WS1000 Connect Control System: First steps

Item numbers
60241-60246

The manual with additional information about commissioning, functions and use of the controls **WS1000 Connect** can be downloaded from www.elsner-elektronik.de.

1. Description

The various technical facilities installed in the building are controlled automatically and operated manually using the **Control System WS1000 Connect**. In order to be able to set up the system flexibly, both cable connections and wireless channels are available.

The **WS1000 Connect** is delivered as a set, which includes the sensors needed for room climate and weather data as well as the central unit (display with control electronics). The sensor values are shown in the display and are the basis of the automatic controls.

Functions and properties of the central unit WS1000 Connect:

- **Colour touch display** 10.1 inch, for manual operation, system set up and for setting the basic and automatic functions
- **Network connection** by LAN or WLAN
- **Browser** for viewing websites, etc.
- **Remote access** via network for system setup, diagnostics etc. Approval by the user required
- Slide show from SD card as screen saver
- Data storage on SD card (storage of settings)
- Integrated loudspeaker (4 tweeters, 1 broadband speaker)
- Individually settable **presence simulation**
- **Motor outputs** (4-10 pcs, depending on model) for electrically powered
  - Awnings, blinds, shutters
  - Windows/sliding roofs
- **4 multifunction outputs** for
  - Lights (on/off)
  - Dimmer of one light
  - Heating (on/off), cooling (on/off), ventilators (on/off)
  - Alarms
  - Gutter heating
- **16 scenes** for calling individually set movement positions and switch states
  With a scene, several motors and devices are addressed simultaneously so a suitable ambience is created with one press of a button ("TV", "Eating", etc.).
- **4 multifunction inputs** for
  - Motion detector
  - Smoke detector
  - Climate detector (prevent ventilation if external air-conditioning/heating is active)
  - Safety contact (motors in safe position, prevent exhaust air, start incoming air)
  - Impulse for automatic reset
  - Binary contact for free use
- **10 key inputs** for additional conventional wind sensor for operating motors and devices on site
- **32 radio channels** for devices with Elsner RF radio protocol
  - Sensors WGTH-UP for room temperature, humidity (from version 1.3), WG AQS/TH-UP for room temperature, humidity, CO_2, WGT (indoor temperature) for measuring at other locations in the room
  - Remote control Remo 8 (from version 1.8), Remo pro
  - Sensor Corlo P RF, sensor interface RF-B2-UP
  - WL400, WL800 and WL-Z ventilation units
  - RF-VM ventilation module for connecting fans/circulation air heaters from other manufacturers
  - Wireless relay RF relay for on/off (each from version 5.5), Heating module RF-HE-ST (from version 5)
  - Wireless motor control device RF-MSG for up/down (from version 3.7)
  - RF-L wireless dimmer:

The wireless actuators with a production date after 14.01.2016 are compatible with the **WS1000 Connect** system. The production date can be found as part of the serial number which has the following structure "DD MM YY consecutive number".

⚠ **WARNING!**
The radio transmission takes place over a non-exclusively available transmission channel!
The device is not suited for applications outside the field of safety equipment, such as emergency stop and alarm equipment.
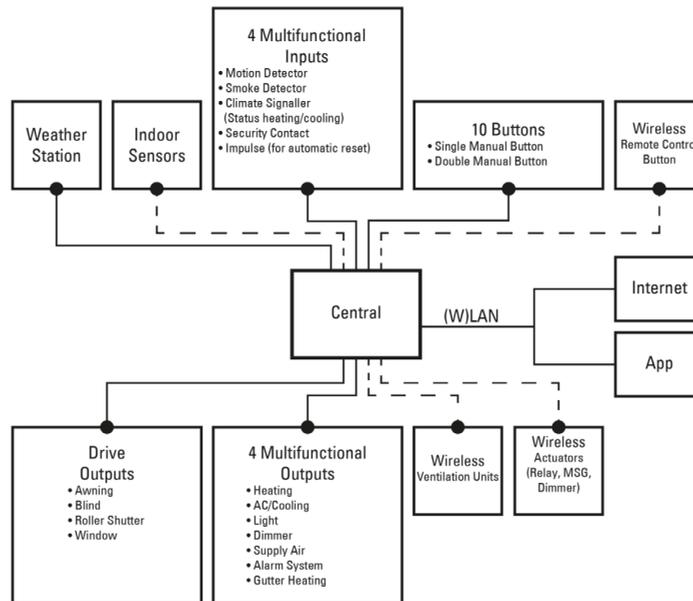
Functions and properties of the indoor sensor:
- Temperature measurement
- Humidity measurement

Functions and properties of the weather station:
- Brightness measurement (sun sensor)
- Temperature measurement
- Wind speed measurement
- Precipitation detection
- GPS receiver for date/time and installation coordinates (for sun position calculation)

Overview of connection and control options

Scope of delivery

- Central control and operating unit with flush installation box and installation accessories
- SD card in card slot
- Weather station with connection accessories
- Indoor sensor with frame
  (*In addition,* you need a device socket ø 60 mm, 42 mm deep)

2. Commissioning

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

⚡ **DANGER!**
Risk to life from live voltage (mains voltage)!
There are unprotected live components inside the device.
- Inspect the device for damage before installation. Only put undamaged devices into operation.
- Comply with the locally applicable directives, regulations and provisions for electrical installation.
- Immediately take the device or system out of service and secure it against unintentional switch-on if risk-free operation is no longer guaranteed.

