

## Infrared Wall Mount Occupancy Sensor

The LOS-WIR Series passive infrared sensor can be mounted to a wall or ceiling for use in spaces with pendant fixtures, ceiling fans, or high ceilings (higher than 12 ft [3.7 m]).

Designed to meet the challenges found in a wide variety of spaces, the sensor works well in spaces with overhead fans and space heaters. Ideal for use in work areas, storage facilities, storerooms, indoor garages, and rooms with pendant fixtures.

### Features

- Intelligent, continually adapting Passive Infrared (PIR) sensor
- Passive Infrared (PIR) sensing
- Reliable motion detection with high error immunity
- Use in rooms with pendant fixtures and storage areas
- Flexible base mounting on wall or ceiling
- Aim and lock: base mount permits fast alignment
- Non-Volatile Memory: settings saved in protected memory are not lost during power outages
- 1600 ft<sup>2</sup> (148 m<sup>2</sup>) coverage when used where the ceiling height is between 8 ft to 12 ft (2.4 m to 3.7 m)
- Affords choice of turning lights off or dimming to a preset level in the unoccupied state when integrated with a Lutron® system.

### Model Available

Model	Color	Coverage	Field of View
LOS-WIR-WH	White	1600 ft <sup>2</sup> (148 m <sup>2</sup> )	110°

**NOTE:** BAA-compliant model numbers available. Add a "U" prefix to the model number.

### Self-Adaptive Feature

The internal microprocessor analyzes the information from the PIR technology and determines the optimum setting to use in order to properly cover the space. The LOS-WIR Series sensor identifies, records, and learns normal occupancy cycles of a space. Over an initial 4 week period, the sensor logs room occupancy for each 24 hour period. The information gathered by the sensor is used to automatically adjust the dual internal sensitivity bias threshold. This technology eliminates time-consuming adjustments and callbacks found in non-intelligent sensors.



<b>Job Name:</b>	<b>Model Numbers:</b>
<b>Job Number:</b>	

## Specifications

### Regulatory Approvals

- UL<sup>®</sup> and cUL<sup>®</sup> listed

### Power

- Operating voltage: 20 – 24 V<sup>===</sup>, IEC PELV/NEC<sup>®</sup> Class 2
- Operating current: 33 mA nominal
- Control output: 20 – 24 V<sup>===</sup> active high logic control signal with short-circuit protection, open collector when unoccupied

### Environment

- Temperature: 32 °F to 104 °F (0 °C to 40 °C)
- Relative humidity: less than 95%, non-condensing
- For indoor use only

### Timer Adjustment

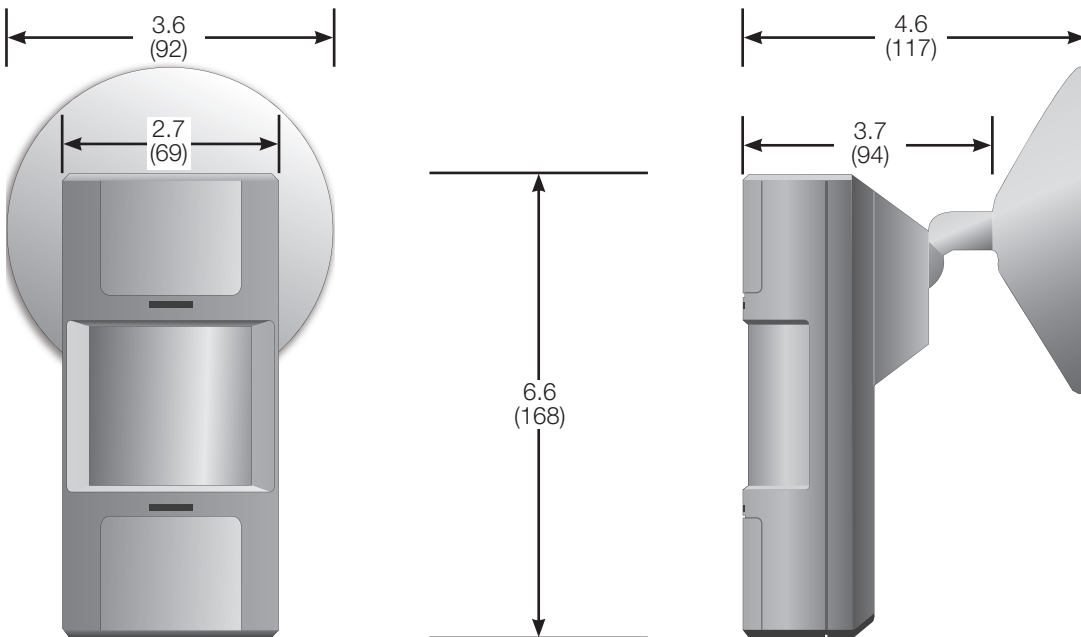
- Automatic mode: Continually adapting sensor automatically adjusts settings to the space
- Manual mode: 4 to 30 minutes
- Test mode: 8 seconds

