

# Wireless Fixture Controller with Quick Connector



For Indoor Or Outdoor Use  
Receptacle Sold Separately

## Overview

- 1-Channel 0-10VDC Dimming
- Mounts On Fixture
- Bluetooth® SIG mesh
- High-End Trim, Zoning, Continuous Dimming, Photocell (ZKV-110 version)
- Powered by 12-24VDC
- Sensor Output (active high)
- IP-65 Outdoor And Indoor Applications
- Quick Connector For Easy Installation

## Applications

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

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-SR version also has an integral photosensor.

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

## Accessories

**Power Pack:** The PSC-ZKV-WCM-100-BLE-SR and the PSC-ZKV-WCM-110-BLE-SR operates on 12-24VDC input and require a separate mwConnect PacWave™ power pack. See mwConnect PacWave™ Power Pack data sheets.

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

## Operation

**TruBlu™ Mesh Controls:** Qualified by Bluetooth SIG for its Bluetooth Mesh 1.0.1 specification, the controller connects to a Bluetooth mesh network and is accessed via the TruBlu web portal or mobile app for initial design, setup and scheduling, as well as subsequent parameter adjustments.

Advanced functionality such as energy monitoring, and demand response is available with the TruBlu Gateway (ordered separately).

**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-WCM-110-BLE-SR 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 TruBlu™ Commissioning User Manual for more information.



## Summary

**Product Type:**  
1-Channel Fixture Controller  
(-110-model includes photosensor)

**Input Voltage | Current Consumption:**  
12-24 VDC | 100 mA

**0-10VDC Output:** 30 mA

**Load Control Output—10-22VDC 30mA**  
(Active High)

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

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

**Operating Temperature:**  
-30° 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

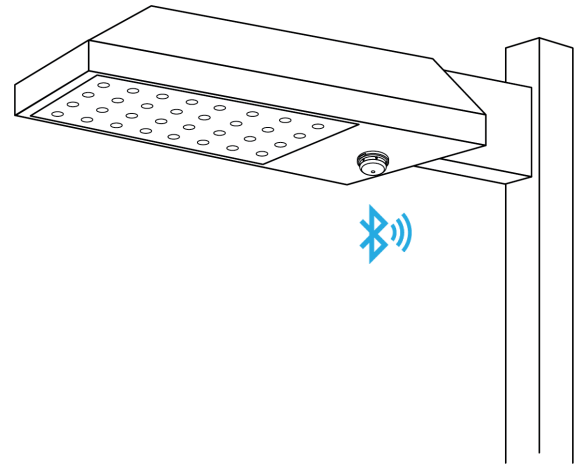
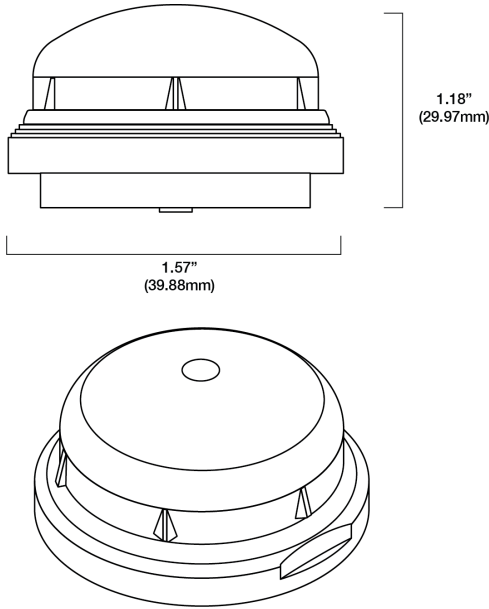
Note:

