order for the objects to be sent (activated by default)



Note
After KNX voltage recovery, the device waits for the configured sending delay before transmitting any telegrams on the bus. In addition, this parameter works in conjunction with the setting ”Delay before sending status request”.

7.2.1.2 Delay before sending status request telegrams

Options:	50 ms
	100 ms
	200 ms

After the initial delay set with parameter “Delay before sending after voltage recovery”, each read request can be transmitted with a delay of 50, 100, or 200 ms. This applies after bus voltage recovery, a download, or an ETS reset.

The read flag for status objects must be enabled in order for the objects to be sent (activated by default)

7.2.1.3 Send cyclic ‘in operation’

Options:	0 ... 240 s

This parameter defines the interval at which the “General - In operation” group object sends a telegram. If the value is set to “0”, the function is disabled and the “General - In operation” group object is hidden.



Note
Readiness can be monitored by another KNX device using this group object. If a telegram is not received, the sending device could be faulty or the bus cable to the transmitting device could be interrupted.

7.2.1.4 Long operation after...

Options:	0.5 s
	1.0 s
	2.0 s
	3.0 s

Defines the duration used to detect long user operations, such as opening extended UI elements or long-pressing a scene to store scene values.

7.2.1.5 When sending time and date

Options:	0 ... 240 s0 ... 255 h

Defines the interval at which the device transmits its internal date and time. A value of "0" disables cyclic transmission.

7.2.1.6 Return to home page after…

Options:	0 ... 60 ... 255 s

Defines the timeout after which the panel automatically returns to the home page if no user interaction occurs. A value of "0" disables the automatic return.

7.2.2 SIP & IP-camera

7.2.2.1 SIP

Session Initiation Protocol (SIP) integration refers to the implementation of SIP technology in communication systems to enable and enhance Voice over IP (VoIP) capabilities.

SIP is a signaling protocol used to initiate, maintain, and terminate real-time sessions, primarily involving video, voice, messaging, and other communication services over IP networks.

SIP integration involves configuring SIP servers, gateways, session border controllers, and other components to manage and route communication between users, devices, and networks.

SIP Server

As an example of a SIP server, the Welcome IP Smart Access Point is used to demonstrate the required settings.

After setting up the Welcome IP system, access the preferences via the web server. In the “Connection and APIs” menu, you can enable SIP.

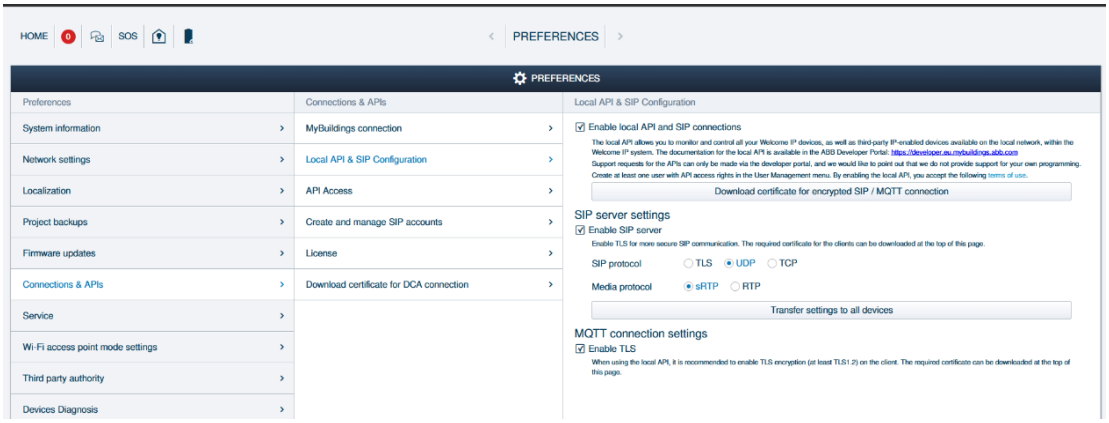


Fig. 13: Enable SIP

Enable the API and SIP and select the appropriate SIP and media protocol. In this example, UDP with SRTP is used.

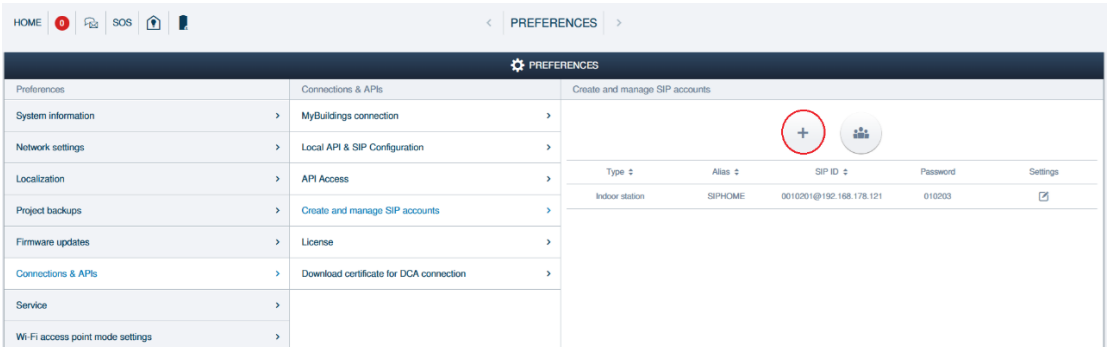


Fig. 14: Create and manage SIP accounts

Then, create the SIP client accounts for the IQTouch. Select matching device addresses, as these will later be assigned to the outdoor station. Use the building, floor, and apartment numbers as the device address, e.g., 010201 → 1st building, 2nd floor, 1st apartment.

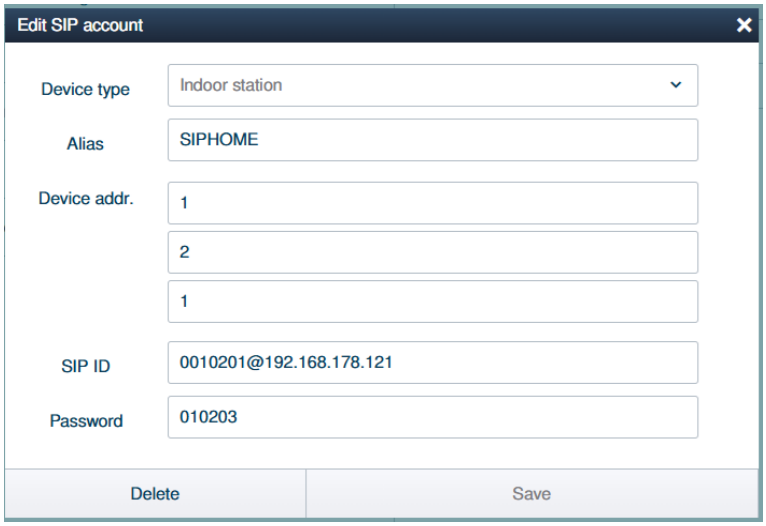


Fig. 15: Edit SIP account

Adding the SIP Account to the Outdoor Station

After the SIP system and the accounts have been enabled and configured, the accounts must be added to the name list of the outdoor station.

The device number is then used as the SIP ID number.

In this example:

1st building, 2nd floor, 1st apartment → Device ID: 0010201 → SIP ID: 0010201

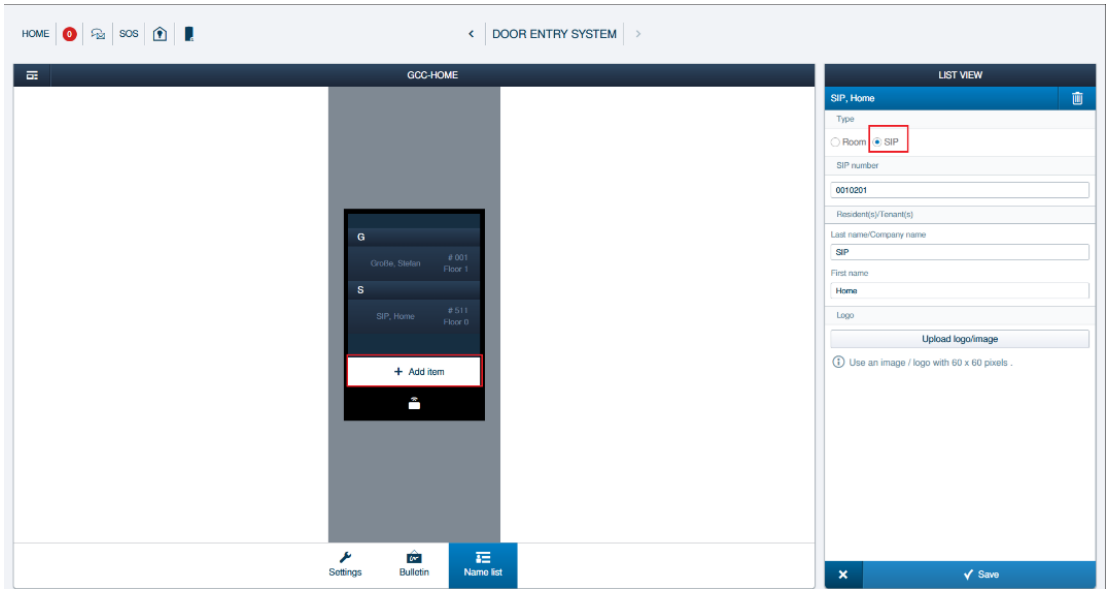


Fig. 16: SIP add item

The SIP clients/accounts are configured in the panel system settings under Project Settings.

Three options are available: two for SIP accounts and one for a local SIP account. The local SIP account is used for peer-to-peer connections between IQTouch panels.

To add a SIP account, select “Settings SIP Account 1”.

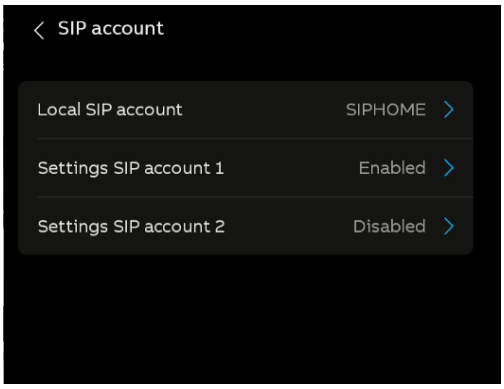


Fig. 17: Add SIP account panel view

Configure the same account as defined on the SIP server.

Note
For the Welcome SIP server, the username corresponds to the SIP ID, not the alias. For UDP, the default server port is 5060.

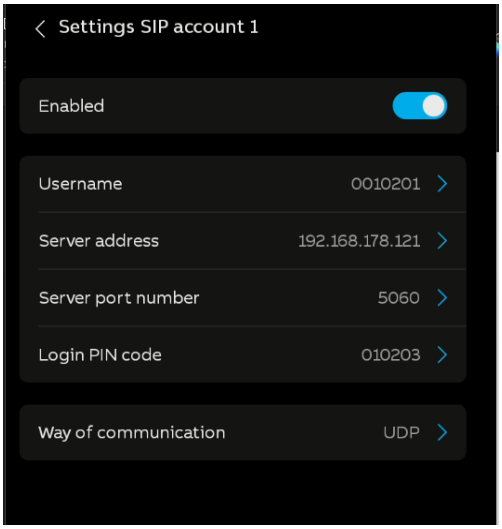


Fig. 18: Settings SIP account

To place a call from one IQTouch panel to another via SIP, you can use the peer-to-peer connection.

Navigate to the Local SIP Account settings, enter a username, and enable Automatic configuration.

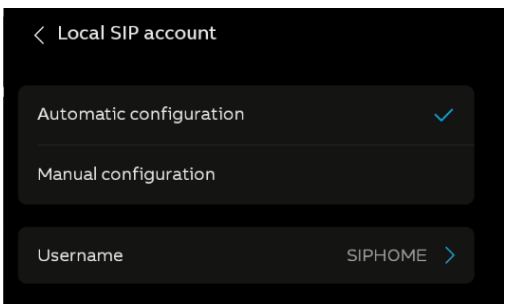


Fig. 19: Local SIP account

If Manual Mode is selected, each SIP client must be added manually.

The automatically or manually configured contacts are listed under Device Communication → Address Book.

After configuring the SIP client, add the device to the trusted devices list on the main SIP server.

Open the Smart AP preferences, go to the “Third Party Authority” tab, and register the SIP client by entering its IP address and port.

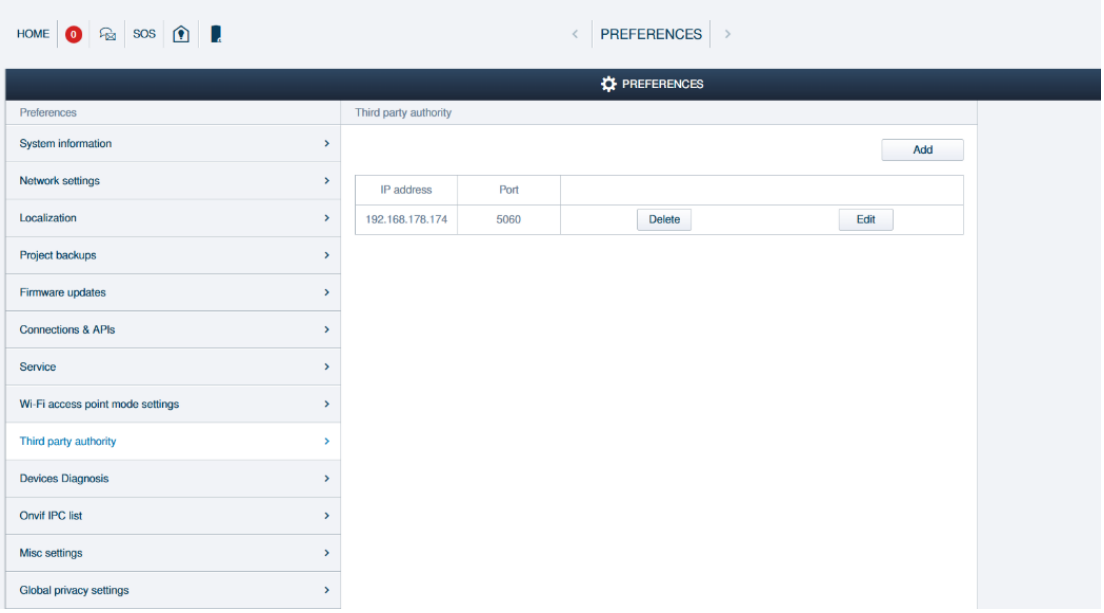


Fig. 20: SIP third party authority

7.2.2.2 Door communication

On the panel, you can navigate to the Door Communication page. There, you will find additional settings for your intercom system, such as Favorites, Security, Address Book, Alarm messages, and more.

Favorites

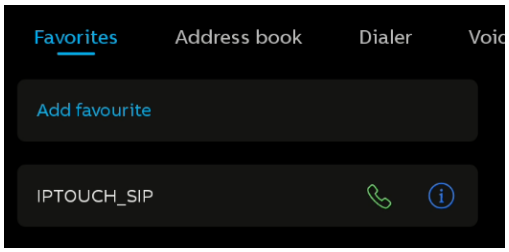


Fig. 21: Door communication favorites

After creating a new dialer, you can add it to your Favorites list. From this list, you can call a contact using the phone icon or view all contact details using the information icon.

All other contacts are listed in the Address Book. To delete a contact, press and hold the name and swipe it to the left. A trash can icon will then appear, allowing you to remove the contact.

Dialer

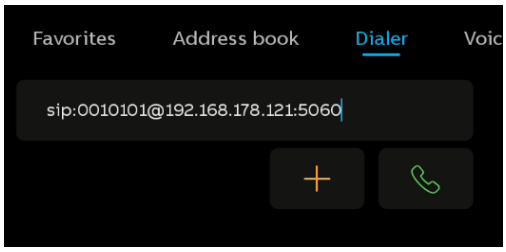


Fig. 22: Door communication dialer

In the Dialer tab, first enter the SIP account of another SIP client. In this example, an IP Touch is used. Enter the SIP ID in the format: SIP ID@IP Address:Port.

You can directly call another client using the phone icon or add it to the Address Book by clicking the plus icon. The panel will then prompt you to enter a name for the new contact.

Contact info

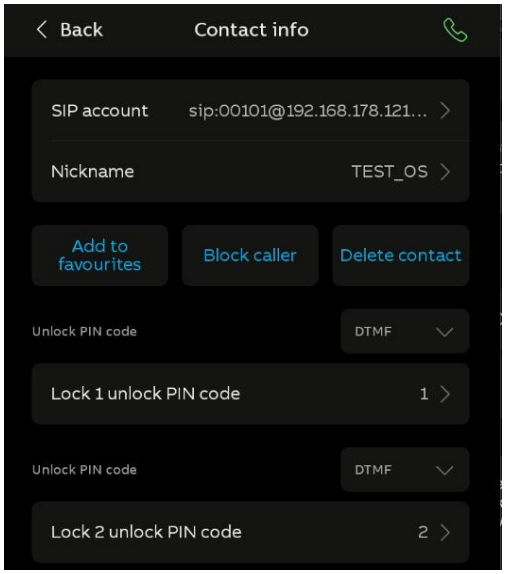


Fig. 23: Door communication contact info

Additional contact settings are available in the contact information section. Here, you can add the contact to Favorites, block or delete the contact, and enter two unlock PIN codes.

Voice message

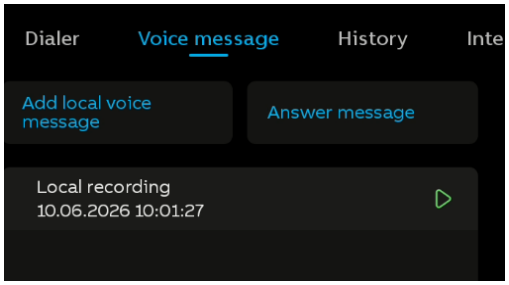


Fig. 24: Door communication voice message

In the Voice Message tab, you can record local messages or configure answer messages. Local messages are stored on the panel and can only be played back within this tab.

Answer message

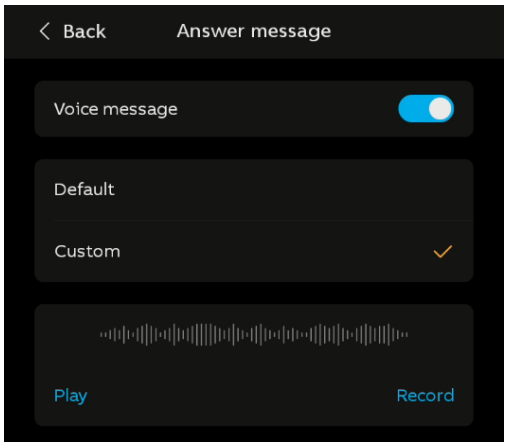


Fig. 25: Door communication answer message

In the Answer Message section, you can either use the default message from the SIP system or define a custom message, which is played when an incoming call from the outdoor station is not answered.

History

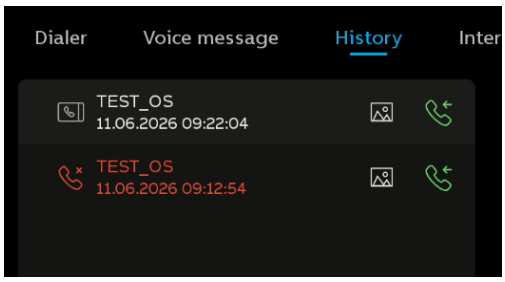


Fig. 26: Door communication history

In the History tab, you can view the intercom system’s call history. This includes missed calls as well as snapshots from the outdoor station, if available.

7.2.2.3 Intercom Settings

The Intercom settings are used to integrate the panel into any SIP server. You can configure up to two SIP accounts or use the automatic function to link multiple IQTouch panels together.

For example, you can use the SIP functionality of the Welcome IP- system and connect the panel to the system as a client.

Note
To ensure that the microphone functions properly, please remove the protective strip from the panel.

Intercom

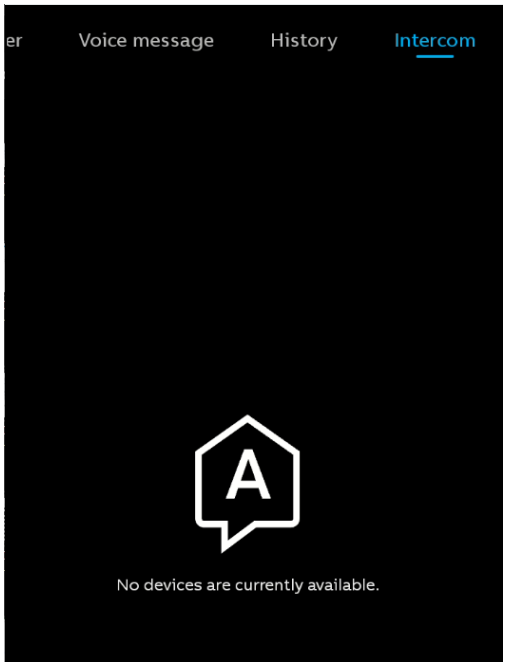


Fig. 27: Intercom panel view

Mute calls

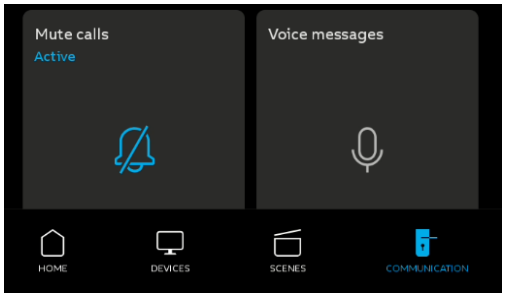


Fig. 28: Intercom mute calls

If needed, calls from the door entry system can be muted via the Door Communication menu under the Mute Calls setting.

Do not disturb

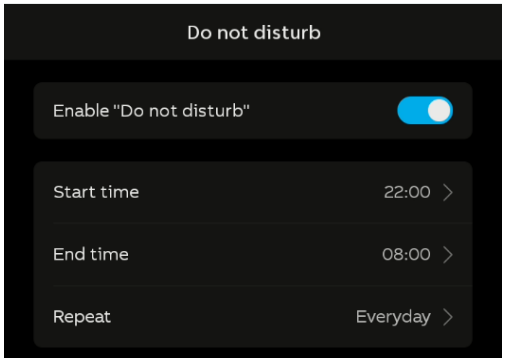


Fig. 29: Intercom do not disturb

The Do not disturb setting lets you mute incoming calls for a defined time period on selected days. Configure the start and end times and select the days using the Repeat option.

Security settings door communication

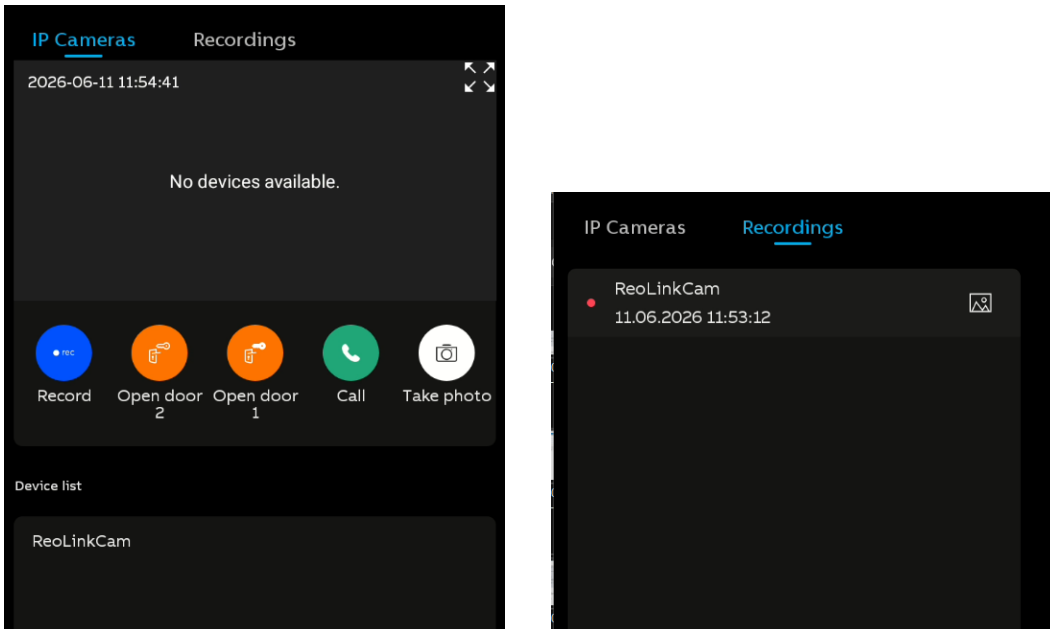


Fig. 30: Security settings door communication

The Security settings in the Door Communication section include a list of connected IP cameras and their recordings.

You can select a camera from the list to view its live stream, operate the two SIP door openers, take snapshots, and start recordings. The captured images and recordings are saved in the Recordings section.

7.2.2.4 IP Cameras

To add IP cameras to the panel, open the system settings, navigate to the Security settings, and select the IP Camera menu. At the bottom of the page, click the “+” button to add a camera.

To add a single camera, enter a name and the RTSP stream address, for example: rtsp://username:password@IPaddress:Port/h264Preview_01_main

Next, click the preview to verify that the panel can connect to the stream. The camera settings can only be saved if the connection is successful.

Note
Only streams with a resolution of 720p or lower are supported.

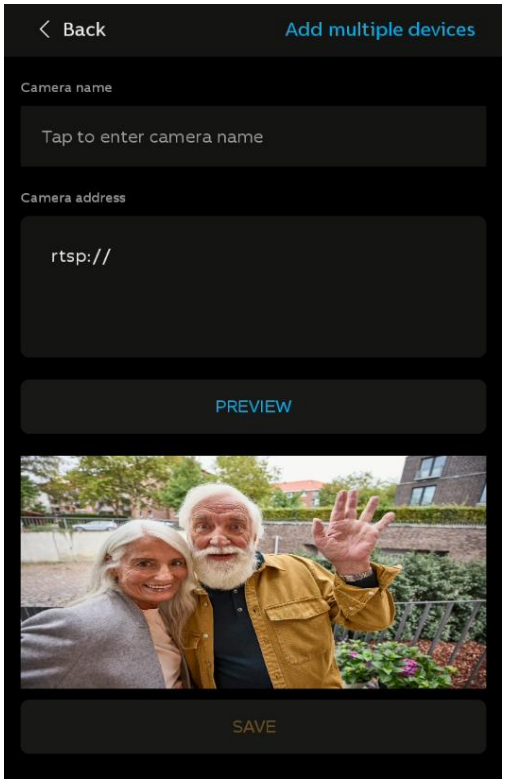


Fig. 31: IP cameras

Additionally, it is possible to add a complete list of multiple cameras. To do this, create a .json-file using the following format.

To adapt the list to your cameras, update the name, username, password, IP address, port, and stream path/channel accordingly.

[{"name":"201-201","rtspUrl":"rtsp://username:password@ipaddress:port/ending/channel},

{"name":"201-201","rtspUrl":"rtsp://username:password@ipaddress:port/ending/channel},]

7.2.3 Security settings

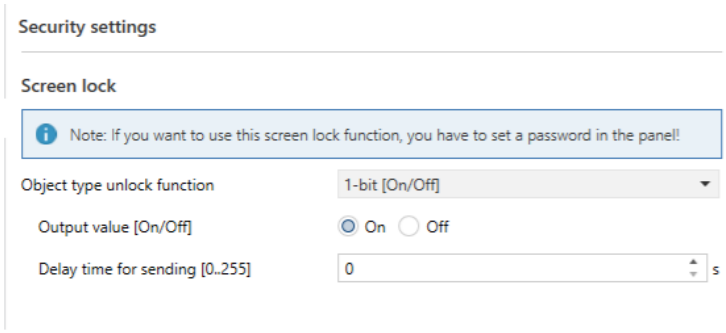


Fig. 32: Security settings ETS

In ETS, only the output object for the security function can be adjusted. All other required settings are configured directly in the panel under System Settings.

The system parameters allow for the configuration of up to three independent PIN codes to protect user access.

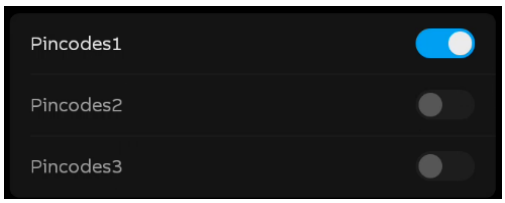


Fig. 33: Enable PIN codes

These PIN codes are managed in the panel under system settings → custom Settings → PIN codes.

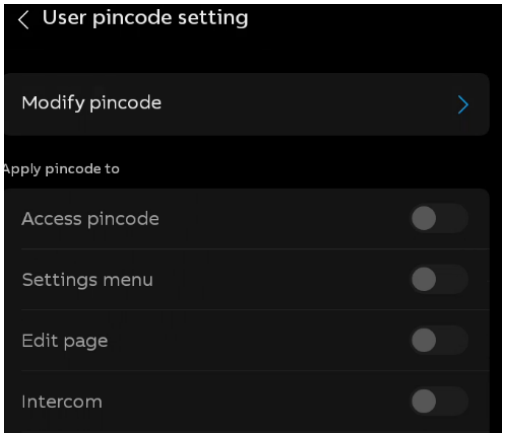
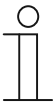


Fig. 34: User pincode setting

When the function is activated, you are prompted to create a PIN, which must be entered to access protected functions such as the panel or settings. Additionally, the security system provides two 1-bit group objects for further control:

1. Screen on/off (DPT 1.001 Switch): Turns the screen on or off.
2. Screen Locking (DPT 1.003 Enable): Locks or unlocks screen operation. When receiving "0", the screen is locked, while "1" unlocks it. A locked screen does not allow any input. If the screen is turned off (upon receiving "0"), reactivating it will prompt for PIN entry if the PIN codes are enabled.



