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ECOELER YM2108

ECOELER Motion Sensor Light Switch User Manual

Model: YM2108

Brand: ECOELER

INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your ECOELER Motion Sensor Light Switch, Model YM2108. This device is designed to provide automatic lighting control in various indoor spaces such as laundry rooms, garages, hallways, and closets, enhancing convenience and energy efficiency.



Image: The ECOELER Motion Sensor Light Switch, Model YM2108, shown installed in a modern bathroom setting, highlighting its compliance with UL, FCC, and California Title 24 standards.

KEY FEATURES

- **Hands-Free Operation:** Detects presence to automatically activate lights, eliminating the need for manual switching.
- **Neutral Wire Required:** Ensures stable performance; designed for single-pole installations only, not for 3-way circuits.
- **Occupancy (OCC) & Vacancy (VAC) Modes:**
 - **OCC Mode:** Lights turn on automatically with motion and off when the space is unoccupied.
 - **VAC Mode:** Requires manual activation, then turns off automatically when no motion is detected.
- **Customizable Settings:** Adjustable time delays, sensitivity, and ambient light level sensing for tailored control.
- **High Quality & Compliance:** UL Certified, FCC Listed, and California Title 24 Compliant.
- **Broad Compatibility:** Works with 300W LED, 300W CFL, and 600W incandescent light bulbs.



HANDS-FREE CONTROL

Enjoy Energy Saving, Convenient and Safe Life

Image: Visual representation of the hands-free control feature, showing the motion sensor light switch seamlessly integrated into different living spaces.

INSTALLATION GUIDE

WARNING: Installation should only be performed by a qualified electrician to ensure safety and compliance with local electrical codes. Always turn off power at the circuit breaker before installation.

The ECOELER Motion Sensor Light Switch (Model YM2108) requires a neutral wire for proper operation. It is designed for single-pole applications only and is not compatible with 3-way circuits.

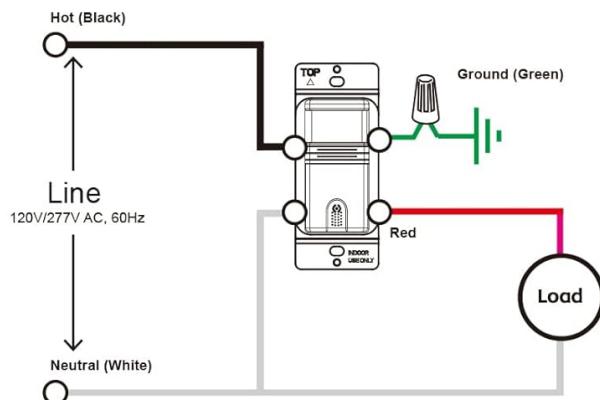
Wiring Instructions:

1. Turn off power at the circuit breaker.
2. Remove the existing wall plate and switch.
3. Identify the wires in your electrical box: Hot (Black), Load (Red), Neutral (White), and Ground (Green or bare copper).
4. Connect the wires from the ECOELER switch to your house wiring according to the diagram below. Use the provided terminal caps to secure connections.
5. Carefully push the wired switch into the electrical box.

6. Attach the wall plate.
7. Restore power at the circuit breaker.

Neutral wire require

WIRING GUIDE



Hot
Load
Neutral
Ground



Image: A clear wiring guide illustrating the connections for the Hot (Black), Load (Red), Neutral (White), and Ground (Green) wires for the YM2108 switch.

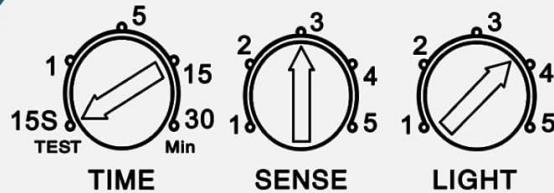
OPERATION

The ECOELER Motion Sensor Light Switch offers two primary operation modes and several customizable settings to suit your specific needs.