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

Project

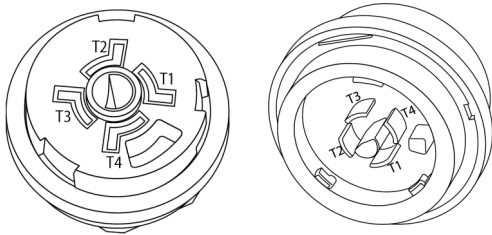
Location/Type

Physical Dimensions



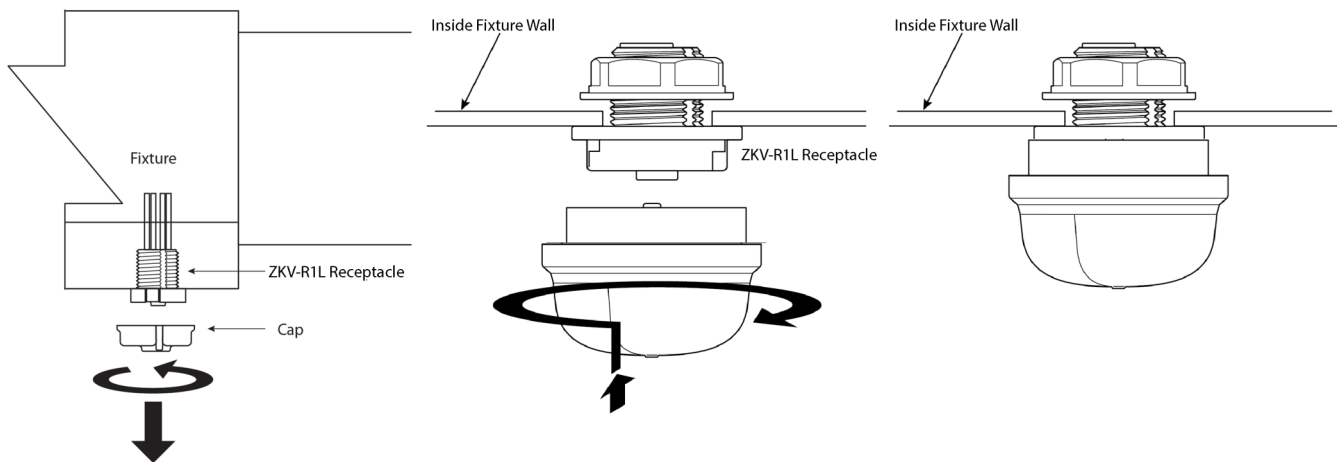
Drawing Are Not To Scale

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       | Vin-2.5V 30mA Load Control Output (Active High) | Yellow Wire (Receptacle)          |

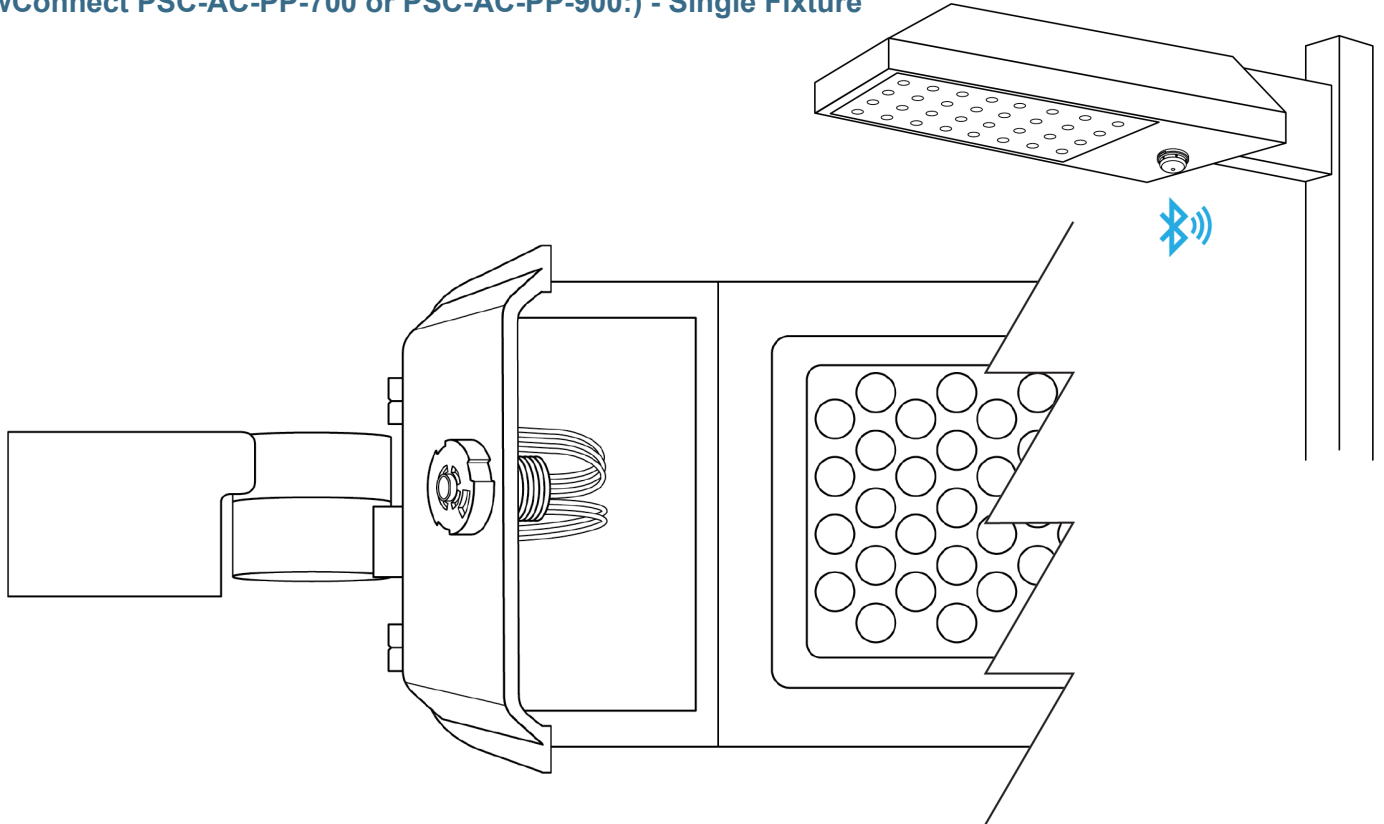
The receptacle for ZKV controller is installed at fixture manufacturer and is shipped to job site with a protective cap.



