

CasaConnect KNX Control Center: First step

Article number 71200



The manual with additional information about commissioning, functions and operation of the control center **CasaConnect KNX** can be downloaded from www.elsner-elektronik.de in the menu area "Service/Downloads".

1. Description

The **CasaConnect KNX Control Center** is a control unit for the KNX building bus system. The graphical touchscreen and the integrated automatic functions allow easy central setting and operation of the technical equipment installed in the building. The basic configuration is made using ETS.

Please use these operating instructions in order to match the automatic functions to your needs and to facilitate comfortable manual operation.

Functions and properties of the CasaConnect KNX control center:

- **KNX controls** with access to the participants in the KNX building system
- **Colour touch-display** 10.1 inches for manual operation, for system set-up and for setting the basic and automatic functions.
- **Network connection** via LAN or WLAN
- **Browser** for displaying websites, streaming, etc.
- **Remote access** required via network for system set-up, diagnostics and activation by the user
- Slide show from SD card as screen saver
- Data storage on SD card (backup of the settings)
- Integrated loudspeaker (4 tweeters, 1 broadband loudspeaker)
- **24 Scenes** for calling up individually set actuation positions and switching conditions. With a scene, multiple motors and devices are addressed simultaneously so that a suitable atmosphere is created with the touch of a finger ("TV", "Eating", etc.).
- **80 channels type A** for motors (blinds, shutters, awnings, windows), fans and lights (switching, dimming, RGB(W), colour temperature). Each with extensive automatic functions
- **120 channels type B** for control and display elements (dimmers, buttons), sensors, alarms, and the transmission of floating point values and text messages
- **15 channels type C**, which are used as temperature regulator extensions, i.e. a heating of cooling system is controlled with this according to the KNX requirements for HVAC applications
- **3 alarm objects** and **4 central objects** with function allocation on the display
- Individually settable **presence simulation**
- **Safety module** for messages from an alarm system with memory for event log
- Integrated **HCL(Human Centric Lighting) controls**: The biodynamic light controls change light colour and brightness over the course of the day

Scope of delivery

- Central control and operating unit
- SD card in card slot

2. Safety and operating instructions

General installation notes



Installation, testing, operational start-up and troubleshooting should only be performed by an electrician.



CAUTION! Live voltage!

- There are unprotected live components inside the device.
- When planning and installing electrical systems, observe the applicable directives, regulations and provisions of the respective country.
 - Ensure that the device or system can be disconnected. During installation, disconnect all cables from the power supply and take safety precautions against unintentional switch-on.

- Do not use the device if it is damaged.
- Take the device or system out of service and secure it against unintentional use, if it can be assumed, that risk-free operation is no longer guaranteed.

The device is only to be used for the intended purpose described in this manual. Any improper modification or failure to follow the operating instructions voids any and all warranty and guarantee claims.

After unpacking the device, check it immediately for possible mechanical damage. If it has been damaged in transport, inform the supplier immediately.

The device may only be used as a fixed-site installation; that means only when assembled and after conclusion of all installation and operational start-up tasks and only in the surroundings designated for it.

Elsner Elektronik is not liable for any changes in norms and standards which may occur after publication of these operating instructions.

Safety information about automatic and alarm functions



WARNING!

Risk of injury from automatically moving components!

System parts may start automatically as a result of the automatic controls and can put people in danger.

- People must not enter the movement range of motorised moving parts.
- If staying outside the building, make sure that the return path/access is not blocked (danger of being locked out).
- During maintenance and cleaning work, switch off the system.

Rain alarm for automatically controlled windows:

If rain is entering, it may be some time before rain is detected by the sensors in the system, depending on the amount of rain and outside temperature. In addition, a closing time for electric windows or sliding roofs has to be included in the calculation. Moisture-sensitive objects should therefore not be placed in areas where they could be damaged by entering precipitation.

Icing-up of rails of the shades:

Be aware that the rails of blinds, awnings and shutters, which are fitted outside, can ice up. If a motor is then moved, shades and motors can be damaged.

Power outage, maintenance work, etc.

If there is a power outage or bus voltage failure, no commands, safety or protection functions (e.g. secure position in there is a wind or rain alarm) can be executed in the KNX system! If the full extent of functions is also to be guaranteed if the mains power fails, an emergency generator with corresponding switching from mains to emergency operation should be installed on site.

