sensorswitch®

SBR 10

EXTENDED RANGE 360º SENSOR
EMBEDDED SMALL BOX • LINE VOLTAGE • PASSIVE INFRARED (PIR)

SPECIFICATIONS

FEATURES
100% Digital PIR Detection,
Excellent RF Immunity
Self-Contained Relay,
No Power Pack Needed
No Minimum Load Requirements
Compatible w/ Electronic & Magnetic Ballasts, CFLs, LED, & Incandescents
Interchangeable Hot & Load Wires, Impossible to Wire in Reverse
Push-Button Programmable
Non-Volatile Settings Memory
Adjustable Time Delays
No Field Calibration or Sensitivity Adjustments Required
Convenient Test Mode
100 hr Lamp Burn-in Timer
Green LED Indicator

LAMPMAXIMIZER® TECHNOLOGY
- Protects Lamp Life while Maximizing Energy Savings
- Minimum On Timer (15 min default)
- Occ. Time Delay (10 min default)
- LampMaximizer+ Mode - Optimizes Lamp Life & Energy Savings (disabled by default)
- Switch Counter (in 1000's)
- Total Lamp On Time (in khrs)

PHYSICAL SPECS
SIZE (w/ MOUNTING FLANGE)
3.40" H x 3.40" W x 1.40" D
(8.64 cm x 8.64 cm x 3.56 cm)
WEIGHT 6 oz
MOUNTING 2.65" (6.73 cm) square opening in fixture (minimum depth 1.50" (3.8 cm))
COLOR White

ELECTRICAL SPECS
MAXIMUM LOAD
800 W @ 120 VAC
1200 W @ 277 VAC
1500 W @ 347 VAC
MINIMUM LOAD None
MOTOR LOAD 1/4 HP
FREQUENCY 50/60 Hz
DIMMING LOAD Sinks < 20mA; ~40 Ballasts @ .5mA each

ENVIRONMENTAL SPECS
OPERATING TEMP
14º to 160º F (-10º to 71º C)
RELATIVE HUMIDITY
20 to 90% non-condensing
SILICONE FREE
ROHS COMPLIANT

OVERVIEW
The **SBR 10** Series incorporates Passive Infrared (PIR) technology into a line powered occupancy sensor to provide maximum viewing from the ceiling. The **SBR 10** sensor recess mounts into a 2.65" (6.73 cm) square opening in a fixture. 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. Low ceiling heights are also best covered with the **SBR 10**. For example, when mounted at only 7 ft (2.13 m), the height of pick aisles in many distribution centers, the **SBR 10** provides a 32 ft (9.75 m) diameter pattern of coverage.

SENSOR OPERATION
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 connected lighting load on. The sensor is line powered, switches line voltage, and requires no field calibration or sensitivity adjustments.

LAMPMAXIMIZER®
This sensor also contains patent pending LampMaximizer technology that allows users to aggressively target energy savings while still protecting lamp life. A minimum on timer, factory set at 15 minutes, helps preserve lamp life by eliminating all lamp cycles shorter than lamp manufacturers' recommendations.

A standard occupancy time delay is also present that ensures lights turn off (assuming minimum on timer has elapsed) if no occupancy is detected. This timer is factory set at 10 minutes to promote energy savings, but is adjustable between 30 seconds and 20 minutes. These adjustments can be done manually, through the unit's push-button, or automatically every two weeks through an advanced mode, called LampMaximizer+, that determines the optimum time delay in order to maximize both lamp life and energy savings. Additionally, this sensor maintains statistics on total lamp on time and number of cycles.

OPTIONS

OCCUPANCY CONTROLLED DIMMING (D)
- Provides dimming output to control 0-10 VDC dimmable ballasts
- Provides a second occupancy time-out period that enables the lights to go to a dim setting before turning off
- Adjustable max/min dim setting

PHOTOCELL (P)
- Auto set-point calibration
- Two selectable modes of operation
- On/Off mode: Photocell has full control during periods of occupancy
- Inhibit mode: Photocell can prevent lights from turning on if adequate daylight is available, but cannot turn lights off

PHOTOCELL W/ DIMMING (ADC)
- Photocell within sensor maintains total room light level by controlling levels of 0-10 VDC dimmable ballasts
- Photocell also has full on/off control during periods of occupancy
- Provides a second occupancy time-out period that enables the lights to go to a dim setting before turning off

Note: LampMaximizer+ features not available with ADC option

347 VAC (347)
- Allows sensor to be powered from and switch 347 VAC

LOW TEMP/HIGH HUMIDITY (LT)
- Sensor electronics are coated for corrosion resistance
- Operates down to -40º F/C
- Required for cooler/freezer applications

WATER PROOF OPTIONS (IP65 / IP65 KIT)
- Sensor is gasketed for inclusion into a wet location fixture (IP65)
- Sensor is gasketed for inclusion into a provided 4"x4" wet location junction box (IP65 KIT)
- Sensor electronics are coated for corrosion resistance
- Operates down to -40º F/C

C SA US

CSA LISTED
TITLE 24
ASSEMBLED in U.S.A.
5 YEAR WARRANTY

ORDERING INFO

SBR 10 [DIMMING/PHOTOCELL] [VOLTAGE] [TEMP/HUMIDITY/WATER PROOF]

