

TYPICAL APPLICATIONS

- Individual Fixture Control
- Stairwells
- Surface Mount Fixtures

FEATURES

- PIR Occupancy Detection
- Self-Contained Relay, no Power Pack needed
- Time Delay: 30 sec. to 20 minutes
- No Minimum Load Requirements
- Push-Button Programmable
- Green LED Activity Indicator
- 100 Hr. Lamp Burn-in Timer Mode

DAYLIGHTING OPTIONS

- On/Off Photocell (-P)
- Auto Dimming Cntl. Photocell (-ADC)

SPECIFICATIONS

- Size: 3.625" x 3.625" x 1.5" Deep
(9.2 cm x 9.2 cm x 3.8 cm Deep)
- Sensor Weight: 7 Ounces
- Sensor Color: White
- Mounting: 1/2 inch knockout
- Relative Humidity: 20 to 90% non-condensing
- Operating Temp: 14° to 160° F
(-10° to 71° C)
- Storage Temp: -14° to 160° F
(-26° to 71° C)
- Load Rating (1 Phase Only):
120 VAC @ 800 W
277 VAC @ 1200 W
347 VAC @ 1500 W
- 1/4 HP Motor Load
- Frequency: 50/60 Hz
(Timers are 1.2 times for 50 Hz)
- UL, CUL, and Title 24 Compliant
- 5 Year Warranty
- Made in U.S.A.

LOW TEMP/HI HUMIDITY(-LT)

- Conformally coated Circuit Board is corrosion resistant from moisture
- Operates down to -40° F (-40° C)

CMRB-10 Series

*w/ Enhanced Daylighting
Control Options!*



The *CMRB-10 Series* occupancy sensor mounts directly to the end of a pendant or surface mount fixture and utilizes the industry's leading Passive Infrared (PIR) technology to provide maximum viewing from the ceiling. The sensor is line powered and can switch loads directly without the need for a Power Pack. When mounted at 9 feet, this sensor views up to 28 feet in all directions. Its circular coverage pattern is designed for "walking" motions; making it ideal for T-shaped intersections in corridors, or other areas where wall mounting a sensor is not practical. The *CMRB-10* is also the best sensor for low ceiling applications. For example, when mounted at only 7 feet, the height of pick aisles in many distribution centers, the *CMRB-10* provides a 32 foot diameter pattern of coverage. In applications where detection of minor motion is also required, use the *CMRB-PDT-10 Series* Dual Technology sensor. For freezer or high humidity applications, use the "-LT" version.

SENSOR OPERATIONS

The sensor detects changes in the infrared energy given off by occupants as they move within the field-of-view. When occupancy is detected, a self-contained relay switches the lighting "On". The sensor is line powered and can switch a large range of line voltages. An internal timer, factory set at 10 minutes, keeps the lights "On" during brief periods of no activity. This timer is selectable at 2.5 minute increments from 30 seconds to 20 minutes, and is reset every time occupancy is re-detected. This state-of-the-art design requires no manual field adjustments.

DAYLIGHTING CONTROL OPTIONS

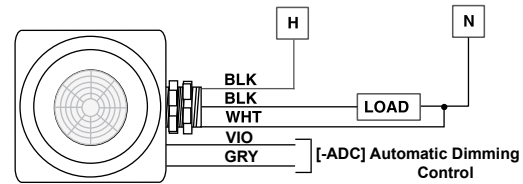
For spaces with abundant natural light from windows or skylights, this series offers an On/Off Photocell (-P) option and an Automatic Dimming Control (-ADC) Photocell option. The -P option is ideal for public areas like vestibules, corridors, or restrooms; while the -ADC option is perfect for classrooms and private offices. As the daylight levels change in the room, both options insure that an adequate light level is maintained according to a programmable set-point value. The -P option provides two modes of operation; one simply inhibits the lights from turning on, while the other has full On/Off control of the lights. The -ADC option allows the sensor to control a dimmable ballast. It also provides a secondary dim time-out that enables the lights to go to a dim setting after one time-out and then turn fully off after a second time-out. For more detailed information on these daylighting control features, see the *CMRB-PC-ADC Technical Data Sheet*. **Note:** If both the -P and the -ADC options are selected the "Inhibit" mode of the -P option is not available.

Model Numbering System: CMRB-10-[DAYLIGHTING CONTROL]-[VOLTAGE]-[TEMP/HUMIDITY]

MODEL #	DAYLIGHTING CONTROL*	VOLTAGE	TEMP/HUMIDITY
CMRB-10	Blank = None -P = On/Off Photocell -ADC = Auto Dimming Cntl. Photocell *for both options use -P-ADC	Blank = 120-277 VAC -3 = 347 VAC	Blank = 14° to 160° F LT= -40° to 160° F
FB-1 = Mounting Bracket for deep fixtures			

TYPICAL WIRING DIAGRAM (DO NOT WIRE HOT)

The sensor uses Sensor Switch's patented "either/or wiring"; Black to Hot and Black to Load. The White wire connects to neutral. Black wires are replaced with Red wires for 347 VAC. The -ADC option adds two low voltage wires for connection to a 0-10 VDC dimmable ballast.