Settings stored in the program are also retained after the power outage.

After a restart (e.g. restoration of power after a power outage or after a manual reset), motors and devices, for which an automatic reset is set, are in automatic mode.

3. Installation

Procedure for commissioning

1. The **installation** of the control center and the other KNX participants must be carried out by an electrician. Information in the installation instructions, for example also about the installation location, must be observed. See manual, chapter 3 *Installation and commissioning*.
2. After completing the installation work, the **KNX integration** in the control center must be performed in the **ETS**. See manual, chapter 4 *Basic settings in the ETS*.
3. In the **System > Set screen** menu, the control center has to be **fundamentally set up**. See manual, chapter 5.2 *The "Set screen" menu*.
4. **Further settings** for time receipt, screen saver, network connection, access code, updates etc. can be made at any time in the **System > System settings** menu. See manual, chapter 5.3 *System setting*.
5. The **Automatic functions** have to be adjusted in the **System > Set automatic** menu to the structural situation and the individual presettings of the users. See manual, chapter 6 *Automatic*.

Operating system

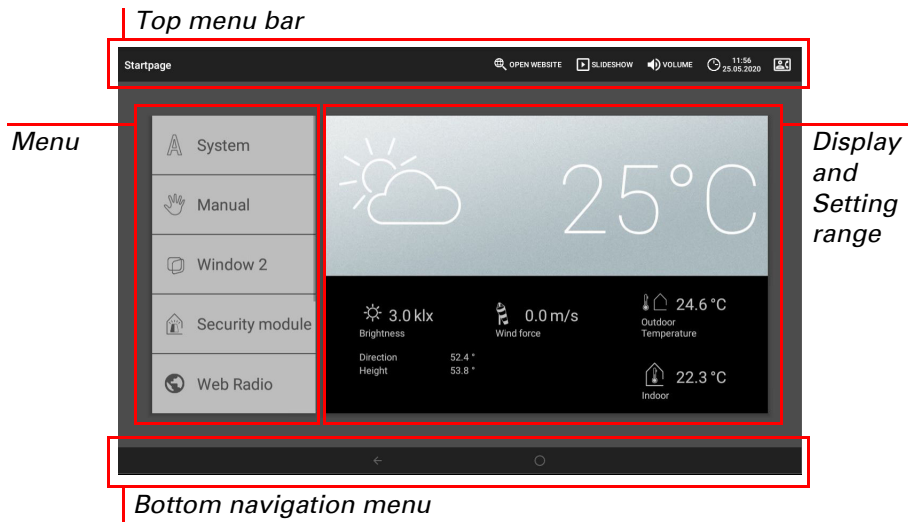
The **CasaConnect KNX** works with the Android operating system. However, the control center work independently so no third-party Apps may be installed!

Protective film

Remove the protective film from the display. Otherwise, there is a risk that the touch operation will be deactivated. If this should happen, the control center must be restarted so that the touch display works again.

4. Overview of homepage, navigation

With the **CasaConnect KNX Control Center** you can centrally operate the technology connected via the KNX bus, e.g. raise and lower shades, switch devices on and off, and dim lights. All basic and automatic settings are also shown on the display after the basic configuration has been set in the ETS.



Top menu bar:

The internet browser (*Open website*) and *Volume* can be reached at any time via the top menu bar. Time and date are displayed. Clicking the alarm icon displays the last active alarm messages. In addition, the start button for the slide show appears here as soon as an SD card with pictures is loaded.

Menu left links (start menu):

In the menu on the left-hand side you can see the *System* menu, via which you can reach all basic and automatic settings.

Via the *Manual* menu you can set the position and condition for the motors and devices configured in the ETS.

In the *Safety module* the alarm system can be switched on or off, open alarms are displayed and the last 64 events in the event memory can be viewed.

In the *Presence simulation* menu, the simulation is switched on or off.

The selected *Favourites* for the manual operation and the websites saved as *Bookmarks* are displayed here.

So that the menu item is displayed in the Manual menu and/or in the Start menu, the display has to be activated in the setting "Manual menu" in the installation settings.

☐ System > Set screen > ... > Manual menu

Display and setting area right:

The start image of the control center shows the current *weather data* and, if configured in the *ETS*, *other sensor data*. If applicable, the display pages can be scrolled through using the arrow in the lower area.

