

# Decorator Passive Infrared occupancy sensor wall switch-AUTO ON/AUTO OFF

**Ratings**  
 Incandescent / Tungsten: 800W-120VAC, 50/60Hz;  
 Resistive load: 800W-120VAC, 50/60Hz;  
 Fluorescent / Ballast: 800VA-120VAC, 50/60Hz

**Motor:** 1/4HP-120V  
**INDOOR USE ONLY**  
 No Minimum Load required.  
 Compatible with incandescent lamps, electronic and magnetic low-voltage ballasts, electronic and magnetic ballasts, and fans

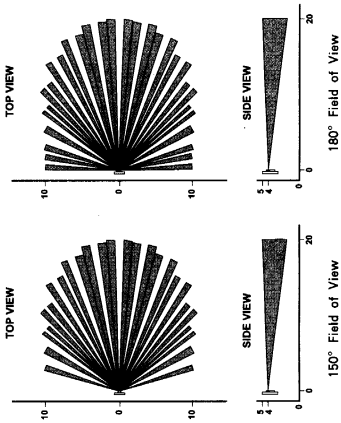
## ◆ INSTALLATION INSTRUCTIONS

**Description:**  
 The Decorator passive infrared occupancy sensors can detect the difference between heat emitted from the human body in motion and the background space. This device operates by detecting motion within its field-of-view (Figure 1) and automatically switches lights ON. When motion is no longer detected, lights remain ON for a selected time and automatically switch OFF. It is suitable for indoor use only. It is ideal for any room in your home that would benefit from automatic light control, such as bathrooms, and living areas.  
 This device is UL listed.

## ◆ SPECIFICATIONS:

- Built-in photocell, increases energy savings.
- Adjustable light, detection range and time delay are located on the front of the device (Figure 2).
- When the slide switch is on OCC position, the LED indicator flashes when the motion is detected.
- Installing this device requires experience with residential and commercial wiring practices. Consult local building codes before attempting to install this device.
- Operating Temperature: 68° F-77° F

Figure 1: Coverage Pattern:



## ◆ GENERAL INFORMATION

- Clean outer surface gently with damp cloth only. Do not use soaps or cleaning liquids.
- Do not attempt to service or repair. No user serviceable components.

## ◆ LOCATION/MOUNTING

Since this device responds to temperature changes, care should be taken when mounting the device. DO NOT mount directly above a heat source, in a location where hot or cold drafts will blow directly on the sensor, or where unintended motion will be within sensor's field-of-view.

## ◆ PRECAUTIONS

**WARNING: TO BE INSTALLED AND/OR USED IN ACCORDANCE WITH APPROPRIATE ELECTRICAL CODES AND REGULATIONS.**  
**WARNING: IF YOU ARE NOT SURE ABOUT ANY PART OF THESE INSTRUCTIONS, CONSULT A QUALIFIED ELECTRICIAN.**  
**CAUTION: USE THIS DEVICE ONLY WITH COPPER OR COPPER CLAD WIRE. WITH ALUMINUM WIRE USE ONLY DEVICES MARKED CO/ALR OR CU/AL.**

## ◆ INSTALLATION

1. **WARNING: TO AVOID FIRE, SHOCK, OR DEATH, TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND TEST THAT THE POWER IS OFF BEFORE WIRING!**
2. Remove existing single-pole switch or dimmer installation, if applicable.
3. Remove 3/4" (1.9 cm) of insulation from each circuit conductor. Make sure the ends of wires are straight.
4. Connect lead wires per WIRING DIAGRAM as follows: Black lead to Line (Hot), Red lead to Load wire, White lead to Neutral wire, Green lead to Ground. Twist strands of each lead tightly, and with circuit conductors, push firmly into appropriate wire connector. Screw connectors on clockwise ensuring that no bare conductor shows below the wire connectors. Secure each connector with electrical tape.

**NOTE:**  
 If wire nut is provided, use to join one 14 AWG supply conductor with one 16 AWG device control lead.

5. Gently position wires to provide room in wall box for switch.
6. Mount device "TOP" up.
7. Restore power at circuit breaker or fuse.
8. Locate the adjustment controls on the front of the switch. Proceed to

the "SETTINGS" section before mounting the device in the wall box.

## Wiring Diagram:

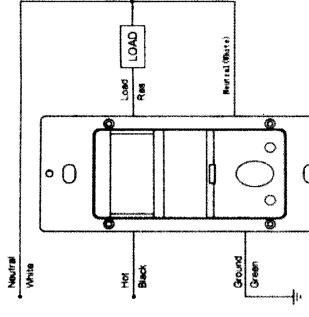
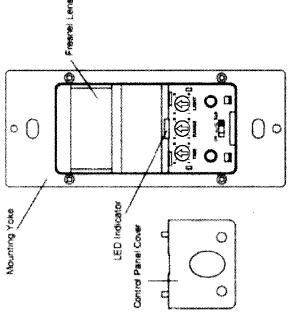
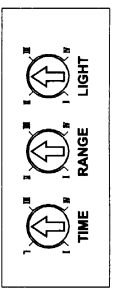


Figure:



Control panel:



## ◆ PROGRAMMING FEATURES

**Factory settings:** The sensor is shipped from the factory to work in almost all situations without any added adjustments. The factory settings are: time-out 10 minutes, Lights always turn ON regardless of existing light levels, and intermediate range.

