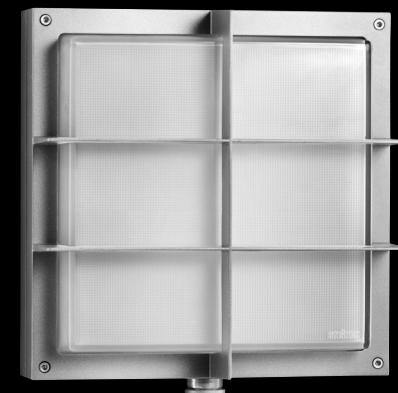
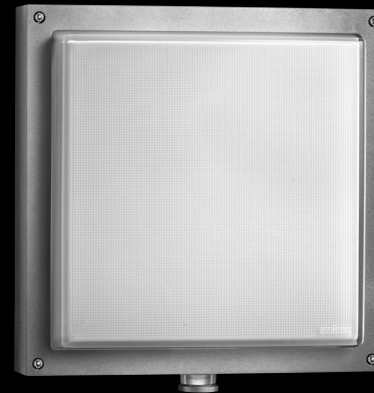


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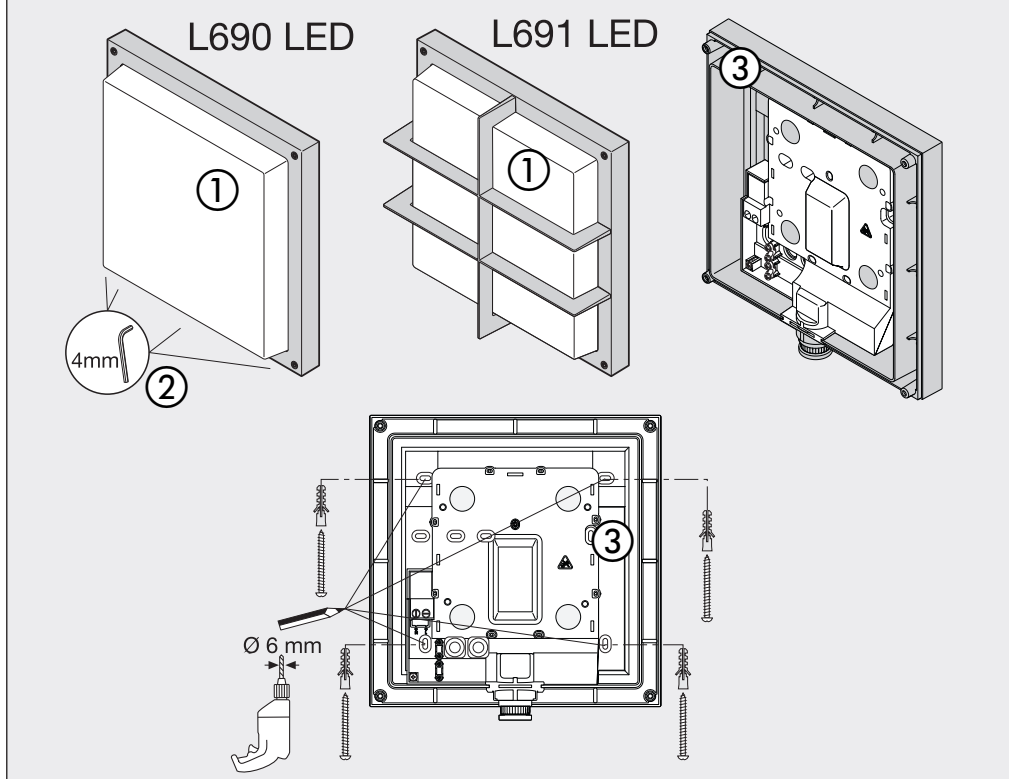
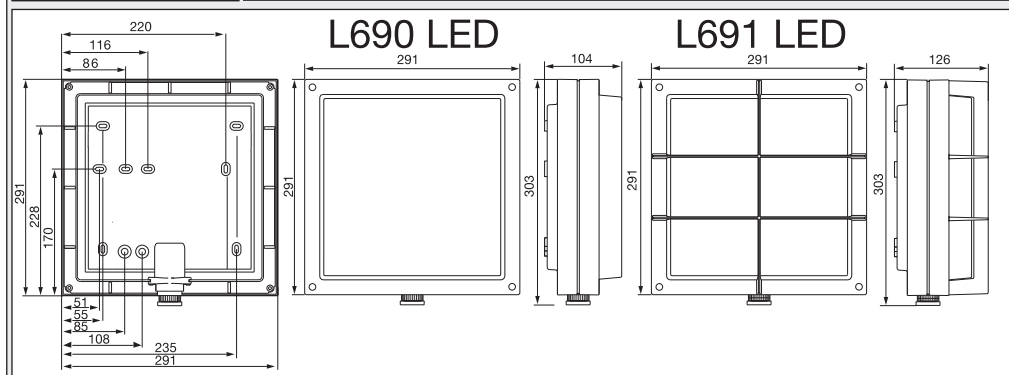
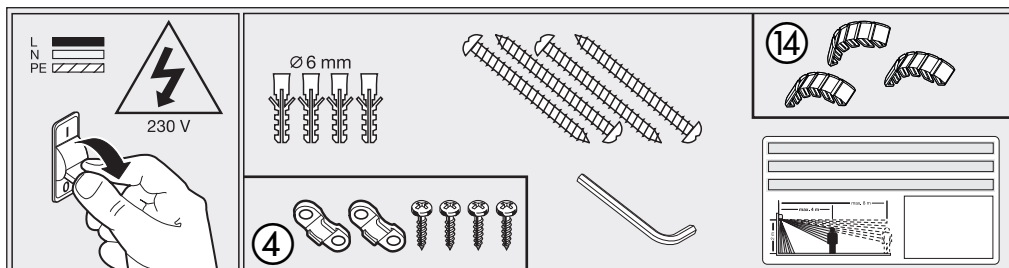
110034663 09/2015, Technische Änderungen vorbehalten. / Subject to technical modification without notice.

