



**Hubbell Building Automation, Inc.**

## Residential Wall Switch Sensors for Incandescent Lighting Vacancy Sensors – RWSVSINC120, RWSVSDINC120 Occupancy Sensors – RWSOSINC120, RWSOSDINC120

### Installation Instructions

#### Hubbell Building Automation, Inc.

9601 Dessau Road • Building One • Suite 100  
Austin, Texas 78754  
512-450-1100 • 512-450-1215 Fax  
www.hubbell-automation.com

#### Overview

Hubbell Building Automation's Residential Vacancy and Occupancy Sensors for Incandescent Lighting use passive infrared detection and a micro-controller to maximize energy savings by turning off lights in an unoccupied room.

#### Specifications

Lighting Load: 120VAC: 25Watts minimum, 500Watts maximum INCANDESCENT ONLY (DO NOT USE WITH FLUORESCENT LAMPS).

Time Delay: Manual adjustment behind front press switch: 30 second minimum, 30 minutes maximum.

Daylight Control (Occupancy Sensor Only): Press one button to set ambient light level (Photocell).

Manual Override Front Press Switch (FPS): Switches lights "on" or "off", (See Front Press switch Basic Operation Below). Note: FPS must be pressed to turn light on.

Motion Indicator: Highly visible green LED.

Reset to Factory Setting: Hold front press switch for 10 seconds resets the sensor to the factory settings.

50% dim down: Lights dim to 50% 30 seconds before they switch off.

Coverage Area: Approximately 800ft<sup>2</sup> (74m<sup>2</sup>) See coverage area below.

Passive infrared (IR) sensors are activated by changes in IR energy in the coverage area.

The product must be installed in the line-of-sight of the occupant. The sensor should not be installed:

- Where view of occupant is obstructed
- In view of open doorways where hallway traffic may be detected and accidentally activate lights
- In view of direct sunlight or strong reflected light sources
- Above baseboard heaters or near forced air ducts
- Outdoors, in the rain, near a shower/steam source (For indoor use only)

#### Precautions

**NOTICE:** Designed for hard wire circuits only, do not use to control receptacles. For installation by a licensed electrician in accordance with National and/or local Electrical Codes and the following instructions.

**CAUTION: RISK OF ELECTRIC SHOCK. Disconnect power before installing. Never wire energized electrical components.**

**CAUTION: USE COPPER CONDUCTORS ONLY.**

**CAUTION: Use only in indoor, dry locations. Sensor's maximum operating ambient temperature = 50°C.**

**CAUTION: To Reduce the Risk of Overheating And Possible Damage To Other Equipment, Do Not Install To Control A Receptacle, A Motor-Operated Appliance, A Florescent Lighting Fixture, Or A Transformer-Supplied Appliance.**

#### Pre-installation Checklist

1. Check rating of sensor to make sure it is suitable for the application.
2. Do not install sensor if the product or lens has any visible damage.
3. If moisture condensation is evident, allow product to dry before installing.

#### Installation

1. DISCONNECT POWER.
2. Make sure sensor's OFF/AUTO switch is in the OFF (down) position (see Figure 1).
3. Mount sensor 42 to 54 inches (107 to 137 cm) above floor (remove old wall switch, if applicable).
4. Connect GREEN wire to equipment grounding conductor "GND" (green, green/yellow or bare wire).
5. Connect BLACK wire to "HOT" or "LINE" wire (see Figure 2).
6. Connect the other BLACK wire to lighting "LOAD" wire (see Figure 2).
7. Mount device in box and secure wall plate.
8. Restore power.
9. Move sensor's OFF switch to ON position.

- Installation complete. Sensor starts with 15 minute time out (Factory default). To further verify correct installation with shortened time delay or use other settings, see below:

### Operation / Adjustments

Front Press Switch (FPS) Basic Operation (See Additional Functions Below).

- Occupancy Sensor: When lights pressed off, they stay off with motion with a 30 minute time out from the last detected motion; after the 30 minute time out, unit returns to auto mode.
- Vacancy Sensor: When lights pressed off, they stay off until the FPS is pressed again.
- When lights pressed on they stay on with motion until the unit times out.

### To Shorten Time Delay To 30 Seconds (For Test Only).

- Remove door (gently pull the FPS push-button from face of occupancy sensor).
- Note the Time adjust setting, then set time adjust to minimum (full counterclockwise position).
- Step out of field of view of sensor (LED stops flashing) for more than 30 seconds.
- Reenter field of view of sensor, LED will flash and the lights will come on.
- Exit test by resetting the time adjust to the prior position or at factory default (12 o'clock position). Range: 30 seconds to 30 minutes.
- Place door back on sensor.

### Occupancy Sensor Only (RWSOSINC120 & RWSOSDINC120):

Daylight Control Lighting (Holds lights off if sufficient natural light is available).

- Make sure the desired natural light level (without lights on) is present.
- Press and hold Front Press Switch for 5 seconds (LED flashes 2 times), step away from sensor.
- During setting, LED flashes and sensor reads the light level in the room for 30 seconds.
- At the end of this period, the sensor stops flashing and the daylight light level will be set.

**NOTE:** If desired, reset to factory default settings by pressing and holding front press switch 10 seconds (LED flashes 3 times). Disables daylight control.

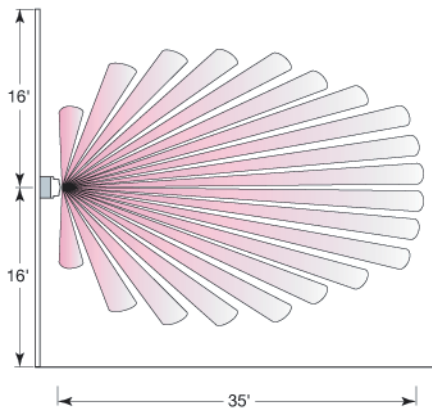


Figure 1 – View Behind Door

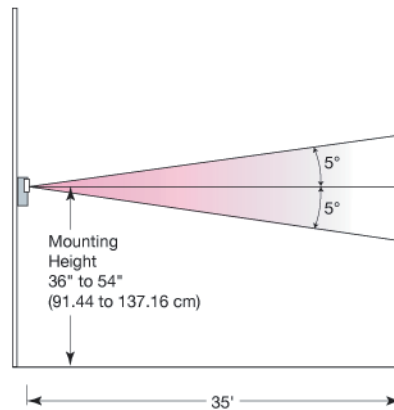
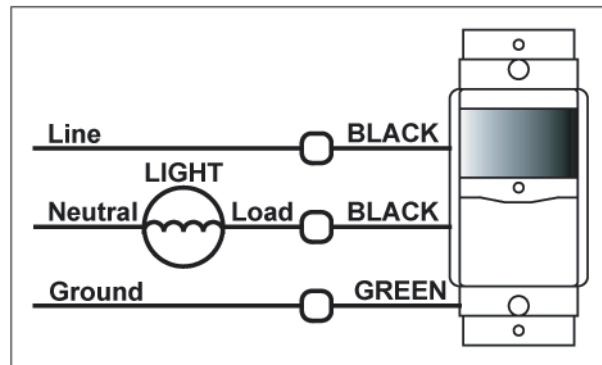


Figure 2 – Wiring Diagram



*Innovative, Integrated and Simple.*

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