

PSC-BL-I-FM-110(-BLE) | Bi-level Dimming High Bay PIR Sensor

Overview

- PIR sensor
- Input voltage: 120-277VAC, 50/60Hz
- 0-10V configurable output: set to 0% (OFF)*, 10%, 25% or 50% dimming
- Photocell for daylight sensing
- Time delay 1 adjustable 5 sec to 30 min
- Time delay 2 adjustable 10 sec to ∞
- LED Motion indicator
- Mounting height up to 40ft.
- 360° coverage pattern
- Bluetooth add-on enables remote sensor programming (up to 40ft) with greater customization of dimming levels, and time delays.



Suitable for indoor Use Only



Applications

The PSC-BL-I-FM-110 can accept universal input (120-277 VAC) to use the PIR Motion Detector Architecture and passive infrared (PIR) technology for improved detection coverage for high bay, and low bay applications.

The PSC-BL-I-FM-110 is a Class 2 Device designed to satisfy new CA Title 24 requirements for bi-level dimming of lighting fixtures. Using a 0-10 V signal, the sensor is capable of dimming lighting loads down to 0%, 10%, 25%, or 50%.

The sensor is suitable for a variety of indoor applications. It supports fixture and ceiling mounts up to 40 ft high. Sensor is rated for use in temperatures ranging from -30° to 70° C and relative humidity from 90 to 95% at 30° C.

0-10 V: 100 mA to drive up to 50 LED sink drivers on 0-10 V output.

Sensor Operation

End users can program length of time delays, light level and motion detection sensitivity, and other settings using a series of dipswitches and trimmings. Simply remove the lens to gain access.

Bi-level Dimming:** 0-10 V bi-level dimmer connects to 0-10 V control on the LED driver. When motion is detected the sensor will bring lighting up to 100% lumen output. When no motion is detected for the length of time delay 1(TD1), the sensor will send a signal to dim lighting to a specific level set by the end-user. If no motion is detected for the length of time delay 2(TD2), the sensor will shut the light off with the high current relay built in.

Bluetooth Enabled Version: Add “-BLE” suffix to order the sensor with wireless control. The Bluetooth Low Energy (BLE) enabled sensor pairs with an Android or iOS application to allow initial setup and subsequent sensor adjustments, beyond what the analog controls on the sensor can offer. The application enables users to adjust sensor parameters such as time delay, dim level, sensitivity, daylight detection, and more. Additionally, features such as parameter profiles, password protection, manual dim control, and real-time feedback from the sensor can speed up configuration and provide custom user control.

**The sensor will dim the light if motion is not detected for the first time delay (TD1) and shut off the light if motion is not detected for the second time delay (TD2). TD2 will only count down after TD1 has expired and the light has dimmed. If motion is detected during TD2, the light will return to full output, and TD1 will restart.

Since one trimpot configures both TD1 and TD2, a fixed TD2 is set to each value of TD1. See page 2 for the corresponding values.

How to Order

Model No.	Description	Input Voltage	Output/Max Load
PSC-BL-I-FM-110(-BLE)	Bi-Level Passive Infrared (PIR) Occupancy Sensor w/Load Switch (add “-BLE” suffix for Bluetooth Enabled version)	100-277VAC	0-10VDC(Dimming) 240VA @ 120VAC, 2A 554VA @ 277VAC, 2A
Add Suffix for options:			
-BLE	For PacWave Standalone Bluetooth Enabled Version		
-BLE-SR	For Bluetooth Mesh in Silvair Enabled Version		
-BLE-CB	For Bluetooth Mesh in Casambi Enabled Version		

Summary	
Sensor Type	PIR occupancy sensor
Input Voltage	100-277VAC
Max Load	240 VA @ 120VAC, 2A 554 VA @ 277VAC, 2A
0-10V Output	60 mA, up to 50 LED sink drivers
Time Delays (TD1/TD2)	5 sec/10 sec, 2min/15min, 5 min/30 min, 10min/60min, 15 min/45 min, 30 min/60 min, 10 min/∞, 20 min/∞
Mounting Height	Fixture mount up to 40ft (12.2m)
Max Range ¹	40ft (12.2m) radius
Max Bluetooth Range ² :	49 ~ 65ft (15 ~ 20m)
Operating Temperature	-30° C to 60°C
Storage Temperature	-40° C to 80°C
Relative Humidity	90-95% non-condensing at 30°C
Mounting	Fixture or ceiling mount (max 40ft high)
Color	White
Warranty	5 years

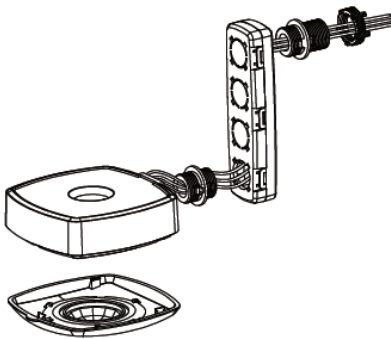
Note:
 1. The application/absolute range of the sensor is subject to variation because of different types of clothing, backgrounds, and ambient temperature. It is recommended to conduct testing for range accuracy.

2. Bluetooth Range is highly dependent on the integration of fixtures, surrounding environment and conditions. It is recommended to conduct testing for range accuracy.

