Greluma ZL926LUM

Greluma ZL926LUM AC220-240V PIR Motion Sensor Light Switch Instruction Manual

Model: ZL926LUM

1. Introduction

Thank you for choosing the Greluma PIR Motion Sensor Light Switch. This manual provides essential information for the safe and efficient installation, operation, and maintenance of your device. Please read these instructions carefully before use and retain them for future reference.

2. Safety Information

WARNING: Electrical installation should only be performed by a qualified electrician. Incorrect installation can lead to electric shock, fire, or damage to the device.

- Ensure the power supply is disconnected before installation or maintenance.
- This device operates on AC220-240V. Verify your local voltage compatibility.
- Do not exceed the maximum load capacity of the switch.
- Keep small parts away from children. Choking hazard.
- Do not disassemble or modify the device.
- Install in a location protected from direct weather exposure if used outdoors, despite its IP44 rating.

3. Package Contents

- Greluma PIR Motion Sensor Light Switch (2 units)
- Mounting Screws and Wall Plugs
- Instruction Manual

Image 3.1: Two Greluma PIR Motion Sensor Light Switches included in the package.

4. Product Overview and Features

The Greluma ZL926LUM is a high-sensitivity passive infrared (PIR) motion sensor designed to automatically control lighting based on detected movement and ambient light levels. It is suitable for both indoor and outdoor applications.

Key Features:

- **Wide Detection Range:** Up to 12 meters (at 24°C).
- **Broad Detection Angle:** 180 degrees for comprehensive coverage.
- **Adjustable Light Sensor (LUX):** Configurable to operate day and night (max LUX) or only in low light conditions (min LUX, below 3 Lux).
- **Adjustable Time Delay (TIME):** Set the duration the light stays on after motion detection, from 7 seconds to 7 minutes. The delay is continuously added if subsequent motion is detected.
- **Energy Efficient:** Utilizes passive infrared technology, consuming minimal power.
- **Versatile Applications:** Ideal for garages, hallways, basements, staircases, kitchens, wardrobes, lofts, and outdoor areas.

Image 4.1: Side view of the motion sensor, showing its compact design.

5. Specifications

Parameter	Value
Model Number	ZL926LUM
Operating Voltage	AC220-240V
Detection Range	Up to 12 meters (at 24°C)
Detection Angle	180°
Installation Height	1 - 2.5 meters
Adjustable Light Sensor (LUX)	3 - 2000 Lux
Adjustable Time Delay (TIME)	7 seconds - 7 minutes
Power Source	Corded Electric
IP Rating	IP44
Item Weight	293 g
Product Dimensions	10.5 x 7.2 x 18 cm

