

DT-355 Dual Technology Line Voltage Ceiling Sensor

Architecturally appealing,
low profile appearance

SmartSet™ automatically
selects optimal settings
for each space

Ultrasonic diffusers give
more comprehensive
coverage



Operates at 120, 230,
277 or 347 VAC, 50/60 Hz

Terminal wiring
for quick and easy
installation

Walk-through mode
increases savings potential

PROJECT

LOCATION/TYPE

Product Overview

Description

Watt Stopper/Legrand's low profile DT-355 dual technology occupancy sensor combines the benefits of passive infrared (PIR) and ultrasonic technologies. The sensor mounts on the ceiling with a flat, unobtrusive appearance and provides 360 degrees of

Operation

The DT-355 is line voltage and operates at 120, 230, 277 or 347 VAC. The sensor turns lighting on when both PIR and ultrasonic technologies detect occupancy. PIR technology senses the difference between infrared energy from a human body in motion and the background space. Ultrasonic technology uses the Doppler Principle and high frequency (40KHz) ultrasound to sense motion within the space. Once lighting is on, detection by either technology holds lighting on. When no occupancy is detected for the length of the time delay, lighting turns off. The DT-355 can also be set so that only one technology is needed to trigger or both technologies are needed to hold lighting on.

SmartSet

Using SmartSet™ technology, the DT-355 requires no adjustment at installation. SmartSet continuously monitors the controlled space to identify usage patterns. Using this information, it automatically adjusts the time delay and sensitivity settings for optimal performance and energy efficiency. The sensor assigns short delays (as low as 5 minutes) for times when the space is usually vacant, and longer delays (up to 30 minutes) for busier times.

Application

Watt Stopper's patented dual technology has the flexibility to work in a variety of applications, where one technology alone could encounter false triggers. Ideal applications include classrooms, open office spaces, large offices, and computer rooms. In addition, because the DT-355 can be mounted onto a variety of junction boxes, the sensor has the flexibility to be used in a wide range of spaces. The sensors eliminate the need for a power pack by using line voltage wiring.

Features

- Advanced control logic based on RISC micro-controller provides:
 - Detection Signature Processing eliminates false triggers and provides immunity to RFI and EMI
 - SmartSet automatically adjusts sensitivity and time delay settings to fit occupant patterns
 - Walk-through mode turns lights off 3 minutes after the area is initially occupied – ideal for brief visits such as mail delivery
- Built-in light level sensor featuring simple, one-step setup
- Ultrasonic diffusion technology spreads coverage to a wider area (patent pending)
- DIP switch simplifies sensor adjustments
- LEDs indicate occupancy detection
- Uses existing line voltage wiring and doesn't require a power pack
- 6 occupancy logic options give users the ability to customize control to meet application needs

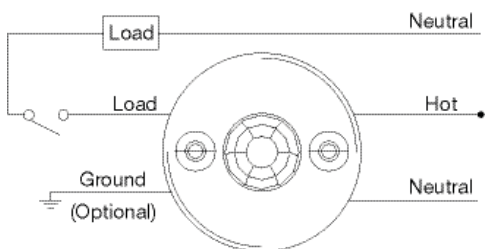


Specifications

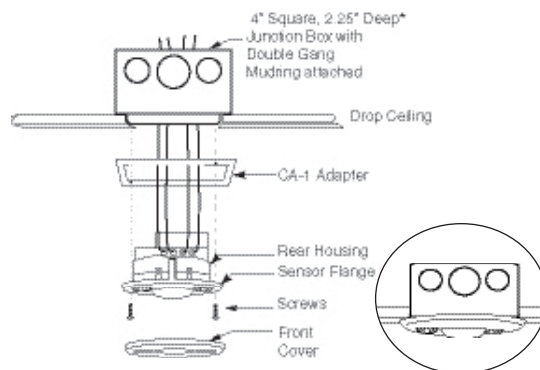
- 120/230/277/347 VAC, 50/60 Hz
- Ultrasonic frequency of 40kHz
- Time delays: SmartSet (automatic), fixed (5, 10, 15, 20, or 30 minutes), walk-through, test-mode
- Sensitivity adjustment: SmartSet (automatic) or reduced sensitivity (for PIR sensitivity); ultrasonic sensitivity is variable with trimpot
- Built-in light level sensor – works from 10 to 300 footcandles (107.6 to 3,229.2 lux)
- Multi-level, 360° Fresnel lens for superior occupancy detection
- Mounting options: 4 square junction box with double gang mudring; 4 inch octagonal junction box
- Dimensions: 4.50" diameter x 1.45" deep (114.3mm x 25.9mm)
- UL and CUL listed; Five year warranty