Note
If PIN codes are enabled, the system will always request PIN authentication after turning the screen on.



Note
The panel utilizes two types of passwords for enhanced security:
- User PIN codes are enabled via the Security Settings and regulate access to page editing, the settings menu, the intercom function, and the panel itself.
- The Administrator password protects all project settings and must be created upon first use.

Screen lock

7.2.3.1 Object type unlock function

Optionen:	1 bit (On/Off)
	1 byte (Scene number, 0 … 255, 0 … 100 %)

After unlocking the screen via PIN code entry, the system sends the selected datapoint with the configured value and delay. Available datapoint types include 1-bit, 1-byte (as scene number, value, or percentage). This feature can be used for tracking unlock events or triggering additional functions upon successful screen unlock.



Note
This function only works when PIN codes are enabled in the panel.

7.2.3.2 Output value

Optionen:	On
	Off

Select the value to be sent after successfully unlocking the screen via PIN code entry.

7.2.3.3 Delay time for sending [0…255]

Options:	0 ... 255 s

Select the delay time before the configured value is sent after screen unlock.

7.2.4 Night mode settings

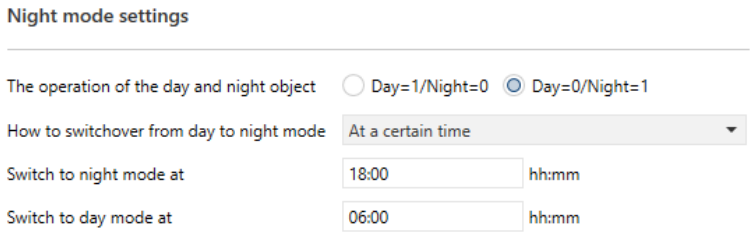


Fig. 35: Night mode settings ETS

The night mode function enables a separate time setting for display switch-off, which can be adjusted in the panel settings.

Note
The total switch-off time is calculated by adding screen saver time and switch-off time day/night.

7.2.4.1 The operation of the day and night object

Options:	Day=1 / Night=0
	Day=0 / Night=1

Select whether the night mode group object sends "0" or "1" for day and night modes. Note that when switching between day and night via an object, then the group object becomes an input which will trigger depending on this setting.

7.2.4.2 How to switchover from day to night mode

Options:	Via an object
	At a certain time
	At sunrise and sunset

The panel can switch between day and night mode using three trigger options: group object, a certain time or sunrise/sunset.

Note
When switching between day and night via an object, the group object “night mode” becomes an input.

- Via an object

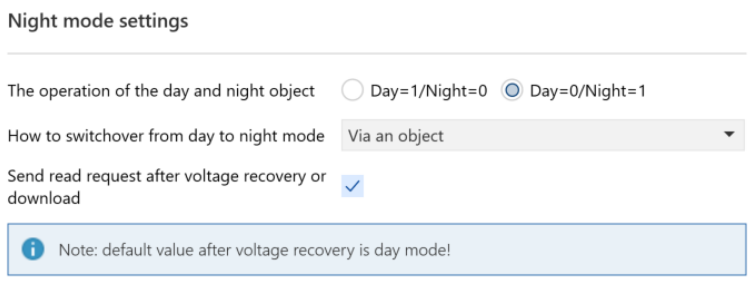


Fig. 36: Night mode settings via an object ETS

When switching between day and night mode via group object, the "Night mode" group object functions as an input. This allows an external device to trigger mode change. Depending on the setting “operation of the day/night object”, day and night can be triggered with "0" or "1".

Send read request after voltage recovery or download

Options:	Checked
	Unchecked

After a restart or download, the panel does not retain the night/day mode status. When this function is enabled, the device sends a read request after download and voltage recovery to retrieve the status. No read request is sent after an ETS reset.

- At a certain time

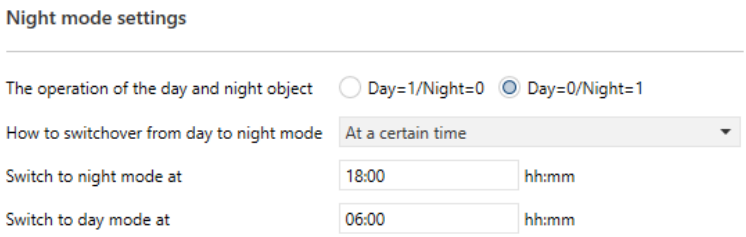


Fig. 37: Night mode settings at a certain time ETS

When switching between day and night mode using scheduled times, you can configure the specific times for each mode to activate. After triggering night or day mode, the corresponding value is sent via the "Night Mode" group object.

Switch to night mode at

Options:	00:00 … 18:00 … 23:59 hh:mm

Select the time when the device switches to night mode.

Switch to day mode at

Options:	00:00 … 06:00 … 23:59 hh:mm

Select the time when the device switches to day mode.

- At sunrise and sunset

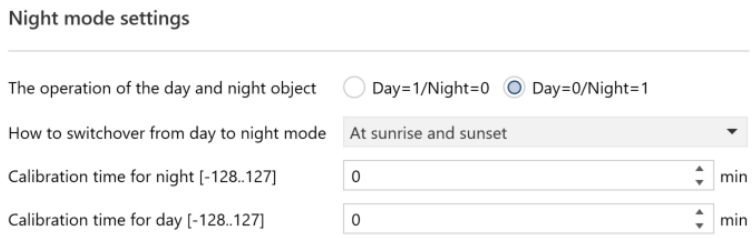


Fig. 38: Night mode settings at sunrise and sunset ETS

When switching between day and night mode using sunrise and sunset, you must configure the location settings. The device uses these settings to calculate the local sunrise and sunset times for automatic mode switching. see chapter 7.2.5 “Location settings“ on page 51.

Calibration time for night

Options:	-128… 0 … 127 min

Set a time offset to shift the calculated sunset time forward or backward.

Calibration time for day

Options:	-128… 0 … 127 min

Set a time offset to shift the calculated sunrise time forward or backward.

7.2.5 Location settings

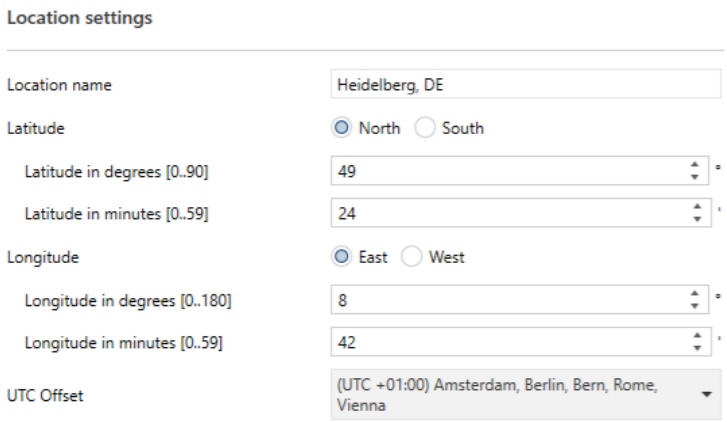


Fig. 39: Location settings ETS

Configure your location for online weather data and automatic day/night mode calculations based on sunrise and sunset times. Enter your location using north/south and east/west coordinates in degrees and minutes.

7.2.5.1 Location name

Options:	[19 characters Text]

Enter a custom location name for display purposes (up to 19 characters). This text is not validated online and serves as a label only.

7.2.5.2 Latitude

Options:	North
	South

Select the latitude hemisphere based on the panel's geographic location.

7.2.5.3 Latitude in degrees/minutes

Enter the location coordinates in degrees and minutes based on your geographic location. For example, Heidelberg, Germany, is located at 49°24' N latitude.

7.2.5.4 Longitude

Options:	East
	West

Select the longitude based on the panel's geographic location.

7.2.5.5 Longitude in degrees/minutes

Enter the location coordinates in degrees and minutes based on your geographic location. For example, Heidelberg is located at 8°42' E longitude.

7.2.5.6 UTC Offset

Select your UTC time zone offset based on your geographic location (e.g., UTC+1 for Central European Time). If time servers are enabled in system settings, the panel will automatically calculate the local time using this offset. This time setting is required for time displays, night mode, schedulers, device timers, daylight saving time adjustments, human-centric lighting (HCL), call logs, monitoring records, and message logs.

7.2.6 Summer time settings

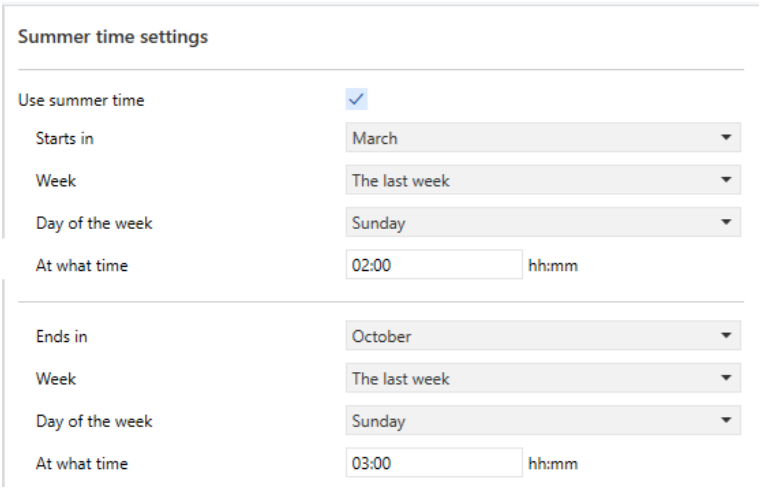


Fig. 40: Summer time settings ETS

7.2.6.1 Use summer time

Options:	Checked
	Unchecked

The panel calculates the local time using location data and online information. Enable this option if your country observes daylight saving time (DST). When enabled, the panel automatically adds one hour during DST periods (UTC + offset + 1 hour).

- Unchecked

  Automatic adjustments for daylight saving time (DST) are disabled.

- Checked

  Starts in

Options:	January
	February
	March
…	

  Select the month when summer time starts in your location.

  Week

Options:	The first week
	The second week
	The third week
	The fourth week
	The last week

  Select the week when summer time starts.

Day of the week

Optionen:	Monday
	Tuesday
	…
	Sunday

Select the day of the week when summer time starts.

Time of day

Options:	00:00 … 02:00 … 23:59 hh:mm

Select the time when the summer time change occurs on the previously selected date.

Ends in

Options:	January
	…
	October
	November
	December

Select the month when summer time ends in your location.

Week

Optionen:	The first week
	The second week
	The third week
	The fourth week
	The last week

Select the week when summer time ends.

Day of the week

Optionen:	Monday
	Tuesday
	…
	Sunday

Select the day of the week when summer time ends.

Time of day

Options:	00:00 … 03:00 … 23:59 hh:mm

Select the time when the winter time change occurs on the previously selected date.

7.2.7 Proximity output settings

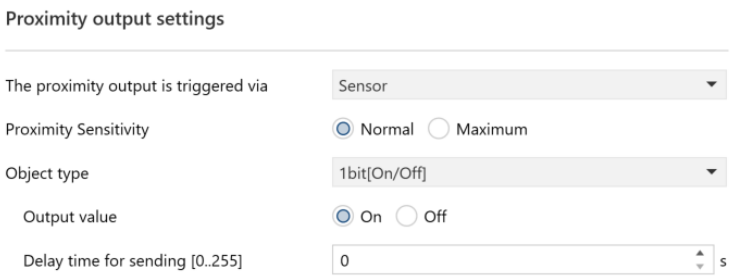


Fig. 41: Proximity output settings ETS

The proximity function detects presence either in front of the panel using the internal sensor, in the room via group objects from another device, or both. This can be used for any presence-based function. When using the internal sensor, you can send an output value as 1-bit (On/Off), 1-byte (Scene), 0 … 255 value, or percentage value.

The delay setting controls both detection and sending intervals. If set to 0 seconds, every movement triggers a transmission. If set to 30 seconds, for example, the group object is sent 30 seconds after the first detected movement.

While you remain in proximity range, the timer resets with each detection. This means that if you stay near the panel for 30 seconds, another telegram is sent. If you leave and return after the 30-second timeout, the object will be sent again with a 30-second delay.

Additionally, the panel's proximity sensor is linked to the screen wake-up and switch-off timers.

7.2.7.1 The proximity output is triggered via

Options:	Sensor
	Proximity object
	Sensor or Proximity object

Select whether to use the internal proximity sensor, a group object from another device in the room, or both as the proximity trigger.

- Proximity object

  Only the group object is used as proximity trigger.

- Sensor / Sensor or Proximity object

Proximity Sensitivity

Options:	Normal
	Maximum

You can adjust the detection range of the proximity sensor. The normal setting covers 30 cm, and the maximum range is 60 cm.

Object type

Options:	1 bit [On/Off]
	1 byte [scene control]
	1 byte [0 … 255]
	1 byte [0 … 100 %]

Select the datapoint type based on your presence function requirements.

Output value

Options:	On / Off
	scene number
	0 … 1 … 255
	0 … 100 %

You can adjust the sent output value with this parameter based on the selected DPT.

Delay time for sending

Options:	0 ... 255 s

The delay applies to both detection and sending. The first proximity detection is always sent after the delay period. Subsequent transmissions only occur if you leave the proximity range for at least the duration of the delay time. Only then will a new proximity signal be sent with the same delay.

7.3 Control elements

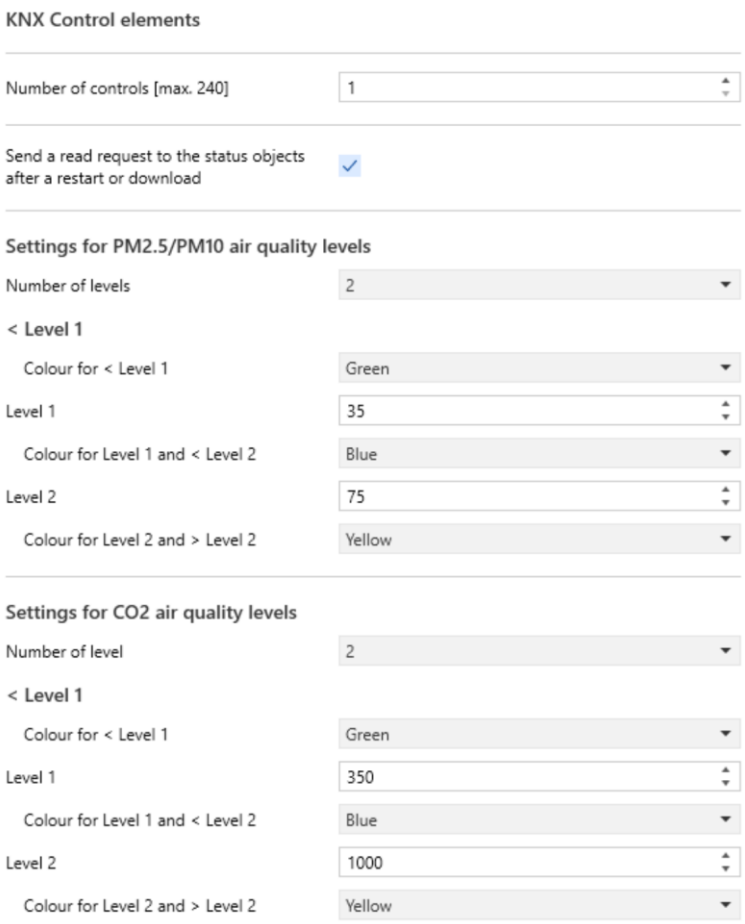


Fig. 42: KNX control elements ETS

The panel can handle a maximum of 240 functions, which are displayed as control elements. To connect these control elements to the panel pages, set them up using the dropdown menus.

The controls offer the following functions:

- Lighting:
  Switch, Dimmer, Dimmer slider, Relative+Slider dimmer, RGB control, RGBW control, RGBW control, RGB+Tunable white control, Tunable white control
- Shading:
  Blinds position, Shutter move/step, Shutter position, Curtain move/step, Curtain position
- Climate:
  Air conditioner, Room temperature control, Fan control
- Music: Audio control
- Energy: Energy display
- Health:
  Temperature display, Humidity display, PM2.5 display, PM10 display, VOC display, AQI display, Brightness display, Wind display
- Status: Status display
- Others:
  Push button, Value sender

7.3.1 KNX Control elements

7.3.1.1 Number of controls

Options:	1 ... 240

Enter the desired number of control elements in the provided box, with a maximum limit of 240.

7.3.1.2 Send a read request to the status objects after a restart or download

Options:	Checked
	Unchecked

If the bus load is too high after a bus voltage return, download, or reboot of the panel, you can disable the reading of these objects. General status objects will still be transmitted and are defined in general settings. This setting applies to all controls and cannot be configured for individual control elements.

Settings for PM 2.5 / PM10 / CO2 air quality levels

To highlight the measured air quality, you can configure up to five different levels that will change the UI colour of the control element based on the selected colour and threshold value. When the measured value exceeds or falls below a threshold, the entire colour of the connected air quality control element will change accordingly.

7.3.1.3 Number of levels

Options:	1 … 2 ... 5

Select the number of air quality levels to highlight the current air quality in the area.

7.3.1.4 Level 1 … Level X

Options:	Air quality value according to type

Set the air quality value according to the type and level threshold. If the measured value exceeds or falls below the threshold, the entire UI will change to reflect the corresponding level colour.

7.3.1.5 Colour for < Level 1 … Colour for Level X and > Level X

Select the colour to be displayed according to the air quality level.

Note
To show the colour change in the UI, you must enable the parameter “Show air quality level in control” in the “Control element X”-settings.

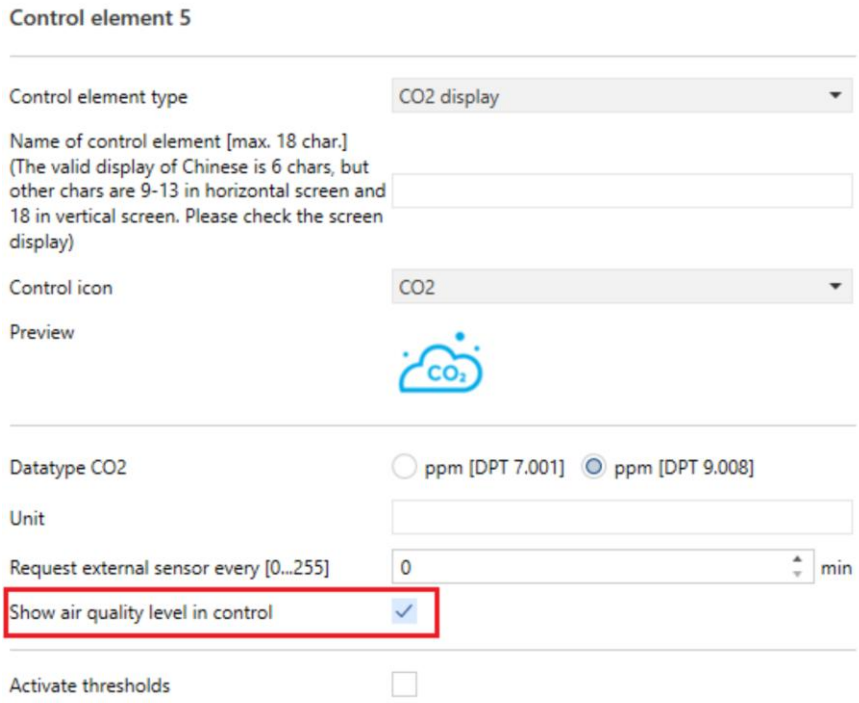


Fig. 43: Control element X ETS

7.3.2 Element X: Push button

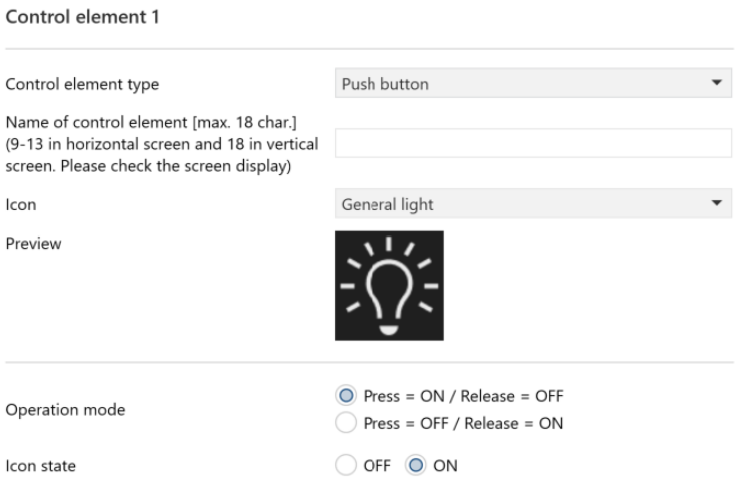


Fig. 44: Control element push button ETS

This function sends an output value upon press and release, with the sent value configurable as either 0 or 1. You can also choose the status to be displayed by the icon, as it can only show one status at a time. Additionally, the control element can be enabled or disabled via a separate 1-bit input object labeled “unlock/lock”.

7.3.2.1 Control element type

Options:	Push button
	Switch
	Dimmer
	…

Select the function for the control element.

7.3.2.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.2.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

7.3.2.4 Operation mode

Options:	Press = ON / Release = OFF
	Press = OFF / Release = ON

To configure the press/release value to operate with 1/0 or 0/1, select the appropriate setting for press/release.

7.3.2.5 Icon state

Options:	OFF
	ON

Since the push button only responds to press/release actions, you can choose whether the icon should display the OFF or ON state.

Panel view



Fig. 45: Push button panel view

The UI displays the selected icon along with the configured status. When pressing the control, the corresponding value (0 or 1) is sent, and upon release, the opposite value is transmitted. You can enable or disable the control element at any time by using the 1-bit object “unlock/lock”. Sending 0 will disable it, while sending 1 will enable it.

7.3.3 Element X: Switch

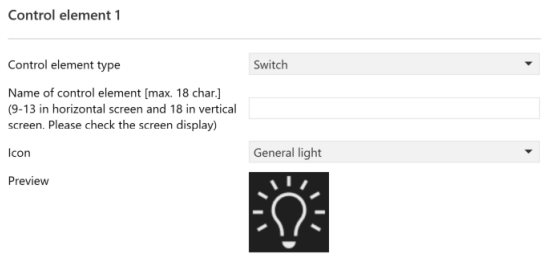


Fig. 46: Control element switch ETS

The switch function operates as an alternating ON/OFF switch using a 1-bit group object output, with the status being received through another 1-bit group object input. Additionally, you can enable or disable this control element at any time using a separate 1-bit input object labeled “unlock/lock.”

7.3.3.1 Control element type

Options:	Push button
	Switch
	Dimmer
	…

Select the function for the control element.

7.3.3.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.3.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

Panel view



Fig. 47: Switch panel view

The UI displays the selected icon, and you can disable the control at any time using the 1-bit object labeled “unlock/lock” by sending 0 to disable or 1 to enable. When you tap the button, the output object sends alternating ON/OFF signals. The icon reflects the status based on the 1-bit input status object.

7.3.4 Element X: Dimmer

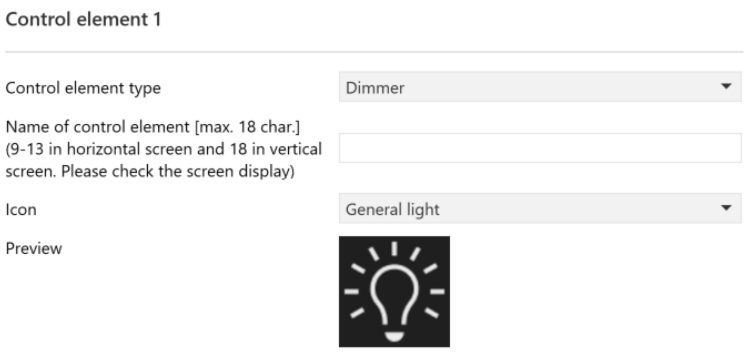


Fig. 48: Control element dimmer ETS

7.3.4.1 Control element type

Options:	Push button
	Switch
	Dimmer
	…

Select the function for the control element.

7.3.4.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.4.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

Panel view



Fig. 49: Dimmer panel view

The UI displays the selected icon. Its status can be changed at any time by using the 1-bit object, with 0 to disable or 1 to enable. If you tap the button, the 1 bit switch output object sends alternating on/off signals. The icon shows the status depending on the 1 bit input object. If the light status is off, a long press starts brightening and releasing sends a break command. Similarly, if the status is on, long pressing starts decreased dimming and releasing sends a break command.

7.3.5 Element X: Dimmer-slider

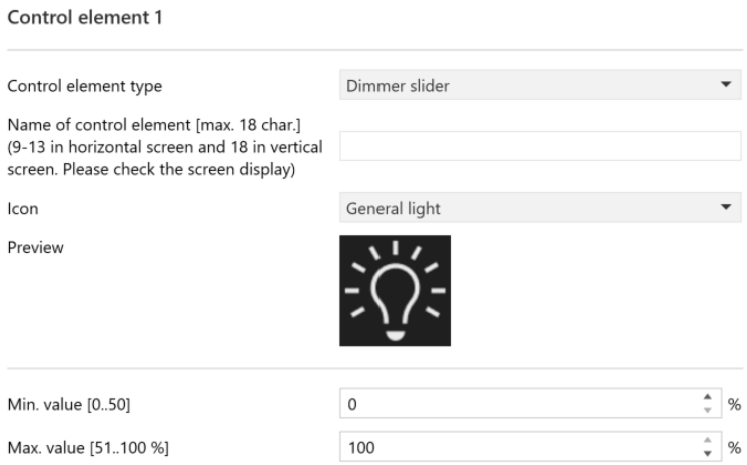


Fig. 50: Control element dimmer slider ETS

7.3.5.1 Control element type

Options:	Push button
	Switch
	…
	Dimmer slider

Select the function for the control element.

7.3.5.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.5.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

7.3.5.4 Min value

Options:	0 … 50 %

Ensure that the dimmer slider boundaries are adjusted to match the dimming actuator settings. If the settings of both devices do not match, the slider may not respond or may display incorrect values.

7.3.5.5 Max value

Options:	51 … 100 %

Ensure that the dimmer slider boundaries are adjusted to match the dimming actuator settings. If the settings of both devices do not match, the slider may not respond or may display incorrect values.

Panel view

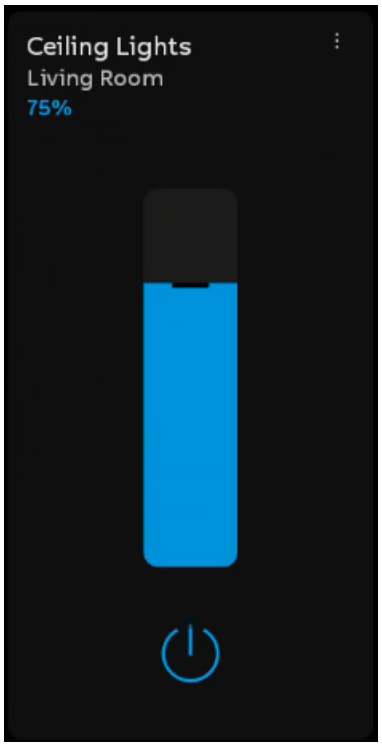


Fig. 51: Dimmer slider panel view

The UI always displays the brightness value as a percentage, along with a slider and an on/off button. Click the top-right area, or press and hold on the control, to open the extended view.

You can disable the UI at any time using the 1-bit object by sending 0 to disable or 1 to enable.

The on/off button toggles the light based on the current state, and the slider adjusts the brightness as a percentage.

The brightness range can be customized using the min/max value parameters. These values rescale the slider so that the bottom represents the minimum value and the top represents the maximum value.

7.3.6 Element X: Relative + Slider Dimmer

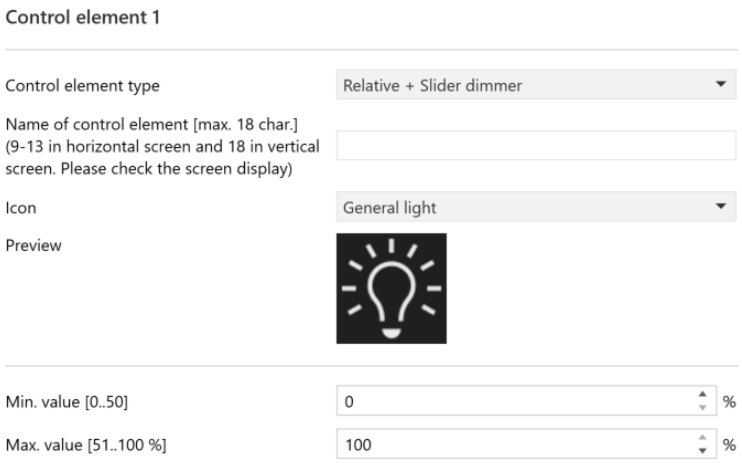


Fig. 52: Control element relative + slider dimmer ETS

The dimmer function is used for value- and relative dimming. It sends alternating ON/OFF signals via a 1-bit object based on the 1-bit status input object.

The slider adjusts the brightness value via a 1-byte percentage output object and displays the current brightness in percent via a 1-byte input object. Additionally, there are two buttons for relative dimming via a 4-bit dimming object.