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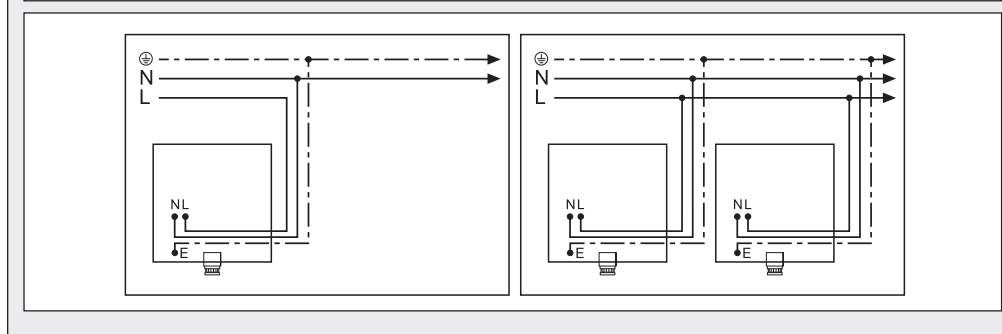
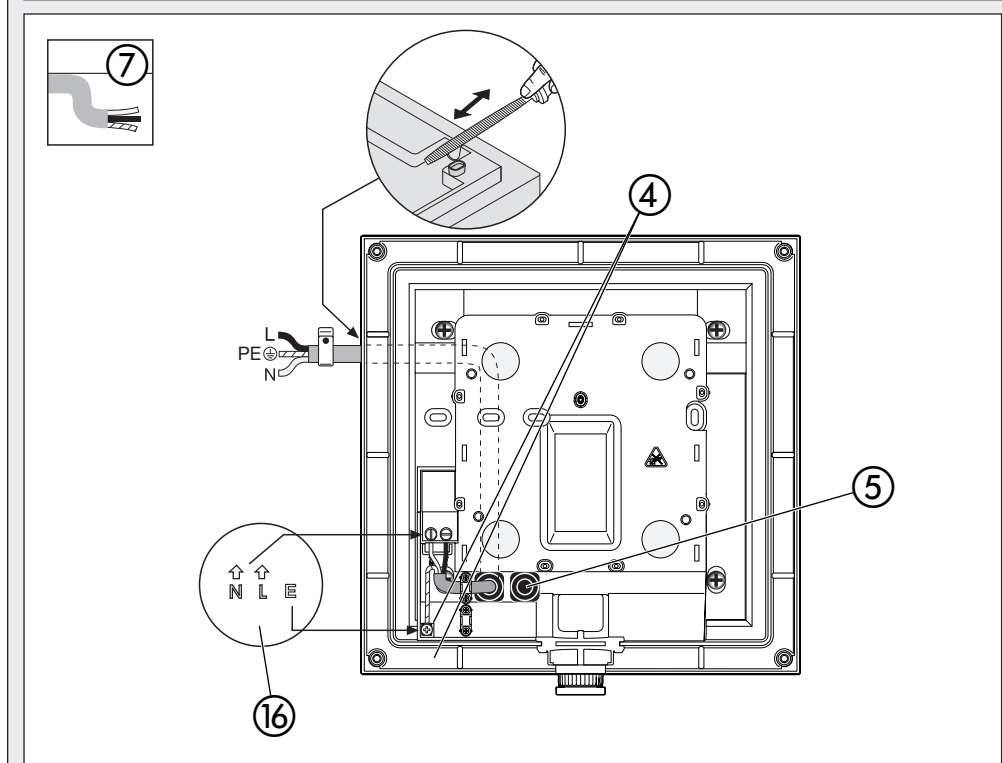
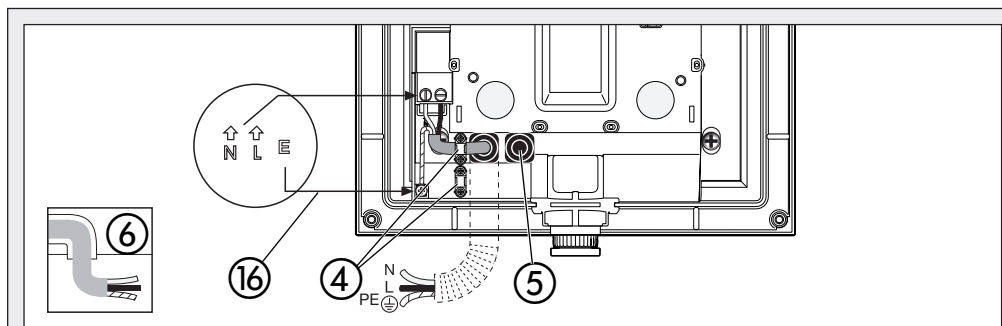


