

ChiliTec 22261

ChiliTec 22261 CT-PIR Mini 12V DC Motion Detector Instruction Manual

1. INTRODUCTION

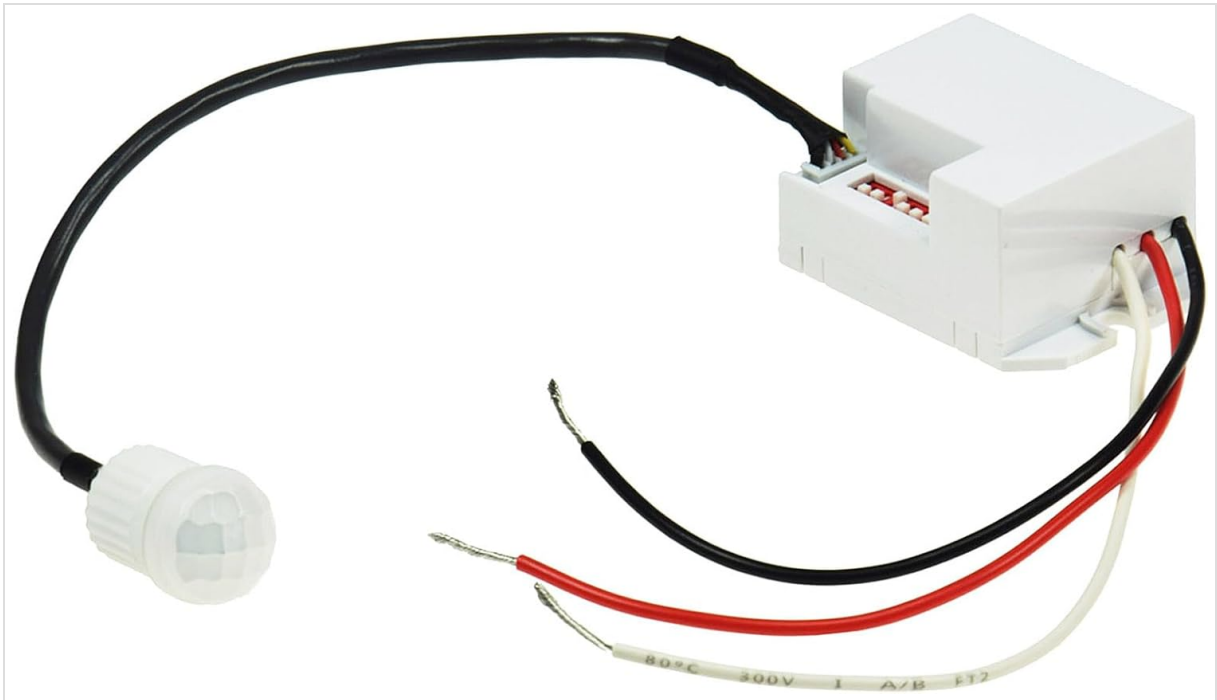
This manual provides essential information for the safe and effective installation, operation, and maintenance of your ChiliTec 22261 CT-PIR Mini 12V DC Motion Detector. This compact, recessed motion detector is designed for 12V DC systems, making it ideal for applications such as suspended ceilings, hollow ceilings, cabinets, and recreational vehicles. Its small size allows for discreet integration.

2. SAFETY INSTRUCTIONS

- **Electrical Safety:** Always disconnect power before performing any installation, maintenance, or troubleshooting. Work should only be carried out by qualified personnel.
- **Voltage:** Ensure the power supply is 12V DC. Connecting to an incorrect voltage can damage the device and pose a safety risk.
- **Indoor Use:** This device has an IP20 rating and is intended for indoor use only. Avoid exposure to moisture, water, or extreme temperatures.
- **Load Capacity:** Do not exceed the maximum load of 60W (for LED). Overloading can cause damage or fire.
- **Mounting:** Ensure the mounting surface is stable and secure.

3. PRODUCT OVERVIEW

The ChiliTec CT-PIR Mini is a passive infrared (PIR) motion detector designed for discreet integration into 12V DC lighting systems. It consists of a small sensor head and a compact control unit.



