



The BMS-S823-PIR-1-O mounts in an outdoor lighting fixture and provides multi-level control based on motion and/or daylight contribution. It controls 0-10 VDC LED drivers or dimming ballasts, as well as non-dimming ballasts and, with an Fresnel Lens, is rated for wet and cold locations. All control parameters are adjustable via a wireless configuration tool capable of storing and transmitting sensor profiles.

TECHNICAL DATA

| | |
|-----------------------|--|
| Motion Sensor | Passive Infrared (PIR) |
| Input Power | 120/277VAC 50/60Hz |
| High Mode | 0-10 V; default 10 V |
| Low Mode | Off, 0-9.8 V; default 1 V |
| Maximum Load | Resistive/Halogen - 800W@120V/1200W@277V Fluorescent Ballast - 660W@120V/1200W@277V Electronic Ballast (LED/CFL) - 5A@120V/5A@277V |
| Detection angle | 360° |
| Low Bay Lens | Max.detection radius 30ft; Max.mounting height 8ft |
| High Bay Lens | Max.detection radius 30ft; Max.mounting height 40ft |
| Operating temperature | -40°F ~ +158°F (-40°C ~ +70°C) |
| Operating Humidity | 20-90% |
| Max Coverage | 200ft(60m) |
| IP Rating | IP66 for PIR LEN(top part of the sensor) |

⚠ WARNING

NOTE: Warm up time is 40seconds. After the sensor connects input power first time, the light will keep on 40 seconds,then go to dimming to work normally.

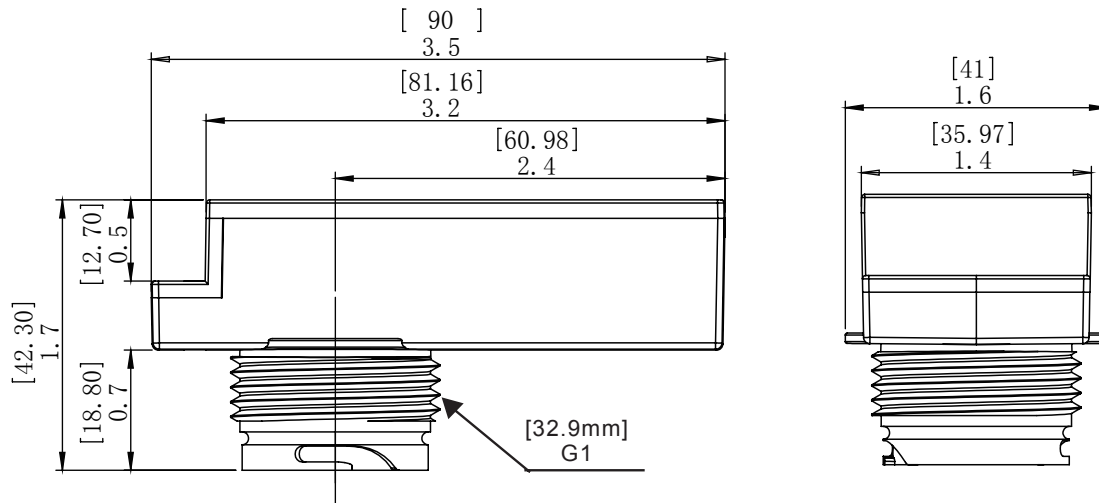
NOTE: Factory Default Setting: 100% sensitivity, Hold on time: 10seconds, Daylight sensor is 30lux, Dimming level:30%,Dimming time: 60minitues.

NOTE: Any setting changed by DIP Switch or remote control, the led light that sensor connect will on/off as confirm.