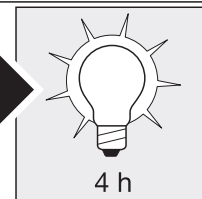
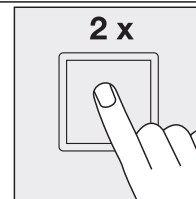
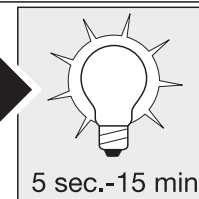
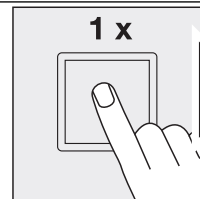
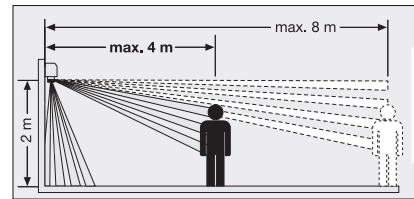
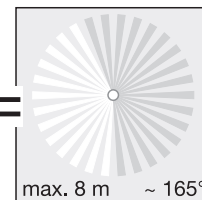
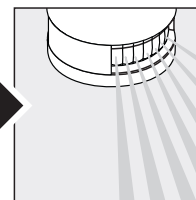
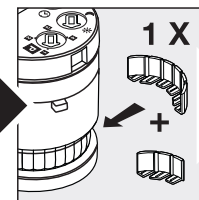
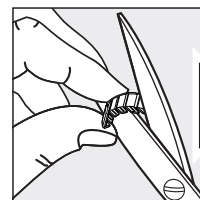
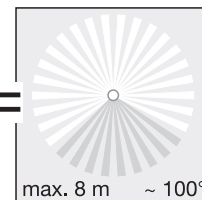
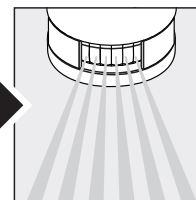
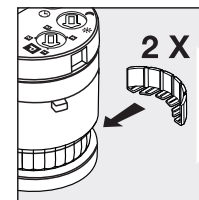
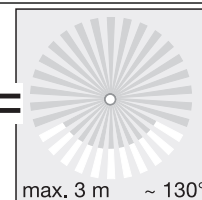
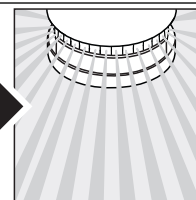
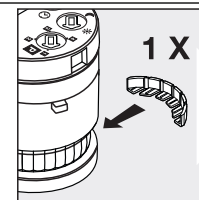