### Adaptive Functions

- Installation: 60 minutes
- Learning: 4 weeks for response to error conditions, air current adaptation, and timer optimization
- Post-learning occupancy periods
  - 24 hour circadian occupancy periods learned
  - Weekly occupancy periods learned
- Adjustments in post-learning period
  - Generally occupied periods (threshold = high-sensitivity mode)
  - Generally unoccupied periods (threshold = miser mode)

## Dimensions

Measurements shown as: in (mm)



Front View

Side View

Job Name:

Model Numbers:

Job Number:

## Wiring: System Control

Power packs may be required when interfaced to Lutron® lighting control systems. If more than 1 occupancy sensor is connected to the same input, a power pack is required. A maximum of 3 occupancy sensors can be connected to the same input. If more than 3 sensors are required per input, use LOS-WDT-R-WH model.

### Power Supply Options

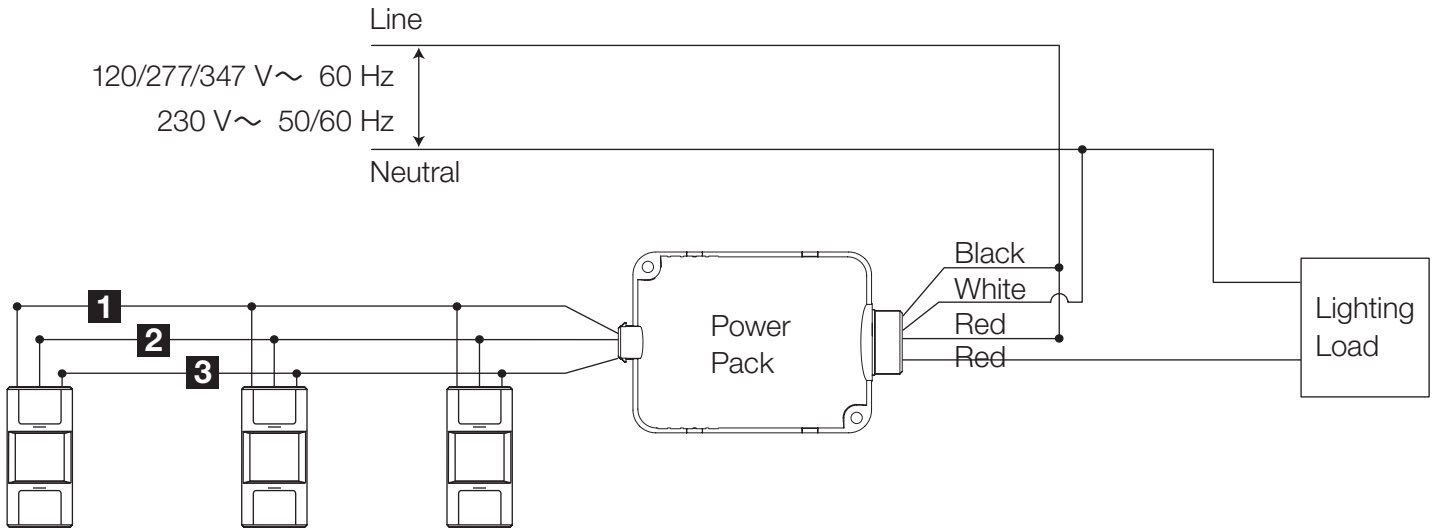
Lutron® Lighting Control System	Power Pack Required?
Digital microWATT™	No
EcoSystem®	No
Energi Savr Node™	No*
GRAFIK 5000™/6000®/7000™	No, when used with seeTouch® wallstations with occupancy sensor connections.
GRAFIK Eye® 3000/4000	Yes
GRAFIK Eye® QS	No*
HomeWorks®	Yes
HomeWorks® QS	No*
LCP128™	No, when used with seeTouch® wallstations with occupancy sensor connections.
microWATT®	No
Quantum®	No*
RadioRA®	Yes
RadioRA® 2	Yes
Softswitch128®	No, when used with seeTouch® wallstations with occupancy sensor connections.

