



GE Lighting Controls

INSTALLATION INSTRUCTIONS

Model #

WIR-10-RR7-D-W
WIR-10-RR7-D-V
WIR-10-RR7-D-A
WIR-10-RR7-D-G
WIR-10-RR7-D-B



RoHS

Passive Infrared RR7 Compatible Wallbox Occupancy Sensor

General Information

- Read all instructions on both sides of this sheet first.
- Plan all component locations carefully.
- For indoor use only.
- Install in accordance with ALL local codes.
- For use with RR7/RR9 type relays
- Do not run Low Voltage wiring in the same conduit as power conductors.

Specifications

Technology: Passive Infrared (PIR)

- For indoor use only

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

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)

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

LED Indicators: Red indicates PIR detection

Operating Environment:

- Temperature: 32° F – 104° F (0° C – 40° C)
- Relative Humidity: 20% to 90% non-condensing

Operating Modes:

- Automatic ON/Automatic OFF
- Manual ON/Automatic OFF

Description

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.

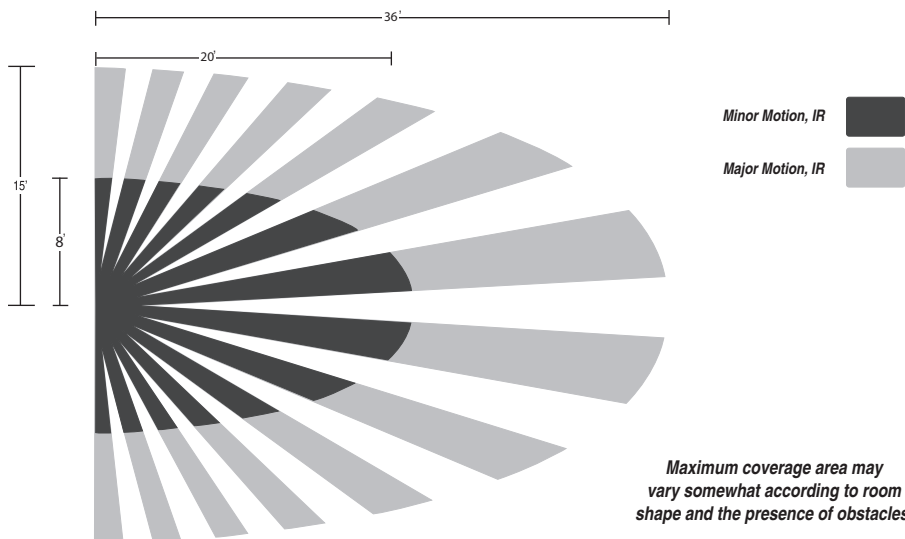
Walk-Through feature maximizes energy savings by not leaving the lights ON after a momentary occupancy. The sensor will switch the lights ON when it detects a person entering the area. If the sensor does not continue to detect motion 20 seconds following the initial activation, it will automatically 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.

Coverage

The WIR-10-RR7-D is designed for offices up to 300 square feet. Coverage testing has been performed according to the NEMA WD7 Guideline.



Location

When installing the WIR-10-RR7-D in a new junction box, choose the switch location carefully to provide optimum coverage of the occupied area. When replacing an existing Wall Switch, bear in mind that there must be a clear Line-of-sight between the sensor and the area to be covered. Avoid pointing the WIR-10-RR7-D directly into the hallway where it may detect passers-by.

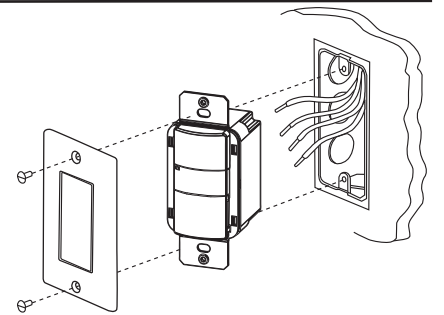
Installation

NOTE: Before you begin, read these instructions completely and carefully.



