intelamp YL002-12A

INTELAMP Solar Outdoor Lights with Motion Detector

Model: YL002-12A

Introduction

Thank you for choosing the INTELAMP Solar Outdoor Lights. This manual provides detailed instructions for the proper installation, operation, and maintenance of your new solar light. Designed for outdoor use, this light features a motion detector, high-brightness LEDs, and a durable, waterproof construction. Please read this manual thoroughly before use to ensure optimal performance and longevity of the product.

Safety Information

- **General Safety:** Ensure the product is installed in a location where it will not pose a tripping hazard or obstruct pathways. Keep away from flammable materials.
- **Electrical Safety:** This product is solar-powered and does not require external wiring. Do not attempt to connect it to a mains power supply.
- **Battery Safety:** The integrated lithium iron phosphate battery is not user-replaceable. Do not attempt to open the unit or replace the battery. Dispose of the product responsibly at the end of its life.
- **Temperature:** Operate the light within its specified temperature range. Extreme temperatures may affect performance.
- **Cleaning:** Use a soft, damp cloth for cleaning. Do not use abrasive cleaners or solvents.

Product Overview

The INTELAMP Solar Outdoor Light features a large solar panel, a central light head, and two adjustable side light heads, all equipped with high-brightness LEDs and motion sensors for wide-angle illumination.

Figure 1: Front view of the INTELAMP Solar Outdoor Light, showcasing the large solar panel, central light, and two adjustable side lights with integrated motion sensors.

Figure 2: Diagram illustrating the dimensions of the solar light, including the 24.5 cm solar panel length, 11.5 cm solar panel width, and 30 cm total light width, highlighting the two motion sensors.

Figure 3: Image demonstrating the adjustable nature of the light heads, which can be rotated 90 degrees horizontally, and the solar panel, which can be adjusted vertically by 45 to 60 degrees for optimal sun exposure.

Setup and Installation

The INTELAMP Solar Outdoor Light is designed for easy installation on walls, trees, or poles. For optimal charging, ensure the solar panel is positioned to receive direct sunlight for most of the day. The ideal installation height is approximately 1.7 to 2 meters (5.6 to 6.6 feet).

Wall Mounting (Using Screws)

1. **Mark and Drill Holes:** Choose a suitable location on a wall. Mark two points 9 cm (approximately 3.5 inches) apart horizontally. Drill holes at these marked points.

Figure 4: Illustration showing the drilling of two holes 9 cm apart on a brick wall for screw anchors.

2. **Insert Anchors:** Insert the provided screw anchors into the drilled holes.
3. **Prepare Light for Mounting:** Rotate the solar panel upwards and the light heads downwards to expose the screw holes on the mounting base.

Figure 5: Image depicting the solar panel rotated up and light heads down, aligning the mounting holes with the wall anchors for screw fixation.

4. **Secure the Light:** Align the light's mounting holes with the anchors and secure it firmly using the provided screws.
5. **Adjust Panel and Lights:** Once mounted, adjust the solar panel to face the sun and the light heads to cover the desired illumination area.

Tree/Pole Mounting (Using Cable Ties)

1. **Thread Cable Ties:** Thread the provided cable ties through the designated fastening holes on the back of the light's mounting base.

Figure 6: Diagram showing how to thread cable ties through the four fastening holes on the back of the light's mounting bracket.

2. **Attach to Tree/Pole:** Position the light on the tree or pole and secure it tightly using the cable ties. Ensure the solar panel is facing a direction that receives maximum sunlight.

Figure 7: Image demonstrating the solar light secured to a tree trunk using cable ties, with the solar panel positioned to receive sunlight.

Figure 8: Collage showing different installation examples: mounted on a tree, on a wall above a deck, above a garage door, and on a pole in a yard, illustrating the versatility of the light's placement.

Operating Instructions

The INTELAMP Solar Outdoor Light is equipped with an intelligent light control chip that automatically charges during the day and illuminates at night. It features two PIR motion sensors for enhanced detection and offers three distinct lighting modes.

Motion Sensor Functionality

The dual PIR sensors detect motion across a wide 180-degree range, with a detection distance of 10 to 16 meters (approximately 33 to 52 feet). This wide coverage ensures reliable activation when movement is detected.