**Time-out:** The value of this time-out is user selected through the use of the Time Control Setting.

# Decorator Passive Infrared occupancy sensor wall switch-AUTO ON/AUTO OFF

**Time Setting:** The base time-out value is selected by rotating the time control dial. Rotate the control fully clockwise (CW), the time-out will increase. Rotate the control fully counter-clockwise (CCW), the time-out will decrease.

**Ambient Light :** The Ambient Light is used to keep the lights OFF if there is already enough natural light in the room. For proper operation, the Ambient Light adjustment must be performed when there is enough natural light (refer to the setting section).

**NOTE:**  
The ambient light level in the center of a room will be different from the level at the wall where the switch is located.

**Ambient Light Dial:** The ambient light setting is adjusted with the Ambient Light dial (refer to figure 2). Turning the Light Dial fully counter-clockwise (CCW), lights always turn ON, when the motion is detected. All other settings will cause the lights to turn ON only when the light level is less than the setting.

**NOTE:**  
When the setting is at the minimum CCW level, the lights will stay OFF when the room is dim. When the setting is at the maximum level clockwise (CW), the lights will turn ON when the room is bright.

**Range:** To decrease detection range and sensitivity, rotate the dial CCW (refer to figure). The detection range can be adjusted from 100% to 30%.

**NOTE:**  
Do not set the range at the Maximum level, it may cause the error operation. If you want to adjust the range, please consult a qualified electrician.

## ◆ SETTINGS

1. With power restored and wallplate removed, use a small screwdriver to adjust the light sensitivity and time setting on the device as follows:

- Time Selection:**
- Adjust the time selector to the desired length of time the lights are to remain ON. Lights will remain ON from 15 seconds to 30 minutes after the room is vacated.
  - Rotate the control fully clockwise (CW). Lights will remain ON up to 30 minutes.

- Rotate the control fully counter-clockwise (CCW). Lights will remain ON up to 15 seconds.

**Range:**

- To decrease detection range and sensitivity, rotate the control CCW.
- To increase detection range and sensitivity, rotate the control CW.

**Light level adjustment:**

- To decrease the light level, rotate the control CCW.
- To increase the light level, rotate the control CW.

**NOTE:**  
If the light control is in the fully clockwise position, the lights will turn ON whenever motion is detected, even in full daylight. Intermediate settings will cause the lights to turn ON only when the ambient light is below the level selected by the light control.

- Test that the time selection, range and light level adjustment are as desired. If not, repeat adjustments until satisfied.
- Mount the wallplate. **INSTALLATION IS COMPLETE.**

## ◆ TO OPERATE

Slide switch: The slide switch located at bottom of sensor has three positions: OFF, OCC, and VAC. Note when in the OFF position, the light will not react to the push-button.

Switch Position	Function
OFF LEFT	The lights are forced OFF, regardless of Occupancy state.
OCC MIDDLE	1. Automatic on/ Automatic off, 15 seconds to 30 minutes delay to off. 2. Also provides a Manual Off operation. 3. If the lights turn off manually. The device will go into Automatic (occ) mode while the setting time-out (delay time) is over.
VAC RIGHT	Manual on/ Automatic off

## TROUBLESHOOTING

- Light do not switch ON when motion is detected:
  - Check the slide switch is not in the OFF position.
  - Motion is beyond sensing range, move closer to switch.
  - Adjust the light level adjustment toward lighter.
- Light always stay ON:
  - Check the time setting. See how this time compares to how long the lights stay ON.
  - Make sure no motion is occurring in the coverage area until the time delay expires.
  - Check that the switch is not installed near hot air currents and heat radiating devices, or detecting motion from an adjacent area (e.g., hallway traffic). If so, switch may have to be relocated.
- Light do not turn ON when the slide switch in OCC or ON position:
  - Check that switch is installed correctly.

- Check that power is ON.
- Check that light bulb is functioning.
- If applicable, check that switch on controlled unit is ON.

**NOTE:**

If problems continue, consult a qualified electrician.

**Capacity Chart:**

Cat. NO.	Coverage	Description
42ES5HD	180° ,650sq.ft	With Relay

## ◆ FULL FIVE YEAR WARRANTY

If within five(5) year from the date of purchase, this product fails due to a defect in material or workmanship, we will repair or replace it, at its sole option, free of charge. This warranty does not apply to: (a) damage to units caused by accident, dropping or abuse in handling, acts of God or any negligent use; (b) units which have been subject to unauthorized repair, opened, taken apart or otherwise modified; (c) unit not used in accordance with instructions; (d) damages exceeding the cost of the product; (e) sealed lamps and/or lamp bulbs, LED's and batteries; (f) the finish on any portion of the product, such as surface and/or weathering, as this is considered normal wear and tear; (g) transit damage, initial installation costs, removal costs, or reinstatement costs.

This warranty service is available by returning the product with proof of purchase date and a description of the problem to the dealer from whom the unit was purchased.