Operation Modes:

- **Occupancy Mode (OCC):** In this mode, the lights will automatically turn ON when motion is detected and automatically turn OFF after a set delay when no motion is detected. This is ideal for high-traffic areas where automatic lighting is desired.
- **Vacancy Mode (VAC):** In this mode, the lights must be turned ON manually. They will then automatically turn OFF after a set delay when no motion is detected. This mode is suitable for areas where manual control for turning on the light is preferred, but automatic turn-off is desired for energy saving.

OPERATION MODES



VACANCY MODE

Manual on & Auto off



OCCUPANCY MODE

Auto on & off

Occupancy and Vacancy sensor mode
allow you to customize the sensor according to your needs.

Image: An illustration detailing the Occupancy (Auto on & off) and Vacancy (Manual on & Auto off) modes, with a switch to select between them.

Customizable Settings:

The switch features three adjustable dials to fine-tune its performance:

- **TIME (Adjustable Delay Time):** Sets how long the lights remain ON after the last detected motion. Adjustable from 15 seconds (TEST) to 30 minutes.
- **SENSE (Sensor Sensitivity Range):** Adjusts the detection range of the motion sensor. Settings range from 1 (approx. 6.56 ft) to 5 (approx. 29.52 ft).
- **LIGHT (Ambient Light Level):** Determines the ambient light level at which the sensor will activate the lights. Settings range from 1 (5 lux) to 5 (all day, meaning it will activate regardless of ambient light).