DIMMING / PHOTOCELL *CHOOSE ONE ONLY*
Blank = None
D = Occupancy Controlled Dimming
P = Photocell
ADC = Photocell w/ Dimming

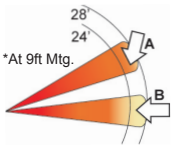
VOLTAGE
Blank = 120/277 VAC
347 = 347 VAC

TEMP/HUMIDITY/WATER PROOOF *CHOOSE ONE ONLY*
Blank = Standard
LT = Low Temp
IP65 = Water Proof *(SENSOR ONLY)*
IP65 KIT = Water Proof *(SENSOR & J-BOX)*

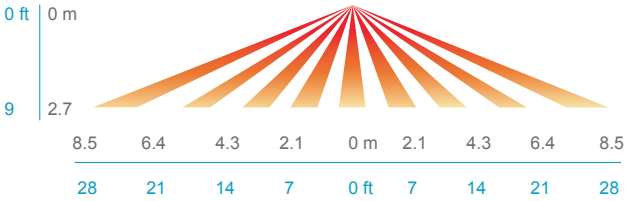
COVERAGE PATTERN

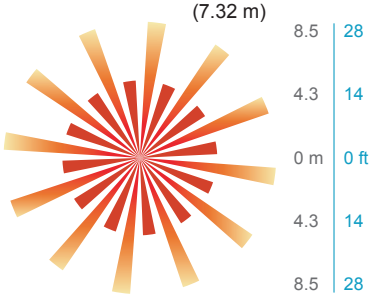
10 EXTENDED RANGE 360° LENS

- Best choice for large motion detection (e.g. walking)
- Viewing angle of 67° in a 360° conical shaped pattern
- Provides 28 ft (8.53 m) radial coverage when mounted to standard 9 ft (2.74 m) ceiling
- 7 to 15 ft (2.13 to 4.57 m) mounting heights provide 16 to 36 ft (4.88 to 10.97 m) radial coverage



A: When walking across beam, detection will occur at approximately 28 ft (8.53 m)
B: When walking into beam, detection will occur at approximately 24 ft (7.32 m)





WIRING (DO NOT WIRE HOT)

STANDARD WIRING

BLACK* - Line Input
BLACK* - Load Output
WHITE - Neutral
} *BLACK wires can be reversed

347 VAC OPTION (347)

Black wires are replaced w/ Red wires

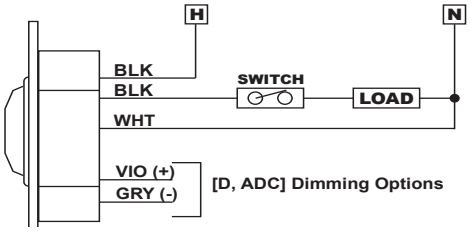
DIMMING OPTIONS (D, ADC)

VIOLET - Connect to Violet control wire from 0-10 VDC dimmable ballast
GRAY - Connect to Gray common wire from ballast

INITIAL POWER UP

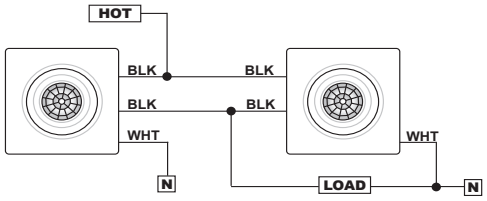
The sensor's relay is shipped in a latched closed position so the lights will come on upon initial power-up. If the lights do not immediately turn on (initial installation only) the latching relay opened during shipment and will close within 30 secs.

Note: If the sensor loses power, the internal relay will latch to on.



SENSORS IN PARALLEL

Sensors may be wired in parallel; however, the maximum load ratings stay the same. Do not wire sensors with P or ADC option in parallel.

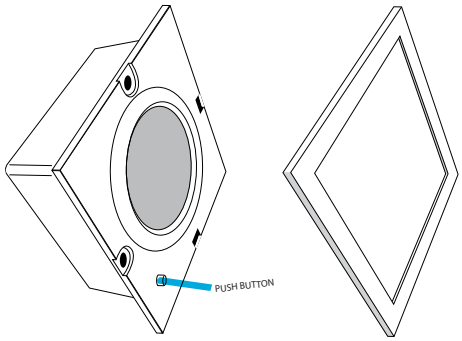


INSTALLATION

- The SB Series offers a custom look for recess mounting in lighting fixtures. It mounts inside a 2.65" square opening in a fixture (minimum depth 1.50").
- Sensor will detect motions crossing segments more effectively than motions parallel to beams
- For optimal detection, position sensor such that segments are crossed upon entrance and unable to view outside the space

PROGRAMMING

Refer to instruction card IC7.001 for default settings and directions on programming the sensor via the push-button.



WARNING

Fire Hazard Caution: Maximum Lamps 1500 Watts, Type 347 VAC.
Attention: Risque d'incendie : Pauissance Maximales Des Lampes 1500 Watts, Type 347 VAC.
Warning: The units are intended to be installed by a qualified person with properly rated branch circuit protectors as per applicable local and national regulations (CEC, NEC).

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