

Casambi Mesh 0-10V Outdoor Controller with Long Range Antenna

Overview

- Single Channel Controller with 0-10VDC Dimming Output
- Integral Long Range Antenna
- Mounts to Light Fixture/Luminaire via Quick Connect Receptacle
- Compatible with Casambi Wireless Mesh Systems
- Features High End Trim Adjustment, Zoning & Continuous Dimming
- Sensor/Control Output (Active High) for Relay/Load Control
- Powered by 12 to 24 VDC
- IP65 Rated for Outdoor or Indoor Applications
- Quick Connector For Easy Installation
- ioXt Alliance Cybersecurity Certification

Applications

The PSC-ZKV-WCM-100-BLE-CB/EXA is a single channel wireless fixture controller with a long range antenna. The controller features an active high output for relay or load control.

The controller is IP65 rated for exterior use and suitable for a variety of indoor and outdoor applications in temperatures ranging from -22° to 158°F (-30° to 70° C).

This device is controlled wirelessly via Casambi Mesh technology allowing for wireless dimming of LED lighting. The compact size allows for seamless integration to the fixture.

Accessories

Power Pack: The PSC-ZKV-WCM-100-BLE-CB/EXA operates on 12 to 24 VDC input. See the mwConnect PacWave™ Power Pack products for low voltage power supply options.

Alternatively, the controller can also operate with a driver that has auxiliary output (12 to 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.

Single Channel: The controller outputs a 0-10V dimming channel for driver control.

Relay Control: The controller outputs a 10-22VDC active high control signal to control a relay or other load circuitry.

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

See the mwConnect Casambi Commissioning User Manual for more information.



For Indoor or Outdoor use



Summary

Product Type:
Single Channel Wireless Fixture Controller with Long Range Antenna

Input Voltage | Current Consumption:
12 to 24 VDC | 100 mA

0-10V Dimming Output: 30 mA

Load Control Output: 10 to 22 VDC 30mA
Source Control Signal (Active High)

Mounting: Mounts to mwConnect PSC-ZKV-R1L receptacle, sold separately

Max Bluetooth Range¹:
950 feet (290 meters)

Operating Temperature:
-22°F to 158°F (-30°C to 70°C)

Storage Temperature:
-40°F to 185°F (-40°C to 85°C)

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

Color: Clear/Transparent Housing

Warranty: 5 years

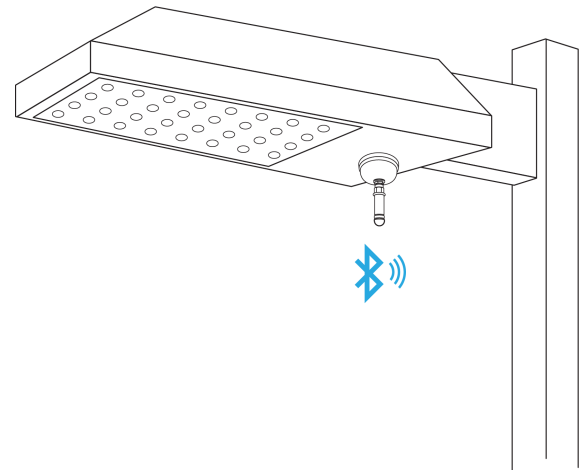
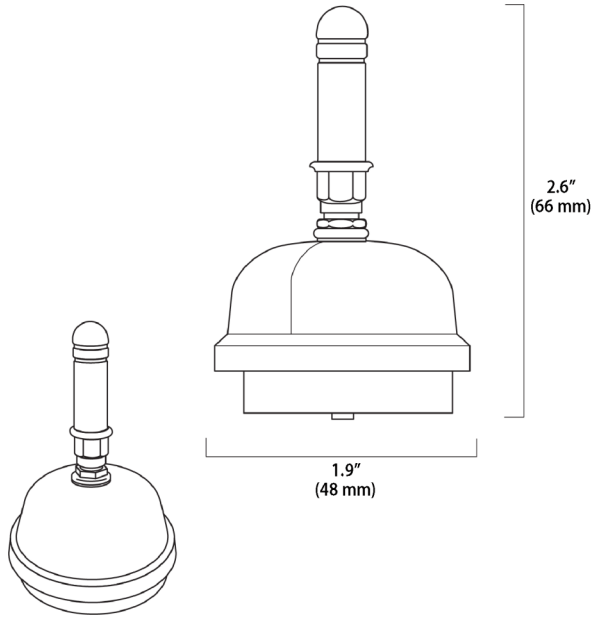
Note:

