

# GE Lighting Controls

## GE Aware™

### Passive Infrared Corner/Wall Low Voltage Occupancy Sensor

## SIR-LONG

#### Overview

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 red lead is 10 to 30 VDC supply, the black lead is common, and the blue is the relay control. (-D models: yellow is second relay control)

#### 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. The Daylighting feature (-D model only: yellow control lead 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 sensor will switch the lights ON when it detects a person entering the area. If the sensor does not continue to detect motion 30 seconds following the initial activation, it will automatically go to a shorter 2 minute time delay.

In Automatic On Mode, the lights turn ON when a person enters the room. In Manual-ON Mode, the lights are turned ON by activating a momentary switch (model # RS2-\*) that is connected to the sensor. When used with 2 level lighting (-D model only), bi-level Automatic-ON can be achieved which allows Zone 1 to come ON automatically upon occupancy. Zone 2 does not come ON unless the occupant presses the optional momentary switch.

#### Ordering

| Product Code | Description | Color | Field of view       | Features                    |
|--------------|-------------|-------|---------------------|-----------------------------|
| 63290        | SIR-LONG    | White | 90 linear ft., 180° |                             |
| 63291        | SIR-LONG-D  | White | 90 linear ft., 180° | BAS relay & daylight sensor |



#### Specifications

**Technology:** Passive Infrared (PIR)

#### Power Requirements:

##### Input:

10-30 VDC from GE 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: 1A 30VDC/VAC

**Time Delays:** Self-Adjusting, 15 seconds/test (10 min Auto), or Selectable 5, 15, 30 minutes

**Coverage:** 90 linear ft.

**Light Level Sensing:** 0 to 300 foot-candles (- D model)

#### Operating Environment:

Temperature: 32° F – 104° F (0° C – 40° C)  
Relative Humidity: up to 90% non-condensing

#### Housing:

Medium impact injection molded housing.  
Polycarbonate resin complies with UL94V0.

