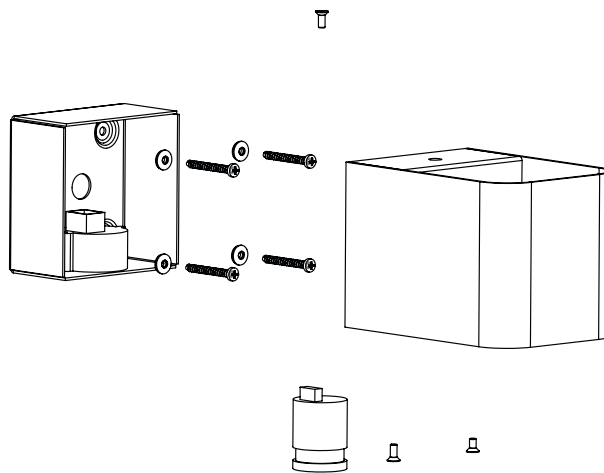


intro control

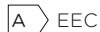
instructions for use

1. Check mains connection, if disconnected.
2. Conduct mains cable through cable entry point of the wall bracket. Conduct aperture in cable entry point in such a way that density is assured.
3. Attach wall bracket: Pay attention of position "top".
Use the washer gaskets with rubberized face showing to the wall bracket. At mounting holes which are not used arrange for density.
4. Establish protective conductor connection and conduct electrical junction.
5. Hustle light housing onto the wall bracket and assure it with countersunk head screws.



light technology:

IvyLight-technology
230V Power LED / 3000K
10 W/900 lm



technical information:

operating voltage 230V / 50Hz



protection class



safety class 1



Luminaire is suitable for mounting on normal inflammable fixing surfaces.



conformity mark

maintenance:

Disconnect the electrical installation.

Check gaskets and clean or replace them if necessary.

This luminaire contains built-in LED lamps. The lamps cannot be replaced in the luminaire.

care:

Regularly clean luminaire from dirt and deposits. Do not use a high pressure cleaner for cleaning.

Please note care instructions at www.IP44.de.

See service documents:

Care of stainless steel rustless or coated surfaces.

safety:

We point out that the electric connection of light fixtures has to be done by a certified installer.

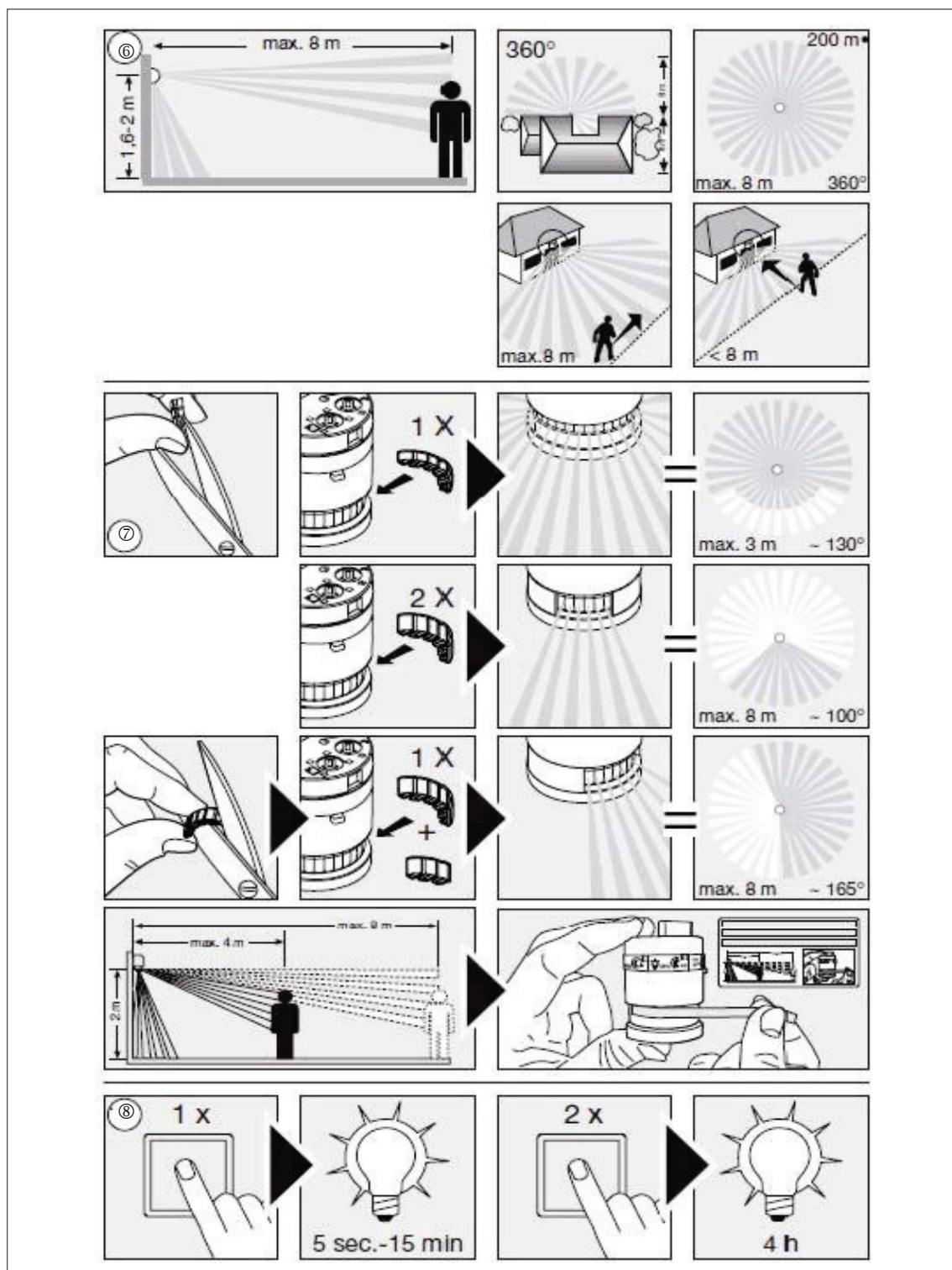
We assume no accountability for damages which are a result of non-appropriate mounting or application of the luminaire. Modifications on the luminaire will result in loss of warranty.