Wiring & Mounting

DT-355 Wiring Diagram

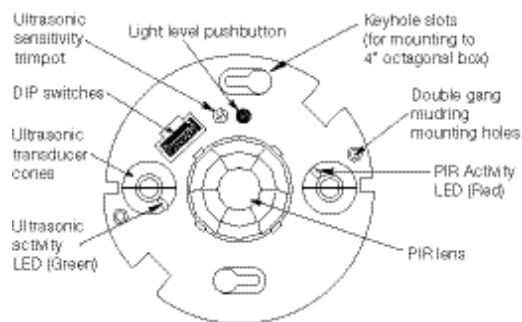


Ceiling Mounting



Controls & Settings

Product Controls



DIP Switch Settings

◀ = Factory Setting
● = ON
- = OFF

Occupancy Logic	Switch#		
	1	2	3
Standard	-	-	-
Option 1	●	-	-
Option 2	-	●	-
Option 3	●	●	-
Option 4	-	-	●
Option 5	●	-	●
Option 6	-	●	●
Option 7	●	●	●

Occupancy Logic	Trigger		
	Initial Occupancy	Maintain Occupancy	Re-trigger (seconds duration)
Standard	Both	Either	Either(5)
Option 1	Either	Either	Either(5)
Option 2	PIR	Either	Either(5)
Option 3	Both	Both	Both(5)
Option 4	PIR	PIR	PIR(5)
Option 5	Ultra	Ultra	Ultra(5)
Option 6	Man.	Either	Either(30)
Option 7	Man.	Both	Both(30)

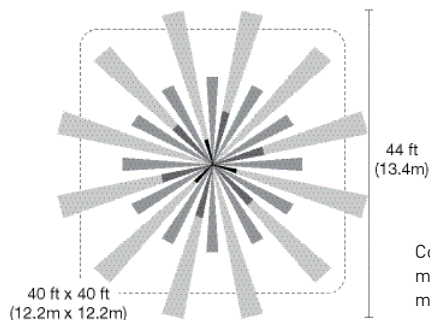
Time Delay	Switch#		
	4	5	6
5 sec/SmartSet	▲	-	-
5 minutes	-	-	-
10 min.	▲	-	-
10 minutes	-	●	-
15 min.	▲	-	-
15 minutes	●	-	-
20 minutes	-	●	-
30 min.	▲	●	●

▲ = walk-through mode

LEDs	Switch#	
	7	8
Disabled	-	-
Enabled	●	▲

PIR Sensitivity	Switch#	
	8	9
Minimum	-	-
Max./SmartSet	●	▲

Coverage



The technology control (occupancy logic) options are adjustable by user. The standard setting (recommended for most applications) is both technologies to trigger on, either to hold on.

Coverage shown is maximum and represents half-step walking motion. Under ideal conditions, coverage for half-step walking motion can reach up to 1000 ft² (92.9 m²).

Ordering Information

Catalog No.	Voltage	Load Requirement	Coverage
<input type="checkbox"/> DT-355	120 VAC, 50/60 Hz 230/277 VAC, 50/60 Hz 347 VAC, 50/60 Hz	0-800W Ballast/Tungsten 0-1200W Ballast 0-1500W Ballast	up to 1000 ft ² , (92.9 m ²)
<input type="checkbox"/> CA-1	Cosmetic adapter for ceiling installations with 4" square j-box or Wiremold #V5748-2 box		

Sensors are white.