TEST MODE

To test the detection coverage:

During the TEST mode, the controlled load turns ON for 5 seconds each time the sensor detects occupancy.

1. Press and hold the ON/OFF button. After 10 seconds the lighted switch turns OFF. The controlled load turns ON if it was not already ON. The sensor is now in a TEST mode that lasts 5 minutes. (You can end the TEST mode sooner by pressing the ON/OFF button for another 10 seconds).
2. Move out of the coverage area or stand very still. The controlled load turns OFF after 5 seconds if no motion is detected.
3. Move into the coverage area. The controlled load turns ON for 5 seconds each time the sensor detects motion. After 5 seconds expire without motion detection, the load turns OFF. The controlled load turns ON automatically with the next motion detection and stays ON for 5 seconds.
4. Repeat as necessary to ensure that the desired coverage areas are within detection range.

TROUBLESHOOTING

Load will not turn ON (lighted switch is visible):

- Move in front of the sensor to automatically turn lights ON. If lights do not turn ON, press the ON/OFF button. The lighted switch should turn OFF and the controlled load should turn ON, if not:
- Check the light bulb.
- Turn OFF power to the circuit then check wire connections.
- Remember that if the load is turned OFF manually, Automatic-ON is reenabled only after no motion is detected for 5 minutes.

Light will not turn ON (lighted switch is NOT visible):

- Check the light bulb.
- Make certain that the circuit breaker is ON and functioning.
- Turn OFF power to the circuit then check wire connections.

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Load will not turn OFF:

The time delay is 5 minutes (fixed time delay).

- Make sure no motion occurs in the coverage area until the time delay expires.
- If the load does not turn OFF, call Technical Support at 800.223.4185.
- Hot air currents and heat radiant devices can cause false detection. Make sure the sensor is at least 6 feet (2 meters) away from devices that are a significant heat source (e.g heater, heater vent, high wattage light bulb).
- Press the ON/OFF button. If the controlled load does not turn OFF, turn OFF the power to the circuit, then check wire connections.

Limited FIVE YEAR Warranty

Pass & Seymour/Legrand will remedy any defect in workmanship or material in Pass & Seymour/Legrand products which may develop under proper and normal use within five years from the date of purchase by a consumer:

(1) by repair or replacement, or, at Pass & Seymour/Legrand's option, (2) by return of an amount equal to the consumer's purchase price. Such remedy is IN LIEU OF ANY AND ALL EXPRESSED OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Such remedy by Pass & Seymour/Legrand does not include or cover cost of labor for removal or reinstallation of the product. ALL OTHER FURTHER ELEMENTS OF DAMAGE (INCIDENTAL OR CONSEQUENTIAL DAMAGES) FOR BREACH OF ANY AND ALL EXPRESSED OR IMPLIED WARRANTIES including warranties OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED HEREBY. (Some states do not allow disclaimer or exclusion or limitation of incidental or consequential damages, so the above disclaimers and limitation or exclusion may not apply to you.) ANY IMPLIED WARRANTIES INCLUDING WHERE REQUIRED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL BE LIMITED TO THE FIVE YEAR PERIOD SET FORTH ABOVE. (Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.)

To ensure safety, all repairs to Pass & Seymour/Legrand products must be made by Pass & Seymour/Legrand or under its specific direction. Procedure to obtain performance of any warranty obligation is as follows: (1) Contact Pass & Seymour/Legrand, P.O. Box 4822, Syracuse, NY 13221 for instructions concerning return or repair; (2) return the product to Pass & Seymour/Legrand, postage paid, with your name and address and a written description of the installation or use of the Pass & Seymour/Legrand product, and the observed defects or failure to operate, or other claimed basis for dissatisfaction.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Pass & Seymour

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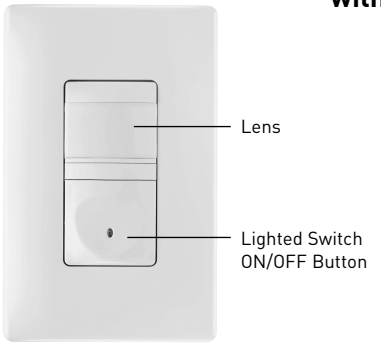
Technical Support: 800.223.4185 • www.passandseymour.com

340800 Rev. B 08129

Please read all instructions before installing

RW500U
PIR Occupancy Sensor Switch
with Manual ON/OFF

Installation Instructions



SPECIFICATIONS

Voltage 120VAC, 60Hz
Load (Single Pole Circuit)
Incandescent . . . . . 25-500 Watts
Time Delay . . . . . .5 minutes
Environment . . . . . .Residential Indoor use only
Operating Temperature . . . . . .32° to 131°F (0° to 55°C)
Humidity . . . . . .95% RH, non-condensing
Electrical Supply Wire . . .minimum temp rating 167°F (75°C)
Tools Needed:
Insulated Screwdriver
Wire Strippers

Pass & Seymour

legrand

Syracuse, NY 13221

DESCRIPTION AND OPERATION

The RW500U Occupancy Sensor Switch is designed to replace a residential light switch. It is ideal for laundry rooms, utility rooms, storage areas, closets and any other indoor area in a residential building where occupancy sensor-based automatic ON/OFF controls are desirable. The sensor requires no adjustments to operate successfully in those particular applications for which it was designed.

Lighted Switch

To help you locate the RW500U in a dark room, a green LED illuminates the ON/OFF button while the controlled light (load) is OFF. When the load is ON, the LED is OFF.

