

TOPGREENER TSOS5-W

TOPGREENER TSOS5-W In-Wall PIR Motion Sensor Light Switch User Manual

Model: TSOS5-W

1. INTRODUCTION

The TOPGREENER TSOS5-W is an in-wall Passive Infrared (PIR) motion sensor light switch designed to automatically control lighting, fans, and motors based on occupancy detection. This single-pole switch requires a neutral wire for proper operation and offers AUTO, ON, and OFF modes for flexible control. It is suitable for various indoor applications, providing convenience and energy savings.

2. IMPORTANT SAFETY INFORMATION

WARNING: To avoid fire, shock, or death, turn off power at the circuit breaker or fuse and test that the power is off before wiring. Installation should be performed by a qualified electrician or a person with electrical knowledge.

- This device requires a neutral wire for installation. Verify the presence of a neutral wire in your electrical box before proceeding.
- For single-pole use only. Do not use in 3-way or multi-way switch configurations.
- Do not exceed the maximum load ratings: CFL/LED: 150W; Incandescent/Halogen: 500W; Motor: 1/8 HP; Fluorescent 500VA.
- Ensure all wire connections are secure and properly insulated.
- Indoor use only.

3. PACKAGE CONTENTS

- TOPGREENER TSOS5-W Motion Sensor Switch
- Wire Nuts
- Instruction Manual

Note: Wall plate sold separately.

4. PRODUCT SPECIFICATIONS

Model Number	TSOS5-W
Voltage	120VAC
Load Type	CFL/LED: 150W; Incandescent/Halogen: 500W; Motor: 1/8 HP; Fluorescent 500VA
Sensor Type	PIR (Passive Infrared)
Field of View	180 degrees
Coverage Area	Up to 980 sq ft
Time Delay	Adjustable: 15 sec (test mode), 10 min, 20 min, 30 min
Sensitivity	Adjustable: 30% to 100%
Wiring Requirement	Neutral Wire Required
Dimensions	5.1 x 3 x 2.2 inches
Weight	4.97 ounces (0.14 Kilograms)
Mounting Type	Embedded (In-Wall)

5. INSTALLATION INSTRUCTIONS

Before You Begin: Ensure power is OFF at the circuit breaker. This device requires a neutral wire. If you are unsure about your wiring, consult a qualified electrician.

5.1 Wiring Diagram

The TSOS5-W switch has four wires for connection: Line (Hot), Load, Neutral, and Ground.

- **Black Wire:** Connects to the Line (Hot) wire from the electrical box.
- **Red Wire:** Connects to the Load wire (to the light fixture/fan).
- **White Wire:** Connects to the Neutral wire from the electrical box.
- **Green Wire:** Connects to the Ground wire from the electrical box.



Figure 1: Front view of the TOPGREENER TSOS5-W motion sensor switch, showing the sensor lens and the OFF-AUTO-ON slider.



Figure 2: Internal components of the TSOS5-W, illustrating the PIR sensor, customizable controls, and safety features.

5.2 Step-by-Step Installation

1. **Turn Off Power:** Locate the circuit breaker that controls the power to the switch box and turn it OFF. Verify power is off using a voltage tester.

2. **Remove Old Switch:** Carefully remove the existing wall plate and switch from the electrical box. Disconnect the wires from the old switch.
3. **Identify Wires:** Identify the Line (Hot), Load, Neutral, and Ground wires in your electrical box. The neutral wire is typically white. If you are unsure, consult a qualified electrician.
4. **Connect Wires:** Using the provided wire nuts, connect the wires from the TSOS5-W switch to the corresponding wires in the electrical box:
 - Black switch wire to Line (Hot) wire.
 - Red switch wire to Load wire.
 - White switch wire to Neutral wire.
 - Green switch wire to Ground wire.
5. **Mount Switch:** Carefully fold the wires into the electrical box and secure the TSOS5-W switch to the box using the mounting screws.
6. **Install Wall Plate:** Attach the wall plate (sold separately) over the switch.
7. **Restore Power:** Turn the power back ON at the circuit breaker.

6. OPERATION

The TSOS5-W features a slider switch for mode selection and adjustable dials for sensitivity and time delay, located behind the faceplate.

6.1 Mode Selection



Figure 3: The OFF-AUTO-ON slider switch for mode selection.

- **AUTO Mode (Occupancy Sensor):** In this mode, the switch automatically turns lights ON when motion is detected and OFF after a set time delay when no motion is detected. This is the primary energy-saving mode.
- **ON Mode:** This mode overrides the sensor, keeping the lights ON continuously, similar to a standard light switch.
- **OFF Mode:** This mode overrides the sensor, keeping the lights OFF continuously, similar to a standard light switch.

