

OS300S

120/277VAC

PIR Wall Switch



Installation Instructions

SPECIFICATIONS

Voltages	120/277VAC, 50/60Hz
Load Limits:	
@120VAC	0-800W tungsten or ballast
@277VAC	0-1200W ballast
Load Type Compatibility	incandescent, fluorescent, magnetic or electronic ballast
Time Delay Adjustment	5 to 30 minutes, user-selectable or automatic
Sensitivity Adjustment	High or 50%
Alerts	Selectable Audible and/or Light Flash
Horsepower Rating	1/6 HP

Pass & Seymour

 **legrand**

US Patents: 4,787,722
4,874,962

Syracuse, NY 13221
800.223.4185

UNIT DESCRIPTION AND OPERATION

The OS300S is a passive infrared wall switch that turns lighting ON and OFF based on occupancy and ambient light levels. SmartSet™ technology allows the sensor to be installed without any adjustments. This technology allows the sensor to automatically adjust to the usage patterns in the space. Alternate operating modes, selected by DIP switch settings, can be combined to create the ideal custom control.

Turning The Lights On

Auto On Mode	The OS300S will turn lights ON and OFF automatically based on occupancy. If the lights are turned OFF manually, automatic-ON operation will not be reenabled until no motion is detected for five minutes. This feature prevents lights from accidentally being turned ON after they were deliberately turned OFF.
Manual On Mode	Occupants must turn ON the lights by pressing the Auto-ON/OFF button. The sensor will then keep the lights ON until no motion is detected for the selected time delay period. There is a 30 second reset delay. If motion is detected during this time, the sensor will turn the lights back ON automatically. After the reset delay time has elapsed, the Auto-ON/OFF button must be pressed to turn the lights ON.
Button Override	The lights can be turned ON or OFF by pressing the Auto ON/OFF button, regardless of the operating mode.

Time Delays

The OS300S time delay holds the lights ON until no motion is detected for a time period of 5 seconds to 30 minutes, at which point it turns the lights OFF. The sensor can automatically select the time delay, or the user can choose a fixed delay.

SmartSet™ Time Delays	Records typical occupancy patterns. Using this history (which is constantly updated), it chooses an optimal time delay from 7 minutes (when space is usually vacant) up to 30 minutes (for times that show heavy usage). SmartSet behavior starts immediately, and is refined continually as history is collected.
Fixed Time Delay	DIP switch selections provide fixed time delays of 5, 10, 15, 20, 25 or 30 minutes.

Call 800.223.4185 for Technical Support

Walk-Through Mode	Use for rooms that have frequent walk-through traffic (ie. room that accepts mail deliveries). The OS300S turns the lights OFF three minutes after the area is initially occupied, if no motion is detected after the first 30 seconds. If motion continues beyond the first 30 seconds, the set time delay applies.
Test Mode	To test the sensor, a short time delay of 5 seconds is set as the default (SmartSet/Test). Test Mode cancels automatically after five minutes, or if a fixed time delay is selected. To restart the Test Mode, change the time delay switch setting to any fixed amount and then return it to the SmartSet/Test setting.

Light Level Control

Light Level Control Enabled	Lights are held OFF, even when the controlled area is occupied, as long as the ambient light level is greater than a chosen threshold level. The light level can be set with the overhead lights ON or OFF.
------------------------------------	---

Sensitivity Adjustment

The OS300S constantly monitors the controlled environment and automatically adjusts to avoid common ambient conditions that can cause false detections, while providing maximum coverage.

High	Default setting. Suitable for most applications.
Low	Reduces sensitivity by approximately 50%. Useful in cases where the sensor is detecting movement outside of the desired area (also consider masking the lens) and where heat sources cause unnecessary activation.

Alerts

The OS300S can provide alerts as a warning before the lights turn OFF.

Light Flash Alert	Lights will flash OFF for one second, one minute before they will be turned OFF by the sensor.
Audible Alerts	Sensor will "chirp" twice, at one minute and at 30 seconds before turn-OFF. A distinct alert will sound 10 seconds before the lights go OFF.
Dual Alerts	When both Light Flash Alerts and Audible Alerts are selected, the Audible Alert at one minute remaining is replaced by the Light Flash Alert.
No Alerts	No warning will be provided.