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

Project

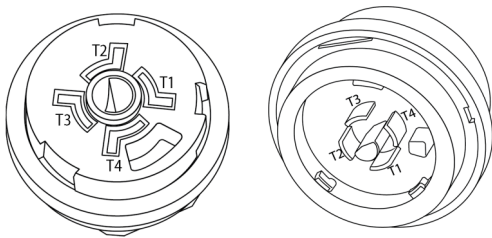
Location/Type

Physical Dimensions



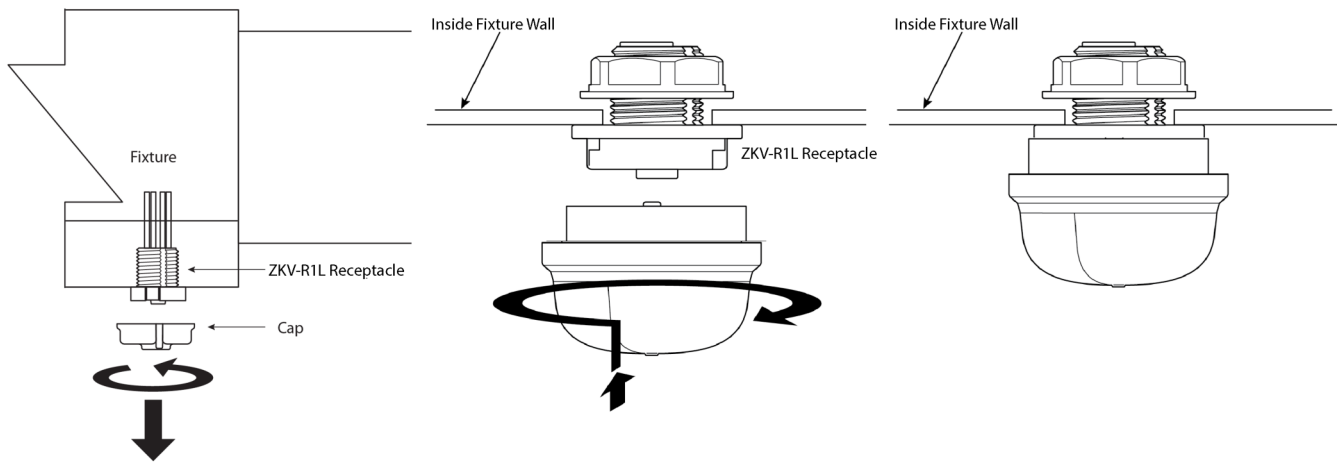
Drawings are not to scale

Installation Of Controller



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

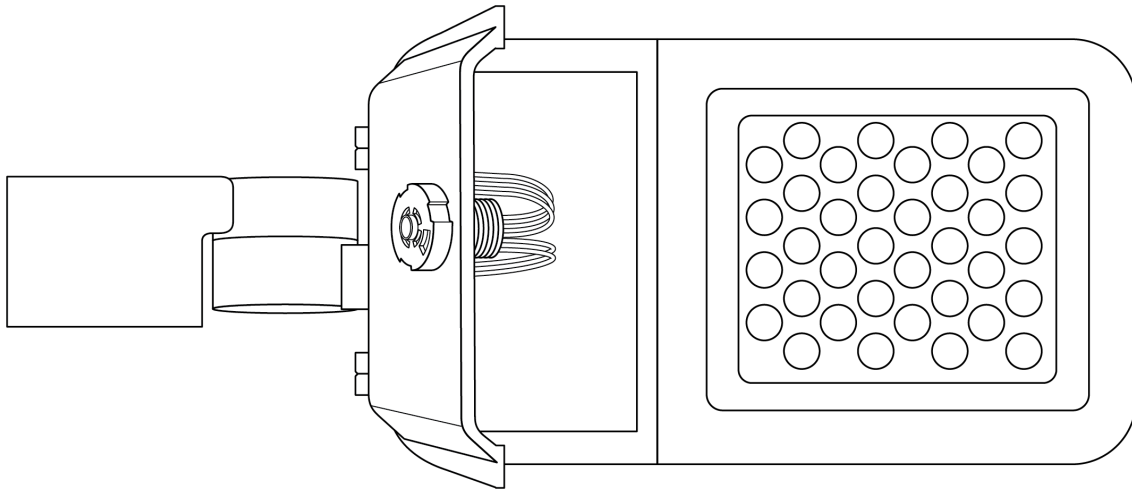
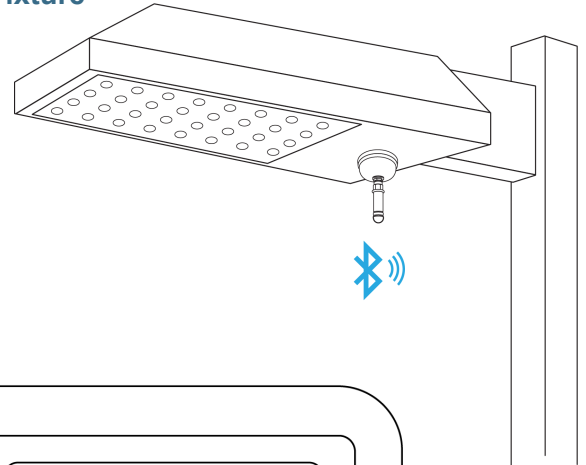
