

Installation and Operating Instruction for B.E.G. - Radarlamp HF-L1

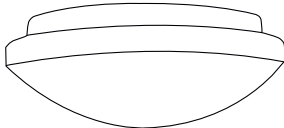
1. Safety information

! Work on the 110 - 240 V 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 to be used to isolate other equipment from the mains supply.

! The total number of switchable loads is limited due to high inrush currents of electronic ballasts and LED drivers. In case of a large number of connected loads please use an external contactor.



2a. Function

B.E.G. high-frequency motion detectors transmit and receive waves with a frequency of 5.8 GHz.

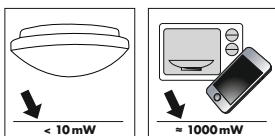
Based on the Doppler effect, the change in frequency of the waves reflected by a moving object are measured and the result is used to detect movement. The detection area depends on the size and speed of the moving object. Since high-frequency waves can pass through walls, when HF technology is used it is not always possible to clearly limit the detection area to one room. As a result, people in adjacent rooms may also be detected and activate the light.

Metal surfaces close to the installation location of the detector can lead to extremely strong reflections of the signal, which may prevent the HF detector from switching reliably and/or change the detection area.

Note: Since this functional principle can affect the detection quality, always check the suitability of this technology for your application.

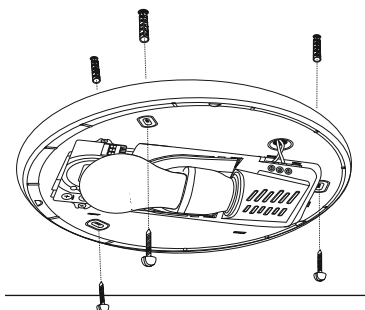
2b. Transmitter output

This is used in roughly the same frequency range as for W-LAN n. The high-frequency output of the HF sensor is approx. 10 mW - that is just 100 th of the transmission power of a mobile phone or microwave oven.



3. Installation

For device installation, the in-house mains fuse must be removed.



Open the lamp by lightly turning the glass anticlockwise. Lead the mains cable on the back of the lamp through the rubber bushing. Mark drill holes on the ceiling or wall. Drill suitable holes and push the plugs tightly into the holes. Screw on the lamp.

For wall mounting, please note: The lamp must be installed horizontally!

4. Putting into operation / Settings (Fig. 1 and 2)



Twilight setting (Rotary control dial C)

The chosen light response threshold can be infinitely varied from approx. 2 - 2000Lux.

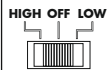
Symbol „Moon“ = dusk-to-dawn operation
Symbol „Sun“ = daylight operation



Time setting (Rotary control dial B)

The light can be set for a duration of min. - 15 minutes. Any movement detected before this time elapses will re-start the timer. There will be no twilight evaluation (daytime operation) for as long as the motion detector is switched on.

Note: After the light switches OFF, it takes approx. 1sec. before it is able to start detecting movement again.



Range/Sensitivity (Switch D, Rotary control dial A)

Range / sensitivity of the sensor can be reduced over switch D and potentiometer A.

Switch D = „LOW“: Range can be adjusted between approx. 0.4 - 8 m Ø.

Switch D = „HIGH“: Range can be adjusted between approx. 6 - 16 m Ø.

Switch D = „OFF“: Detector is switched off.

Note: We recommend to adjust the range starting at the maximum and then reducing it, if not time delay may occur while setting the range.

Test setting

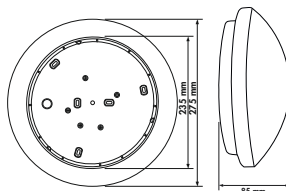
In order to adjust the detection range during the day, the twilight value must be set to day („sun“ symbol) and time should be set to the minimum.

5. Connections (Fig. 3)

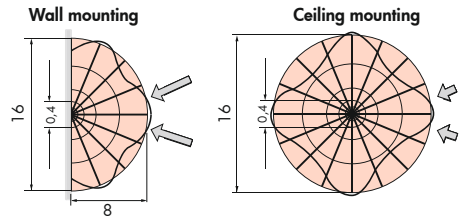
Connect power supply as indicated in the terminal connection:

Phase = L
Neutral conductor = N
geschaltete Phase = L'

6. Dimensions



7. Typical detection area [in m] (Mounting height = 2.50 m / Switch C = "HIGH")



The range depends on the size and speed of the object.

8. Technical data

Adjustments: manually by potentiometers
Power supply: 230V - ±10%
Detection area / Range: r = 0.2 to 8m
Wall mounting: Ø 0.4 to 16m
Ceiling mounting: IP40 / II / C E
Protection / class: -15°C to +30°C
Ambient temperature: glass
Diffuser: max. 23 W
Lamps:

Channel 1 (light control)

Switching power: 1200 W, cosφ = 1
600 W, cosφ = 0,5 μ
Power consumption: < 1 W
Time settings: 5 sec. - 15 min.
Photo electric switch: 2 - 2000 Lux
HF-transmitter consumption: 5.8GHz, < 10mW

Mounting:

wall or ceiling installation
Ø 275 mm x H 85 mm

Note: When taking the detector into operation or after each power failure, the motion detector will switch on for a duration of 3 seconds.

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)
 4. radio equipment (Radio Equipment Directive-RED) (2014/53/EU)



9. Article / Part nr.

Type	Part nr.
HF-L1 - Glass silk-matt	94440

10. Fault-finding/ Troubleshooting

Light not illuminated

Twilight-value not reconcilable with the given situation
Adjust twilight-value with regulating screw

Light illuminated constantly during darkness

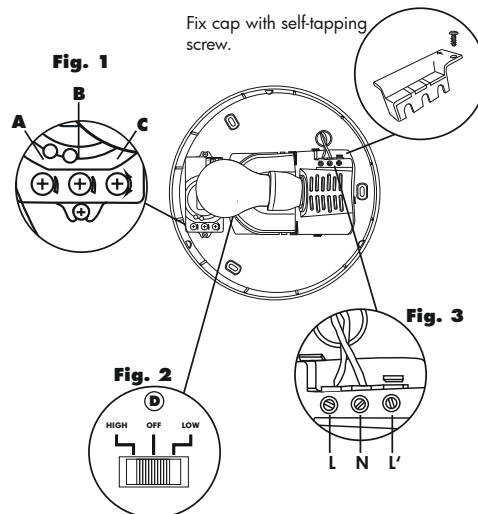
Constant movement activity in the area of coverage
If movements caused by sources of interference (animals, ventilation, etc.), remove from area of coverage
Reduce range/sensitivity with "SENS" regulating screw

Light illuminated constantly, also during the day

Twilight-value not reconcilable with the given situation
Adjust twilight-value with regulating screw
Check the installation location (see Section 2)

Light will not switch

Photo electric switch has not been reached.
Check bulb
Check connection
Check the installation location (see Section 2)



Rotary control dial:
A Range/Sensitivity (Sens)
B Time setting (TIME)
C Lux value (LUX)