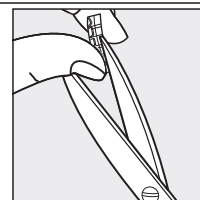
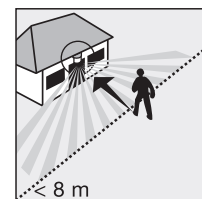
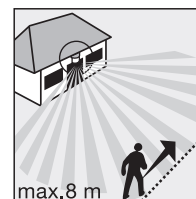
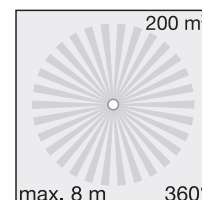
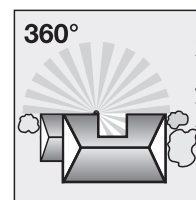
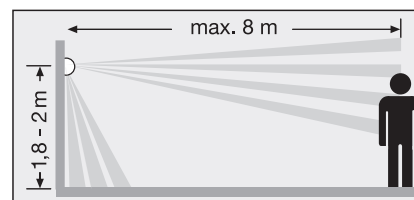
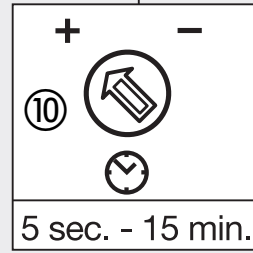
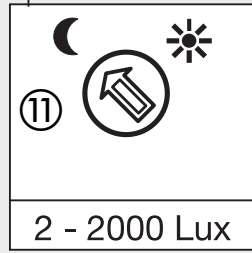
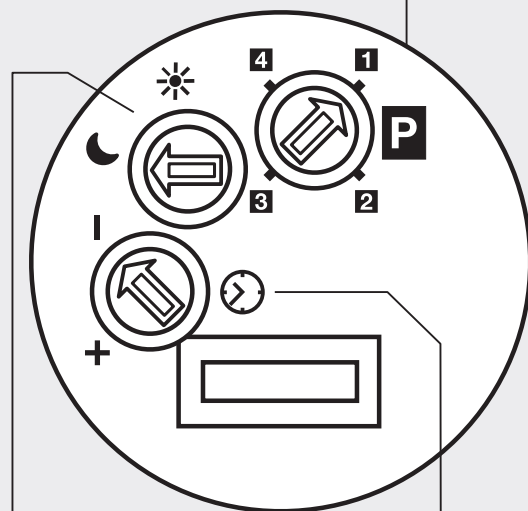
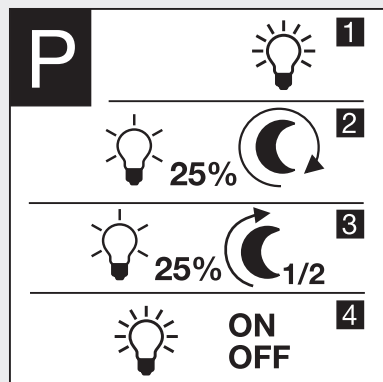
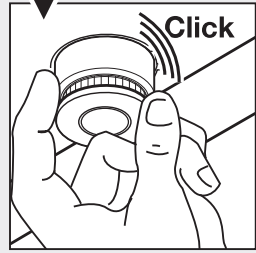
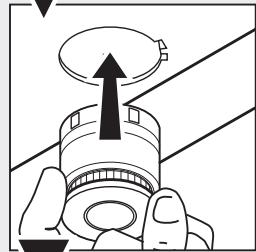
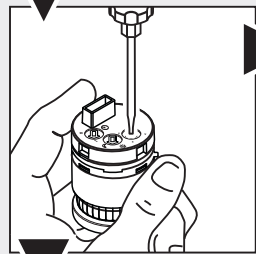
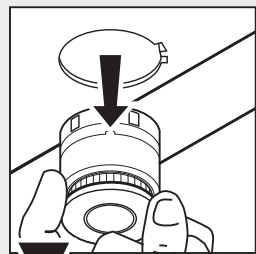
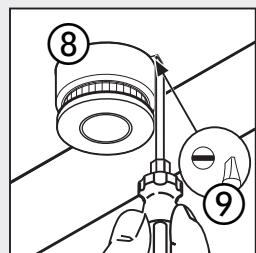
Information  
**L 690LED / L 691LED**