The receptacle for ZKV controller is installed at fixture manufacturer and is shipped to job site with a protective cap.



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

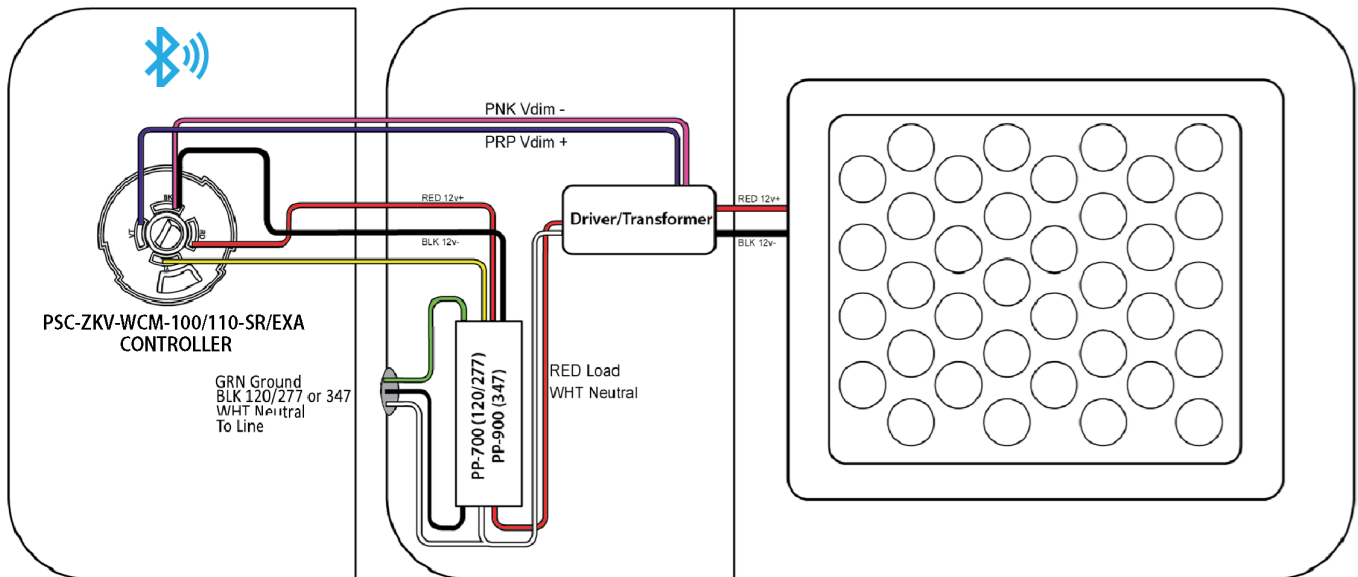
To install the ZKV controller insert, push up and rotate to lock. No tools required. Luminaires can be easily and quickly upgraded.

