

## Controls

## Wall Switch Sensor

LRS2225

120/277V, Multi-Technology,  
Dual Relay Wall Switch  
Incandescent, Fluorescent, or LED



## Specifier's Reference

Project
Type
Model No.
Comments

## description

- The LRS2225 sensor is used to provide automatic switching of two separate banks of fluorescent, incandescent, or LED from a single unit.

## features

- Multi-Technology: Passive Infrared (PIR) and Ultrasonic (US) detection.
- Low Profile Design: Eliminates obtrusive "scanning-device" look. Elegant styling complements any interior; uses standard wallplates.
- Field of View: 180° field of view provides approximately 2400 square feet of coverage.
- Adjustable Horizontal Field of View (PIR): May be adjusted between 180° and 60° of arc by using integral blinders located on either side of the lens.
- Fast Simple Installation: Fits in standard wallbox and replaces two single-pole wall switches, ground connection required.
- Application: Suitable for a variety of commercial applications, including retrofit, private and executive offices, conference rooms, classrooms, restrooms, lounges, training areas, multimedia rooms, day care centers, and storage rooms.
- Self-Adaptive Technology: Callbacks for adjustment are eliminated. Time delay and sensitivity settings are continually adjusted to occupant patterns of use in auto adapt mode.
- Walk-through Feature: Provides increased energy savings by not leaving the lights on for an extended period after only momentary occupancy.
- ON/OFF Switching: Convenient push-button provide manual ON/OFF light switching at any time. Optional manual adjustment for delayed-OFF time settings allows customized adjustments to maximize energy savings.
- All Digital Circuitry: Uses a minimum of components for maximum reliability and low cost.
- Presentation Mode: Allows push buttons to turn lights off and keep them off while the room is occupied during slide or film presentations.
- Ambient Light Recognition: Integrated photocell prevents lights from turning on when the room is adequately illuminated by natural light.
- Segmented Fresnel Lens: Provides optimum sensitivity and performance. Designed with an extensive "small motion" area where even slight body movements will be detected.
- Small Motion Sensitivity (US): The ultrasonic technology provides excellent small motion sensitivity.
- Zero Cross: Relays activate at the zero crossing point in the sine wave to maximize contact life.
- May be used for step dimming.

## specifications

- Operating Environment: 32°F to 104°F (0°C to 40°C); 20% to 90% non-condensing, relative humidity. For indoor use only.
- Size: 4.06"H x 1.75"W x 1.85"D (103.2mm x 44.4mm x 47.2mm)
- Colors: White, Ivory
- Listings: UL Listed and CSA Certified, complies with California Title 24 Energy Code and FCC regulations.
- Line Voltage: 120-230-277 VAC
- Power Consumption: 120V-140mW  
277V-360mW
- Operational Frequencies: 50/60Hz
- Ultrasonic Operational Frequency: 40kHz
- Wire Designation:
  - Primary Relay: No. 16 AWG leads: Line-Black; Load-Blue  
Ground-Green;
  - Secondary Relay: No. 16 AWG isolated contact leads: (2) Red
- Load Rating:
  - Primary Relay:
    - Fluorescent – 1200VA @ 120V, 2700VA @ 277V
    - Incandescent/Tungsten – 800W @ 120V
  - Secondary Relay:
    - Fluorescent – 800VA @ 120V, 1200VA @ 277V
    - Incandescent/Tungsten/LED – 800W @ 120V
    - Motor – 1/4 HP @ 120V

## operation

The PIR is used to detect motion and turn lights ON, while either technology is used to keep lights ON while occupied. This allows the U/S to be set to higher sensitivity levels minimizing false OFF conditions. The PIR portion gives immunity to false ON through a specialized lens that divides the field-of-view into sensor zones. When a person passes into or out of a sensor zone, the sensor detects motion and switches two separate lighting loads ON. The lights will remain ON as long as there is an occupant moving through the sensor zones. The U/S sensors give maximum sensitivity and range in difficult spaces with irregular shaped rooms and partitions that can block the PIR