7.3.6.1 Control element type

Options:	Push button
	Switch
	…
	Relative + Slider dimmer

Select the function for the control element.

7.3.6.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.6.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

7.3.6.4 Min value

Options:	0 … 50 %

Ensure that the dimmer slider boundaries are adjusted to match the dimming actuator settings. If the settings of both devices do not match, the slider may not respond or may display incorrect values.

7.3.6.5 Max value

Options:	51 … 100 %

Ensure that the dimmer slider boundaries are adjusted to match the dimming actuator settings. If the settings of both devices do not match, the slider may not respond or may display incorrect values.

Panel view

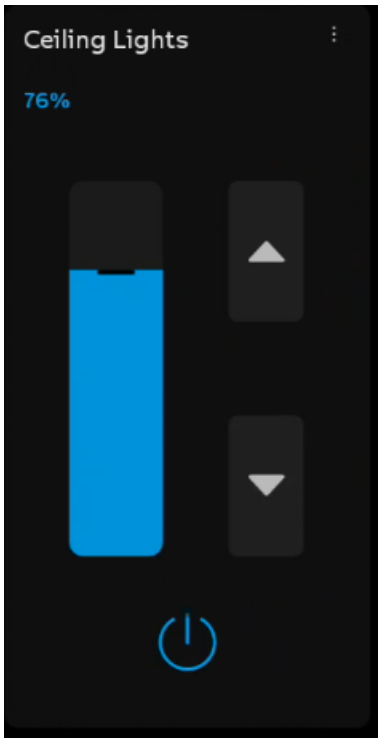


Fig. 53: Relative + slider dimmer panel view

The UI always displays the brightness value as a percentage, along with a slider, two buttons and an on/off button. Click the top right area, or press and hold on the control, to open the extended view.

You can disable the UI at any time using the 1-bit object by sending 0 to disable or 1 to enable.

The on/off button toggles the light based on the current state, and the slider adjusts the brightness as a percentage.

The two buttons next to the slider enable relative dimming on long press with start/stop.

The brightness range can be customized using the min/max value parameters. These values rescale the slider so that the bottom represents the minimum value and the top represents the maximum value.

7.3.7 Element X: RGB Control

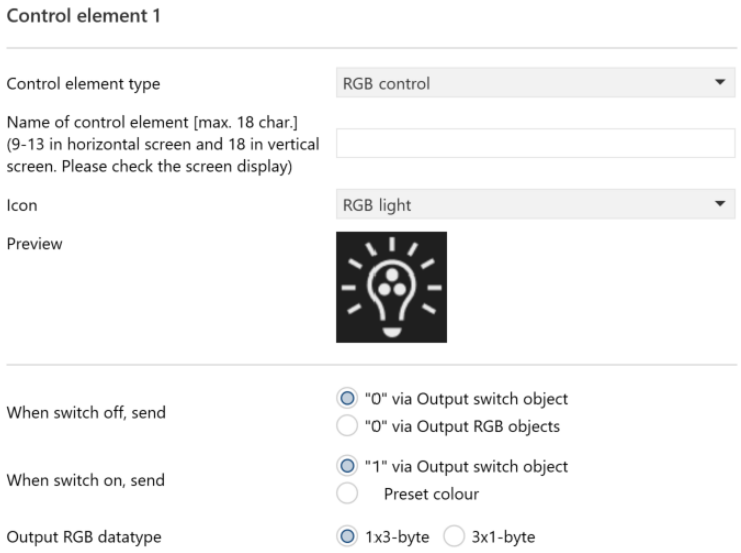


Fig. 54: Control element RGB control ETS

The RGB control is used for controlling RGB lights with single or combined objects. The lights can be switched on with a preset value or with the 1-bit switch object. The UI on a page is a button, and in the extended view is an colour circle with a saturation slider and an on/off button.

7.3.7.1 Control element type

Options:	Push button
	Switch
	…
	RGB control

Select the function for the control element.

7.3.7.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.7.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

7.3.7.4 When switch off/on, send

Options:	“0/1” via Output switch object
	“0” via Output RGB objects / Preset colour

- “0/1” via Output switch object / “0” via Output RGB objects

  The device only sends the 1-bit object for switching on or off.

- Preset colour

  Depending on your actuator, or if you want to start the RGB lights with a preset colour, you can adjust the value in ETS. According to the preset, the device will send the colour value instead of the 1-bit switch command.

  Preset colour

Options:	#000000 … #FFFFFF

7.3.7.5 Output RGB datatype

Options:	1x3-byte
	3x1-byte

Select whether the function uses a 3-byte object for RGB and saturation control or sends them as 3 separate objects with 1-byte percentage values for each colour.

Panel view

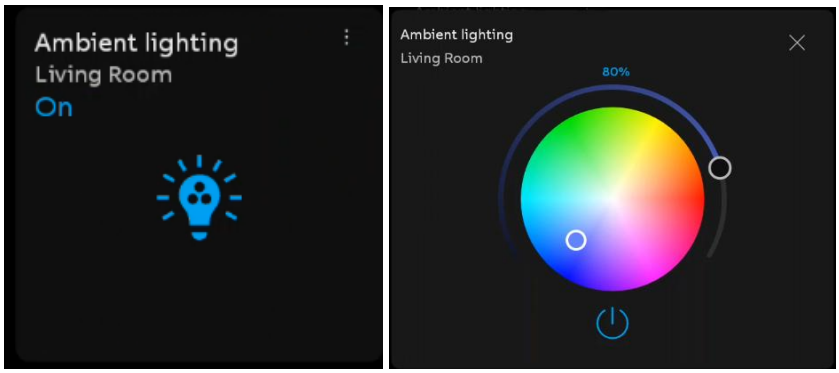


Fig. 55: RGB control panel view

The UI on the page is a button for switching the RGB lights on and off. In the extended view, there is a colour circle and saturation slider with an on/off button for controlling the RGB value.

You can disable the UI at any time using the 1-bit object by sending 0 to disable or 1 to enable. The on/off button sends alternating on/off signals or switches between on and off with a preset colour value.

In the extended view, the colour value and saturation can be adjusted using the colour circle and slider.

Tapping on the circle sends the corresponding colour value as 3-byte or 1-byte objects. Adjusting the saturation with the slider increases and decreases all colour values simultaneously.

7.3.8 Element X: RGBW Control

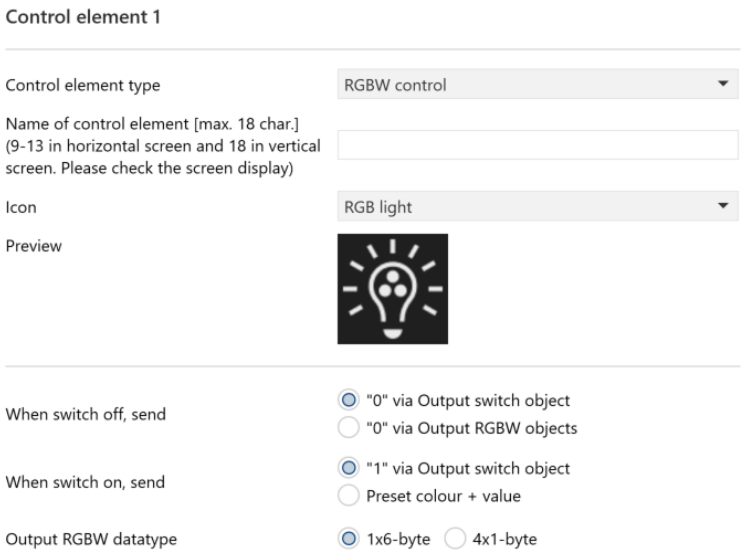


Fig. 56: Control element RGBW control ETS

The RGBW control is used for controlling RGBW lights with single or combined objects. The lights can be switched on with a preset value or with the 1-bit switch object.

The UI on a page is a button, and in the extended view is a colour circle with a saturation slider, a slider for white, and an on/off button. The colour circle and saturation slider are only for adjusting RGB, while the white component is adjusted separately with its own slider.

7.3.8.1 Control element type

Options:	Push button
	Switch
	…
	RGBW control

Select the function for the control element.

7.3.8.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.8.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

7.3.8.4 When switch off/on, send

Options:	“0/1” via Output switch object
	“0” via Output RGBW objects / Preset colour + value

- “0/1” via Output switch object / “0” via Output RGB objects

  The device only sends the 1-bit object for switching on or off.

- Preset colour + value

  Depending on your actuator, or if you want to start the RGB lights with a preset value, you can adjust the value in ETS. According to the preset, the device will send the colour value instead of the 1-bit switch command.

Preset colour

Options:	#000000 … #FFFFFF

Select a preset colour that is sent when switching on.

Preset value

Options:	0 … 255

Select a preset value for white.

7.3.8.5 Output RGB datatype

Options:	1x6-byte
	4x1-byte

Select whether the function uses a 6-Byte Output RGB DPT 251.600 for RGBW and saturation control or sends them as 4 separate objects with 1-byte percentage values for each colour.

Panel view

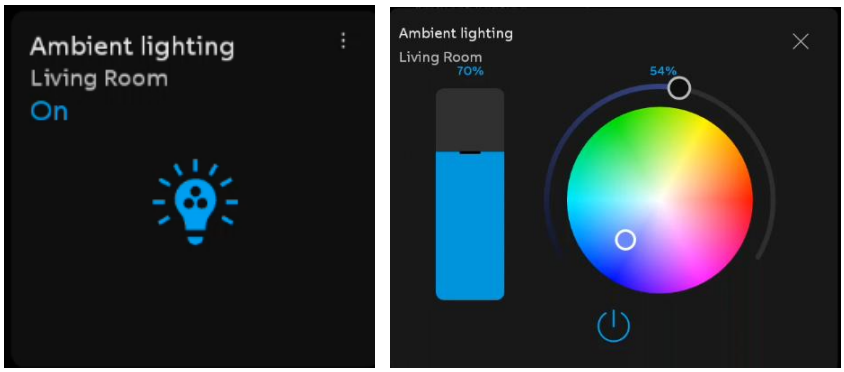


Fig. 57: RGBW control panel view

The UI on the page is a button. In the extended view, there is a colour circle, a saturation slider, a slider for controlling the white component, and an on/off button. You can disable the UI at any time using the 1-bit object by sending 0 to disable or 1 to enable. The on/off button switches alternating on/off or switches on/off with a preset colour value.

In the extended view, the RGB colour value can be adjusted using the colour circle and slider. The slider on the left adjusts only the white component of the RGBW value. Tapping on the circle sends the corresponding colour value as 6-byte or 1-byte objects. Adjusting the saturation with the slider increases and decreases the RGB values simultaneously.

7.3.9 Element X: RGB + Tunable white control

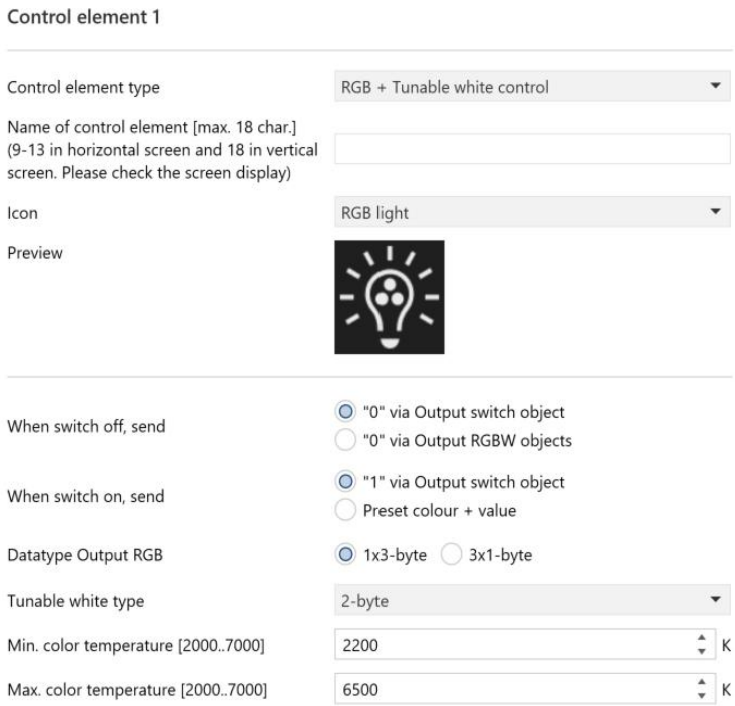


Fig. 58: Control element RGB + Tunable white control ETS

The RGB + Tunable white control function combines RGB colour control and tunable white control for illumination which support both types. You can set up the function to use combined values for RGB as 3 bytes and for tunable white as 2 bytes, but you can also use 5 separate 1-byte objects.

In the UI there are four functions: one button for alternating on/off switching or switching via RGB value, one RGBW colour wheel for sending combined or individual colour values, and two sliders.

The left slider controls the combined or individual colour temperature, and the second slider adjusts the brightness.

7.3.9.1 Control element type

Options:	Push button
	Switch
	…
	RGB + Tunable white control

Select the function for the control element.

7.3.9.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.9.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

7.3.9.4 When switch off/on, send

Options:	“0/1” via Output switch object
	“0” via Output RGBW objects / Preset colour + value

Depending on your actuator, or if you want to start the RGB lights with a preset value, you can adjust the value in ETS. According to the preset, the device will send the colour value instead of the 1-bit switch command. Otherwise, the device only sends the 1-bit object for switch on or off.

- “0/1” via Output switch object / “0” via Output RGB objects

  The device only sends the 1-bit object for switching on or off.

- Preset colour + value

  Depending on your actuator, or if you want to start the RGB lights with a preset value, you can adjust the value in ETS. According to the preset, the device will send the colour value instead of the 1-bit switch command.

  Preset colour

Options:	#000000 … #FFFFFF

  Select a preset colour that is sent when switching on.

  Preset value

Options:	0 … 100 %

  Select a preset value for switching on.

7.3.9.5 Output RGB datatype

Options:	1x3-byte
	3x1-byte

Select whether the function uses a 3-byte object for RGB and saturation control or sends them as 3 separate objects with 1-byte percentage values for each colour.

7.3.9.6 Tunable white type

Options:	2-byte
	1-byte
	Direct WW/CW

Please select the according datatype for the used colour temperature lamps.

- 2-byte
  2 byte colour temperature DPT 7.600
- 1-byte
  1 byte DPT 5.001 percentage value
- Direct WW/CW

Type of status feedback

Options:	2-byte + brightness
	WW/CW

According to the used colour temperature lamps, select the suitable datatype. “2-byte + brightness” uses two 1-byte percentage values for cold and warm white, a 2-byte status object, and another 1-byte brightness status object. The option “WW/CW” uses four 1-byte objects for input and output warm and cold white as percentage values.

7.3.9.7 Min. colour temperature

Options:	2000 … 2200 … 7000 K

Please make sure that the colour temperature min. value matches the colour temperature of the used lamps.

7.3.9.8 Min./Max. colour temperature

Options:	2000 … 6500 … 7000 K

Please make sure that the colour temperature max. value matches the colour temperature of the used lamps.

Panel view

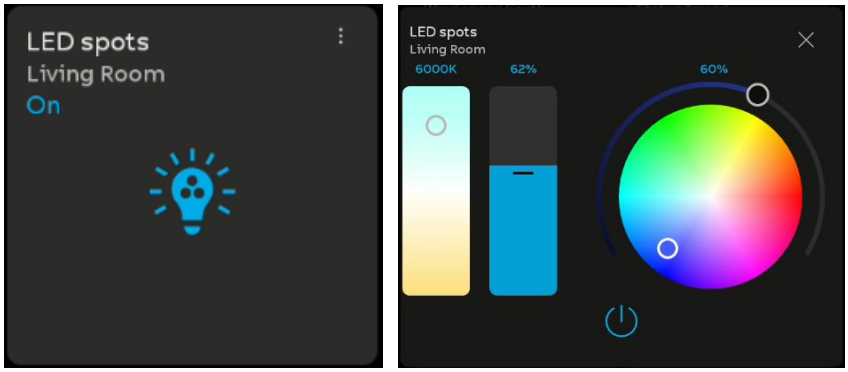


Fig. 59: RGB + Tunable white control panel view

The control on the page is displayed as an icon. In the extended view, additional elements become available: a colour wheel, a saturation slider, a colour temperature slider, a brightness slider, and an on/off button. The UI can be disabled at any time using the 1-bit object by sending 0 to disable or 1 to enable it.

The on/off button either works as an alternating on and off switch or as an on and off switch using a preset colour value. In the extended view, the RGB colour value can be adjusted using the colour wheel and the saturation slider. The sliders on the left control the colour temperature and the corresponding brightness value.

Tapping on the colour wheel sends the selected colour value as either a 6-byte or a 1-byte object. Adjusting the saturation slider increases or decreases all RGB values simultaneously.

7.3.10 Element X: Tunable white control

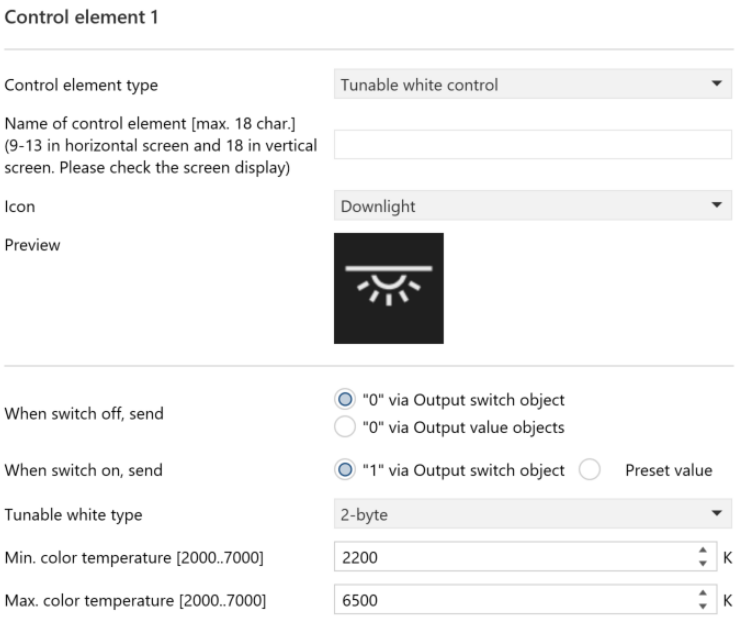


Fig. 60: Control element tunable white control ETS

The tunable white function is used for colour temperature illumination. You can set up the function to use combined colour temperature as 2 bytes, but you can also use four separate 1-byte objects.

In the UI there are three functions: one button for alternating on/off switching or switching via preset value, a slider for tunable white and another one for the brightness value.

7.3.10.1 Control element type

Options:	Push button
	Switch
	…
	Tunable white control

Select the function for the control element.

7.3.10.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.10.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

7.3.10.4 When switch off/on, send

Options:	“0/1” via Output switch object
	“0” via Output objects / Preset value

- “0/1” via Output switch object / “0” via Output objects

  The device only sends the 1-bit object for switching on or off.

- Preset value

  Depending on your actuator, or if you want to start the RGB lights with a preset value, you can adjust the value in ETS. According to the preset, the device will send the colour value instead of the 1-bit switch command.

  Preset value

Options:	0 … 100 %

  Select a preset value for switching on.

7.3.10.5 Tunable white type

Options:	2-byte
	1-byte
	Direct WW/CW

Please select the according datatype for the used colour temperature lamps.

- 2-byte

  2 byte colour temperature DPT 7.600

- 1-byte

  1 byte DPT 5.001 percentage value

- Direct WW/CW

  Type of status feedback

Options:	2-byte + brightness
	WW/CW

  According to the used colour temperature lamps, select the suitable datatype. “2-byte + brightness” uses two 1-byte percentage values for cold and warm white, a 2-byte status object, and another 1-byte brightness status object. The option “WW/CW” uses four 1-byte objects for input and output warm and cold white as percentage values.

7.3.10.6 Min. colour temperature

Options:	2000 … 2200 … 7000K

Please make sure that the colour temperature matches the colour temperature of the lamps used.

7.3.10.7 Max. colour temperature

Options:	2000 … 6500 … 7000K

Please make sure that the colour temperature matches the colour temperature of the lamps used.

Panel view

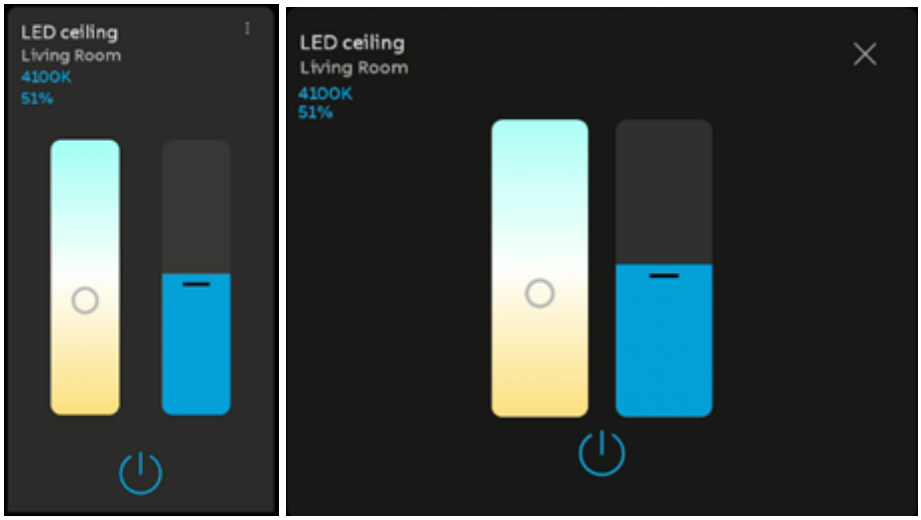


Fig. 61: Tunable white control panel view

You can disable the UI at any time using the 1-bit object by sending 0 to disable or 1 to enable. The on/off button either works as an alternating on/off switch or as an on/off switch with a preset colour temperature value.

With the slider to the left you can adjust the colour temperature according to the min and max values and the slider next to it is for adjusting the brightness as percentage value.

As the control is a dedicated control, you have the same layout for the extended view.

7.3.11 Element X: Curtain step move

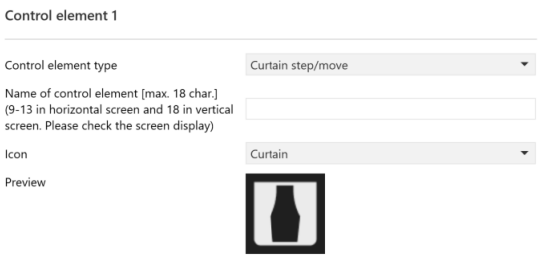


Fig. 62: Control element curtain step/move ETS

The curtain control is used to open and close the curtain with a 1-bit object. You can disable the UI at any time using the 1-bit object by sending 0 to disable or 1 to enable. The command for opening and closing is sent alternating, and you can stop at any time with the 1-bit stop object.

7.3.11.1 Control element type

Options:	Push button
	Switch
	…
	Curtain step/move

Select the function for the control element.

7.3.11.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.11.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

Panel view



Fig. 63: Curtain step/move panel view

The UI always displays the curtain icon with three buttons:open, close, and stop. Tap the top right to open the extended view. You can change the status of the UI at any time using the 1-bit object by sending 0 to disable or 1 to enable.

7.3.12 Element X: Shutter move/step

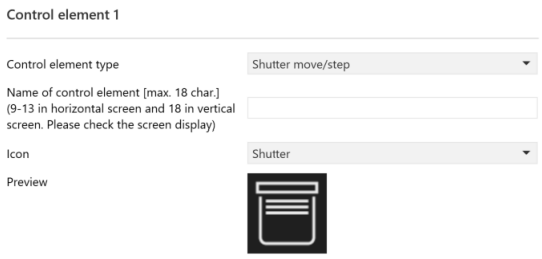


Fig. 64: Control element shutter move/step ETS

The shutter control is used to move the shutter with a 1-bit object. You can change the status of the UI at any time using the 1-bit object by sending 0 to disable or 1 to enable. The command for moving up and down is sent alternatingly, and you can stop at any time using the 1-bit stop object.

7.3.12.1 Control element type

Options:	Push button
	Switch
	…
	Shutter move/step

Select the function for the control element.

7.3.12.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.12.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

Panel view

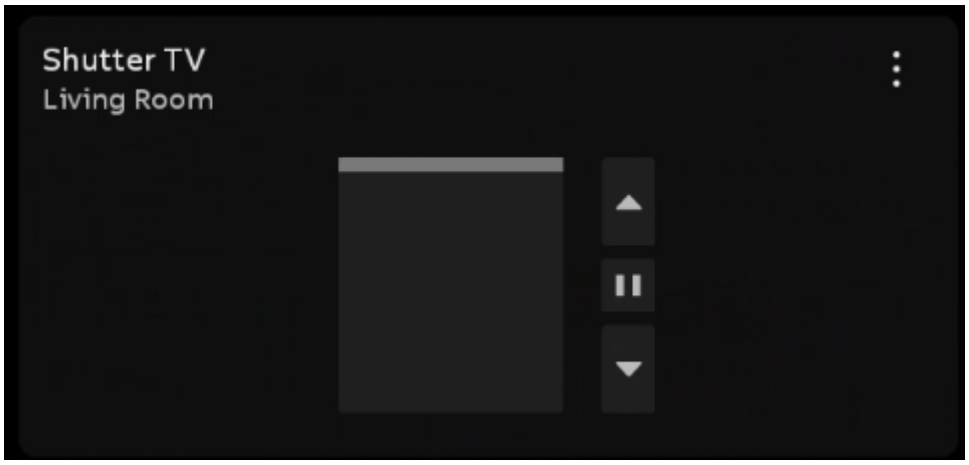


Fig. 65: Shutter move/step panel view

The UI always displays the shutter icon with three buttons: open, close, and stop. Tap the top right to open the extended view. You can change the status of the UI at any time using the 1-bit object by sending 0 to disable or 1 to enable.

7.3.13 Element X: Curtain position

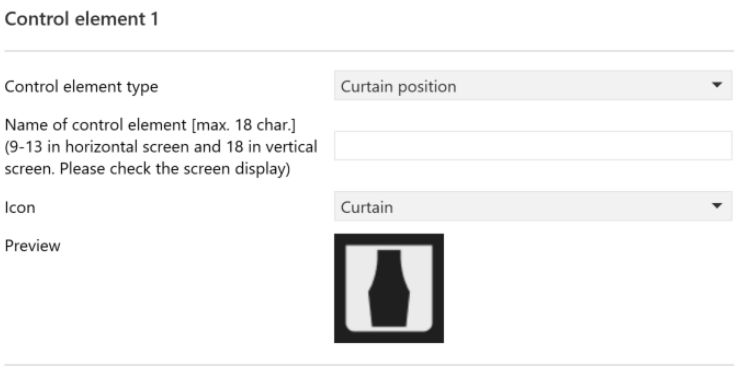


Fig. 66: Control element curtain position ETS

The curtain control is used to move the curtain with a 1-bit object or travel to a certain position using a 1-byte percentage value.

You can change the status of the UI at any time using the 1-bit unlock/lock object by sending 0 to disable or 1 to enable.

The command for closing and opening are sent alternatingly, and you can stop at any time using the 1-bit stop object. The 1-byte move command will move the curtain to 0% for fully open and 100% for fully closed.

7.3.13.1 Control element type

Options:	Push button
	Switch
	…
	Curtain position

Select the function for the control element.

7.3.13.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.13.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

Panel view

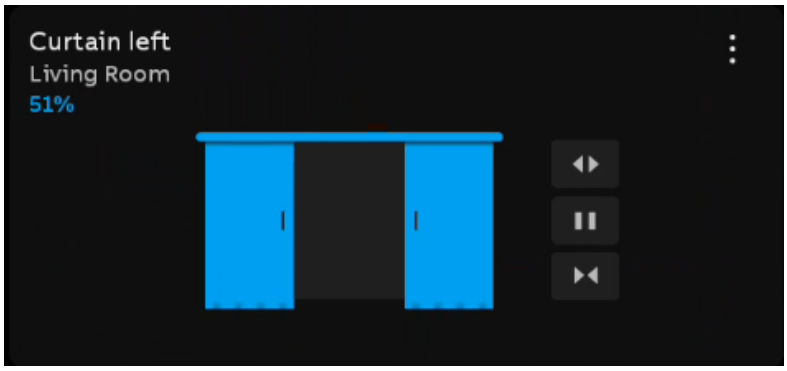


Fig. 67: Curtain position panel view

The control always displays the curtain icon and three buttons: open, close, and stop.

You can adjust the position in percent directly on the curtain icon. Tap the top right or tap long on the control to open the extended view. You can change the status of the UI at any time using the 1-bit “unlock/lock” object by sending 0 to disable or 1 to enable. In addition to the buttons on the right, you can use the icon to move the curtain to a desired position. The percentage value is displayed in the top left.