Use the device exclusively for building automation and observe the operating instructions. Improper use, modifications to the device or failure to observe the operating instructions will invalidate any warranty or guarantee claims.
Operate the device only as a fixed-site installation, i.e. only in assembled condition 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.

Procedure for commissioning

1. The **installation** of the Control System and the sensors must be performed by a skilled electrician. Information in the installation instructions, for example also about the installation location, must be observed.
2. After completing the installation work, the Control System must be **thoroughly set up** in the menu *System > Installation*. Which connections are used for which functions, e.g. Motor 1 = Awning, is specified here.
   See manual chapter *Basic setting*.
3. **More settings** for time reception, screen saver, network connection, access code, updates, etc. can be made at any time in the menu *System > WS1000 settings*.
   See manual chapter *Basic setting*.

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4. The **automatic functions** must be adjusted in the menu *System > Automatic settings* to the structural conditions and individual requirements of the users. See manual chapter *Automatic*.
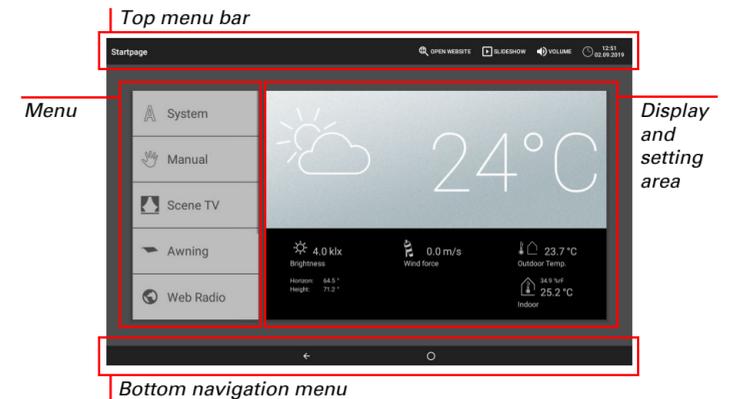
Operating system

The **WS1000 Connect** works with the Android operating system. However, the Control System work self-sufficiently and therefore 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 system must be restarted so that the touch display works again.

3. Overview of homepage, navigation

With the **Control System WS1000 Connect** you can control the connected technology centrally, e.g. raise and lower shades, switch devices on and off and dim lights. All the settings are also made on the display.

Top menu bar:

The Internet browser (*open website*) and *Volume* functions can be accessed at any time via the top menu bar. Time and date are displayed. Additionally, the start key for the slide show appears here as soon as an SD card with pictures is loaded.

Menu on left (Start menu):

The menu on the left-hand side contains the *System* menu, with which you can reach all the basic and automatic settings.

Connected motors and devices are operated by hand using the *Manual* menu.

The menu item *Presence simulation* is displayed in the start menu depending on the setting. The *presence simulation* can be switched on or off there.

This includes the selected *Favourites* for manual operation and the websites saved as *Bookmarks*.
So that a motor/device is displayed in the Manual menu and/or as a Favourite, the display has to be activated in the setting "Manual menu" in the installation settings.
☐ System > Installation > Motor/Multif.output > Manual menu

Right-hand display and settings area:

The control unit displays the current *weather data* as its start page .

The functions / parameters are displayed here when navigating in the settings (submenus).
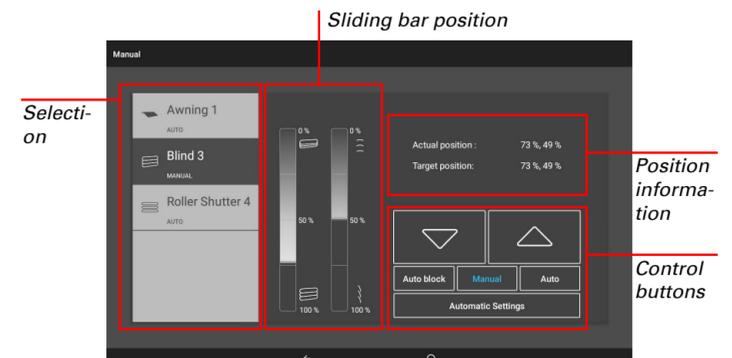
Bottom navigation menu:

On the **bottom edge of the display** you will see a **Navigation menu** with "Back" arrow and a circle, which takes you back directly to the start page. Stay longer on the circle to activate the screen saver.

