

Casambi Mesh Passive Infrared Outdoor Sensor-Controller

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 by 12-24VDC
- Features Low, Medium, High Sensor Sensitivity Adjustment



For Indoor or Outdoor Use
Receptacle Sold Separately



E341446

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 Range¹:
100ft (30.4m)

Operating Temperature:
-40° C to 70°C

Storage Temperature:
-40° C to 85°C

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

Color: Brown (standard default), Black or White

Warranty: 5 years

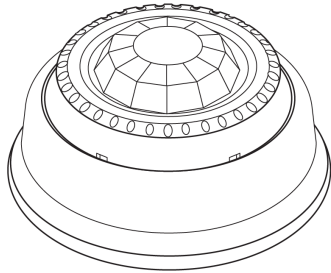
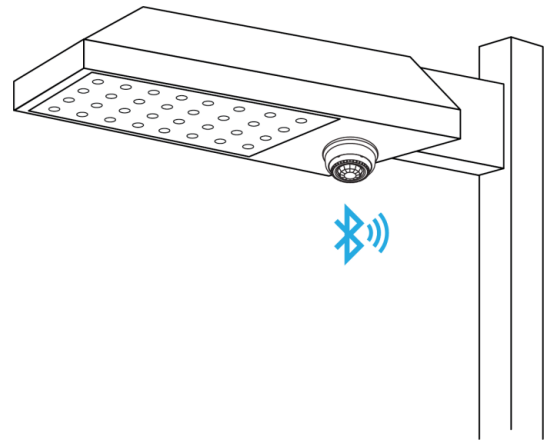
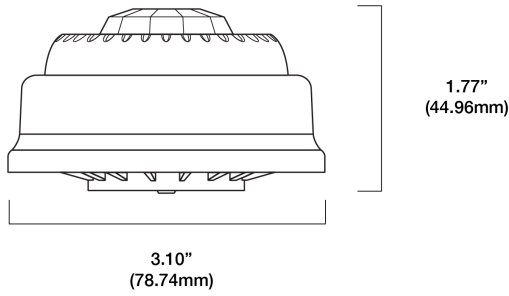
Note:

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

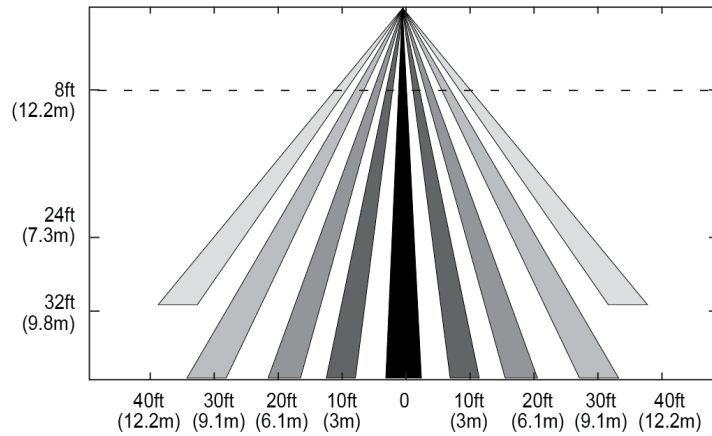
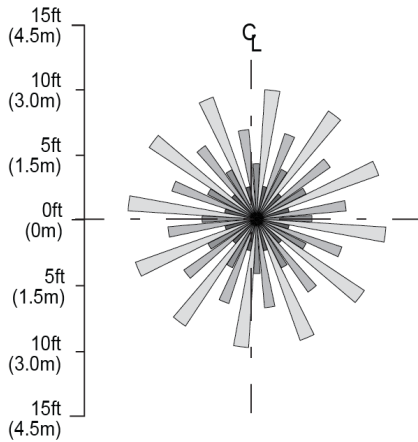
Location/Type