7.3.14 Element X: Shutter position

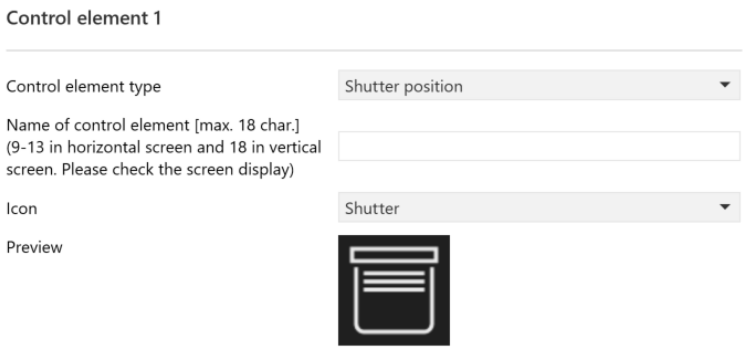


Fig. 68: Control element shutter position ETS

The shutter control is used to move the shutter with a 1-bit object or travel to a specific position using a 1-byte percentage value. You can disable the UI at any time using the 1-bit “unlock/lock” object by sending 0 to disable or 1 to enable. The commands for moving up and down are sent alternately, and you can stop the shutter at any time with the 1-bit stop object. The 1-byte move command will travel the shutter to 0% for fully up and 100% for fully down.

7.3.14.1 Control element type

Options:	Push button
	Switch
	…
	Shutter position

Select the function for the control element.

7.3.14.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.14.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

Panel view

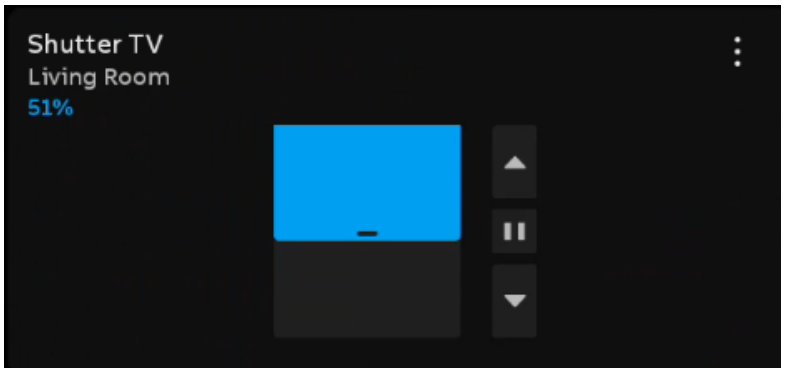


Fig. 69: Shutter position panel view

The control always displays the curtain icon and three buttons: open, close, and stop.

You can adjust the position in percent directly on the shutter icon. Click the top right or push long on the control, to open the extended view. You can disable the UI at any time using the 1-bit “unlock/lock” object by sending 0 to disable or 1 to enable. The button on the right moves the shutter up, the bottom button moves it down, and the middle button stops movement. On the icon, you can move the shutter to a desired position, and the percentage value is displayed in the top left.

7.3.15 Element X: Blinds position

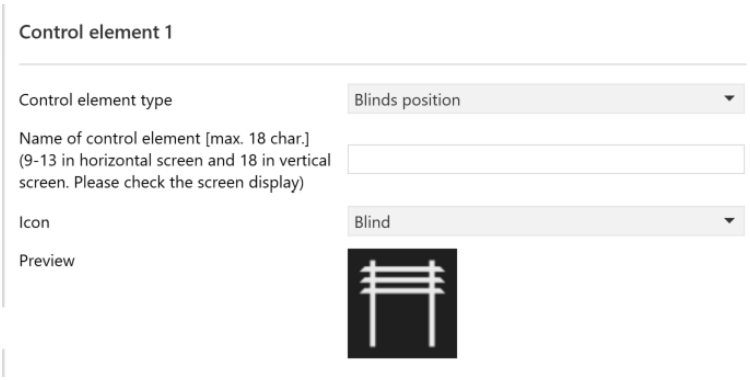


Fig. 70: Control element blinds position ETS

The blinds position control is used to move the blind via button or directly to a specific position and adjust the slats via slider. You can disable the UI at any time using the 1-bit “unlock/lock” object by sending 0 to disable or 1 to enable. The commands for moving up and down are sent alternately, and you can stop the blind at any time with the 1-bit stop object. The 1-byte move command will travel the blind to 0% for fully up and 100% for fully down, and similarly, the slider will open and close the slats in percent.

7.3.15.1 Control element type

Options:	Push button
	Switch
	…
	Blinds position

Select the function for the control element.

7.3.15.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.15.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

Panel view

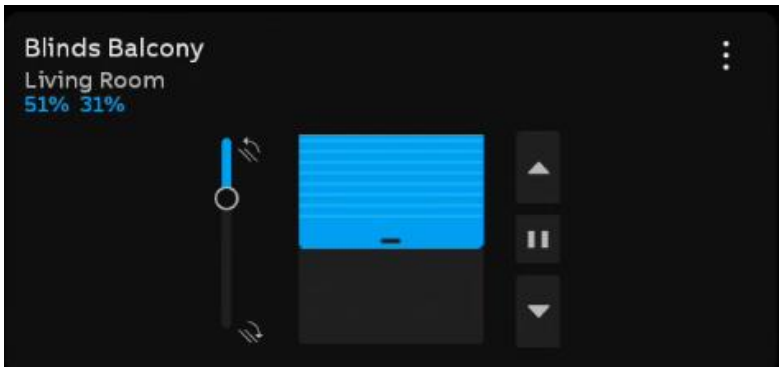


Fig. 71: Blinds position panel view

The control always displays the curtain icon and three buttons: open, close, and stop.

You can adjust the position of the blind and slats directly in percent. Click the top right or push long on the control, to open the extended view. You can disable the UI at any time using the 1-bit “unlock/lock” object by sending 0 to disable or 1 to enable. The button on the right moves the blind up, the bottom button moves it down, and the middle button stops movement. On the icon, you can move the blind to a desired position, and the percentage value is displayed second in the top left. The slider is used for slat adjustment in percent, and the status is also displayed first in the top left.

7.3.16 Element X: Air conditioner

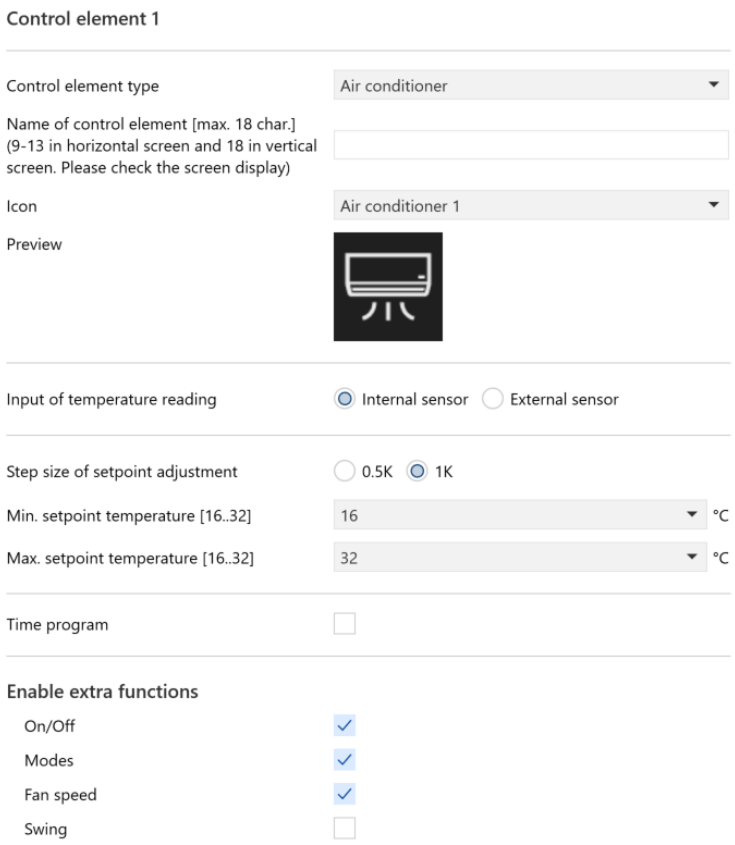


Fig. 72: Control element air conditioner ETS

The air conditioner control is used for operating split units with or wihout swing. The user interface consists of 6 functions: switch on/off, setpoint and fan adjustment, changing the operation mode and start/stop swing. The operation mode can be adjusted via further parameters, as well as the setpoint and fan adjustment. The fan can be adjusted as a percentage value or as 1-byte 0-255. The setpoint is adjustable as a 2-byte temperature in °C or via 1-byte counter pulses. Additionally, it is possible to set up 4 timers; for further information, see parameter “Time program”.

7.3.16.1 Control element type

Options:	Push button
	Switch
	…
	Air conditioner

Select the function for the control element.

7.3.16.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.16.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

7.3.16.4 Input of temperature reading

Options:	Internal sensor
	External sensor

- Internal sensor

  The panel internal temperature sensor is used as temperature input.

- External sensor

  An external sensor provides the temperature input via the external group object using DPT 9.001 temperature (°C).

  Request external temperature every

Options:	0 … 255 min

  You can surveil the external temperature sensor. Therefore the panel will check if the external temperature is received within the period, otherwise the panel will send out a read request. If the time is set to 0 the function is disabled.

7.3.16.5 Step size of setpoint adjustment

Options:	0,5K
	1K

Select the step size of the setpoint adjustment. If the “Datapoint of setpoint” is 1-byte, then the step size is always 1 K.

7.3.16.6 Min/ Max setpoint temperature

Options:	16 … 32°C

This parameter is used to define the range of the temperature setpoint adjustment. The minimum setpoint is always lower than the maximum setpoint, so in the ETS you can't set it up wrongly, as it will not be able to set up.

7.3.16.7 Time program

Options:	Unchecked
	Checked

Set the checkbox to enable the timer function, this function includes 4 separate timer which can send adjustable at a day and time the values for on/off, setpoint adjustment, control mode and fan stage. This function can temporarily be disabled with a 1 Bit object. Temporarily means that you can activate and deactivate the timer any time in the UI. If the timer function is disabled, the set timers won't react.

Enable extra functions

7.3.16.8 On/Off

Options:	Checked
	Unchecked

It is possible to enable/disable the local operation of the control for the on/off button.

7.3.16.9 Modes

Options:	Checked
	Unchecked

It is possible to enable/disable the local operation of the control for the control mode settings. You can still open the extended view of the control mode, but you can't change the control mode.

7.3.16.10 Fan speed

Options:	Checked
	Unchecked

It is possible to enable/disable the local operation of the control for the fan stage adjustment. You can still open the extended view of the fan adjustment, but you can't change the fan stages.

7.3.16.11 Swing

Options:	Checked
	Unchecked

It is possible to enable/disable the local operation of the user interface of the swing function. You can still open the extended view of the swing function, but you can't change the current swing.

Panel view

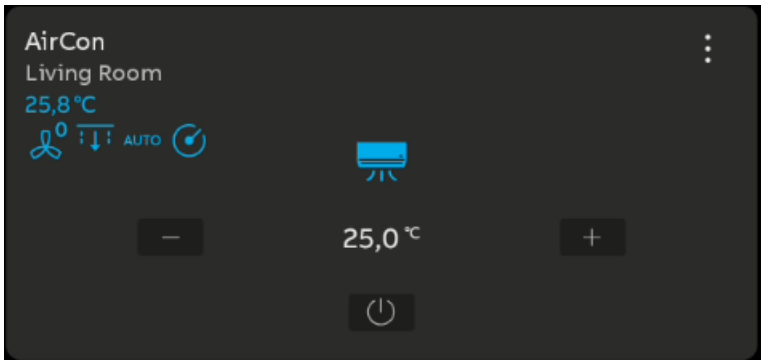


Fig. 73: Air conditioner panel view

The control always displays the air conditioner icon with three buttons for on/off and setpoint adjustment. Click the top right to open the extended view. You can disable the UI at any time using the 1-bit “unlock/lock” object by sending 0 to disable or 1 to enable.



Fig. 74: Air conditioner extended panel view

In the extended view, there is a slider for setpoint adjustment, which can also be operated with the + and - buttons. The buttons at the bottom are used to switch between on/off and the different additional settings for operation mode, fan stage, and time program.

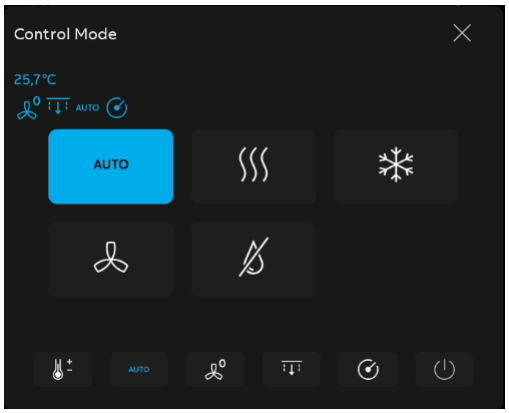


Fig. 75: Control mode panel view

For changing the operation mode, it is possible to switch between heating and cooling, as well as fan-only and dehumidification mode.

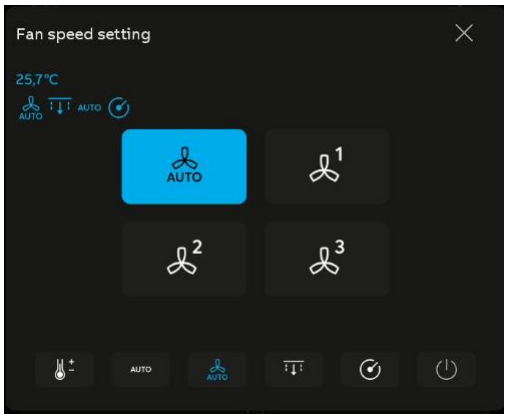


Fig. 76: Fan speed setting panel view

The fan stage can be operated manually; therefore, you can select fan stage 1 to 3 or auto mode.

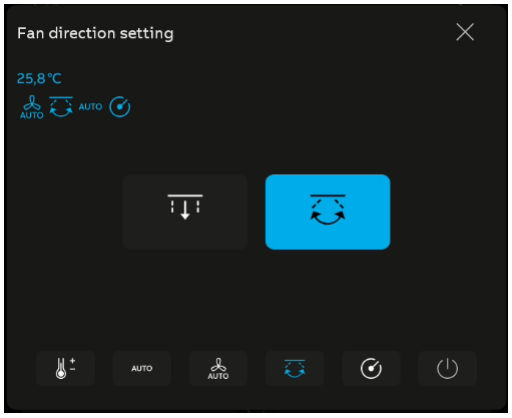


Fig. 77: Fan direction setting panel view

For the fan direction setting, you can enable and disable the swing.

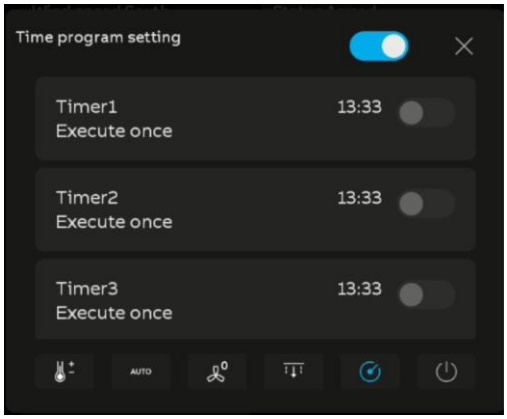


Fig. 78: Time program setting panel view

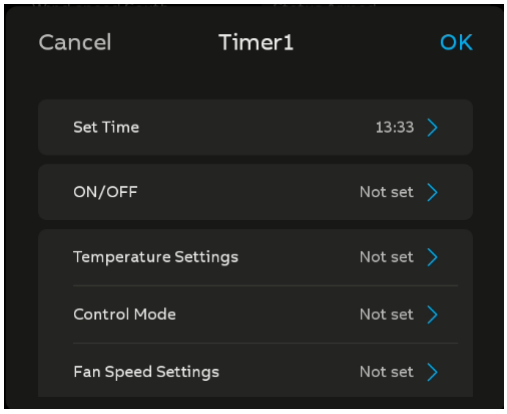


Fig. 79: Timer setting panel view

In the time program, it is possible to set four individual time programs. By clicking on the timer, you can set the time and the corresponding values which should be applied for on/off, setpoint temperature, control mode, and fan speed. After setting up the time program, you can then enable and disable the time program.

7.3.17 Element X: Room temperature control

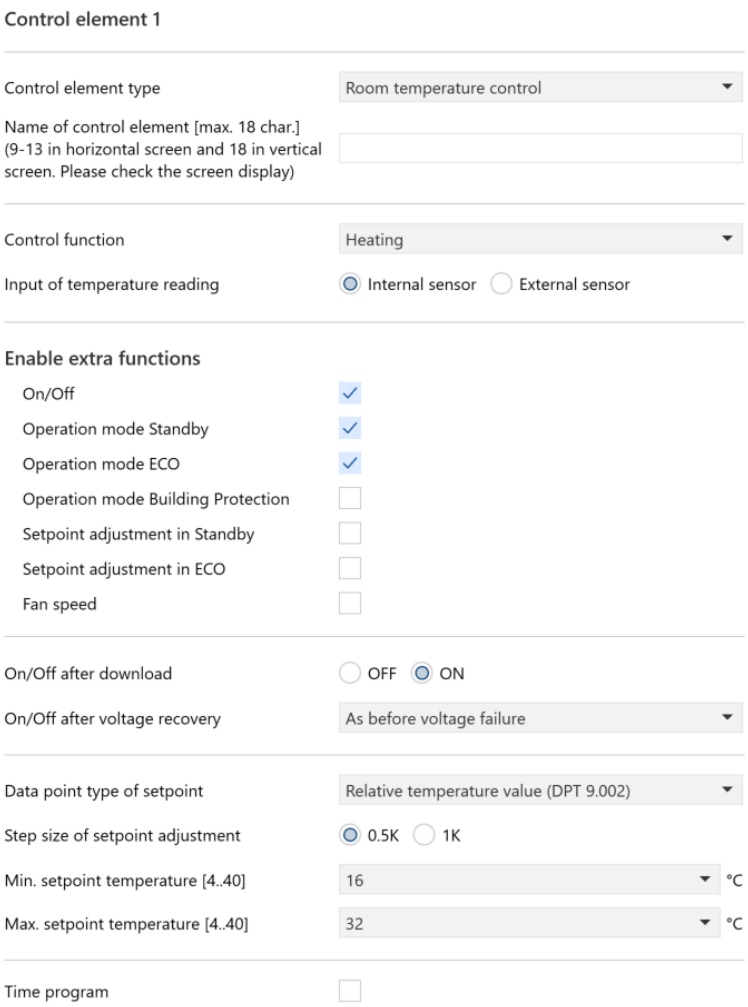


Fig. 80: Control element room temperature control ETS

The room temperature control function is used as secondary controller to switch on/ off, change the setpoint of an external main controller, the operation mode and fan stage and display the status for heating/cooling as well as the room temperature, fan stage and operation mode. The setpoint can be adjusted as 2 byte relative value as DPT 9.002 temperature K, 2 byte float (absolute) DPT 9.001 temperature °C or as 1 Bit DPT 1.007 step. In the UI you can switch on/ off, adjust the setpoint with the slider and the 2 buttons, additional there are 4 further function for switching between heating and cooling, changing the operation mode as HVAC mode, changing the fan stages as percentage value or in 1 Byte fan stage and you can create 4 timer to switch according to day and time the setpoint and heating/cooling.

7.3.17.1 Control element type

Options:	Push button
	Switch
	…
	Room temperature control

Select the function for the control element.

7.3.17.2 Name of control element

Options:	[max. 18 characters]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.17.3 Control function

Options:	Heating
	Cooling
	Heating and Cooling

Depending on the main controller and the HVAC system, you need to select if the UI is for heating or cooling or both. If you select heating and cooling you will get an additional extended UI, only here you can switch between heating cooling. Additional in the ETS will appear 2 group objects for switchover heating/cooling and the according status group object.

7.3.17.4 Temperature is coming from

Options:	Internal sensor
	External sensor

- Internal sensor

  The panel internal temperature sensor is used as temperature input.

- External sensor

  An external sensor provides the temperature input via the external group object using DPT 9.001 temperature (°C).

  Request external temperature every

Options:	0 … 255 min

  You can surveil the external temperature sensor. Therefore the panel will check if the external temperature is received within the period, otherwise the panel will send out a read request. If the time is set to 0 the function is disabled.

Enable extra functions

7.3.17.5 On/Off

Options:	Checked
	Unchecked

Select whether the group objects for on/off, the function, and the buttons in the UI are visible.

The following parameters are available if the function is activated.

On/Off after download

Options:	OFF
	ON

To ensure that the room temperature UI is starting with a defined value after download, you can select here if the device is sending an ON or OFF after download via the group object output ON/OFF.

On/ Off after voltage recovery

Options:	As before voltage failure
	OFF
	ON

To ensure that the room temperature UI is starting with a defined value after bus voltage recovery or ETS reset, you can select here if the device is sending an ON or OFF after download via the group object output ON/OFF.

7.3.17.6 Switchover Heating/ Cooling

Options:	Checked
	Unchecked

Select whether the group objects for switchover heating/ cooling, the function, and the buttons in the UI are visible.

This parameter is only available if control function "heating and cooling" is set.

7.3.17.7 Operation mode Standby

Options:	Checked
	Unchecked

Depending on the RTC used, you can select whether the Standby operation mode is available and visible in the Operation Mode tab.

The following function is available if the function is activated.

Setpoint adjustment in Standby

Options:	Checked
	Unchecked

Select whether the setpoint can be adjusted in the Setpoint tab while in Standby mode.

7.3.17.8 Operation mode ECO

Options:	Checked
	Unchecked

Depending on the RTC used, you can select whether the ECO operation mode is available and visible in the Operation Mode tab.

The following function is available if the function is activated.

Setpoint adjustment in ECO

Options:	Checked
	Unchecked

Select whether the setpoint can be adjusted in the Setpoint tab while in ECO mode.

7.3.17.9 Operation mode Building Protection

Options:	Checked
	Unchecked

Depending on the RTC used, you can select whether the Building Protection operation mode is available and visible in the Operation Mode tab.

7.3.17.10 Fan speed

Options:	Checked
	Unchecked

You can enable or disable the fan speed adjustment, including local operation and the group objects.

7.3.17.11 Datatype of setpoint

Optionen:	Relative temperature value (DPT 9.002)
	2-byte float
	1-bit

Depending on the main room temperature controller used, choose the datatype of the setpoint adjustment.

- Relative temperature value (DPT 9.002)

  The relative temperature value (DPT 9.002) will also enable the status RTSM and RTC and is used for internal room temperature controllers with relative setpoint adjustment.

  Step size of setpoint adjustment

Options:	0.5 K
	1 K

  Select the step size of the absolute setpoint adjustment.

- 2-byte float

  The 2-byte float is used for main room temperature controllers with absolute adjustment.

Step size of setpoint adjustment

Options:	0.5 K
	1 K

Select the step size of the absolute setpoint adjustment.

- 1-bit

  The 1-bit is used for room temperature controllers with step/counter adjustment. It will send 1 to increase setpoint and 0 to decrease setpoint temperature.

7.3.17.12 Min/Max setpoint temperature

Options:	4 … 16 … 32 … 40 °C

This parameter is used to define the range of the temperature setpoint adjustment. The minimum setpoint is always lower than the maximum setpoint.

7.3.17.13 Time program

Options:	Checked
	Unchecked

Set the checkbox to enable the timer function, this function is including 4 separate timer which can send adjustable at a day and time the values for on/off, setpoint adjustment, control mode and fan stage. This function can temporarily be disabled with a 1 Bit object. Temporarily means, that you can activate and deactivate the timer any time in the UI. If the timer function is disabled, the set up timers won't react.

Panel view

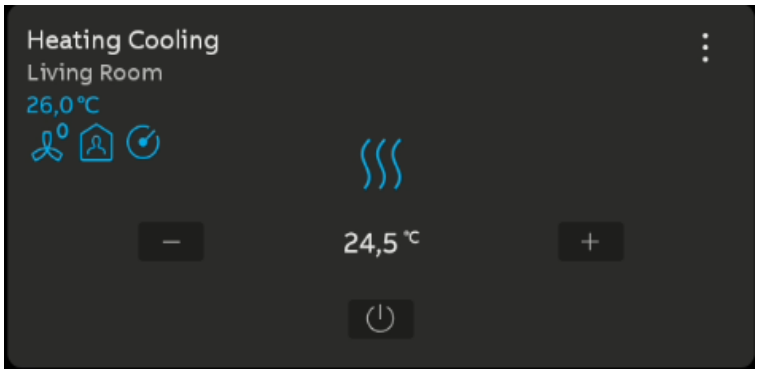


Fig. 81: Room temperature control panel view

The control always displays the room temperature icon with three buttons for on/off and setpoint adjustment. Click the top right to open the extended view. You can disable the UI at any time using the 1-bit “unlock/lock” object by sending 0 to disable or 1 to enable.

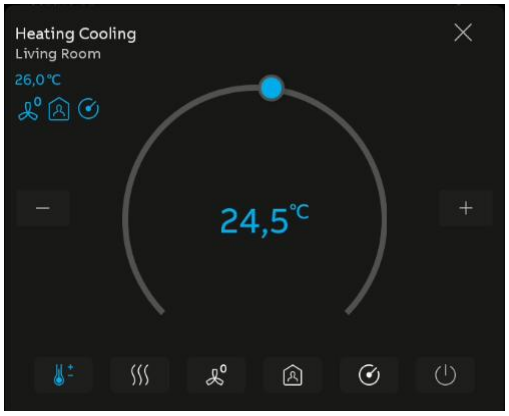


Fig. 82: Room temperature control extended panel view

In the extended view, there is a slider for setpoint adjustment, which can also be operated with the + and - buttons. The buttons at the bottom are used to switch between on/off and the different additional settings for heating/cooling, fan stage, operation mode and time program.

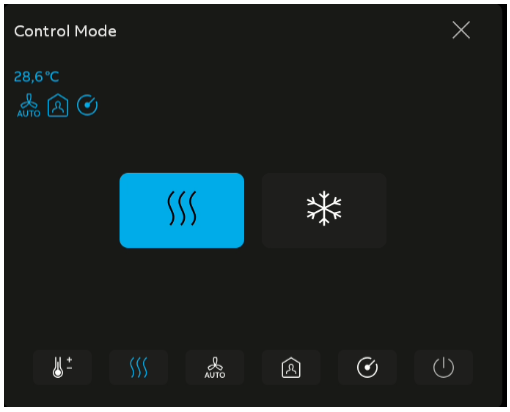


Fig. 83: Control mode panel view

For the Control Mode you can switch between the 2 modes heating and cooling.

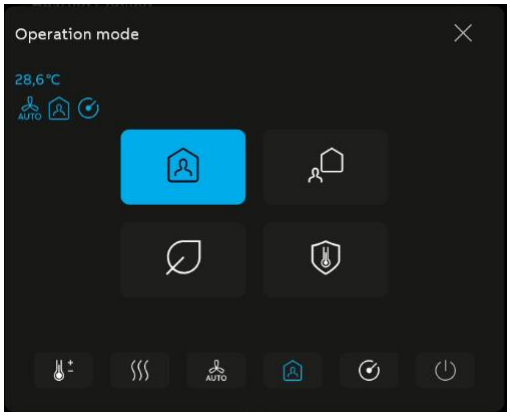


Fig. 84: Operation mode panel view

For changing the operation mode, it is possible to switch between Comfort, Eco, Standby and Building Protection.

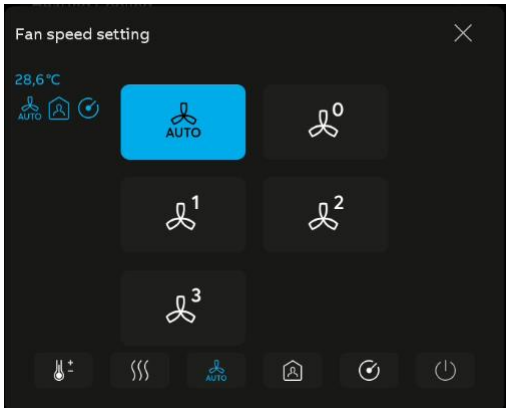


Fig. 85: Time program setting panel view

The fan stage can be operated manually; therefore, you can select fan stages 1 to 3, or you can use the automatic mode.

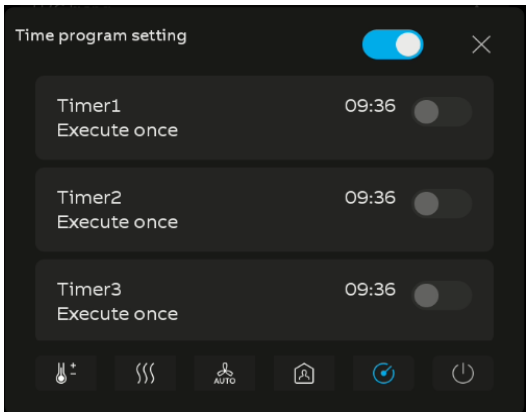


Fig. 86: Time program setting panel view

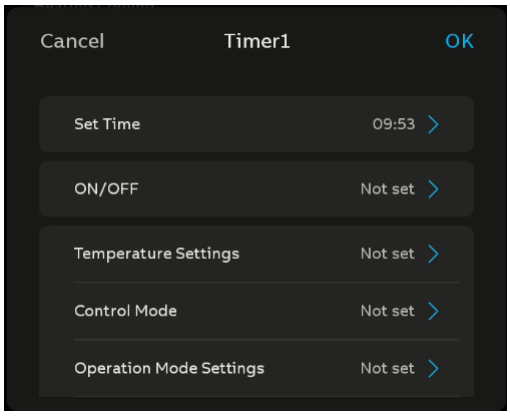


Fig. 87: Timer setting panel view

In the time program, it is possible to set four individual time programs. By clicking on the timer, you can set up the time and the corresponding values which should be applied for on/off, setpoint temperature, control mode, and fan speed. After setting up the time program, you can then enable and disable the time program.