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

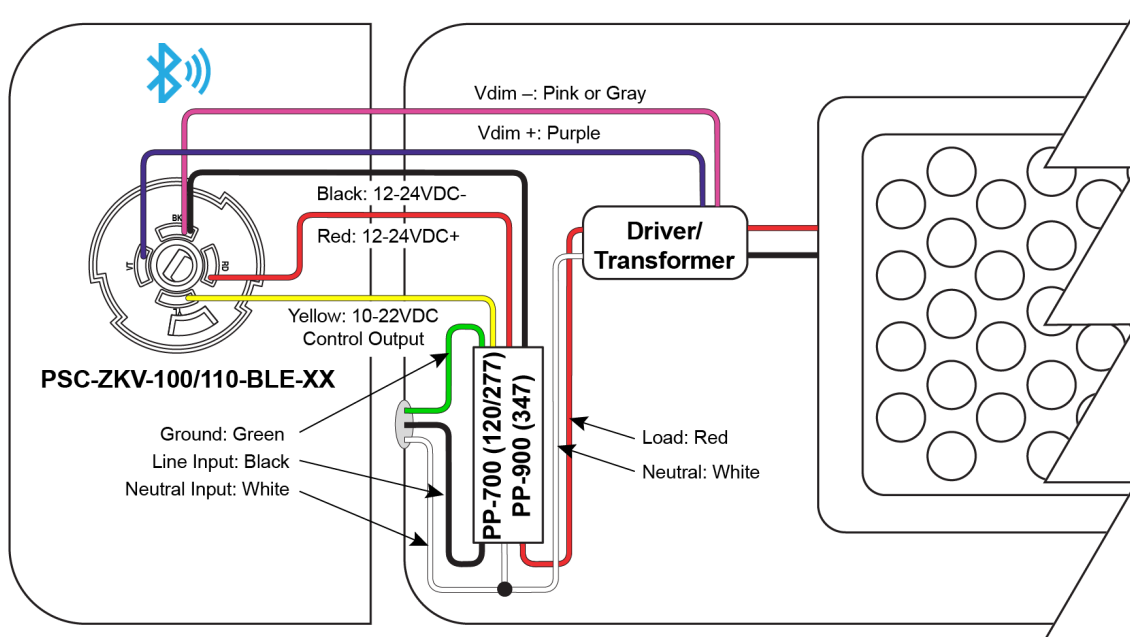
To install ZKV controller insert, push up and rotate to lock. No tools required. Luminaires can be easily and quickly upgraded.