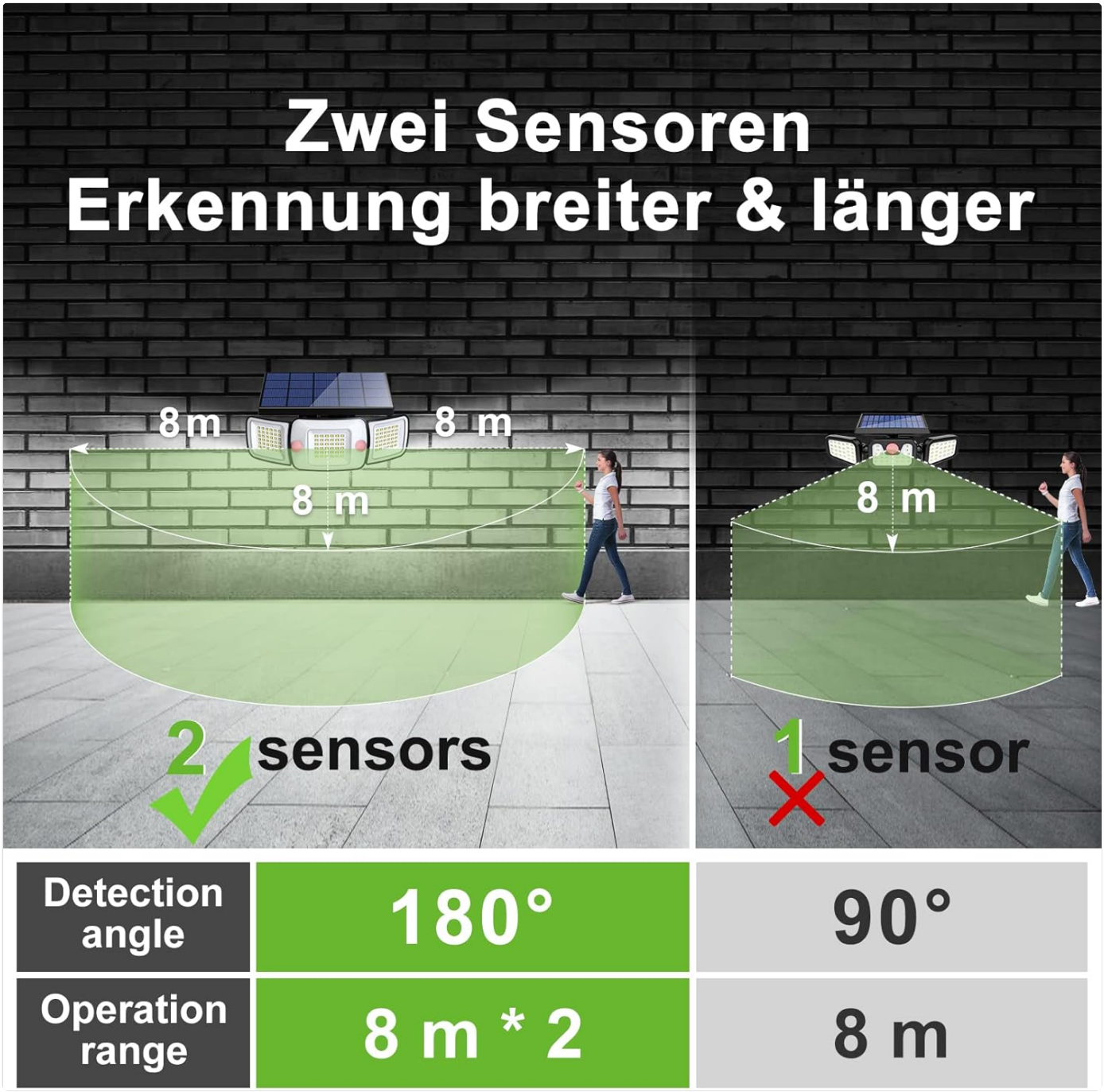

Figure 9: Comparison illustrating the superior 180-degree detection angle and wider operation range of the dual-sensor system compared to a single-sensor system's 90-degree detection.