This image displays the ChiliTec CT-PIR Mini motion detector, showing its two main components: the small, white, circular PIR sensor head with a black cable, and the rectangular white control unit with multiple colored wires (black, red, white) extending from it. The wires are stripped at the ends for connection.

Key Features:

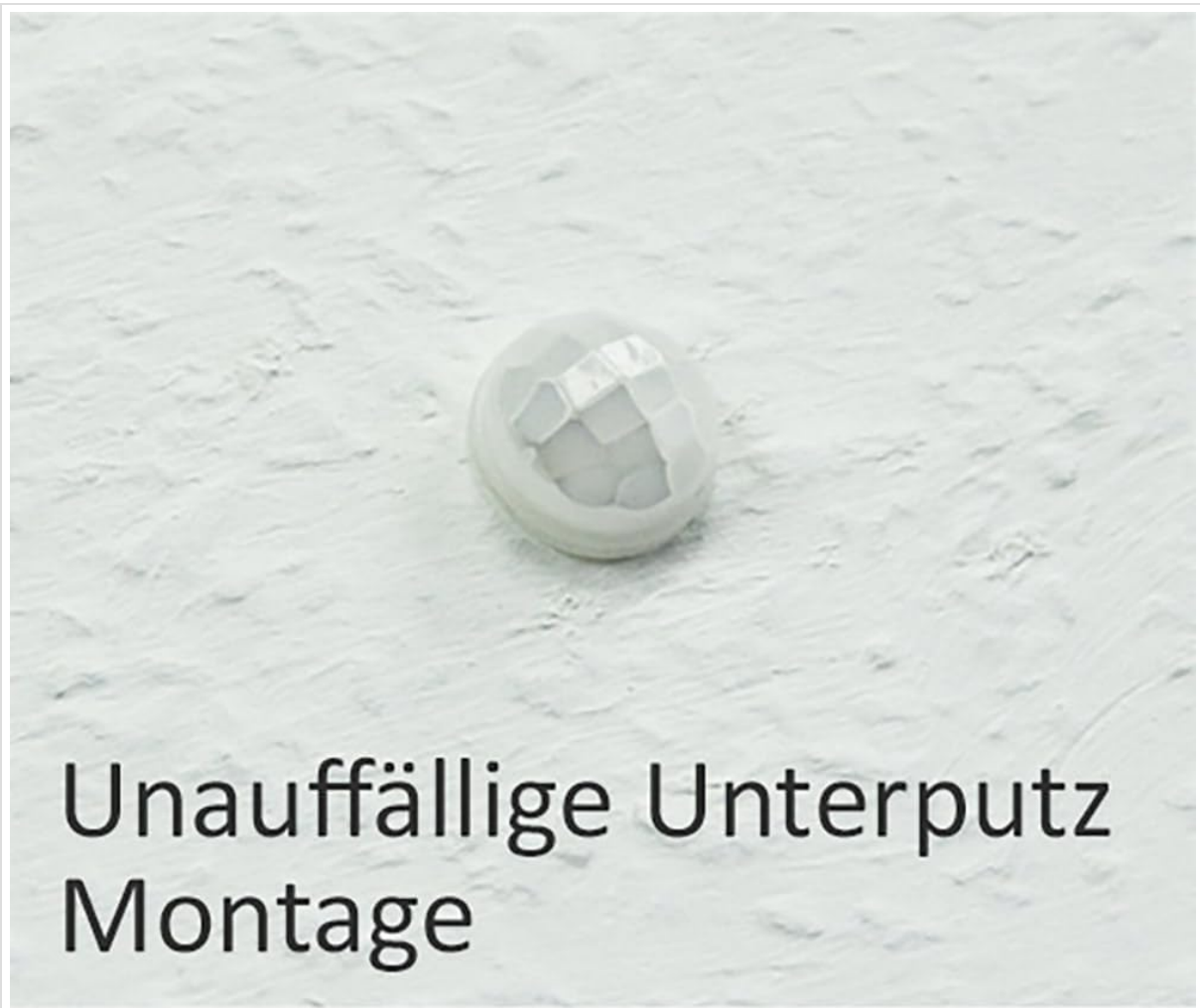
- 12V DC operation, suitable for various low-voltage applications.
- Compatible with LED loads from 1W to 60W.
- 360° detection angle for comprehensive coverage.
- Maximum detection range of 6 meters.
- Adjustable sensitivity and switch-on duration.
- Compact design for inconspicuous recessed mounting.