7.3.18 Element X: Fan

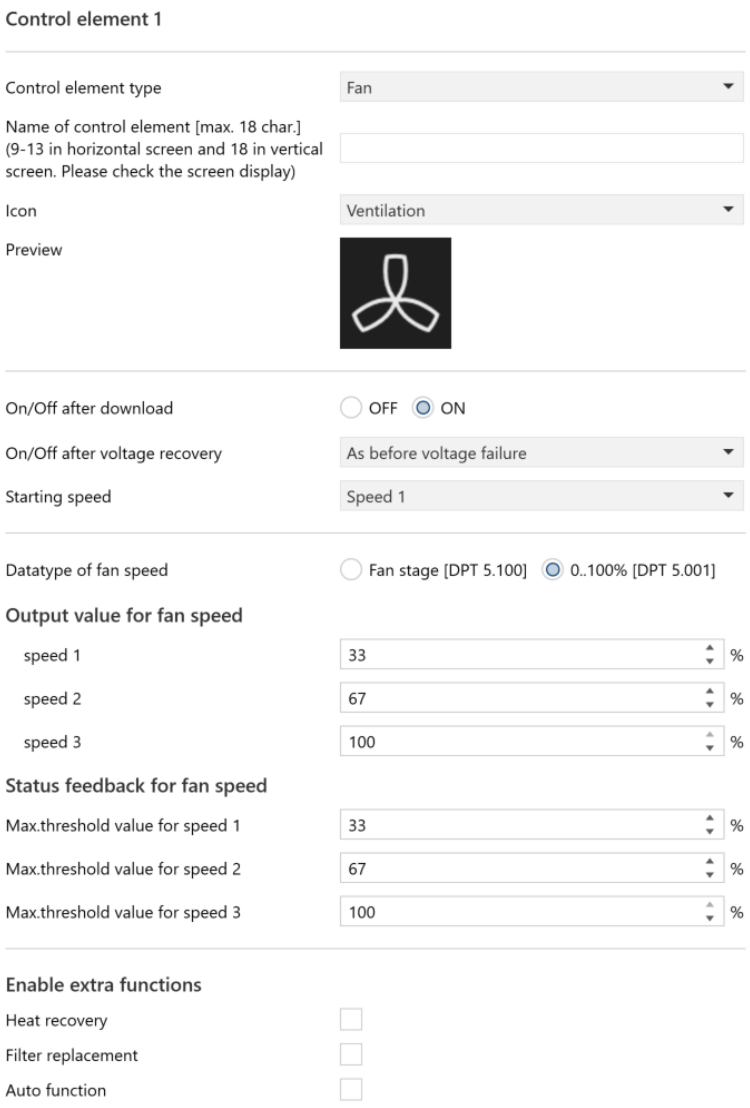


Fig. 88: Control element fan ETS

The fan control is used for ventilation systems with 3 different fan stages and automatic mode according to air quality. The control is blocked if the status is off. After switching on, you can change the fan stages by clicking. It also shows the current status for speed, heat recovery, and filter top left. In the extended view, there is additionally a slider to change the fan stages, a button for triggering the heat recovery, and a button to reset the filter replacement time.

7.3.18.1 Control element type

Options:	Push button
	Switch
	…
	Fan

Select the function for the control element.

7.3.18.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.18.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

7.3.18.4 On/off after download

Options:	OFF
	ON

If set, the panel sends the selected value (ON/OFF) after a download, and the UI displays the status.

This does not apply to a bus voltage recovery or an ETS reset, which are handled with parameter "On/off after voltage recovery".

7.3.18.5 On/off after voltage recovery

Options:	As before voltage failure
	OFF
	ON

If set, the panel sends out the selected value (ON/OFF) after ETS reset and voltage recovery, and the UI displays the status.

This does not apply to a download, which is handled with parameter “On/off after download”.

7.3.18.6 Starting speed

Options:	Speed 1
	Speed 2
	Speed 3
	Last status

Select the fan speed which is sent out after every status change from off to on, including changes triggered by a download, voltage recovery, or ETS reset.

If setting "Last status" is selected, the switch-on value is speed 1 in case of download, voltage recovery, or ETS reset.

Fan speed

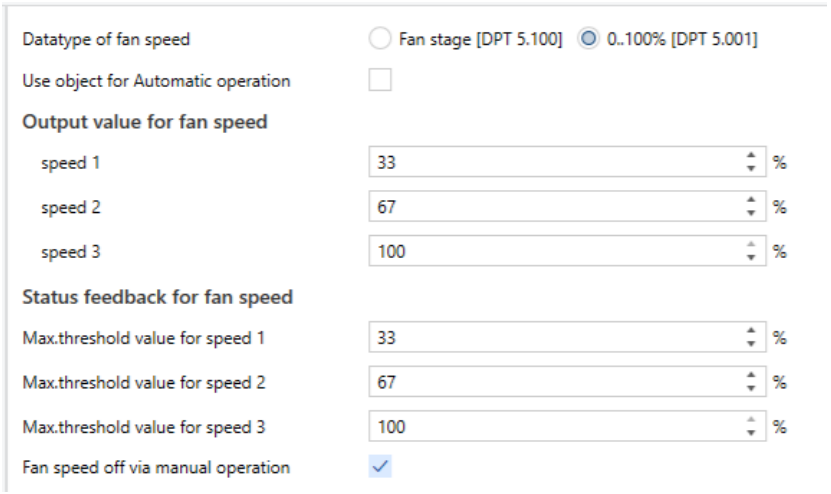


Fig. 89: Control element fan speed ETS

The Fan Speed tab is only visible when fan speed is enabled. You can configure the data type of the output and set the values and threshold values for each fan stage.

7.3.18.7 Datatype of fan speed

Options:	Fan stage [DPT 5.100]
	0 … 100 % [DPT 5.001]

Choose if the fan speed and status should be sent as a value from 0 to 255 according to DPT 5.100 or sent as a percentage value 0 … 100 % according to DPT 5.001.

7.3.18.8 Use object for automatic operation

Options:	Checked
	Unchecked

Since some room temperature controller with feature an automatic mode with a value of 0, you can enable or disable the auto mode here. Select the value for the auto mode, and the parameter will be displayed. Note: If the auto mode is not selected, the lowest value will always correspond to stage 1.

7.3.18.9 Output value for fan speed: Speed X

Options:	0 … 33 … 66 … 100 %
	0 … 1 … 2 … 3 … 255

Set the value for fan speed 1 to speed 3 according to the datatype. You can enter any number from 0 % to 100 % or 0 to 255.

7.3.18.10 Status feedback for fan speed: Speed X

Options:	0 … 33 … 66 … 100 %
	0 … 1 … 2 … 3 … 255

Select the status value which needs to be received to show the corresponding speed 1 to 3. You can enter any number from 0 % to 100 % or 0 to 255.

Enable extra function

7.3.18.11 Heat recovery

Options:	Unchecked
	Checked

A heat recovery function in a VRV (Variable Refrigerant Volume) or split unit system is an advanced feature that allows the system to simultaneously heat and cool different zones while recovering and reusing waste heat. Therefore, you can start the heat recovery with the 1-bit object and show the status in the extended UI. The fan actuator should then operate automatically.

7.3.18.12 Filter replacement

Options:	Unchecked
	Checked

- Unchecked

  The function is not active.

- Checked

  The filter replacement function is used to set up a replacement interval for the fan filter. The status of the filter is shown in the extended UI as a percentage value, depending on the hours left before replacement. You can reset the timer after replacing the filter by pressing the filter button in the extended UI. The timer is then reset, and the time 0h is sent via the 2-byte output filter replacement time.

  Filter replacement interval

Options:	100 …10000 h

  Set the time limit for the replacement interval. Depending on the time left, the UI shows the corresponding value in percent. For example, if the interval is 1000 h and 500 h have passed, then the status will show 50 %.

7.3.18.13 Auto function

Options:	Unchecked
	Checked

- Unchecked

  The function is not active.

- Checked

  The automatic function allows fan systems to control the fan speed based on the air quality. You can select the air quality reference between PM2.5, CO2, and VOC. In automatic mode, the fan behavior changes. In normal operation, you can select stages and the corresponding values are sent. Upon receiving the fan speed status, the UI adjusts accordingly. In automatic mode, if you switch between automatic and any manual stage, the device sends a command to turn automatic off.

  Automatic mode has different status behavior. Normally, 0 % fan speed turns the fan off, but in automatic mode, 0 % speed activates auto mode.

Air Quality value reference from

Options:	PM2.5
	CO2
	VOC

During automatic mode, the fan operates according to the current air quality. Here you can select which air quality sensor is used. In automatic mode, the extended UI then displays the current air quality value.

Panel view

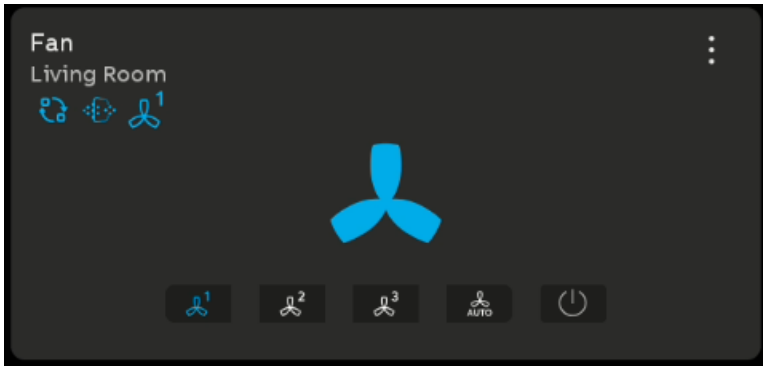


Fig. 90: Fan panel view



Fig. 91: Fan extended view

In the extended view there is a slider for switching between speed 1 to speed 3 and also 2 additional button for - and +. The 3 buttons at the bottom are for switching heat recovery, showing the filter status and switching on/off. Heat recovery and on/off is simply showing the status as the filter status is shown in percent. Depending on the time left, the UI shows the corresponding value in percent. For example, if the interval is 1000 h and 500 h have passed, then the status will show 50 %. If the fan is put to automatic mode, then the UI will display the current air quality value and the device will send the command auto as 1 Bit object.

7.3.19 Element X: Audio control

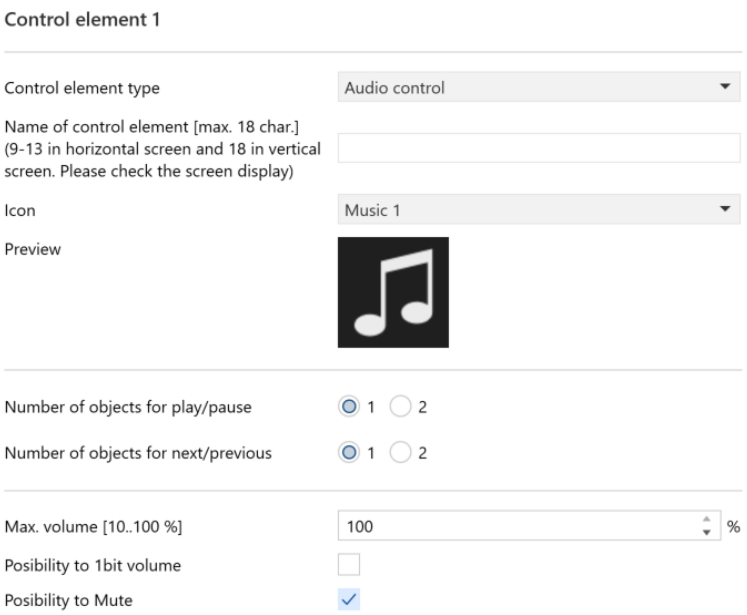


Fig. 92: Control element audio control ETS

This audio control is used for operating an audio system. Therefore, you can switch between play and pause, select next and previous track, and adjust the volume or mute the audio system. In the control, you can switch between play and pause and select next or previous track. In the extended view, you can adjust the volume as a slider with a percentage value or via the buttons as 1-bit, same for muting the audio.

7.3.19.1 Control element type

Options:	Push button
	Switch
	…
	Audio control

Select the function for the control element.

7.3.19.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.19.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

7.3.19.4 Number of objects for play/pause

Options:	1
	2

Depending on the used audio system, you can choose to send and receive the play and pause objects as 1-bit Play=1/Pause=0 or as 2 separate 1-bit objects with play=1 and pause=1.

7.3.19.5 Number of objects for next/previous

Depending on the used audio system, you can choose to send the next and previous track objects as 1-bit Next track=1/Previous track=0 or as 2 separate 1-bit objects with next track=1 and previous track=1.

Options:	1
	2

7.3.19.6 Max. volume

Options:	10 … 100 %

To limit the maximum volume of the audio system, you can set the maximum value here. This will affect the entire range of the slider.

7.3.19.7 Possibility to 1bit volume

Options:	Unchecked
	Checked

Depending on your audio system, you can enable the 1-bit volume to change the volume stepwise with 1 for +volume and 0 for -volume.

7.3.19.8 Possibility to mute

Options:	Unchecked
	Checked

Depending on your audio system, you can activate the mute function, muting and unmuting the audio system with an additional 1-bit object. The mute command is send with “1”.

Panel view

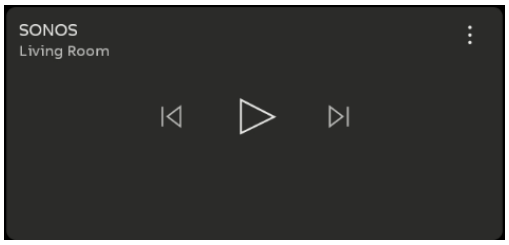


Fig. 93: Audio control panel view

The audio control consists of 3 buttons for switching between play and pause and for changing the track to next or previous.

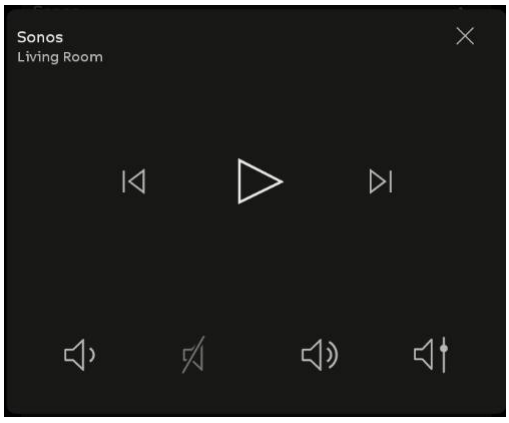


Fig. 94: Audio control extended view

In the extended view, you have additional options to change the volume via buttons for + and -, if “1-bit volume adjustment” is activated. You can also use a slider to adjust the absolute volume as a percentage value. If the mute function is enabled, there will be a button for sending mute and unmute.

7.3.20 Element X: Audio control (play mode + track information)

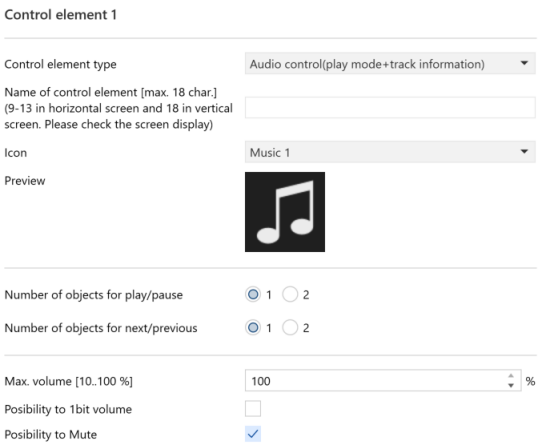


Fig. 95: Control element audio control (play mode + track information) ETS

This audio control (play mode + track information) is used to operate an audio system and display all meta information. Therefore, you can switch between play and pause, select next and previous track, and display the current track, artist, and album name. In the control, you can switch between play and pause and select next or previous track. In the extended view, you can additionally enable shuffle and repeat and adjust the volume. In both views, all the meta information like title, artist and album name is shown.

7.3.20.1 Control element type

Options:	Push button
	Switch
	…
	Audio control (play mode + track information)

Select the function for the control element.

7.3.20.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.20.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

7.3.20.4 Number of objects for play/pause

Options:	1
	2

Depending on the used audio system, you can choose to send and receive the play and pause objects as 1-bit play=1/pause=0 or as 2 separate 1-bit objects for play=1 and pause=1.

7.3.20.5 Number of objects for next/previous

Depending on the used audio system, you can choose to send the next and previous track objects as 1-bit Next track=1/Previous track=0 or as 2 separate 1-bit objects for next track=1 and previous track=1.

Options:	1
	2

7.3.20.6 Max. volume

Options:	10 … 100%

To limit the maximum volume of the audio system, you can set the maximum value here. This will affect the entire range of the slider.

7.3.20.7 Possibility to 1bit volume

Options:	Unchecked
	Checked

Depending on your audio system, you can enable the 1-bit volume to change the volume stepwise with 1 for +volume and 0 for -volume.

7.3.20.8 Possibility to mute

Options:	Unchecked
	Checked

Depending on your audio system, you can activate the mute function, muting and unmuting the audio system with an additional 1-bit object. The mute command is sent with "1".

Panel view

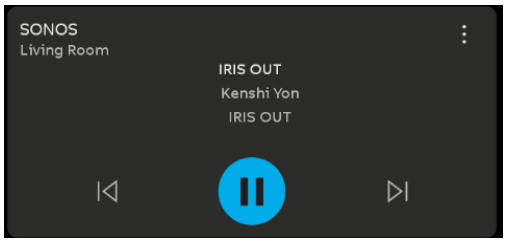


Fig. 96: Control element audio control (play mode + track information) panel view

The audio control (play mode + track information) consists of 3 buttons for switching between play and pause and for changing the track to next or previous.



Fig. 97: Control element audio control (play mode + track information) extended panel view

In the extended view, you have buttons for volume, repeat and shuffle. In both views, the complete meta information such as track name, artist name, and album name is displayed.

7.3.21 Element X: Audio control (play mode)

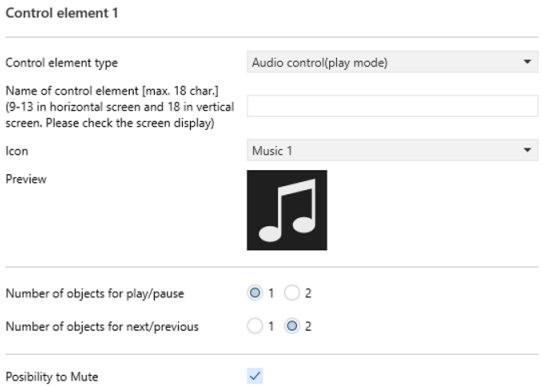


Fig. 98: Control element audio control (play mode) ETS

This audio control is used for operating an audio system. Therefore, you can switch between play and pause, select next and previous track, enable shuffle and repeat or mute the audio system. In the dedicated control, you can switch between play and pause and select next or previous track. In the extended view, you can additionally enable and disable shuffle and repeat or mute the system and adjust the volume via two buttons and a 1-bit object

7.3.21.1 Control element type

Options:	Push button
	Switch
	…
	Audio control (play mode)

Select the function for the control element.

7.3.21.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.21.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

7.3.21.4 Number of objects for play/pause

Options:	1
	2

Depending on the used audio system, you can choose to send and receive the play and pause objects as 1-bit Play=1/Pause=0 or as 2 separate 1-bit objects for play=1 and pause=1.

7.3.21.5 Number of objects for next/previous

Depending on the used audio system, you can choose to send the next and previous track objects as 1-bit Next track=1/Previous track=0 or as 2 separate 1-bit objects for next track=1 and previous track=1.

Options:	1
	2

7.3.21.6 Possibility to mute

Options:	Unchecked
	Checked

Depending on your audio system, you can activate the mute function, muting and unmuting the audio system with an additional 1-bit object. The mute command is sent with “1”.

Panel view

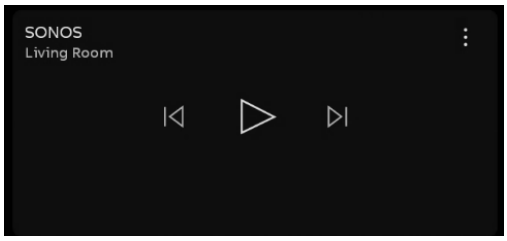


Fig. 99: Control element audio control (play mode) panel view

The audio control consists of 3 buttons for switching between play and pause and for changing the track to next or previous.

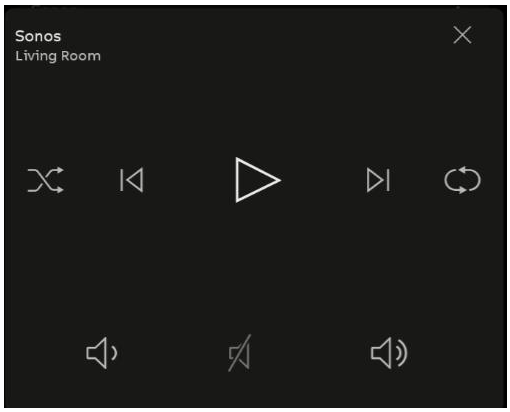


Fig. 100: Control element audio control (play mode) extended panel view

In the extended view, you have additional options to adjust the play mode. Therefore, you can enable or disable the mute, repeat, and shuffle functions with the corresponding buttons. Additionally, you can adjust the volume via two buttons and a 1-bit object.

7.3.22 Element X: Audio control (track information)

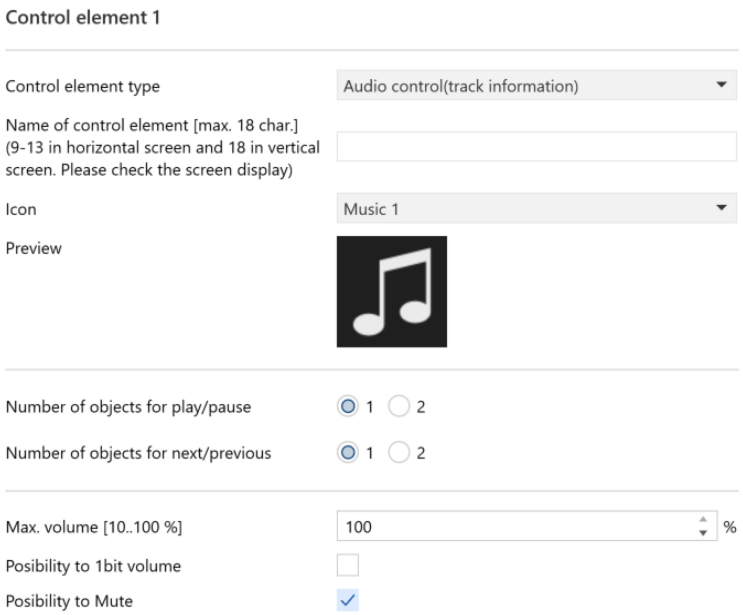


Fig. 101: Control element Audio control (track information) ETS

This audio control is used for operating an audio system and displaying all meta information. Therefore, you can switch between play and pause, select next and previous track, adjust the volume via slider and display the current track name, artist name, and album name in the control.

7.3.22.1 Control element type

Options:	Push button
	Switch
	…
	Audio control (track information)

Select the function for the control element.

7.3.22.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.22.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

7.3.22.4 Number of objects for play/pause

Options:	1
	2

Depending on the used audio system, you can choose to send and receive the play and pause objects as 1-bit Play=1/Pause=0 or as 2 separate 1-bit objects for play=1 and pause=1.

7.3.22.5 Number of objects for next/previous

Depending on the used audio system, you can choose to send the next and previous track objects as 1-bit Next track=1/Previous track=0 or as 2 separate 1-bit objects for next track=1 and previous track=1.

Options:	1
	2

7.3.22.6 Max. volume

Options:	10 … 100 %

To limit the maximum volume of the audio system, you can set the maximum value here. This will affect the entire range of the slider.

7.3.22.7 Possibility to 1bit volume

Options:	Unchecked
	Checked

Depending on your audio system, you can enable the 1-bit volume to change the volume stepwise with 1 for +volume and 0 for -volume.

7.3.22.8 Possibility to mute

Options:	Unchecked
	Checked

Depending on your audio system, you can activate the mute function, muting and unmuting the audio system with an additional 1-bit object. The mute command is sent with "1".

Panel view

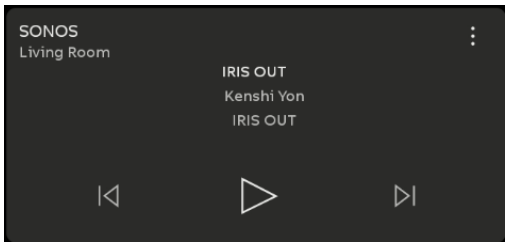


Fig. 102: Control element Audio control (track information) panel view



Fig. 103: Control element Audio control (track information) extended panel view

The audio control (track information) consists of 3 buttons for switching between play and pause and for changing the track to next or previous. In both views, the complete meta information such as track name, artist name, and album name is displayed. In the extended view, you can aditionally adjust the volume via a slider.

7.3.23 Element X: Audio control (track information + playlist)

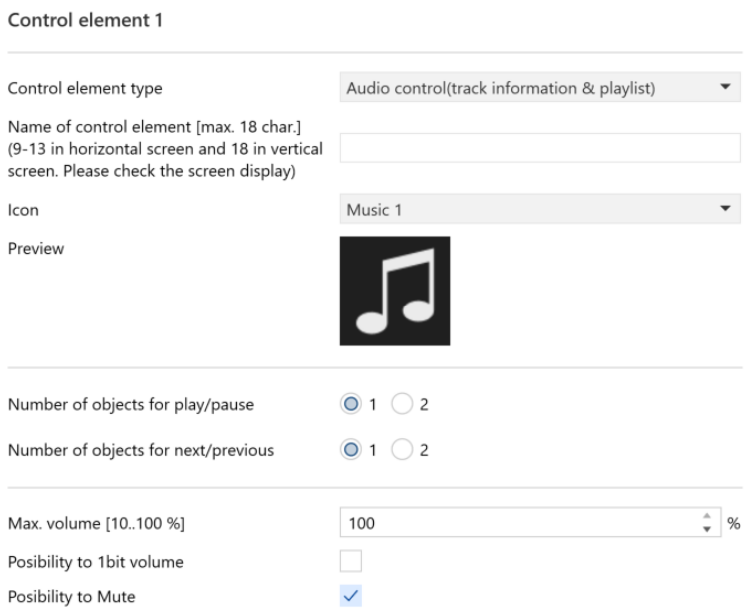


Fig. 104: Control element audio control (track information & playlist) ETS

The audio control is used for operating an audio system. Therefore, you can switch between play and pause, adjust the volume via slider, select next and previous track and playlist. Additionally, the control will display all meta information like track, artist and album name.

7.3.23.1 Control element type

Options:	Push button
	Switch
	…
	Audio control (track information & playlist)

Select the function for the control element.

7.3.23.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.23.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

7.3.23.4 Number of objects for play/pause

Options:	1
	2

Depending on the used audio system, you can choose to send and receive the play and pause objects as 1-bit Play=1/Pause=0 or as 2 separate 1-bit objects for play=1 and pause=1.

7.3.23.5 Number of objects for next/previous

Depending on the used audio system, you can choose to send the next and previous track objects as 1-bit Next track=1/Previous track=0 or as 2 separate 1-bit objects for next track=1 and previous track=1.

Options:	1
	2

7.3.23.6 Max. volume

Options:	10 … 100 %

To limit the maximum volume of the audio system, you can set the maximum value here. This will affect the entire range of the slider.

7.3.23.7 Possibility to 1bit volume

Options:	Unchecked
	Checked

Depending on your audio system, you can enable the 1-bit volume to change the volume stepwise with 1 for + volume and 0 for - volume.

7.3.23.8 Possibility to mute

Options:	Unchecked
	Checked

Depending on your audio system, you can activate the mute function, muting and unmuting the audio system with an additional 1-bit object. The mute command is sent with “1”.

Panel view

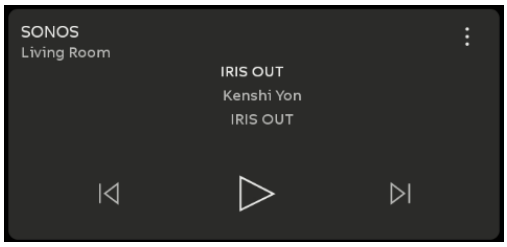


Fig. 105: Control element audio control (track information & playlist) panel view

The audio control (track information & playlist) consists of 3 buttons for switching between play and pause and for changing the track to next or previous. In both views, the complete meta information such as track name, artist name, and album name is displayed.



Fig. 106: Control element audio control (track information & playlist) extended panel view

In the extended view, you have two additional buttons for switching to the next or previous playlist and adjust or mute the volume via slider.

