GE Lighting Controls

GE Aware™
Passive Infrared RR7 Compatible Wallbox Occupancy Sensor
WIR-10-RR7-D

Overview
The WIR-10-RR7-D Occupancy Sensing Wall Switch is a Passive Infrared (PIR) motion sensing lighting control and conventional Wall Switch all-in-one, used for energy savings and convenience.

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 WIR-10-RR7-D allows the control of four GE RR7/9 relays or two Sierra 1070-B relays. The sensor may be interfaced to an energy management system that accepts either a normally open or normally closed dry contact via the sensor’s Form C relay. To enhance energy savings set the unit to manual ON operation.

In Automatic ON Mode, the lights turn ON automatically when a person enters the room. In Manual ON Mode, the lights are turned ON by pressing the pushbutton. In either mode, the lights stay ON as long as the sensor detects motion in the room. When the room is vacated, the lights turn OFF automatically after a preset Time Delay interval.

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 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 20 seconds following the initial activation, it will automatically go to a shorter 2 minute Time Delay.

Tracking Mode allows the load connected to the Form C relay to follow the state of the sensor’s blue lead. HVAC Mode allows the load connected to the Form C relay to remain ON when the lights are turned OFF manually. Applications may include keeping the room at a desired temperature while giving a presentation and the lights are OFF.

Ordering

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Color</th>
<th>Coverage</th>
<th>Input voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>63398</td>
<td>WIR-10-RR7-D-W</td>
<td>White</td>
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<td></td>
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<td>63399</td>
<td>WIR-10-RR7-D-V</td>
<td>Ivory</td>
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<td>63401</td>
<td>WIR-10-RR7-D-A</td>
<td>Light Almond</td>
<td>1000 sq.ft., 180°</td>
<td>24 VAC</td>
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<td>63403</td>
<td>WIR-10-RR7-D-G</td>
<td>Gray</td>
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<td>63405</td>
<td>WIR-10-RR7-D-B</td>
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</table>

Specifications

Technology: Passive Infrared (PIR)

Electrical Ratings:
- Input:
  - 24 VAC ± 10% Maximum current needed is 25mA per sensor.
  - 1 VA max for each sensor.
  - 7 VA max for each GE RR7/9 relay.
  - 8.5 VA max for each Sierra 1070-B relay.
- Output:
  - Half-wave rectified 24VAC for 300ms pulse for driving up to 4 GE RR7/9 type relays or up to 2 Sierra 1070-B type relays.
  - Isolated Form C Relay

Isolated Form C Relay Ratings: 1A 30VDC/VAC

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

Operating Environment:
- Temperature: 32° F – 104° F (0° C – 40° C)
- Relative Humidity: 20% to 90% non-condensing
- For indoor use only

Coverage: Major Motion - 1000 sq. ft., Minor Motion - 300 sq. ft.

Light Level Sensing: 0 to 200 foot-candles

Housing:
- Durable, injection-molded housing. Polycarbonate resin complies with UL94V0.

Size:
- Mounting Plate Dimensions: 4.195” H x 1.732” W (106.553 mm x 44 mm)
- Product Housing Dimensions: 2.618” H x 1.752” W x 1.9” D (66.5 mm x 44.5 mm x 48.26 mm)

LED Indicators: Red indicates PIR detection

Operating Modes:
- Automatic ON/Automatic OFF
- Manual ON/Automatic OFF
Maximum coverage area may vary somewhat according to room shape and the presence of obstacles.

**Settings**

**DIP Switch Legend**

<table>
<thead>
<tr>
<th>DIP Switch</th>
<th>Time Delay</th>
<th>Activation</th>
<th>Isolated Relay</th>
<th>PIR Sensitivity</th>
<th>Walk-Through Mode</th>
<th>Not Used</th>
<th>Override</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto*</td>
<td>1</td>
<td>Auto</td>
<td>Tracking</td>
<td>Full</td>
<td>Disable</td>
<td>Double</td>
<td>Double</td>
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<tr>
<td>5 Minutes</td>
<td>▼ ▼</td>
<td>Manual</td>
<td>InAC</td>
<td>50%</td>
<td>Enable</td>
<td>▲ ▲</td>
<td>▲ ▲</td>
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<tr>
<td>15 Minutes</td>
<td>▲ ▲</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 Minutes</td>
<td>▲ ▲</td>
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</tbody>
</table>

*Self-Adapts to 10 min user mode

Default = ▲ ▲

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

- **WARNING**
- Risk of electric shock
  - Turn power off before servicing
  - Install per National Electric Code

- **Coverage**

- **Minor Motion, IR**
  - Gray/Black

- **Major Motion, IR**
  - Orange/Purple

- **Maximum Coverage Area**

- **Settings**

- **DIP Switch Legend**

- **Time Delay**
  - 5 Minutes
  - 15 Minutes
  - 30 Minutes

- **Activation**
  - Auto
  - Manual

- **Isolated Relay**
  - Enable
  - Disable

- **PIR Sensitivity**
  - Full
  - 50%

- **Walk-Through Mode**
  - Enable
  - Disable

- **Not Used**
  - Double

- **Override**
  - ▲
  - ▼

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