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



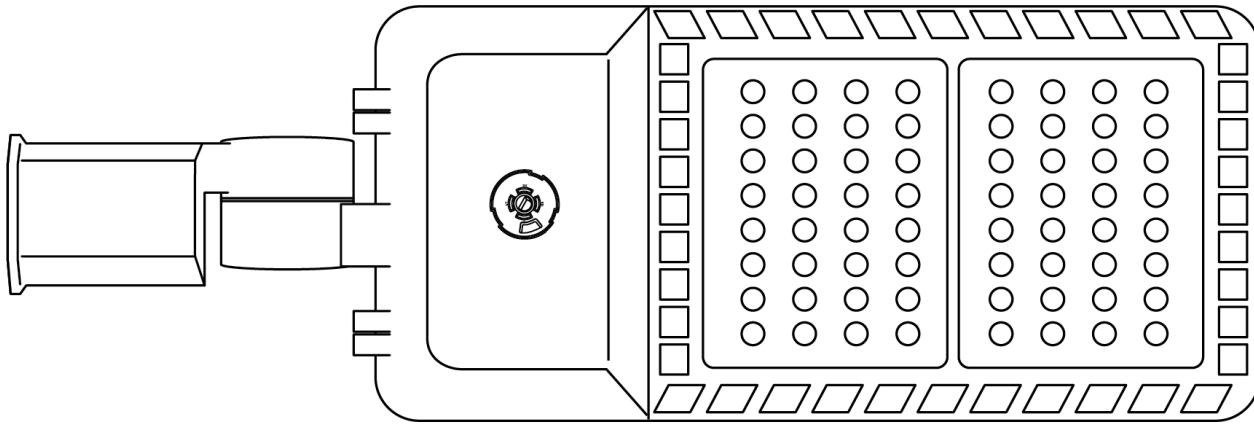
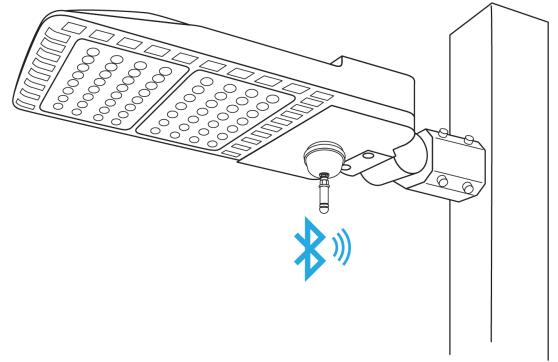
ZK-R1L receptacle on outside of fixture

