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SEBSON High Frequency Motion Detector Surface Mounted



Specifications

- **Operating Voltage:** 220-240V AC 50/60Hz
- **Maximum Power Consumption:** Max. 2000W for resistive loads, Max. 1000W for inductive loads
- **Protection Rating:** IP20 II
- **Radar Frequency:** 24 GHz CW radar

Thank you for choosing a product of SEBSON. Please read the instructions carefully and keep them for reference before starting up this product. A long and failure-free operation can only be guaranteed if the installation and start-up is done properly. Before starting up this product, please check for external damage. In case of visible external damage, we immediately advise against the start-up of this product! Please remove all packaging material of this product before the first start-up and check the content for completeness!

Intended use

With this active motion detector, devices such as a connected light can be controlled depending on the presence of people and the ambient brightness. The highly sensitive sensor technology makes it possible to recognise the smallest movements of a person, such as the up and down movement of the chest (breathing movement). The motion detector is therefore particularly suitable for rooms such as offices or bathrooms where people do not move much.

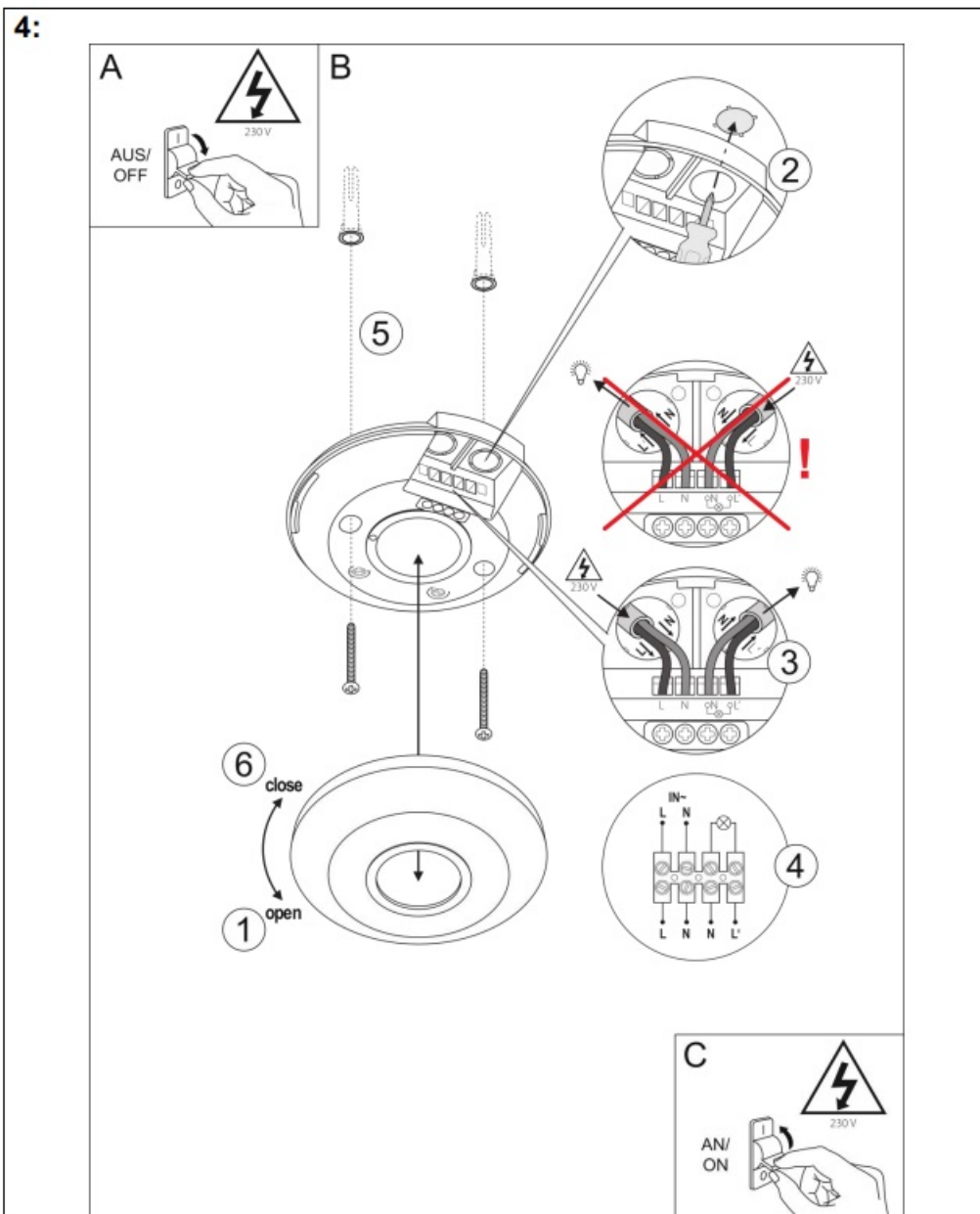
Scope of delivery

- 1 motion detector
- Screws for fixing (2 pieces)
- Dowels Ø 6mm (2 pieces)

