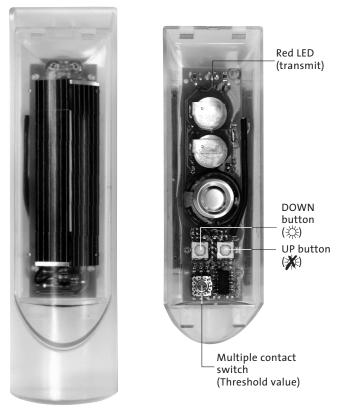
# SILENTGLISS SPARES SILENTGLISS SYSTEMS

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## Lumero-868 Operating instructions

28 680.0001



## **General information**

The Lumero-868 is a wireless sun sensor for your shade system (roller shutters, awnings, venetian blinds).

Integrated solar cells enable autonomous function of the device. Radio signals (frequency 868 MHz) are transmitted between the Lumero-868 and the receiver.

Important! The Lumero-868 only operates in combination with radio receivers from the elero ProLine-868 radio system.

Manual operation of the system is carried out with a manual/wall transmitter.

This item is not included in the scope of delivery.

**Recommendation:** Use a LumeroTel or VarioTelPlus hand-held transmitter to deactivate the sun function.

## **Safety instructions**



#### Important safety instructions! Observe the following instructions.

- Only use unmodified original elero electrical
- parts.
- Keep persons away from the operating range of the system.
- Keep children away from the controls.
- Follow the relevant country-specific regulations.
- If one or more devices are used for controlling the system, the operating range must stay visible during operation.
- The device contains swallowable small parts.

## Intended use

The Lumero-868 may only be used for controlling roller shutter, awning and blind systems.

Third-party devices should only be connected after consultation with your specialised dealer.

- Please ensure that the radio installations are not operated in areas of heightened possible interference. (e.g. hospitals, airports ...).
- The remote control is only approved for devices and systems for which any malfunction of the manual transmitter or receiver would not result in a risk for persons, animals or property, or if such a risk is covered by other safety devices.
- The operator has no protection whatsoever from interferences by other radio emitters and local terminals (e.g. also from radio installations), that are normally used on the same frequency range.
- Only use radio receivers with equipment and units approved by the manufacturer.

## **Device function**

The light intensity is measured at intervals and compared with the set values.

Brightness above set value □⇒ Awning moves out, roller shutter, (Delay time approx. 5 min.) (Delay time approx. 15 min.)

venetian blind moves down. Brightness below set value Awning moves in or remains in,

roller shutter, venetian blind moves up.

The sliding switch at the programmed manual transmitter can be used to switch the light function of the Lumero-868 on or off. The sliding switch has no influence on the function of the travel keys.

## Function for "Manual" switch setting (manual transmitter)

All buttons (Lumero-868 and manual transmitter) are active. - Sun protection is disabled.

## Function for "Auto" switch setting (manual transmitter)

All buttons (Lumero-868 and manual transmitter) are active. - Sun protection is active.

## Semi-automatic

Your device is in AUTO mode.

As soon as you now press a button on your programmed manual transmitter the receiver switches itself into the semi-automatic mode.

## Leave semi-automatic mode:

- If a level falls below and/or rises above a set threshold value then the system automatically changes to AUTO mode. The system moves in/out. or
- Set the sliding switch of your transmitter briefly to MANUAL mode and then to AUTO mode. The system moves in.

## **Technical data**

Power supply	Solar
Temperature range	–25 °C to +60 °C
Detection angle	150°
Protection class	IP 54
Radio frequency	868,3 MHz
Standby	approx. 1 hour

#### Condition:

A receiver with radio software from version 1.9 must be installed.



## Commissioning

### Charging the Lumero-868

The Lumero-868 is delivered in the discharged condition.

 Place the Lumero-868 under a lamp for at least 30 minutes or push the DOWN-button 5 on the Lumero-868 for at least 3 minutes before starting up.

**Note:** The travel keys have two levels.

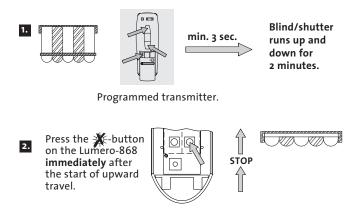
The first level transfers energy from a built-in battery to the energy store. The second level activates the travel command.

### **Programming Lumero-868**

#### **Condition:**

The end positions of the awning, the roller shutter or the venetian blind have been set, a transmitter has been programmed, and the Lumero-868 has been loaded (LED lights and/or flashes when a button is pressed).

#### Start programming mode





# Setting the mode (awning, protection against prying eyes, roller shutter)

The Lumero-868 can be operated in three different modes. The modes can be successively switched through..

The current mode of the Lumero-868 is displayed by means of the flashing of the red LED.

The awning mode is set as standard in the delivery condition.

In the case of OEM versions, a different mode can also be set.

#### Awning mode

The awning is automatically retracted when the current measured sun value changes from 1 to 0 (late evening) or when the current measured light value changes from 0 to 1 (early morning).

#### Protection against prying eyes mode.

To keep the blind closed even in the evening, close the blind manually using your hand-held transmitter or a timer.

The current transitions of the measured light values from 1 to 0 (late in the evening) or from 0 to 1 (early in the morning) will be ignored.

The blind will remain closed throughout the night.

The switching commands such as tilting position (venetian blind) or ventilation position (roller shutter) will be executed automatically the next day.

