

Installation and Operating Instruction for B.E.G. -Wall Occupancy detector Indoor 180N-R/2W-UK

1. Product information

- Wall-mounted occupancy detector
- 1 Relay switching channel
- Two-wire technology
- Integrated acoustic sensor

2. Operation

The motion detector switches the light automatically, depending on people being present (movements) and on ambient light. The light sensor integrated into the detector continually measures ambient light and compares it with the brightness threshold set in the detector. If ambient light is sufficient, the lighting is not switched on. If ambient light is below the brightness threshold set, movement in the room switches on the lighting. The lighting remains switched on until the detector no longer detects motion and the follow-up time is fully elapsed. Ambient brightness, i.e. the brightness threshold, is not evaluated during this period. As well as motion detection, the unit also has an adjustable acoustic sensor, which automatically extends the follow-up time when noises are detected. Motion detection is still required for switching on. The acoustic sensor remains active during the follow-up time and for 9 seconds after the lighting is switched off.

Unlike conventional motion detectors, the unit uses two-wire technology. This has the advantage of making it easy to replace a conventional light switch.

As there is no neutral wire in a two-wire installation, the unit uses an integrated battery, which continues to supply the sensor with power while the lighting is active. This battery charges in periods when the lighting is not active.

3. Safety information

Work on the 110-240V mains supply may only be carried out by qualified professionals or by instructed persons under the direction and supervision of qualified skilled electrical personnel in accordance with electrotechnical regulations.

Disconnect supply before installing!

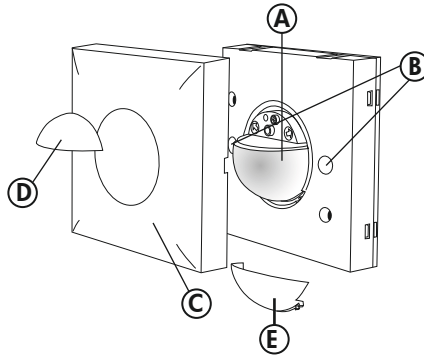
This device is not suitable for disconnection.

4. Prior to installation

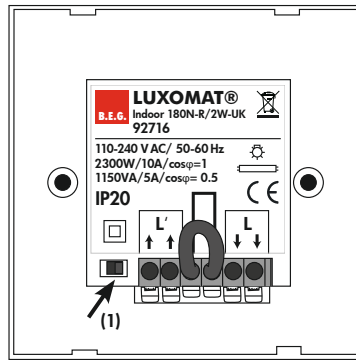
Before installation the following has to be considered:

- The LUXOMAT® Indoor 180 is designed for the installation in standard switch flushmount boxes.
- The recommended fixing height is 1.10 - 2.20m
- Parallel installation of units is allowed, depending on the load
- The connect luminaire load must not exceed
Ohmic load 3000W, 10A, $\cos\phi=1$
Inductive load 1500VA, 5A, $\cos\phi=0.5$
Electronic ballast 35x 50W 140 μ F max.
- There must be no obstacles in the view of the sensor, since infrared rays cannot penetrate solid materials.
- The LUXOMAT® Indoor 180 is an automatic light switch which cannot be used in intrusion applications.
- The minimum load must exceed 50W

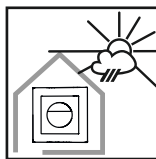
5. Mounting



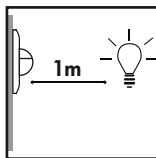
- (A) Sensor
- (B) Mounting holes
- (C) Front cover
- (D) Upper cover
- (E) Lower cover



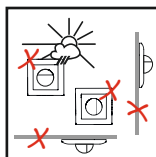
- ⚠ Note:**
- Turn on battery switch (1) before installing.
 - The unit is supplied as standard with a jumper wire installed. The jumper is required for normal operation. Do not remove it.



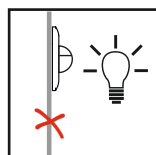
Install the unit in a protected position, for wall mounting at a height of 1m to 2.2m.