Visit our website at: www.passandseymour.com

TROUBLESHOOTING

Lights will not turn ON (LED does flash):

1. Press and release the button. If the lights turn ON, verify that the correct On Mode is selected in the DIP switches.
2. Check all wire connections, in particular, the Load connection.
3. Check to see if light level control is enabled and natural light is holding OFF light. Test by holding hand over the sensor lens.
4. If lights still do not turn ON, call 800.223.4185 for technical support.

Lights will not turn ON (LED does not flash)

1. Check the wire connections, in particular, the Ground and Line connections. Verify that connections are tightly secured.
2. Press and release the button. If the lights turn ON, verify that the Sensitivity is set to High/Auto.
3. If lights still do not go ON, call 800.223.4185 for technical support

Lights will not turn OFF

1. There can be up to a 30 minute time delay after the last motion is detected. To verify proper operation, place the unit in any Fixed time delay (any of switches 1, 2, or 3 in the ON position), then select Automatic time delay (switches 1, 2, and 3 in the OFF position) to temporarily reenable Test Mode. Move out of view of the sensor. The lights should turn OFF in approximately 15 seconds.
2. Verify that the sensor is mounted at least six feet away from any heating/ventilating/air conditioning device that may cause false detection. Verify that there is no significant heat source (e.g., high wattage light bulb) mounted near the sensor.
3. If the lights still do not turn OFF, call 800.223.4185 for technical support.

Sensing motion outside desired areas

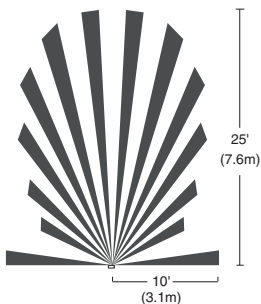
1. Select Sensitivity – Low (dip switch 4 = ON) if necessary.
2. Mask the sensor's lens, using the opaque tape supplied, to limit the field-of-view to the desired area.

No response to repeated button presses

Rapid pressing of the Auto-ON/OFF button will cause a delay in proper functioning of sensor. If the sensor does not respond to pressing the Auto ON/OFF button, wait for 10-15 seconds, and then press the button once again

COVERAGE PATTERNS

The OS300S will cover up to 300 sq. ft. The typical recommended coverage for desktop activity is 150 sq. ft. The sensor has a two-tiered, multi-cell viewing Fresnel lens with 180 degree field of view.



Masking the lens

Opaque adhesive tape is supplied so that sections of the sensor's view can be masked. This allows you to eliminate coverage in unwanted areas. Since masking removes bands of coverage, remember to take this into account when troubleshooting coverage problems.

INSTALLATION



WARNING



TURN THE POWER OFF AT THE CIRCUIT BREAKER BEFORE INSTALLING THE SENSOR OR WORKING ON THE LOAD.

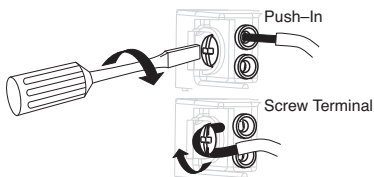


CAUTION



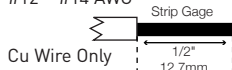
THE GROUND MUST BE TIGHTLY SECURED OR THE SENSOR WILL NOT WORK.

1. Make sure that the power has been turned OFF at the circuit breaker.
2. Connect the existing wires to the sensor terminals.
 - Hot or Black to Line; Load or Red to Load; Ground or Green to Ground
 - Do not allow bare wire to show above connector.
 - The ground wire must be tightly fastened or the unit will not operate properly.
 - If the metal junction box is grounded, attachment of the strap (by screws) to the junction box can constitute a suitable ground. Assure that the green ground screw on the sensor is completely tightened.

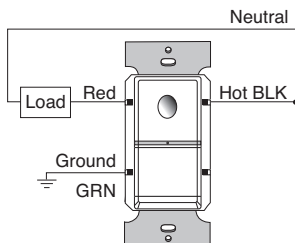


Insert or wrap wire as shown and tighten screw in the clockwise direction.

