LIGHTING

Project	Catalog #
Distributor	Type
Prepared by	Date

Line Voltage PIR Outdoor Sensor with DIP Switch

T1-SS123-PIR-BI-OD

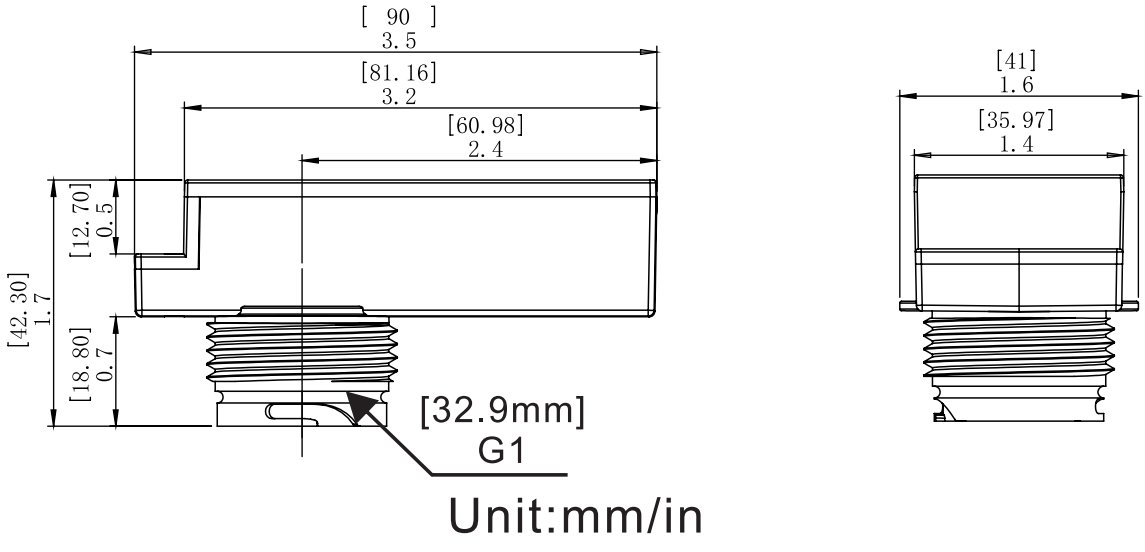
The **T1-I-SS123-PIR-BI-OD** is a multi-level passive infrared (PIR) motion sensor designed for outdoor (IP65) lighting fixtures. It controls 0-10 VDC LED drivers or dimming as well as non-dimming ballasts. With a Fresnel Lens, it is rated for wet and cold locations. All control parameters are adjustable via DIP Switch or a wireless remote capable of storing and transmitting sensor profiles.

SPECS

Operating Voltage	120/277 VAC, 50Hz/60Hz
Maximum Load	Resistive/Halogen - 800W@120V / 1200W@277V Fluorescent Ballast - 660W@120V / 1200W@277V Electronic Ballast (LED/CFL) - 5A@120V / 5A@277V
Detection Area	360° Maximum Coverage 60' Diameter from 40' height
High Mode	0-10 V (default 10V)
Low Mode	Off, 0-9.8V (default 1V)
Operating Temperature	-40°F~158°F (-40°C~70°C)
Humidity	20-90% RH
IP Rating	IP66 for PIR Lens (top part of the sensor)
Warranty	Five Year Warranty

CERTIFIED

DIMENSIONS



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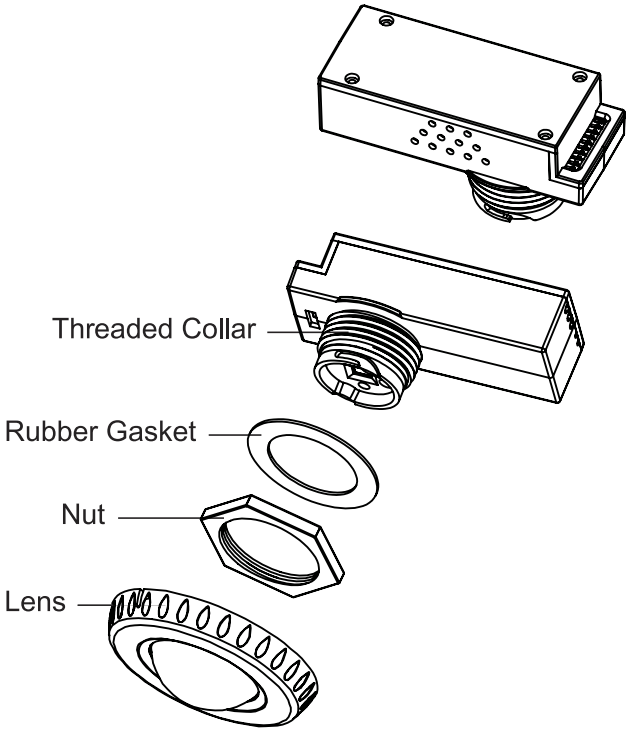
SENSOR MODULE