ORDERING INFORMATION

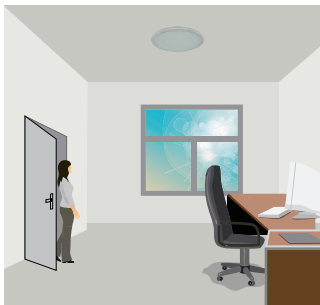
| Model No. | Description | Input Voltage | Output | Mount |
|------------------------|---|---------------|--------|---|
| BMS-S823-PIR-1-O | Passive Infrared (PIR) Occupancy Sensor | 120/277VAC | 0-10V | Half built-in Mount With Enclosure for IP66 |
| Add Suffix for Options | Description | | | |
| LS02-HB3-WH | 360° Low Bay Lens, Max.detection radius 30ft; Max.mounting height 40ft, white color | | | |
| LS02-LB4-WH | 360° High Bay Lens, Max.detection radius 30ft; Max.mounting height 8ft, white color | | | |

Unit:mm/in

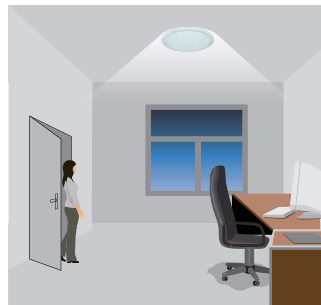


DIMMING FUNCTION

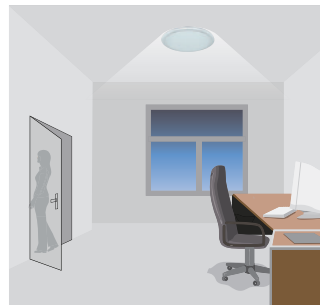
This function inside the motion sensor to achieve tri-level control, for some areas which require a light change notice before switch-off. The sensor offers 3 levels of light: 100%-->dimmed light (natural light is insufficient) -->off; and 2 periods of selectable waiting time: motion hold-time and stand-by period; Selectable daylight threshold and freedom of detection area.



With sufficient natural light, the light does not switch on when presence is detected.



With insufficient natural light, the sensor switches on the light automatically when presence is detected.



After hold-time, the light dims to stand-by level if the surrounding natural light is below the daylight threshold.



Light switches off automatically after the stand-by period elapses.

DAYLIGHT SENSOR FUNCTION

Open the daylight sensor by push when  remote control is in setting condition.

Settings on this demonstration:

Hold-time: 30min

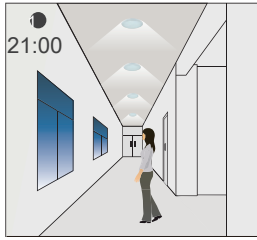
Setpoint on:50lux

Stand-by Dim: 10%

Stand-by period: +∞

Setpoint off:300lux

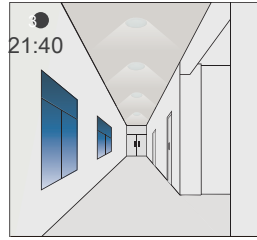
(when the smart photocell sensor open, the stand-by time is only +∞)



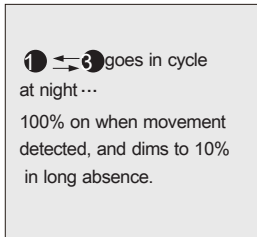
21:00
The light switches on at 100% when there is movement detected.



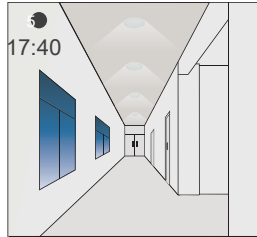
21:10
The light dims to stand-by level after the hold-time.



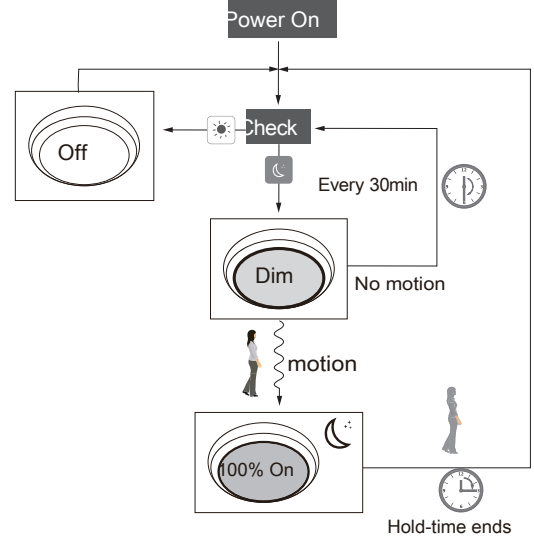
21:40
The light remains in dimming level at night.