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



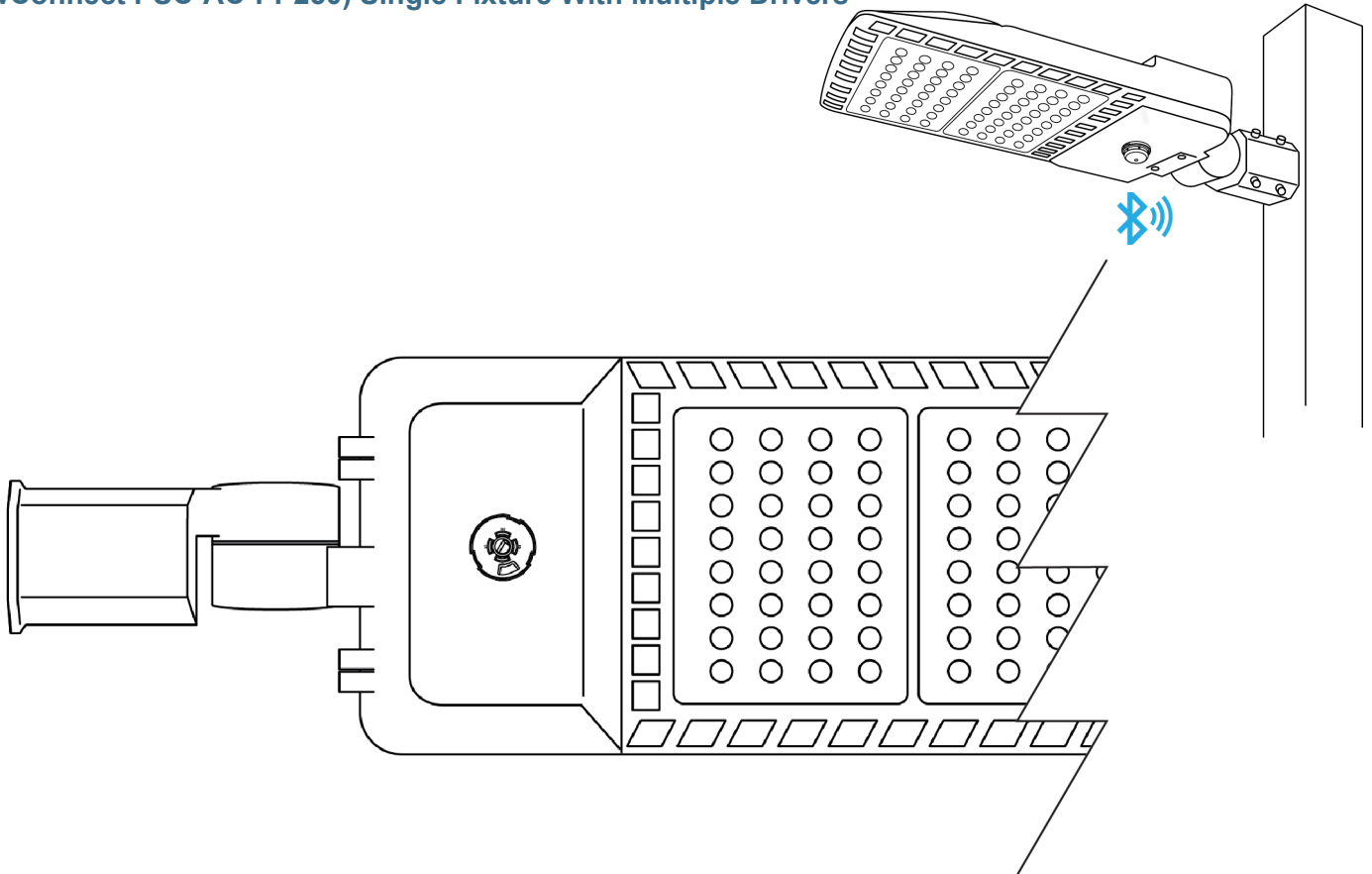
**ZKV-R1L Receptacle on Outside of Fixture**