6.2 Adjusting Settings (Behind Faceplate)

To access the adjustment dials, carefully remove the faceplate of the switch. You will find dials for Time Delay and Sensitivity.

- **Time Delay:** This setting determines how long the lights remain ON after the last detected motion. Adjustable options include 15 seconds (test mode), 10 minutes, 20 minutes, and 30 minutes. Rotate the dial to select the desired delay.
- **Sensitivity:** This setting controls the sensor's responsiveness to motion. It can be adjusted from 30% to 100%. A higher sensitivity setting will detect smaller movements or movements at a greater distance. Rotate the dial to adjust.

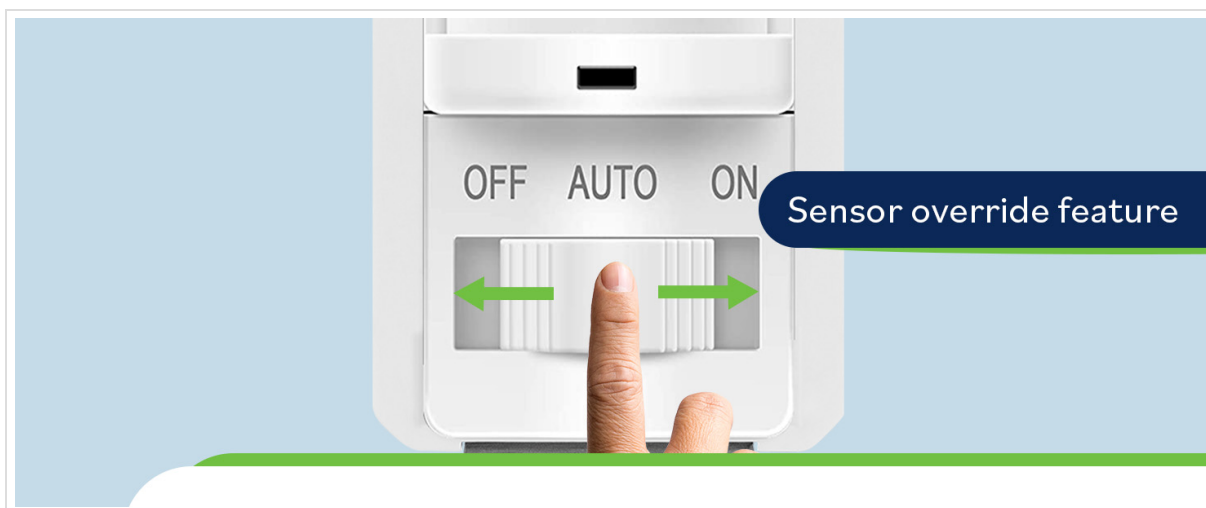


Figure 4: The TSOS5-W in an occupancy sensing application, providing hands-free lighting control.

7. TROUBLESHOOTING

Problem	Possible Cause / Solution
Lights do not turn ON/OFF or device does not work after installation.	<ul style="list-style-type: none"> • Verify power is ON at the circuit breaker. • Ensure all wiring connections (Line, Load, Neutral, Ground) are correct and secure. A neutral wire is required. • Check if the switch is in the correct mode (AUTO, ON, OFF). • Confirm the load (light/fan) is functioning correctly. • If the issue persists, contact customer support.
Lights turn ON unexpectedly or stay ON too long.	<ul style="list-style-type: none"> • Adjust the sensitivity dial to a lower setting. • Check for heat sources or air currents (e.g., HVAC vents, windows) within the sensor's field of view that might be causing false triggers. • Reduce the time delay setting.
Lights do not turn ON when motion is detected.	<ul style="list-style-type: none"> • Ensure the switch is in AUTO mode. • Increase the sensitivity setting. • Verify the sensor's field of view is not obstructed. • Check if the ambient light level is too high (some sensors have a daylight detection feature that prevents lights from turning on if sufficient natural light is present).
Cannot set time delay less than 10 minutes.	<ul style="list-style-type: none"> • The specified time delay options are 15 seconds (test mode), 10 minutes, 20 minutes, and 30 minutes. Intermediate settings between 15 seconds and 10 minutes are not available.

8. MAINTENANCE

- Clean the sensor lens periodically with a soft, dry cloth to ensure optimal performance. Avoid using abrasive cleaners.
- Do not paint over the sensor lens.
- No user-serviceable parts inside. Do not attempt to disassemble the unit.

