Install Guide

Wireless 0-10V High Bay Sensor-Controllers



Models:

- PSC-BL-I-FM-110
- PSC-BL-I-FM-110-BLE-xx



Device Overview

The mwConnect™ The PSC-BL-I-FM-110-BLE-xx-y (xx= CB (Casambi®) or SR (TruBlu®)) uses PIR Motion Detector Architecture and passive infrared (PIR) technology for improved detection coverage for ceiling or fixture mount, high bay, and low bay applications.

Installation Preparation

WARNING: Controlling a load in excess of the specified rating will damage the device and may cause fire, shock or death. Ensure connected load does not exceed device rating.

IMPORTANT: Disconnect power when servicing any switch, controller or sensor.

NOTICE: Use this device with copper or copper clad wire only.

RESTRICTION: Do not attempt to disassemble or repair.

ATTENTION: Wireless range is dependent on device spacing, surrounding environment, and conditions. It is highly recommended to test for signal strength and accuracy.

Configurations

Figure 1: PSC-BL-I-FM-110-xx Sensor

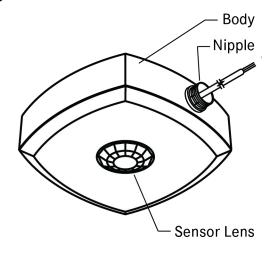
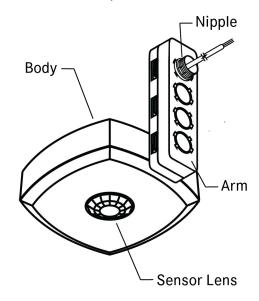


Figure 2: PSC-BL-I-FM-110-xx Sensor Arm Mount Assembly

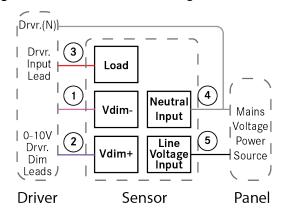


Wiring Designation Information

Call out	Designation	Notes
1	0-10V Vdim-	#20AWG, Pink Wire

Call out	Designation	Notes
2	0-10V Vdim+	#20AWG, Purple Wire
3	Load	#18AWG, Red Wire
4	Neutral Input	#18AWG, White Wire
5	Line Voltage Input	#18AWG, Black Wire

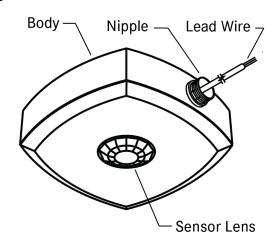
Figure 3: PSC-BL-I-FM-110 Wiring



Standard Mount Installation

1. Turn off all circuit power during the following installation steps

Figure 4: PSC-BL-I-FM-110-BLE-XX Sensor-Controller



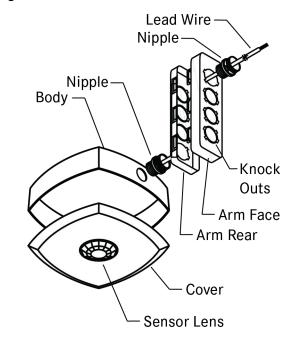
Installation Note: PSC-BL-I-FM-110 Sensor-Controller - Wireless 0-10V High Bay Sensor-Controllers

- 2. Open the knock-out opening in the luminaire body and feed the sensor lead wires into the luminaire cavity.
- 3. Insert the threaded nipple of the sensor through the knock-out opening. Pull all wire slack through opening as well.
- 4. Using the electrical nut provided, feed it over the lead wires and thread onto the sensors threaded nipple.
- 5. Orient the sensor to align with the direction of the luminaire light source. Directly vertical (downward, or in nadir) is recommended.
- 6. Tighten the electrical nut to secure the sensor inplace.
- 7. Connect the dimming PINK (or Gray) lead (Vdim-) to the driver PINK (or Gray) dimming (Vdim-) lead using a code compliant connector or process.
- 8. Connect the dimming PURPLE lead (Vdim+) to the driver PURPLE dimming (Vdim+) lead using a code compliant connector or process.
- 9. Connect the sensor WHITE lead (N) and the Driver WHITE lead, to the circuit branch WHITE (N) lead using a code compliant connector or process.
- 10. Connect the BLACK lead (L) from the driver to the RED (L) sensor lead using a code compliant connector or process. (Note: 277VAC systems may use ORANGE for secondary (L) leads.)
- 11. Connect the BLACK lead (L) from the sensor to the circuit branch BLACK (L) lead using a code compliant connector or process. (Note: 277VAC systems may use BROWN for primary (L) leads.)
- 12. Close the splice compartment of the luminaire. Your installation is complete. (Note: Once the branch circuit has been energized, a red LED light will appear within the lens area to indicate the sensor is operating.)
- 13. See commissioning guide for further instructions.