Drawings Are Not To Scale



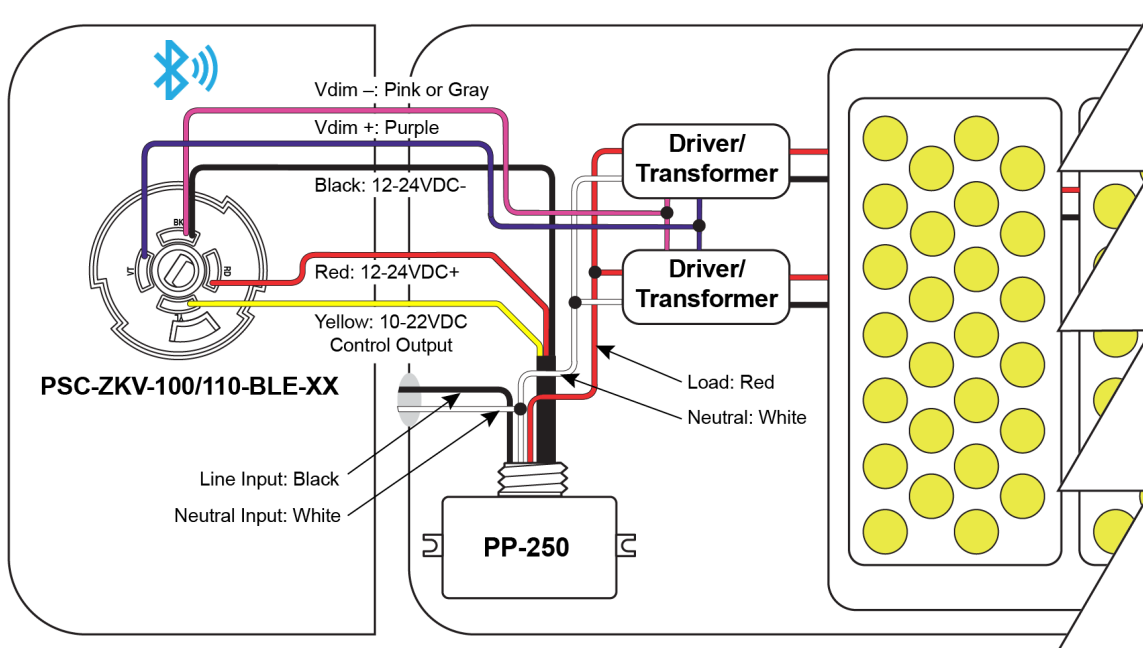
**ZKV-R1L Receptacle with PP-700 Power Pack  
and LED Dimmable Driver (open wiring compartment)**

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



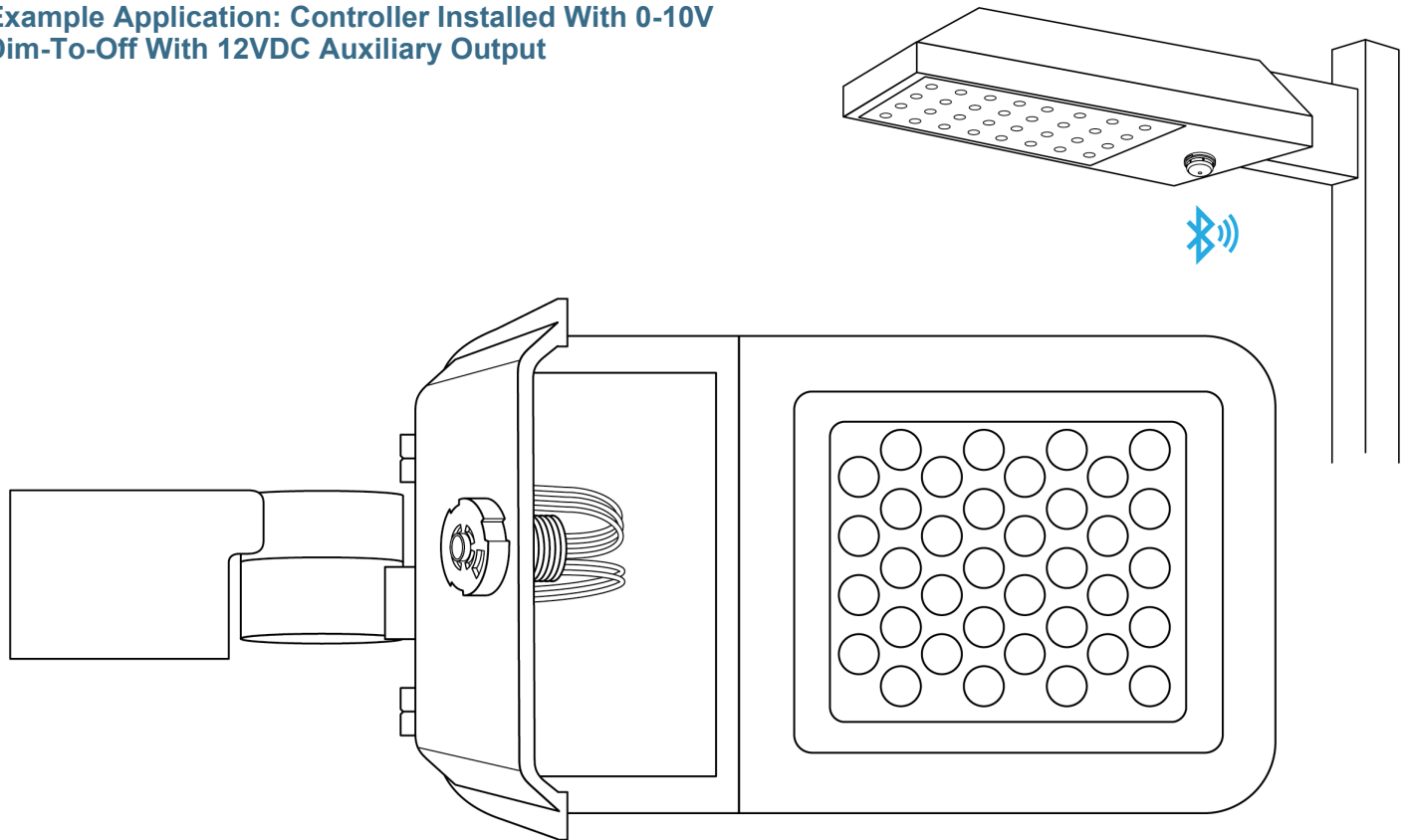
ZKV-R1L Receptacle on Outside of Fixture