Please keep the instructions with the service documents!

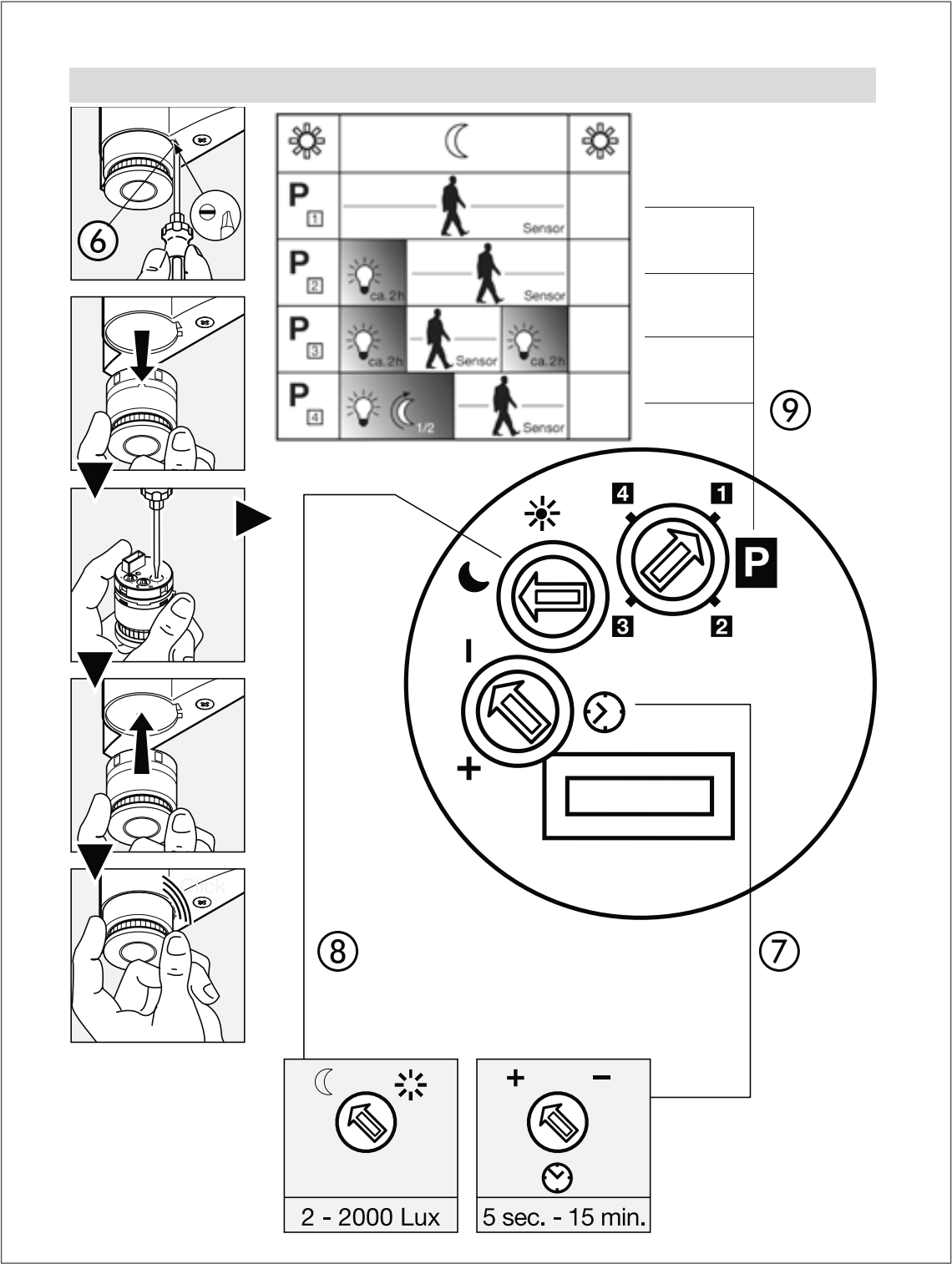
sensor

installation instructions

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sensor
installation instructions



sensor

installation instructions

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(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 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 sensor light since prolonged reliable and trouble-free operation will only be ensured if it is installed properly. We hope your new STEINEL infrared sensor will bring you lasting pleasure.

System components

- | | |
|---|--------------------------------|
| ① Mini sensor | ⑦ Time setting |
| ② Wall mount | ⑧ Twilight setting |
| ③ Designer trim | ⑨ Programme setting |
| ④ Connection, concealed wiring with load | ⑩ Principle |
| ⑤ Connection, exposed wiring with load | ⑪ Adjusting the detection zone |
| ⑥ Engagement lug for removing sensor unit | ⑫ Manual override |
| | ⑬ Sealing plug |

Principle ⑩

The IS NM 360 combines timeless, aesthetic design with practical additional benefits. There are 4 sensor and NightMatic combinations to choose from for automatically switching light "ON" and "OFF" just as you please.

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 movement is to install the infrared sensor so that it points across the direction in which a person would walk and by ensuring that no obstacles (such as trees, walls etc.) obstruct the line of vision. Reach is restricted when you walk straight towards the sensor.

sensor

installation instructions

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Safety warnings

- During installation, the electric power cable to be connected must be voltage-free. Therefore, switch "OFF" the power first and use a voltage tester to make sure the wiring is off circuit.
- Installing this infrared sensor involves work on the mains voltage supply. This work must therefore be carried out by a specialist in accordance with the applicable national wiring regulations and electrical operating conditions. (D-VDE 0100, A-ÖVE/ÖNORM E8001-1, CH-SEV 1000).