Physical Dimensions

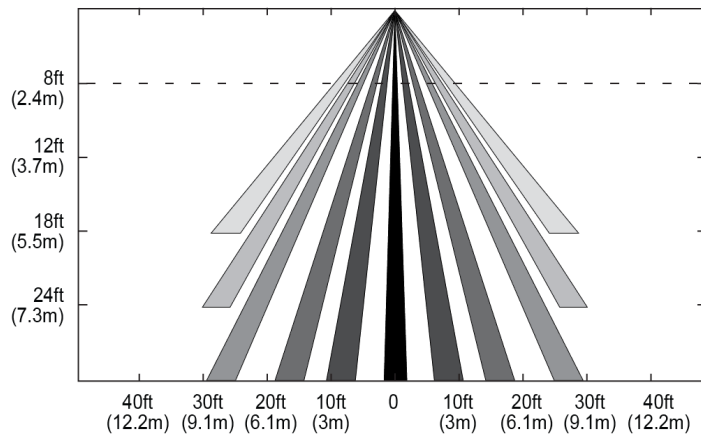
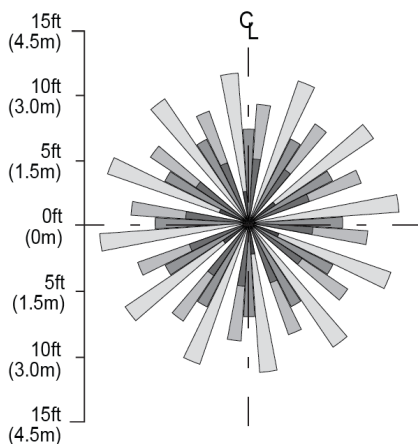


