

# SBOR 6 ODP SBOR 10 ODP



## OUTDOOR POLE/FIXTURE MOUNT MOTION SENSOR 360° COVERAGE • ON/OFF/DIM • PHOTOCELL • IP66 RATED

### SPECIFICATIONS

#### FEATURES

100% Digital PIR Detection,  
Excellent RF Immunity  
Integrated Photocell  
Self-Contained Relay for Switching  
0-10 VDC Output for Dimming  
Gasketed for Outdoor Operation  
Enables Fixture or Pole Mounting  
Compatible w/ 0-10 VDC Dimmable  
Ballasts and LED Drivers  
Interchangeable Hot & Load Wires,  
Impossible to Wire in Reverse  
Adjustable Time Delays, Max/Min Dim  
Levels, and Ramp Rates  
Programming Button Accessible w/o  
Opening Sensor or Removing Gaskets  
No Field Calibration or Sensitivity  
Adjustments Required  
Non-Volatile Settings Memory  
Convenient Test Mode  
Green LED Indicator

#### PHYSICAL SPECS

SIZE: 3.35" H x 4.40" W x 4.00" D  
(8.51 cm x 11.18 cm x 10.16 cm)  
WEIGHT: 9 oz  
MOUNTING: 1/2" knockout (7/8" hole)  
COLOR: White, Black, or Dark Bronze

#### ELECTRICAL SPECS

MAXIMUM SWITCHING LOAD:  
800 W @ 120 VAC  
1000 W @ 208 VAC  
1200 W @ 240 VAC  
1200 W @ 277 VAC  
1500 W @ 347 VAC  
2160 W @ 480 VAC  
MINIMUM LOAD: None  
MOTOR LOAD: 1/4 HP  
FREQUENCY: 50/60 Hz  
DIMMING LOAD: Sinks < 20mA  
(0-10 VDC LED Drivers / Ballasts

#### ENVIRONMENTAL SPECS

OPERATING TEMP:  
-40° to 160° F (-40° to 71° C)  
IP66 RATED  
SILICONE FREE  
ROHS COMPLIANT



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

#### OVERVIEW

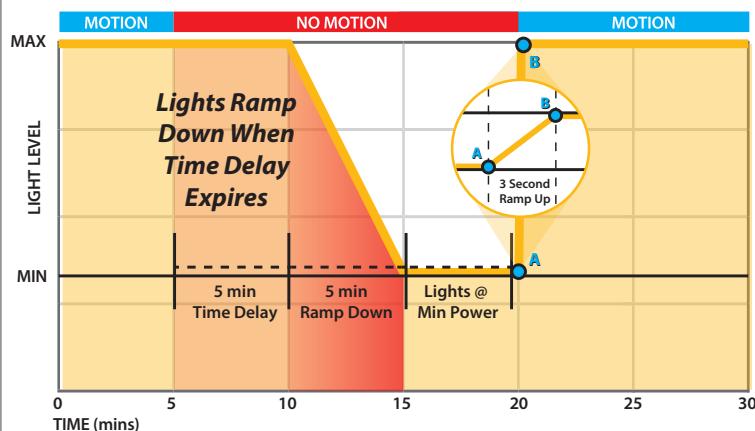
The SBOR xx ODP Series sensors provide both Motion and Daylight based control of a 0-10 VDC dimmable outdoor or wet location luminaire. Designed to mount directly through a 1/2" knockout (7/8" hole) in a light fixture or pole, the SBOR xx ODP can both switch and dim its connected lighting. For motion detection, the sensor utilizes 100% Digital Passive Infrared (PIR) technology that is tuned for walking size motion while preventing false tripping from the environment. The unit's integrated photocell enables additional energy savings during daytime periods when there is sufficient daylight.