# L 690 LED / L 691 LED



# L 690 LED / L 691 LED





## GB Installation instructions

### Dear Customer,

Congratulations on purchasing your new STEINEL SensorLight and thank you for the confidence you have shown in us. You have chosen a high-quality product that has been manufactured, tested and packed with the greatest care.

Please familiarise yourself with these instructions before attempting to install the SensorLight because prolonged reliable and trouble-free operation will only be ensured if it is fitted properly. We hope your new STEINEL SensorLight will bring you lasting pleasure.

### System components

- |   |   |
|---|---|
| ① Light diffuser                                      | ⑨ Engagement lug for removing sensor unit |
| ② Locking screw                                       | ⑩ Time setting                            |
| ③ Light enclosure / wall mount                        | ⑪ Twilight setting                        |
| ④ Cable grip  | ⑫ Programme setting                       |
| ⑤ Sealing plug  | ⑬ Principle                               |
| ⑥ Mains connection, concealed wiring                  | ⑭ Adjusting the detection zone            |
| ⑦ Mains connection, surface wiring                    | ⑮ Manual override                         |
| ⑧ Sensor unit (removes for ease of setting functions) | ⑯ Connecting terminal E                   |

### Principle ⑬

The integrated high-performance infrared sensor is equipped with a double 360° sensor that detects the invisible heat emitted by moving objects (persons, animals etc.).

The heat detected in this way is converted electronically into a signal that switches the light ON automatically. Heat is not detected through obstacles, such as walls or panes of glass. Heat radiation of this type will, therefore, not trigger the sensor. The unit achieves a coverage angle of 360°

with an aperture angle of 90°. A sneak-by guard ensures coverage below the sensor.

**Important:** The most reliable way of detecting motion is to install the SensorLight with the sensor aimed across the direction in which a person would walk and by ensuring that no obstacles (such as trees and walls, for example) obstruct the line of sensor vision. Reach is limited when walking directly towards the light.

### ! Safety warnings

- Disconnect the power supply before attempting any work on the unit.
- During installation, the electrical wiring you are connecting must be dead. Therefore, switch off the power first and use a voltage tester to make sure the wiring is off circuit.
- Installing the SensorLight involves work on the mains voltage supply. This work must therefore be carried out professionally in accordance with the applicable national wiring regulations and electrical operating conditions.  
(D) - VDE 0100, (A) - ÖVE/ÖNORM E8001-1, (CH) - SEV 1000)

### Installation

The site of installation should be at least 50 cm away from another light because heat radiated from it may activate the system. To obtain the specified reach of 8 m, the sensor should be installed at a height of approx. 1.8 – 2 m.

#### Connecting the mains supply lead (see illustration)

The mains lead consists of a 3 phase cable.

**L** = phase (usually black, brown or grey)

**N** = neutral conductor (usually blue)

**PE** = protective earth conductor (green/yellow) ⊕

If you are in any doubt, identify the conductors using a voltage tester; then disconnect from the power supply again. Phase (**L**), neutral conductor (**N**) are connected to the terminal block. The protective earth conductor can be connected to terminal E for wiring through to other loads ⑯.

**Note:** A mains switch for switching the unit ON and OFF may of course be installed in the mains supply lead. A mains switch is required for the manual override function (see Manual override function) ⑮.

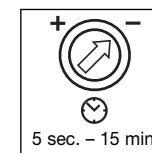
**Note:** The light must only be connected to the mains power once it has been fully assembled.

### Functions ⑩, ⑪, ⑫

The SensorLight can be put into service after it has been fully installed and connected to the mains power supply. Control dials are provided on the removable sensor unit for selecting time, twilight and programme settings. After

pressing engagement lug ⑨ with a flat-bladed screwdriver, the sensor unit can be removed for ease of setting. When the sensor is removed, the light automatically switches to constant output.

#### Switch-off delay (time setting) ⑩ (factory setting: 5 sec.)



Light ON time can be adjusted continuously from 5 sec. to 15 min.

Control dial set to - = shortest time (5 sec.)  
Control dial set to + = longest time (15 min.)

To set the detection zone, it is recommended to select the shortest time -.

#### Twilight setting (response threshold) ⑪ (factory setting: daylight operation 2000 lux)

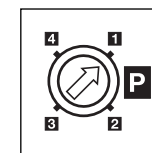


The sensor's response threshold can be infinitely varied from 2 – 2000 lux.