Push Button

The push button can be used to manually turn ON and OFF the load. To turn the load OFF, tap firmly on the push button once. The lighted switch will turn ON and the load will turn OFF. If the load is turned OFF manually, Automatic-ON is reenabled when no motion is detected for 5 minutes.

Time Delay

The RW500U has a fixed time delay of 5 minutes. Lights will remain ON for 5 minutes after the last motion detection.

Coverage Area

The RW500U has a maximum range of 180 degrees and a coverage area of 600 sq. feet (56 sq, meters). The sensor must have a clear and unobstructed view of the coverage area. Objects blocking the sensor's lens may prevent detection thereby causing the light to turn OFF even though someone is in the area.

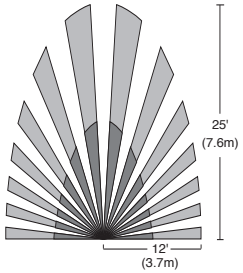


Fig. 1: Sensor Coverage Area

Windows, glass doors, and other transparent barriers will obstruct the sensor's view and prevent detection.

INSTALLATION & WIRING

WARNING

Disconnect power to the wall switch box by turning OFF the circuit breaker or removing the fuse for the circuit before installing the RW500U, replacing lamps, or doing any electrical work.

1. Prepare the switch box.

After the power is turned OFF at the circuit breaker box, remove the existing wall plate and mounting screws. Pull the old switch out from the wall box.

2. Identify the type of circuit.

In a Single Pole Circuit (see Fig. 2), two single wires connect to two screws on the existing switch. A ground wire may also be present and connected to a ground terminal on the old switch.

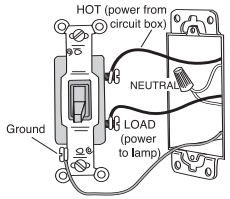


Fig 2: Typical Single Pole Switch Wiring

CAUTION – FOR YOUR SAFETY: Connecting a proper ground to the sensor provides protection against electrical shock in the event of certain fault conditions. If a proper ground is not available, consult with a qualified electrician before continuing installation.

Only connect the RW500U to a Single Pole Circuit. The RW500U is not suitable for 3-way switching. If the existing wiring does not match the description for a Single Pole Circuit, you should consult with a qualified electrician. If 3-way switching is required, use P&S 3-way occupancy sensor, RW3U600.

3. Prepare the wires.

Tag the wires connected to the existing switch, so that they can be identified later. Disconnect the wires. Make sure the insulation is stripped off the wires to expose their copper cores to the length indicated by the "Strip Gage" (in Fig. 3) (approx. 1/2 inch).

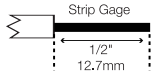


Fig 3: Wire Stripping

4. Wire the sensor.

Twist the existing wires together with the wire leads on the RW500U sensor as indicated below. Cap them securely using the wire nuts provided (see Fig 4).

- Connect the green or non-insulated (copper) GROUND wire from the circuit to the green wire on the RW500U.
- Connect the power wire from the circuit box (HOT) to the black wire on the RW500U.
- Connect the wire to the lamp (LOAD) to the red wire on the RW500U.

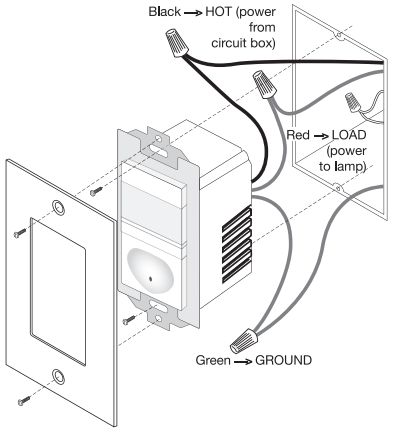


Fig. 4: Sensor orientation, wire connections and wall box assembly

5. Put the RW500U in the wall box.

Position the lens above the ON/OFF button (lens at top, button at bottom) and secure it to the wall box with the screws provided.

6. Attach the new cover plate.

Secure it to the wall box with the screws provided.

7. Restore power to the circuit.

Turn ON the breaker or replace the fuse.

8. Test the sensor's operation.

See TEST MODE.

Initial Power-up Delay

There is an initial warm-up period the first time power is applied to the unit and after a power failure lasting more than 5 minutes. It may take up to 1 minute before the lights turn ON. However, the lights can be turned ON/OFF manually by pressing the ON/OFF button at any time when power is supplied to the unit.

REV.	DESCRIPTION	INT:	REV. DATE	APPROVED
1	340800	JAR		

TITLE BOX PAGE ONLY.
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- Print: 2-sided
- Ink Color: Black
- Paper: White 16lb (60g/m sq)
- Final trim size: 12" (Wide) x 6" (High).
- Three (3) fold.
- Final folded size: 4" (Wide) x 6" (High).

IF YOU HAVE ANY QUESTIONS REGARDING SPECIFICATIONS OR REQUIRE ADDITIONAL FILE FORMATTING, PLEASE CONTACT Joyce Rougeau.
Phone: 315.437.7561
Email: jrougeau@aggraphics.com

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MarCom		Title: RW500U Installation Instructions		
Engineering				
QA				
		Drawing #: 08129	Orig. Drawing Date: 28 FEB 06 Revision Date: 28 FEB 07	Rev. #: 1
TITLE BOX PG	Scale: 1:1			