



### Line Voltage Ceiling Sensors

#### Dual Technology- Passive Infrared/Ultrasonic

The LVDT2000R series is a line voltage ceiling mount sensor that uses Dual Technology - Passive Infrared (PIR) and Ultrasonic, to turn lighting loads on and off based upon occupancy. Dual Technology ensures maximum reliability and minimizes false triggering. As a line voltage sensor, it does not need a separate control unit. The LVDT2000R is an excellent choice for areas where there is major or minor motion.



#### Applications

- Retrofit use with concrete or inaccessible ceilings which limit access to low voltage wiring.
- New construction with line-voltage circuitry only.

#### Features and Benefits

Line Voltage Sensor with self contained power supply	Accepts line voltage inputs of 120V AC (LVDT2000R120) or 277V AC (LVDT2000R277). No need for a separate control unit
Dual Technology - Passive Infrared (PIR) and Ultrasonic	Maximum reliability and minimum false triggering
Five programming options	Ability to customize settings for room size and environment by use of dip switches
Adjustable time delay/sensitivity	Sensor can easily be adjusted to meet the needs of the room occupants by use of dip switches
2,000 sq. ft. range	Excellent coverage of a wide area



### Line Voltage Ceiling Sensors

#### Dual Technology

#### Passive Infrared/Ultrasonic Ceiling Sensor

2000 sq. ft. coverage

Description	Catalog Number
120V AC; white	<b>LVDT2000R120</b>
277V AC; white	<b>LVDT2000R277</b>



**LVDT2000R120**

### Specifications

<b>Sensitivity</b>	Fully adjustable: 0% - 100%
<b>Time Delay</b>	Fully adjustable: 30 seconds to 30 minutes
<b>Ultrasonic output</b>	Operating frequency: 32.7kHz
<b>Passive Infrared</b>	Multi-segmented, high-density Fresnel™ lens
<b>LED Lamp</b>	Walk test indicator; Red – Infrared motion; Green – Ultrasonic motion
<b>Coverage</b>	360°; up to 2000 sq. ft
<b>Power Requirements</b>	LVDT2000R120 – 120V AC 50/60 Hz LVDT2000R277 – 277V AC 50/60 Hz
<b>Load Ratings</b>	LVDT2000R120 – 2400 watts @ 120V AC 50/60 Hz LVDT2000R277 – 5000 watts @ 277V AC 50/60 Hz
<b>Operating Environment</b>	Indoor use only Operating temperature: 32° to 122°F (0° to 50°C)
<b>Construction</b>	Housing: Rugged, high impact, injection molded plastic; Color-coded leads
<b>Size</b>	4.74 inch (120.4mm) diameter; 3.875 inch (98.4mm) deep
<b>Weight</b>	14.6 oz
<b>Color</b>	White
<b>Mounting</b>	Sensors may be mounted using a single gang mud ring attached to a 4 inch square electrical box; Recommended max mounting height: 12 ft.
<b>Certifications</b>	UL
<b>Warranty</b>	5 years limited



### Line Voltage Ceiling Sensors Ultrasonic technology

The LVUS series of line voltage ceiling mount sensor uses Ultrasonic technology to turn lighting systems on and off based on occupancy.

Ultrasonic technology senses occupancy by bouncing ultrasonic sound waves off objects in space and detecting a frequency shift between the emitted and reflected sound waves. Ultrasonic occupancy sensors are good at detecting minor motion (e.g. typing) and do not require an unobstructed line-of-sight, making them suitable for applications such as an office with cubicles or a restroom with stalls. As a line voltage sensor, it does not need a separate control unit. The LVUS series has four models - two which cover up to 1,500 sq. ft. and two which cover up to 2,000 sq. ft.



### Applications

- Retrofit use with concrete or inaccessible ceilings which limit access to low voltage wiring.
- New construction with line-voltage circuitry only.

