

# Wireless PIR Fixture Controller With Quick Connector

#### Overview

- 1-Channel 0-10VDC Dimming
- Mounts On Fixture
- Casambi Wireless Mesh
- PIR Sensor Mounting Height Up To 40 ft (12.2 m)
- Photocell (-110 version)
- High-End Trim, Zoning, Continuous Dimming
- Sensor Output (active high)
- IP-65 Rated for Outdoor or Indoor **Applications**
- Quick Connector For Easy Installation
- ioXt Alliance Cybersecurity Certification
- Powered by12-24VDC
- Features Low, Medium, High Sensor Sensitivity Adjustment



For Indoor Or Outdoor Use Receptacle Sold Separately



## **Applications**

The PSC-ZKV-I-100-BLE-CB and the PSC-ZKV-I-110-BLE-CB are a series of 1-Channel Wireless Fixture Controllers. Both versions have active high outputs for relay control.

The PSC-ZKV-I-100-BLE-CB and PSC-ZKV-I-110-BLE-CB use PIR motion detection architecture and passive infrared (PIR) technology for improved detection coverage.

The controllers are IP65 rated for exterior use. They are suitable for a variety of indoor and outdoor applications in temperatures ranging from -40° to 70°C. The PSC-ZKV-WCM-110-BLE-CB version also has an integral photosensor.

These devices are controlled wirelessly via Casambi Mesh technology allowing for wireless dimming of luminaires. The compact size allows for seamless integration to the fixture.

#### **Accessories**

Sensor Lens: The PSC-ZKV-I-100-BLE-CB and the PSC-ZKV-I-110-BLE-CB require a High Bay or Low Bay lens option (sold separately).

Alternatively, the unit can also operate with a driver that has an auxiliary output (12 or 24VDC).

# **Operation**

#### **Casambi Wireless Mesh Controls:**

The controller connects to a wireless mesh network via a mobile app, available as iOS or Android, to allow initial setup and subsequent parameters adjustments.

User Interface: Using the mobile app, features include: setup, control real time feedback, and scheduling without a gateway or internet access.

1-Channel: Outputs 0-10 dimming channel for driver control.

Relay Control: 10-22VDC active high output to control relays or other control circuitry.

Photosensor (PSC-ZKV-I-110-BLE-CB version only): Features a single setpoint for ambient light detection for automated control.

**Quick Connector:** The controller mounts to a receptacle (mwConnect part# ZKV-R1L). One receptacle is required for mounting each controller.

See the mwConnect Casambi Commissioning User Manual for more information.

# Summary

Product Type: 1-Channel PIR Sensor and Controller (-110-model includes photosensor)

Input Voltage | Current Consumption: 12-24 VDC | 50 mA max

0-10VDC Output: 30 mA

Mounting Heights: High Bay 20-40ft (6.1-12-2m) Low Bay 8-30ft (2.4-9.1m)

Max Sensor Range: High Bay 80ft (24.4m) radius Low Bay 60ft (18.3m) radius

Load Control Output-Active High Vin-2.5 V 30 mA

Fixture Mount: Mounts to mwConnect PSC-ZKV-R1L receptacle, sold separately.

Max Wireless Range<sup>1</sup>: 100ft (30.4m)

Operating Temperature: -40° C to 70°C

Storage Temperature: -40° Č to 85°C

Relative Humidity: 90-95% non-condensing at 30°C

Color: Brown (standard default), Black or White

Warranty: 5 years

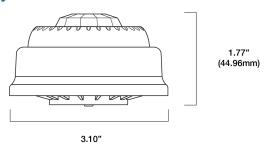
Note:

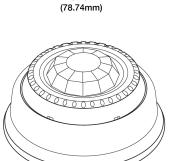
1. Wireless range is highly dependent on the integration of fixtures, surrounding environment and conditions. It is recommended to conduct testing for range accuracy.

Project	
Location/Type	

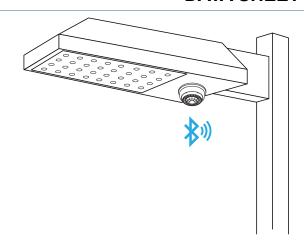


# **Physical Dimensions**





Drawing Are Not To Scale



### **Detection Area**



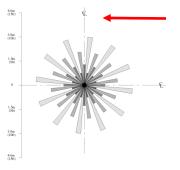
Corresponding to the CL on Detection Area Top View

## Fresnel Lens:

Lenses are available in: Low Bay Lens for mounting height at 8-30 ft (2.4-9.1 m), High Bay Lens for mounting height at 20-40 ft (6.1-12.2 m).