4. INSTALLATION

The CT-PIR Mini is designed for recessed mounting, allowing the sensor head to be flush with the surface for a discreet appearance.

4.1 Mounting the Sensor Head

1. Choose a suitable location for the sensor head, typically in a ceiling or panel, ensuring it has an unobstructed view of the desired detection area.
2. Drill a hole with a diameter of approximately 15 mm for the sensor head.
3. Insert the sensor head into the drilled hole until it sits flush with the surface. The sensor head has a threaded design for secure fitting.



This image shows the small, white, circular PIR sensor head of the ChiliTec CT-PIR Mini motion detector discreetly installed, flush with a white surface. Only the sensor dome is visible, indicating its suitability for inconspicuous flush mounting.

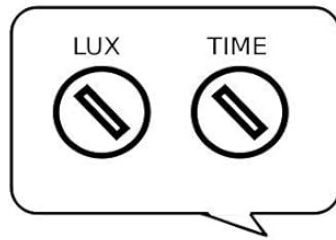
4.2 Wiring Instructions

The control unit features a 3-wire connection system. Ensure all connections are secure and insulated.

- **Input (12V DC):** Connect the 12V DC power supply to the designated input terminals on the control unit. Typically, red for positive (+) and black for negative (-).
- **Output (to Load):** Connect your 12V DC load (e.g., LED light) to the designated output terminals. The white wire is typically the switched positive output.
- The sensor head connects to the control unit via its integrated cable.

Refer to the diagram below for a visual representation of the detection area and settings.

Einbau-Bewegungsmelder 12V(=)

