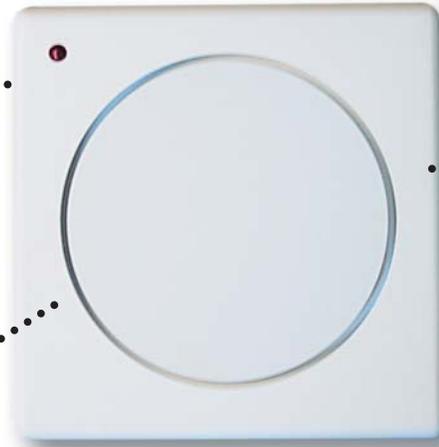




W Ultrasonic Ceiling Sensor



Reduces energy costs by turning lighting off when not needed

500, 1000, 2000 sq ft, and hallway coverages available

Advanced, omni-directional, Doppler technology

Ideal for open office areas, conference rooms and restrooms

Adjustable time delay from 15 seconds to 15 minutes

Advanced Signal Processing Circuitry automatically adjusts detection threshold

PROJECT
LOCATION/TYPE

Product Overview

Description

Watt Stopper ultrasonic sensors are versatile motion detectors that control lighting in a wide variety of applications. These sensors can be used individually or as part of an integrated system of Watt Stopper/Legrand lighting control products.

Operation

The 24 VDC ultrasonic sensors utilize advanced, omni-directional, Doppler technology to sense occupancy. When an ultrasonic sensor detects movement in a controlled area, it switches lighting on through a Watt Stopper power or auxiliary pack. The sensor controls the power pack through low voltage wiring. Once the area is vacated and the user-adjustable time delay (15 seconds to 15 minutes) has elapsed, lighting systems automatically switch off.

Manual-on Option

For additional control options, ultrasonic sensors can be used with BD series power packs for manual-ON/auto-OFF control. If this option is selected, occupants turn lighting on via low voltage momentary wall switches. Lights automatically turn off after the area is vacated and the user-adjustable time delay has elapsed.

Applications

Ultrasonic sensors effectively control offices, restrooms, utility areas, open office spaces and warehouses. The W-500A is perfect for offices, conference rooms, restrooms and other areas up to 500 square feet. The W-1000A fits in larger spaces such as storage areas. The W-2000A is ideal for open office areas or large warehouses and can control partitioned open office spaces when configured in highly versatile zone patterns. The W-2000H reliably covers hallways with walls.

Features

- Advanced Signal Processing Circuitry helps to eliminate false ONs
- Utilizes advanced, omni-directional, Doppler technology for reliable occupancy detection
- Omni-directional transmission provides 360° of coverage
- Time delay adjustable from 15 seconds to 15 minutes
- 500, 1000, 2000 sq ft, and hallway coverages available to fit needs of specific applications
- Optional ON override through the installation of the override pin provided with the sensor
- LED indicates occupancy detection

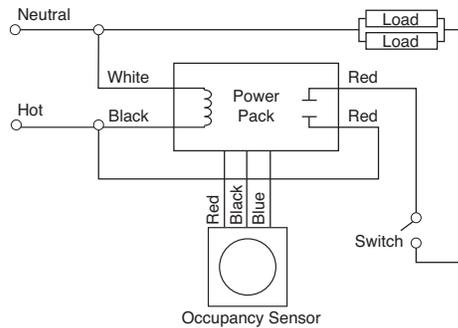


Specifications

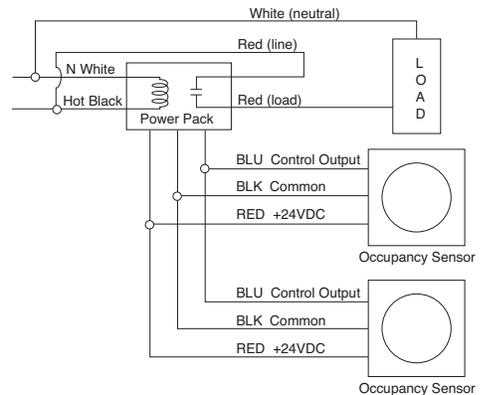
- Solid state, crystal-controlled (25 kHz \pm 0.005%)
- Temperature and humidity-resistant 25 kHz receivers, W-500A contains 1 receiver, other models contain 2 receivers
- Time delay adjustable from 15 seconds to 15 minutes
- Mounts to ceiling tile or 4 square junction box
- Units per power pack: up to 7 (B); up to 9 (BZ)
- Dimensions: 4.5" x 4.5" x 1.25" (115mm x 115mm x 32mm) W x L x D
- UL listed; five year warranty

Wiring

Standard Wiring Diagram

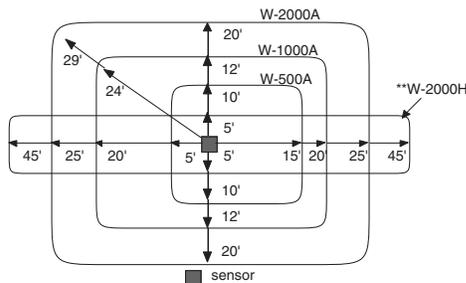


Multiple Sensor Wiring Diagram



Coverage & Installation

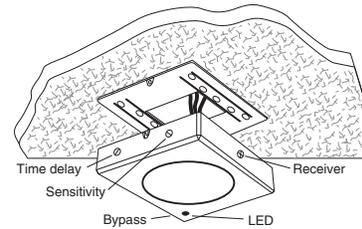
Coverage



Coverages shown represent half-step walking motion. Actual coverages can vary for each application depending on the shape and the use of space and the obstacles present. Coverage may be reduced if product is mounted greater than 12 feet high.

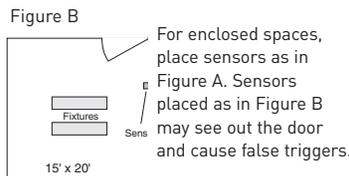
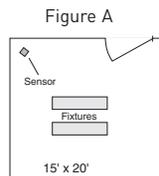
The W-2000H drawing is not drawn to scale. Coverage is 10' x 90' in a hallway; enclosed spaces enhance coverage.

Installation

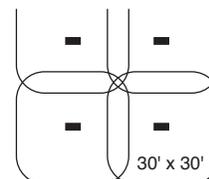


Attach sensor to a vibration-free surface. Mount the sensors with the receivers facing the area of coverage. Note: Ultrasonic sensors should be placed 4" away from supply ducts, 6" from horizontal discharge ducts, and 6" from power packs.

Enclosed Office Sensor Placement



Open Office Sensor Placement



A typical layout for an open office space would be to place W-2000A sensors so they control zones that overlap. For partitioned spaces, a typical zone is about 25' x 25' with an overlap on the coverages that senses motion up to 30' x 30'.

Ordering Information

Catalog No.	Voltage	Current	Coverage
<input type="checkbox"/> W-500A	24 VDC	16 mA	360°; 500 ft ² (46.5 m ²)
<input type="checkbox"/> W-1000A	24 VDC	16 mA	360°; 1000 ft ² (92.9 m ²)
<input type="checkbox"/> W-2000A	24 VDC	16 mA	360°; 2000 ft ² (185.8 m ²)
<input type="checkbox"/> W-2000H	24 VDC	16 mA	360°; 90 linear ft (27.4 m)**

All units are white and use Watt Stopper power packs. **Coverage for an enclosed hallway is 10' x 90', see pattern above.