**HBL** - Side View

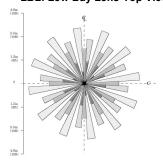
HBL: High Bay Lens-Top View at 8 ft (2.4m)



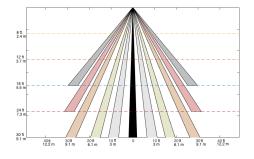
Corresponding to the Arrow on Gasketed Lens

24.8 7.5 m 32.8 9.8 m 40.1 30.1 20.8 10.8 0.1 10.8 20.8 30.1 40.1 12.2 m 12.2 m 5.1 m 6.1 m 3.1 m 5.1 m 12.2 m 12.2 m 5.1 m 6.1 m 3.1 m 5.1 m 12.2 m 12.2 m 5.1 m 6.1 m 3.1 m 12.2 m 12.2 m 5.1 m 6.1 m 3.1 m 12.2 m 12.2 m 5.1 m 6.1 m 3.1 m 12.2 m 12.2 m 12.2 m 5.1 m 6.1 m 3.1 m 12.2 m 12.2 m 12.2 m 5.1 m 6.1 m 3.1 m 12.2 m 1

LBL: Low Bay Lens-Top View at 8 ft



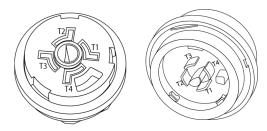
LBL - Side View





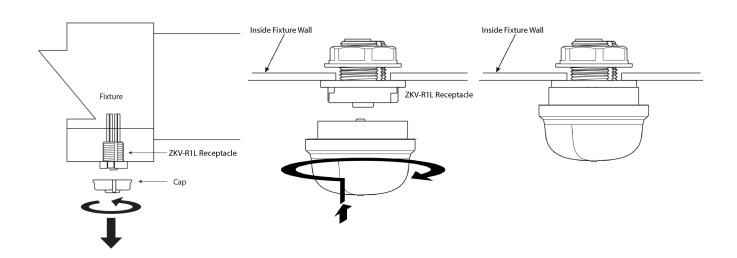


# **Installation Of Controller**



The receptacle for ZKV controller is installed at fixture manufacturer and is shipped to job site with a protective cap.

Tab/Slot	Designation	Notes	
T1	12-24VDC+ Power To Controller	Red Wire (Receptacle)	
T2	12-24VDC- Power And 0-10VDC-/Common	Black Wire (Receptacle)	
Т3	0-10VDC+ Control Signal From Controller	Purple (Violet) Wire (Receptacle)	
T4	Vin-2.5V 30mA Load Control Output (Active High)	Yellow Wire (Receptacle)	



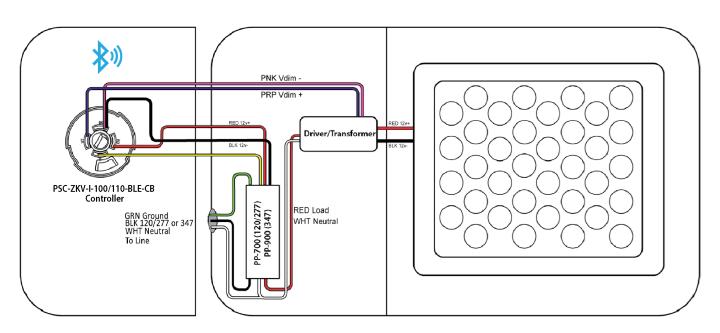
To install ZKV controller, first remove the protective cap on the ZKV-1RL receptacle by pushing up and rotating counterclockwise.

To install ZKV controller insert, push up and rotate to lock. No tools required. Luminaires can be easily and quickly upgraded.



Example Application: Controller Installed With Power Pack (mwConnect PSC-AC-PP-700 or PSC-AC-PP-900:) - Single Fixture

Drawings Are Not To Scale

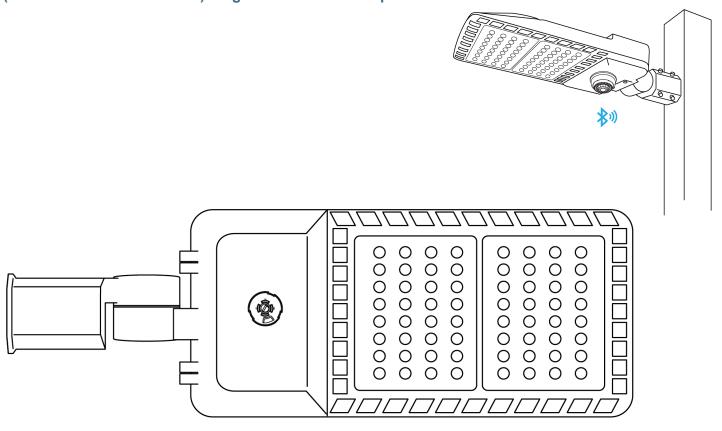


ZKV-I Receptacle with PP-700 power pack, and LED dimmable driver (open wiring compartment)