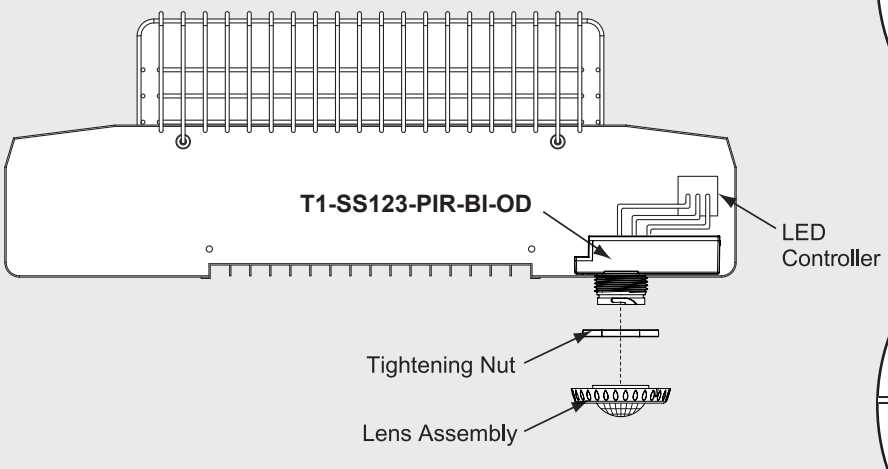
⚠ **WARNING**

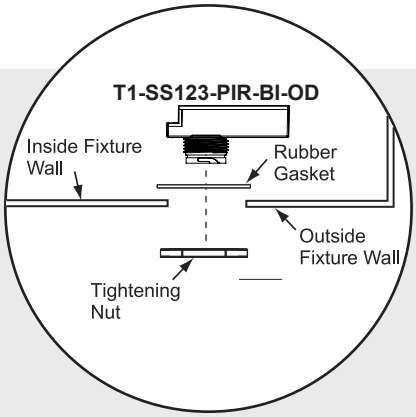
NOTE: Warm-up time is 40 seconds the first time. After the sensor connects, the light will turn on for 40 seconds.

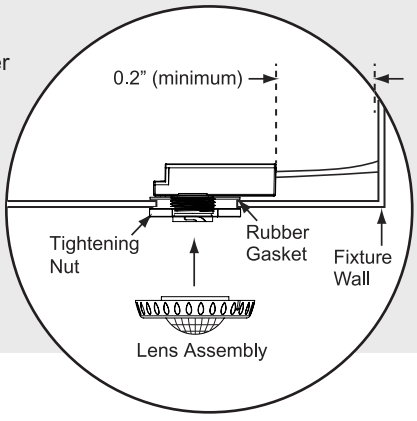
NOTE: Factory default setting: 100% sensitivity.
Hold on time: 10 seconds
Daylight sensor: 30lux
Dimming level: 30%
Dimming time: 60 minutes

NOTE: The LED set light will blink as a confirmation that the setting has been changed on the DIP switch.









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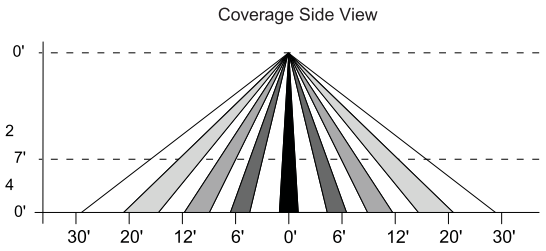
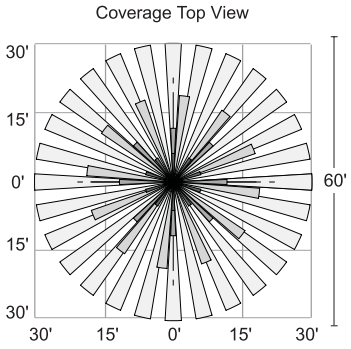
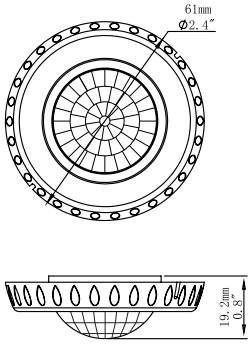
COVERAGE