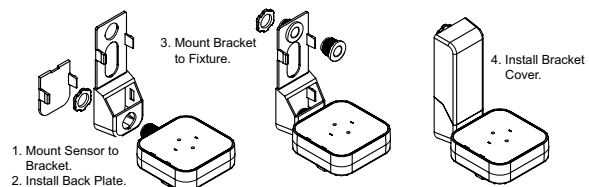
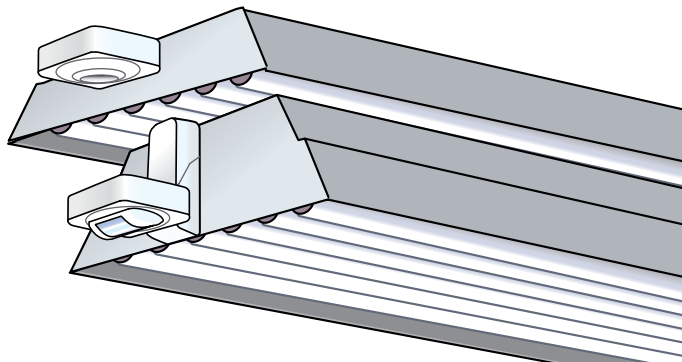


INITIAL POWER UP

When power is applied to the sensor, the relay is designed to be in a latched closed position, and the lights should come on. After a 1-3 minute warm-up period, the sensor becomes functional and begins to "time out". **If the Lights Do Not Immediately Turn On (Initial Installation Only)** the latching relay is in the open position. When the 1-3 minute warm-up is over the sensor will correct itself and close the relay.

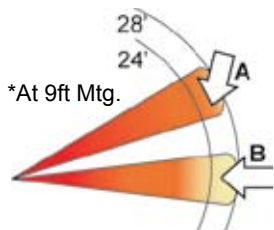
TYPICAL MOUNTING

The CMRB-10 mounts in a half-inch knockout hole on the side of the fixture. If the sensor's field-of-view is partially blocked by the fixture housing, use the FB-1 Fixture Bracket as shown.



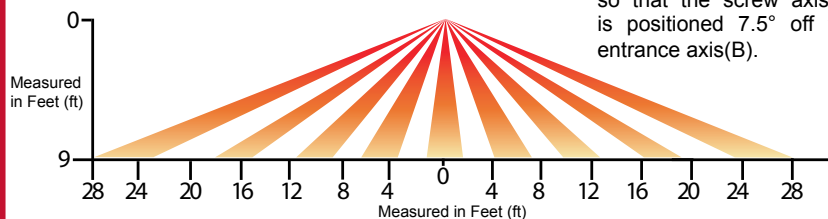
FIELD OF VIEW

The CMRB-10's dome lens provides a maximum viewing angle of 67° in a complete 360° conical pattern.



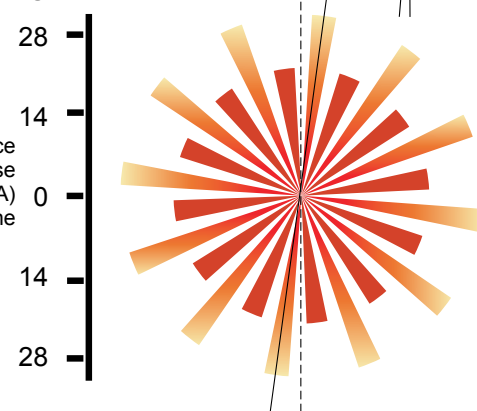
A: When walking across beam, detection will occur at approximately 28 feet.
B: When walking into beam, detection will occur at approximately 24 feet.

SIDE VIEW



Note: For maximum distance rotate the sensor clockwise so that the screw axis(A) is positioned 7.5° off the entrance axis(B).

TOP VIEW



WARRANTY: Sensor Switch, Inc. warrants these products to be free of defects in manufacture and workmanship for a period of sixty months. Sensor Switch, Inc., upon prompt notice of such defect will, at its option, provide a Returned Material Authorization number and a replacement product.

LIMITATIONS AND EXCLUSIONS: This Warranty is in full lieu of all other representation and expressed and implied warranties (including the implied warranties of merchantability and fitness for use) and under no circumstances shall Sensor Switch, Inc. be liable for any incidental or consequential property damages or losses.

sensorswitch

SENSOR SWITCH, INC.

900 Northrop Rd., Wallingford, CT 06492
 (203) 265-2842 info@sensorswitch.com
 www.sensorswitch.com

revised 06/13/2006
 copyright Sensor Switch, Inc. 2006