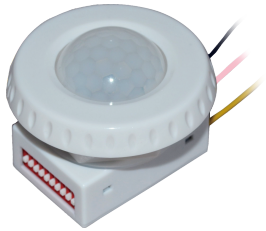
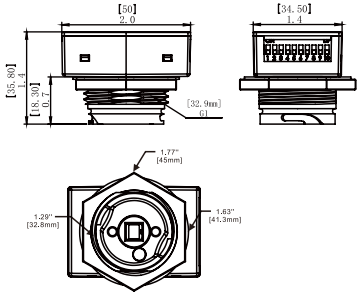
WSD LED INC
Green Lighting Resources

■ Low Voltage PIR Fixture Integrated Outdoor Photo/Motion Sensor
BRI619 Instruction



BRI619

RC-100
(OPTIONAL)



INTRODUCTION

The BRI619 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, and is rated for wet and cold locations.
All control parameters are adjustable via a wireless configuration tool capable of storing and transmitting sensor profiles or by DIP switch.

SPECIFICATIONS

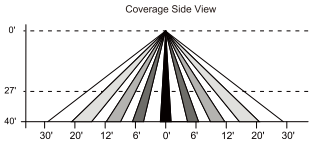
Power supply	12-24V DC
Dim control output	0-10V, max. 25mA sinking current
Detection radius/angle	30FT@40FT Height/360°
Mounting height	Max 40ft. @L3 Max 24ft. @L4
Remote range	50ft. (15m) indoor, no backlight
Humidity	Max. 95% RH
Temperature	-40°F ~ +167°F (-40°C ~ +75°C)

SENSOR'S LED:

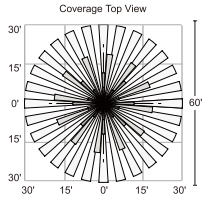
1. It always light after switch on power, and be off after the unit enter working state.
2. It flash once when the unit receives sensing signal.

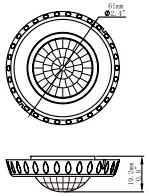
SENSOR INFORMATION

L3

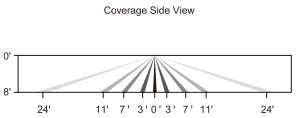


360° Coverage

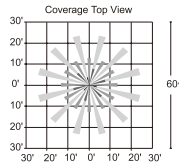


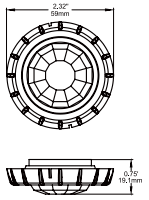


L4



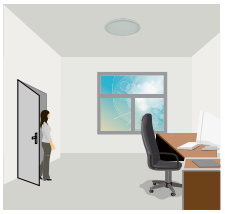
360° Coverage



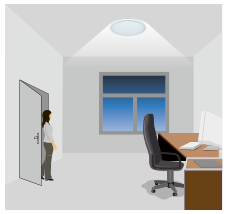


CORRIDOR FUNCTION

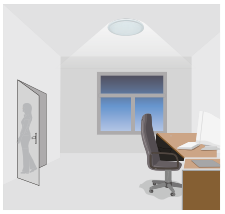
This function inside the motion sensor to achieve tri-level control, for some areas which require a light change notice before switch-off. The sensor offers 3 levels of light: 100%-->dimmed light (natural light is insufficient) -->off; and 2 periods of selectable waiting time: motion hold-time and stand-by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



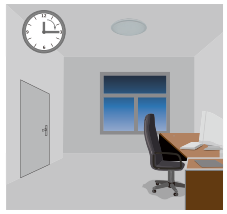
With suffcient natural light, the light does not switch on when presence is detected.



With insuffcient natural light, the sensor switches on the light automatically when presence is etected.



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

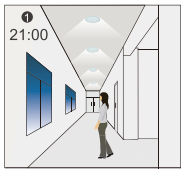


Light switches off automatically after the stand-by period elapses.

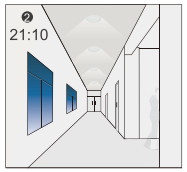
Note:if you choose STAND-BY DIM is 0,the stand-by period is 0,it is ON/OFF function.

SMART PHOTOCELL FUNCTION

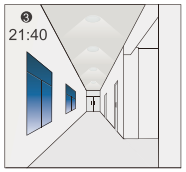
open the smart photocell sensor by push ⏻ when remote control is in setting condition.



