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› [SEBSON HF Motion Detector for Indoor Ceiling Surface Mounting \(Model 2\\_X\\_HF\\_CEIL\\_A\)](#)

## SEBSON 2\_X\_HF\_CEIL\_A

# SEBSON HF Motion Detector Instruction Manual

Model: 2\_X\_HF\_CEIL\_A | Brand: SEBSON



## 1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your SEBSON HF Motion Detector (Model 2\_X\_HF\_CEIL\_A). Please read this manual thoroughly before installation and use to ensure proper function and safety. Keep this manual for future reference.



Image 1.1: Front view of the SEBSON HF Motion Detector. This image shows the circular, white casing of the motion detector, designed for discreet ceiling surface mounting.

## 2. SAFETY INSTRUCTIONS

- Installation must be performed by a qualified electrician in accordance with national wiring regulations.
- Disconnect power before installation or any maintenance.
- Do not exceed the maximum load capacity: 800W for incandescent lamps, 300W for LED or other energy-

saving lamps.

- This device is designed for indoor use only (IP20 rating). Do not expose to moisture or extreme temperatures.
- Ensure the mounting surface is stable and can support the device.
- Keep out of reach of children.

### 3. PRODUCT OVERVIEW

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The SEBSON HF Motion Detector utilizes high-frequency (HF) technology to detect movement within its coverage area. It is designed for ceiling surface mounting and offers adjustable settings for optimal performance in various indoor environments.

#### Key Features:

- **High-Frequency Sensor:** Detects movement through non-metallic objects like thin walls or doors.
- **Wide Coverage:** 360° detection angle with a range of 2 to 16 meters.
- **Adjustable Settings:** Time delay (10 seconds to 12 minutes), sensitivity (detection range), and ambient light threshold (3-2000 lux).
- **LED Compatible:** Supports up to 300W for LED lamps and 800W for incandescent lamps.
- **Compact Design:** Circular, white casing with dimensions of Ø100x22mm.



2-16m/360°

LED jusqu'à 300W

IP20

10sec. - 12min.

3-2.000LUX

230V

Image 3.1: Overview of the motion detector highlighting its key specifications including detection range, LED compatibility, IP rating, time delay, lux range, and voltage.

## 4. SPECIFICATIONS

Brand	SEBSON
Model Number	2_X_HF_CEIL_A
Dimensions (Ø x H)	100 mm x 22 mm
Weight	280 grams
Color	White
Material	Plastic
Power Source	AC
Voltage	230 Volts

Max Load (Incandescent)	800 Watts
Max Load (LED/Energy-saving)	300 Watts
Detection Technology	High-Frequency (HF)
Detection Angle	360°
Detection Range	2 - 16 meters (adjustable)
Time Delay	10 seconds - 12 minutes (adjustable)
Ambient Light Setting (LUX)	3 - 2000 lux (adjustable)
Installation Type	Ceiling Surface Mount
IP Rating	IP20 (Indoor use only)