When navigating in the settings (submenus), the functions/parameters are displayed and set here.

Bottom navigation menu:

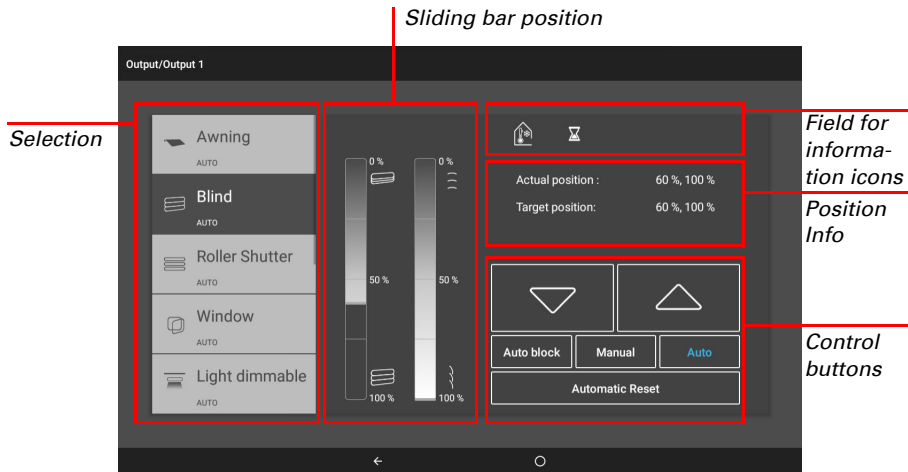
The **bottom display edge** contains a **navigation menu** with "Back" arrow and a circle. Tap the circle to return to the start page. If the start page is active, stay on the circle longer to activate the screen saver.

Actuate motors and switch devices

Additional information about the display and control possibilities is contained in *Operation*.

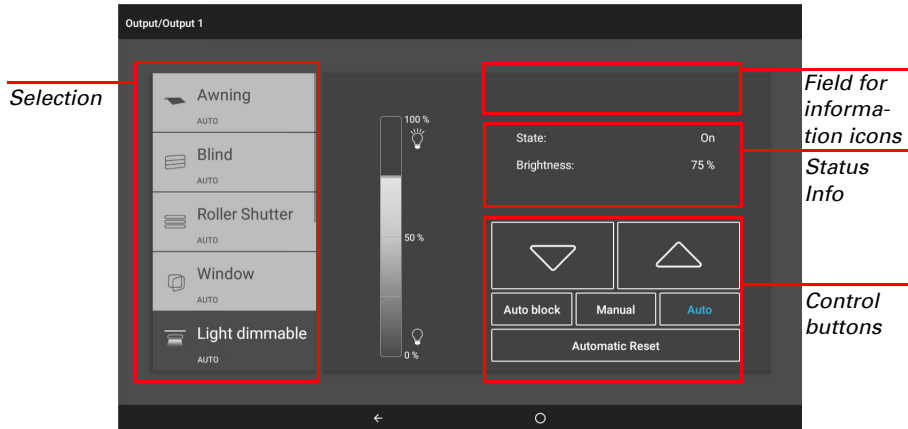
Example: Move blinds manually

☐ Start menu > Manual



Example: Dim lights

☐ Start menu > Manual



Setup scene

In scenes, you define the status of various motors and devices so that they can then be accessed with just one push of a button. You can also specify, for example, that the light should be dimmed and the shutters closed at the same time, and save this as "TV evening" scene.

Scenes can only be configured directly on the **CasaConnect KNX Control Center** and not in the ETS. However, the configured scenes can be used via the input/output object 22 ("Call scene") in the KNX system.

24 scenes are available in the **CasaConnect KNX Control Center**.

☐ System > Set screen > Scenes

Select a scene from the list on the right and enter the **Name** and display in the **manual menus**.

Channels:

Select which motors/devices are assigned to the scene. Set the actuation position for each device, e.g. On or Off.

Safety module

In the safety module, motion detectors and/or door contacts, for example, can be monitored and specific alarm signals can be executed and/or alarm messages sent to email addresses when they are activated.

☐ System > Set screen >> Safety module

Set the **Name** and display in the **Manual menus**.

Live switching:

Switching delay external:

Set the live switching delay if a detector is installed in the entrance area. As a result, you have time to leave the house during the delay before the detectors in the entrance area are live. This delay time only applies to external live switching, not at the control center.