The WIR-10-RR7-D can be installed in any standard single gang box. It may be installed in the same manner as an ordinary Wall Switch.

- Wire the WIR-10-RR7-D as described in the wiring section.
- Mount the WIR-10-RR7-D in the junction box.



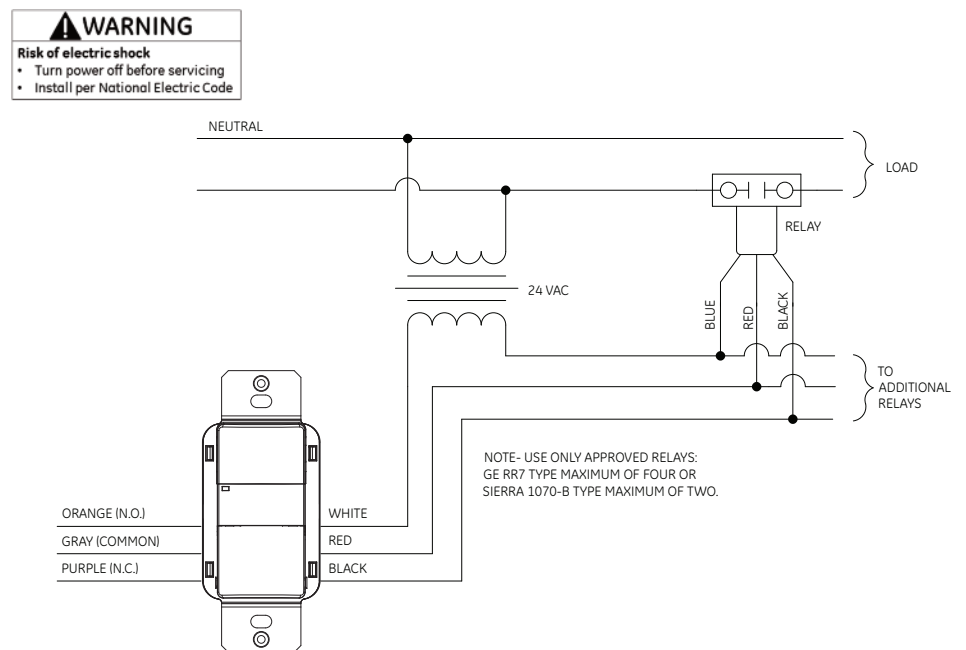
Wiring

CAUTION: Before installing or performing any service on a GE system, the power MUST be turned off at the branch circuit breaker. According to NEC 240-83(d), if the branch circuit breaker is used as the main switch for a fluorescent lighting circuit, the circuit breaker should be marked "SWD." All installations should be in compliance with the National Electric Code and all state and local codes.

NOTE REGARDING COMPACT FLUORESCENT LAMPS: The life of some compact fluorescent lamps (CFLs) is shortened by frequent automatic or manual switching. Check with CFL and ballast manufacturer to determine the effects of cycling.

1. Make sure power is turned off at the branch circuit breaker.
2. Wire units as shown in wiring diagrams per applicable voltage requirements.
3. Mount unit to Wall Box.
4. Turn power back ON at the branch circuit breaker and wait 2 minutes for the unit to stabilize.
5. Make necessary adjustments. (See Checkout and Adjustments section)
6. Install Wall Switch plate.

Wiring Diagram 1



DIP Switch Settings

DIP Switch Legend

DIP Switch	Time Delay		Activation		Isolated Relay	PIR Sensitivity	Walk-Through Mode		Not Used	Override	
	1	2	Relay 1	3			4	5			6
Auto*	▼	▼	Auto	▼	Tracking	Full	▼	Disable	▼	Disable	▼
5 Minutes	▼	▼	Manual	▲	HVAC	50%	▲	Enable	▲	Enable	▲
15 Minutes	▲	▲									
30 Minutes	▲	▲									
Default = <input type="checkbox"/>											
*Self-Adjusts to 10 min. user mode											

