



LIGHTING CONTROLS

DT-300 DUAL TECHNOLOGY CEILING SENSOR

DT SERIES OCCUPANCY WITH LIGHT LEVEL SENSOR

DESCRIPTION

The low-profile DT-300 dual-technology occupancy sensor with light level sensor combines the benefits of passive infrared (PIR) and ultrasonic technologies. The sensor mounts in the ceiling with a flat, unobtrusive appearance and provides 360 degrees of coverage.

Using SmartSet™ technology, the DT-300 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.

FEATURES

- **SmartSet™** adjusts sensitivity and time delay
- **Walk-through mode** turns lights off
- **Ultrasonic diffusion technology**
- **LED occupancy indication**
- **Pluggable terminal wiring**



12

LIGHTING CONTROLS

OPERATION

In normal operation, the DT-300 turns lighting on when both the PIR and ultrasonic technologies detect occupancy. It can also work with a low voltage switch for manual-on operation. 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 (40 KHz) ultrasound to sense motion.

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-300 can also be configured so that one or both technologies are needed to turn lighting on or hold lighting on.

SPECIFICATIONS

Supply Voltage		Coverage	
DT-300	24 VDC/VAC 43 mA	Switch input	Up to 1000 ft ² (92.9 m ²)
DT-305	24 VDC/VAC 35 mA		Low voltage, momentary for manual ON or OFF operation
Ultrasonic frequency	40kHz	Relay Output (DT-300 only)	Isolated SPDT contacts rated for 1A @ 30 VAC/VDC
Time delays	SmartSet™ (automatic), fixed (5, 10, 15, 20, or 30 minutes), walkthrough, test-mode	Mounting options	Ceiling tile 4" square junction box with double gang mud ring
Sensitivity adjustment	SmartSet™ (automatic) or reduced sensitivity (for PIR sensitivity); ultrasonic sensitivity is variable with trimpot	Dimensions	4.50" \pm 1.02"D (11.3 x 2.5 cm)
Light level sensor (DT-300 only)	10 to 300 footcandles (108 to 3230 lux)	Agency approvals	UL and CUL listed
		Warranty	5 years

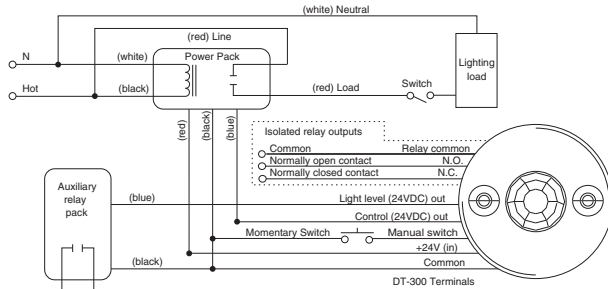
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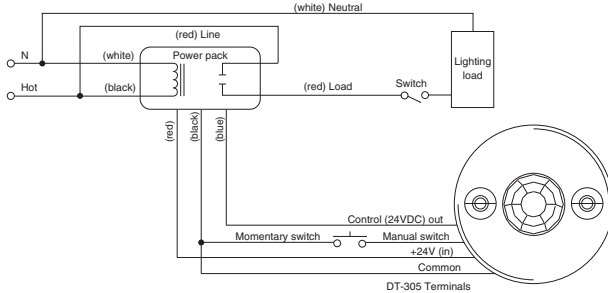


WIRING

Occupancy and Light Level Controlled Lighting



Occupancy



DIP SWITCH SETTINGS

Occupancy Logic	Trigger	Initial Occupancy	Maintain Occupancy	Relay Trigger (sec)	Relay Duration (sec)
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)		

◀ = Factory Setting

● = ON
- = OFF

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

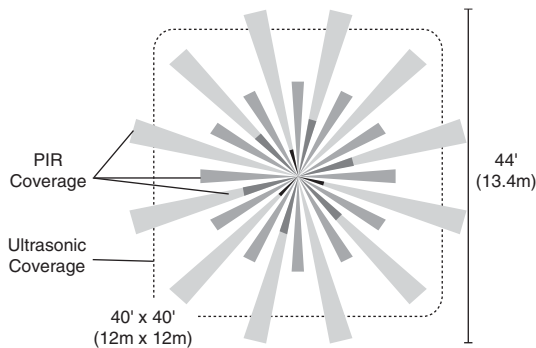
Time Delay	4	5	6
5 sec/SmartSet	-	-	-
5 min	-	●	-
10 min	-	-	●
10 min	-	●	-
15 min	-	-	●
15 min	-	●	-
20 min	-	-	●
30 min	-	●	●

⬆ = walk-through mode

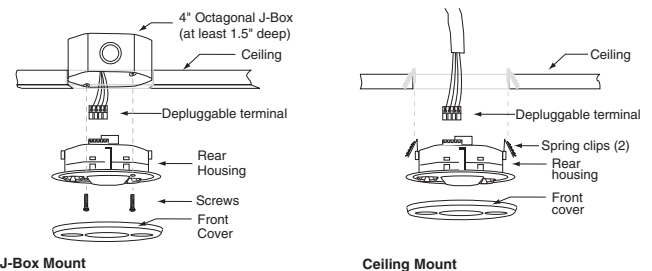
LEDs	7
Disabled	-
Enabled	●

PIR Sensitivity	8
Minimum	-
Maximum/SmartSet	●

COVERAGE



MOUNTING



ORDERING INFORMATION

MODEL

DT-300

DT-305

DESCRIPTION

Dual technology occupancy sensor with isolated relay and light level actuation

Dual technology occupancy sensor with 24 VDC control output only (no light level)