Alarm delay:

Set the alarm delay here. If a detector is triggered in the entrance area, for which a delay has been set, the alarm is only reported after the end of this time.

Display activation acknowledgement:

This is where you set how long the message, which has been successfully activated, is displayed and at the same time a "1" is sent to the KNX bus.

Display error message:

This is where you set how long an error message is displayed if activation failed.

Deactivation code for external live:

If desired, specify a code here for deactivating the external live switching.

Alarm:

Signal message duration:

Set the activation duration here, i.e. how long the various signals (flashing light, siren, internal signal) remain on after an alarm message.

Assign signal:

This is where you assign the different signals to the various alarm types.

- External live: The user is outside the building. All indoor and outer skin alarms are live.
- Internal live: The user is in the building. Only the outer skin alarms are live.
- Not live: Neither the indoor nor the outer skin alarm is live.

For each alarm status set, specify which alarm signal should be activated for the different live statuses.

Recipient for notifications:

Assign email recipients for the various alarm types here And for each alarm status set, specify which email recipient should be informed of the different live statuses. The email addresses have to be entered beforehand.

☐ System > System setting > Email message

Edit text messages:

Edit the text messages, which are displayed on the screen and sent to the KNX bus. Live switching texts for various statuses, alarm texts, other texts.

Presence simulation

You can call up to 16 events with the presence simulation simultaneously or consecutively, to give the appearance that people are in the building. A settable delay for the start time makes the simulation more realistic.

☐ System > Set screen > Presence simulation

Set the **Name** and display in the **Manual menus**.

Configuration:

Select an event from the list and apply it. The start can be defined as follows:

- Time: Event starts at specific time
- Time and brightness: Event starts if a set brightness is undercut in a defined period.
- Event X: Event starts as soon as Event X has started

With a random delay, a range can be set, by which the start time of an event is delayed.

The motor or the device / light is selected with the "Select function" button.

5. First setting steps at the control center

Network connection (internet)

The **CasaConnect KNX Control Center** is internet-ready and can be connected to a network by cable (Ethernet/LAN) or WiFi (WLAN). The network connection is needed for:

- Use of Apps (with smartphones and tablets in the same network/WLAN)

If the **CasaConnect KNX** is also connected to the internet via the internal network, the following functions are also possible:

- Accessing web contents in the control center's browser (also e.g. streaming)
- Remote access (e.g. for system set-up, diagnosis)

The Ethernet/LAN connection socket can be reached after the display has been accepted. Note the information regarding assembly.



Set up network connection

☐ System > System settings> Internet

Connection status:

Shows the current status (disconnected or connected).

Connection type:

Tap the field to set up the connection (Ethernet or WiFi).

WLAN: Wireless connection. If WLAN has been confirmed, the additional field "Network name" is displayed for the additional set up.

Ethernet: Cable connection via the LAN socket on the circuit board. No further settings necessary.

Network name (SSID):

The network is selected and set up here under the setting WLAN. Enter a network name or touch "Find networks" in order to see all the available networks.

Create connection:

You can only "Create connection" using this touch field once a network has been selected. The password for the network is requested.

If required, you can disconnect the connection again using the same button.

Mac address:

The MAC address (Media-Access-Control address) is the hardware address of each single network adapter and serves as the unique identifier of the device in the network. This is also called the physical address or device address.

Remote setup / remote maintenance

Access to the **CasaConnect KNX Control Center** is possible via the internet using the remote maintenance function. There must be an internet connection (see chapter *Network connection (Internet)*). A service technician can then see and change the settings without being on site.

Access to the control center is only possible if remote maintenance is also started on the device. This is not a remote control option! If you want to operate the control center and your building technology when on-the-go, then use the CasaConnect KNX App and set up a secure VPN connection to your building network.

☐ System > System setting > Service > Remote maintenance

Start remote maintenance software:

The software opens. Follow the instructions. To create the connection, the device ID of the **CasaConnect KNX** must be input at the PC used for the remote maintenance. Then every menu and function of the **CasaConnect KNX** can be viewed and controlled from the PC.

End remote maintenance software:

Ends an active remote maintenance session.

Use SD card

The **CasaConnect KNX Control Center** can load data from a micro SD card. The SD card storage is needed for:

- Screen saver data
- Update files for software updating
- Saving settings (configuration file)

The card socket is located on the right-hand side of the device. The SD card is pushed into the slot, until it clicks into place.