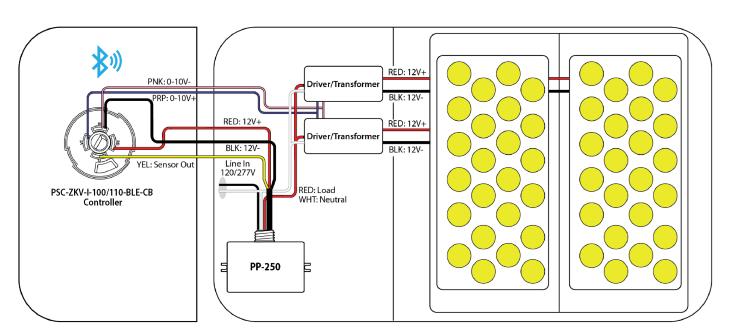


**Example Application: Controller Installed With Power Pack** (mwConnect PSC-AC-PP250) Single Fixture With Multiple Drivers



ZKV Receptacle on outside of fixture

Drawings Are Not To Scale

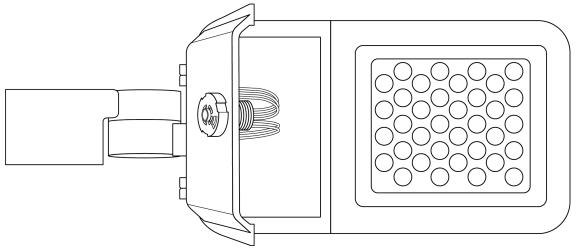


ZKV Receptacle with PP-250 power pack, and LED driver (open wiring compartment)



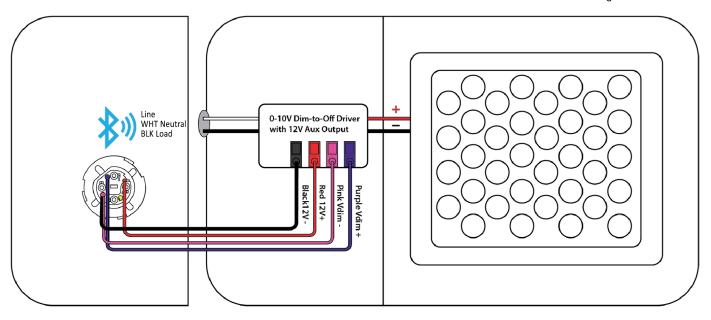


# **Example Application: Controller Installed With 0-10V Dim-To-Off With 12VDC Auxiliary Output**



ZKV Receptacle on outside of fixture

Drawings Are Not To Scale



## **How To Order**

Model No.	Description	Input Voltage	Output
PSC-ZKV-I-100-BLE-CB-BN	Fixture Controller with 0-10V Dimming, PIR Motion Sensor, Wireless Mesh, standard Dark Brown Color	12-24VDC	Control High 0-10V Dimming
PSC-ZKV-I-110-BLE-CB-BN	Fixture Controller with 0-10V Dimming, PIR Motion Sensor, Light Sensing, Wireless Mesh, standard Dark Brown Color	12-24VDC	Control High 0-10V Dimming
PSC-ZKV-I-100-BLE-CB-WT	Fixture Controller with 0-10V Dimming, PIR Motion Sensor, Casambi Mesh, White Color	12-24VDC	Control High 0-10V Dimming
PSC-ZKV-I-110-BLE-CB-WT	Fixture Controller with 0-10V Dimming, PIR Motion Sensor, Light Sensing, Wireless Mesh, White Color	12-24VDC	Control High 0-10V Dimming
PSC-ZKV-I-100-BLE-CB-BK	Fixture Controller with 0-10V Dimming, PIR Motion Sensor, Wireless Mesh, Black Color	12-24VDC	Control High 0-10V Dimming
PSC-ZKV-I-110-BLE-CB-BK	Fixture Controller with 0-10V Dimming, Light Sensing, Wireless Mesh, Black Color	12-24VDC	Control High 0-10V Dimming
PSC-ZKV-R1L	Receptacle for Fixture Controller	12-24VDC	

Design and specifications are subject to change without notice.