Move motors and switch devices

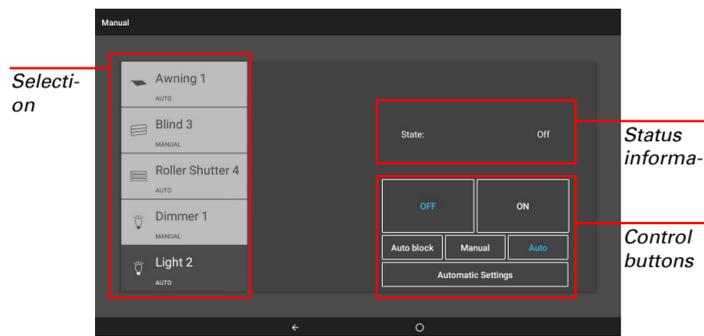Additional information about the display and control possibilities is contained in *Operation*.

Example: Move blinds manually
☐ Start menu > Manual

Example: Switch light
☐ Start menu > Manual

Selection

Status information

Control buttons

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 > Installation > 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.

4. Initial setting steps

Network connection (internet)

The **Control System WS1000 Connect** 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 **WS1000 Connect** is also connected to the internet via the internal network, the following functions are also possible:

- Accessing web contents in the controls' browser
- Remote access (e.g. for system set-up, diagnosis)

The Ethernet/LAN connection terminal can be accessed after removing the display, without having to remove the touch protection (cover for 230 V power area). Note the information regarding assembly.

Set up network connection

☐ System > Set up WS1000 > Internet

Connection status:

Shows the current status (disconnected or connected).

Connection type:

Shows the type of connection (Ethernet or WLAN). Touch the field to set up the connection.

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 other 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" to view all 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 necessary, use the same field to terminate the connection.

🛑 **Protect your network with the latest encryption technology and change your passwords regularly!**

Remote set up/remote maintenance

Access to the **Control System WS1000 Connect** is possible via the internet using the remote maintenance function. There must be an internet connection for this (see chapter *Network connection (internet)*). A service technician can then see and change the settings without being on site.

Access to the controls 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 controls and your building technology on the go, then use the WS1000 Connect App and set up a secure VPN connection for your home network.

☐ System > Set up WS1000 > Service

Start remote maintenance software:

The software opens. Follow the instructions. To create the connection, the device ID of the **WS1000 Connect** must be input at the PC used for the remote maintenance. Then every menu and function of the **WS1000 Connect** can be viewed and controlled from the PC.

Close remote maintenance software:

Ends the active remote maintenance session.

Using an SD card

The **Control System WS1000 Connect** can load data from a micro SD card. The SD card storage is needed for:
- Screen saver data
- Update files for software updates
- 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 is jumps out.

Updates

The software for the **Control System WS1000 Connect** can be updated during normal operation. If the control is connected to the internet, the control downloads 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 **WS1000 Connect**, continue.

☐ System > Set up WS1000 > 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 **WS1000 Connect** 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 longer on the circle in the lower navigation bar.

Additionally, the display brightness can be adjusted automatically to the room brightness and the screen can switch off when dark.

☐ System > Set up WS1000 > Settings

Display:

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 meet the following requirements:

- The files must be saved in the highest directory level of 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 at the top/bottom or right/left. The display has a resolution of 1280 × 800 pixels
- Colour intensity 24 bit or 16 bit

If picture data is saved on the card, the "Slide show" key 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 **Control System WS1000 Connect** includes a browser for accessing internet pages on the WorldWideWeb. Note, however, that the control is not suitable for rendering resource-intensive web pages.

There must be an internet connection in order to use the browser (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).

Web sites can be displayed in the display area on the right or as a full screen. The switch field is located on the lower edge of the display. The "Create bookmark" button is also located here. This creates a link (bookmark button) in the start menu below system and manual functions, with which the website can be accessed quickly.

You can subsequently edit the name of the bookmark in the menu:
☐ System > Installation > Homepage > Bookmarks
You can also delete the individual bookmarks here.

You cannot display or download PDF documents in the browser of the **Control System WS1000 Connect**.

WS1000 Connect App

The **WS1000 Connect App** is available for Android and iOS free of charge in the respective APP store.

Install the App on the mobile device. As soon as the mobile device and WS1000 Connect are on the same network (WLAN), the **Control System WS1000 Connect** can be controlled via the App.

Up to nine mobile devices can be connected to the **Control System WS1000 Connect** at the same time.

Access via the App to the controls can be password-protected or completely prevented. Additional information about this can be found in the manual chapter *Basic setting > Setting the WS1000*.
☐ System > Set up WS1000 > Access codes

If you want to operate the controls and your building technology on the go, then use the **WS1000 Connect App** and set up a secure VPN connection for your home network. App access via VPN only works after the app has already been used once in the internal WLAN. In the Internet router, DHCP IP address assignment should be set to always assign the same IP address.

If two **WS1000 Connect** controls are installed in one building, so that the App control is possible they have to be connected to different WLAN networks.

5. Maintenance and care

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. This function locks the touch display for 60 seconds and thus prevents functions from being triggered or adjusted unintentionally during cleaning.
☐ System > Set up WS1000 > Service > Cleaning mode
📖 *Cleaning mode*, Page 96

If there is a power outage, the data entered by you is saved for approx. 10 years. A battery is not needed for this. After the mains power has been restored, the clock is set automatically as soon as the weather station receives a time signal.