**Size:** 4.4" x 3.4" x 2" (112mm x 86.4mm x 50.8mm)

**LED Indicators:** Red indicates PIR detection

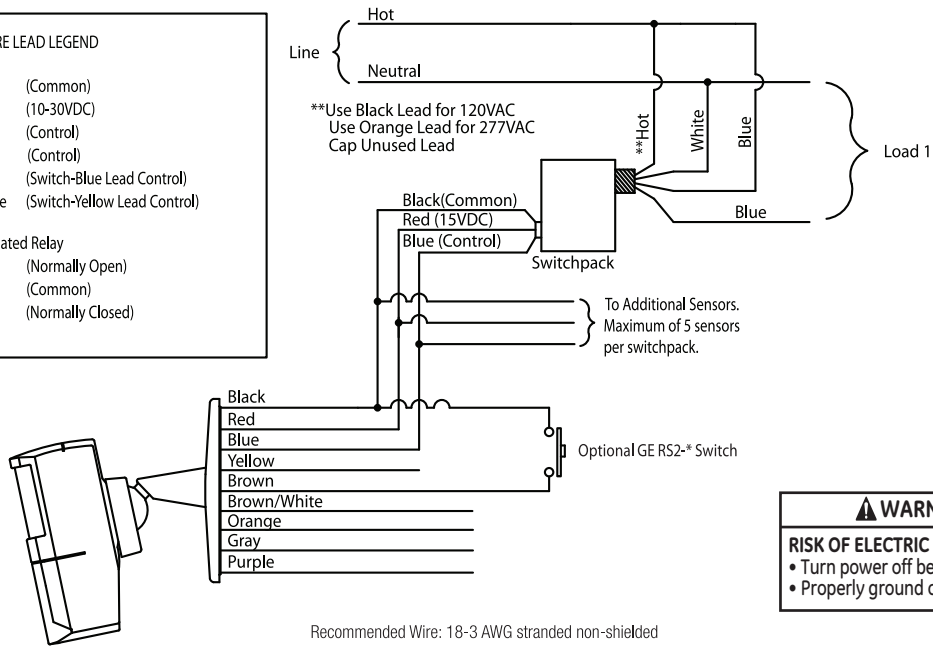


**RoHS**

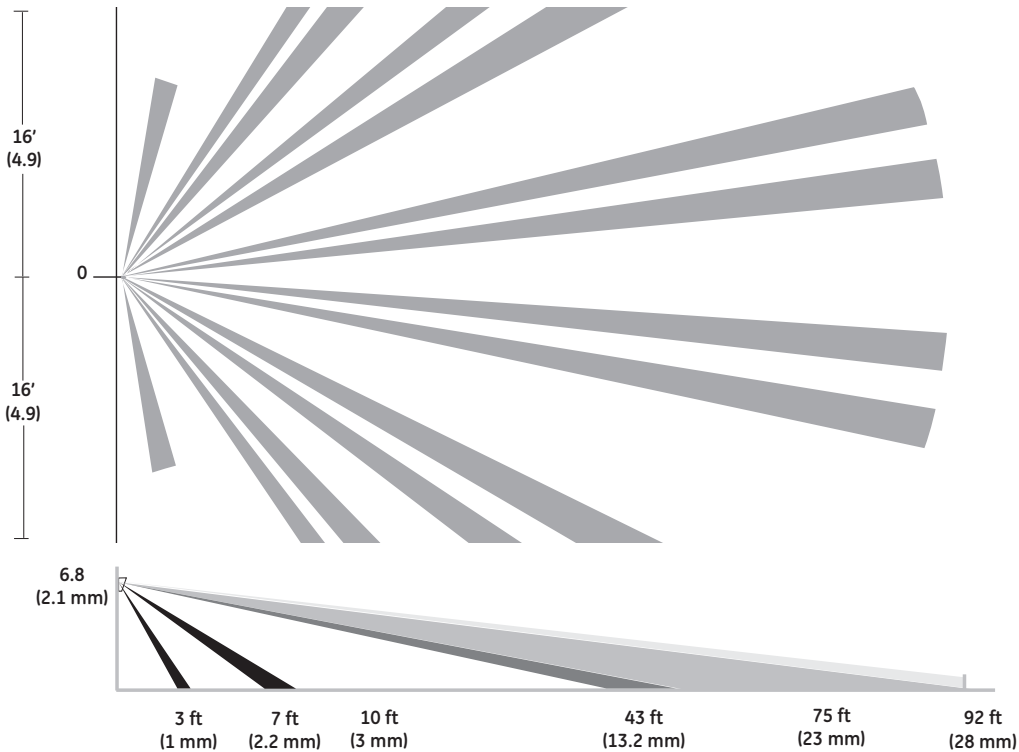
# Wiring Diagram (consult instruction sheet for other wiring options)

SIR-LONG

| SENSOR WIRE LEAD LEGEND |                              |
|-------------------------|------------------------------|
| Black                   | (Common)                     |
| Red                     | (10-30VDC)                   |
| Blue                    | (Control)                    |
| Yellow                  | (Control)                    |
| Brown                   | (Switch-Blue Lead Control)   |
| Brown/White             | (Switch-Yellow Lead Control) |
| Sensor's Isolated Relay |                              |
| Orange                  | (Normally Open)              |
| Gray                    | (Common)                     |
| Purple                  | (Normally Closed)            |



## Coverage



## Settings

| DIP Switch | Time Delay |   | Activation      |                | PIR Sensitivity | Walk-Through Mode | LEDs            | Override  | Lighting Sweep | Daylighting Mode |
|------------|------------|---|-----------------|----------------|-----------------|-------------------|-----------------|-----------|----------------|------------------|
|            | 1          | 2 | Power Pack One  | Power Pack Two | 5               | 6                 | 7               | 8         | 9              | 10               |
| Auto*      | ▼          | ▼ | Auto ▼          | Auto ▼         | Full ▼          | Disable ▼         | Enable ▼        | Disable ▼ | Disable ▼      | Half ▼           |
| 5 Minutes  | ▼          | ▲ | Manual ▲        | Manual ▲       | 50% ▲           | Enable ▲          | Disable ▲       | Enable ▲  | Enable ▲       | Full ▲           |
| 15 Minutes | ▲          | ▲ | (-D model only) |                |                 |                   | (-D model only) |           |                |                  |
| 30 Minutes | ▲          | ▲ |                 |                |                 |                   |                 |           |                |                  |

\*Self-Adjusts to 10 min. user mode

Default =