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Sensor Patterns

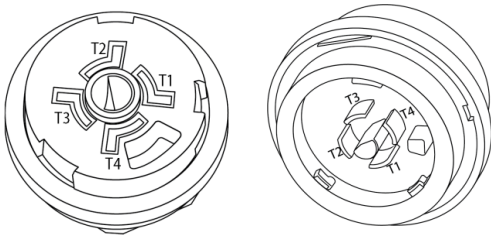


High Bay Lens (H) Pattern



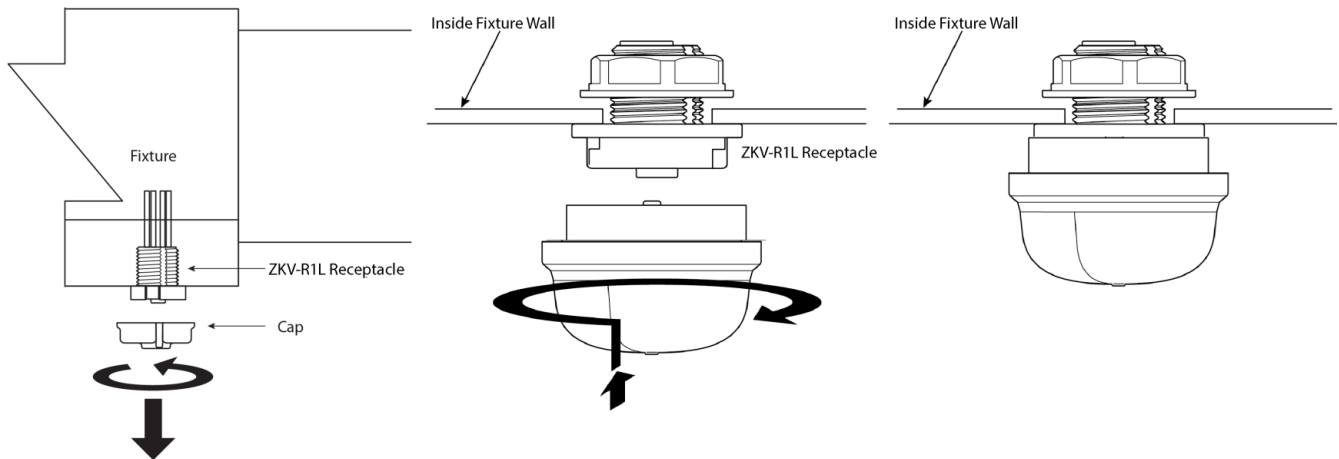
Low Bay Lens (N) Pattern

Installation Of Sensor-Controller



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

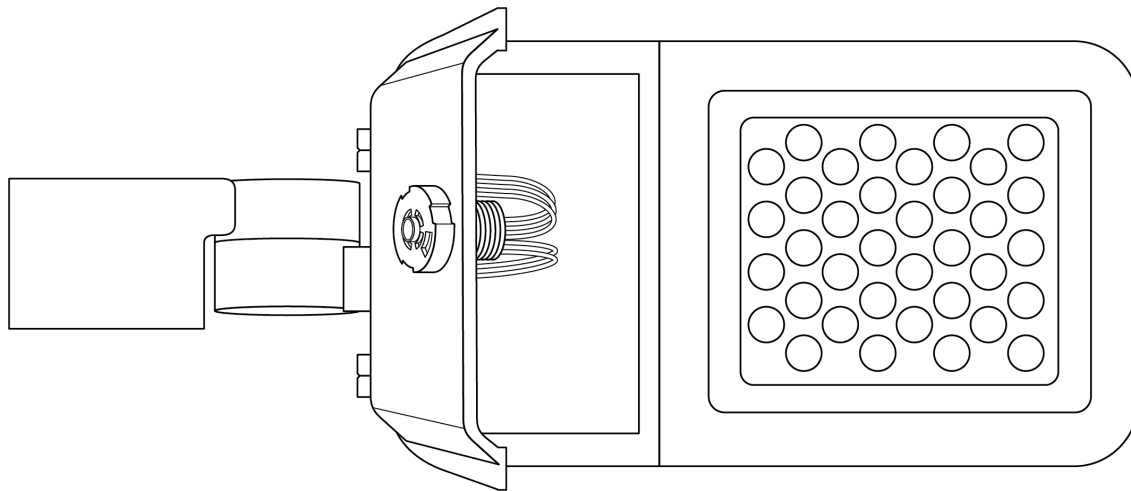
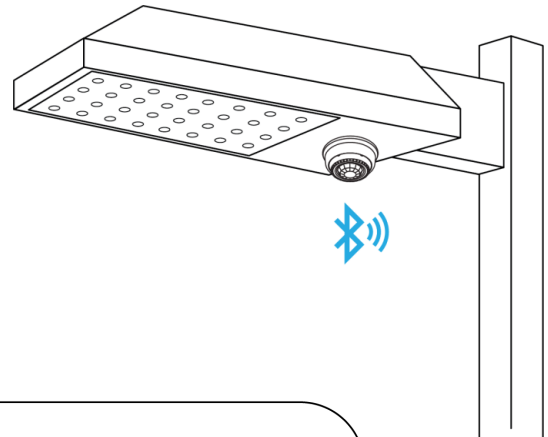
Tab/Slot	Designation	Notes
T1	12-24VDC+ Power to Sensor-Controller	Red Wire (Receptacle)
T2	12-24VDC- Power and 0-10VDC-/Common	Black Wire (Receptacle)
T3	0-10VDC+ Control Signal from Sensor-Controller	Purple (Violet) Wire (Receptacle)
T4	10-22VDC 30mA Load Control Output (Active High)	Yellow Wire (Receptacle)



