Ceiling Sensor — Dual Technology





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



Ceiling Sensor - Dual Technology

Line Voltage Ceiling Sensors Dual Technology Passive Infrared/Ultrasonic Ceiling Sensor

2000 sq. ft. cover	age	
Description		Catalog Number
120V AC; white	(L)	LVDT2000R120
277V AC; white	(l)	LVDT2000R277



LVDT2000R120

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



Ceiling Sensor — Ultrasonic Technology





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-ofsight, 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



Applications

up to 2,000 sq. ft.

- 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



Ceiling Sensor — Ultrasonic Technology



Line Voltage Ceiling Sensors Ultrasonic Technology Ceiling Sensors

1000 3q. It. Coverage	1500	sq.	ft.	coverage
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Description		Coverage	Catalog Number
120V AC; white	(I)	1,500 sq. ft.	LVUS1500R120
277V AC; white	(II)	1,500 sq. ft.	LVUS1500R277
120V AC; white	CULLISTED	2,000 sq. ft.	LVUS2000R120
277V AC; white	C UL LISTED	2,000 sq. ft.	LVUS2000R277





LVUS1500R120

LVUS2000R120

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



Ceiling Sensor — Passive Infrared (PIR)





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



Ceiling Sensor — Passive Infrared (PIR)

Line Voltage Ceiling Sensor Passive Infrared (PIR)

(UL) C(UL) LISTED

Description **Catalog Number** Coverage

120-347V AC with photocell and isolated relay; white

1,500 sq. ft.

LVPR1500R



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



Ceiling Sensor - Passive Infrared (PIR)





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 longrange 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



Ceiling Sensor — Passive Infrared (PIR)

Low Voltage Ceiling Sensor Passive Infrared (PIR)

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Description Passive Infrared Low Voltage Ceiling Sensor, with Relay; white; Must be used with CU300A

control unit

Coverage 1,500 sq. ft.

Catalog Number LVPR1500RP



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