### Roller shutter mode



Support for the twilight function is dependent on the software version of the receiver.

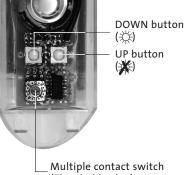
If the roller shutter is driven manually by a timer or the twilight function to the lower end position, the light function (driving according to set light value) will be switched off.

The current transitions of the measured light values from 1 to o (late in the evening) or from 0 to 1 (early in the morning) will be ignored.

You can switch on the light function again in several different ways:

- the blind moves to the upper end position by means of a manual UP travel command (button on the Lumero-868).
- the blind moves to the upper end position by means of an automatic timer command.
- by switching the sliding switch from AUTOMATIC mode to MANUAL mode and back to AUTOMATIC mode.

#### Change the mode



\_Multiple contact switcr (Threshold value)

There is a multiple contact switch inside the Lumero-868.

- 1. Set the multiple contact switch to o using a small screwdriver.
- Keep the UP and DOWN button pressed for at least 3 seconds. The current mode of the Lumero-868 is displayed by means of the flashing of the red LED:

The operating mode is indicated by the flashing signal.

Red LED flashes 1x	→ Awning mode
Red LED flashes 2x	$\rightarrow$ Protection against prying eyes mode.
Red LED flashes 3x	$\rightarrow$ Roller shutter mode

The set mode is displayed at each radio transmission by the flashing of the red LED (LED flashing pattern 1x per minute). Set the multiple contact switch from o to a value selected by yourself.



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## Commissioning



## Setting the threshold values

There is a solar multiple contact switch inside the Lumero-868. The switch has several levels, which can be modified with a small screwdriver.

### Sun

Level o	$\Rightarrow$ Light function is deactivated
Level 1	$\Rightarrow$ Move out at low light levels
Level 2 to E	⇒ Intermediate levels
Level 7	$\Rightarrow$ Factory setting
Level F	⇒ Move out in full sun

## Check the set threshold value

#### Press the **UP** or **DOWN** button:

LED flashes	⇒	Light value is higher (brighter) than set threshold value.
LED lights continuously	⇒	Light value is lower (darker) than set threshold value.

## Check the sun protection function (test mode)

## **Condition:** The blind/shutter is retracted.

The delay times are shortened in the test mode. You can then test the travel movement of your system on the set light value being exceeded or undercut.

1. Press the UP button (wind symbol) for at least 3 seconds until the red LED flashes.

The test mode stays active for 5 minutes but with the LED extinguished.



## Injury risk from extending the awning or running down the venetian blind

The test mode is active for 5 minutes. This time cannot be shortened. Keep away from the operating range of the system.

2. Shine a torch on the sun sensor.

Set light value is exceede  $\rightarrow$  shutter/blind immediately travels out/down.

Set light value is undercut  $\rightarrow$  shutter/blind travels in/up after 15 seconds.

You can repeat the operation as often as you want within 5 minutes.

In "normal" operation the LEDs light up every 5 seconds and show that the threshold values have been reached or exceeded.

## Deletion of a programmed Lumo-868

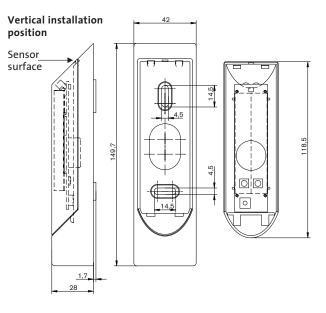
Press the 🔆 - und the 🌾 -button simultaneously. The LED goes out. Wait until the LED lights again after approx. 3 seconds. The Lumero-868 is deleted.

## Installation

Check whether a perfect radio connection exists between the Lumero-868 and the receiver before installation at the desired installation position.

Note: The Lumero-868 must not be mounted under projecting structures.

Fix the Lumero-868 with the screws provided.



## Horizontal installation





#### Maintenance

The Lumero-868 is maintenance-free, but the cover must be cleaned from time to time.

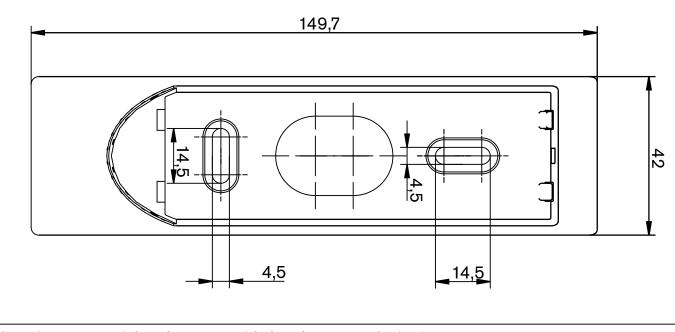
Otherwise, light entry is limited and shortens functioning time.

## Troubleshooting

Fault	Cause	Remedy	
Awning does not move out in	<ul> <li>Threshold set incorrectly</li> </ul>	Set correct value	
sunny conditions	<ul> <li>Manual mode is set</li> </ul>	<ul> <li>Set automatic mode</li> </ul>	
	<ul> <li>Poor radio connection</li> </ul>	<ul> <li>Change the position of the Lumero-868</li> </ul>	
	• Light sensor is dirty	• Clean light sensor	
	<ul> <li>SUN threshold (level o)</li> </ul>	Set appropriate level	

## Drilling template

Scale 1:1



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