L3

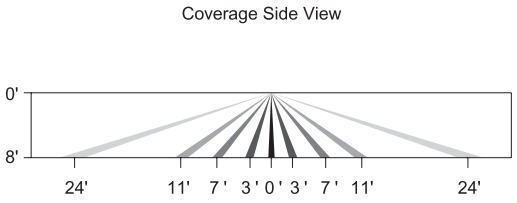


360° Coverage

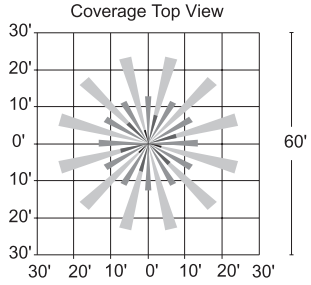


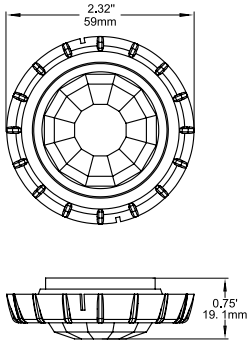


L4



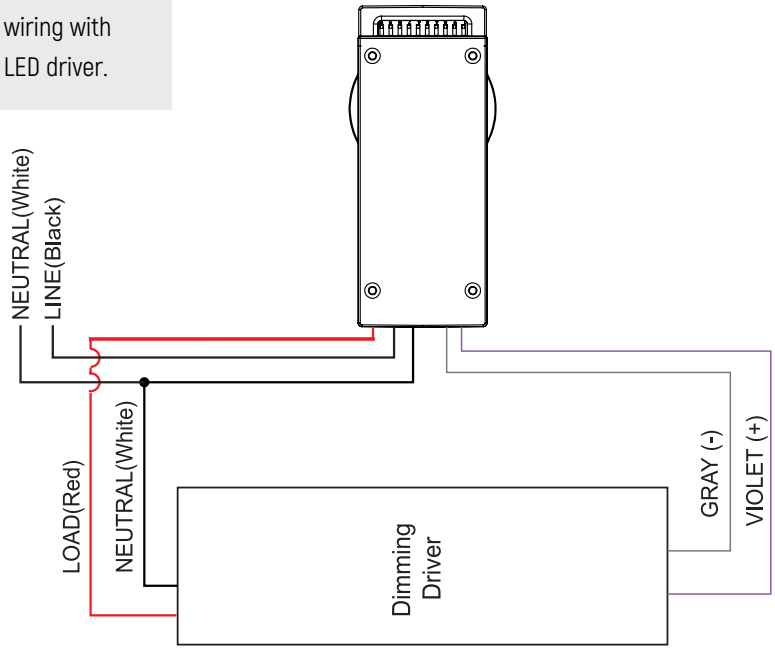
360° Coverage





WIRING DIAGRAM

T1-SS123-PIR-BI-OD wiring with dimming ballast or LED driver.



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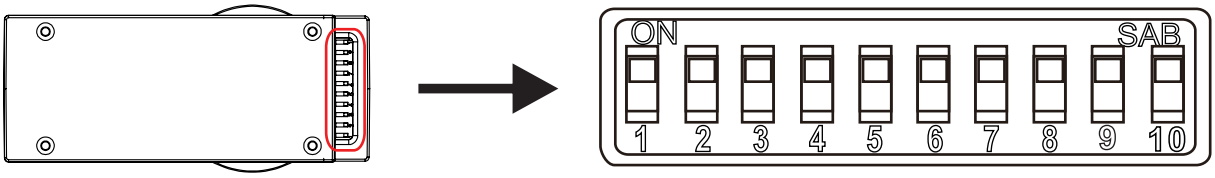
SETTINGS

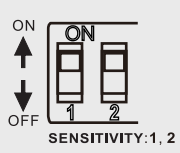
SHOWN ON THE DIAGRAM:

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



DETECTION SENSITIVITY SETTING

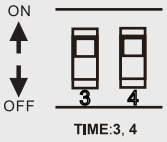
Detection range is the term used to describe the radius of the detection zone at a height of 40ft. Pull switch to the OFF position as "↓", pull switch to the ON position as "↑". See diagram below to adjust to the desired sensitivity.



SENSITIVITY 1	2
↓	↓ 20%
↓	↑ 50%
↑	↓ 75%
↑	↑ 100%

HOLD-TIME SETTING

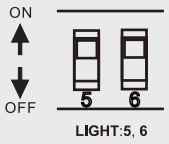
The light can be set to stay ON from 10sec to 15min. Any movement detected will restart the timer. Pull switch to the OFF position as "↓", pull switch to the ON position as "↑". See diagram below to adjust to the desired hold time.