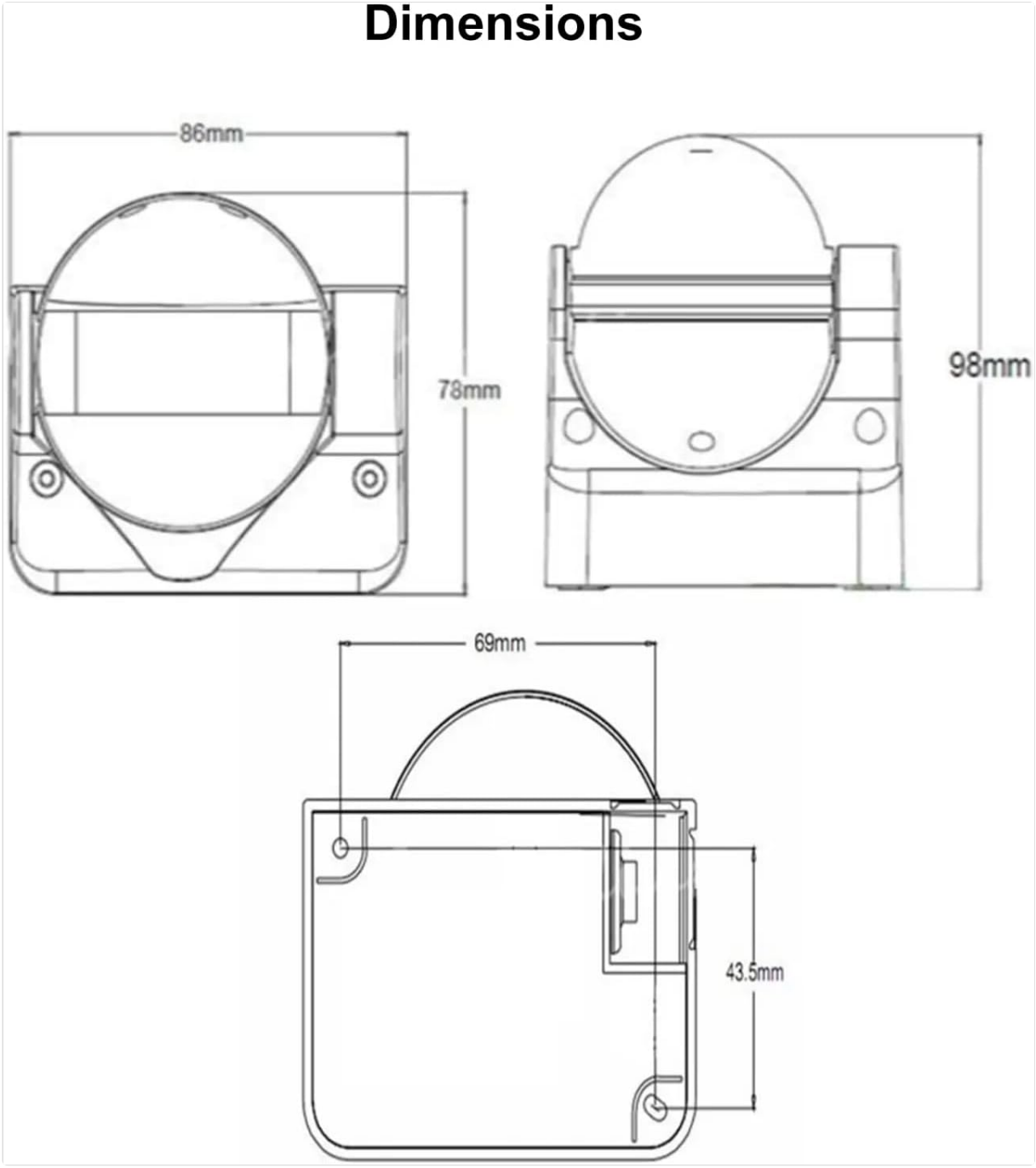

Image 5.1: Detailed dimensions of the Greluma motion sensor.

Image 5.2: Product packaging displaying key specifications and IP44 rating.

6. Installation and Setup

6.1 Mounting Location

- Choose a stable surface for mounting, such as a wall or ceiling.
- The optimal installation height is between 1 and 2.5 meters.
- Avoid mounting near heat sources (e.g., air conditioners, heaters) or in direct sunlight, as this may affect sensor performance.
- Ensure the detection area is clear of obstructions.