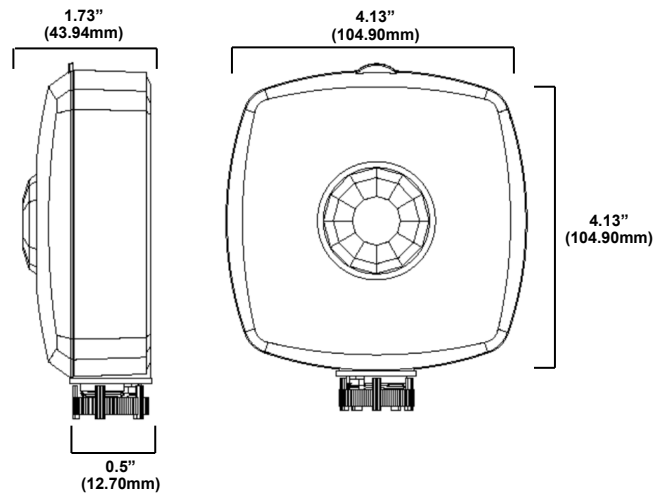
Settings Adjustment

Sensitivity		Delay Time			Dimming		
1	2	3	4	5	6	7	8
↓ ↓	Hi	↓ ↓ ↓	↓ ↓ ↓	5sec/10sec	↓ ↓	OFF	↓ PIR sensor only
↓ ↑	Med	↓ ↓ ↑	↓ ↓ ↑	2min/15min	↓ ↑	10%	↑ Photocell + Sensor
↑ ↓	Med	↓ ↑ ↓	↓ ↑ ↓	5min/30min	↑ ↓	25%	
↑ ↑	Lo	↓ ↑ ↑	↓ ↑ ↑	10min/60min	↑ ↑	50%	
		↑ ↓ ↓	↑ ↓ ↓	15min/45min			
		↑ ↓ ↑	↑ ↓ ↑	30min/60min			
		↑ ↑ ↓	↑ ↑ ↓	10min/∞			
		↑ ↑ ↑	↑ ↑ ↑	20min/∞			

Assembly



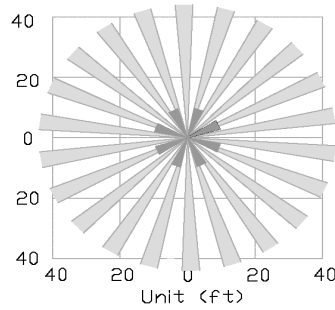
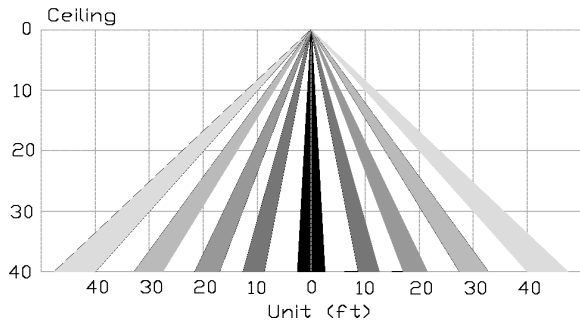
Physical Dimensions



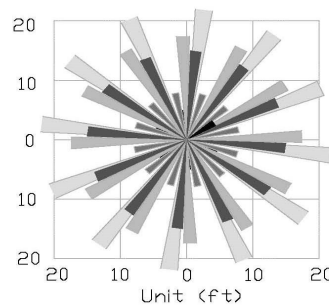
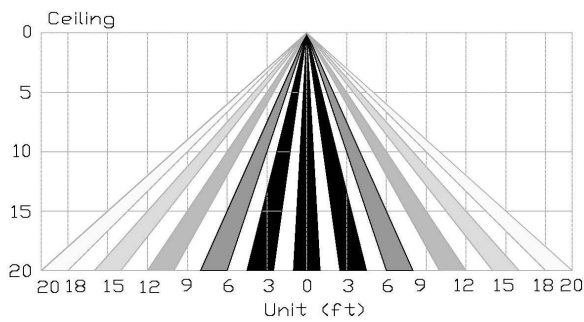
Drawings are Not to Scale

Detection Area

HBL: High bay lens

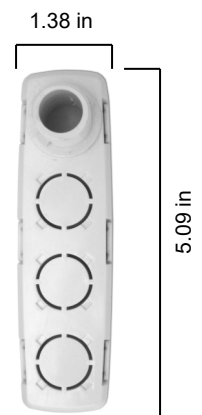
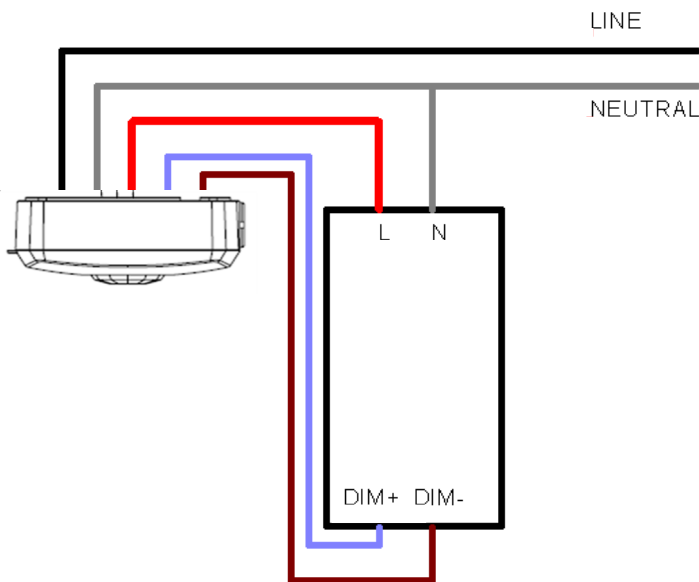


LBL: Low bay lens



Wiring Diagrams

ARM: Mounting Arm (optional)



Design and specifications are subject to change without notice.