

DT CM DIM-24

Presence Detector



The DT CM DIM-24 Dual Technology Presence Detector utilizes PIR and ultrasonic technologies to detect the presence or signature of a person in a space. The logic options for initial “ON” and “Maintained” state of occupancy gives design engineers and installation contractors the choice for proper control of lighting and provides a 1-10 volt dimming output to control ballasts or driver lighting loads. Lighting is controlled in relation to the presence of motion, the user selected dim level by remote or momentary switch and ambient light levels. As soon as presence is detected, the sensor goes to either the last selected electric light dim level (constant-lighting controller ‘OFF’) or adjusts to the last selected electric light + daylight brightness level (constant-lighting controller ‘ON’). The “force off” light level feature will turn lights off when sufficient daylight is present for additional energy savings. When no movement is detected and the occupancy time setting has elapsed, the sensor dims light levels back to basic brightness. After the Stay ‘ON’ time DIM before ‘OFF’ delay has expired, the light turns off. STEINEL’s world class PIR optics and ultrasonic signal processing provide unparalleled line of sight and volumetric presence detection. Operational choices of auto on or manual on with a momentary or maintained switch input. The convenient “COM-Link” feature enables multiple sensors to link together via the communication link for peer to peer grouping achieving expanded detection zones with control set up functions set at only one primary sensor for the entire group. The available service and user wireless remotes provide simplified commissioning and occupant convenience.

Applications

Typical applications include classrooms, conference rooms, computer rooms, workspaces, open office space with cubicles, general open areas, restrooms, stairwells, storage rooms, executive offices and private offices.

Project Name:

Location:



DT CM DIM-24 Specifications

Item No.	65540 DT CM DIM-24
Accessories	65900 Smart remote 65800 RC 8 programming remote 65320 RC 4 user remote
Voltage	18-24 VDC/VAC (39 mA) 50/60 Hz
Load Rating	control output (blue) 1 A @ 24 VAC/VDC 1 - 10 volt dimming output (purple & gray) 100 mA, max. 50 (1 - 10 V electronic dimming ballasts)
Sensing Technology	passive infrared (PIR), single pyro, 11 detection levels, 520 switching zones, ultrasonic 40 kHz
Time Delay Setting	30 sec. to 30 min., IQ mode (automatic adjustment to the usage profile)
Light Level Setting	10 - 1000 lux / 1 - 100 fc
Environment	IP20 rated, 0°C to +55°C, 32°F to +131°F
Ultrasonic Detection Zones: (Coverage at 2.5 m / 9 ft)	presence: max. 7 m (130 sq.m.) / min. 20% max. 22 ft (426 sq.ft.) / min. 20% radial: max. 11.5 m (376 sq.m.) / 38 ft (1236 sq.ft.) tangential: max. 8 m (218 sq.m.) / 26 ft (718 sq.ft.)
PIR Detection Zones: (Coverage at 2.5 m / 9 ft)	presence: max. 7 m (134 sq.m.) max. 22 ft (440 sq.ft.) radial: max. 8 m (200 sq.m.) / 26 ft (655 sq.ft.) tangential: max. 25 m (1612 sq.m.) / 82 ft (5290 sq.ft.)
Dimensions	4.72 x 2.76 x 4.21 in, 120 x 70.2 x 107 mm (LxWxD)
Warranty	5 years
Certifications	C-UL-US Listed, RoHS Compliant CA Energy Code Compliant

Key Features:

- Low voltage (18-24 VDC/VAC) sensor for use with a power pack or building automation system
- 1-10 volt dimming
- Stay ‘ON’ time DIM before ‘OFF’
- Constant light level DIM control option
- PIR & Ultrasonic (40 kHz) Presence Detection
- Service and user wireless remotes available
- Manual ON mode (MAN) / Automatic mode (AUTO)
- Momentary / Maintained switch option
- ‘ON’ only / ‘ON’ & ‘OFF’ manual switching
- IQ Mode dynamically adjusts the ‘ON’ time delay by learning individual room occupancy



Passive Infrared
Ultrasonic



160° 82 Ft Max
22 Ft Presence



1 - 100 fc



18 - 24 VDC/VAC
1 - 10 Volt Dimming



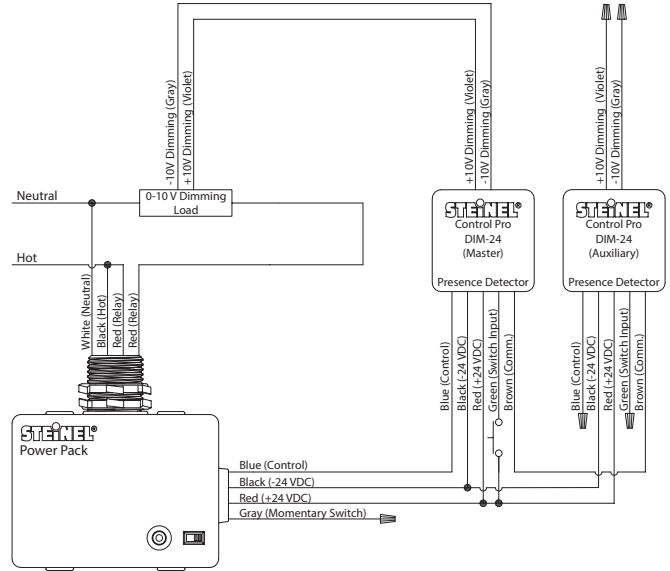
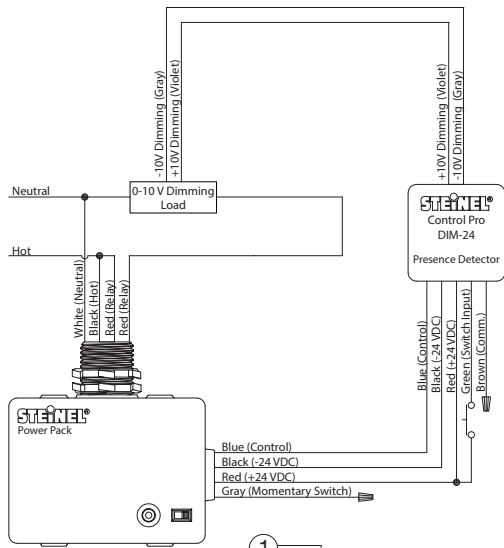
30 Sec - 30 Min