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

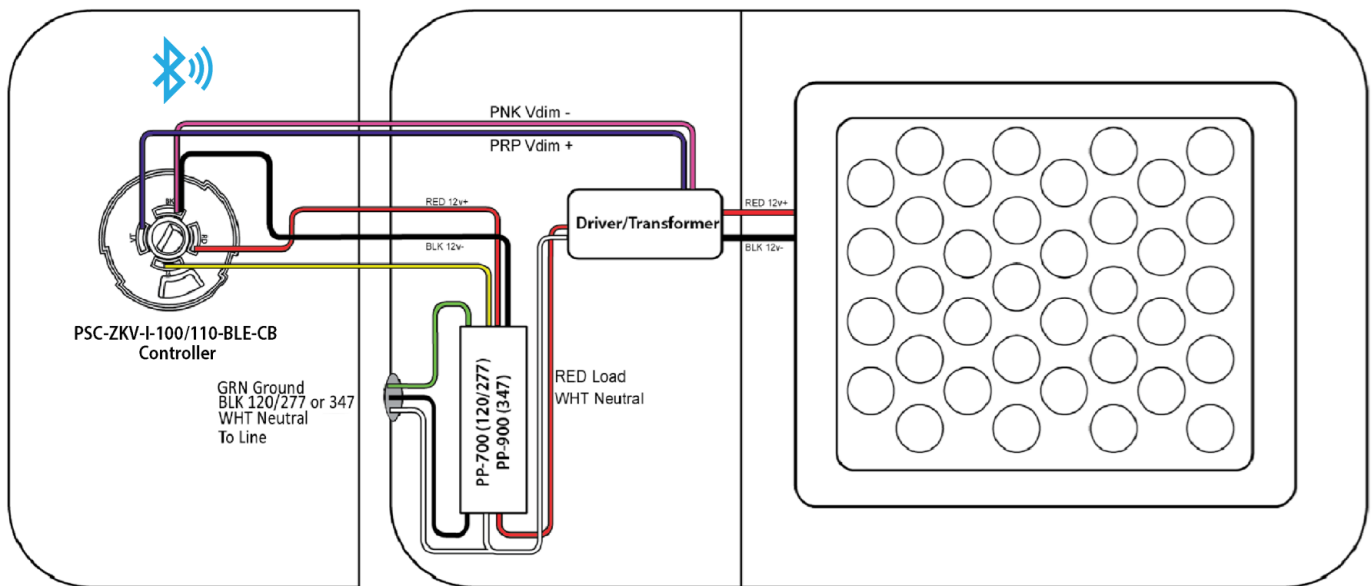
To install ZKV controller insert, push up and rotate to lock. No tools required. Luminaires can be easily and quickly upgraded.

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



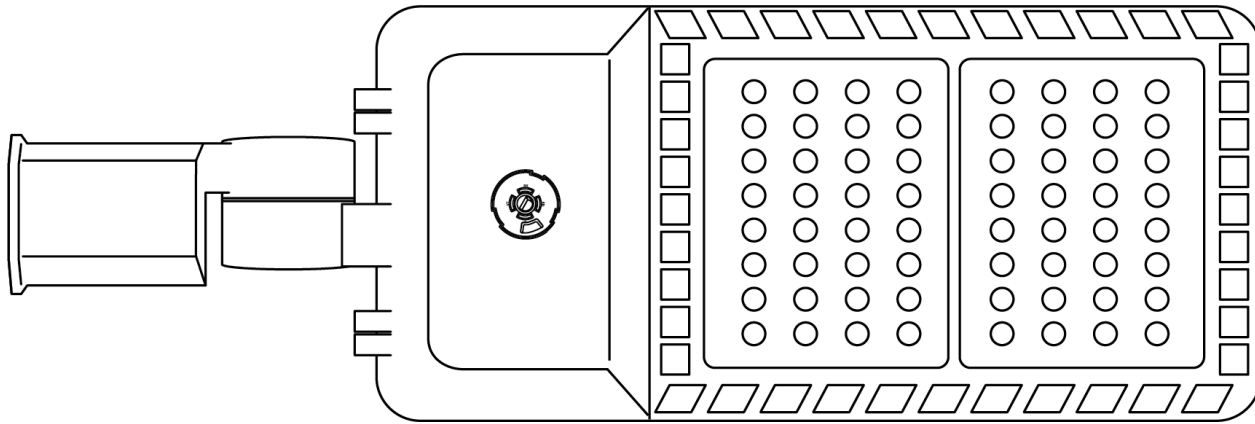
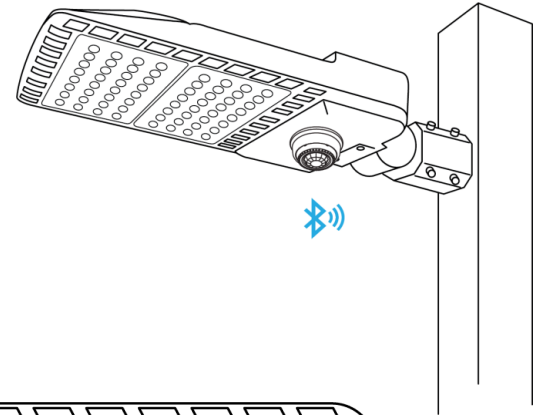
ZKV Receptacle on outside of fixture