Drawings Are Not To Scale



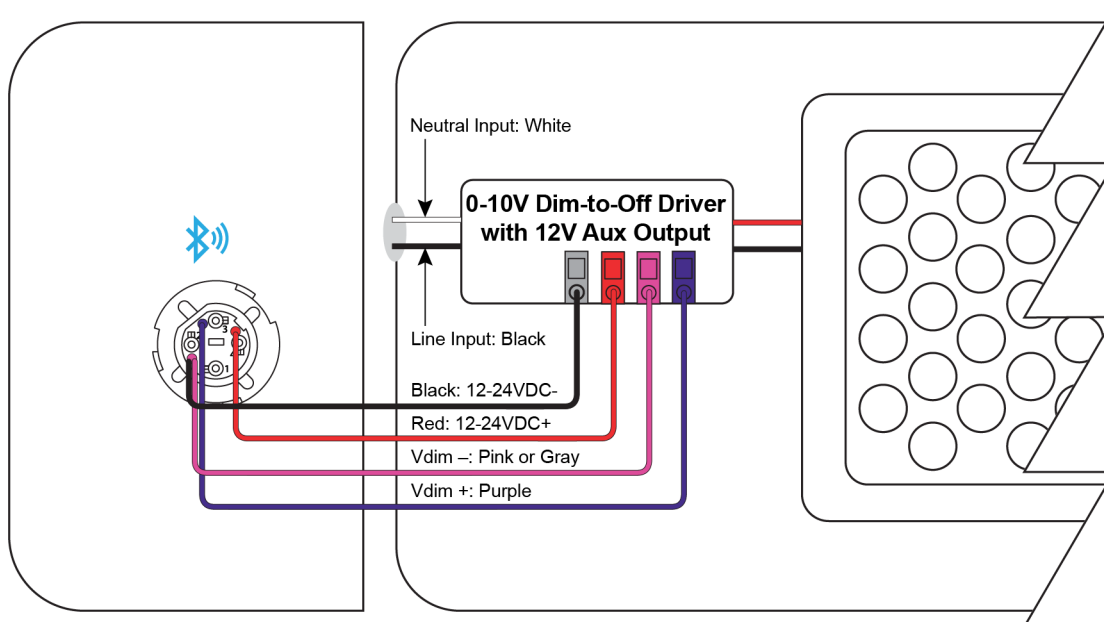
ZKV-1RL Receptacle with PP-250 power pack, and LED dimmable driver  
(open wiring compartment)