### Features and Benefits

Line Voltage Sensor with self contained power supply	Accepts line voltage inputs from 120V AC (LVUS1500R120, LVUS2000R120) or 277V AC (LVUS1500R277, LVUS2000R277). No need for a separate control unit
Ultrasonic technology	Good at detecting minor motion and does not require unobstructed line-of-sight. Suitable for applications such as an office with cubicles or a restroom with stalls
Adjustable time delay/sensitivity	Sensor can easily be adjusted to meet the needs of the room occupants
1,500 sq. ft. range (LVUS1500R Series) 2,000 sq. ft. range (LVUS2000R Series)	Excellent coverage of a wide area



### Line Voltage Ceiling Sensors

### Ultrasonic Technology Ceiling Sensors

1500 sq. ft. coverage

Description	Coverage	Catalog Number
120V AC; white	1,500 sq. ft.	<b>LVUS1500R120</b>
277V AC; white	1,500 sq. ft.	<b>LVUS1500R277</b>
120V AC; white	2,000 sq. ft.	<b>LVUS2000R120</b>
277V AC; white	2,000 sq. ft.	<b>LVUS2000R277</b>



LVUS1500R120



LVUS2000R120

### Specifications

<b>Sensitivity</b>	Fully adjustable: 0% to 100%
<b>Time Delay</b>	Fully adjustable: 30 seconds to 30 minutes
<b>Ultrasonic output</b>	Operating frequency: 32.7kHz
<b>LED Lamp</b>	Walk test indicator - Red
<b>Coverage</b>	LVUS1500R120/277 — Up to 1,500 sq. ft LVUS2000R120/277 — Up to 2,000 sq. ft
<b>Power Requirements</b>	LVUS1500R120 — 120V AC, 50/60 Hz LVUS1500R277 — 277V AC, 50/60 Hz LVUS2000R120 — 120V AC 50/60 Hz LVUS2000R277 — 277V AC 50/60 Hz
<b>Electrical Ratings</b>	LVUS1500R120 — 2400 watts @ 120V AC 50/60 Hz LVUS1500R277 — 5000 watts @ 277V AC 50/60 Hz LVUS2000R120 — 2400 watts @ 120V AC 50/60 Hz LVUS2000R277 — 5000 watts @ 277V AC 50/60 Hz
<b>Operating Environment</b>	Indoor use only Operating temperature: 32° to 122F° (0° to 50°C)
<b>Construction</b>	Housing: Rugged, high impact, injection molded plastic; Color-coded leads
<b>Size</b>	LVUS1500R120/277 — 4.87 inch (123.7mm) diameter; 1.65 inch (41.9mm) deep; LVUS2000R120/277 — 5 inch (127.5mm) length, 2.87 inch (73.0mm) width, 3.00 inch (76.2mm) deep
<b>Weight</b>	3.0 oz
<b>Color</b>	White
<b>Mounting</b>	Sensors may be mounted using a single gang mud ring attached to a 4 inch square electrical box; Recommended max mounting height: 12 ft.
<b>Certifications</b>	LVUS1500R120/277 — UL LVUS2000R120/277 — cUL Listed
<b>Warranty</b>	5 years limited



### Line Voltage Ceiling Sensors Passive Infrared (PIR)

The LVPR1500R is a line voltage ceiling mount sensor that uses Passive Infrared (PIR) technology to turn lighting loads on and off based upon occupancy. As a line voltage sensor, no control unit is required. The LVPR1500R is an excellent choice where long-range major motion detection is needed. It has a 360° field of view with low profile styling. It also contains an integral photocell control that increases energy savings by preventing lights from turning on when there is sufficient natural light.



### Applications

- Retrofit use with concrete or inaccessible ceilings which limit access to low voltage wiring.
- New construction with line-voltage circuitry only.

### Features and Benefits

Line Voltage Sensor	Accepts line voltage inputs from 120-347V AC; no need for a control unit
Passive Infrared Technology	Excellent for long range major motion detection
Integral photocell control for daylight harvesting	Increases energy savings by preventing the lights from turning on when there is sufficient natural light
360° field of view	Excellent coverage of a wide area; up to 1,500 sq. ft.
Low profile styling	Device sits only 1 in. off of ceiling; takes up minimal space

## Line Voltage Ceiling Sensor

## Passive Infrared (PIR)



Description	Coverage	Catalog Number
120-347V AC with photocell and isolated relay; white	1,500 sq. ft.	<b>LVPR1500R</b>