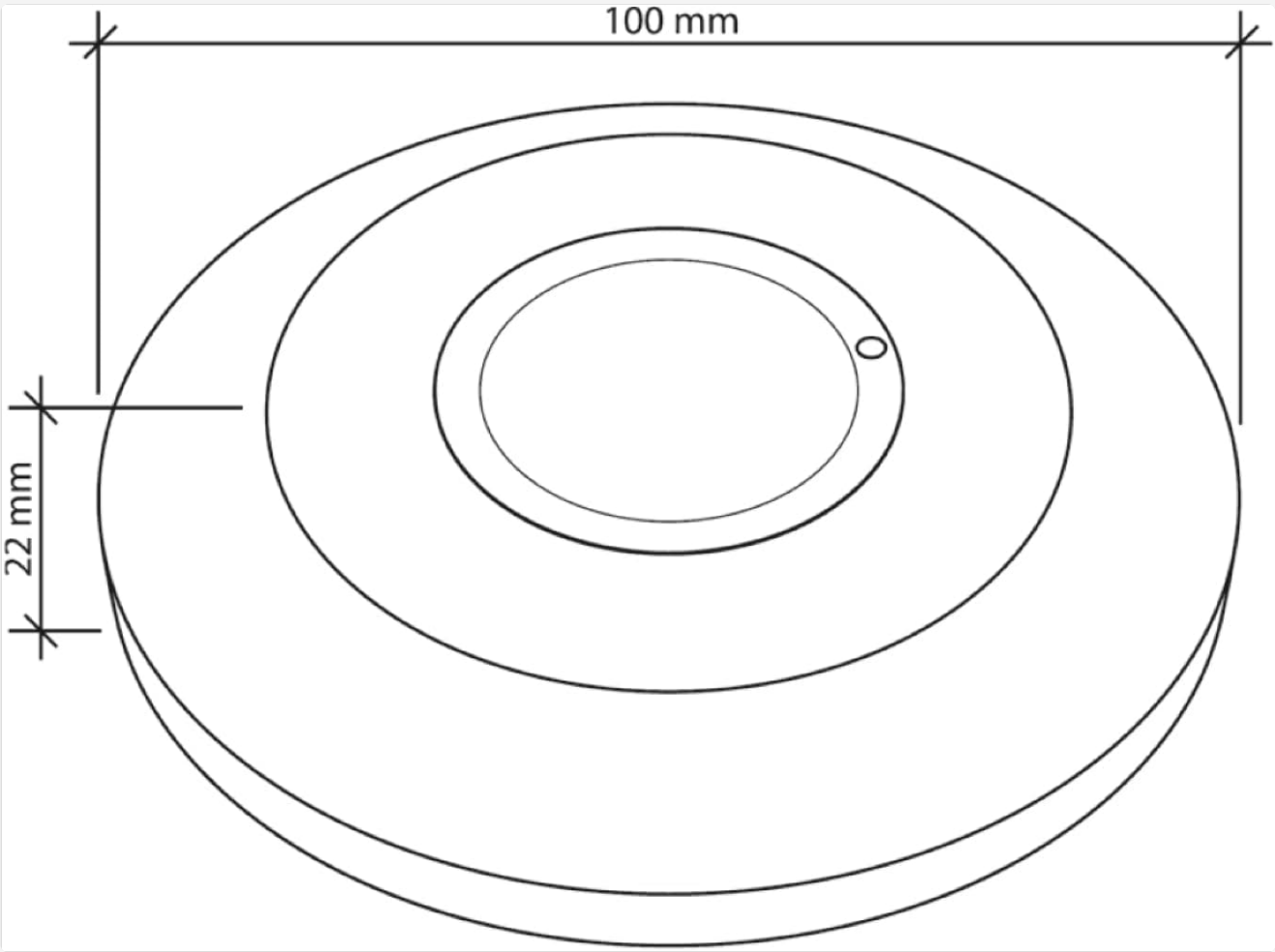


Image 4.1: Technical drawing showing the dimensions of the motion detector: 100mm diameter and 22mm height.

## 5. INSTALLATION (SETUP)

**Important:** Ensure the main power supply is switched off before commencing installation.

1. **Choose Location:** Select a suitable indoor ceiling location for surface mounting. Avoid placing near heat sources, air conditioning vents, or areas with significant air movement, which can interfere with detection.
2. **Prepare Wiring:** Open the casing of the motion detector. You will find terminals for Live (L), Neutral (N), and Switched Live (L').

3. **Mount Base:** Secure the base of the motion detector to the ceiling using appropriate screws and wall plugs. Ensure the cable entry points are aligned.
4. **Wire Connections:**
  - Connect the incoming Live wire to the 'L' terminal.
  - Connect the incoming Neutral wire to the 'N' terminal.
  - Connect the Live wire to your light fixture (load) to the 'L' terminal.
  - Connect the Neutral wire from your light fixture (load) to the 'N' terminal (shared with incoming neutral).



Image 5.1: Rear view of the motion detector, illustrating the wiring terminals (L, N, L') and the three adjustable dials for TIME, SENS, and LUX settings.

5. **Close Casing:** Once wiring is complete and secure, reattach the main body of the detector to its base.
6. **Restore Power:** Switch on the main power supply. The detector will enter a warm-up period (typically 30-60 seconds) during which it may switch on and off randomly.