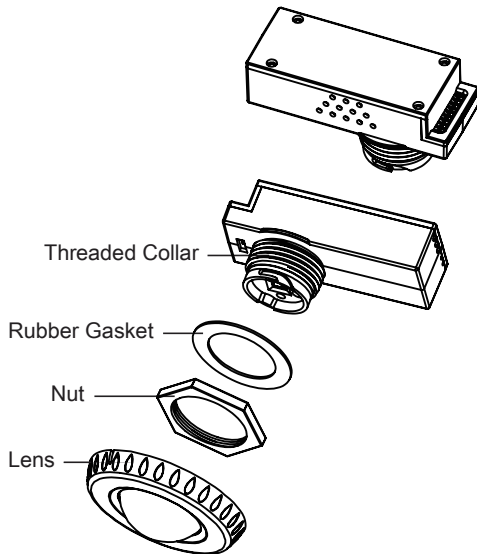
08:10
When the natural light level exceeds setpoint off to light, the light will turn off even if when the space is occupied.



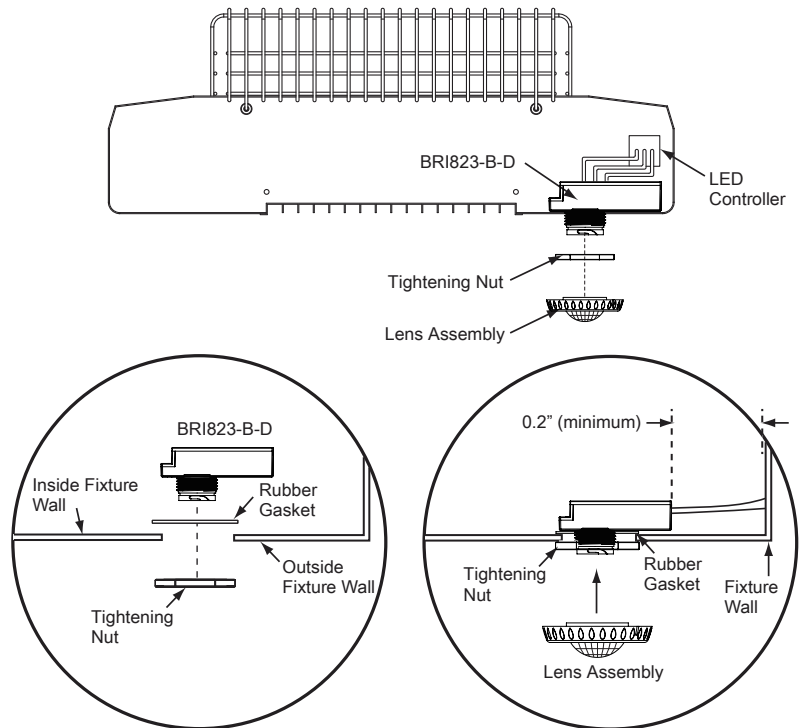
17:40
The light automatically turns on at 10% when natural light is insufficient (no motion).



STRUCTURE



MOUNTING

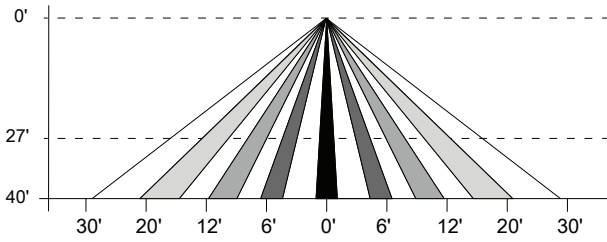


DETECTION AREA

HB3 LENS

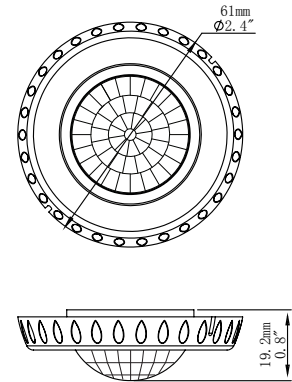
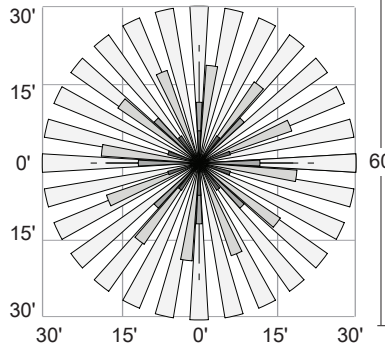