7.3.24 Element X: Energy display

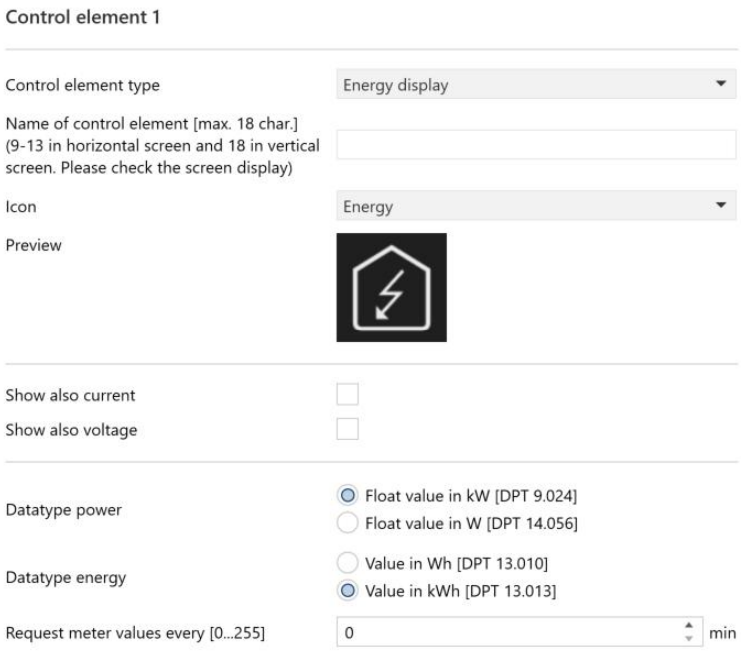


Fig. 107: Control element energy display ETS

The Energy display control is only for displaying the energy values for current in mA, voltage in V, power in kW, and active energy in kWh.

7.3.24.1 Control element type

Options:	Push button
	Switch
	…
	Energy display

Select the function for the control element.

7.3.24.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.24.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

7.3.24.4 Show also current

Options:	Unchecked
	Checked

Depending on the used metering you can enable or disable to display the value for the measured current.

- Unchecked

  The measured current is not displayed.

- Checked

  Datatype current

Options:	Value in mA [DPT 7.012]
	Float value in mA [DPT 9.021]
	Float value in A [DPT 14.019]

  Select the corresponding datatype to display the current value in the control. Therefore, you can choose value mA, float mA, or float A.

7.3.24.5 Show also voltage

Options:	Unchecked
	Checked

Depending on the metering used, you can enable or disable to display the value for the measured voltage.

- Unchecked

  The measured voltage is not displayed.

- Checked

  Datatype voltage

Options:	Float value in mV [DPT 9.020]
	Float value in V [DPT 14.027]

  Select the corresponding datatype to display the voltage value in the control. Therefore, you can choose float value mV and float value in V.

7.3.24.6 Datatype power

Options:	Float value in kW [DPT 9.024]
	Float value in W [DPT 14.056]

Select the corresponding datatype to display the voltage value in the control. Therefore, you can choose float value kW and float value in W.

7.3.24.7 Datatype energy

Options:	Value in Wh [DPT 13.010]
	Value in kWh [DPT 13.013]

Select the corresponding datatype to display the voltage value in the control. Therefore, you can choose value Wh and value in kWh.

7.3.24.8 Request meter values every

Options:	0 … 255 min

To ensure the control is showing the correct values, you can set up an interval for requesting the meter values every x minutes.

Panel view

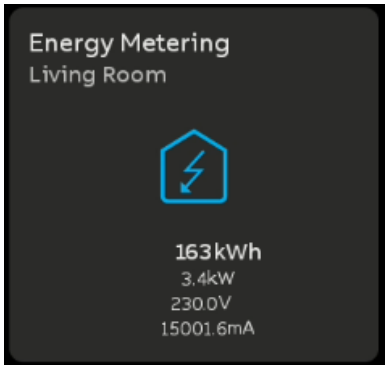


Fig. 108: Control element energy display panel view

The Energy display is used only for displaying all important energy values such as current, voltage, power, and energy. According to the meters used, you need to select the correct datatype.

7.3.25 Element X: Temperature display

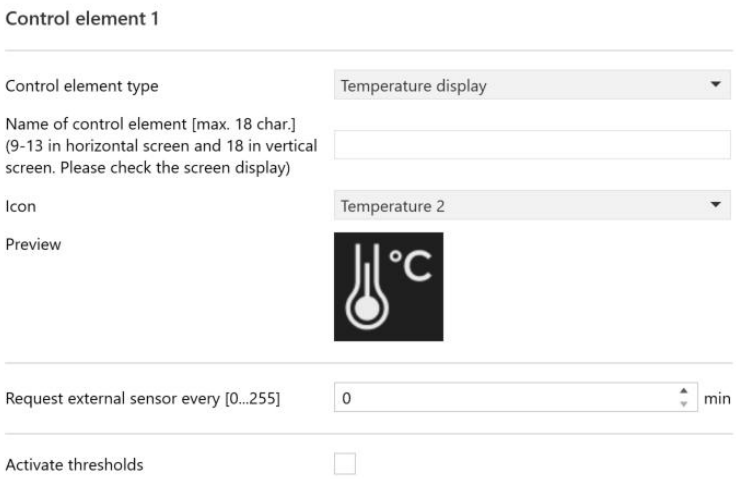


Fig. 109: Control element temperature display ETS

The Temperature display control is only for displaying a measured temperature value in °C. Additionally, you can set up a threshold to send out alarm objects if the temperature value is too high or low.

7.3.25.1 Control element type

Options:	Push button
	Switch
	…
	Temperature display

Select the function for the control element.

7.3.25.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.25.3 Control icon

Options:	Temperature 2
	…

You can select different icons for each function. The icons are shown if a function does not have any dedicated control. Additionally, the icon will be shown in the floor plan.

7.3.25.4 Request external sensor values every

Options:	0 … 255 min

To ensure the control is showing the correct values, you can set up an interval for requesting the meter values every x minutes.

7.3.25.5 Activate thresholds

Options:	Unchecked
	Checked

- Unchecked

  The measured temperature value is not tracked.

- Checked

  The measured temperature value is tracked and can be connected to 1 bit alarms object for going above or below the selected threshold.

  Lower temperature threshold

Options:	0 … 15 °C

  Set the lower threshold for the alarm object. It is possible to set the lower threshold between 0 to 15°C.

  Higher temperature threshold

Options:	30 … 45 °C

  Set the higher threshold for the alarm object. It is possible to set the lower threshold between 30 and 45 °C.

Panel view



Fig. 110: Control element temperature display panel view

The Temperature display control is used only for displaying one measured temperature value. This value will be shown and received in °C. Additionally, you can set up a threshold to send out alarm objects if the temperature value is too high or low.

7.3.26 Element X: Humidity display

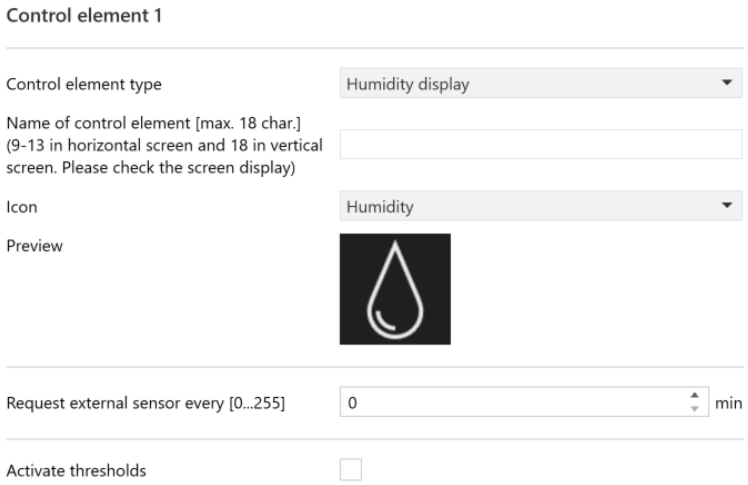


Fig. 111: Control element humidity display ETS

The Humidity display control is only for displaying a measured humidity value as 2-byte DPT 9.007 humidity in %. Additionally, you can set up a threshold to send out alarm objects if the humidity value is too high or low.

7.3.26.1 Control element type

Options:	Push button
	Switch
	…
	Humidity display

Select the function for the control element.

7.3.26.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.26.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

7.3.26.4 Request external sensor values every

Options:	0 … 255 min

To ensure the control is showing the correct values, you can set up an interval for requesting the meter values every x minutes.

7.3.26.5 Activate thresholds

Options:	Unchecked
	Checked

- Unchecked

  The measured humidity value is not tracked.

- Checked

  The measured humidity value is tracked and can be connected to 1 bit alarms object for going above or below the selected threshold.

Lower temperature threshold

Options:	5 … 20 %

Set the lower threshold for the alarm object. It is possible to set the lower threshold between 5 % to 20 %.

Higher temperature threshold

Options:	70 … 85 %

Set up the higher threshold for the alarm object. It is possible to set up the higher threshold between 70 % to 85 %.

Panel view



Fig. 112: Control element humidity display panel view

The Humidity display control is only for displaying a measured humidity value as 2-byte DPT 9.007 humidity in %. Additionally, you can set up a threshold to send out alarm objects if the humidity value is too high or low.

7.3.27 Element X: PM2.5 display

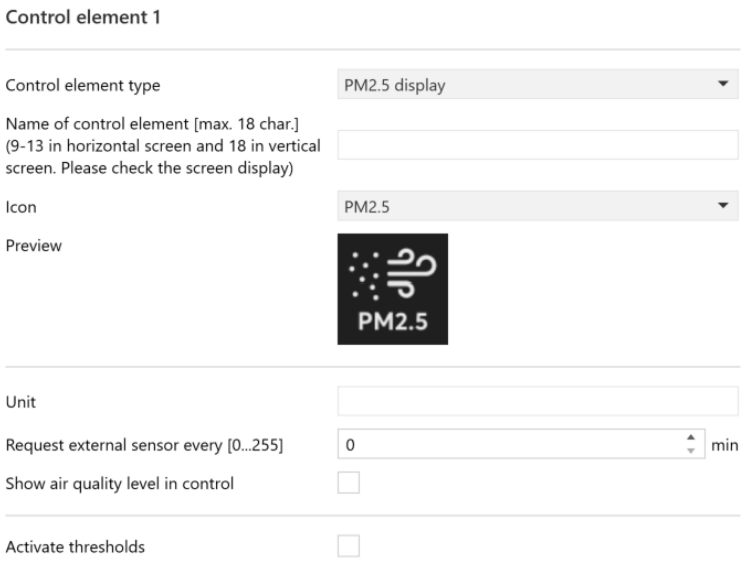


Fig. 113: Control element PM2.5 display ETS

The PM2.5 display control is only for displaying a measured air quality value PM2.5 as 2-byte DPT 7.001 pulses. Additionally, you can set up a threshold to send out an alarm object if the air quality value is too high or activate the air quality level which will highlight the control according to the selected colour.

7.3.27.1 Control element type

Options:		Push button
		Switch
		…
		PM2.5 display

Select the function for the control element.

7.3.27.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.27.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

7.3.27.4 Unit

Options:	[max. 18 characters text]

Enter the unit as text which will then be shown in the control. You can enter any text with up to 6 characters. If left empty the control shows µg/m³.

7.3.27.5 Request external sensor values every [0…255]

Options:	0 … 255 min

To ensure the control is showing the correct values, you can set up an interval for requesting the meter values every x minutes.

7.3.27.6 Show air quality level in control

Options:	Unchecked
	Checked

Select whether the control follows the levels which can be set up in the “control elements” setting in the ETS. If a certain level is reached, the UI is highlighted in the corresponding colour.

7.3.27.7 Activate thresholds

Options:	Unchecked
	Checked

- Unchecked

  The measured air quality is not tracked.

- Checked

  The measured air quality is tracked and can be connected to 1 bit alarms object for going above or below the selected threshold.

  Threshold

Options:	100 … 150 … 999 µg/m³

  Set the threshold for the alarm object. It is possible to set up the threshold between 100 to 999 µg/m³.

Panel view



Fig. 114: Control element PM2.5 display panel view

The PM2.5 display control is only for displaying a measured air quality value PM2.5 as 2-byte DPT 7.001 pulses. Additionally, you can set up a threshold to send out an alarm object if the air quality value is too high or activate the air quality level which will highlight the control according to the selected colour.

7.3.28 Element X: PM10 display

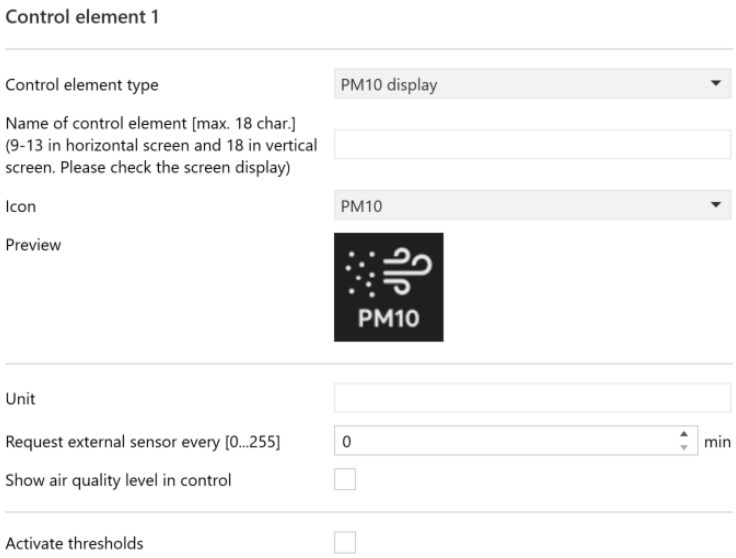


Fig. 115: Control element PM10 display ETS

The PM10 display control is only for displaying a measured air quality value PM10 as 2-byte DPT 7.001 pulses. Additionally, you can set up a threshold to send out an alarm object if the air quality value is too high or activate the air quality level which will highlight the control according to the selected colour.

7.3.28.1 Control element type

Options:	Push button
	Switch
	…
	PM10 display

Select the function for the control element.

7.3.28.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.28.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

7.3.28.4 Unit

Options:	[max. 18 characters text]

Enter the unit as text which will then be shown in the control. You can enter any text with up to 6 characters. If left empty, the control show µg/m³.

7.3.28.5 Request external sensor values every

Options:	0 … 255 min

To ensure the control is showing the correct values, you can set up an interval for requesting the meter values every x minutes.

7.3.28.6 Show air quality level in control

Options:	Unchecked
	Checked

Select if the control is following the levels which can be set up in the "control elements" setting in the ETS. If a certain level is reached, the UI is highlighted in the corresponding colour.

7.3.28.7 Activate thresholds

Options:	Unchecked
	Checked

- Unchecked

  The measured air quality is not tracked.

- Checked

  The measured air quality is tracked and can be connected to 1 bit alarms object for going above or below the selected threshold.

  Threshold

Options:	100 … 150 … 999 µg/m³

  Set the threshold for the alarm object. It is possible to set up the threshold between 100 to 999 µg/m³.

Panel view



Fig. 116: Control element PM10 display panel view

The PM10 display control is only for displaying a measured air quality value PM10 as 2-byte DPT 7.001 pulses. Additionally, you can set up a threshold to send out an alarm object if the air quality value is too high or activate the air quality level which will highlight the control according to the selected colour.

7.3.29 Element X: VOC display

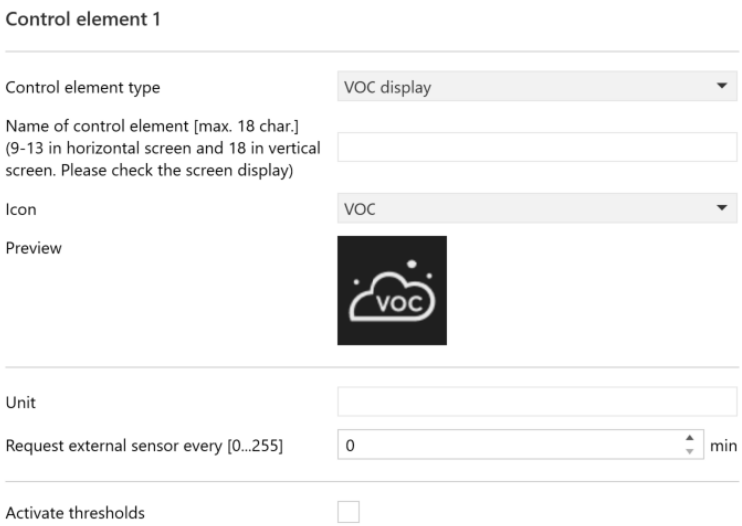


Fig. 117: Control element VOC display ETS

The VOC display control is only for displaying a measured volatile organic compounds air quality value as 2-byte DPT 7.001 pulses. Additionally, you can set up a threshold to send out an alarm object if the air quality value is too high.

7.3.29.1 Control element type

Options:	Push button
	Switch
	…
	VOC display

Select the function for the control element.

7.3.29.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.29.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

7.3.29.4 Unit

Options:	[max. 18 characters text]

Enter the unit as text which will then be shown in the control. You can enter any text with up to 6 characters. IF left empty the control show µg/m³.

7.3.29.5 Request external sensor values every [0…255]

Options:	0 … 255 min

To ensure the control is showing the correct values, you can set up an interval for requesting the meter values every x minutes.

7.3.29.6 Activate thresholds

Options:	Unchecked
	Checked

- Unchecked

  The measured air quality is not tracked.

- Checked

  The measured air quality is tracked and can be connected to 1 bit alarms object for going above or below the selected threshold.

  Threshold

Options:	100 … 150 … 999 µg/m³

  Set the threshold for the alarm object. It is possible to set up the threshold between 100 to 999 µg/m³.

Panel view



Fig. 118: Control element VOC display ETS

The VOC display control is only for displaying a measured VOC air quality value as 2-byte DPT 7.001 pulses. Additionally, you can set up a threshold to send out an alarm object if the air quality value is too high.

7.3.30 Element X: CO2 display

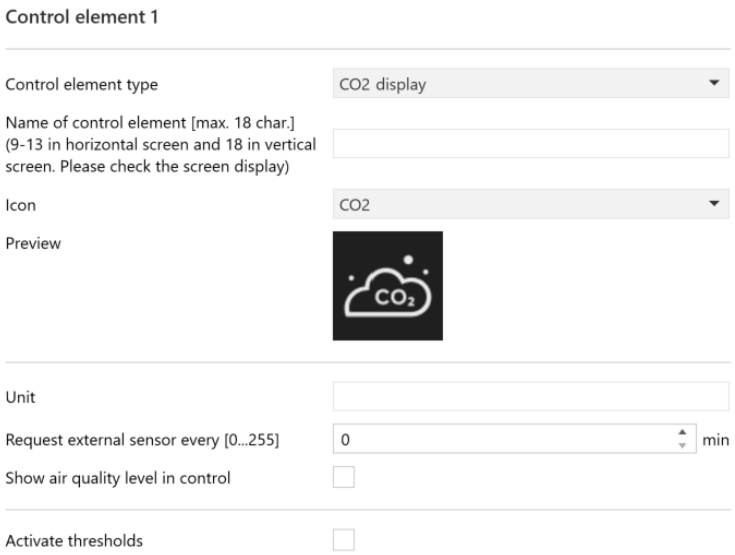


Fig. 119: Control element CO2 display ETS

The CO2 display control is only for displaying a measured Carbon Dioxide value (CO2) as 2 bytes DPT 7.001 pulses or DPT 9.008 ppm. Additionally, you can set up a threshold to send out an alarm object if the air quality value is too high or activate the air quality level which will highlight the control according to the selected colour.

7.3.30.1 Control element type

Options:	Push button
	Switch
	…
	CO2 display

Select the function for the control element.

7.3.30.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.30.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

7.3.30.4 Unit

Options:	[max. 18 characters text]

Enter the unit as text which will then be shown in the control. You can enter any text with up to 6 characters. IF left empty the control show µg/m³.

7.3.30.5 Request external sensor values every [0…255]

Options:	0 … 255 min

To ensure the control is showing the correct values, you can set up an interval for requesting the meter values every x minutes.

7.3.30.6 Show air quality level in control

Options:	Unchecked
	Checked

Select if the control is following the levels which can be set up in the “control elements” setting in the ETS. If a certain level is reached, the UI is highlighted in the corresponding colour.

7.3.30.7 Activate thresholds

Options:	Unchecked
	Checked

- Unchecked

  The measured air quality is not tracked.

- Checked

  The measured air quality is tracked and can be connected to 1 bit alarms object for going above or below the selected threshold.

  Threshold

Options:	100 … 150 … 999 µg/m³

  Set up the threshold for the alarm object.

Panel view

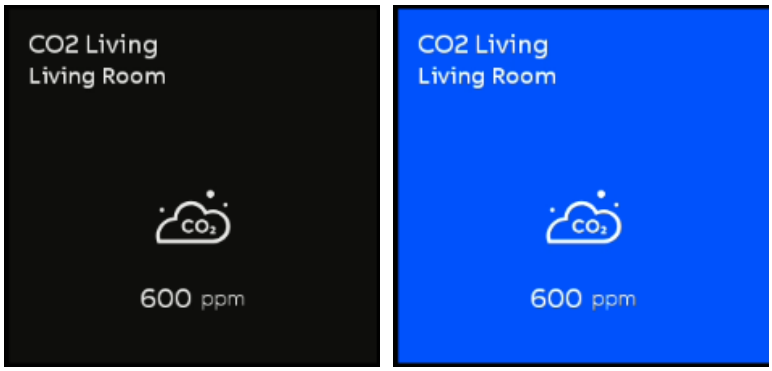


Fig. 120: Control element CO2 display panel view

The CO2 display control is only for displaying a measured Carbon Dioxide value (CO2) as DPT 9.008 ppm. Additionally, you can set up a threshold to send out an alarm object if the air quality value is too high or activate the air quality level which will highlight the control according to the selected colour.

7.3.31 Element X: Brightness display

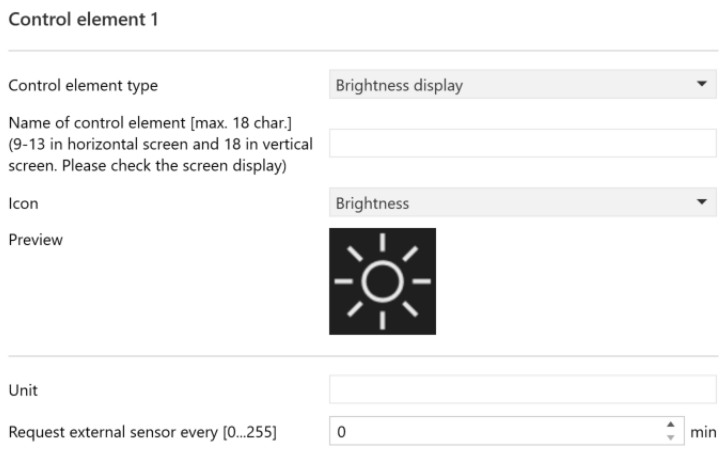


Fig. 121: Control element brightness display ETS

The Brightness display control is only for displaying a measured brightness value in lux as 2 bytes DPT 9.004.

7.3.31.1 Control element type

Options:	Push button
	Switch
	…
	Brightness display

Select the function for the control element.

7.3.31.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.31.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

7.3.31.4 Unit

Options:	[max. 18 characters text]

Enter the unit as text which will then be shown in the control. You can enter any text with up to 6 characters. If left empty, the control shows lux.

7.3.31.5 Request external sensor values every [0…255]

Options:	0 … 255 min

To ensure the control is showing the correct values, you can set up an interval for requesting the meter values every x minutes.

Panel view



Fig. 122: Control element brightness display panel view

The Brightness display control is only for displaying a measured brightness value in lux as 2 bytes DPT 9.004.

7.3.32 Element X: Wind display

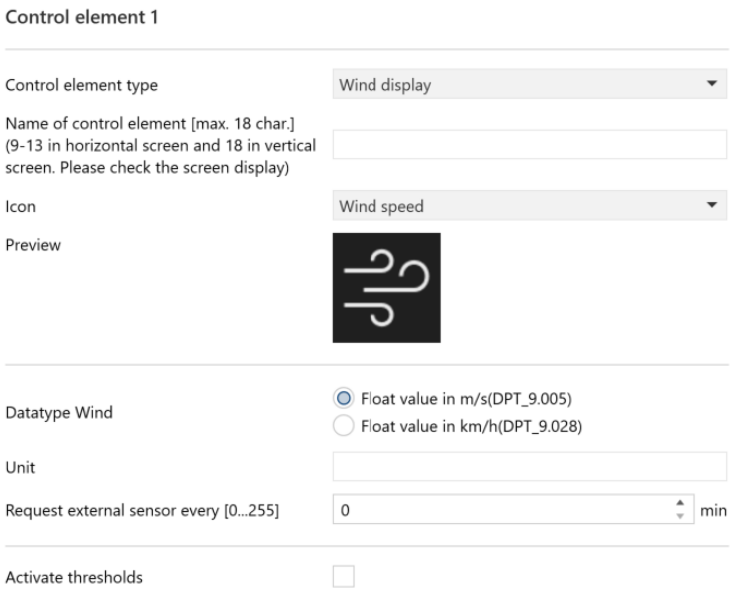


Fig. 123: Control element wind display ETS

The Wind display control is only for displaying a measured wind speed as 2-byte float in m/s or km/h as DPT 9.005 or DPT 9.028. Additionally, you can set up a threshold to send out an alarm-object if the wind speed is too high.

7.3.32.1 Control element type

Options:	Push button
	Switch
	…
	Wind display

Select the function for the control element.

7.3.32.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.32.3 Control icon

Options:	Wind speed
	…

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

7.3.32.4 Datatype wind

Options:	Float value in m/s (DPT 9.005)
	Float value in km/h (DPT 9.028)

Select the datatype according to the used wind speed sensor. Choose between float value in m/s as DPT 9.005 or km/h as DPT 9.028.

7.3.32.5 Unit

Options:	[max. 18 characters text]

Enter the unit as text which will then be shown in the control. You can enter any text with up to 6 characters. If left empty, the control shows m/s.

7.3.32.6 Request external sensor values every

Options:	0 … 255 min

To ensure the control is showing the correct values, you can set up an interval for requesting the meter values every x minutes.

7.3.32.7 Activate thresholds

Options:	Unchecked
	Checked

- Unchecked

  The measured wind speed is not tracked.

- Checked

  The measured wind speed is tracked and can be connected to 1 bit alarms object for going above or below the selected threshold.

  Threshold

Options:	5 … 20 … 50 m/s
	20 … 75 …150 km/h

  Set up the threshold for the alarm object. It is possible to set up the threshold between 5 to 50 m/s or 20 to 150 km/h.

Panel view



Fig. 124: Control element wind display panel view

The Wind display control is only for displaying a measured wind speed as 2-byte float in m/s or km/h as DPT 9.005 or DPT 9.028. Additionally, you can set up a threshold to send out an alarm-object if the wind speed is too high.

7.3.33 Element X: Status display

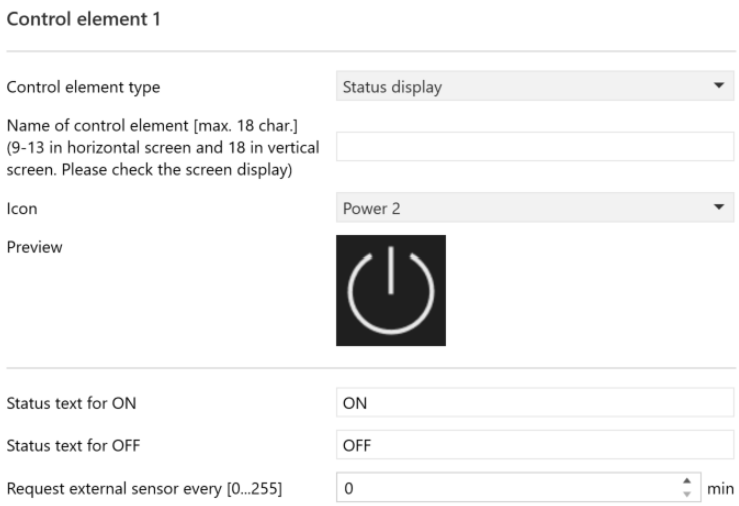


Fig. 125: Control element status display ETS

7.3.33.1 Control element type

Options:	Push button
	Switch
	…
	Status display

Select the function for the control element.

7.3.33.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.33.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

7.3.33.4 Status text for ON

Options:	[max. 12 characters text]

It is possible to change the shown text for the status “ON” with any text up to 12 characters.

7.3.33.5 Status text for OFF

Options:	[max. 12 characters text]

It is possible to change the shown text for the status “OFF” with any text up to 12 characters.

7.3.33.6 Request external sensor values every [0…255]

Options:	0 … 255 min

To ensure the control is showing the correct values, you can set up an interval for requesting the meter values every x minutes.

Panel view

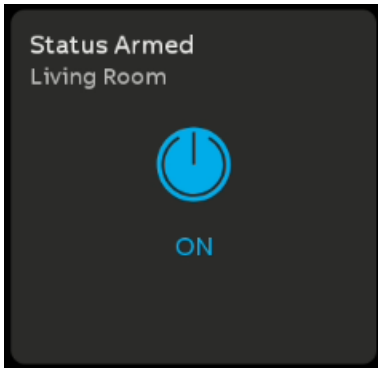


Fig. 126: Control element status display panel view

The status display control is only for displaying a status from a binary sensor as 1-bit DPT 1.001 switch.

