

# Solexa II **Radio control system**

# Operation

Item numbers 10144 (Display), 10150 (Set)







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Phone +49 (0) 70 33 / 30 945-0 info@elsner-elektronik.de Fax +49 (0) 70 33 / 30 945-20 www.elsner-elektronik.de This document describes how to operate the device during normal operation.

The complete manual can be found in www.elsner-elektronik.de in the "Service/Downloads" menu area.



Installation, testing, operational start-up and troubleshooting of the unit should only be performed by an electrician (accredited according to VDE 0100).

This manual is subject to change and will be brought into line with new software releases. The change status (software release and date) can be found in the footnote. If you have a device with a later software release, please check on **www.elsner-elek-tronik.de** in the "Service" menu area whether a more up-to-date version of this document is available.

## Key to the symbols

	Safety information.
	Safety information for working on electrical connections, components, etc.
DANGER!	indicates an immediately hazardous situation which will lead to death or severe injuries if it is not avoided.
WARNING!	indicates a potentially hazardous situation which may lead to death or severe injuries if it is not avoided.
BEWARE!	indicates a potentially hazardous situation which may lead to trivial or minor injuries if it is not avoided.
	indicates a situation which may lead to damage to property if it is not avoided.

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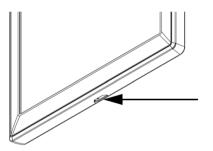
# 1. Operating the display

# 1.1. Charging the battery

The display has a fixed, integrated battery that cannot be removed. The "Battery" symbol displays the battery charging status:

- ➡ Charging status very good, device is ready for use.
- Charging status good, device is ready for use.
- Charging status low, charge the battery.
- + Beep every 15 minutes. Charging status very low, charge the battery.
- Both SOC bars flashing. Battery faulty. Consult technical service of the manufacturer.

Charge the display before initial start-up. To charge, connect the display via a USB socket with a mains socket charging device or a PC. The charging device must have a charging current of 200 mA (or more).



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The USB charging socket is at the lower edge of the display.

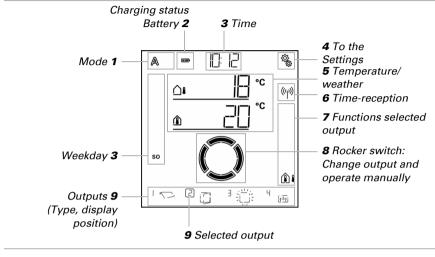
If the device is not charged in time, the display switches off. If a weather station is being used in the system, then the automation is not affected. The automation continues to run without the indoor temperature function.

# 1.2. Maintenance and care

Fingerprints on the display and the housing are best removed with a cloth moistened with water or a microfibre cloth. Do not use an abrasive cleaning agent or aggressive cleansing agents.



# **1.3. Display and operating options on the start screen**



The display has various areas in which information and functions can be called up.

 $\nabla$  Loading data.

# 1 – Mode

The actual mode of the selected output is displayed.

Tap in the area of the symbol to change mode (Automatic/Manual). Press in the area of the (Automatic/Manual) symbol to set *all* outputs to automatic simultaneously (press until the high beep "button held down" sounds).



Automatic mode. Automatic functions for the selected output are active.



Manual mode. Output was operated manually or switched to manual mode.

After an output has been operated manually, it remains in manual mode. Automatic mode is inactive. Set an automatic mode reset so that the output switches back to automatic, once a day or after a certain time after being operated manually (see *General settings* chapter: *Automatic reset* in the manual and automatic reset in the individual automatic descriptions in the manual).

# 2 - Battery charging status

Observe the chapter Charging the battery, page 5.

## 3 – Time, day of the week

The time can be displayed in 12- or 24-hour mode. Further information on setting the clock can be found in the *Setting the time* chapter in the manual.

## 4 - Settings menus



Tap to access the automatic settings or

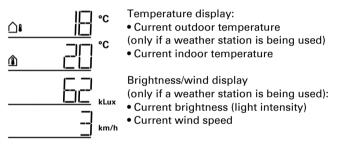
hold down for 3 seconds to access the default settings.

The automatic settings are described in the Automatic chapter in the manual.

The default settings are described in the *Default setting* chapter in the manual.

## 5 – Room temperature and weather data

In this area, the indoor temperature value is displayed and, if a weather station is being used, the outdoor/weather data also. In this case, tap on the area with the values to switch between the "Temperature" display and the "Brightness/Wind" display.



Further information on the values for brightness and wind is in the manual, chapter *Units for sun and wind*, page 178.

# 6 - Time reception (weather station)

If the radio symbol is displayed in the start screen, the controller has, within the last 5 minutes, received the actual time from the GPS receiver integrated into the weather station.

If no radio symbol is displayed, then the time has not been received for over 5 minutes. The controller's internal clock continues to run.

# 7 – Active output functions

The right-hand edge of the display indicates the selected output functions, i.e. automatic mode status. There is a more precise description in the *Meaning of the functional symbols (automatic mode status)*, page 8 chapter.

# 8 – Rocker switch for manual operation

## 9 – Outputs

You use the rocker switch to drive or switch the individual outputs manually. The outputs are visible at the lower edge of the display with the display position number and type symbol. The selected output is marked by a frame around the display position number.

Please note that at this position only outputs are displayed for which the display has been activated (see manual, Display position chapter in the descriptions of the default settings for Motor control units (RF-MSG, weather station), for Relay (RF-Relay, RF-HE) and for Dimmer (RF-L).