Control dial set to ☀ = daylight operation approx. 2000 lux.  
Control dial set to ☾ = night-time operation approx. 2 lux.

To adjust the detection zone in daylight, the control dial must be set to ☀ (daylight operation).

#### Programme setting ⑫ (factory setting: programme 1)



##### 1 Standard programme:

- Soft light start / no basic lighting level

##### 2 User-friendly programme:

- Soft light start + basic lighting level

##### 3 LED comfort economy programme:

- Soft light start + basic lighting level until the middle of the night \*

##### 4 Normal programme:

- No soft light start / no basic lighting level

\* Note on comfort economy programme 3:

The sensor light does not have any integrated clock. The middle of the night is only determined on the basis of the length of darkness phases. To work perfectly, therefore, it is important for the SensorLight to be permanently connected to the power supply during this period. During the first night (calibration phase) basic lighting level remains activated throughout the night. Values remain saved even in the event of mains power failure.

We recommend not to interrupt the power supply in programme 3. As the values are determined over several nights, the SensorLight should, in the event of any fault, be observed over several nights to ascertain whether the switch-off time moves towards midnight.

#### What is soft light start?

The SensorLight comes with a soft light start function. This means that when the light is switched ON, it does not go directly to maximum output but gradually

increases brightness to 100 % over the space of one second. Brightness is also gradually reduced when the light is switched OFF.

#### What is basic lighting level?

Basic lighting level provides continuous night-time illumination at approx. 25 % light output. The light only switches to maximum output of 100 % (for the time selected, see Switch-off delay ⑩) in response to movement in the detection zone. The light then returns to basic lighting level (approx. 25 %).

**Note:** Depending on the local power grid, the LED's may flicker slightly when dimmed. This is not a product defect and no reason for complaint.

## Adjusting the detection zone ⑭

The detection zone can be limited to suit requirements. The shrouds supplied with the light can be used to mask out as many lens segments as you wish. This prevents the light from being activated unintentionally, e.g. by cars, passers-by etc., and allows you to target danger

spots. The shrouds can be cut along the pre-grooved vertical divisions. Then you simply clip them onto the lens.

## Manual override function ⑮

If a mains switch is installed in the mains supply lead, the light is capable of the following functions in addition to the simple ON/OFF function:

### Sensor operation

#### 1) Switch light ON (when light is OFF):

Turn switch OFF and ON once.

Light stays ON for the period selected.

#### 2) Switch light OFF (when light is ON):

Turn switch OFF and ON once.

The light goes out or switches over to sensor mode.

### Manual override

#### 1) Activate manual override:

Turn switch OFF and ON twice. The light is set to stay ON for 4 hours (red LED lights up behind lens). Then it returns automatically to sensor mode (red LED off).

#### 2) Deactivate manual override:

Turn switch OFF and ON once. The light goes out or switches over to sensor mode.

### Important:

The switch should be actuated in rapid succession (in the 0.5 – 1 sec. range).

## Technical specifications

Dimensions (H x W x D):	291 x 291 x 104 mm (L 690 LED) 291 x 291 x 126 mm (L 691 LED)
Mains voltage:	230 – 240 V/50 Hz
Output:	16 W Power LEDs 320 lumens / 20 lumens/W
Colour temperature:	3200 kelvin (warm white)
LED life expectancy:	50.000 hours
Angle of coverage:	360° with sneak-by guard
Detection reach:	8 m all round
Twilight setting:	2 – 2000 lux
Time setting:	5 sec. – 15 min.
Basic lighting level:	0 or 25%, soft light start
Manual override:	4 hours, switchable
IP rating:	IP 44
Protection class:	II
Type of material:	Aluminium base, glass shade or plastic shade (PMMA)
Temperature range:	-20 °C to +40 °C

## Operation / Maintenance

The SensorLight is suitable for switching light ON automatically. Weather conditions may affect the way the SensorLight functions. Strong gusts of wind, snow, rain or hail may cause the light to come ON when it is not

wanted because the sensor is unable to distinguish sudden changes of temperature from sources of heat. The detector lens may be cleaned with a damp cloth if it gets dirty (do not use cleaning agents).