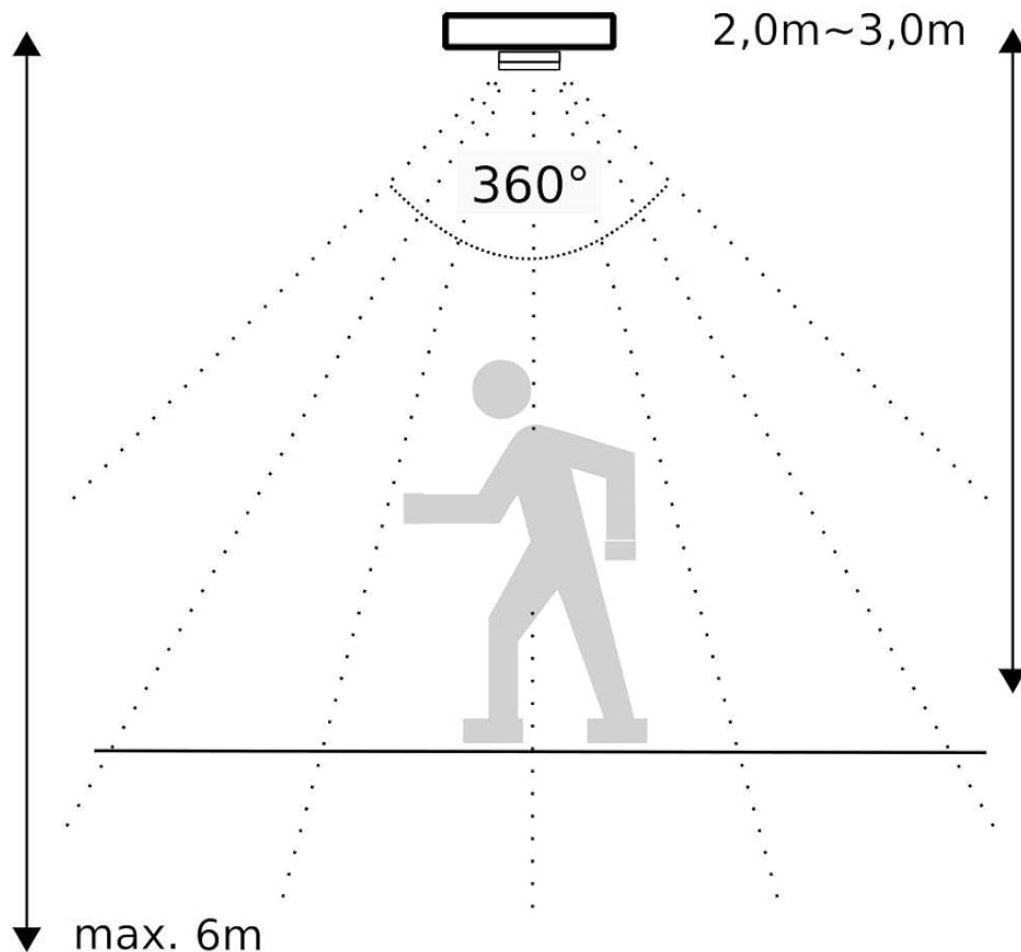


LED geeignet

3-Draht 12V +ⁱⁿ/ -ⁱⁿ/ -^{out}

IP20 - Nur für Innen

PIR-Sensor



22261 V.1.00-0119

This diagram illustrates the detection capabilities and adjustable settings of the ChiliTec CT-PIR Mini motion detector. It shows a 360-degree detection angle, a maximum range of 6 meters, and an installation height between 2 to 3 meters. Icons for 'LUX' and 'TIME' adjustments are visible, along with checkboxes indicating compatibility with LED, 3-wire 12V connections, IP20 rating for indoor use, and PIR sensor type.

5. OPERATING INSTRUCTIONS

The CT-PIR Mini features two adjustable settings: LUX and TIME. These settings are typically adjusted via small potentiometers on the control unit.

- **LUX (Ambient Light Sensitivity):** This setting determines the ambient light level at which the motion detector will activate.
 - Turn towards the 'sun' symbol for activation during both day and night (high sensitivity to light).
 - Turn towards the 'moon' symbol for activation only in low light conditions (low sensitivity to light, only activates at dusk/night).
- **TIME (Switch-on Duration):** This setting controls how long the connected load remains active after motion is detected.
 - Adjustable durations typically include 5/30 seconds or 1/3/5/8 minutes.
 - Turn the dial to select the desired duration.

Test the settings after adjustment to ensure they meet your requirements. Walk through the detection area to verify activation and deactivation.

6. MAINTENANCE

The ChiliTec CT-PIR Mini motion detector requires minimal maintenance.

- **Cleaning:** Gently wipe the sensor lens with a soft, dry cloth to remove dust or dirt. Do not use abrasive cleaners or solvents, as these can damage the lens or housing.
- **Inspection:** Periodically check the wiring connections for any signs of wear or damage.

7. TROUBLESHOOTING

- **Detector does not activate:**
 - Check power supply (12V DC).
 - Verify wiring connections are correct and secure.
 - Adjust LUX setting towards the 'sun' symbol to test in brighter conditions.
 - Ensure no obstructions are blocking the sensor's field of view.
 - Confirm the connected load (e.g., LED light) is functional.
- **Detector is always on or does not turn off:**
 - Check if there is continuous motion within the detection area.
 - Adjust TIME setting to a shorter duration.
 - Ensure the sensor is not exposed to rapid temperature changes or air currents (e.g., from heating/cooling vents) that could trigger it.
 - Verify the wiring, especially the output connection to the load.
- **Detection range is too short or too long:**
 - The detection range is fixed at a maximum of 6 meters. Ensure the installation height is between 2-3 meters for optimal performance.
 - Consider the placement of the sensor relative to the area you wish to cover.

8. SPECIFICATIONS

Brand	ChiliTec
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Model Number	22261
Power Source	Wired Electric
Voltage	12 Volts DC
Power Range (Load)	1-60 W (for LED)
Detection Angle	Approx. 360°
Maximum Range	6 Meters
Installation Height	2-3 Meters
Adjustable Switch-on Duration	5/30 seconds, 1/3/5/8 minutes
Standby Consumption	0.50 W
Sensitivity	Adjustable
IP Rating	IP20 (Indoor use)
Main Unit Dimensions (L x W x H)	56 x 34 x 25 mm
Sensor Head Dimensions	24 x Ø 15 mm
Sensor Cable Length	12 cm
Material	Plastic
Color	White
Recommended Use	Security in recreational vehicles

9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please refer to the documentation provided with your purchase or contact your retailer or the manufacturer directly. Specific warranty terms may vary by region and seller.