#12 – #14 AWG



3. Attach the sensor to the wall box by inserting screws into the two wide holes on the top and bottom of the attached metal bracket. Match them up with the holes in the wall box and tighten.
4. Turn circuit breaker ON. Wait one minute, then push the auto/OFF switch and the lights will turn ON. There is a delay due to initial power-up of the sensor that only occurs during installation.



Single-Level Wiring

ADJUSTMENTS

Sensor Adjustment

Your OS300S has been preset for optimum performance at the factory. It is designed with SmartSet technology for "Install and Forget" functionality. If you need to change the settings follow the directions below.

All major adjustments to the OS300S must be made with the wall plate removed. To access DIP switches, remove the button cap by squeezing the top sides of the button and pull it gently away from the unit.

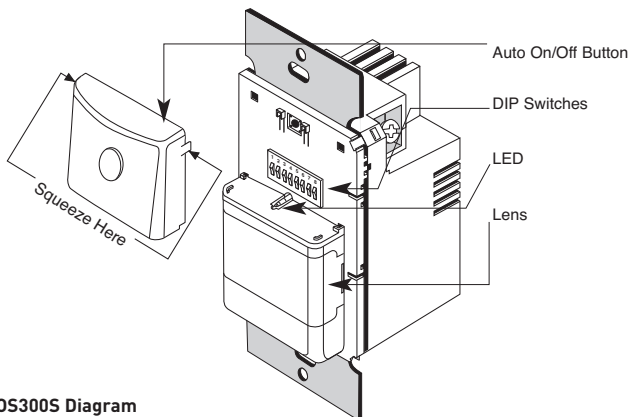
When the adjustments are completed, replace the button by inserting its hinges into the LED light bar and then squeeze the top of the button while pressing it into the unit. Reinstall the cover plate.

Light Level Adjustment

To set, or reset, the threshold to match a current ambient light level, put the sensor into TEST mode. Press and hold the button for 3 seconds, until a beep is heard, then step away from the sensor. After 25 seconds another short beep will sound, indicating that the threshold level has been set. This threshold will be retained, even if power is lost, or Light Level Control is temporarily disabled, until it is re-programmed in this manner.

Automatic Reset

Holding the On/Off button for ten seconds will cause the OS300S to reset to default settings. This includes resetting the light level threshold to maximum (i.e. even the brightest ambient light will not hold the light OFF). The sensor occupancy history is also reset.



OS300S Diagram

DIP SWITCH SETTINGS

DIP Switch #s:	1	2	3
Time Delay	↓	↓	↓
SmartSet/Test	↓	↓	↓
5 minutes	↓	↓	↑
10 minutes	↓	↑	↓
15 minutes	↓	↑	↑
20 minutes	↑	↓	↓
25 minutes	↑	↓	↑
30 minutes	↑	↑	↓
⊗ override	↑	↑	↑

DIP Switch #	5
ON Mode	↓
Auto On	↓
Manual On	↑

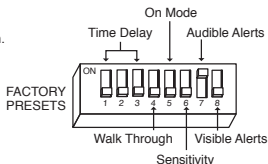
DIP Switch #	7
Audible Alerts	↓
Disabled	↓
Enabled	↑

DIP Switch #	6
Sensitivity	↓
High	↓
Low, 50%	↑

DIP Switch #	8
Visible Alerts	↓
Disabled	↓
Enabled	↑

⊗ Bypass occupancy & light level functions.
Load is manually controlled with OS300S button.

DIP Switch #	4
Walk Through	↓
Disabled	↓
Enabled	↑



◀ Factory Settings ↑=ON ↓=OFF

ORDERING INFORMATION

Catalog #	Description
OS300S	Universal PIR Wall Switch; 120/277VAC, 50/60Hz

Units come in White (-W), Ivory (-I), Gray (-GRY), and Light Almond (-LA).
Add color designator to catalog number when ordering.

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 | **legrand®**

P.O. Box 4822, Syracuse, NY 13221-4822
Technical Support: 800.223.4185 • www.passandseymour.com
340783 Rev. B 07925