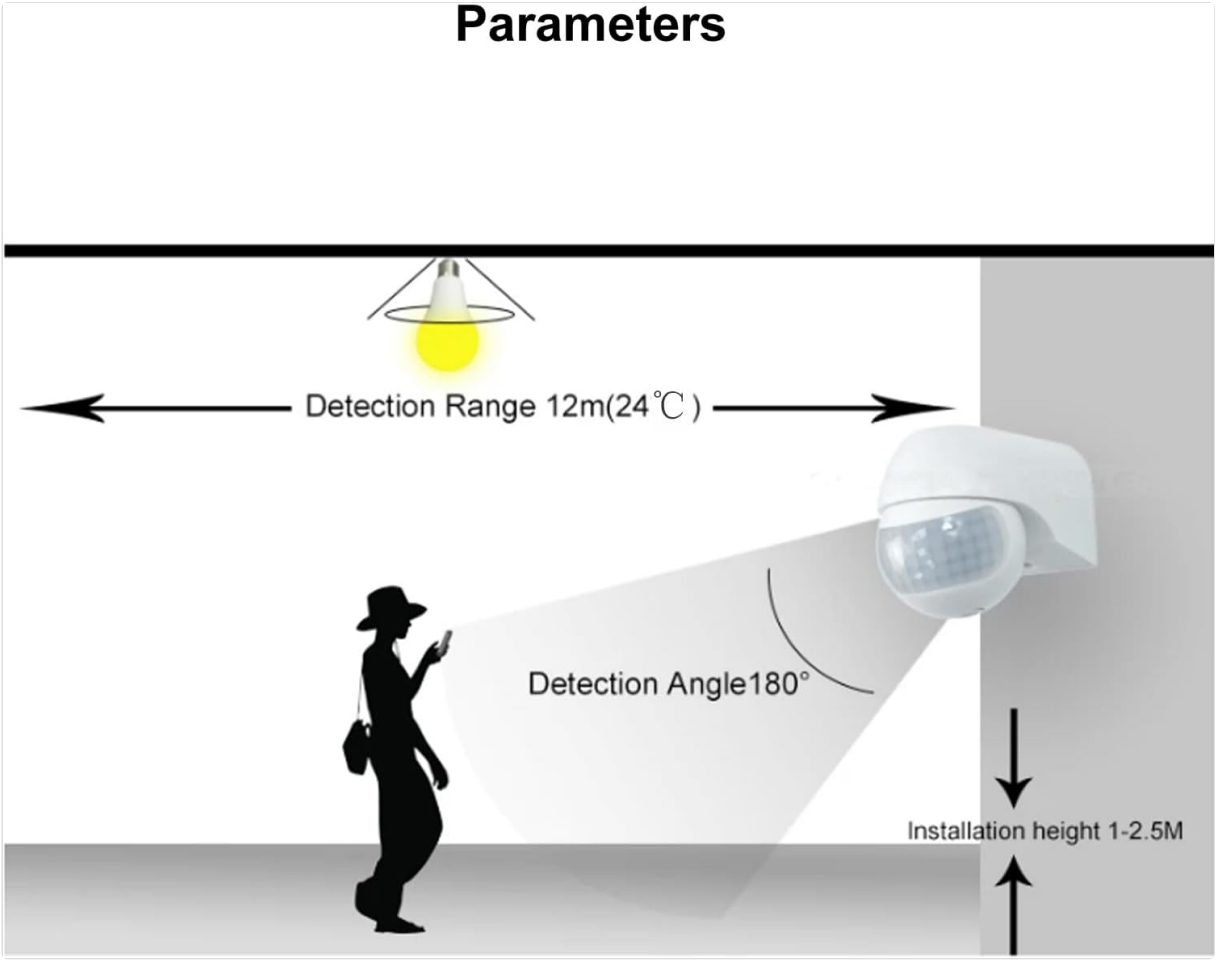

Image 6.1: Illustration of the sensor's 12m detection range, 180° detection angle, and recommended installation height of 1-2.5m.

6.2 Wiring Instructions

Always disconnect power at the circuit breaker before performing any wiring.

1. Open the sensor casing carefully.
2. Connect the live (L) wire from your power supply to the 'L' terminal on the sensor.
3. Connect the neutral (N) wire from your power supply to the 'N' terminal on the sensor.
4. Connect the live wire of your light fixture (load) to the 'L' terminal of the output.
5. Connect the neutral wire of your light fixture (load) to the 'N' terminal of the output.
6. Ensure all connections are secure.
7. Close the sensor casing and secure it with screws.