- Only use genuine replacement parts.
- Repairs must only be made by specialised workshops.

GB

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 no more than 2 m.

Connecting the mains and load supply lead (see illustration)

The mains supply lead is a 3-core cable.

- L** = phase conductor (usually black or brown)
- 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 switch "OFF" the power again. Connect phase conductor (**L**), neutral conductor (**N**) and protective earth conductor (**PE**) to the terminal block. Getting the cable connections crossed will produce a short circuit in the unit or in your fuse box. In this case, you must identify the individual cables and re-connect them.

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 ⑫).

Adjusting the detection zone ⑪

The detection zone can be limited to suit requirements. The shrouds supplied with the unit 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 and film covers can be cut along the pre-grooved divisions. Then you simply clip them onto the lens.

sensor

installation instructions

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Permanent light function ⑫

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 to sensor mode.

Manual override

1) Activate manual override:

Turn switch "OFF" and "ON" once. 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:

Switch "OFF" and "ON" once. The light goes out or switches to sensor mode.

Important:

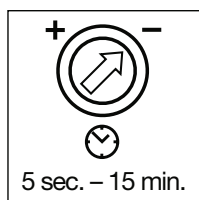
The switch should be actuated in rapid succession (in the 0.5 – 1 sec. range).

Functions ⑦, ⑧, ⑨

Once installed, the sensor can be put into operation. Control dials are provided on the sensor unit for selecting time, twilight and programme settings. After pressing the

engagement lug ⑥ with a flat-bladed screwdriver, the sensor unit can be removed for ease of setting. The IS NM 360 and connected light switch to permanent light "ON".

Switch-off delay (time setting) ⑦ (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.)

When setting the detection zone, it is recommended to select the shortest time –.

