Passive Infrared Corner/Wall Mounted Low Voltage Occupancy Sensor

General Information
- Read all instructions on both sides of this sheet first.
- Plan all component locations carefully.
- Install in accordance with ALL local codes.
- For indoor use only.
- For use with GE Switchpacks & Systems Only.
- Do not run any GE Low Voltage Wiring in the same conduit as power conductors.

Specifications
- Technology: Passive Infrared (PIR)
- Power Requirements:
  Input: 10-30 VDC from GE Controls Switchpack or GE System
  Maximum current needed is 25mA per sensor
- Output: Open collector output to switch up to ten GE Switchpacks. BAS with isolated Form C Relay. (-D model) isolated Form C Relay Ratings: 1 A 30 VDC/VAC
- Time Delays:
  Self-Adjusting, 15 seconded delay.
  10 min Autot, or Selectable 5, 10, 30 minutes

PIR Technology
The sensor's segmented lens divides the field of view into sensor zones, and detects the changes in temperature that are created when a person, or part of a person as small as a hand, passes into or out of a sensor zone. The sensor includes self-adaptive technology that continually adjusts to conditions by adjusting sensitivity and time delay in real time. By adjusting sensitivity and time delay automatically, the sensor is maximizing the potential energy savings that are available in the particular application.

Walk-Through feature maximizes energy savings by not leaving the lights on after a momentary occupancy. The Daylighting feature (-D model only) prevents lights from turning on when the room is adequately illuminated by natural light. Walk-Through feature maximizes energy savings by not leaving the lights on after a momentary occupancy. The Daylighting feature (-D model only) prevents lights from turning on when the room is adequately illuminated by natural light.

Coverage
- Coverage: 90 sq. ft.
  Light Level Sensing: 1x20 foot candle (-F model)
- Operating Environment:
  Temperature: 12° F - 104° F (-10° C - 40° C)
  Relative Humidity: up to 90% non-condensing
- Housing:
  Medium impact injection molded housing
  Polycarbonate resin complies with UL94 V0
- Size: 4.4” x 3.4” x 2” (112mm x 86.4mm x 50.8mm)
- LED Indicators: Red indicates PIR detection

Description
The SIR-LONG Corner/Wall Mount Low Voltage Occupancy Sensor is a Passive Infrared (PIR) motion sensing lighting control used for energy savings and convenience. When motion is detected, the blue wire is electronically connected to the red wire, energizing the relay in the switchpack to turn on the load. If vacancy is detected, the blue wire is disconnected from the red, causing the relay to open turning off the load. The relay load is 20 to 30 VDC supply, the black lead is common, and the blue is the relay control (-D models, yellow is second relay control).

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Coverage

Location
The maximum coverage area may vary somewhat according to room shape and the presence of obstacles. Follow the coverage diagram concerning major and minor motion coverage. The sensor must have a clear view of the area to be controlled. The sensor will not "see" through glass. Mounting heights should not exceed 12 feet. Optimum mounting height is 10 feet. To prevent false activation, the sensor should be mounted away from the air supply duct a minimum of 4 to 6 feet. Mounting at fixture height is most effective.
**Checkout and Adjustment**

Adjustments should be made with the HVAC system on. Use only insulated tools to make adjustments.

**Self-Adjust**

- Setting is shipped in the Self-Adjust Mode. This applies to time delay and PIR sensitivity. In preparation for the Installer Test, the time delay is set to 15 seconds, after the sensor is installed, powered on and has stabilized, the unit will time-out 15 seconds after the last motion detected. Coverage and sensitivity can be confirmed by watching the Red (PIR) indicator LED on the front of the sensor, while moving around the room.
- 1. Walk around the room and monitor LED. LED should only turn ON for one second with each motion. If LED does not turn ON, go to Installer Adjustments - Sensitivity Adjustments (Section).
- 2. Stand still six to eight feet away from sensor for five seconds. LED should not turn ON. If any LED turns ON, go to installer Adjustments - Sensitivity Adjustment (Section)

**Field-of-view outside the space**

1. Adjust PIR sensitivity to 50% by moving DIP Switch S5 up.

**Daylight Adjustments**

If this feature is not needed, leave the light level at maximum (fully CW). The Daylighting feature (DIP Switch 10 model only) prevents the lights from turning ON when the room is adequately illuminated by natural light. If there is enough light in the room regardless of the occupancy, the sensor will hold the lights OFF. If there is not enough light in the room, the sensor will allow the lights to turn ON when occupied.

**Full and Halogen Modes (See DIP Switch Legend)**

In both Full and Halogen Modes, lights connected to the yellow control lead will not turn ON upon occupancy activation, should the ambient light level exceed the preset foot-candle level.

**Troubleshooting**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Possible Causes</th>
<th>Suggestions</th>
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<tbody>
<tr>
<td>Lights won't turn ON automatically</td>
<td>If low voltage switch option is used, lights may have been turned off manually.</td>
<td>Press low voltage switch.</td>
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<tr>
<td>Daylight Feature Enabled</td>
<td>If all lights are required to turn ON adjust DIP Switch 10 and/or daylight potentiometer.</td>
<td>Power interruption Check incoming voltage and/or wiring</td>
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**Limited Warranty**

This product is warranted to be free from defects in material and workmanship and shall conform to and perform in accordance with Seller's written specifications for a period of five (5) years from date of shipment for all occupancy sensors. We guarantee the performance of our products to specifications or your money back. This warranty will be limited to the repair or replacement, at Seller's discretion, of any such goods found to be defective, upon their authorized return to Seller. This limited warranty does not apply if the goods have been damaged by accident, abuse, misuse, or misapplication, by damage during shipment or by improper service. There are no warranties, which extend beyond the hereinabove-limited warranty, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND THE IMPLIED WARRANTY OF FITNESS. No employee, agent, dealer, or other person is authorized to give any warranty on behalf of the Seller or to assume for the Seller any other liability in connection with any of its goods except in writing and signed by the Seller. The Seller makes no representation that the goods comply with any present or future federal, state or local regulation or ordinance. Compliance is the Buyer's responsibility. The use of the Seller's goods shall be in accordance with the provision of the National Electrical Code, US, and/or other industry or military standards that are particular to the particular end use. Installation or use not in accordance with these codes and standards could be hazardous.