7.3.34 Element X: Value sender

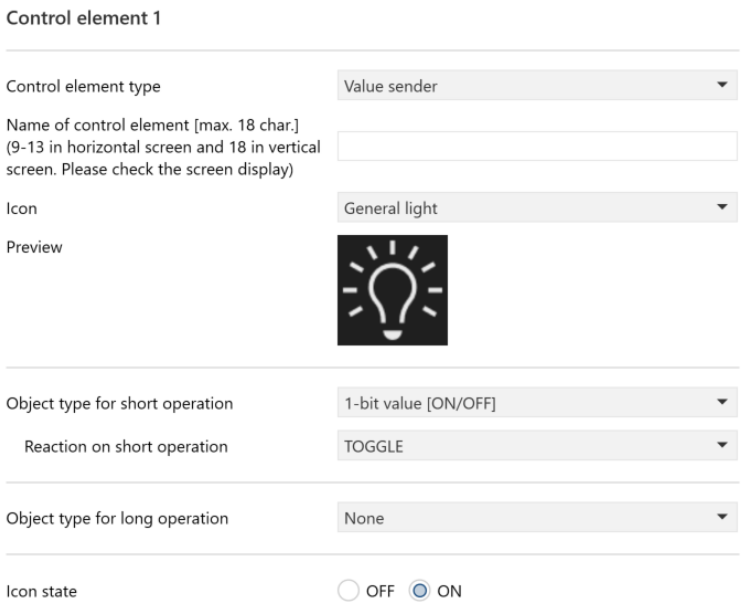


Fig. 127: Control element value sender ETS

The Value sender control is used for sending out 1 or 2 defined values for short and long operation with different value types: 1-bit, 2-bit, 4-bit, 1-byte as percentage and counter pulses, 2-byte as value and float value, and 4-byte as value and float value. It is possible to send alternating values or send preset values.

7.3.34.1 Control element type

Options:	Push button
	Switch
	…
	Value sender

Select the function for the control element.

7.3.34.2 Name of control element

Options:	[max. 18 characters text]

Enter a name for the control element, which will be displayed in the UI and group object name. Any name up to 18 characters is allowed.

7.3.34.3 Control icon

You can assign different icons to each function. An icon is shown whenever a function does not have any dedicated control. The selected icon also appears in the floor plan.

7.3.34.4 Object type of short operation

Options:	None
	1-bit value [ON/OFF]
	2-bit/ 4-bit value
	1-byte value [0…100%]
	1-byte value [0…255]
	2-byte value [0…65535]
	2-byte float value
	4-byte value [0…4294967295]
	4-byte float value

Select the corresponding data point type which should be sent out for short operation.

- None
  No group object is activated.
- 1-bit value [ON/OFF]

  Reaction on short operation

Options:	TOGGLE
	On
	Off

  Select the preset value which should be sent out on short operation.
- 2-bit/ 4-bit value / 1-byte value / 2-byte (float) value / 4-byte (float) value

  Object datatype

Options:	2-bit [0…3]
	4-bit [0…15]

  Select the corresponding data point type as 2-bit or 4-bit.

  Reaction on short operation

Options:	Value 1
	Alternating Value 1/Value2

  You can select the preset value which should be sent out on short operation. Additionally, you can use toggle or alternating value 1 and value 2 to switch between 2 preset values.

  Value 1 / Value 2

Options:	Value depending on object type

  You can set up the preset value for the short operation.

7.3.34.5 Object type of long operation

Options:	None
	1-bit value [ON/OFF]
	2-bit/ 4-bit value
	1-byte value [0…100%]
	1-byte value [0…255]
	2-byte value [0…65535]
	2-byte float value
	4-byte value [0…4294967295]
	4-byte float value

Select the corresponding data point type which should be sent out for short operation.

- None
  No group object is activated.
- 1-bit value [ON/OFF]

  Reaction on short operation

Options:	TOGGLE
	On
	Off

  Select the preset value which should be sent out on short operation.
- 2-bit/ 4-bit value / 1-byte value / 2-byte (float) value / 4-byte (float) value

  Object datatype

Options:	2-bit [0…3]
	4-bit [0…15]

  Select the corresponding data point type as 2-bit or 4-bit.

  Reaction on short operation

Options:	Value 1
	Alternating Value 1/Value2

  You can select the preset value which should be sent out on short operation. Additionally, you can use toggle or alternating value 1 and value 2 to switch between 2 preset values.

  Value 1 / Value 2

Options:	Value depending on object type

  You can set up the preset value for the short operation.

7.3.34.6 Icon state

Options:	OFF
	ON

As the control is only used for sending out values without receiving any status feedback, it is necessary to select if the control is showing status off or on.

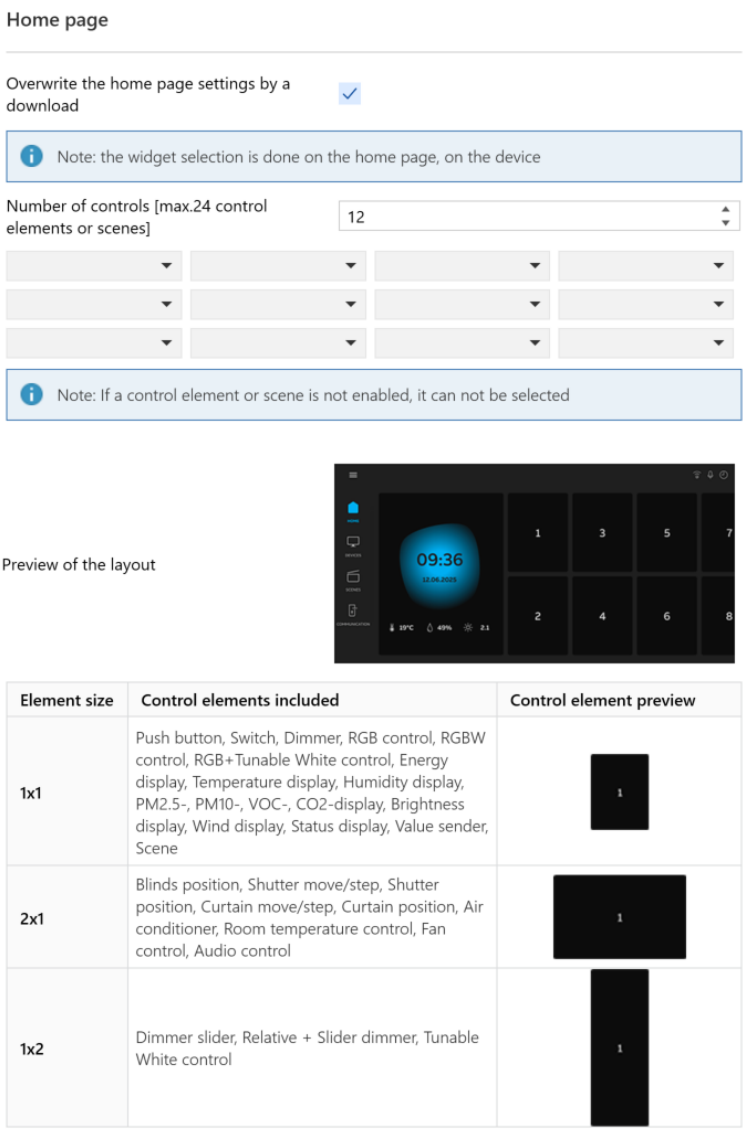
Panel view



Fig. 128: Control element value sender panel view

The Value sender control is used for sending out 1 or 2 defined values for short and long operation with different value types: 1-bit, 2-bit, 4-bit, 1-byte as percentage and counter pulses, 2-byte as value and float value, and 4-byte as value and float value. It is possible to send alternating values or send preset values.

7.4 Home page



Element size	Control elements included	Control element preview
1x1	Push button, Switch, Dimmer, RGB control, RGBW control, RGB+Tunable White control, Energy display, Temperature display, Humidity display, PM2.5-, PM10-, VOC-, CO2-display, Brightness display, Wind display, Status display, Value sender, Scene	
2x1	Blinds position, Shutter move/step, Shutter position, Curtain move/step, Curtain position, Air conditioner, Room temperature control, Fan control, Audio control	
1x2	Dimmer slider, Relative + Slider dimmer, Tunable White control	

Fig. 129: Home page ETS

You can add and adjust up to 24 control elements via ETS and page edit. The home page can be completely removed in the settings of the panel under: Project settings - Device settings.

7.4.1 Overwrite the home page settings by a download

Options:	Unchecked
	Checked

Disable this function to keep the local widget settings for the homepage.

7.4.2 Number of controls

Options:	0 … 12 … 24

You can set up control elements via ETS or the panel. The amount of control elements needs to be set in ETS. If page editing is not blocked by security settings, you can edit the homepage on the panel and add up to 24 control elements.

7.4.3 Drop Down Box

Options:	Control 1 … 240
	Scene 1 … 30

To link controls to the homepage, use the dropdown box to select the desired control.

Additionally, the homepage offers the following five widgets: blue digital clock with online weather data, digital clock with online weather data, small clock (digital/analog), small blue digital clock, and recommendations.

Blue digital clock with online weather data

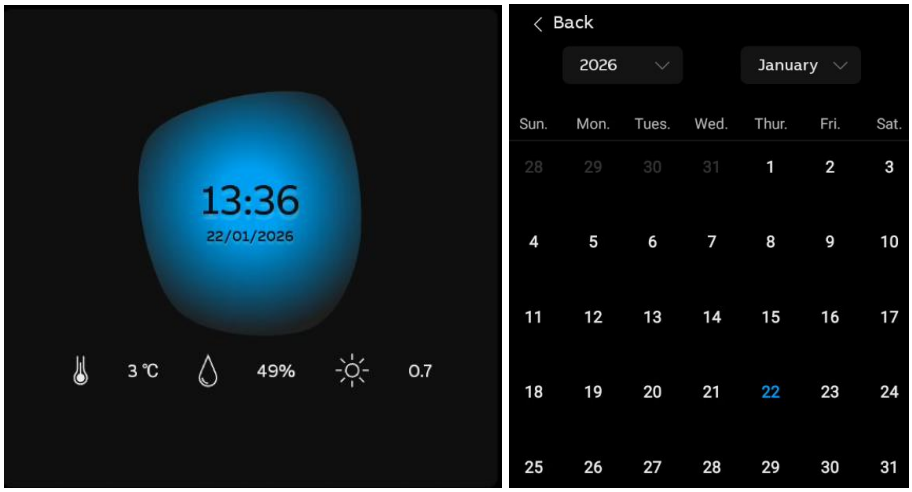


Fig. 130: Home page blue digital clock with online weather data

The widget displays the current time, date, and weather data for your location. Clicking the widget opens a calendar.

Digital clock with online weather data

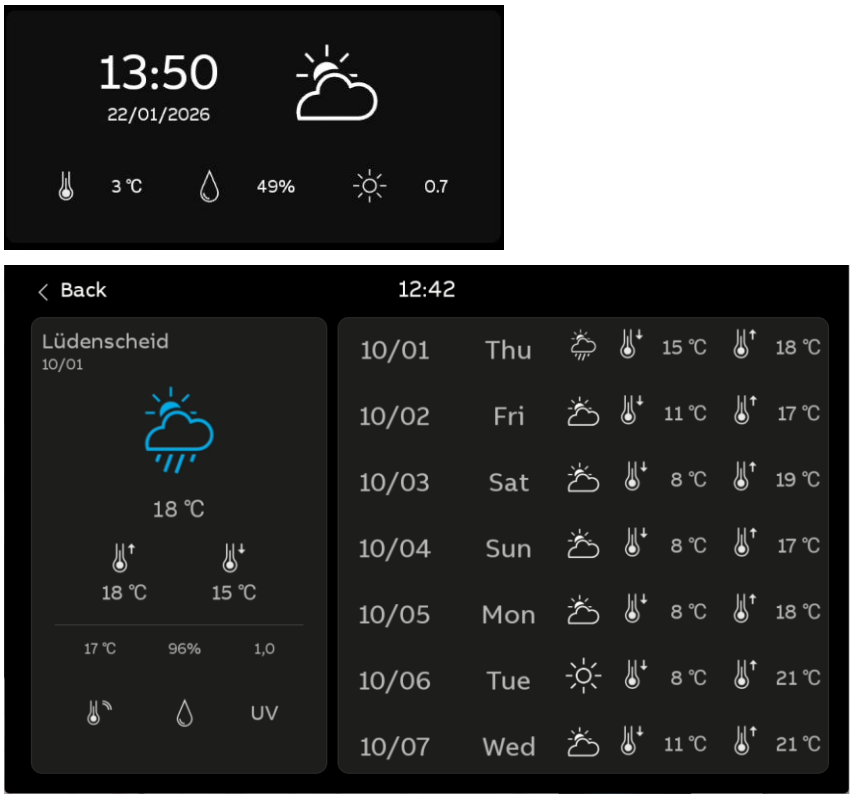


Fig. 131: Home page digital clock with online weather data

The widget displays a digital clock with current weather data. In the extended view, you can check the weather forecast for the next 7 days.

Small clock digital and analog

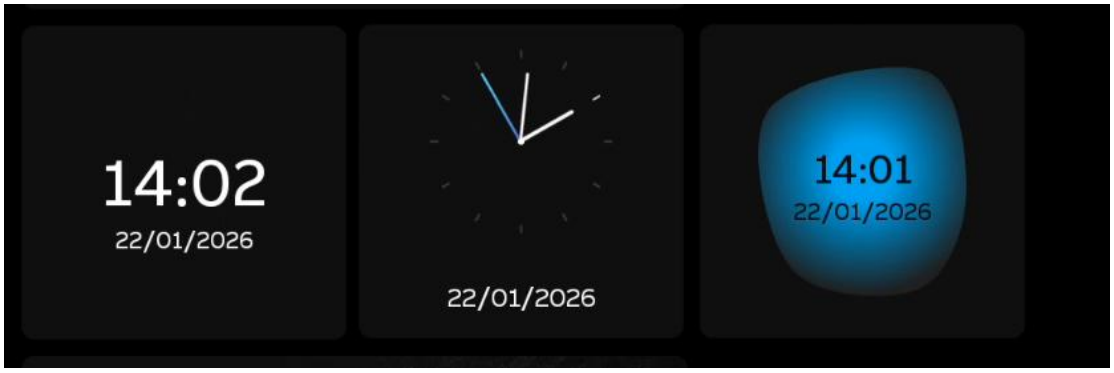


Fig. 132: Home page small clock digital and analog

The widget displays a digital clock with a blue background, plain numbers, or an analog clock. Click the widget to switch between the different types.

Small blue digital clock

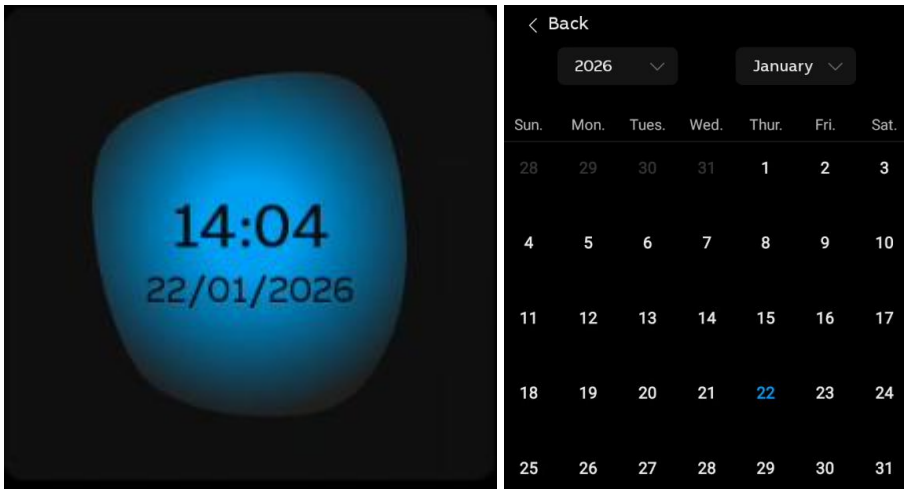


Fig. 133: Home page small blue digital clock

The widget displays the current time and date as blue digital clock. Clicking the widget opens the calendar.

Recommendation

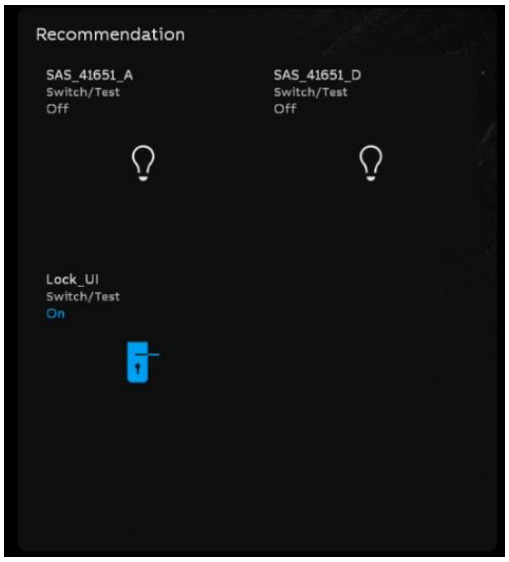


Fig. 134: Home page recommendation

The recommendation widget displays your most frequently used control elements. The more often you use a control element, the higher it appears in the recommendation list. There is no expanded view, but you can operate the control elements directly from the widget.

7.5 Open page settings

Pages

Number of pages [max. 12] 1

Preview of the layout



Category settings

Category	Category name	Included control elements
Lighting	Lighting	Switch, Dimmer, Dimmer slider, Relative+Slider dimmer, RGB control, RGBW control, RGB+Tunable white control, Tunable white control
Shading	Shading	Blinds position, Shutter move/step, Shutter position, Curtain move/step, Curtain position
Climate	Climate	Air conditioner, Room temperature control, Fan control
Music	Music	Audio control
Energy	Energy	Energy display
Health	Health	Temperature display, Humidity display, PM2.5 display, PM10 display, VOC display, CO2 display, Brightness display, Wind display
Status	Status	Status display
Others	Others	Push button, Value sender

Fig. 135: Pages ETS

The panel provides three standard layout options for organizing pages: by devices, pages, or floor plans. Each of these types of pages can be set invisible in the settings page of the panel under Project settings – Device settings. In ETS, only the page layout can be created, allowing for the setup of up to 12 pages with a maximum of 50 controls per page. Floor plans can be created directly on the panel, while the device layout is automatically sorted by device type. In the system settings under smart building settings, you can adjust the page layout order and modify names. Additionally, you can change the device layout order and hide control elements in the project settings.

Note
Each control element can only be assigned to one page (in addition to the optional homepage) and cannot be reused across multiple pages.

7.5.1 Number of pages

Options:	1 ... 12

You can set the number of pages to a maximum of 12.

7.5.2 Layout

In the panel, you can change the layout by tapping the menu-button and entering the page settings.

In Device view, pages are sorted by control element categories; refer to the ETS table for details on which functions belong to each category. In Pages view, the layout is organized according to the pages created in ETS. In the floor plan layout, you can upload various PNG picture files (up to 10 MB) and set up visualizations with control elements configured as buttons in System Settings.

7.5.3 Floor plan

To set up a floor plan, open system settings, navigate to smart building settings, and then access floor plan settings.

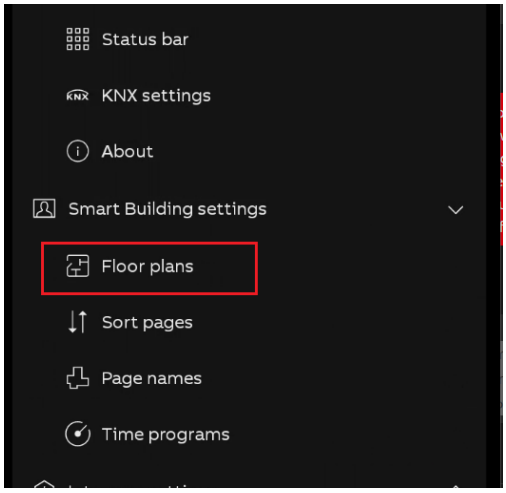


Fig. 136: Floor plan settings

There are two options for adding a picture: upload via smartphone (only via WiFi) or USB stick Type-C. To upload, select the corresponding button and follow the instructions. Ensure the picture is a .png file and smaller than 10 MB. After uploading, a preview will be displayed. To set up control buttons on the building plan, return to “Pages” and select “Floor Plan”.

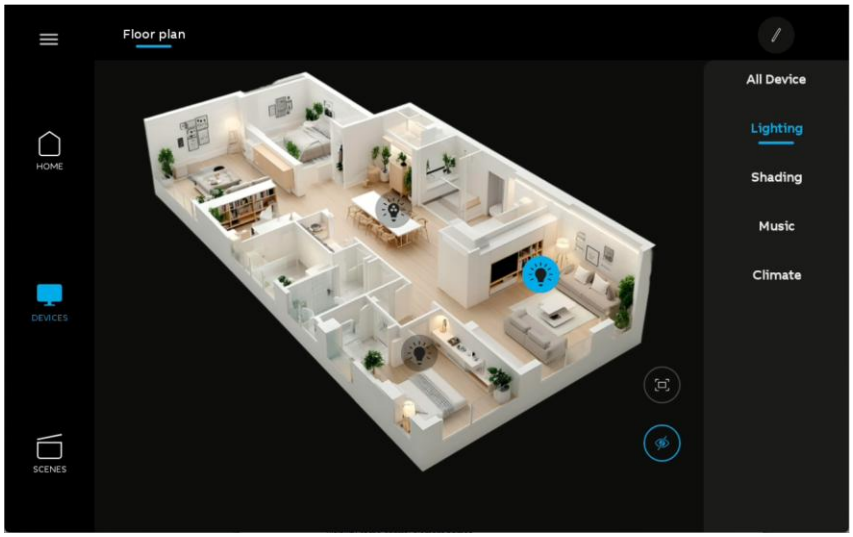


Fig. 137: Floor plan

Tap the pencil icon in the top right to enter edit mode. Control elements that have not yet been placed on the floor plan will appear at the bottom; select one to add it to the floor plan. You can adjust its location by dragging it to the desired position. Zooming in is possible by pinching your fingers, and to return to the original size, tap the center icon. Use the eye icon to toggle the visibility of the control element names.

7.5.4 Page X

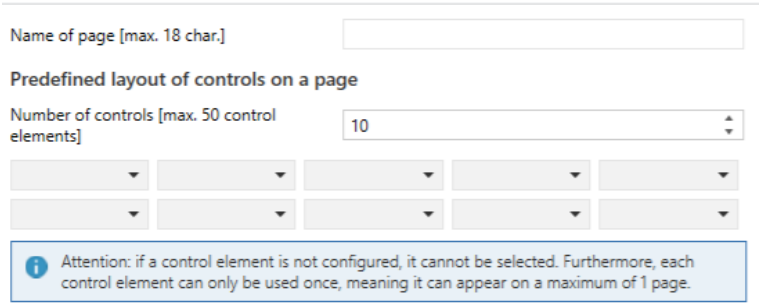


Fig. 138: Page X ETS

You can set up pages with control elements, allowing for a maximum of 12 pages, with each page containing up to 50 controls. To preconfigure the pages, enter the desired number of controls in the provided box and give each page a name. You can then select which control elements should be displayed on that page using the dropdown menus.

When you click the “Devices” tab at the bottom of the panel, the default layout will be device view.

To switch to a layout with different pages, tap the settings button in the upper left corner and change the view to Page view.

Note
The order of control elements is always arranged horizontally. If you leave one dropdown box empty, the next control element will automatically fill that empty spot.

7.5.5 Name of page

Options:	[max. 18 characters text]

Enter a name for the page, which will be displayed in the layout. Any name up to 18 characters is allowed.

7.5.6 Number of controls

Options:	1 ... 10 … 50

Select the number of controls you want to use on the page.

7.5.7 Drop Down Box

Options:	Control 1 … 240
	Scene 1 … 30

To link controls to the homepage, use the dropdown box to select the desired control.

Note
If a control element is not configured, it cannot be selected. Each control element can only be used once, meaning it can appear on a maximum of one page. If a control is selected more than once on a single page, an error message will be displayed in the ETS.

7.6 Scene page

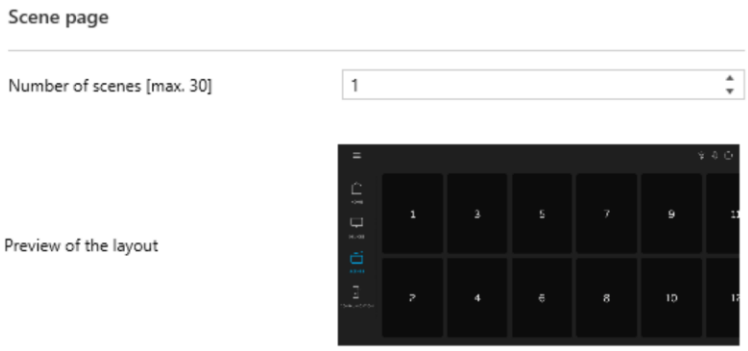


Fig. 139: Scene page ETS

On the Scene page, you can set up different scenes that are called by scene number and can be stored with a long press if enabled. Each scene has a separate group object.

7.6.1 Number of Scenes

Options:	1 ... 30

Select the desired number of scenes in this setting.

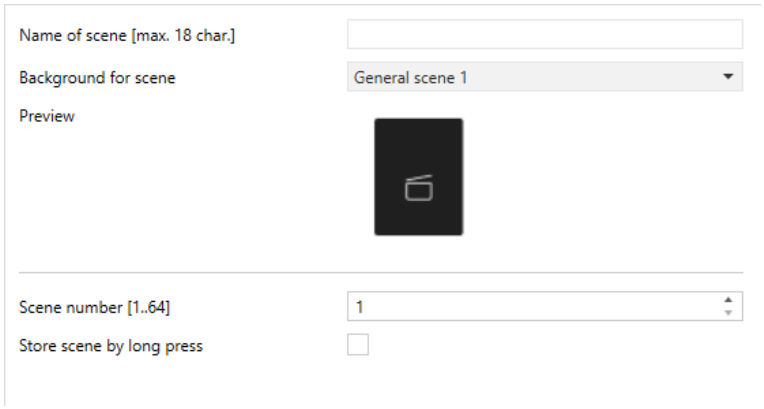


Fig. 140: Scene X ETS

7.6.2 Name of Scene

Options:	[18 characters text]

Enter a name for the page, which will be displayed in the layout. Any name up to 18 characters is allowed.

7.6.3 Background for scene

Options:	General scene 1, General scene 2, …

You can select different background images for each scene.

7.6.4 Scene number

Options:	1 … 64

According to the KNX standard, you can select a scene number between 1 and 64.

7.6.5 Store scene by long press

Options:	Unchecked
	Checked

You can choose to enable or disable the Store Scene function. This allows you to store the current scene value by long pressing the scene.

Panel view

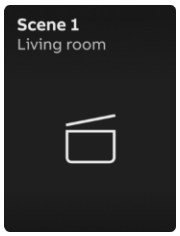


Fig. 141: Scene UI panel view

The Scene UI triggers the scene number with a single press. If the Store function is enabled, you can save the current scene values with a long press on the UI.

7.7 Internal sensors

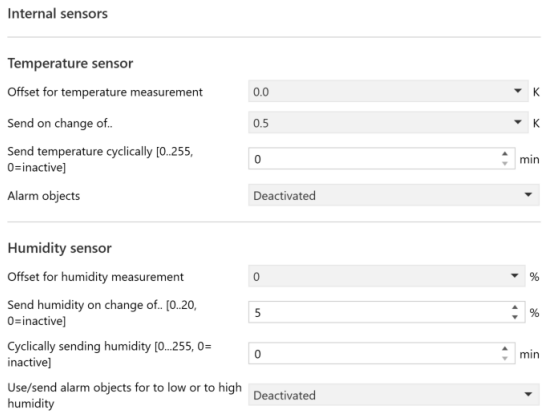


Fig. 142: Internal sensors ETS

The internal sensors include the built-in temperature and humidity sensors. For both sensors, you can adjust the calibration, configure the sending behavior based on value changes and cyclic intervals in minutes, and link the sensor values to alarms for values that are too high or too low.

7.7.1 Temperature sensor

7.7.1.1 Offset for temperature measurement

Options:	-5 … 0 … +5 K

For calibration of the internal temperature sensor, you can adjust the offset from -5 K to +5 K in steps of 0.5 K.

7.7.1.2 Send on change of..

Options:	Disable
	0.5 … 10 K

The measured temperature value is not transmitted after every change. Instead, the sensor value is transmitted only when the difference between the current and the previously measured value reaches the configured threshold. You can set the threshold from 0.5 K to 10 K in increments of 0.5 K. Additionally, you can disable the send-on-change behavior by selecting “Disable”.

7.7.1.3 Send temperature cyclically

Options:	0 … 255 min

This parameter defines whether the measured temperature value is transmitted cyclically every X minutes. If the value is set to 0, cyclic transmission is disabled, and the value is sent only when it changes.

7.7.1.4 Use/send alarm object for too low or too high humidity

Options:	Deactivated
	Only send on request
	Send directly

- Deactivated

  The alarm function for the measured temperature value is deactivated.

- Only send on request / Send directly

  The alarm is triggered when the temperature falls below the low threshold or exceeds the high threshold. Additionally, you can define whether the alarm value is sent only upon a read request or transmitted immediately.

Frost alarm temperature

Options:	0 … 7 … 15 °C

The low temperature threshold defines the trigger point for the temperature alarm. You can set the low temperature threshold between 0 and 15°C.

Overheat alarm temperature

Options:	30 … 35 … 45 °C

The high temperature threshold defines the trigger point for the temperature alarm. You can set the high temperature threshold between 30 and 45°C.

7.7.2 Humidity sensor

7.7.2.1 Offset for humitidy measurement

Options:	-20 … 0 … +20 %

For calibration of the internal humidity sensor, you can adjust the offset from -20 % to +20 %.

7.7.2.2 Send humidity on change of..

Options:	0 … 5 … 20 %

The measured humidity value is not transmitted after every change. Instead, the sensor value is transmitted only when the difference between the current and previous measured value reaches the configured threshold. You can set the threshold from 0% to 20% relative humidity. If the value is set to 0%, transmission on value change is inactive.