Drawings are not to scale



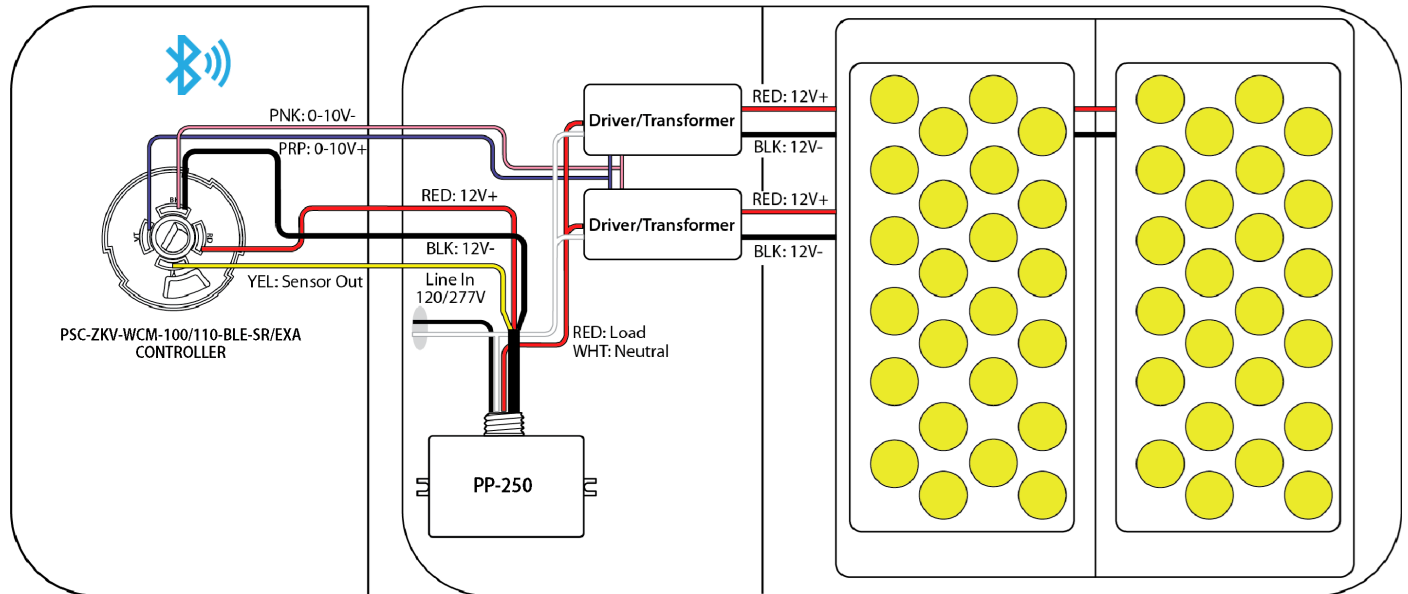
ZKV-R1L receptacle with PP-700 power pack, and LED dimmable driver

Example Application: Controller Installed With Power Pack
(mwConnect PSC-AC-PP-250) Single Fixture With Multiple Drivers



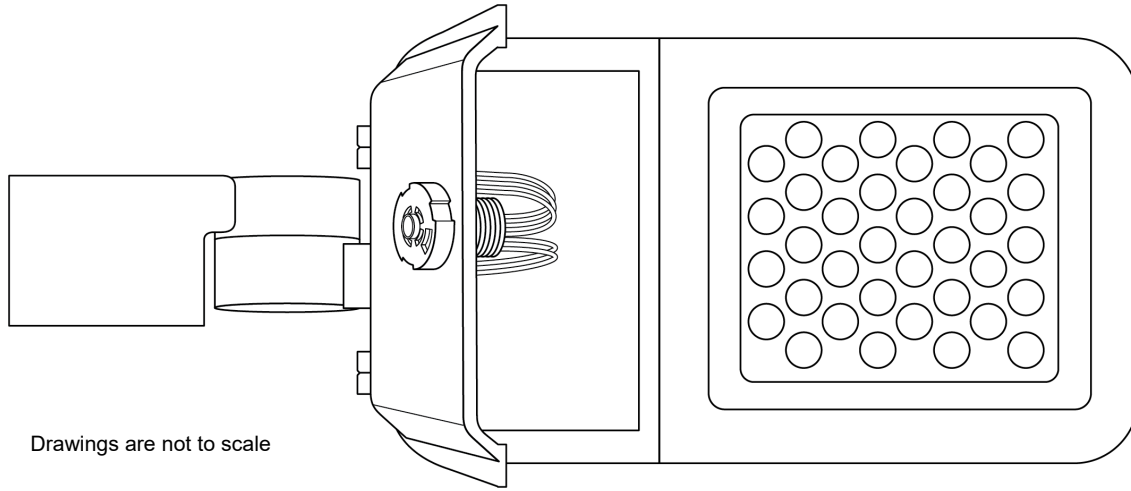
ZKV-R1L Receptacle on outside of fixture