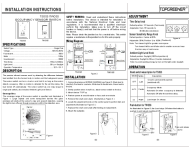
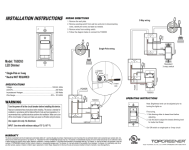
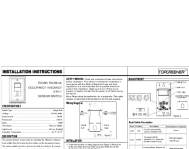

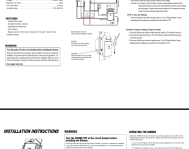
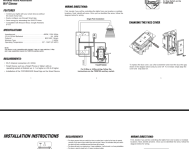
9. WARRANTY AND SUPPORT

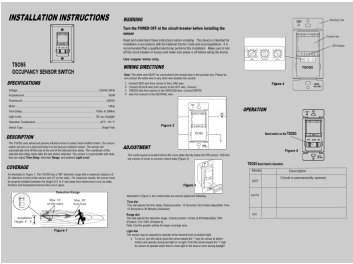
TOPGREENER products are designed for reliability and performance. For warranty information or technical support, please contact TOPGREENER customer service. Refer to the product packaging or the official TOPGREENER website for contact details.

Manufacturer: Top Greener Inc

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Related Documents - TSOS5-W

	<p>TopGreener TSOS5/TWOS5 Occupancy Sensor Switch Installation Instructions</p> <p>Detailed installation instructions for the TopGreener TSOS5 and TWOS5 occupancy sensor switches, including specifications, wiring diagrams, operation, troubleshooting, and warranty information.</p>
	<p>Top Greener TGSDS3 LED Dimmer Installation Instructions</p> <p>Comprehensive installation guide for the Top Greener TGSDS3 LED Dimmer, detailing single-pole and 3-way wiring, product specifications, operating instructions, and warranty information.</p>
	<p>Topgreener TDOS5/TDOS5-NL Occupancy/Vacancy Sensor Switch Installation Guide</p> <p>Comprehensive installation guide for the Topgreener TDOS5/TDOS5-NL 2-in-1 Occupancy/Vacancy Sensor Switch. Includes specifications, wiring diagrams, adjustment settings, operation modes, troubleshooting tips, and warranty information.</p>
	<p>TOPGREENER TDHS5 Humidity Sensor Fan Control Installation Guide</p> <p>Comprehensive installation instructions and user guide for the TOPGREENER TDHS5 Humidity Sensor Fan Control. Learn how to wire, program, and operate your humidity-sensing fan control for optimal bathroom ventilation.</p>
	<p>TOPGREENER TGWF500D Wi-Fi Dimmer Installation and Setup Guide</p> <p>Comprehensive installation and setup guide for the TOPGREENER TGWF500D Wireless Home Automation Wi-Fi Dimmer. Learn how to wire, connect to Wi-Fi, and operate your smart dimmer.</p>
	<p>TopGreener TGT01-H Astronomic In-Wall Programmable Timer Installation and Operation Guide</p> <p>Comprehensive guide for installing and operating the TopGreener TGT01-H Astronomic In-Wall Programmable Timer. Learn about features, wiring, programming, and troubleshooting.</p>



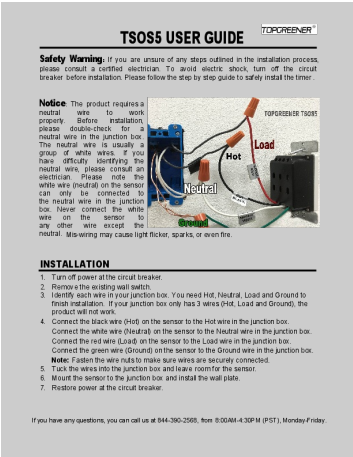
[\[pdf\]](#) User Manual Instructions Specifications

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INSTALLATION INSTRUCTIONS TSOS5 OCCUPANCY SENSOR SWITCH SPECIFICATIONS Voltage

..... 120VAC,60Hz
Incandescent

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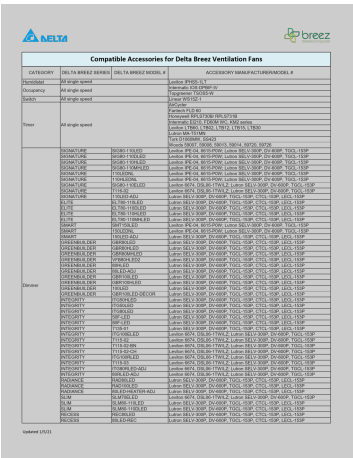


[\[pdf\]](#) Installation Guide Guide

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TSOS5 USER GUIDE Safety Warning: If you are unsure of any steps outlined in the installation process, please consult a certified electrician. To avoid electric shock, turn off the circuit breaker before installation. Please follow the step by step guide to safely install the timer . Notice: The prod...

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[\[pdf\]](#) Accessories

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