CUSTOMIZABLE SETTINGS

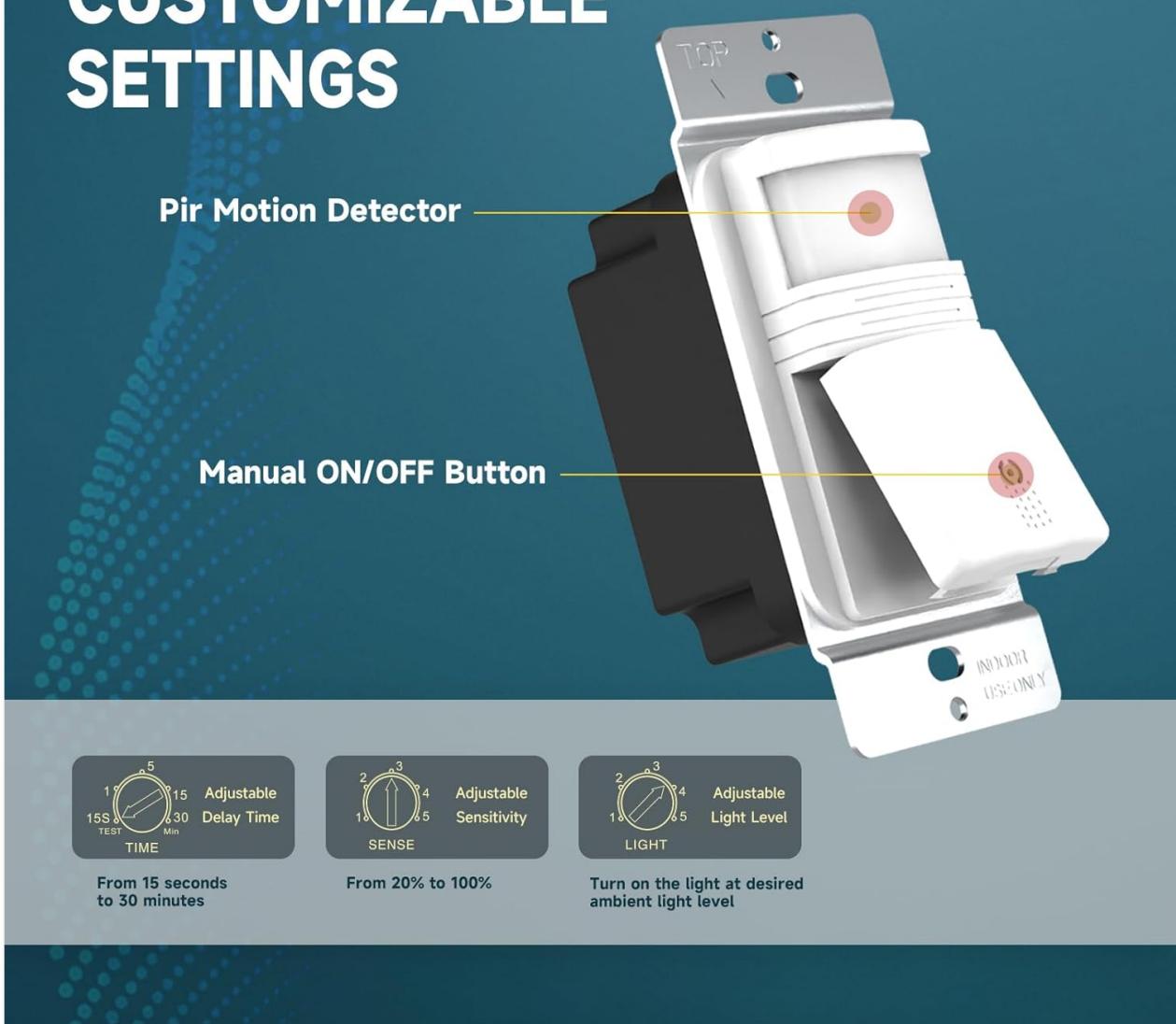


Image: A detailed view of the customizable settings on the ECOELER Motion Sensor Light Switch, including dials for Time Delay, Sensitivity, and Ambient Light Level.

MAINTENANCE

The ECOELER Motion Sensor Light Switch requires minimal maintenance. Periodically, gently wipe the sensor lens and switch surface with a soft, dry cloth to remove dust or debris that may interfere with sensor performance. Do not use abrasive cleaners or solvents.

TROUBLESHOOTING

If you experience issues with your ECOELER Motion Sensor Light Switch, consider the following:

- **Lights not turning on/off automatically:** Verify the selected operation mode (OCC/VAC) and adjust the 'SENSE' (sensitivity) and 'LIGHT' (ambient light level) settings. Ensure there are no obstructions blocking the sensor's field of view.
- **Lights turning off too quickly or staying on too long:** Adjust the 'TIME' dial to increase or decrease the delay time.

- **Lights not turning on at all:** Check the circuit breaker to ensure power is supplied to the switch. Confirm that the wiring connections are secure and correct, especially the neutral wire. Test the connected light bulb to ensure it is functional.

SPECIFICATIONS

Feature	Specification
Model Number	YM2108
Operation Mode	OCC / VAC Mode
Current Rating	6 Amps
Operating Voltage	120 Volts (AC)
Contact Type	Normally Open
Connector Type	Clamp
Terminal	SPST
Item Dimensions (L x W x H)	4.61 x 2.87 x 2.24 inches
Circuit Type	1-way (Single Pole)
Actuator Type	Relay
Contact Material	Copper
International Protection Rating	IP40
Lower Temperature Rating	32 Degrees Fahrenheit (0°C)
Upper Temperature Rating	131 Degrees Fahrenheit (55°C)
Controller Type	Motion Sensor
Color	White
Wattage	600 watts (Incandescent), 300 watts (LED/CFL)
Item Weight	4.2 ounces
Power Source	Corded Electric
Type of Bulb	LED, CFL, Incandescent
Included Components	Motion sensor switch with plate, User manual

PRODUCT SPECIFICATION



Wall Plate



Sensor



4*Screws



4*Terminal Caps

Input Rating	120V,60Hz
Lamp Type	300W LED 300W CFL 600W Incandescent
Switch Type	Single Pole
Wiring Type	Terminal Cap
Operating Temperature	30°F to 140°F (0°C to 40°C)
Product Size	2.70*4.52*1.65 inch
Remark	Not suitable for 3way circuit

Image: A visual summary of the product specifications and a list of included accessories such as the wall plate, screws, and terminal caps.

WARRANTY AND SUPPORT

The ECOELER Motion Sensor Light Switch (Model YM2108) comes with a **1-Year Limited Warranty**. This warranty covers manufacturing defects under normal use conditions. In the event of a defect, a replacement or refund may be available.

For warranty claims or technical support, please contact the seller (ECOELER ELECTRIC INC) directly via Amazon for assistance.