\* Some system components do not supply external power for occupancy sensors. Refer to individual product specifications for more information.

Job Name:	Model Numbers:
Job Number:	

## Wiring: Stand-Alone Control

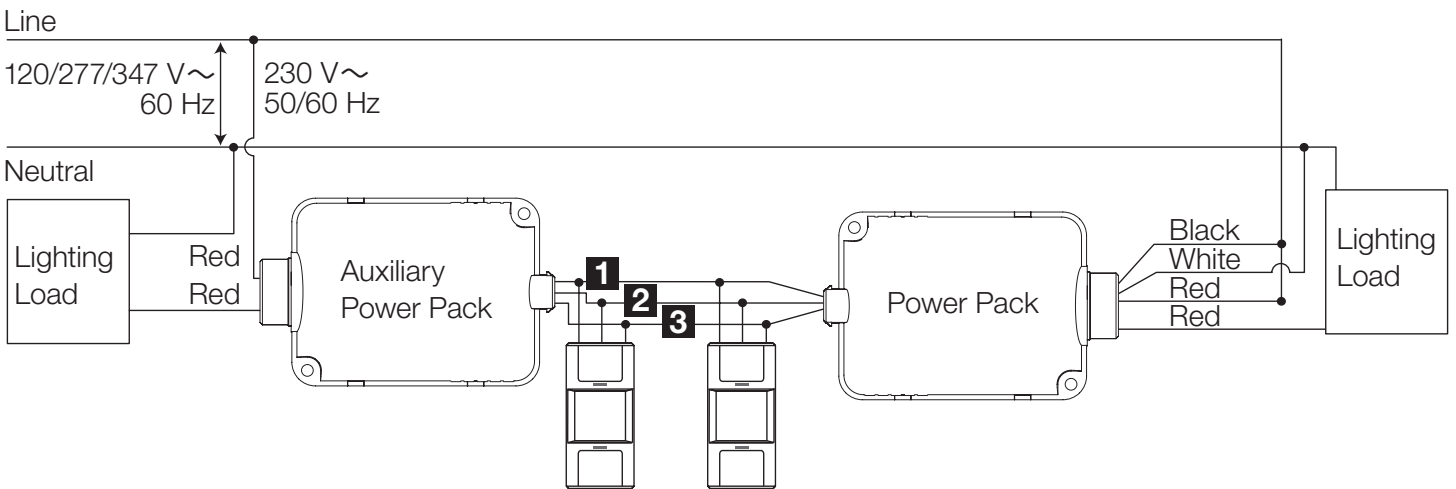
### 1 to 3 Sensors with Power Pack



**NOTE:** Maximum 3 occupancy sensors.

- 1** Red (+20 – 24 V==)
- 2** Blue (signal)
- 3** Black (common)

### Switching Multiple Loads with Auxiliary Power Packs



**NOTE:** Maximum of 3 devices total (occupancy sensors and auxiliary power packs) can be connected to a power pack.

Job Name:	Model Numbers:
Job Number:	

## Installation

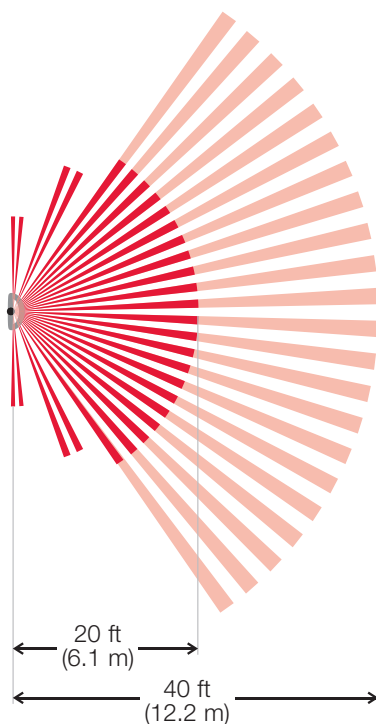
### Sensor Setup

- Sensor setup is available as a service by Lutron. For more information see the **Sensor Layout and Tuning** service document (Lutron® P/N 3601235).