7.7.2.3 Cyclically sending humidity

Options:	0 … 255 min

This parameter defines whether the measured humidity value is transmitted cyclically every X minutes. If the value is set to 0, cyclic transmission is disabled, and the value is sent only when it changes.

7.7.2.4 Alarm objects

Options:	Deactivated
	Only send on request
	Send directly

- Deactivated

  The alarm function for the measured humidity value is deactivated.

- Only send on request / Send directly

  The alarm is triggered when the humidity falls below the low threshold or exceeds the high threshold. Additionally, you can define whether the alarm value is sent only upon a read request or transmitted immediately.

  Lower humidity threshold

Options:	5 … 20 %

  The low humidity threshold defines the trigger point for the low humidity alarm. You can set the threshold from 5 % to 20 % relative humidity.

  Upper humidity threshold

Options:	75 … 85 %

  The upper humidity threshold defines the trigger point for the high humidity alarm. You can set the threshold from 75% to 85% relative humidity.

7.8 HCL-Control



Fig. 143: HCL control ETS

HCL Control is a lighting technology that adjusts the colour temperature and brightness throughout the day to support the human circadian rhythm and improve well-being. You can configure up to 8 different time-based presets with fixed colour temperatures to automatically adapt the lighting conditions throughout the day.

7.8.1 When are the values send

Options:	At a certain hour of the day
	Related to sunrise and sunset

The HCL function uses predefined colour temperature values at specific times. Therefore, you can choose whether the switching times are based on fixed times of day or at sunrise and sunset.

7.8.2 HCL behavior after voltage recovery

Options:	Start running
	Stop running
	As before voltage failure

To ensure correct HCL operation after a voltage failure, you can define whether the HCL function starts running, stops, or restores its state from before the voltage failure. This parameter also applies after an ETS reset, but not after a download.

7.8.3 HCL behavior after receiving a new preset value

Options:	Ignore, keep running
	Ignore, stop
	Store new value, keep running
	Store new value, stop

To optimize the HCL control, you can adjust the preset values for the different time slots. The presets can be configured in ETS and updated via the bus using the group object “Input Colour Temperature.” You can define whether incoming preset values are ignored or stored. Stored values remain available after a power failure but are reset after the next download. Additionally, you can define whether the HCL function continues running or stops after receiving a new preset value.

7.8.4 Colour temperature control type

Options:	DPT 7.600 absolute colour temperature
	2 separate 1-byte objects for warm white/cool white

This parameter defines the datatype and group objects used for HCL control.

- DPT 7.600 absolute colour temperature

  A combined 2-byte colour temperature value using DPT 7.600 is activated.

  Control brightness via HCL

Options:	Unchecked
	Checked

  You can additionally enable brightness control based on the configured time slots. When this parameter is enabled, two additional brightness objects become available, allowing preset brightness values to be configured in ETS.

- 2 separate 1-byte objects for warm white/cool white

  Two separate 1-byte DPT 5.001 percentage values for direct warm white (WW) and cool white (CW) control are activated.

7.8.5 Time 1 … 10

Options:	Checked
	Unchecked

You can enable up to 10 different time slots for HCL control. Each enabled time slot can be used to define a dedicated colour temperature value.

Time

Options:	00:00 … 23:00
	Sunrise ± X h

For each time slot, you can define either a fixed time or, when using sunrise and sunset mode, an offset relative to sunrise or sunset. If the device restarts between two configured time slots, the value of the previous time slot is used.

Colour temperature preset

Options:	2000 … 7000 K

For each time slot, you can define a specific colour temperature between 2000 K and 7000 K. If the device restarts between two configured time slots, the value of the previous time slot is used.

Brightness preset

Options:	0 … 100 %

If control brightness is enabled, you can define a specific brightness value in percent for each time slot. If the device restarts between two configured time slots, the value of the previous time slot is used.

7.9 Time programs

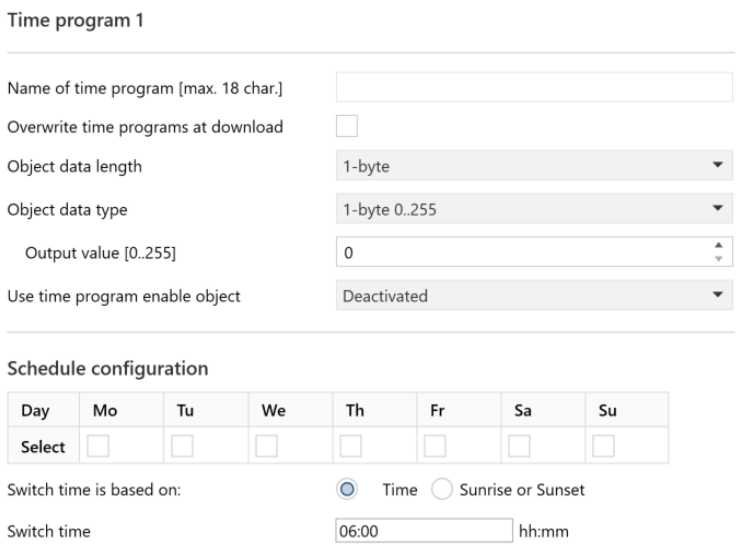


Fig. 144: Time programs ETS

The Time Program function is a scheduler that can send a single 1-bit, 1-byte, or 2-byte value at a specific time on selected days of the week. Additionally, the function provides an enable/disable option, and the switching time can also be based on sunrise and sunset.

7.9.1 General parameters

7.9.1.1 Number of time programs

Options:	1 … 16

Select the number of time programs to be used. You can configure up to 16 different time programs.

7.9.2 Time program X

7.9.2.1 Name of time program

Options:	[max. 18 charcters text]

Enter a name for the time program. The name is displayed in the list of time programs under the system settings and is also used for the group object name. Any name with up to 18 characters is permitted.

7.9.2.2 Overwrite time programs at download

Options:	Unchecked
	Checked

This parameter protects the configured time programs from being overwritten during an ETS download. The protection applies to the configured days and switching times. However, if the name, data length, or datatype is changed, the time program will still be overwritten.

7.9.2.3 Object data length

Options:	1-bit
	1-byte
	2-byte

Select the data length of the time program output object.

- 1-bit

  Output value

Options:	Off
	On

  You can define a preset output value for the time program. This value can only be configured in ETS.

- 1-byte

  Object data type

Options:	1-byte 0 … 100 %
	1-byte 0 … 255
	Scene number
	HVAC mode

  Different datatypes are available depending on the required application.

  Output value

Options:	0 … 100 %
	0 … 255
	1 … 64
	Auto / Comfort / Standby / ECO / Frost/heat protection

  You can define a preset output value for the time program. This value can only be configured in ETS.

- 2-byte

  Object data type

Options:	2-byte 0 … 65535
	Temperature

  Different datatypes are available depending on the required application.

  Output value

Options:	0 … 65535
	-5 … 21 … 45°C

  You can define a preset output value for the time program. This value can only be configured in ETS.

7.9.2.4 Use time program enable object

Options:	Deactivated
	Enable = 1
	Enable = 0

The time program can be enabled or disabled in the Smart Building settings. Alternatively, you can use a group object to enable or block the time program function.

Schedule configuration

7.9.2.5 Select Day

Options:	Unchecked
	Checked

The active days for the time program can either be configured in the Smart Building settings or predefined in ETS using the corresponding checkboxes.

7.9.2.6 Switch time is based on

Options:	Time
	Sunrise or Sunset

You can choose between two different time references for the time program: a fixed time of day or sunrise and sunset.

7.9.2.7 Switch time

The switching time for the time program can be configured in the Smart Building settings or predefined in ETS.

7.10 Alarm messages

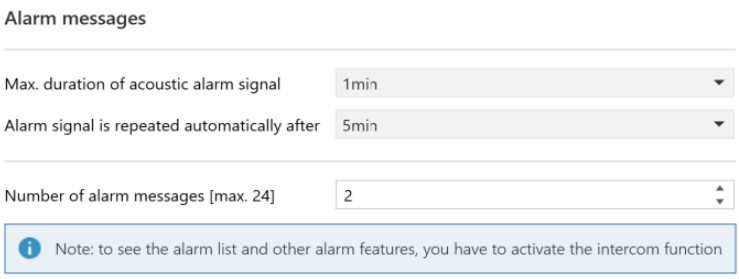


Fig. 145: Alarm messages ETS

The alarm function provides up to 24 configurable alarms that are triggered via a 1-bit object. When triggered, the alarm is highlighted on the panel and the selected alarm sound from the system settings is played. Note that the alarm sound will not play if the panel is muted.

7.10.1 General settings

7.10.1.1 Max. duration of acoustic alarm signal

Options:	disable
	10 s … 1 min … 30 min

The alarm message includes an alarm signal that can be selected in the system settings. Here, you can configure the duration of the alarm signal. The duration is not restarted if another alarm telegram is received, but it stops when the alarm is canceled via telegram. After cancellation, the alarm remains visible in the alarm list in the intercom tab, provided the intercom function is enabled.

7.10.1.2 Alarm signal is repeated automatically after

Options:	disable
	10 s … 5 min … 30 min

You can enable automatic repetition of the alarm signal. If a repetition interval is selected, the complete alarm message and signal will repeat every x minutes until the alarm is deactivated via telegram. The alarm can also be acknowledged on the panel to temporarily stop the signal; however, it will be triggered again after each configured repetition interval.

7.10.1.3 Number of alarm messages [max. 24]

Options:	1 … 24

Select the number of alarm messages to be configured. Up to 24 different alarm messages can be set up.

7.10.2 Alarm message X

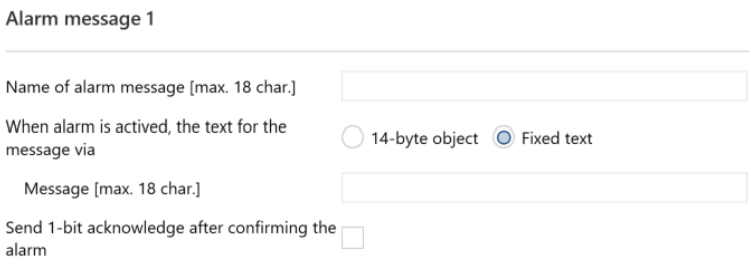


Fig. 146: Alarm message X ETS

7.10.2.1 Name of alarm message

Options:	[max. 18 characters text]

Enter a name for the alarm message. The name is displayed in the alarm list after the alarm has been triggered and is also used as the group object name. Any name with up to 18 characters is permitted.

7.10.2.2 When alarm is activated, the text for the message is provided via

Options:	14-byte object
	Fixed text

- 14-byte object

  The alarm message text displayed on the panel is provided dynamically via a 14-byte object.

- Fixed text

  The alarm message text displayed on the panel is defined as fixed text configured in the ETS.

  Message

Options:	[max. 18 characters text]

  Here, you can enter an alarm message with up to 18 characters.

7.10.2.3 Send 1-bit acknowledge after confirming the alarm

Options:	Unchecked
	Checked

To monitor whether the alarm has been acknowledged on the panel, a 1-bit acknowledge object can be configured. This object is sent after the alarm has been acknowledged.

7.11 Logic functions

The logic function provides up to 8 configurable logic functions with up to 8 input values each. The available Boolean logic functions include AND, OR, XOR, separation function, value comparator, format converter, gate, output delay, and staircase lighting. Similar to other Boolean logic functions, the result can be inverted and transmitted with a delay.

7.11.1 General settings

7.11.1.1 Logic function X

Options:	Unchecked
	Checked

Up to 8 different logic functions can be configured. To enable a logic function, activate the checkbox. The next logic function will then become visible in the ETS.

Logic function 1 is already activated.

7.11.2 Logical function X: AND, OR, XOR

If the application is configured as AND, OR, or XOR, up to eight input communication objects can be enabled per logic function. The input size is fixed to 1-bit. The inputs can also be individually inverted and assigned default values of 0 or 1. Each logic function provides a 1-bit output that can additionally be inverted, delayed, and transmitted either on value change or upon receiving any input value.

7.11.2.1 Name of logic function

Options:	[max. 30 characters text]

Enter a name for the logic function. The name will be displayed as the group object name. Any name with up to 30 characters is permitted.

7.11.2.2 Input a-h

Options:	Deactivated
	Used
	Inverted

Select whether inputs a to h are used, not used, or inverted.

7.11.2.3 Default value

Options:	0
	1

Select whether the logic inputs use a default value of 0 or 1 after restart, download, or ETS reset.

7.11.2.4 Invert result

Options:	Unchecked
	Checked

Select whether the calculated result is inverted before being transmitted as the output value.

7.11.2.5 Read input objects after a bus voltage recovery or download

Options:	Unchecked
	Checked

To ensure proper operation after restart, download, or bus voltage recovery, you can configure the panel to send a read command for the logic input values.

7.11.2.6 Send output value on

Options:	Each input telegram
	Value change

Select whether the calculated output value is transmitted only when the calculated value changes, or whenever any new input telegram is received. Note: After the first calculation following restart, download, or ETS reset, the output value is always transmitted.

7.11.2.7 Send delay: Base

Options:	None
	0.1 … 25 s

7.11.2.8 Factor

Options:	1 … 255

You can delay the transmission of the calculated output value by selecting a base time and a factor. The delay time is calculated as base time × factor. For example, a delay of 5 s can be achieved using a base time of 1 s with a factor of 5, or a base time of 5 s with a factor of 1.

7.11.3 Logical function X: Gate forwarding

The separation function is used to change the assignment of 4 input values to 4 output values according to a received scene number. Up to 8 different mappings can be configured, each assigned to a dedicated scene number.

7.11.3.1 Name of logic function

Options:	[max. 30 characters text]

Enter a name for the logic function. The name will be displayed as the group object name. Any name with up to 30 characters is permitted.

7.11.3.2 Object type

Options:	1-bit
	4-bit
	1 byte

Select the object type for all input and output values. Available options are 1-bit, 4-bit, and 1-byte.

7.11.3.3 Default scene after startup [0=inactive]

Options:	0 … 64

To ensure defined operation after download, bus voltage recovery, or ETS reset, you can configure a default scene number here. The scene number is not transmitted on the KNX bus.

7.11.3.4 (1-8) Trigger scene [0=inactive]

Options:	0 … 64

You can configure up to 8 different mappings and assign a scene number to each one. When the corresponding scene number is received, the device forwards the input values according to the selected mapping.

7.11.3.5 Input A-D sends on

Options:	Output A-D

For the separation function, you can define the assignment of inputs A to D to outputs A to D. After the trigger scene number and the next input value are received, the corresponding output value is transmitted on the KNX bus.

7.11.4 Logical function X: Value comparator

The value comparator logic compares an input value with a fixed preset value. Depending on the selected comparison condition, a corresponding 1-bit output value is transmitted. Additionally, the transmission behavior and a transmission delay can be configured.

7.11.4.1 Name of logic function

Options:	[max. 30 characters text]

Enter a name for the logic function. The name will be displayed as the group object name. Any name with up to 30 characters is permitted.

7.11.4.2 Data type comparator value

Options:	4-bit
	1-byte [0 … 100 %]
	1-byte [0 … 255]
	2-byte [0 … 65535]
	2-byte [-32768 … 32767]
	2-byte float value
	4-byte [0 … 4294967295]
	Temperature value [-20 … 95°C]
	Humidity value [0 … 100 %]
	Brightness value [0 … 65535 lux]

Select the data type for the input value.

7.11.4.3 Comparator value

Options:	Depending on type

Configure the fixed comparison value according to the selected data type.

7.11.4.4 If Input [<, =, !=, >, <=, >=] comparator value

Options:	No telegram
	Send a ‘0’
	Send a ‘1’

Select the comparison operation for the value comparator.

7.11.4.5 Send output value on

Options:	Each input telegram
	Value change

Select whether the calculated output value is transmitted only when the result changes or whenever a new input telegram is received.



Note
After the first calculation following restart, download, or ETS reset, the output value is always transmitted.

7.11.4.6 Send delay: Base

Options:	None
	0.1 … 25 s

7.11.4.7 Factor

Options:	1 … 255

You can delay the transmission of the calculated output value by selecting a base time and a factor. The delay time is calculated as base time × factor.

7.11.5 Logical function X: Format converter

The format converter can be used to split larger data types into smaller data types or combine smaller data types into a larger data type. For example, one byte can be converted into 8 bits, or 8 bits can be combined into one byte.

7.11.5.1 Name of logic function

Options:	[max. 30 characters text]

Enter a name for the logic function. The name will be displayed as the group object name. Any name with up to 30 characters is permitted.

7.11.5.2 Function

Options:	2x1 Bit -> 1x2 Bit
	8x1 Bit -> 1x1 Byte
	1x1 Byte -> 1x2 Byte
	2x1 Byte -> 1x2 Byte
	2x2 Byte -> 1x4 Byte
	1x1 Byte -> 8x1 Bit
	1x2 Byte -> 2x1 Byte
	1x4 Byte -> 2x2 Byte
	1x3 Byte -> 3x1 Byte
	3x1 Byte -> 1x3 Byte

Select the desired conversion type. The format converter can combine multiple smaller data types into one larger type or split a larger data type into several smaller types.



Note
If “1x1 Byte -> 1x2 Byte” is selected, the 1-byte value is assigned to byte 0 of the 2-byte value.

7.11.5.3 Send output value on

Options:	Each input telegram
	Value change

Select whether the calculated output value is transmitted only when the output value changes or whenever any new input telegram is received. Note: After the first calculation following restart, download, or ETS reset, the output value is always transmitted.

7.11.6 Logical function X: Gate

The gate logic application is used to block or forward values depending on a 1-bit condition. The gate input can be inverted. In the default configuration, the gate must first be opened before an input value can pass through. If the save input function is enabled, the stored value is transmitted immediately after the gate opens.

7.11.6.1 Name of logic function

Options:	[max. 30 characters text]

Enter a name for the logic function. The name will be displayed as the group object name. Any name with up to 30 characters is permitted.

7.11.6.2 Object type

Options:	1-bit [On/Off]
	1-byte [0 … 100 %]
	1-byte [0 … 255]
	2-byte float
	2-byte [0 … 65535]

- 1-bit [On/Off]

  Select the data type used for the gate application. If 1-bit is selected, additional functions such as output inversion and input filtering are available.

  Filter function

Options:	None
	Filter out ‘1’
	Filter out ‘0’

  If required, a filter function can be enabled to allow only 0 values, only 1 values, or both values to pass through the gate.

  Invert result

Options:	Unchecked
	Checked

  This parameter allows inversion of the 1-bit output value after it passes through the gate.

- 1-byte / 2-byte (float)

  Select the data type used for the gate application.

7.11.6.3 Invert gate object

Options:	Unchecked
	Checked

This parameter allows inversion of the 1-bit gate input value used for opening and closing the gate.

7.11.6.4 Gate position after voltage recovery

Options:	Closed
	Open

To ensure proper operation after restart, ETS reset, or download, you can define the gate state after recovery.

7.11.6.5 Save input when gate is closed

Options:	Unchecked
	Checked

This function stores the last received input value while the gate is closed. When the gate is opened, the stored value is transmitted immediately.

7.11.7 Logical function X: Output delay

The output delay logic application delays a received input value before transmitting it as the output value after the configured time period. Note: If another input value is received during the delay time, the delay timer restarts.

7.11.7.1 Name of logic function

Options:	[max. 30 characters text]

Enter a name for the logic function. The name will be displayed as the group object name. Any name with up to 30 characters is permitted.

7.11.7.2 Object type

Options:	1-bit [On/Off]
	1-byte [0 … 100 %]
	1-byte [0 … 255]
	2-byte float
	2-byte [0 … 65535]

Select the data type used for the output delay application. Available options include 1-bit, 1-byte, and 2-byte values.

7.11.7.3 Delay time

Options:	00:00:00 … 00:00:10 … 01:30:00 hh:mm:ss

Select the delay time between receiving the input value and transmitting the output value.

7.11.8 Logical function X: Staircase lighting

The staircase lighting logic application activates a fixed preset value for a defined time period. When the trigger object is received, the preset value is transmitted. If another trigger is received, the timer restarts. The staircase lighting function does not include a pumping function; however, a flexible time interval can be configured via an object.

7.11.8.1 Name of logic function

Options:	[max. 30 characters text]

Enter a name for the logic function. The name will be displayed as the group object name. Any name with up to 30 characters is permitted.

7.11.8.2 Trigger value

Options:	0
	1
	0 or 1

Select whether the trigger input responds to a value of 0, 1, or both values.

7.11.8.3 Object type

Options:	1-bit [On/Off]
	1-byte [0…100%]
	1-byte [0…255]

Select the data type used for the staircase lighting application. Available options include 1-bit and 1-byte values.

7.11.8.4 Staircase light time

Options:	00:00:10 … 01:30:00 hh:mm:ss

The staircase lighting duration can either be configured via a KNX object or set as a fixed preset value in the ETS. The adjustable range is from 10 seconds to 1 hour and 30 minutes.

7.11.8.5 Send at beginning

Options:	1-bit [ON/OFF]
	1-byte [0 … 100 %]
	1-byte [0 … 255]

Configure the output value transmitted at the start of the staircase lighting function.

7.11.8.6 Send at end

Options:	1-bit [ON/OFF]
	1-byte [0 … 100 %]
	1-byte [0 … 255]

Configure the output value transmitted at the end of the staircase lighting function.

7.11.8.7 Can be retriggered

Options:	Unchecked
	Checked

Select whether the timer is restarted when a new trigger input is received.

7.12 Scene actuator

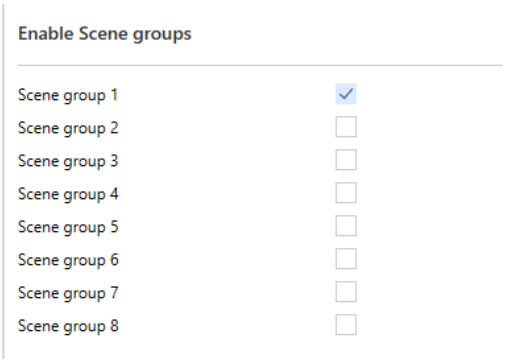


Fig. 147: Enable scene groups ETS

The Scene Actuator function is used to trigger adjustable output values based on the main scene number. You can configure up to 8 scene groups, each containing up to 8 different output objects. In total, 64 outputs can be configured as 1-bit, 1-byte, 2-byte, RGB, or RGBW objects. Each output supports up to 8 trigger points with fixed values assigned to specific main scene numbers.

7.12.1 General settings

7.12.1.1 Scene group X

Options:	Unchecked
	Checked

You can configure up to 8 different scene groups. Each group provides 8 additional outputs. All groups are triggered by the same scene object.

Scene group 1 is already activated.

7.12.2 Group X



Fig. 148: Group X ETS

7.12.2.1 Output X

Options:	Unchecked
	Checked

You can configure up to 8 different outputs for each scene group. In total, up to 64 outputs can be configured.

Output 1 is already activated.

Output X

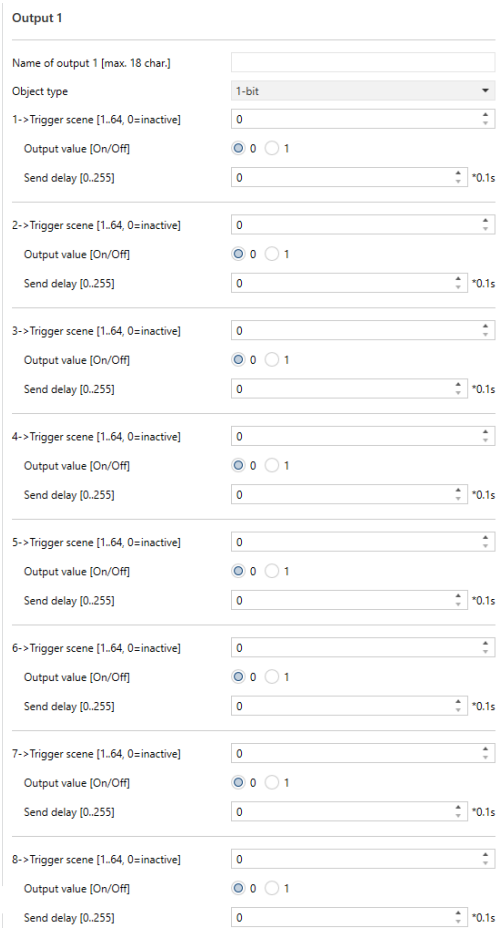


Fig. 149: Output X ETS

7.12.2.2 Name of output X

Options:	[max. 18 characters text]

Enter a name for the output. The name will be displayed in the group object name. Any name with up to 18 characters is allowed.

7.12.2.3 Object type

Options:	1-bit
	1-byte
	2-byte
	RGB
	RGBW

- 1-bit / RGB / RGBW

  Select the object type for the output value.

- 1-byte / 2-byte

  Select the object type and data subtype for the output value.

  Object data type

Options:	1-byte (0…100%, 0…255, HVAC mode)
	2-byte [0…65535, Temperature]

  You can select the data subtype for 1-byte and 2-byte output values, such as value, percentage, HVAC mode, or temperature.

7.12.2.4 X → Trigger scene

Options:	1…64, (0 = inactive)

For each output, you can configure up to 8 scene numbers that trigger the output to send a fixed value. Select the main scene number for each trigger point.

7.12.2.5 Output value

Options:	Value depending on type

Set the fixed value that will be sent after the corresponding delay when the configured scene number is triggered.

7.12.2.6 White value

Options:	0 … 255

This parameter is only available for data type RGBW. Set the value for white.

7.12.2.7 Send delay

Options:	0 … 255 × 0.1 s

If required, you can configure a delay for the output. The delay can be set from 0 to 25.5 seconds in increments of 0.1 seconds.

8 Maintenance

8.1 Cleaning



Caution! - Risk of damaging the device!

- When spraying on cleaning agents, these can enter the device through crevices.
  - Do not spray cleaning agents directly onto the device.
- Aggressive cleaning agents can damage the surface of the device.
  - Never use caustic agents, abrasive agents or solvents.

Clean dirty devices with a soft dry cloth.

– If this is insufficient, the cloth can be moistened slightly with a soap solution.

9 Notes

10 Index

A

Air conditioner 91
Alarm message X 168
Alarm messages 167
AND, OR, XOR 169
Applications
  Parameters 24
Audio control 108
Audio control (play mode + track information) 111
Audio control (play mode) 114
Audio control (track information + playlist) 119
Audio control (track information) 116

B

Blinds position 89
Brightness display 137

C

Cleaning 183
CO2 display 135
Connection 22
Connection, installation / mounting 20
Control elements 57
  Parameters 24
Curtain position 85
Curtain step move 81
Cyber security 9

D

Device certificate 12
Device overview 17
Dimensional drawings 19
Dimmer 64
Dimmer-slider 66
dismantling 21
Dismantling 23

E

Energy display 122
Environment 15

F

Fan 103
Floor plan 153
Format converter 174

G

Gate 175
Gate forwarding 171
Global settings 35
Group X 180

H

HCL-Control 161
Home page 148
Humidity display 127
Humidity sensor 160

I

Improper use 7
Information and symbols used 6
Information on protection of the environment 15
Installation, commissioning and maintenance 8
Intended use 7
Internal sensors 158
IP cabling inside the building 13

K

KNX Control elements 58
KNX Secure 12

L

Layout 153
Location settings 50, 51
Logic functions 169

M

Maintenance 183
Mounting 21

N

Night mode settings 48
Notes 184
Notes on the instruction manual 5

O

Open page settings 152
Operation 8
Output delay 177
Output X 181

P

Page X 155
PM10 display 131
PM2.5 display 129
Preparatory steps 20
Preventing unauthorized access 13
Product Overview 16
Proximity output settings 55
Push button 60

Q

Qualification of personnel 8

R

Relative + Slider Dimmer 68
Requirements for the electrician 20
RGB + Tunable white control 74
RGB Control 70
RGBW Control 72
Room temperature control 96

S

Safety 6
Safety instructions 14, 20
Scene actuator 180
Scene page 156

Schedule configuration ... 166
Screen lock ... 47
Secure commissioning of KNX Secure devices ... 11
Security settings ... 46
Settings for air quality levels ... 58
Shutter move/step ... 83
Shutter position ... 87
SIP & IP-camera ... 37
Staircase lighting ... 178
Status display ... 142
Summer time settings ... 53
Switch ... 62
System settings in panel ... 25

T

Target group ... 8
Technical data ... 18
Temperature display ... 125
Temperature sensor ... 159
Time program X ... 164
Time programs ... 164
Tunable white control ... 78

U

Using filter tables ... 13

V

Value comparator ... 172
Value sender ... 144
VOC display ... 133

W

Wind display ... 139

ABB AG – BUSCH-JAEGER
Freisenbergstraße 2
58513 Lüdenscheid

go.abb/contact

https://BUSCH-JAEGER.de
info.bje@de.abb.com

Telephone: +49 2351 956-1600

© Copyright ABB. We reserve the right to make technical changes to the products as well as amendments to the content of this document at any time without advance notice. The agreed properties are definitive for any orders placed. ABB AG does not accept any responsibility whatsoever for potential errors or possible lack of information in this document. We reserve all rights in this document and in the subject matter and illustrations contained therein. Reproduction, transfer to third parties or processing of the content – including sections thereof – is not permitted without the prior written consent of ABB AG.

Publication number 9AKK108473A3539 | EN | Rev. A | 21.10.2026 | EN

BUSCH-JAEGER