General safety information

- **Danger:** The installation of this product may be done only by a qualified person according to the valid regulations for electrical installation!
- **Danger:** If the power cables are damaged or come into contact with water, immediately disconnect the product from the power supply and ensure that it cannot be switched on again!
- **Danger of suffocation:** Please keep this product away from children and animals. The packaging contains small parts that can be swallowed!
- **Caution:** Avoid overloading the device, an overload can damage the device or cause a short circuit! Therefore, please note the maximum power consumption in the technical data!
- The remodeling of this product is not allowed! The proper and safe functioning of the device can no longer be guaranteed if it is modified! In addition, this will invalidate the warranty claim!
- The manufacturer does not accept any responsibility for injuries or damage resulting from improper use of this product!
- Any other use than the description may result in damage to the product. So the dangers are such as electric shock, short circuit, fire etc.
- We reserve the right to make changes to the product, the packaging or the operating instructions as well as printing errors.
- This product is only suited for indoor use and not for outdoor use!
- Protect the product from external damage, heavy dirt, moisture and excessive heat!
- In order that the warranty claim does not expire, please use only the supplied items. Repairs may only be done by an expert and only by using original spare parts!
- In commercial institutions, the accident prevention regulations of the professional trade association for electrical equipment and facilities must be adhered to.

Instructions for installation



Danger: Before installing please make sure that the circuit is interrupted! For installation, the work on the mains voltage is required. Please remove the associated mains fuse or deactivate the switch fuse! Check by using a voltage tester if the line is de-energized. Make sure that the current circuit will not closed during the installation!

Danger: The installation of this product may be done only by a qualified person according the valid regulations for electrical installation!

Attention: Before drilling the mounting holes, make sure that there are no gas, electricity or water pipes at the drilling location that could be damaged by this!

- Please observe the safety instructions and technical data before installing this product!

Note on installation

- L: Live wire (black or brown)
- N: Neutral conductor (blue or grey)
- This device is only suitable for ceiling mounting.
- When mounting the unit on the ceiling, mount it at least 1m away from the wall. If the wall is very thin, a greater

distance is recommended. The sensor could also detect movements behind this wall.

- Observe a minimum distance of 2 meters when commissioning several motion detectors.
- For optimum range, select the mounting height recommended in the “Technical Data”.
- 2 units in a parallel connection (see Fig.3a)
- Permanent switch-on of a connected device with an additional switch connected in parallel. (see Fig.3b).

The following environments or surfaces are not suitable for mounting, as they can impair the function of the motion sensor:

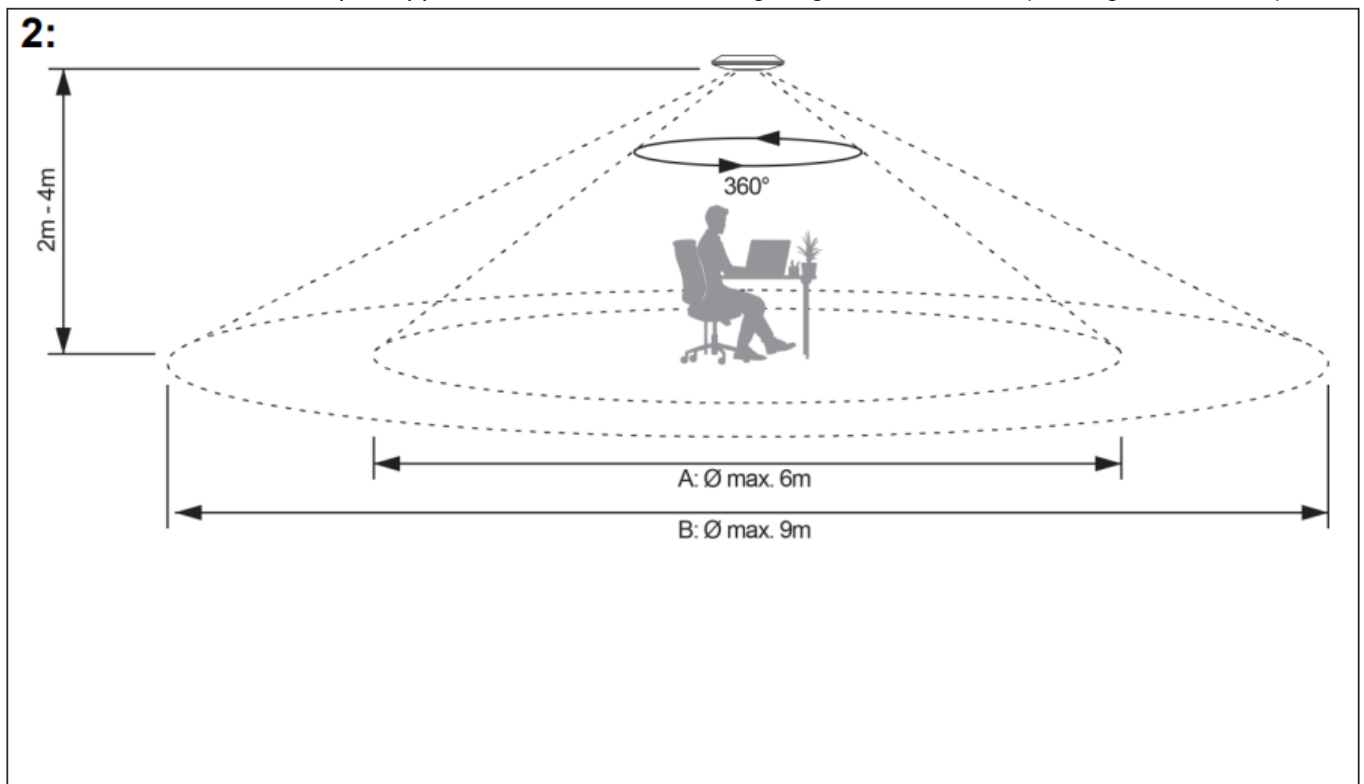
- Metal surfaces, for example metal door frames or metal-coated walls
- Metal contained in masonry e.g. steel girders
- In the immediate vicinity of electronic devices such as computers, monitors, etc.
- Water drainage or supply pipes can trigger a signal when water flows.

Function of the motion sensor

This product is an active motion detector. It generates high-frequency electromagnetic waves (24GHz) and then receives their echo. The motion detector thus reacts to changes in the waves reflected back from objects, regardless of temperature. As a result, the smallest movements that occur in the detection range of the product can be detected. The integrated microprocessor triggers the command “Switch on light” almost without delay. This enables the perception of movements through doors, glass panes or thin walls. Note: The radiation emitted by the sensor has a power of about 0.2mW. Thus the power of the radiation is about 1/ 5,000th of that of a mobile phone. The product can therefore be used without any risk.

Detection area (Fig 2)

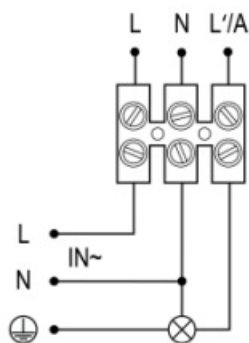
Both movements at rest, e.g. during sedentary activities (breathing movements), and active movements are detected within a radius of up to approx. 6 metres at a mounting height of 2-4 metres (see Fig. 2: Variant A).



Outside this range, the sensor only detects movements of people who are actively moving within the detection range (see Fig. 2: Variant B).

Connection of the protective conductor (PE)

When connecting a lamp with a protective conductor contact, the protective conductor must be bypassed from the supply line to the lamp with the aid of an additional terminal in the in-wall socket.

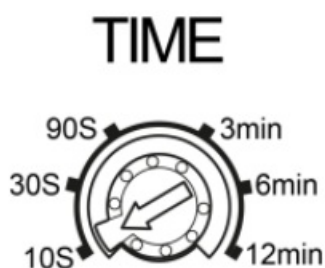


Sensitivity when switching (with regard to the ambient brightness)

- This setting control can be used to regulate the switch-on sensitivity of this unit depending on the ambient brightness (between 3 and 2,000 LUX).

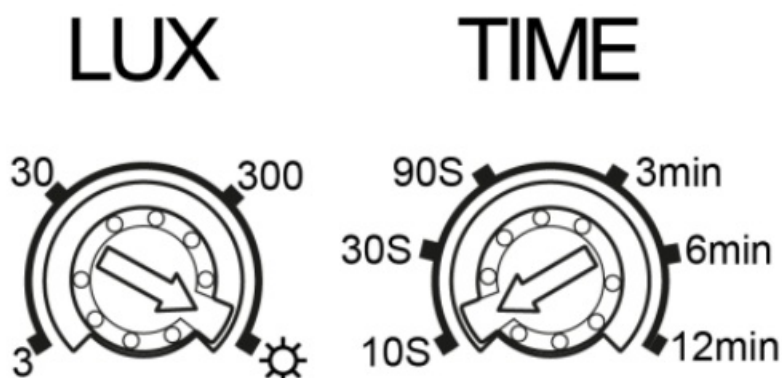


Time setting (switching off delay)



The duration of the operating time can be set continuously from approx. 10s to 12min. The timer is restarted if a movement from the sensor is detected before the set time has elapsed.