Lighting Modes

The light offers three modes to suit different needs. To cycle through the modes, press the mode button located on the back of the unit (refer to product diagram for exact location).

- **Mode 1 (Sensor Mode - High Brightness):** The light remains off until motion is detected. Upon detection, it illuminates at high brightness (1200 lumens) for approximately 15-30 seconds, then turns off if no further motion is detected.
- **Mode 2 (Sensor Mode - Dim to High Brightness):** The light stays at a low brightness (dim mode) at night. When motion is detected, it switches to high brightness for 15-30 seconds, then returns to dim mode.
- **Mode 3 (Constant ON Mode):** The light automatically turns on at dusk and stays on at a medium brightness throughout the night, regardless of motion.

Figure 10: Visual representation of the two primary operating modes: Sensor Mode (high brightness upon detection, then off or dim) and Constant ON Mode (stays on all night).

Maintenance

Regular maintenance ensures the optimal performance and longevity of your solar light.

- **Cleaning the Solar Panel:** Periodically wipe the solar panel with a soft, damp cloth to remove dust, dirt, leaves, or snow. A clean panel ensures maximum sunlight absorption and efficient charging.
- **Checking for Obstructions:** Ensure no trees, buildings, or other objects are blocking direct sunlight from reaching the solar panel, especially during peak daylight hours.
- **Battery Care:** The light uses a high-capacity 6000mAh lithium iron phosphate battery. This battery is designed for long life (over 3000 charge cycles) and is not user-replaceable. Avoid prolonged storage in a completely discharged state.
- **Environmental Protection:** The IP65 waterproof rating protects against rain and dust. However, avoid submerging the unit in water.

Troubleshooting

If you encounter issues with your INTELAMP Solar Outdoor Light, please refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Light does not turn on at night.	Insufficient charging due to lack of direct sunlight.	Ensure the solar panel is exposed to 6-8 hours of direct sunlight daily. Relocate if necessary.
Light is dim or only stays on for a short period.	Battery not fully charged or low battery capacity.	Allow the light to charge for 1-2 full sunny days. Clean the solar panel to ensure maximum efficiency.
Motion sensor is not detecting movement.	Sensor obstructed or incorrect mode selected.	Ensure the sensor lens is clean and unobstructed. Verify the light is in a motion-sensing mode (Mode 1 or 2).
Light flickers or behaves erratically.	Loose connection or internal fault.	Gently tap the unit to check for loose connections. If the problem persists, contact customer support.
Water ingress despite IP65 rating.	Extreme weather conditions or improper sealing.	While IP65 is waterproof, it is not designed for submersion. Ensure all seals are intact. If damage is visible, contact support.

Specifications

- **Model:** YL002-12A
- **Brand:** INTELAMP
- **Light Source:** 108 LED beads
- **Luminous Flux:** Up to 1200 lumens
- **Color Temperature:** 6000 Kelvin (Cool White)
- **Battery:** 6000 mAh Lithium Iron Phosphate (LiFePO4)
- **Solar Panel:** High-efficiency silicone, 22% conversion rate
- **Motion Sensor:** Dual PIR sensors
- **Detection Angle:** 180 degrees
- **Detection Range:** 10-16 meters (33-52 feet)
- **Waterproof Rating:** IP65
- **Material:** Acrylonitrile Butadiene Styrene (ABS)
- **Dimensions (L x W x H):** 25 x 11.8 x 12.2 cm (9.8 x 4.6 x 4.8 inches)
- **Weight:** 750 grams (1.65 lbs)
- **Installation Height:** 1.7 - 2 meters (5.6 - 6.6 feet) recommended