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



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

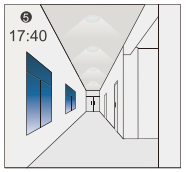


The light remains in dimming level at night.

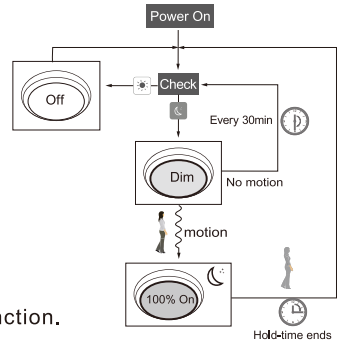
Settings on this demonstration:
Hold-time: 10min
Setpoint on:50lux
Setpoint off:300lux
Stand-by Dim: 10%
Stand-by period: +∞
(when the smart photocell sensor open, the stand-by time is only +∞)

❶⇄❸ goes in cycle at night...
100% on when movement detected, and dims to 10% in long absence.

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



The light automatically turns on at 10% when natural light is insuffcient (no motion).

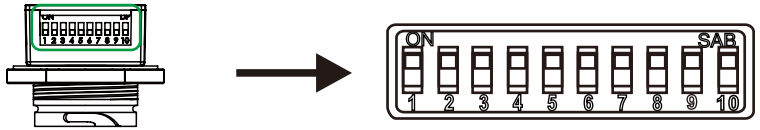


Difference between Corridor Function and Smart Photocell Function.

1.In corridor function, the daylight sensor as threshold to assist motion sensor, in Photocell function, the daylight sensor works independently to motion sensor.
2.Turn On light by detect motion when natural light is insufficient for corridor function, turn on light by natural light level exceeds setpoint on to light, do need to detect motion, for smart photocell function.
3.Turn off light by stand-by time for corridor function, Turn off light by natural light level lower than setpoint off of light for smart photocell function.

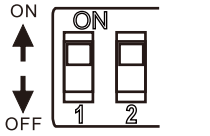
PARAMETER SETTING BY DIP SWITCH

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(L3), 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:

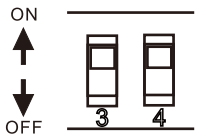


SENSITIVITY:1, 2

SENSITIVITY 1	2	
↓	↓	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 detection range of the corresponding table is as follows:

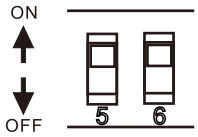


TIME:3, 4

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:

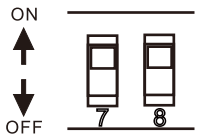


LUX:5, 6

LIGHT 5	6	
↓	↓	☀ (light sensor disable)
↓	↑	10Lux
↑	↓	30Lux
↑	↑	50Lux

Stand-by Light Level Setting

Switch to the on is "↑", switch to the off is "↓"; he corresponding file of switch location and detection distance as follow:

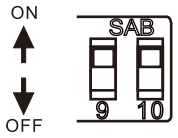


STAND-BY LEVEL:7, 8

STAND-BY LEVEL 7	8	
↓	↓	0%
↓	↑	10%
↑	↓	30%
↑	↑	50%

Stand-by Time Setting

File of switch location and detection distance as follow: file of switch location and detection distance as follow:



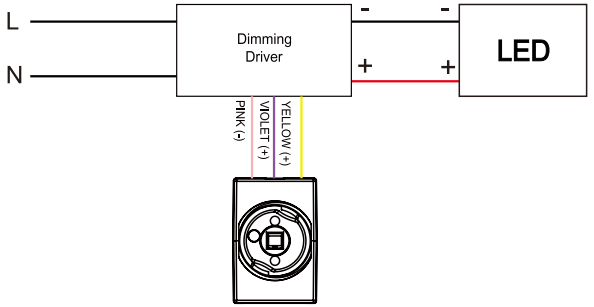
STAND-BY TIME:9, 10

STAND-BY TIME 9	10	
↓	↓	+∞
↓	↑	1Min
↑	↓	30Min
↑	↑	60Min

PARAMETER SETTING BY REMOTE CONTROL IN MANUAL OF RC-100.

WIRING DIAGRAMS

BRI619 wiring with 12-24V DC wire dimming ballast or LED driver.



BRI619 Wiring by AC/DC Adapter with dimming ballast or led driver.