# (GB) Installation instructions

#### Dear Customer.

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

Please familiarise yourself with these instructions before attempting to install the sensor light because prolonged reliable and troublefree operation will only be ensured if it is fitted properly.

We hope your new Infrared Sensor will give you lasting satisfaction.

## **Principle**

The unit is equipped with pyro sensors that detect the invisible heat emitted from moving objects (people, animals etc.). The heat thus detected is electronically converted and switches ON connected consumers (e.g.

a light). No heat radiation is detected through obstacles such as walls or panes of glass for example and consequently no switching occurs.

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- During installation, the electrical wiring you are connecting must be dead. Therefore, switch off the power first and use a voltage tester to check that the power supply is disconnected.
- Installing the sensor involves work on the mains power supply. This work must therefore be carried out professionally in

accordance with applicable national wiring regulations and electrical operating conditions. (@-VDE 0100. @-ÖVE/ÖNORM E 8001-1, @-SEV 1000)

- Only use genuine replacement parts.
- Repairs may only be carried out by specialist workshops.

#### Installation

The site of installation should be at least 50 cm away from another light because heat radiated from it may activate the system. In order to achieve optimum detection, the sensor must be installed tangentially to the walking direction.

An optional corner wall mount is available for installing the sensor on external corners. (see Accessories on p. 11).

The mains supply lead is a 3-core cable (max. conductor Ø 15 - 19 mm):

- = phase (usually black, brown or grey)
- = neutral conductor
- PE = protective-earth conductor (1)

If the rubber seal is damaged, the cable entry openings must be sealed with an M 16 or M 20 double seal cable gland.

A condensation water drainage hole is outlined in the housing. This can be opened for wall installation.

Wall mount @ must be renewed if any subsequent change is made to wiring run.

## System components

- Surface-mounting adapter
- (2) Sealing plug ③ Film shroud
- (4) Lens enclosure
- (5) Condensation water drainage hole
- 6 Wall mount / sensor unit (7) Corner wall mount (optional)

- (8) Plug-in terminals
- (9) Locking screw
- (iii) Light-level setting (ii) Time setting
- (12) Reach setting
- Mains connection, concealed wiring Mains connection, surface wiring

# Connection examples

- Light without existing neutral conductor Il Light fitted with a neutral conductor
- III Connection by means of two-circuit single-interruption switch for manual and automatic operation
- IV Connection by means of two-way switch for manual override and automatic operation

Setting I: Automatic operation Position II: Manual operation

Light ON permanently

Note: The system cannot be switched OFF, it is only possible to select operation at setting I or II.

- a) Loads, lighting of 2000 W max. (see Technical specifications)
- b) Sensor connection terminals
- Indoor switch
- d) Indoor series switch, manual, automatic
- e) Indoor two-way switch, automatic operation, manual override

Technical specification	าร
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Dimensions (H x W x D):	74 x 114 x 128 mm		
Output:			
<b>☆</b>	Incandescent lamps, 2000 W max. at 230 V $^{*1)}$ Incandescent lamps, 1200 W max. at 120 V $^{*1)}$		
=====	Fluorescent tube, 1000 VA max. at 230 V (cos $\phi$ = 0.5) Fluorescent tube, 500 VA max. at 120 V (cos $\phi$ = 0.5)		
Max. starting current	800 A / 200 μs max.		
	Electronic ballast * <sup>2</sup> : 30 x (1 x 18 W), 25 x (2 x 18 W) 25 x (1 x 36 W), 15 x (2 x 36 W) 20 x (1 x 58 W), 10 x (2 x 58 W)		
Power supply:	100 - 240 V AC 50/60 Hz		
Angle of coverage:	300° with 180° angle of aperture, as well as sneak-by guard for coverage directly below the sensor. Capability of masking out individual segments		
Reach:	Adjustable in 3 directions independently from one another by control dial, (2 – 20 m max., temperature-stabilised)		
Sensor technology:	4 sensors, 6 levels for long-distance detection and 5 for sneak-by guard, 1360 switching zones		
Time setting:	5 sec 15 min., pulse mode (approx. 2 sec.)		
Twilight setting:	2 – 2000 lux		
Manual override:	selectable (4 hrs.) / (by remote control only)		
Permanently OFF:	selectable (6 hrs.) / (by remote control only)		
IP rating	IP 54 through 2-component injection mould technology		
Temperature range:	- 20 °C to + 50 °C		
*1) + (***			

<sup>&</sup>lt;sup>\*2)</sup> Fluorescent lamps, low-energy lamps, LED lights with electronic ballast (total capacity of all ballasts connected below the level stated).

## Functions on the unit

The system can be put into operation once the mains power has been connected and the unit is closed. The sensor first goes through a calibration cycle (40 - 50 sec.) (LED flashes once a second).

Several settings can then be made directly on the sensor or by remote control (see Remote control).



#### Twilight setting (response threshold) (10) (Factory setting: daylight operation 2000 lux)

The sensor's response threshold can be set to between approx. 2 lux and 2000 lux.

#### Note:

The desired twilight value can also be memorised by remote control.



## Time setting (switch OFF delay) (1)

(Factory setting: approx. 10 sec.)

5 sec. - 15 min.

nected light to stay ON for can be infinitely adjusted from approx. 5 sec. to a maximum of 15 min

The time you wish the con-

#### Pulse mode:

Set the control dial to "\Pi" the unit is in pulse mode, i.e. the output is switched ON for approx. 2 sec. (e.g. for staircase lighting timer). Afterwards the sensor does not react to movement for approx. 8 sec.