- Change output.
- Operate or switch selected output manually.
- Selected output is blocked for manual operation (alarm function active).
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## 1.3.1. Meaning of the functional symbols (automatic mode status)

The symbols show the automatic mode status for the selected output and the alarm functions valid for the manual mode. A function is only displayed if it has been activated for the output.

# Shading (shutters, awnings, blinds)

Please note that for an action such as "extend shading" a number of conditions must be fulfilled. The functions are listed here in the sequence of their priority. This means that the sun protection function is only executed if all previously named functions for the shading have been released.

The detailed description of the automatic functions is in the Shading - automatic mode chapter in the manual.

#### Alarm functions:

Alarm functions have the highest priority and prevent manual operation of the output.

Wind alarm. Retracted shading. 0

In automatic mode, manual operation can again be activated, even if the automatic functions are blocked by wind alarm.

Frost alarm (combination of precipitation and low outdoor temperature). Retracted shading.

Rain alarm. Retracted shading.

#### Time and night functions:

Timed closure or timed opening active.

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Dropping below the threshold value for twilight/night.

S\* Night closure is executed.

#### Indoor and outdoor temperature:

- Indoor temperature is OK. Shading is released.
- If the *not* symbol is displayed, the indoor temperature block is active.

Outdoor temperature is OK. Shading is released.

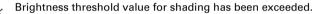
- If the *not* symbol is displayed, the outdoor temperature block is active.
  - Retraction delay is running. Shading is blocked because indoor temperature is too low.

#### Sun direction:

 $(\mathcal{O})$  The sun is in the shading zone (compass direction). Shading is released.

#### Sun protection function:

Priphtness threshold value for shading has been exceeded, extension delay is running. After the delay time has expired the shading is extended, if all other conditions are OK.



Shading is performed if all other conditions are OK.

Brightness below threshold value for shading, retraction delay is running. Shading is retracted after the delay time has expired.

Brightness below threshold value for shading. Sun protection automatic inactive.

## Window

Please note that for an action such as "Ventilate according to indoor temperature" a number of conditions must be fulfilled. The functions are listed here in the sequence of their priority. This means that the temperature-dependent ventilation function is only executed if all previously named functions for the ventilation have been released.

The detailed description of the automatic functions can be found in the *Windows-Ventilation-Automatic mode* chapter in the manual.

#### Alarm functions:

Alarm functions have the highest priority and prevent manual operation of the output.

- Wind alarm. Window closed.
  - Manual mode: Manual operation blocked. Automatic mode: Output can be operated if the wind automatic block is running.

Frost alarm (combination of precipitation and low outdoor temperature). Window closed.

Rain alarm. Ф

Depending on the setting, the window is either closed or in the rain position.

#### Timer functions:

Timed closure or timed opening active.  $(\Box)$ 

#### **Outdoor temperature:**

Outdoor temperature is OK. Ventilation is released.

If the not symbol is displayed, the outdoor temperature block is active.

#### Ventilation function:

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Indoor temperature for ventilation has been exceeded.

Ventilation is performed if all other conditions are OK.

# Light

The detailed description of the automatic functions is in the Light - Automatic mode chapter in the manual.

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Values below twilight threshold value. Lights are switched on after a delay of 1 minute. If a lighting time period has also been set, the lights are only switched on during this period.

Lighting time period active. If twilight switching has also been set, the lights are  $(\mathbf{P})$ only switched on in twilight.

# Heating

The detailed description of the automatic functions is in the Heating - Automatic mode chapter in the manual.



Day mode. Only the day temperature value set is valid.



Night mode (night period). Only the night temperature value set is valid.



Currently valid reference temperature value not reached. Heating is turned on.

# **Roof gutter heating**

The detailed description of the automatic functions can be found in the Roof gutter heating - Automatic mode chapter in the manual.

Outdoor temperature in the set range. Heating is turned on.

# 1.4. Beeps

If a button or a touch sensitive area is actuated, a beep sounds. If a button has been held down, then a higher beep sounds as confirmation that the button has been recognised as held down. This is, for example, valid for the settings button in order to access the default settings or the SET button to save.

Shortly before the display battery is flat, a warning signal sounds every 15 minutes (combination of high and low beeps).

# 1.5. Error messages

If, instead of a sensor value, ER error is displayed then the wireless connection to the weather station is disrupted or the sensor is defective.

Check whether the weather station is powered (fuse). Have the device checked by an electrician if the problem continues.



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# **1.6.** Table: Memory locations for the outputs and inputs

In the table you can enter the devices that have been taught and the functions for the individual memory location and note keywords for automatic mode set.

Memory location	Туре	Display position	Room	Keyword

Memory location	Туре	Display position	Room	Keyword

# 2. Operating the weather station

## 2.0.1. Maintenance of the weather station



## WARNING!

**Risk of injury caused by components moved automatically!** The automatic control can start system components and place people in danger (e.g. moving windows/awnings if a rain/wind alarm has been triggered while cleaning).

• Always isolate the device from the mains for servicing and cleaning.

The device must regularly be checked for dirt twice a year and cleaned if necessary. In case of severe dirt, the sensor may not work properly anymore.



## ATTENTION

The device can be damaged if water penetrates the housing.

• Do not clean with high pressure cleaners or steam jets.