Coverage Side View



360° Coverage

Coverage Top View



LB4 LENS

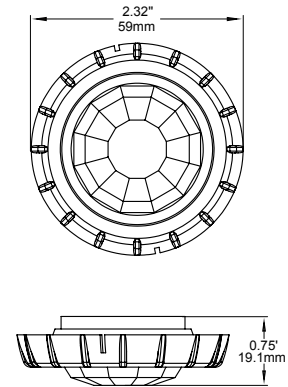
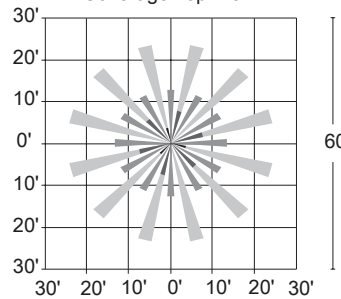


Coverage Side View



360° Coverage

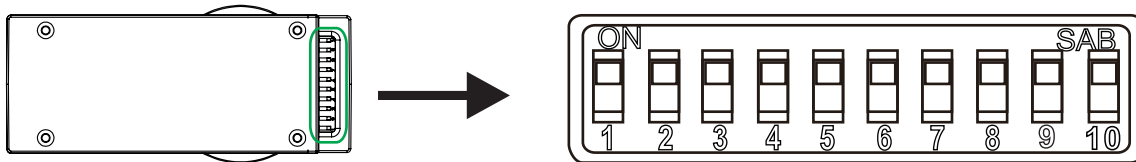
Coverage Top View



DIP SWITCH SETTING

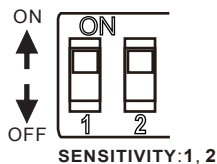
Consider the picture:

1, 2 set sensitivity; 3, 4 set hold time; 5, 6 set the lux; 7, 8 stand-by light level; 9, 10 set stand-by time;



Detection Range Setting (sensitivity)

Detection range is the term used to describe the radii of the more or less circular detection zone produced on the ground after mounting the sensor light at a height of 40ft, pull switch to the ON position as "↓", pull switch to the OFF position as "↑", switch location and detection range of the corresponding table is as follows:



| SENSITIVITY | |
|-------------|------|
| ↓ ↓ | 20% |
| ↓ ↑ | 50% |
| ↑ ↓ | 75% |
| ↑ ↑ | 100% |

Hold Time Setting

The light can be set to stay ON for any period of time between approx. 10sec and a maximum of 15min. Any movement detected before this time elapse will re-start the timer. It is recommended to select the shortest time for adjusting the detection zone and for performing the walk test.

Pull switch to the ON position as " ↑ ", pull switch to the OFF position as " ↓ ", switch location and hold time of the corresponding table is as follows:

| | | |
|----------|---|-----------|
| ON ↑ |  | TIME |
| OFF ↓ | | 3 4 |
| | TIME:3, 4 | |
| | | ↓ ↓ 10S |
| | | ↓ ↑ 1Min |
| | | ↑ ↓ 5Min |
| | | ↑ ↑ 15Min |

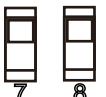
Light-control Setting

The chosen light response threshold can be infinitely from approx. 10-50lux, pull switch to the ON position as " ↑ ", pull switch to the OFF position as " ↓ ", switch location and light-control of the corresponding table is as follows:

| | | |
|----------|---|------------------------------|
| ON ↑ |  | LIGHT |
| OFF ↓ | | 5 6 |
| | LIGHT:5, 6 | |
| | | ↓ ↓ ☀ (light sensor disable) |
| | | ↓ ↑ 10Lux |
| | | ↑ ↓ 30Lux |
| | | ↑ ↑ 50Lux |