Drawings Are Not To Scale



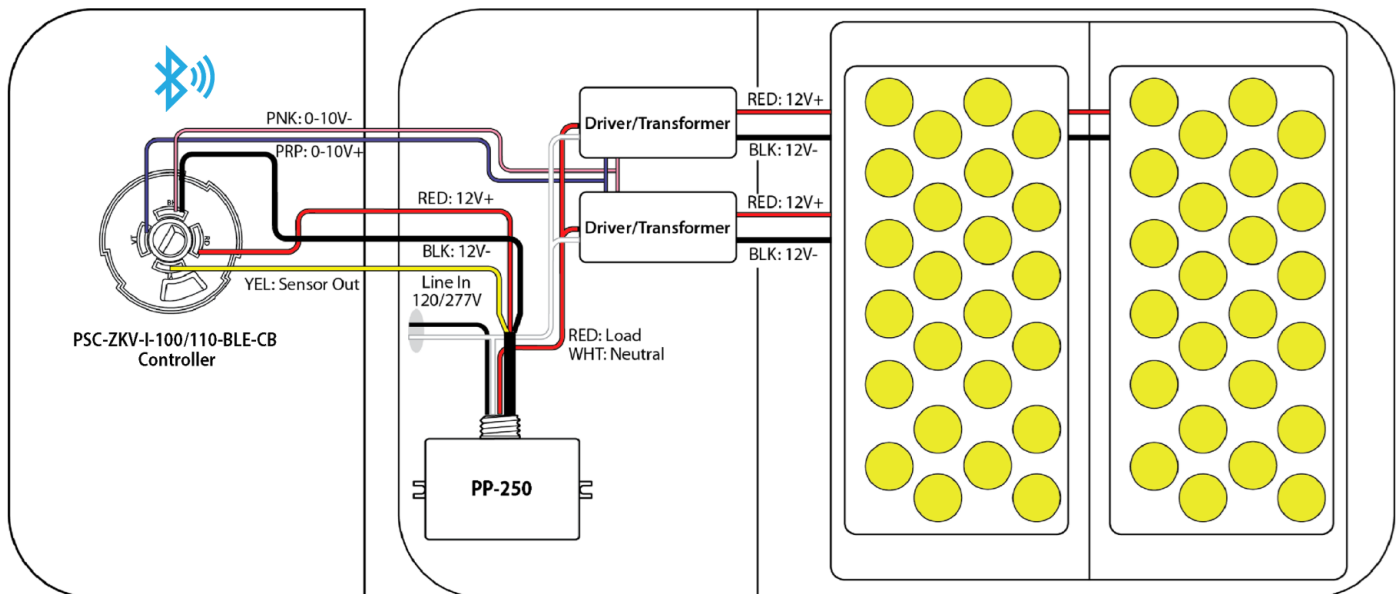
ZKV-I Receptacle with PP-700 power pack, and LED dimmable driver
(open wiring compartment)