## 6. OPERATION AND SETTINGS ADJUSTMENT

The SEBSON HF Motion Detector features three adjustable dials to customize its operation:

- **TIME (Time Delay):** Controls how long the connected light remains on after the last detected movement.
  - Adjustable from 10 seconds to 12 minutes.
  - Turn clockwise to increase the time delay, counter-clockwise to decrease.
- **SENS (Sensitivity/Detection Range):** Adjusts the detection range of the HF sensor.
  - Adjustable from 2 meters to 16 meters.
  - Turn clockwise for higher sensitivity (longer range), counter-clockwise for lower sensitivity (shorter range).
  - Consider the environment to avoid unwanted detections (e.g., through thin walls).
- **LUX (Ambient Light Threshold):** Determines the ambient light level at which the sensor will activate the connected light.
  - Adjustable from 3 lux (darkness) to 2000 lux (daylight).
  - Turn towards the sun icon for activation in brighter conditions (daylight).
  - Turn towards the moon icon for activation only in darker conditions (night).



Portée de Détection (2-16m/ 360°)

Sensibilité à l'Allumage (3-2.000LUX)

Durée d'Éclairage (10sec. - 12min.)

Image 6.1: A detailed view of the three rotary dials on the motion detector, labeled TIME, SENS, and LUX, used for fine-tuning operational parameters.