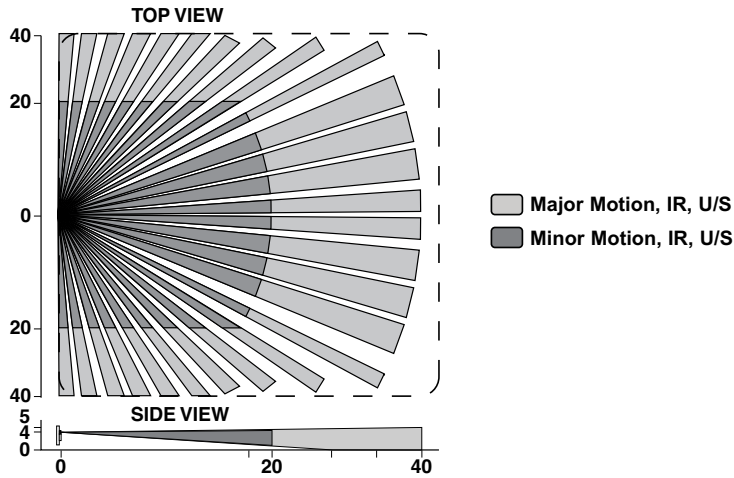
field-of-view. The LRS2225 also features the ability to turn off PIR or U/S to become a single tech device.

The LRS2225 provides automatic switching of two separate loads from a single unit. It is compatible with incandescent, fluorescent, LED, low-voltage lighting, and fan loads. The unit features dual manual-override switches that can be used to toggle the ON/OFF status of each lighting load while an area is occupied. The LRS2225 can be installed in place of two single-pole wall switches and fits in a standard single-gang wall box. To comply with CEC Title 24, the second relay is a manual-ON only.

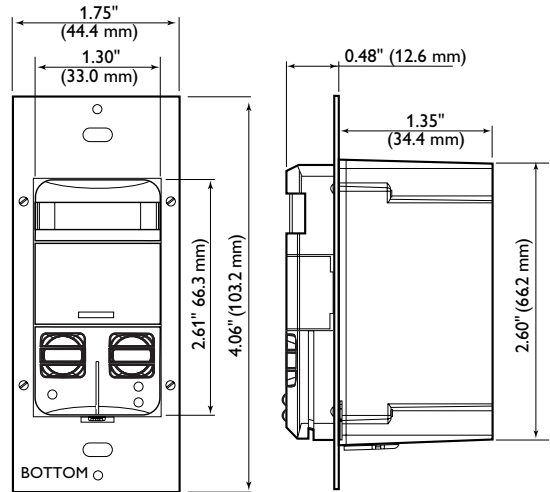
## Ordering Information:

Part Number	Description
LRS222500	Wall Switch Occupancy Sensor, Multi-Tech, Dual Relay, White, 120/277VAC
LRS222501	Wall Switch Occupancy Sensor, Multi-Tech, Dual Relay, Ivory, 120/277VAC

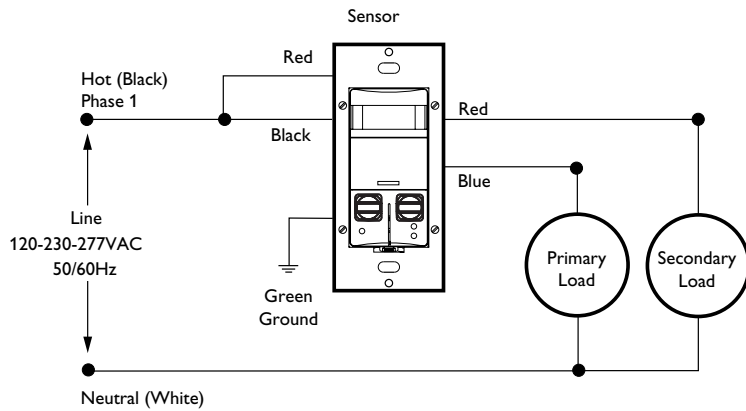
field of view



dimensions



wiring diagrams



Note: Ground wire must be connected.



©2012 Philips Day-Brite  
All rights reserved.  
776 South Green Street • Tupelo, MS 38804  
p. 800.234.1890 • f. 662.841.5501 • www.daybrite.com  
Canadian Division  
189 Bullock Drive • Markham, Ontario L3P 1W4  
p. 905.294.9570 • f. 905.294.9811

Contact Factory for Additional Configurations.  
Specifications are subject to change without notice.