#### SEQUENCE OF OPERATION - MOTION

For outdoor applications, where occupant safety is of primary concern, the SBOR xx ODP Series sensors are factory set to start dimming the lights once the motion time delay expires. Set to 5 min by default, this time delay is followed by a 5 min ramp down period where the lights slowly drop to the minimum dim level. Utilizing a long ramp down rate eliminates noticeable drops in light level. If motion is detected at any time during the ramp down period or when at the minimum dim level, the sensor will quickly ramp the lights back up to maximum level (default 100%) over a 3 sec (default) period. This ramp up period is intended to quickly return the lighting to full bright without distracting occupants with a sudden jump in the space's light level. The time delays, ramp rates, and max/min dim levels are user adjustable via the accessible push-button. See luminaire specifications for corresponding power level at minimum dim level.

#### Sequence of Operation

When time delay expires, lights ramp down to minimum over 5 min



#### SEQUENCE OF OPERATION - DAYLIGHT

To prevent lights from day-burning, the SBOR xx ODP Series sensor will switch lighting completely off during periods of sufficient daylight. Providing on/off photocell control eliminates the need for astronomical or time clocks. Additionally, the sensor's closed loop photocell adjusts its calibration after every cycle to accommodate visual changes to the space in which they are installed (for example different color cars in a parking garage reflecting light differently). The photocell operation can also be set to dim lights to the minimum level instead of turning them off.

### ORDERING INFO

SBOR [MOUNTING HEIGHT] ODP [VOLTAGE] [COLOR] [MINIMUM DIM LEVEL]

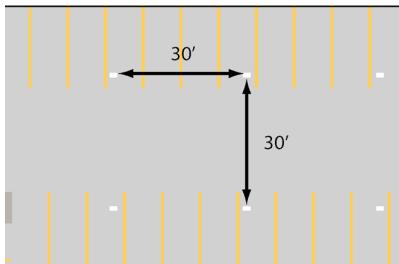
OPTIONS	MOUNTING HEIGHT	VOLTAGE	COLOR	MIN DIM LEVEL
	Low Mount (8-15 ft) = 10 High Mount (15-30 ft) = 6	Blank = 120-277 VAC (MVOLT) HVOLT = 347-480 VAC	WH = White BK = Black BZ = Dark Bronze	1V = 1 VDC 4V = 4 VDC 2V = 2 VDC 5V = 5 VDC 3V = 3 VDC 0V = OFF

# APPLICATION / COVERAGE

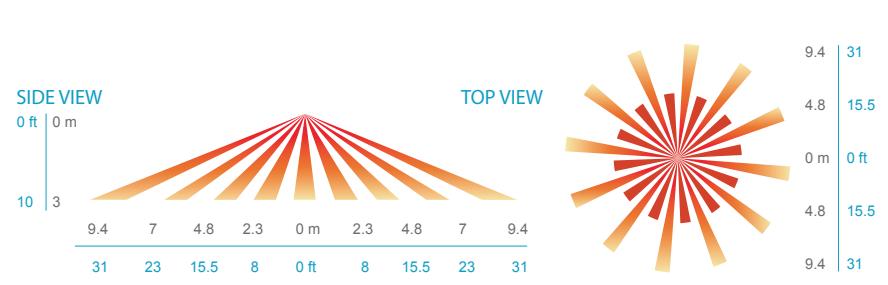
Revised 12.03.13 © 2013 Sensor Switch

## PARKING GARAGE / LOW MOUNT APPLICATIONS

In general, the **SBOR 10 ODP** is recommended for 8-15 ft mounting and provides a coverage area radius for walking motion of greater than 2x the mounting height. The **SBOR 10 ODP** is ideal for parking garage and low pole mount applications. When mounted 10 ft high, for example, on a luminaire in a parking garage, the sensor's coverage for walking motion extends out 30 ft in a 360° pattern. This closely matches the lighting distribution of a typical parking garage luminaire. When mounted to a light pole, for example, in a parking lot or along a path, the sensor provides 270° of coverage (90° is blocked by the pole).