Function test



To set the detection range and the daylight test, turn the knobs to the positions shown. The motion detector is activated after a warm-up phase of approx. 30s. If no further movement takes place in the sensing area of the

sensor, the sensor switches off.

Technical Data

- Operating voltage: 220 -240V AC 50/60Hz
- Maximum power consumption:
 - Max. 2000W
 - Max. 1000W



- Electrical protection: IP20
- Protection class: II
- Frequency: 24GHz CW radar
- Transmission power: <10mW
- Detection moving speed: 0,1-1,5m/s
- Ambient temperature: -20° – +40°C
- Humidity: <93%

Possibilities of adjustments

- Detection area: 6-9m/ 360°
- Sensitivity when switching (with regard to the ambient brightness): < 3- 2,000LUX
- Time setting (switching off delay): Min. 10s +/- 3s – Max. 12min +/-1min

Information for private households (WEEE)

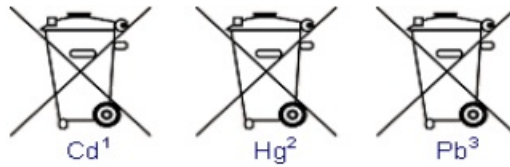
The Electrical and Electronic Equipment Act (WEEE) contains a large number of requirements for the handling of electrical and electronic equipment. The most important ones are summarised here.

Separate collection of waste equipment

Old, worn-out or defective electrical and electronic equipment is referred to as waste equipment. These devices must not be disposed of in the normal household waste or together with the residual waste. The devices should be transferred to special collection and return systems.

Batteries and rechargeable batteries as well as illuminating

As a rule, owners of WEEE shall separate spent batteries and accumulators that are not enclosed in the WEEE, as well as light sources that can be removed from the WEEE without causing damage, from the WEEE before handing it over to a collection point. This does not apply if WEEE is prepared for reuse with the participation of a public waste management authority. Batteries or rechargeable batteries that contain harmful substances are marked with the symbol of a crossed-out dustbin and must not be disposed of in household waste. Below the dustbin symbol is the chemical name of the pollutant – in the example below, “Cd” for cadmium. “Pb” stands for lead, “Hg” for mercury: If disposed of improperly, the substances contained in the batteries may cause hazards to health and the environment. The hazards are averted by the separate collection and proper disposal of used batteries.



Options for returning old appliances

Owners of WEEE from private households can hand it in free of charge at the collection points of the public waste management authorities or at the take-back points set up by manufacturers or distributors.

Data privacy notice

Old devices often contain sensitive personal data. This applies in particular to information and telecommunications technology devices such as computers and smartphones. In your own interest, please note that each end user is responsible for deleting the data on the end-of-life devices to be disposed of.

Meaning of the “crossed-out dustbin” symbol



- The symbol of a crossed-out dustbin regularly displayed on electrical and electronic equipment indicates that the respective device must be collected separately from unsorted municipal waste at the end of its service life.

Cleaning

Danger: Before starting to clean the product, interrupt the current circuit by switching off the circuit breaker or unscrewing the fuse! Use a slightly moistened cloth for cleaning. In order not to damage the product, it is essential to avoid water penetrating into the housing! Never clean the device under running water! Do not use a solvent-containing cleaner for cleaning.

Address

- SEBSON Sebastian Sonntag Walter-Behrendt-Str.10 44329 Dortmund Germany
- support@sebson.de
- VAT-Nº: GB179436663
- WEEE-Reg.-ID.: 500617

FAQs

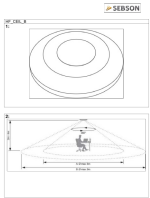
Q: How do I adjust the sensitivity of the motion sensor?

A: The sensitivity can be adjusted based on ambient light conditions. Refer to the user manual for detailed instructions on sensitivity adjustment.

Q: What is the maximum power consumption of the product?

A: The product can handle a maximum power consumption of 2000W for resistive loads and 1000W for inductive loads.

Documents / Resources



[SEBSON High Frequency Motion Detector Surface Mounted \[pdf\]](#) Instruction Manual
HF_CEIL_B, High Frequency Motion Detector Surface Mounted, Frequency Motion Detector Surface Mounted, Motion Detector Surface Mounted, Detector Surface Mounted, Surface Mounted

References

- **[User Manual](#)**

[Manuals+](#), **[Privacy Policy](#)** | **[@manuals.plus](#)** | **[YouTube](#)**

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