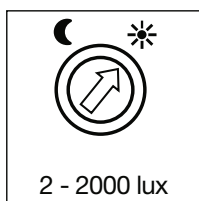
installation instructions

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Functions ⑦, ⑧, ⑨

**Twilight setting
(response threshold)**


⑧ (factory setting:
daylight operation
2000 lux)



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

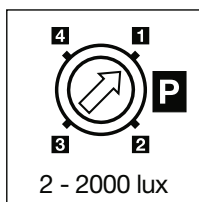
Control dial set to ☀ = daylight operation at approx. 2000 lux.

Control dial set to **C** = night-time operation at approx. 2 lux.

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

Programme setting

⑨ (factory setting:
programme 1)



Standard programme 1

- Sensor "ON" only in response to movement as from the selected light threshold setting

Comfort programme **2** - evening

- Sensor "ON" for approx. 2 hours as from the selected twilight setting, followed by normal sensor mode (4)








Comfort programme 3 - evening/morning

- Sensor "ON" for approx. 2 hours as from the selected twilight setting, followed by normal sensor mode and, once again, approx. 2 hours of constant light as from the twilight setting at dawn

Comfort programme 4 - midnight*

- Sensor "ON" to the middle of the night* as from the selected twilight setting, followed by standard programme



		
P 1		Sensor
P 2	 ca. 2h	Sensor
P 3	 ca. 2h	Sensor
P 4	 ca. 2h	Sensor

* Note on comfort programme **4** - midnight

The sensor contains no integrated clock, the middle of the night is determined by the length of the dark phases. To work perfectly, therefore, it is important for the connected load to be permanently supplied with power during this period. During the first night (calibration phase) basic brightness 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 **4**. As the values are determined over several nights, the connected load should, in the event of any fault, be observed over several nights to ascertain whether the switch-off time moves towards midnight.

sensor

installation instructions

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Troubleshooting

Malfunction	Cause	Remedy
Sensor without power	■ Fuse faulty, not switched "ON", break in wiring	■ Fit new fuse; switch "ON" mains switch; check wiring with voltage tester
	■ Short circuit	■ Check connections
Sensor will not switch "ON"	■ Twilight control set to night-time mode during daytime operation	■ Re-adjust (control ⑧)
	■ Bulb faulty	■ Change bulb
	■ Mains switch "OFF"	■ Switch "ON"
	■ Fuse faulty	■ Renew fuse, check connection if necessary
	■ Detection zone not properly targeted	■ Re-adjust
Sensor will not switch "OFF"	■ Internal electrical fuse has been activated (red LED flashing rapidly)	■ Switch sensor "OFF" and "ON" again after approx. 5 sec.
	■ Continued movement in detection zone	■ Check detection zone and re-adjust if necessary
Sensor does not switch "OFF" at around midnight	■ Sensor unit is not properly engaged	■ Lightly press sensor unit to clip it into place
	■ External light source (e.g. another motion detector or light) inactivating the sensor	■ Shade sensor from extraneous light, observe sensor for several days as it takes time to return to the correct value
Sensor reach has changed	■ Differing ambient temperatures	■ Use shrouds to define detection zone precisely
Red LED flashing rapidly	■ Internal fuse activated	■ Switch light "OFF" and "ON" again after 5 sec.

sensor

installation instructions

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Troubleshooting

Malfunction	Cause	Remedy
Sensor responds when it should not	■ Wind is moving trees and bushes in the detection zone	■ Change zone
	■ Cars in the street are being detected	■ Change zone
	■ Sudden change in temperature due to weather (wind, rain, snow) or air expelled from fans, open windows	■ Adjust detection zone or change site of installation

GB

Technical specifications

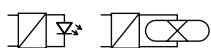
Output:



Filament bulbs, 1000 W max., operating on 230 V AC



Fluorescent lamp, 500 W max., at $\cos \varphi = 0.5$, inductive load at 230 V AC



6 x 58 W each max., $C \leq 132 \mu\text{F}$ operating on 230 V AC ^{*1)}

Voltage: 230 – 240 V, 50/60 Hz

Angle of coverage: 360° with 90° angle of aperture and sneak-by guard

Sensor reach: 8 m max. all round (mounted at a height of 1.75 – 2 m)

Time setting: 5 sec. – 15 min.

Twilight setting: 2 – 2000 lux

Programme setting: 4 function programmes geared to practical requirements

ON time: selectable (4 hours) provided Switch in mains power supply lead

Enclosure: IP 54

Temperature range: -20 °C to +50 °C

^{*1)} Fluorescent lamps, low-energy bulbs, LED lights with electronic ballast (total capacity of all connected ballasts below the value specified).