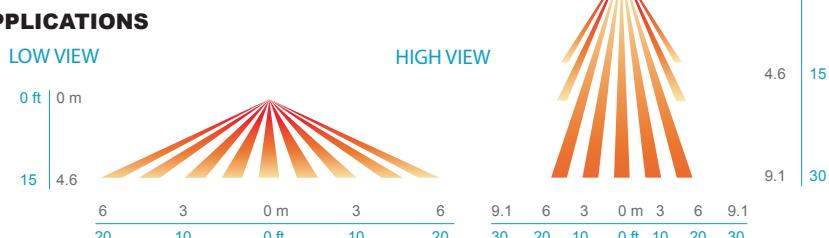
Typical 30'x30' spacing of parking garage luminaires



Coverage Pattern of Low Mount Lens Option (SBOR 10 ODP)

## SITE & AREA LIGHTING / HIGH MOUNT APPLICATIONS

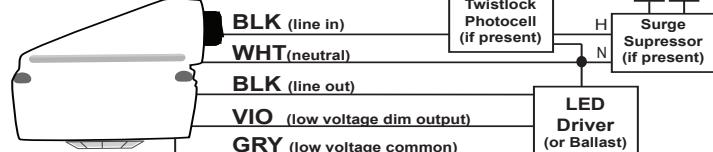
The **SBOR 6 ODP** is intended for higher pole mount applications, between 15-30 ft, and provides a coverage area radius for walking motion of 15-20 ft. When mounted to a pole the sensor provides 270° of coverage (90° is blocked by the pole).



## WIRING (DO NOT WIRE HOT)

### WIRING TO SINGLE PHASE POWER (120/277/347 VAC)

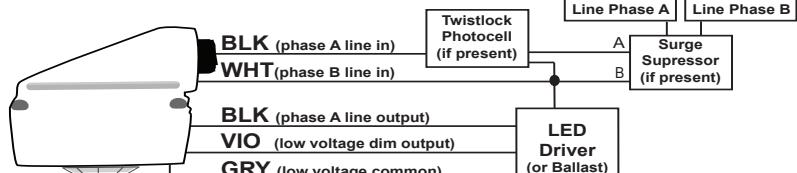
BLACK*	- 120/277 VAC Input (RED wire for 347 VAC - requires HVOLT option)
BLACK*	- Switched Line Voltage Output to Luminaire (RED wire for 347 VAC - requires HVOLT option)
WHITE	- Neutral
VIOLET	- Low Voltage Dimming Output (0-10 VDC)
GRAY	- Low Voltage Common



\*BLACK wires can be reversed

### WIRING TO 2-PHASE POWER (208/240/480 VAC)\*

BLACK*	- 208/240 VAC Phase A Input (RED wire for 480 VAC - requires HVOLT option)
BLACK*	- Switched Line Voltage Output to Luminaire (RED wire for 480 VAC - requires HVOLT option)
WHITE	- Phase B of 208/240/480 VAC Input
VIOLET	- Low Voltage Dimming Output (0-10 VDC)
GRAY	- Low Voltage Common



\*BLACK wires can be reversed

\*Safety Note: only one line phase is being switched

## INSTALLATION

- Sensor has a 1/2" chase nipple that enables mounting through a knockout/hole in a junction box, fixture, or pole
- When mounting to a pole, a 7/8" unthreaded hole should be located 12" below luminaire and should be accessible via an adjacent or opposite side hand hole
- If the sensor loses power, the internal relay will latch closed and the dimming output will allow lights to return to full bright.



## PROGRAMMING

Refer to instruction card IC14.003 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 : Puissance Maximale 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).



<sup>®</sup> **WARRANTY:** Sensor Switch warrants these products to be free of defects in manufacture and workmanship for a period of 60 months. Sensor Switch, upon prompt notice of such defect, will, at its option, provide a Returned Material Authorization number and repair or replace returned 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 be liable for any incidental or consequential property damages or losses.

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