Install the unit in a protected position, for wall mounting at a height of 1m to 1.4m.



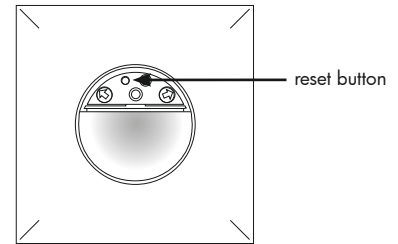
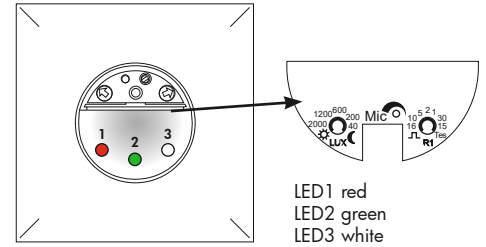
Inappropriate installation or use will interfere with trouble-free operation or lead to damage to the unit.



Suitable for installation in a 86x86x40 mm flush-mount box. The cable inlet should be vertical.

6. Hardware configuration

Position Potentiometer and LEDs



7. Self test cycle/Startup behavior

The product enters an initial 60-second self-test cycle, when the supply is first connected. During this time the device does not respond to movement and stays on. During this time, if the "follow-up time" potentiometer is set to Test, the function of the PIR sensors can be tested using the green (left PIR sensor) and white (right PIR sensor) LEDs. For this purpose, the LEDs blink briefly at every movement detected.

Using the red LED, the current brightness value can also be determined. The red LED shows a steady light when the value set on the "Lux" potentiometer is below the current measured brightness value.

8. Putting into operation / Settings

Brightness



The switch-on value for the light can be set at between 10 and 2000 Lux. Using the rotary control, the luminance set points can be set as desired.

Symbol ☾ : Night operation

Symbol ☼ : Day-/Night operation

Follow-up time „light“



Follow-up time can be set from 15 seconds to 16 minutes. In Pulse mode, noise detection is deactivated. The potentiometer for setting the acoustic sensor therefore has a different function in this mode. It specifies the duration of the pause following a pulse:

Potentiometer to minimum (right end stop)= 9 second pause

Potentiometer to 50% = 30 second pause

Potentiometer to maximum (left end stop) = 60 second pause

TEST symbol: Test mode, only affected by movement.

At every movement, the light switches ON for 2 seconds, then OFF for 2 seconds.

Acoustic sensor

Sensitivity of the acoustic sensor can be set steplessly with the potentiometer (left end stop = max. sensitivity, right end stop = acoustic sensor off). Acoustic sensor response is indicated by the green LED.



Battery charge

The following operating states can occur during setup:

Operating state A:

Battery has sufficient charge

In this case, the unit will work directly after activation of the battery switch and switch-on of the mains supply.

Operating state B:

The battery is empty and the lighting remains switched off

Blinking of LED 1 shows that the battery has insufficient charge and therefore the lighting cannot be switched on. In order to enable sensor operation, the unit switches to charging mode for approx. 2 hours. During this period, the connected lighting remains switched off. After charging mode ends, the unit automatically switches to normal mode.

Operating state C:

The light switches on despite a low battery level

This state can be recognised by the fact that the lighting remains on, but LEDs 1 and 2 do not blink. To reinstate normal sensor mode, it is necessary to remove the installed jumper wire. This interrupts the relay output and enables battery charging.

Attention! Before the jumper wire is removed, the mains supply must be turned off.

After the jumper wire has been removed, turn the mains supply back on for approx. 10 minutes, in order to charge the integrated battery.

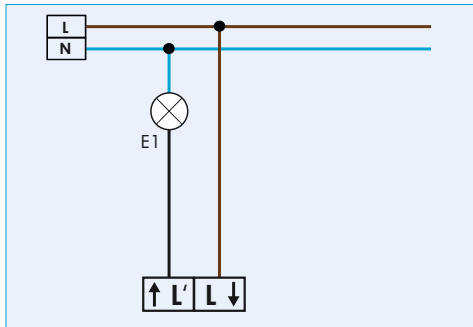
Attention! Before the jumper wire is replaced, the mains supply must be turned off.

