ULTRASONIC LOW VOLTAGE CEILING SENSORS

UT-300 SERIES

Architecturally appealing low-profile appearance

Ultrasonic diffusers give more comprehensive coverage

Accepts low-voltage switch input for manual-on operation

Plug terminal wiring for quick and easy installation

Walk-through mode increases savings potential

Automatic or manual-on operation when used with a BZ-150 Power Pack

Description

Wattstopper's UT-300 Ultrasonic Ceiling Sensors automatically turn lighting on and off based on occupancy. The sensors mount on the ceiling with a flat, unobtrusive appearance and provides 360° coverage.

Operation

UT-300 Series Sensors operate on 24 VDC, VAC or halfwave rectified. They use 40 KHz high frequency ultrasound to sense occupancy and automatically turn lighting on. When no occupancy is detected for the length of the time delay, lighting automatically turns off. For manual-on operation, the units work with a low-voltage momentary switch.

Time Delay Options

The UT-300 is factory set for a 20 minute time delay, ideal for both energy savings and user satisfaction in most applications. Installers can quickly select other fixed time delays (5, 10, 15 or 30 minutes) via DIP switches. Fixed time delays eliminate the occupant dissatisfaction associated with an automatically adjusted time delay option, and reduce callbacks. Walk-through mode may be enabled for added energy savings in spaces with frequent transient traffic.

Applications

UT-300 Series Sensors offer excellent control of lighting for many spaces, including restrooms, large offices, open office areas and hallways. They can control large partitioned office spaces when configured in zone patterns. Unit performance combined with ease of installation will provide fast payback and many years of energy savings.

Features

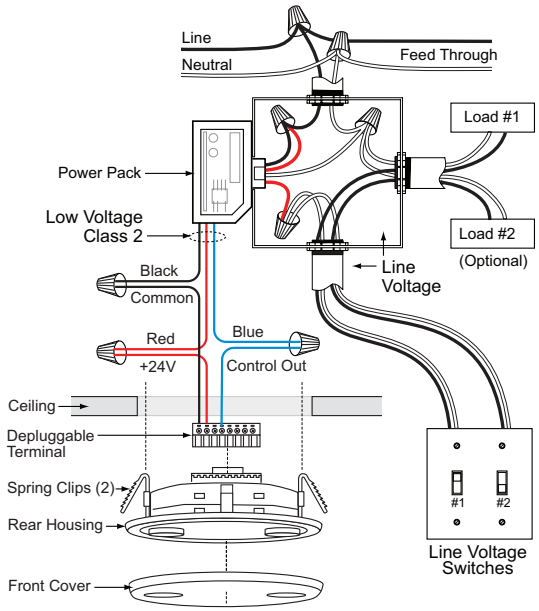
- Advanced control logic based on RISC microcontroller provides:
  - Advanced Signal Processing eliminates false triggers and provides immunity to RFI and EMI
  - Walk-through mode turns lights off three minutes after the area is initially occupied – ideal for brief visits such as mail delivery
- LED indicates occupancy detection
- Coverage 500-2,000 square feet
- Available with isolated relay for integration with BAS or HVAC
- DIP switch simplifies sensor adjustments
- Patented ultrasonic diffusion technology spreads coverage to a wider area
- UT-300 Series Sensors work with low-voltage momentary switches for manual control
- Clip mounting system makes ceiling tile installation simple
- Uses plug terminal wiring system for quick and easy installation
- BAA/TAA-compliant models available
- Sensor coverage tested to NEMA Guide Publication WD 7-2000

PROJECT		LOCATION/ TYPE	

Specifications

- 24 VDC/VAC
- Time delays: 5, 10, 15, 20 or 30 minutes, Walk-through/ Test Modes
- Sensitivity adjustment: variable with trimpot
- Ultrasonic frequency: 40 kHz
- UT-300 contains isolated relay with N/O and N/C outputs; rated for 1 Amp at 30 VDC/VAC
- Mounting options: ceiling tile; 4" square junction box with double-gang mud ring
- Max. UT-300s per power pack: B=2, BZ=5
  Max. UT-305s per power pack: B=3, BZ=5
- Dimensions: 4.5" x 1" (114.3mm x 25.9mm) diameter x depth
- UL and cUL listed
- Five year warranty

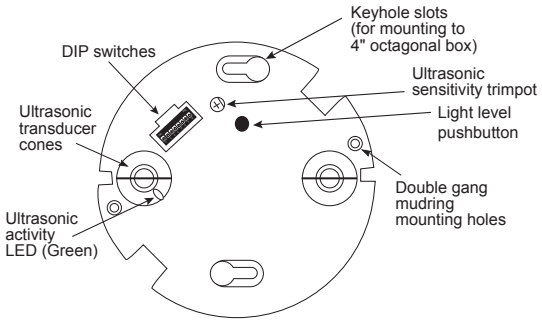
Wiring & Mounting



UT-300

Controls & Settings

Product Controls



DIP Switch Settings

Feature	Switch#		
Time Delay	**1**	**2**	**3**
Test Mode/20 min	↓	↓	↓
30 seconds	↓	↓	↑
5 minutes	↓	↑	↓
10 minutes	↓	↑	↑
15 minutes	↑	↓	↓
20 minutes ◀	↑	↓	↑
25 minutes	↑	↑	↓
30 minutes	↑	↑	↑

Walk-Through	**4**
Enabled	↑
Disabled ◀	↓

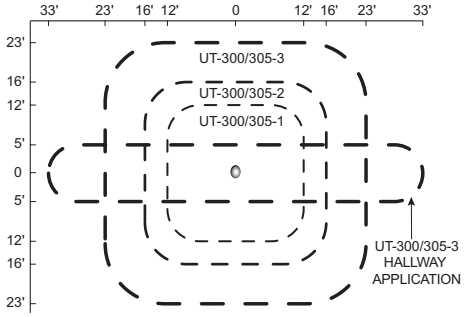
Service	**5**
Service	↑
Normal ◀	↓

◀ = Factory Setting
↑ = ON
↓ = OFF

Coverage & Placement

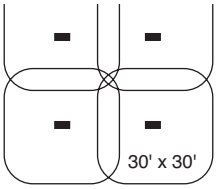
Coverage Patterns

Coverages shown represent half-step walking motion when sensor is mounted 8'-10' high. Actual coverage can vary for each application depending on the shape and use of space and the obstacles present.



Placement

Typical layout for open office space would be to place UT-300-3 sensors so they control zones that overlap. For partitioned spaces, a typical zone is about 25' x 25' with an overlap on the coverage up to 30' x 30'.



Ordering Information

Catalog #	Voltage	Current	Coverage	Features
☐ UT-300-1 ☐ UT-300-1-U	24 VDC	40 mA	500 ft² (46.5 m²)	Isolated relay
☐ UT-300-2 ☐ UT-300-2-U	24 VDC	40 mA	1000 ft² (92.9 m²)	Isolated relay
☐ UT-300-3 ☐ UT-300-3-U	24 VDC	45 mA	2000 ft² (185.8 m²)	Isolated relay
☐ UT-305-1	24 VDC	30 mA	500 ft² (46.5 m²)	
☐ UT-305-2	24 VDC	30 mA	1000 ft² (92.9 m²)	
☐ UT-305-3	24 VDC	35 mA	2000 ft² (185.8 m²)	

All units are white and use Wattstopper power packs. Current consumption can be slightly higher when only one sensor per power pack is used.
-U = BAA/TAA compliant; product is compliant with Buy American Act and Trade Agreement Act

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