TIME 3	4
↓	↓ 10S
↓	↑ 1Min
↑	↓ 5Min
↑	↑ 15Min

LIGHT CONTROL SETTING

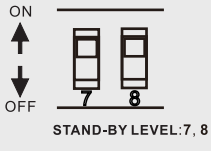
The light control threshold can be set from 10lux to 50lux. Pull switch to the OFF position as "↓", pull switch to the ON position as "↑". See diagram below to adjust light control.



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

STAND-BY LIGHT LEVEL SETTING

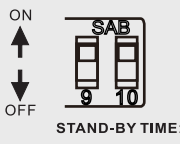
See diagram below to adjust to the desired light level.



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

STAND-BY TIME SETTING

See diagram below to adjust to the desired stand-by time.



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

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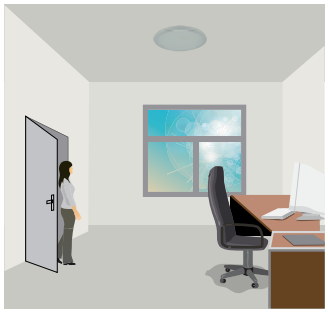
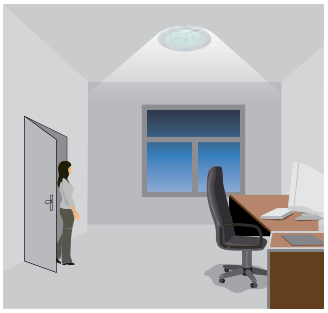
FUNCTIONS AND OPTIONS

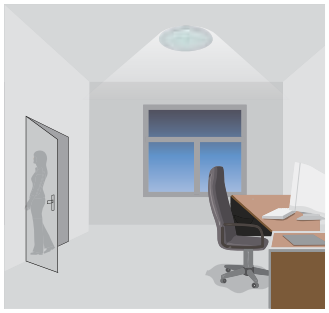
This PIR sensor offers 3 levels of light: 100%-->dimming light (when ambient light is insufficient)-->OFF;
and 2 periods of selectable waiting time: motion hold-time and stand-by period. Daylight threshold and detection area are selectable



With sufficient ambient light, the light does not switch ON with the presence of motion.



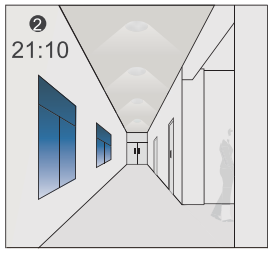
With insufficient ambient light, the sensor switch the light ON automatically with the presence of motion.



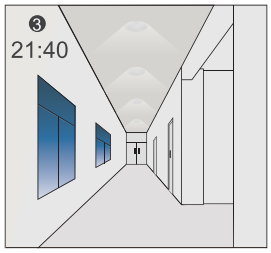
After hold time period has elapsed, the light dims to stand-by level if the surrounding ambient light is below the daylight threshold.

The light switches OFF automatically after the stand-by period has elapsed.

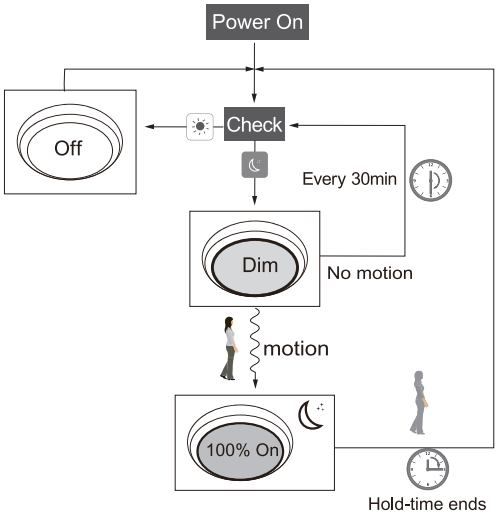
The light switches on at 100% when there is movement detected.



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



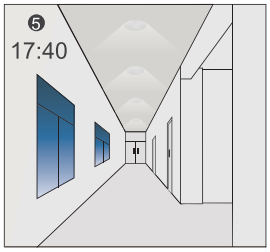
The light remains at dimming level at night.



❶ ⇄ ❸ goes in cycle at night ···

100% on when movement detected, and dims to 10% in long absence.

When the ambient light exceeds set point off to light, the light will turn OFF even when the space is occupied.



The light automatically turns ON at 10% when ambient light is insufficient (no motion).

*** Settings on this demonstration:**
Hold-time: 30min
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 +∞)

DAYLIGHT SENSOR FUNCTION