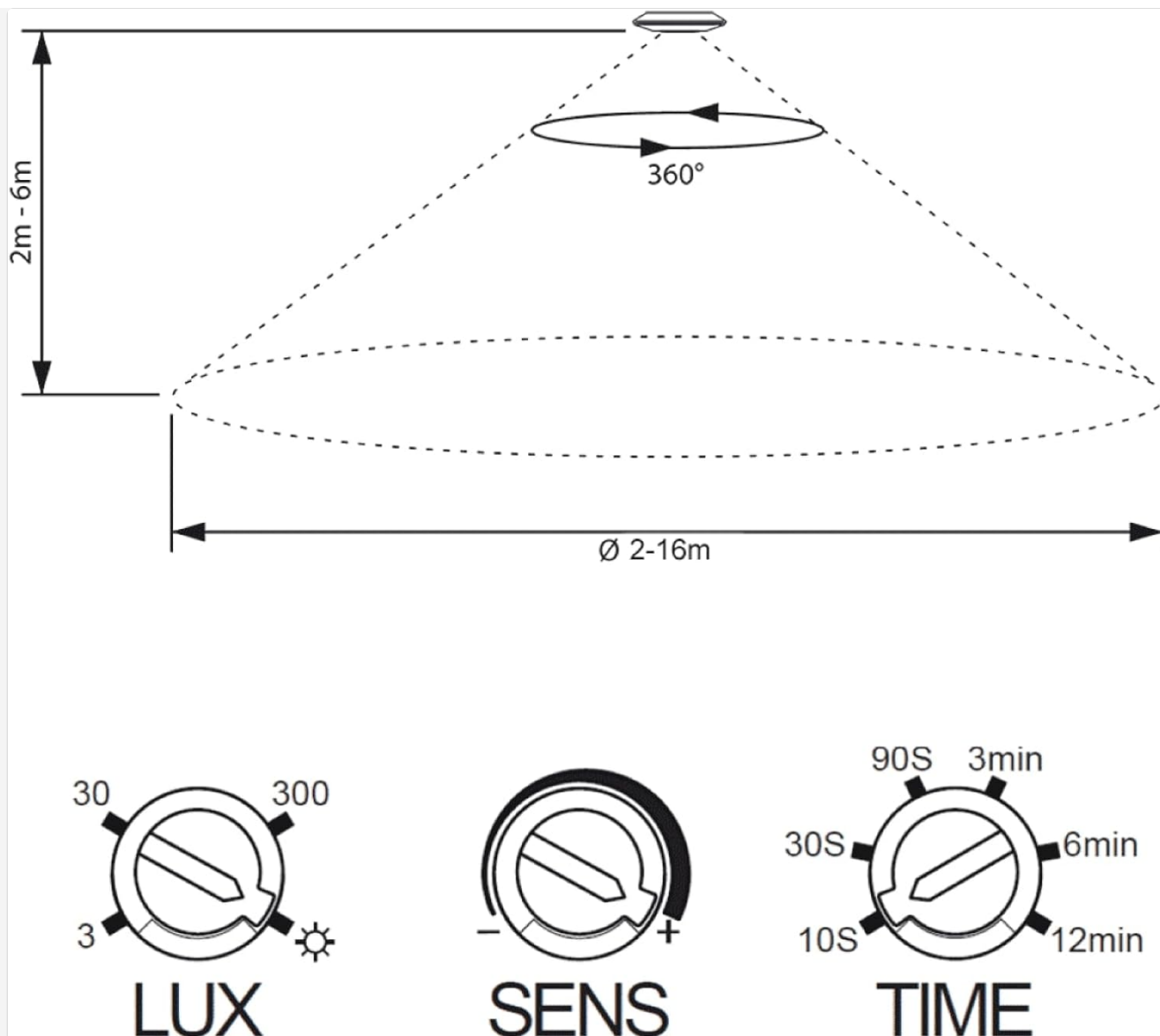


Image 6.2: A diagram showing the 360° detection pattern and adjustable range (2-16m) from a ceiling mount, along with visual representations of the LUX, SENS, and TIME adjustment dials.

## 7. MAINTENANCE

The SEBSON HF Motion Detector requires minimal maintenance. Follow these guidelines:

- **Cleaning:** Gently wipe the surface of the detector with a soft, dry cloth. Do not use abrasive cleaners, solvents, or excessive moisture, as these can damage the device.
- **Inspection:** Periodically check for any visible damage to the casing or wiring. If any damage is found, disconnect power and consult a qualified electrician.
- **Environmental Conditions:** Ensure the operating environment remains within the specified indoor conditions (IP20).

## 8. TROUBLESHOOTING

Problem	Possible Cause	Solution
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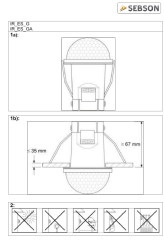
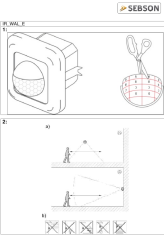
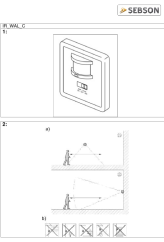
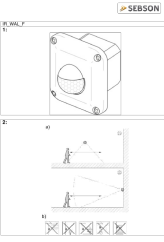
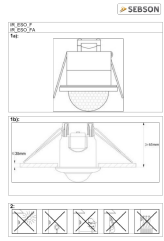


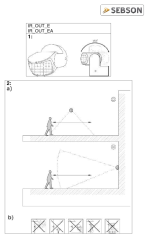
Light does not turn on.	<ul style="list-style-type: none"><li>◦ No power supply.</li><li>◦ LUX setting is too low (set for darkness).</li><li>◦ Detection range (SENS) is too low.</li><li>◦ Faulty wiring.</li><li>◦ No movement within detection area.</li></ul>	<ul style="list-style-type: none"><li>◦ Check power connection.</li><li>◦ Adjust LUX setting towards the sun icon.</li><li>◦ Increase SENS setting.</li><li>◦ Verify wiring connections (power off first).</li><li>◦ Test by moving within the sensor's range.</li></ul>
Light stays on continuously.	<ul style="list-style-type: none"><li>◦ Continuous movement detected.</li><li>◦ SENS setting is too high, detecting through walls.</li><li>◦ TIME setting is too long.</li><li>◦ Faulty unit.</li></ul>	<ul style="list-style-type: none"><li>◦ Ensure no constant movement in the area.</li><li>◦ Decrease SENS setting.</li><li>◦ Decrease TIME setting.</li><li>◦ If issues persist, contact customer support.</li></ul>
Light turns on unexpectedly.	<ul style="list-style-type: none"><li>◦ SENS setting is too high.</li><li>◦ Interference from external sources (e.g., strong electromagnetic fields, large moving objects outside the intended area).</li></ul>	<ul style="list-style-type: none"><li>◦ Decrease SENS setting.</li><li>◦ Relocate the detector if possible, or adjust SENS to minimize interference.</li></ul>