Then the jumper wire must be replaced, so that the unit can be used normally. Lastly, turn on the mains supply, and the unit returns to normal mode (if not, please press the Reset button on the front of the unit).

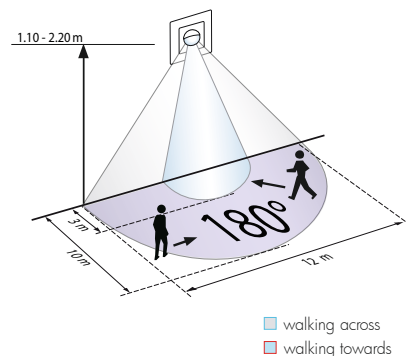
Note:

Whenever battery voltage falls below the predefined value for BATTERY LOW, the sensor switches the relay OFF and carries out a two-hour recharge. The red LED 1 will then blink quickly. During this time, the unit remains OFF and does not react to noise or movement. If no mains power is available, the battery will discharge further. After a certain point, the discharge protection system will activate and switch off the sensor completely.

9. Wiring diagrams

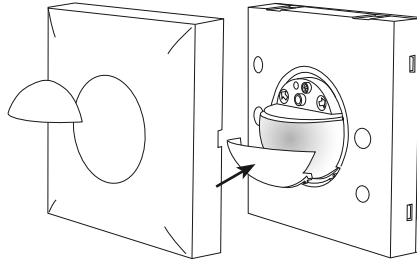


10. Range



- walking across
- walking towards

11. Exclude sources of interference



In order to blank off the detection area below the detector (e.g. for animals or small children), the clip-on cover included can be fitted.

12. Technical Data

Power supply:	110-240 VAC; 50/60 Hz
Battery part:	5 x NiMH/30AAAAH 1,2 V/200 mAh
Power consumption:	ca. 1W
Ambient temperature:	+5°C to +45°C
Degree of protection/class:	IP20 / II
Switching power/-contact:	2300 W, cos φ= 1 1150VA, cos φ= 0,5 μ-contact with pretravel tungsten contact impulse, 15 sec. to 16 min.
Follow-up time:	ca. 10 - 2000 Lux
Photo electric switch:	
Range of coverage	
Ø H 1,10 m / T = 18°C:	tangential 10 m / frontal 3 m
Area of coverage:	semicircular 180°
Dimensions:	H 87 x W 87 (with covering)

EU Declaration of conformity



This product respects the directives concerning

1. electromagnetic compatibility (2014/30/EU)
2. low voltage (2014/35/EU)
3. restriction of the use of certain hazardous substances in electrical and electronic equipment (2011/65/EU)

13. Article / Part nr. / Accessory

Type	UK
Indoor 180N-R/2W-UK	92716

14. LED-functional indicators

LED function display during initialisation + potentiometer in Test position	
Process	LED function indicators
Motion detection PIR left	Green flashes on each detected movement
Motion detection PIR right	White flashes on each detected movement
Low brightness	The red LED illuminates continuously when brightness falls below the brightness threshold set

LED function indicators during operation	
Process	LED function indicators
Motion detection	Red flashes on each detected movement
Too bright detected	White flashes
Noise detection	Green flashes on each detected noise
Low battery	Red flashes quickly

15. Simple instructions for charging the sensor

1. Before you start the process, make sure that the potentiometer that shows the time is not in test mode or in impulse mode (turn it to the middle).
2. Turn OFF 230 VAC mains supply and remove the black shunt, then reconnect 230VAC, without shunt installed.
3. Make sure the lights are off
4. Leave the current connected for 2 hours
5. After 2 hours, turn OFF 230 VAC mains supply and put back the black shunt, then reconnect 230 VAC and press the reset button

Wiring diagram showing how the suppressor can be installed