To remove, briefly press the card into the socket so that it jumps out.



Update software (Updates)

The software for the **CasaConnect KNX Control Center** can be updated during normal operation. If the control center are connected to the internet, the control center download updates automatically after confirmation. Alternatively, you load the new software from the Elsner Elektronik website and save it to the SD card. After inserting the SD card into the socket on the **CasaConnect KNX**, continue.

☐ System > System settings > Device information

Check for updates:

Shows the currently installed version and facilitates the installation of SD card or the search for updates on the internet. Follow the download and installation instructions on the display.

Screen saver (slide show)

The **CasaConnect KNX** can display picture file, time/temperature as a screen saver or simple a black screen. The screen saver is activated if the display has not been touched for 5 minutes. To start the screen saver manually, stay in the circle in the bottom navigation bar for a longer period.

In addition, the screen brightness can be adjusted automatically to the ambient brightness and the screen can switch off when it is dark.

☐ System > System settings > Settings

Screen:

Shows which screen saver is currently active and whether automatic brightness is switched on.

Select the screen saver:

- Without
- Black screen
- Time / temperature display
- Picture display (slide show or single picture)

In order to show digital picture data as a slide show, save the files to a micro SD card. The picture files must fulfil the following requirements:

- The files must be saved in the top directory level on the card (master directory)
- File format: Bitmap (BMP, without RLE compression), Jpeg (JPG), GIF or PNG (without transparency)
- For pictures with a page ratio other than 16:10, black bars are added to the top and bottom or left and right. The display has a resolution of 1280 x 800 pixels
- Colour intensity 24 bit or 16 bit

If picture data is saved on the card, the "Slide show" button is displayed on the right of the upper menu bar, with which you can directly start it. The image changes approx. every 45 seconds (for images with 24-bit colour intensity). To interrupt the screen saver, touch the screen or remove the SD card.

Internet (browser)

The **CasaConnect KNX Control Center** has a browser for accessing internet pages on the WorldWideWeb. Music and video streaming services can therefore also be used. There must be an internet connection in order to use these functions (see chapter *Network connection (Internet)*).

Start the browser via "Open website" in the top menu bar. Enter the web address (URL). Navigate by touching the screen (touch display).

Websites can be shown in the display area on the right or as full screen. The switch field is located on the lower edge of the display. The "Create bookmark" button is also located here. With this, you create a link (bookmark button) in the start menu beneath the system and manual functions, through which the website can be accessed quickly.

You can edit the name of a bookmark later in the menu:

☐ System > Set screen > Start page > Bookmark

You can also delete individual bookmarks here.

PDF documents cannot be displayed or downloaded in the browser of the **CasaConnect KNX Control Center**.

CasaConnect KNX App


The **CasaConnect KNX App** is available for Android and for iOS free of charge in the respective App stores.

Install the App on the mobile device. As soon as the mobile device and **CasaConnect KNX** are in the same network (WLAN), the **CasaConnect KNX Control Center** can be remote-controlled using the App.

Up to nine mobile devices can be connected with the **CasaConnect KNX Control Center** at the same time.

Access via the App to the control center can be password-protected or completely prevented.

☐ System > System settings> Access codes

 Access code

If you want to operate the control center and your building technology when on-the-go, then use the **CasaConnect KNX App** and set up a secure VPN connection to your building network. App access via VPN only works after the App has been used once in the internal WLAN. IP address assignment should be set in the internet router for DHCP so that the same IP address is always assigned.

If two **CasaConnect KNX** control centers are installed in the building, they must be connected to different WLAN networks so that App control is possible.

6. Maintenance and care



WARNING!

Risk of injury from automatically moving components!

System parts may start automatically as a result of the automatic controls and can put people in danger.

- Always disconnect the system from the mains power before maintenance or cleaning.

Abrasive / detergent cleaning agents and aggressive care products must not be used for cleaning. Remove fingerprints from the touchscreen ideally using a wet cloth or a microfibre cloth. Use the cleaning mode for this.

☐ System > System settings > Cleaning mode

If there is a power outage, the data entered by you is saved for approx. 10 years. A battery is not required for this. The clock has to be reset after mains power has been restored. This is done automatically if a time signal is received.