#### Reach setting (2) (Factory setting: max. reach)

Setting, Mounting height		Stan- dard		
control dial	1.8 m	2.5 m	3 m	5 m
2	2 m	2 m	3 m	4 m
4	4 m	4 m	7 m	12 m
8	8 m	7 m	12 m	>20 m
12	13 m	12 m	>20 m	>20 m
16	19 m	16 m	>20 m	_ 1)
max	>20 m	>20 m	_ 1)	_ 1)

1) Not recommended, limited detection

Reach can be adjusted in 3 directions by 3 control dials (through 100° in each direction and independently of each another). The table shows reaches at different mounting heights for tangential walking direction. The values apply on flat terrain at a temperature of 20° C.

#### Film shrouds (3)

If the independent settings of the 3 sensors are not sufficient, the detection zone can restricted further by fitting film shrouds C, D, E (see Fig.). Film shrouds A + B under the sensor help to prevent the detection of small animals. This, of course, takes the lenses out of action and in particular results in loss of the sneak-by quard.

Note: The remote control does not work when using film shroud A (see Fig. (3)).

Advice: Apply a solution of water and detergent to the lens before fitting the film shroud. This way, the film does not firmly stick on immediately and gives you time to make precision adjustments. Once the cleaner is dry, the film adheres.

#### Functions using the infrared remote control

Any number of sensIQ S units can be operated by remote control.

Note: Each sension has no more than one remote control. The remote control must be programmed when used for the first time. To do this, button I must be pressed within 10 min of switching on the power supply. This operation can be repeated as often as desired. The last remote control saved always applies.

The following special functions are presented

as follows:

Holiday function: LED rapidly flashes 3x every 5 sec. Manual override: LED permanently ON Permanently OFF: LED flashes every 2 sec.

## Functions using infrared remote control RC 1

# Holiday function:

The holiday function gives the impression that someone is at home. Once the light-level threshold is reached, the connected load is programmed to switch ON and OFF again after approx. 3 hours. Normal sensor mode remains.

LED indicator: rapidly flashes 3 x every 5 sec.



# (2) Permanent light OFF:

Pressing this button switches the connected load OFF for 6 hours. After this period, the sensor returns to sensor mode automatically.

LED indicator: permanently ON



#### Reset function:

Pressing this button once guits the holiday. manual override and permanent OFF functions. The previously set values apply again.



#### Manual override:

Pressing this button switches the connected load ON for 4 hours. After this period, the sensor returns to sensor mode automatically. LED indicator: permanently ON.



#### Twilight setting by the potentiometer on the device:

Pressing this button reactivates the light level set on the sensor. As soon as you change the light-level setting directly on the sensor, this value takes effect. Any adjustments of the remote control are ineffective.



## 6 Twilight setting by memory button:

This button must be pressed at the level of light at which you want the sensor to respond to movement from now on. The current twilight value is saved

Troubleshooting		
Malfunction	Cause	Remedy
Sensor without power	■ Fuse has blown; not switched ON; break in wiring ■ Short circuit	■ New fuse, turn on power switch, check wiring with voltage tester ■ Check connections
Sensor will not switch ON	■ Twilight setting in night-time mode during daytime operation ■ Bulb faulty ■ Mains power switch OFF ■ Fuse faulty ■ Detection zone not correctly adjusted	■ Adjust setting ■ Change bulb ■ Switch ON ■ Replace fuse, check connection if necessary ■ Re-adjust
Sensor will not switch OFF	■ Continued movement within the detection zone ■ Light is in detection zone and keeps switching ON as a result of temperature change ■ Light being operated is in the manual override mode (LED ON)	Check zone and readjust if necessary or fit shrouds Adjust detection zone or fit shrouds  Deactivate manual override
Sensor keeps switching ON/OFF	■ Light being operated in the detection zone ■ Animals moving in detection zone	■ Adjust detection zone or fit shrouds, increase distance adjust zone, or apply shrouds
Sensor responds when it should not	■ Wind is moving trees and bushes in the detection zone ■ Cars in the street are detected ■ Sunlight is shining on the lens ■ Sudden temperature changes due to weather (wind, rain, snow) or air expelled from fans, open windows	■ Change zone ■ Change zone ■ Mount sensor in a protected place or change zone ■ Adjust detection zone or install in a different place
Change in sensor's reach	■ Differing ambient temperatures	■ Adjust reach by reach controller (®), if necessary applying film shrouds (1)
Detector not responding to remote control	■ Remote control not programmed	■ Disconnect sensor from the power supply for approx. 5 sec. Switch on the voltage again and press the button on the remote control within 10 min.

#### Operation/Maintenance

The infrared sensor can be used for switching light ON and OFF automatically. The unit is not suitable for burglar alarm systems as it is not tamperproof in the manner prescribed for such systems. Weather conditions may affect the way the motion detector works. 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).

#### Accessories

Corner wall mount:

Black: 4007841 608828 White: 4007841 608835 Stainless steel: 4007841 608804

# C ← 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 2002/96/EC

## **Functional Warranty**

This Steinel product has been manufactured with the utmost care, tested for proper operation and safety in accordance with applicable regulations and then subjected to random sample inspection. Steinel guarantees that it is in perfect condition and proper working order. The warranty period is 36 months and starts on the date of sale to the consumer. We will remedy defects caused by material flaws or manufacturing faults. The warranty will be met by repair or replacement of defective parts at our own discretion. The warranty does not cover damage to wear parts, nor does it cover damage or defects caused by improper treatment, maintenance or the use on non-genuine parts. Further consequential damage to other objects shall be excluded.

Claims under the warranty will only be accepted if the light is sent fully assembled and well-packed with a brief description of the fault, a receipt or invoice (date of purchase and dealer's stamp) to the appropriate Service Centre.

#### Repair service:

If defects occur outside the warranty period or are not covered by warranty, ask your nearest service station for the possibility of repair.



- 16 -