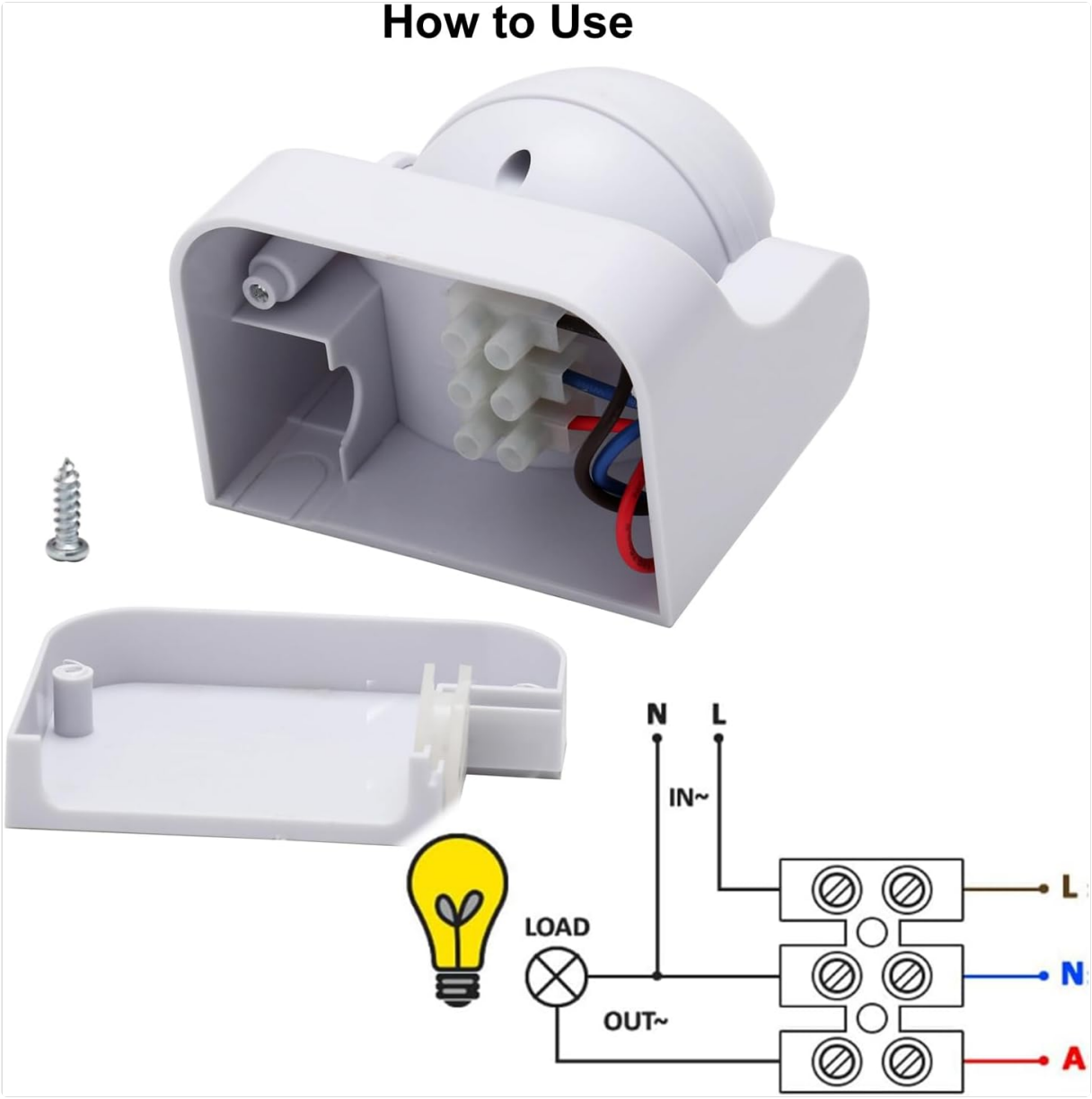

Image 6.2: Detailed wiring diagram showing connections for Live (L), Neutral (N), and Load (Light).

7. Operation

The sensor features two adjustable knobs: TIME and LUX. These allow you to customize the sensor's behavior according to your needs.

7.1 TIME Adjustment

- The TIME knob controls how long the connected light remains on after motion is detected.
- Adjustable range: Approximately 7 seconds to 7 minutes.
- Turning the knob towards '+' increases the delay time.
- Turning the knob towards '-' decreases the delay time.
- If motion is detected again before the set time expires, the timer will reset and the light will remain on for the full duration from the last detection.

7.2 LUX Adjustment

- The LUX knob determines the ambient light level at which the sensor will activate the connected light.
- **'Sun' Position (Max LUX):** The sensor will operate both during the day and at night, regardless of ambient light.

- **'Moon' Position (Min LUX):** The sensor will only activate the light when the ambient light level is less than approximately 3 Lux (i.e., in dark conditions).
- Adjust the LUX knob to your desired operating condition.

Image 7.1: The TIME and LUX adjustment knobs for customizing sensor behavior.

8. Maintenance

- Ensure the power is off before cleaning.
- Wipe the sensor lens and casing with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- Regularly check for any loose wiring connections.
- Keep the sensor lens clear of dust, dirt, or obstructions that could impair detection.

9. Troubleshooting

Problem	Possible Cause	Solution

Light does not turn on when motion is detected.	• LUX setting is too low (set to 'Moon' during daytime). • No power to the sensor or light. • Faulty wiring. • Motion is outside detection range/angle.	• Adjust LUX knob towards 'Sun' or test in darker conditions. • Check power supply and circuit breaker. • Verify wiring connections (refer to Section 6.2). • Adjust sensor position or walk within detection area.
Light stays on continuously.	• Continuous motion in the detection area. • TIME setting is too long. • Faulty sensor.	• Ensure no constant movement or heat sources are triggering the sensor. • Adjust TIME knob towards '-'. • Contact customer support if problem persists after checking other solutions.
Light turns on/off erratically.	• Interference from heat sources (e.g., vents, direct sunlight). • Loose wiring connections. • Sensor lens is dirty or obstructed.	• Relocate sensor away from heat sources or direct sunlight. • Check and secure all wiring connections. • Clean the sensor lens.

10. Warranty and Support

Greluma products are manufactured to high-quality standards. For warranty information or technical support, please contact your retailer or the manufacturer directly. Please have your model number (ZL926LUM) and purchase details ready when contacting support.
Manufacturer: Greluma
For support inquiries, you may contact:LumaTech@outlook.com

11. Applications

The Greluma PIR Motion Sensor Light Switch is versatile and can be used in various settings to enhance convenience and energy efficiency.

- **Indoor:** Ideal for hallways, staircases, basements, garages, utility rooms, and large open spaces like parlors.
- **Outdoor:** Suitable for patios, gardens, entryways, and other outdoor areas where motion-activated lighting is desired. Ensure proper protection from direct harsh weather.

Image 11.1: Examples of the motion sensor installed in an indoor parlor and an outdoor patio setting.