Install Guide

Wireless 0-10V Sensor-Controllers

Models:

- PSC-BL-I-FM-DC0
- PSC-BL-I-FM-DC0-BLE-xx
- PSC-BL-I-FM-DC0-BLE-xx-y

Device Overview

The mwConnect™ The PSC-BL-I-FM-DC0-BLE-xx-y (xx= CB (Casambi®) or SR (TruBlu®)) (y=/S side mount or /B bottom mount) 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-DC0-xx Sensor

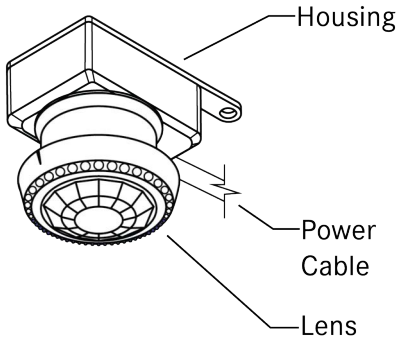


Figure 2: PSC-BL-I-FM-DC0-xx-B Sensor Assembly

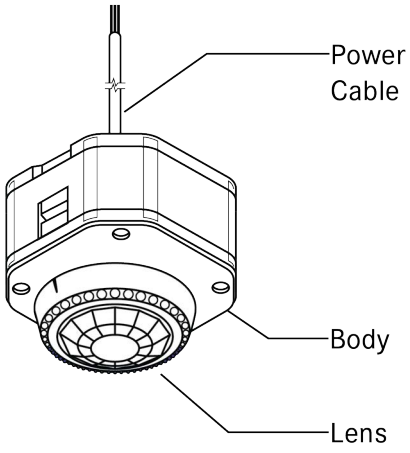
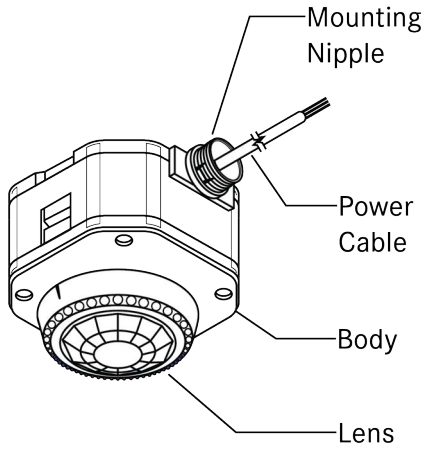


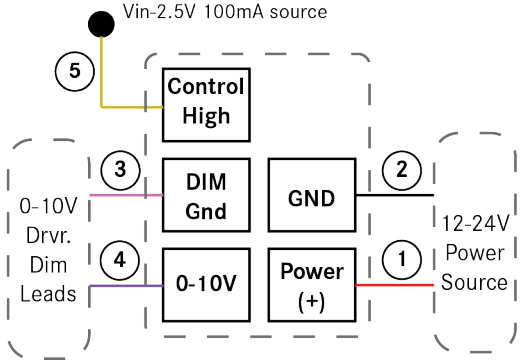
Figure 3: PSC-BL-I-FM-DC0-xx-S Sensor Assembly



Wiring Designation Information

Call out	Designation	Notes
1	Power 12-24VDC (+)	#22AWG, Red Wire
2	Ground 12-24VDC (-)	#22AWG, Black Wire
3	0-10V (-) sink	#22AWG, Pink Wire
4	0-10V (+) power	#22AWG, Purple Wire
5	Optional Terminal (Active High)	#22AWG, Yellow Wire

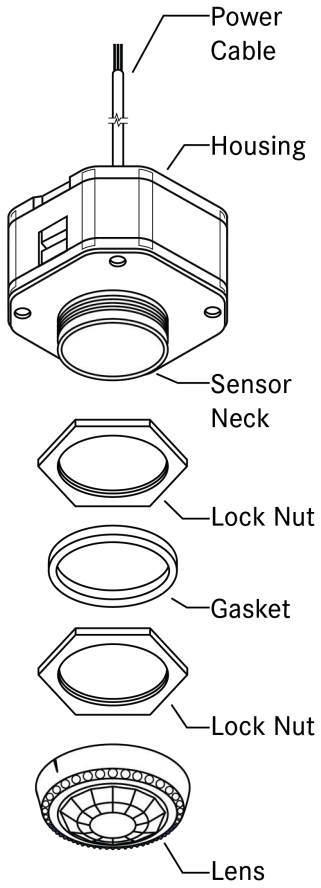
Figure 4: PSC-BL-x-FM-DC0 Wiring



Bottom Mount Installation

1. Turn off all circuit power during the following installation steps
2. Install a 12-24Vdc power source. For automatic full shut OFF use a controller with a contact relay integrated.

Figure 5: PSC-BL-I-FM-DC0-BLE-XX-B Sensor-Controller



3. Drill a 1” Trade hole (1-3/16” Ø) into the fixture body, for the threaded sensor neck to be inserted.
4. Thread a lock nut onto the sensors threaded neck. Continue until the nut has bottomed out and stops turning. Then place a gasket onto the neck, sliding down until stopping at the lock nut.
5. Insert the sensor, from the inside of the fixture, pushing the threaded sensor neck through the drilled opening.
6. Once inserted, with sensor body on the internal side of the fixture wall, slide the next gasket onto the sensor neck, and thread the provided nut onto the sensor neck and secure with mild pressure once tightened fully.