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



ZKV-R1L Receptacle on outside of fixture

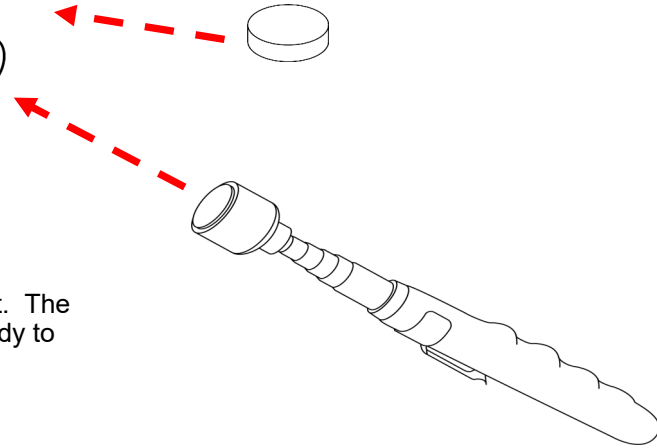
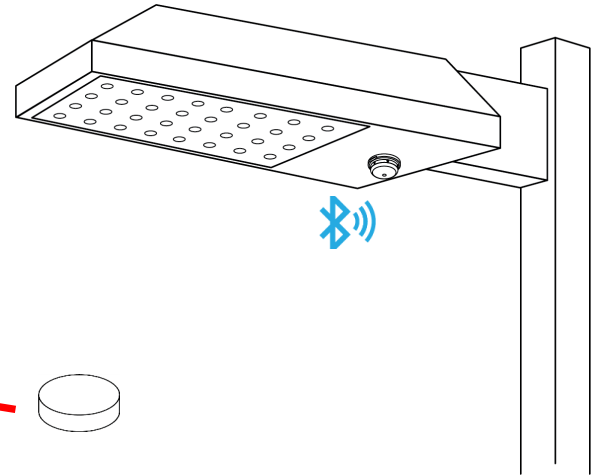
Drawings Are Not To Scale



ZKV Receptacle, 0-10V Dim to off driver with 12v auxiliary output (open wiring compartment)

**Reset Instructions**

Using a magnet (with 20lb pull strength), hold the magnet against the dot labeled RST (reset).



Once the fixture associated with the controller has flashed 3 times then stayed on, remove the magnet. The controller is now reset to factory conditions and ready to be reprogrammed.

**How To Order**

| Model No.                 | Description   | Input Voltage | Output                        |
|---------------------------|---|---------------|-------------------------------|
| PSC-ZKV-WCM-100-BLE-SR-BN | Fixture Controller with 0-10V Dimming, Bluetooth Mesh in TruBlu™, standard Brown Color, Silvair technology partner                | 12-24VDC      | Control High<br>0-10V Dimming |
| PSC-ZKV-WCM-110-BLE-SR-BN | Fixture Controller with 0-10V Dimming, Light Sensing, Bluetooth Mesh in TruBlu™, standard Brown Color, Silvair technology partner | 12-24VDC      | Control High<br>0-10V Dimming |
| PSC-ZKV-WCM-100-BLE-SR-WT | Fixture Controller with 0-10V Dimming, Bluetooth Mesh in TruBlu™, White Color, Silvair technology partner                         | 12-24VDC      | Control High<br>0-10V Dimming |
| PSC-ZKV-WCM-110-BLE-SR-WT | Fixture Controller with 0-10V Dimming, Light Sensing, Bluetooth Mesh in TruBlu™, White Color, Silvair technology partner          | 12-24VDC      | Control High<br>0-10V Dimming |
| PSC-ZKV-WCM-100-BLE-SR-BK | Fixture Controller with 0-10V Dimming, Bluetooth Mesh in TruBlu™, Black Color, Silvair technology partner                         | 12-24VDC      | Control High<br>0-10V Dimming |
| PSC-ZKV-WCM-110-BLE-SR-BK | Fixture Controller with 0-10V Dimming, Light Sensing, Bluetooth Mesh in TruBlu™, Black Color, Silvair technology partner          | 12-24VDC      | Control High<br>0-10V Dimming |
| PSC-ZKV-R1L               | Receptacle for Fixture Controller   | 12-24VDC      |                               |

Design and specifications are subject to change without notice.