Drawings are not to scale



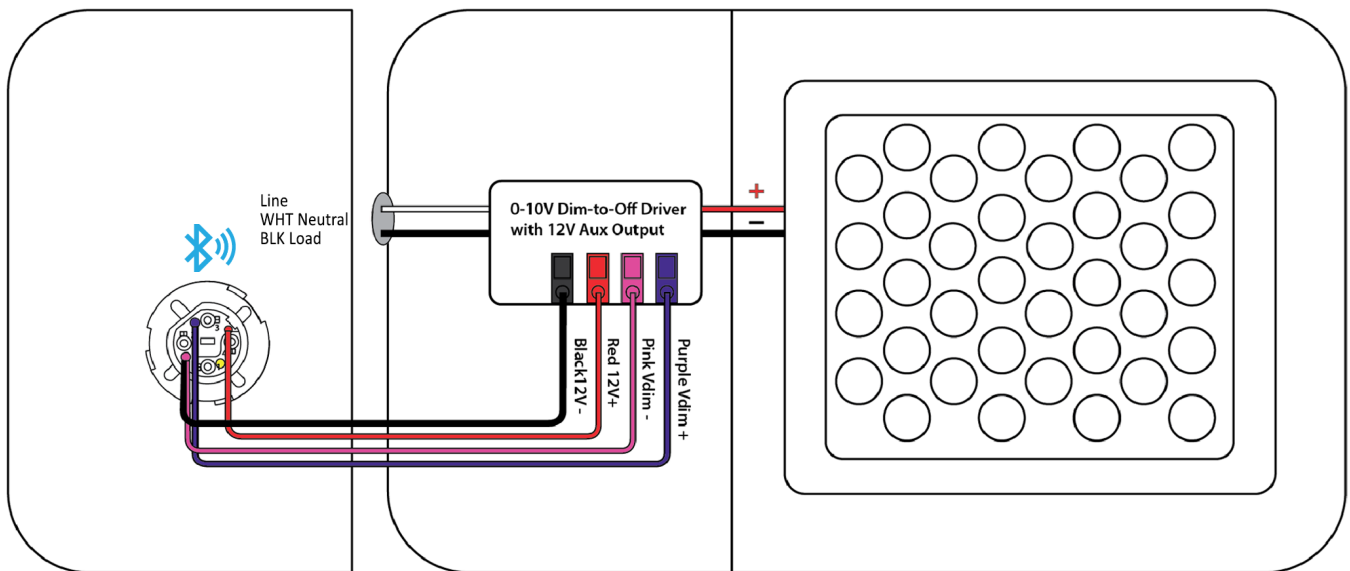
ZKV-R1L Receptacle with PP-250 power pack, and LED dimmable driver
(open wiring compartment)

Example Application: Controller Installed with 0-10V Dim-To-Off Driver and 12VDC Auxiliary Output



Drawings are not to scale

ZKV-R1L Receptacle on outside of fixture



How To Order

Model No.	Description	Input Voltage	Output
PSC-ZKV-WCM-100-BLE-CB/EXA	Fixture Controller With 0-10V Dimming, Long Range Antenna, Casambi Mesh, Clear Housing	12-24VDC	Load Control 0-10V Dimming
PSC-ZKV-R1L	Receptacle for Fixture Controller	12-24VDC	

For Line to Low Voltage Power Supply/Controller, please see mwConnect PacWave™ Power Pack data sheets. Design and specifications are subject to change without notice.