

ECOELER YM2511

ECOELER Ceiling Occupancy Motion Sensor Switch User Manual

Model: YM2511

Brand: ECOELER

1. INTRODUCTION

The ECOELER Ceiling Occupancy Motion Sensor Switch (Model YM2511) is an advanced automatic light switch designed to enhance energy efficiency and convenience in various indoor environments. It utilizes Passive Infrared (PIR) technology to detect motion, automatically turning lights ON when occupancy is detected and OFF after a set period of inactivity. This sensor is ideal for applications such as hallways, bathrooms, storage areas, closets, and pantries, providing hands-free lighting control.



Front view of the ECOELER Ceiling Occupancy Motion Sensor Switch.

2. WHAT'S IN THE BOX

Your ECOELER Motion Sensor Switch package includes the following components:

- Motion Sensor Unit
- Mounting Accessories (screws, wire nuts)
- User Manual (this document)

3. SPECIFICATIONS

Feature	Specification
Model Number	YM2511
Brand	ECOELER

Feature	Specification
Product Dimensions	3.97 x 3.14 x 1.37 inches
Weight	5.93 ounces
Color	White
Power Source	Corded Electric
Voltage	120/277VAC
Maximum Range	20 Feet (detection)
Detection Angle	360°
Mounting Type	Plug-In Mount (Ceiling Fixture Mount)
Compatibility	LED, Incandescent, Electronic Ballast Fluorescent, CFL, Magnetic Low-voltage (MLV), Electronic Low-Voltage (ELV)

DIMENSIONAL DRAWING



WIRE NUTS



Dimensional drawing showing the physical measurements of the sensor.

UNIVERSAL COMPATIBILITY

Works with 99% of LED, CFL and incandescent light bulbs.



The sensor is compatible with various lamp types, including Incandescent, CFL, and LED.

4. SETUP AND INSTALLATION

Important Safety Information: Installation should be performed by a qualified electrician or in accordance with local electrical codes. Always ensure the power is OFF at the circuit breaker before beginning any electrical work to prevent electric shock.

Wiring Requirements:

- The ECOELER YM2511 sensor requires a neutral wire for proper operation.
- Ensure all wiring connections are secure and insulated.

Installation Steps (General Guide):

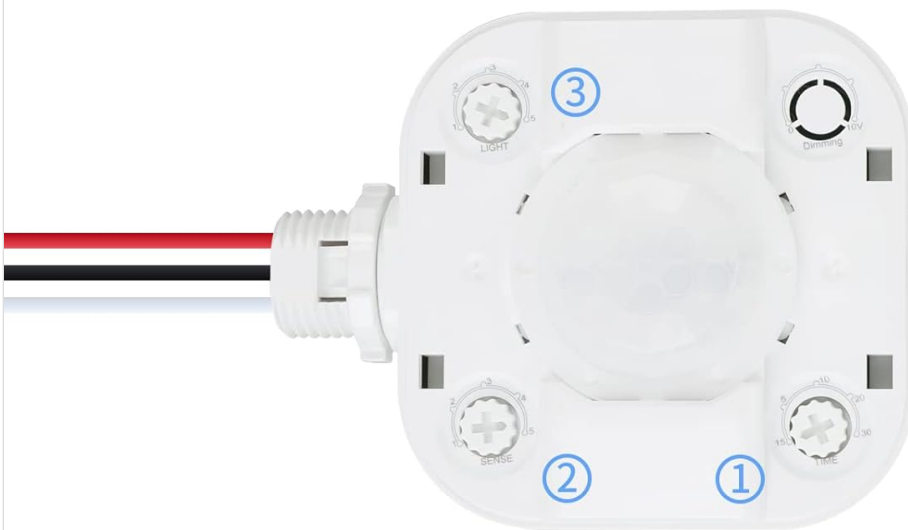
1. **Turn Off Power:** Locate the circuit breaker controlling the light fixture and turn off the power. Verify power is off using a voltage tester.
2. **Prepare Wiring:** Identify the Line (hot), Load (to light fixture), and Neutral wires from your electrical box. The sensor has corresponding wires (typically black for Line, red for Load, white for Neutral).

3. **Connect Wires:** Use the provided wire nuts to connect the sensor's wires to the corresponding house wires. Connect ground wires if present.
4. **Mount Sensor:** Securely mount the sensor to the ceiling fixture or junction box using the provided mounting accessories. Ensure it is positioned for optimal 360° detection.
5. **Restore Power:** Once all connections are secure and the sensor is mounted, turn the power back on at the circuit breaker.

5. OPERATING INSTRUCTIONS

The ECOELER motion sensor switch features three adjustable dials to customize its performance according to your specific needs. These dials are located on the sensor unit.