NOTE: NOTE: The harness leads should be loosely routed as needed to the driver and/or 12-24Vdc power pack.

7. Connect the Pink 0-10Vdc (-) lead to the similarly Pink 0-10Vdc (-) lead from the driver.
8. Connect the Purple 0-10Vdc (+) lead to the similarly Purple 0-10Vdc (+) lead from the driver.
9. Connect the Black (-) leads between power source and sensor.
10. Connect the Red (+) leads between power source and sensor.

NOTE: NOTE: Cap the Yellow Active High lead if unused. If using to trigger a relay, make the connection to the relay device at this point.

11. Install the PIR-BL01-Fx-xBL-xx lens onto the protruding neck of the sensor.
12. Restore power to the branch circuit.

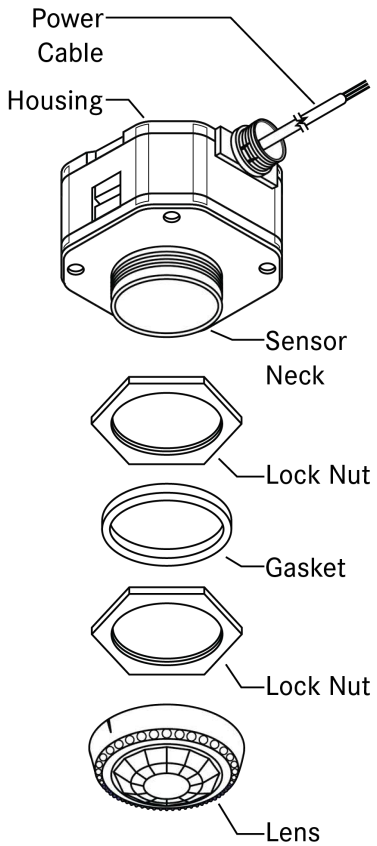
NOTE: Note: Once reenergized the sensor will undergo a stabilization period where the red LED remains solid. Afterward, the LED blinks to indicate motion detection.

13. See commissioning guide for further instructions.

Side Mount Installation

1. Turn off all circuit power during the following installation steps
2. Install a 12-24Vdc power source. For automatic full shut OFF use a controller with a contact relay integrated.

Figure 6: PSC-BL-I-FM-DC0-BLE-XX-S Sensor-Controller



3. Drill a 1/2” Trade hole (3/4” Ø) into the fixture body, for the threaded housing neck to be inserted.
4. Insert the sensor housing, from the outside of the fixture, pushing the threaded sensor neck through the drilled opening.

5. Once inserted slide the gasket onto the sensor neck threads, and thread the provided nut onto the neck and secure with mild pressure once tightened fully.
6. The harness leads should be loosely routed as needed to the driver and/or 12-24Vdc power pack.
7. Connect the Pink 0-10Vdc (-) lead to the similarly Pink 0-10Vdc (-) lead from the driver.
8. Connect the Purple 0-10Vdc (+) lead to the similarly Purple 0-10Vdc (+) lead from the driver.
9. Connect the Black (-) leads between power source and sensor.
10. Connect the Red (+) leads between power source and sensor.

NOTE: NOTE: Cap the Yellow Active High lead if unused. If using to trigger a relay, make the connection to the relay device at this point.

11. Install the PIR-BL01-Fx-xBL-xx lens onto the protruding neck of the sensor.
12. Restore power to the branch circuit.

NOTE: Note: Once reenergized the sensor will undergo a stabilization period where the red LED remains solid. Afterward, the LED blinks to indicate motion detection.

13. See commissioning guide for further instructions.

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/

Troubleshooting

TruBlu (-SR) Condition	Solution
There is no red LED indicator ON.	The device is not powered. Check the wiring connections.
Upon power up, a Red LED light is on for 10-30 sec. Then turns OFF.	The device is powered and completing warm up stabilization. No action is required.
Load does not blink 3× during power-up (when control device is uncommissioned).	The device is powered but the dim wires are not connect correctly. Check the wiring connections. OR Verify in the Trublu App whether the device has already been commissioned. See User Guide for commissioning instructions.
Load blinks 3× during power-up (when control device is uncommissioned).	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.
Upon power up, the connected load energizes to 100% briefly, then goes to the last known state (or level configured in the controlled lighting network) and responds to control input.	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
There is no red LED indicator ON.	The device is powered and the wiring is correct. Proceed with commissioning the device.
Upon power up, a Red LED light is on for 10-30 sec. Then turns OFF.	The device is powered and completing warm up stabilization. No action is required.
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.
Upon power up, the connected load energizes to 100% briefly, then goes to the last known state (or level configured in the controlled lighting network) and responds to control input.	The device is powered and in a commissioned state. The device is connected and operating on a Lighting Control System. No action is required.

Device Specifications

Specifications	
Input Voltage	12-24VDC
Current Consumption	50 mA
Wireless Range	100ft (30.4m)
Max. Sensor Range	Low-Bay Lens: 30ft (12.2m) radius High-Bay Lens: 30ft. (12.2m) radius
Environment	RH: 90 to 95% non-condensing
Operating Temperature	-40˚F to 158˚F (-40˚C to 70˚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
- Zhaga Book 18