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



ZKV Receptacle on outside of fixture

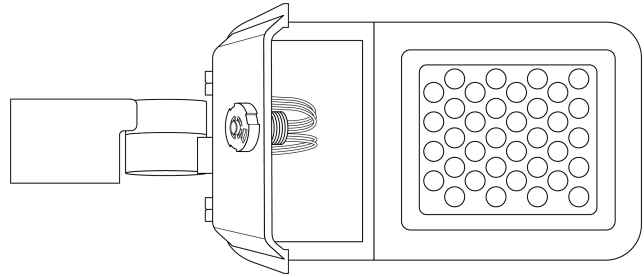
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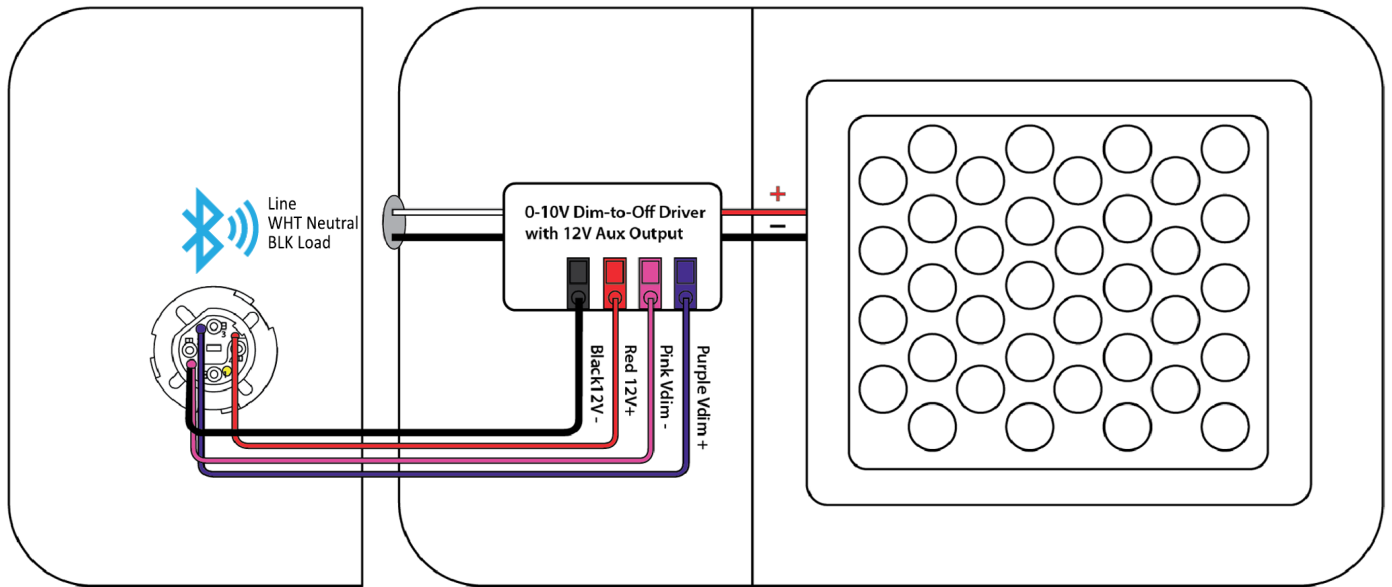
ZKV Receptacle with PP-250 power pack, and LED driver
(open wiring compartment)

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



Model Number Matrix

PSC	ZKV	I	---	BLE	CB	---
PSC	ZKV 0-10V Outdoor Device	I Passive Infrared (PIR) Sensor	10N Low Bay Lens (no Photo Sensor)	BLE Wireless	CB Casambi Mesh Compatible	BN Brown Finish
			10H High Bay Lens (no Photo Sensor)			WT White Finish
			11N Photo Sensor & Low Bay Lens			BK Black Finish
			11H Photo Sensor & High Bay Lens			

Example:

PSC-ZKV-I-11N-BLE-CB-BN

Design and specifications are subject to change without notice.