## CE Declaration of conformity

This product complies with  
- Low Voltage Directive 2006/95/EC  
- EMC Directive 2004/108/EC

- RoHS Directive 2011/65/EC  
- WEEE Directive 2012/19/EC

## Troubleshooting

Malfunction	Cause	Remedy
SensorLight without power	<ul style="list-style-type: none"> <li>■ Fuse faulty, not switched ON, break in wiring</li> <li>■ Short circuit</li> </ul>	<ul style="list-style-type: none"> <li>■ Fit new fuse; switch ON mains switch; check wiring with voltage tester</li> <li>■ Check connections</li> </ul>
SensorLight will not switch ON	<ul style="list-style-type: none"> <li>■ Twilight control set to night-time during daytime operation</li> <li>■ Power switch OFF</li> <li>■ Fuse faulty</li> <li>■ Detection zone not properly targeted</li> <li>■ Internal electrical fuse has been activated (red LED flashing rapidly)</li> <li>■ Mains terminal not connected properly</li> </ul>	<ul style="list-style-type: none"> <li>■ Re-adjust (control ⑪)</li> <li>■ Switch ON</li> <li>■ New fuse, check connection if necessary</li> <li>■ Re-adjust</li> <li>■ Switch SensorLight OFF and back ON again after 5 sec.</li> <li>■ Firmly press terminal together</li> </ul>
SensorLight will not switch OFF	<ul style="list-style-type: none"> <li>■ Continued movement within the detection zone</li> <li>■ Sensor unit is not properly engaged</li> </ul>	<ul style="list-style-type: none"> <li>■ Check detection zone and re-adjust if necessary</li> <li>■ Lightly press sensor unit to clip it into place</li> </ul>
Basic lighting level does not go out at about midnight as desired	<ul style="list-style-type: none"> <li>■ External light source (e.g. other motion detector or light) inactivating the SensorLight</li> </ul>	<ul style="list-style-type: none"> <li>■ Shade SensorLight from extraneous light, observe SensorLight for several days as it takes time to return to the correct value</li> </ul>
SensorLight will not switch OFF completely	<ul style="list-style-type: none"> <li>■ Basic lighting level selected</li> </ul>	<ul style="list-style-type: none"> <li>■ Turn programme selector dial to 1</li> </ul>
SensorLight switching ON when it should not	<ul style="list-style-type: none"> <li>■ Wind is moving trees and bushes in the detection zone</li> <li>■ Cars in the street are being detected</li> <li>■ Sudden temperature change due to weather (wind, rain, snow) or air expelled from fans, open windows</li> </ul>	<ul style="list-style-type: none"> <li>■ Change detection zone</li> <li>■ Change detection zone</li> <li>■ Change detection zone, change site of installation</li> </ul>
Change in SensorLight reach	<ul style="list-style-type: none"> <li>■ Differing ambient temperatures</li> </ul>	<ul style="list-style-type: none"> <li>■ Use shrouds to define detection zone precisely</li> </ul>
Red LED flashing rapidly	<ul style="list-style-type: none"> <li>■ Internal fuse activated</li> </ul>	<ul style="list-style-type: none"> <li>■ Switch SensorLight OFF and back ON again after 5 sec.</li> </ul>
LEDs flickering	<ul style="list-style-type: none"> <li>■ Local power grid</li> </ul>	<ul style="list-style-type: none"> <li>■ see note on page 11</li> </ul>

## Declaration of Guarantee

All rights are based on our guarantee period. We guarantee that your STEINEL Professional sensor product will remain in perfect condition and proper working order for a period of 5 years. We guarantee that this product is free from material, manufacturing and design flaws. In addition, we guarantee that all electronic components and cables function in the proper manner and that all materials used and their surfaces are without defects.

### Making Claims

If you wish to make a claim, please send your product complete and carriage paid with the original receipt of purchase, which must show the date of purchase and product designation, either to your retailer or directly to us at STEINEL (UK) Limited, 25 Manasty Road, Axis Park, Orton Southgate, Peterborough, PE2 6UP.

For this reason, we recommend that you keep your receipt of purchase in a safe place until the guarantee period expires. STEINEL shall assume no liability for the costs or risks involved in returning a product.

For information on making claims under the terms of the guarantee, please go to [www.steinel-professional.de/garantie](http://www.steinel-professional.de/garantie)

If you have a guarantee claim or would like to ask any question regarding your product, you are welcome to call us at any time on our service hotline 01733 366700.

**FUNCTIONAL**  
**5 Year**  
**WARRANTY**