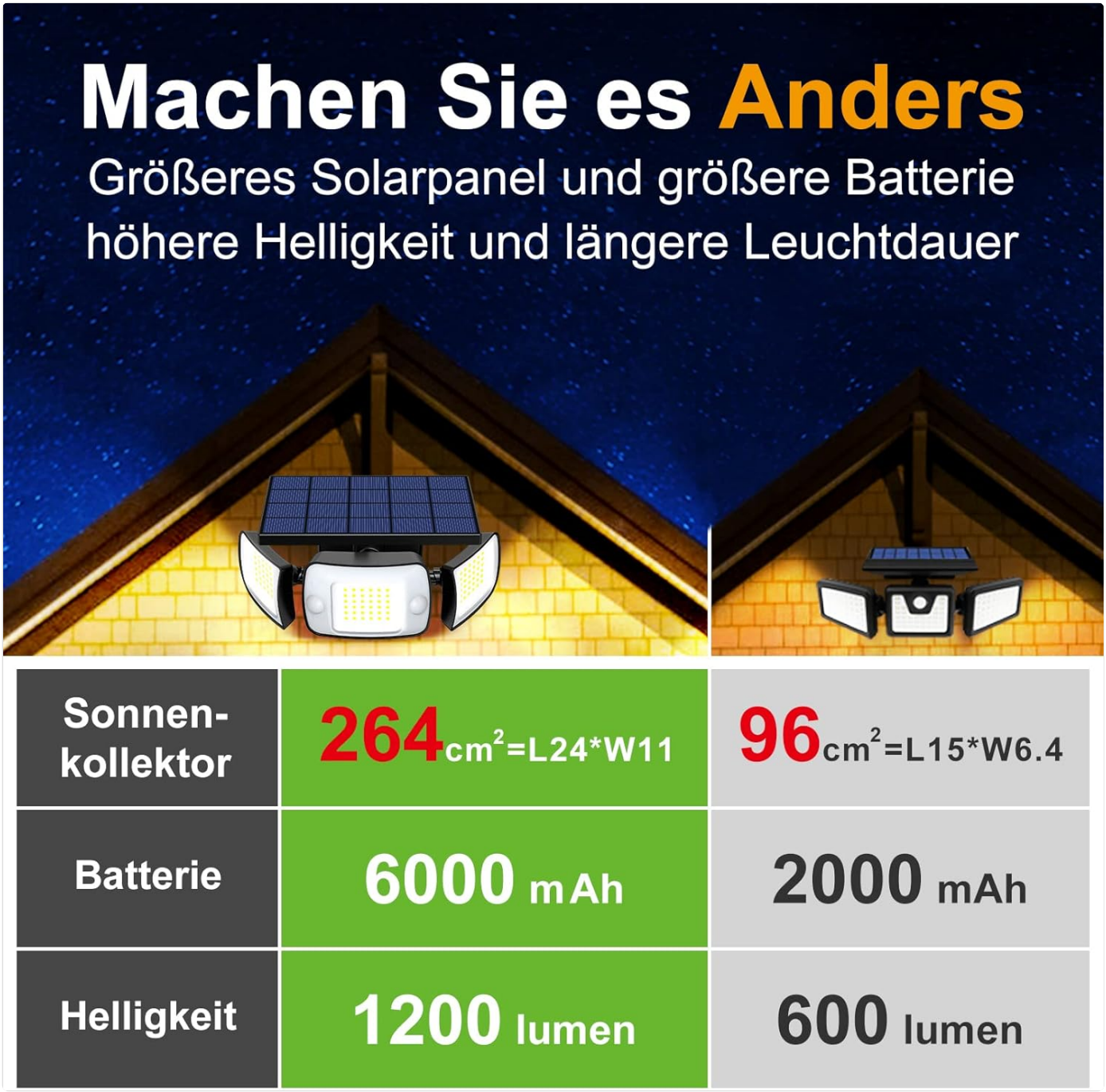

Figure 11: Infographic comparing the INTELAMP solar light's specifications (6000mAh battery, 1200 lumens, 264 cm² solar collector) against a standard 2000mAh, 600 lumens, 96 cm² solar light, highlighting its superior performance.

Figure 12: Close-up image of the 6000mAh lithium iron phosphate battery, emphasizing its high capacity and durability.

Warranty and Support

INTELAMP is committed to providing high-quality products and excellent customer service. Your solar light comes with a worry-free after-sales service.

- **Initial Testing:** Upon receiving the product, please test its functionality before proceeding with installation and regular use.
- **Customer Support:** If you encounter any problems during use, or have questions regarding installation or operation, please do not hesitate to contact INTELAMP customer support. Contact information can typically be found on the product packaging or the retailer's website where the product was purchased.