ADJUSTMENT



1.TIME:

Controls how long the light or fan stays on after no motion is detected.

2.SENSE:

Adjusts the sensitivity setting to avoid unwanted detection such as hallway traffic or adjacent movement.

3.LIGHT:

Prevents the sensor from automatically turning the lights or fan on if the area has enough ambient lighting.

The adjustment dials for Time, Sense, and Light settings.

Adjustable Settings:

1. TIME (Delay Time):

This dial controls how long the light remains ON after the last detected motion. You can adjust the delay time from 15 seconds to 30 minutes. Turning the dial clockwise increases the delay time.

2. SENSE (Sensitivity):

This dial adjusts the sensitivity of the motion detection. It can be set from 20% to 100%. A higher sensitivity setting will detect smaller movements or motion at a greater distance. Adjust this to avoid unwanted detection from minor movements or distant traffic.

3. LIGHT (Ambient Light Level):

This dial sets the ambient light level threshold. The sensor will only activate the lights if the surrounding ambient light is below this set level. This prevents the lights from turning on unnecessarily during daylight hours when sufficient natural light is available.

PIR MOTION DETECTION

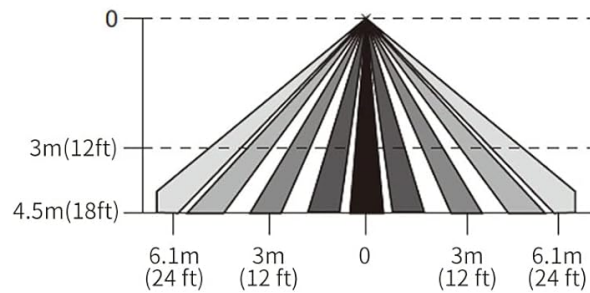
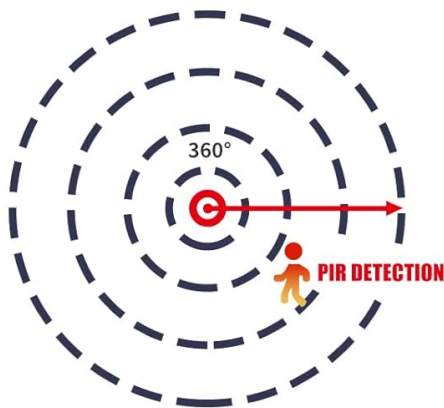


Diagram illustrating the 360° PIR detection range and pattern.

APPLICATION



Warehouse



Corridor



Parking Lot



Stairs



Porch



Closet

The sensor is suitable for a wide range of applications, including warehouses, corridors, parking lots, stairwells, porches, and closets.

6. MAINTENANCE

The ECOELER motion sensor switch requires minimal maintenance. To ensure optimal performance and longevity:

- **Cleaning:** Periodically wipe the sensor lens with a soft, dry cloth to remove dust or debris. Do not use abrasive cleaners, solvents, or harsh chemicals, as these can damage the sensor.
- **Inspection:** Occasionally inspect the wiring connections to ensure they remain secure.

7. TROUBLESHOOTING

If you encounter issues with your ECOELER motion sensor switch, refer to the following common troubleshooting steps:

- **Light not turning ON when motion is detected:**

- Ensure power is supplied to the sensor.
 - Check the 'LIGHT' setting; it might be set too high, preventing activation in current ambient light conditions. Try lowering the setting.
 - Verify that motion is occurring within the sensor's detection range and line of sight.
 - Clean the sensor lens to ensure no obstructions.
- **Light not turning OFF:**
 - Check the 'TIME' setting; it might be set to a very long delay.
 - Ensure there is no continuous motion within the sensor's detection area. Even subtle movements can keep the light on.
 - Verify that the sensor is not exposed to heat sources (e.g., HVAC vents) or air drafts that could cause false triggers.
 - **False Triggers (light turns on without apparent motion):**
 - Adjust the 'SENSE' setting to a lower sensitivity.
 - Ensure the sensor is not positioned where it can detect motion outside the desired area (e.g., through a doorway to an adjacent room).
 - Check for environmental factors like strong air currents or rapid temperature changes near the sensor.

If the problem persists after attempting these steps, it is recommended to consult a qualified electrician or contact ECOELER customer support.

8. WARRANTY AND SUPPORT

ECOELER is committed to providing high-quality products. For information regarding the product warranty, please refer to the warranty card included with your purchase or visit the official ECOELER website. For technical assistance, troubleshooting beyond this manual, or any other inquiries, please contact ECOELER customer service through the retailer where the product was purchased or directly via the contact information provided on the ECOELER website.

We appreciate your purchase of the ECOELER Ceiling Occupancy Motion Sensor Switch and hope it brings convenience and energy savings to your space.