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Presence Detector

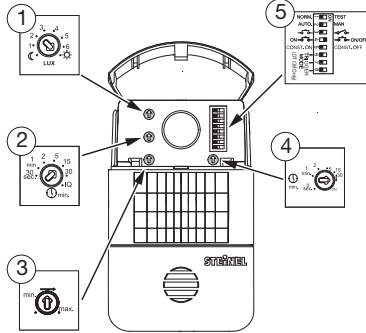


Wiring



Settings

- 1 - Light level setting
- 2 - Occupancy time delay setting
- 3 - Reach setting
- 4 - Stay 'ON' time DIM before 'OFF'
- 5 - Sensor DIP switch settings
- 6 - Trigger mode



- DIP 1 - Normal mode / Test mode (NORM / TEST)
- DIP 2 - Automatic mode (AUTO) / Manual ON mode (MAN)
- DIP 3 - Momentary / Maintained switch option
- DIP 4 - 'ON' only / 'ON' & 'OFF' manual switching
- DIP 5 - Constant light level DIM control option
- DIP 6/7/8 - Trigger mode

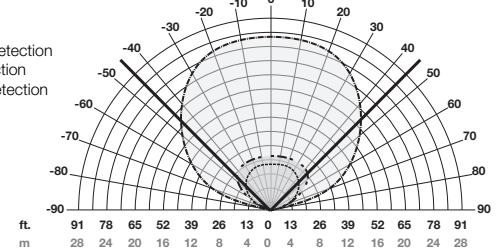
Trigger Mode Options	Initial Occupancy	Maintain Occupancy	DIP 6	DIP 7	DIP 8
Option 1 (factory setting)	Both	Either	↓ OFF	↓ OFF	↓ OFF
Option 2	Both	Both	↓ OFF	↓ OFF	↑ ON
Option 3	PIR	Either	↓ OFF	↑ ON	↓ OFF
Option 4	US	Either	↓ OFF	↑ ON	↑ ON
Option 5	Either	Either	↑ ON	↓ OFF	↓ OFF
Option 6	US	US	↑ ON	↓ OFF	↑ ON
Option 7	PIR	PIR	↑ ON	↑ ON	↓ OFF
Option 8	Either	Both	↑ ON	↑ ON	↑ ON

The trigger mode enables the user to choose which sensing technologies should be used to initially turn the load on and which technologies are required to keep it on.

Coverage

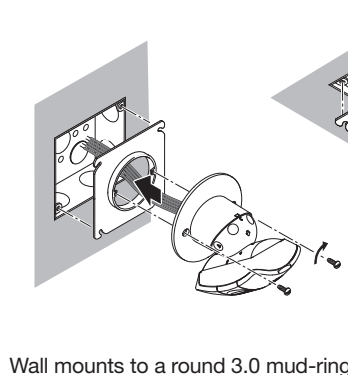
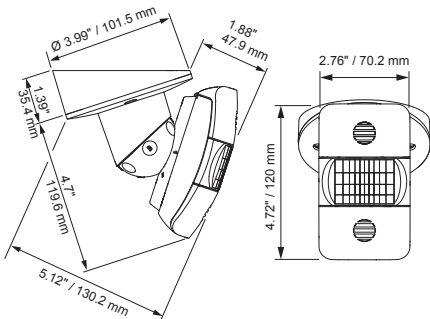
Shown coverage diagram at 9 ft mounting height. Ultrasonic signal can be increased by hard surfaces and decreased by soft surfaces.

- PIR Tangential Detection
- - - PIR Radial Detection
- · - PIR Presence Detection
- Wall

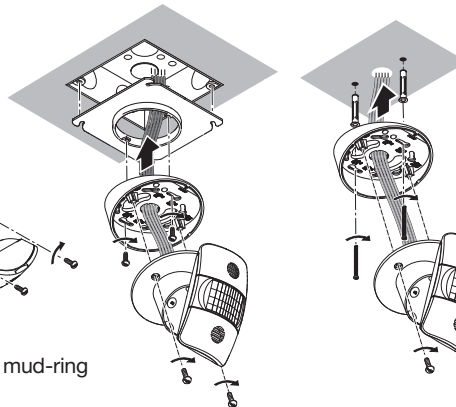


Ceiling mounts to a round 3.0 mud-ring using the ceiling mount adapter

Mounting



Wall mounts to a round 3.0 mud-ring



Can be mounted directly to the ceiling or wall using anchor bolts or can be mounted to the ceiling using the supplied 1/2" snap in chase nipple, washer and lock nut. When mounting to the ceiling, the ceiling mount adapter should be used.