LVPR1500R

## Specifications

<b>Sensitivity</b>	Fully adjustable: 20% to 100%
<b>Time Delay</b>	Fully adjustable: 30 seconds to 30 minutes
<b>LED Lamp</b>	Walk test indicator — Red
<b>Integral Photocell</b>	Adjustable ambient light override ranges from 5 foot candles (5 lux) to 200 foot candles (200 lux)
<b>Coverage</b>	360° 1500 sq. ft. at 10 ft. mounting height
<b>Power Requirement</b>	120-347V AC
<b>Load Ratings</b>	800 watts Incandescent, 1000 watts fluorescent @ 120V AC; 1800 watts fluorescent @ 277V AC; 2200 watts fluorescent @ 347V AC
<b>Operating Environment</b>	Indoor use only Operating temperature: 32° to 131°F (0° to 55°C) 0% to 95% relative humidity, non-condensing
<b>Construction</b>	Housing: Rugged, high impact, injection molded plastic KJB ABS Cycolac (UL-945VA) flame class rating, UV inhibitors Color-coded leads are 6 inches long
<b>Size Weight</b>	Size: 4.0 inch diameter, 1.9 inch deep (101mm diameter, 48mm deep) Weight: 3.5 oz
<b>Color</b>	White
<b>Mounting</b>	LVPR1500R sensors may be mounted using a 3.0 round mud ring attached to a 4-inch square electrical box; Recommended max mounting height: 12 ft.
<b>Certifications</b>	UL and cUL Listed
<b>Warranty</b>	5 years limited



### Low Profile Passive Infrared Ceiling Sensor

The LVPR1500RP is a low voltage ceiling sensor that uses Passive Infrared technology(PIR) to turn lighting loads on and off based upon occupancy. It is excellent when long-range major motion detection is needed.

The LVPR1500RP is excellent for use with energy management systems. The auxiliary relay can be used with numerous manufacturers of building systems to signal that an area is occupied, i.e. tell the HVAC system to turn on the air/heat.



### Applications

- Excellent for use with energy management systems in office buildings
- Signals HVAC that there is occupancy and that air/heat should be turned on
- Can be used to indicate occupancy with an alarm system

### Features and Benefits

Passive Infrared Technology      Excellent for long range major motion detection

Integral photocell control for Daylight Harvesting      Increases energy savings by preventing the lights from turning on when there is sufficient natural light

360° field of view      Excellent coverage of a wide area; up to 1,500 sq. ft.

Low profile styling      Device sits only 1 in. off of ceiling; takes up minimal space

Auxiliary Relay version      Low Voltage Ceiling Sensor with relay- 24V DC 10mA; uses CU300A control unit

## Low Voltage Ceiling Sensor

## Passive Infrared (PIR)



Description	Coverage	Catalog Number
Passive Infrared Low Voltage Ceiling Sensor, with Relay; white; Must be used with CU300A control unit	1,500 sq. ft.	LVPR1500RP



LVPR1500RP

## Specifications

<b>Sensitivity</b>	Fully adjustable: 20% to 100%
<b>Time Delay</b>	Fully adjustable: 30 seconds to 30 minutes
<b>LED Lamp</b>	Walk test indicator — Red
<b>Integral Photocell</b>	Adjustable ambient light override ranges from 5 foot candles (5 lux) to 200 foot candles (200 lux)
<b>Auxiliary Relay</b>	SPDT, 1 A rated @ 24V DC / 120V AC dry contact
<b>Coverage</b>	360° 1500 sq. ft. at 10 ft. mounting height
<b>Power Requirement</b>	24V DC, 10 mA from Hubbell CU series control unit
<b>Output</b>	24V DC active high logic control signal with short circuit protection and optional dry contact
<b>Operating Environment</b>	Indoor use only Operating temperature: 32° to 131°F (0° to 55°C) 0% to 95% relative humidity, non-condensing
<b>Construction</b>	Housing: Rugged, high impact, injection molded plastic KJB ABS Cycolac (UL-945VA) flame class rating, UV inhibitors Color-coded leads are 6 inches long
<b>Size</b> <b>Weight</b>	Size: 4.0 inch diameter, 1.9 inch deep (101mm diameter, 48mm deep) Weight: 3.5 oz
<b>Color</b>	White
<b>Mounting</b>	Metal mounting ring provided
<b>Certifications</b>	UL and cUL Listed
<b>Warranty</b>	5 years limited