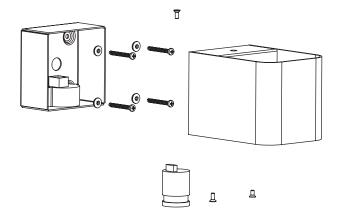
intro control

#### instructions for use

- 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.
- 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.
- 3. Establish protective conductor connection and conduct electrical junction.
- 4. Hustle light housing onto the wall bracket and assure it with countersunk head screws.
- 5. Select lux- and time-setting.
- 6. Click into place sensor head.



### light technology:

lvyLight-technology 230V Power LED / 3000K system performance: 11 W/360 Im



#### 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.

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

#### 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.

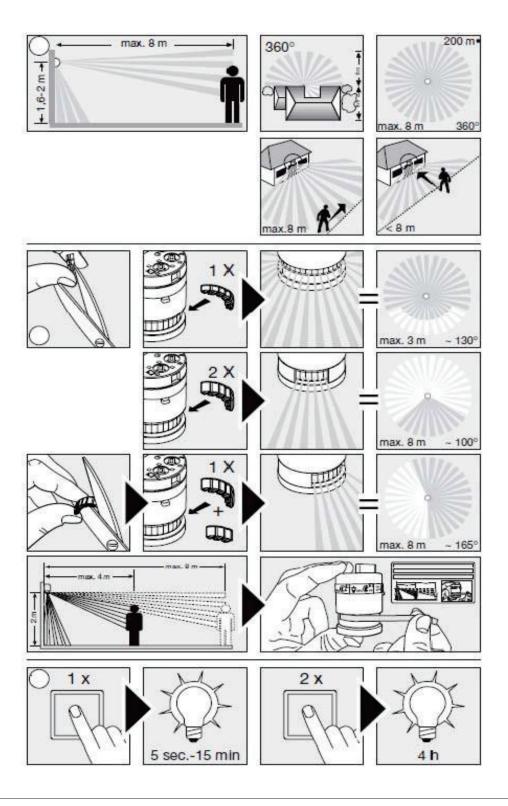
We assume no accountability for damages which are a result of non-appropriate mounting or application of the luminaire.

Modifications on the luminaire will result in loss of warranty.

Please keep the instructions with the service documents!

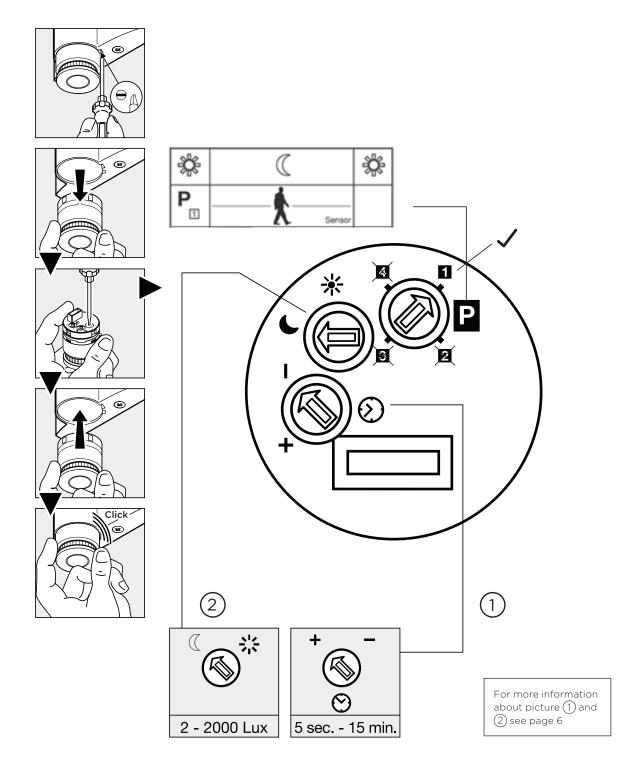
sensor 2/8

# installation instructions



sensor 3/8

# installation instructions



sensor 4/8

#### installation instructions

# **Principle**

The IS NM 360 combines timeless, aesthetic design with practical additional benefits.

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.

# 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 in- volves 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).
- 3. Only use genuine replacement parts.
- 4. Repairs must only be made by specialised 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. 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.

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

## Adjusting the detection zone

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 5/8

#### installation instructions

# Permanent light function

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 sen- sor 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).

sensor 6/8

#### installation instructions

## **Functions**

Once installed, the sensor can be put into operation. Control dials are provided on the sensor unit for selecting time, twilight and pro- gramme settings. After pressing the engagement lug 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)

(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 -.





#### Twilight setting (response threshold)

(factory setting: daylight operation 2000 lux)

The sensor's response threshold can be in nitely varied from 2 - 2000 lux.

- · Control dial set to = \* daylight opera- tion at approx. 2000 lux.
- Control dial set to = ( night-time operation at approx. 2 lux.

To adjust the detection zone in  $\frac{1}{K}$  day- light, the control dial must be set to (daylight operation).



#### Programme setting

(factory setting: programme 1)

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





sensor 7/8

installation instructions

# 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 ②)
	· light source faulty	· exchange factory-provided
	· Mains switch "OFF"	· Switch "ON"
	· Fuse faulty	· Renew fuse, check connection if necessary
	· Detection zone not properly targeted	· Re-adjust
	· Internal electri- cal fuse has been activated (red LED flashing rapidly)	· Switch sensor "OFF" and "ON" again after approx. 5 sec.
Sensor will not switch "OFF"	· Continued move- ment in detection zone	Check detection zone and re-adjust if necessary
	· Sensor unit is not properly engaged	· Lightly press sensor unit to clip it into place
Sensor does not switch "OFF" at around midnight	· 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 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

sensor 8/8

installation instructions

# **Technische Daten**

Output	Filament bulbs, 1000 W max., operating on 230 V AC Fluorescent lamp, 500 W max., at $\cos \Phi = 0.5$ , inductive load at 230 V AC 6 x 58 W each max., C $\leq$ 132 $\mu$ F operating on 230 V AC <sup>-1</sup>	
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	
ON time	selectable (4 hours) provided Switch in mains power supply lead	
Enclosure	IP54	
Temperature range:	-20°C to +50°C	

<sup>\*1</sup> Fluorescent lamps, low-energy bulbs, LED lights with electronic ballast (total capacity of all connected ballasts below the value specified).