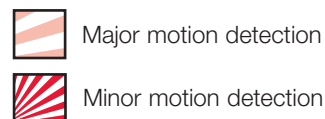
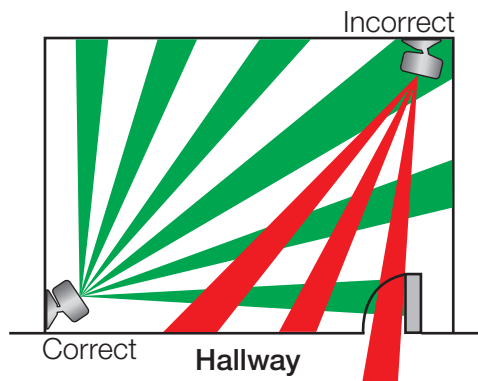
### Sensor Placement

- The occupancy sensor must have an unobstructed view of the room. Do not mount behind or near tall cabinets, shelves, indirect hanging fixtures, etc.
- Do not place sensor within 4 ft (1.2 m) of air vents, air handlers, windows, fans, etc., as this may cause false triggering.
- Place the sensor on the same wall as the doorway so that traffic in a hallway will not affect the sensor.
- Closely follow the diagrams shown concerning major and minor motion coverage. The sensor can detect major motion (e.g. person taking a half-step) at a greater distance than it can detect minor motion (e.g. writing at a desk or reading a book).
- May not detect occupancy with no significant difference between ambient and body temperatures.

### Range Diagram



### Placement Diagram



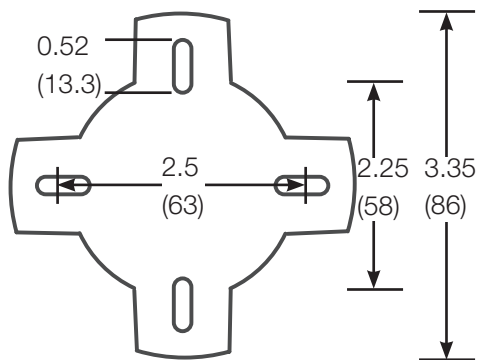
Job Name:	Model Numbers:
Job Number:	

## Mounting

The sensor can be mounted to a wall, ceiling or acoustic ceiling tile.

### Mounting Plate Dimensions

Measurements shown as: in (mm)



### Wire Lengths

Number of Sensors	1	2	3	1	2	1
Number of Auxiliary Power Packs	0	0	0	1	1	2
22 AWG	750 ft	375 ft	250 ft	375 ft	250 ft	250 ft
0.5 mm <sup>2</sup>	365 m	180 m	120 m	90 m	120 m	120 m
20 AWG	1200 ft	600 ft	400 ft	600 ft	400 ft	400 ft
0.75 mm <sup>2</sup>	730 m	365 m	240 m	365 m	240 m	365 m
18 AWG	2400 ft	1200 ft	800 ft	1200 ft	800 ft	800 ft

Job Name:	Model Numbers:
Job Number:	

# Sensor Adjustments

## Override Settings

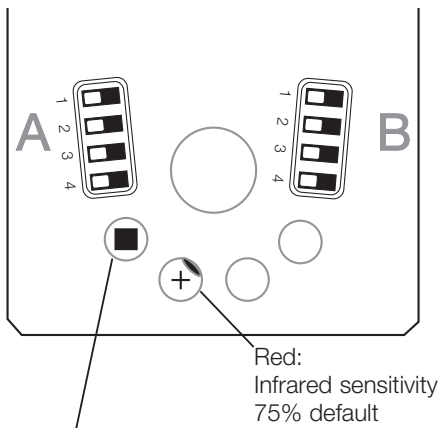
**A**

	Off (Default)	On
Auto/Manual	Automatically Turn Lights On	Manually Turn Lights On
N/A	Not Used	Not Used
LED Indicator	LED On	LED Off
Settings	Lock Settings	Unlock Settings (any change resets learned settings)

**B**

	Off (Default)		On	
Manual Timer	OFF } 8 minutes	OFF } 4 minutes	ON } 15 minutes	ON } 30 minutes
Auto Timer	Auto Timer Adjust On		Auto Timer Adjust Off	
Auto Sensitivity	Auto Sensitivity Adjust On		Auto Sensitivity Adjust Off	

## Factory Settings



Timer Test Mode:  
 Push and Release – 8 second test timer (resets to Normal timer after 1 hour)  
 Push and Hold (flash) – Normal timer

Job Name:	Model Numbers:
Job Number:	