## 9. WARRANTY AND SUPPORT

SEBSON products are manufactured with quality and reliability in mind. For specific warranty details, please refer to the documentation provided at the time of purchase or visit the official SEBSON website. If you encounter any issues or require technical assistance, please contact SEBSON customer support through their official channels. For more information, visit: [www.sebson.de](http://www.sebson.de)



 <p>Diagram showing the SEBSON IR Motion Detector (IR_ES_G / IR_ES_GA) in two views: a top view and a side view. The top view shows a circular sensor with a central lens and a mounting bracket. The side view shows the detector mounted on a wall, with dimensions 120 mm and 107 mm indicated. Below the diagrams are five icons representing different installation or safety instructions.</p>	<p><a href="#">SEBSON IR Motion Detector (IR_ES_G / IR_ES_GA) Installation and User Manual</a></p> <p>Comprehensive guide for installing and using the SEBSON IR Motion Detector (IR_ES_G / IR_ES_GA), including safety instructions, technical specifications, detection range, and WEEE disposal information.</p>
 <p>Diagram showing the SEBSON IR Motion Detector IR_WAL_E in two views: a top view and a side view. The top view shows a rectangular sensor with a central lens and a mounting bracket. The side view shows the detector mounted on a wall, with dimensions 120 mm and 107 mm indicated. Below the diagrams are five icons representing different installation or safety instructions.</p>	<p><a href="#">SEBSON IR Motion Detector IR_WAL_E: User Manual and Installation Guide</a></p> <p>Comprehensive user manual and installation guide for the SEBSON IR_WAL_E infrared motion detector. Learn about its features, safety precautions, installation steps, technical specifications, and proper disposal.</p>
 <p>Diagram showing the SEBSON IR WAL C Motion Detector in two views: a top view and a side view. The top view shows a rectangular sensor with a central lens and a mounting bracket. The side view shows the detector mounted on a wall, with dimensions 120 mm and 107 mm indicated. Below the diagrams are five icons representing different installation or safety instructions.</p>	<p><a href="#">SEBSON IR WAL C Motion Detector: Installation Guide, Features, and Technical Specifications</a></p> <p>Comprehensive guide for the SEBSON IR WAL C infrared motion detector. Learn about its intended use, safety precautions, installation steps, operational features, technical data, and disposal information.</p>
 <p>Diagram showing the SEBSON IR_WAL_F Motion Detector in two views: a top view and a side view. The top view shows a rectangular sensor with a central lens and a mounting bracket. The side view shows the detector mounted on a wall, with dimensions 120 mm and 107 mm indicated. Below the diagrams are five icons representing different installation or safety instructions.</p>	<p><a href="#">SEBSON IR_WAL_F Motion Detector: User Manual and Installation Guide</a></p> <p>Comprehensive guide for the SEBSON IR_WAL_F infrared motion detector, covering intended use, safety instructions, installation, technical specifications, and disposal information.</p>
 <p>Diagram showing the SEBSON IR_ESO_F Infrared Motion Detector in two views: a top view and a side view. The top view shows a rectangular sensor with a central lens and a mounting bracket. The side view shows the detector mounted on a wall, with dimensions 120 mm and 107 mm indicated. Below the diagrams are five icons representing different installation or safety instructions.</p>	<p><a href="#">SEBSON IR_ESO_F Infrared Motion Detector Installation and User Manual</a></p> <p>Comprehensive guide for the SEBSON IR_ESO_F infrared motion detector, covering installation, operation, safety, and technical specifications. Learn how to effectively use this motion detector for lighting control.</p>



### [SEBSON IR Motion Detector \(IR\\_OUT\\_E, IR\\_OUT\\_EA\) - Installation and User Manual](#)

Comprehensive guide for the SEBSON IR Motion Detector models IR\_OUT\_E and IR\_OUT\_EA, covering installation, safety, features, technical specifications, and maintenance. Learn how to install and operate your motion detector for optimal performance.