Stand-by Light Level Setting

Switch to the on is " ↑ ", switch to the off is " ↓ "; The corresponding file of switch location and stand-by level as follow:

| | | |
|----------|---|----------------|
| ON ↑ |  | STAND-BY LEVEL |
| OFF ↓ | | 7 8 |
| | STAND-BY LEVEL:7, 8 | |
| | | ↓ ↓ 0% |
| | | ↓ ↑ 10% |
| | | ↑ ↓ 30% |
| | | ↑ ↑ 50% |

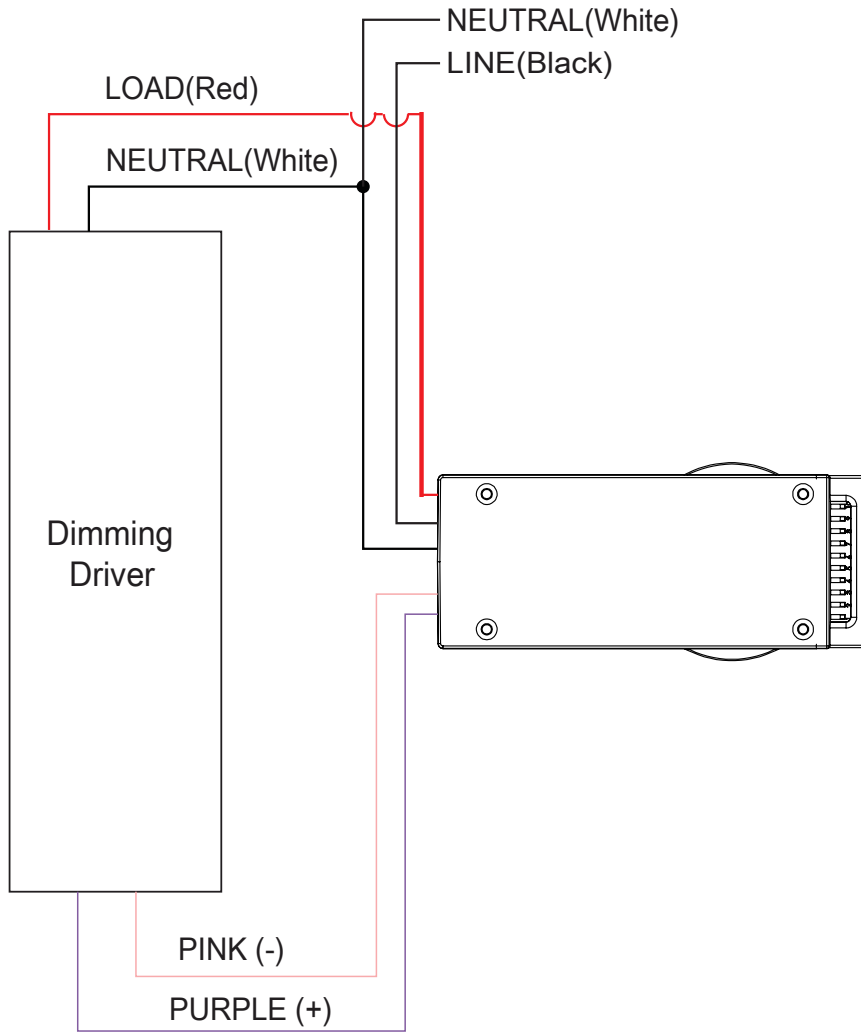
Stand-by Time Setting

Switch to the on is " ↑ ", switch to the off is " ↓ "; The corresponding file of switch location and stand-by level as follow:

| | | |
|----------|---|---------------|
| ON ↑ |  | STAND-BY TIME |
| OFF ↓ | | 9 10 |
| | STAND-BY TIME:9, 10 | |
| | | ↓ ↓ +∞ |
| | | ↓ ↑ 1Min |
| | | ↑ ↓ 30Min |
| | | ↑ ↑ 60Min |

WIRING DIAGRAM

Ref#: 20231207



WARRANTY

Five year limited warranty.

Specifications subject to change without notice.