Offset Arm Mount Installation

1. Turn off all circuit power during the following installation steps

Figure 5: PSC-BL-I-FM-110-BLE-XX Sensor-Controller



- 2. Using the Offset Arm (included), carefully determine the offset mounting distance desired. A proper offset distance will allow the sensor "to see" the space below without any obstruction from the associated luminaire body.
- 3. Carefully open the knock-out location for the sensor on one side, and for affixing to luminaire on the other side. Install the snap in nipple for the luminaire side mounting.
- 4. On the sensor, thread the provided electrical nut fully onto the nipple.
- 5. Feed the lead wires into the arm, and out from the knock-out opening on the opposite side.
- 6. Tighten the sensor into place on the arm by backing off the electrical nut until tight against the arm.

- Open the knock-out opening in the luminaire body and feed the sensor lead wires into the luminaire cavity.
- 8. Insert the threaded nipple of the sensor through the knock-out opening. Pull all wire slack through opening as well.
- Using the electrical nut provided, feed it over the lead wires and thread onto the sensors threaded nipple.
- 10. Orient the sensor to align with the direction of the luminaire light source. Directly vertical (downward, or in nadir) is recommended.
- 11. Tighten the electrical nut to secure the sensor inplace.
- 12. Connect the dimming PINK (or Gray) lead (Vdim-) to the driver PINK (or Gray) dimming (Vdim-) lead using a code compliant connector or process.
- 13. Connect the dimming PURPLE lead (Vdim+) to the driver PURPLE dimming (Vdim+) lead using a code compliant connector or process.
- 14. Connect the sensor WHITE lead (N) and the Driver WHITE lead, to the circuit branch WHITE (N) lead using a code compliant connector or process.
- 15. Connect the BLACK lead (L) from the driver to the RED (L) sensor lead using a code compliant connector or process. (Note: 277VAC systems may use ORANGE for secondary (L) leads.)
- 16. Connect the BLACK lead (L) from the sensor to the circuit branch BLACK (L) lead using a code compliant connector or process. (Note: 277VAC systems may use BROWN for primary (L) leads.)
- 17. Close the splice compartment of the luminaire. Your installation is complete. (Note: Once the branch circuit has been energized, a red LED light will appear within the lens area to indicate the sensor is operating.)
- 18. See commissioning guide for further instructions.

Troubleshooting

TruBlu (-SR) Condition	Solution
Upon power up, the load cycles through dim \rightarrow off \rightarrow bright \rightarrow off \rightarrow steady on.	The device is powered and in an un-commissioned state. Proceed with commissioning the device.
Upon power up, the load stays at a constant level.	The device is powered and in a commissioned state. The device is connected and operating on a Lighting Control System. No action is required.

Casambi (-CB) Condition	Solution			
Upon power up, check the Casambi App. The device is dicoverable in "Nearby devices". But the load does not blink when "Indentify Device" is pressed.	The device is powered but the dim wires are not connect correctly. Check the wiring connections.			
Upon power up, check the Casambi App. The device is dicoverable in "Nearby devices". And the load blinks when "Indentify Device" is pressed.	The device is powered and the wiring is correct. Proceed with commissioning the device.			
Upon power up, check the Casambi App. The device is not dicoverable in "Nearby devices".	The device is not powered. Check the wiring connections.			
Upon power up, check the the Casambi App. The device is dicoverable in "Nearby devices". But shows "@xxxxx/nn".	The device is powered and paired into a lighting control system. No Action is required.			

End of Troubleshooting

TruBlu Commissioning Guide



For TruBlu models (partID ending in -SR), use this link to the Commissioning Guide: https://mwconnect.us/trublu_commissioning/

Casambi Commissioning Guide



For Casambi models (partID ending in -CB), use this link to the Commissioning Guide: https://mwconnect.us/casambi_commissioning/

Device Specifications

Specifications		
Input Voltage	100-277Vac	
Current Consumption	2 W	
Wireless Range	100ft (30.4m)	
Max. Sensor Range	40ft. (12.2m) radius (@max mt. ht.)	
Environment	RH: 90 to 95% non- condensing	
Operating Temperature	-4°F to 140°F (-20°C to 60°C)	
Warranty	5 years	

Limited 5 Year Warranty

mwConnect™ warrants, to the original or first end user purchaser and not for the benefit of anyone else, that this product at the time of its sale by mwConnect is free of defects in materials and in workmanship under normal and proper use for five years from the manufacture date. mwConnect's only obligation to correct such defects is by repair or replacement or by extending credit in the amount of the purchase, at its option. For details visit https://mwconnect.us/ or call 1-888-600-9188. This warranty excludes and there is a disclaimed liability for labor for removal of this product or reinstallation. This warranty is void if this product is installed improperly or in an improper environment, overloaded, misused, opened, abused or altered in any manner, or is not used under normal operating conditions or not in accordance with any labels or instructions. There are no other or implied warranties of any kind, including merchantability and fitness for a particular purpose, but if implied warranty is required by the applicable jurisdiction, the duration of any such implied warranty, including merchantability and fitness for use is limited to five years. mwConnect is not liable for incidental, indirect, special, or consequential damages, including without limitation, damage to, or loss of use of, any equipment, lost sales or profits or delay or failure to perform this warranty obligation. The remedies provided herein and the exclusive remedies under this warranty, whether based on contract, tort or otherwise.

Contact

For Technical Assistance Call: 1-888-600-9188.

Certifications

- UL Listed
- FCC