



APPLICATIONS

The BMS-M100-WCM-DC1-BLE-SR-Z10-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.

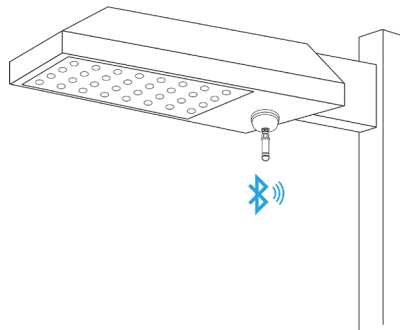
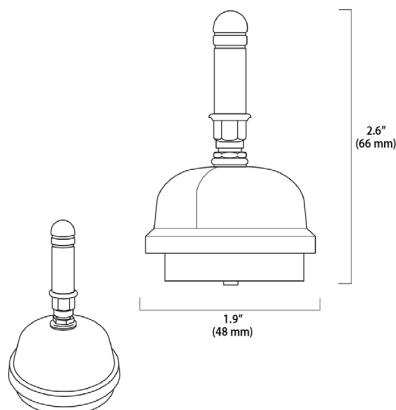
The controller is IP65 rated for exterior use and suitable for a variety of indoor and outdoor applications in temperatures ranging from -22° to 158°F (-30° to 70°C).

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

OVERVIEW

- Single Channel Controller with 0-10VDC Dimming Output
- Integral Long Range Antenna
- Mounts to Light Fixture/Luminaire via Quick Connect Receptacle
- Compatible with Bluetooth® SIG 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
- Conforms with DLC NLC5 Cybersecurity

PHYSICAL DIMENSIONS



Drawing Are Not To Scale

SUMMARY

Product Type:

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

Input Voltage

12-24 VDC | 100 mA max

0-10V Dimming Output: 30 mA

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

Mounting: Mounts to BMRC-ZKV-R1L receptacle, sold separately.

Max Bluetooth Range¹: 1200 feet (366 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

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.

OPERATION

BlueMesh® 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 BlueMesh 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 optional BlueMesh® Gateway (ordered separately).

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

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 (BMRC-ZKV-R1L sold separately). One receptacle is required for mounting each controller.

See BlueMesh® Commissioning User Manual for more information.

ACCESSORIES

Power Pack:

The BMS-M100-WCM-DC1-BLE-SR-Z10-EXA operates on 12 to 24 VDC input. See the mwConnect PacWavePower Pack products for low voltage power supply options.

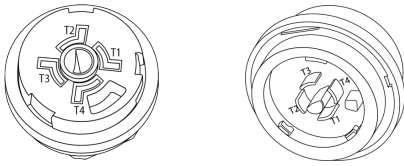
Alternatively, the unit can also operate with a driver that has an auxiliary output (12 or 24VDC).

ORDERING INFORMATION

Example: BMS-M100-WCM-DC1-BLE-SR-Z10-EXA

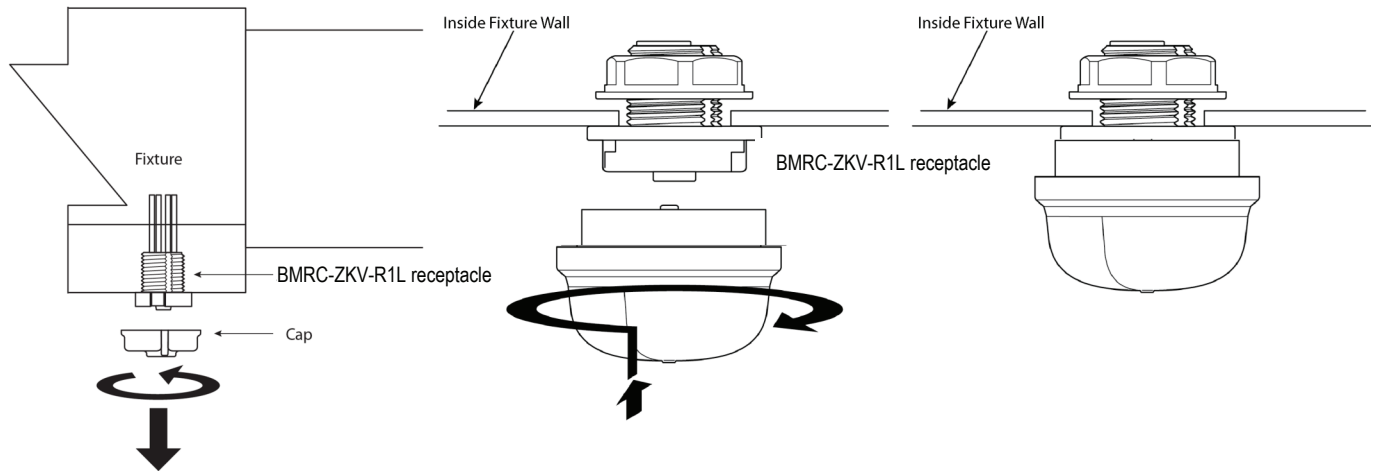
Model No.	Description	Input Voltage	Output
BMS-M100-WCM-DC1-BLE-SR-Z10-BZ	Fixture Controller With 0-10V Dimming, Long Range Antenna, BlueMesh® Clear Housing	12-24VDC	Load Control 0-10V Dimming
BMRC-ZKV-R1L	Receptacle for Fixture Controller	12 24VDC	

Installation Of Controller



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

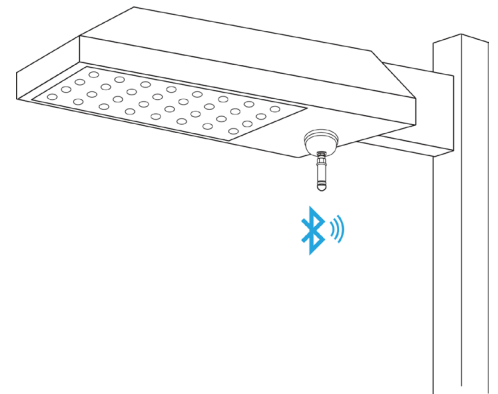
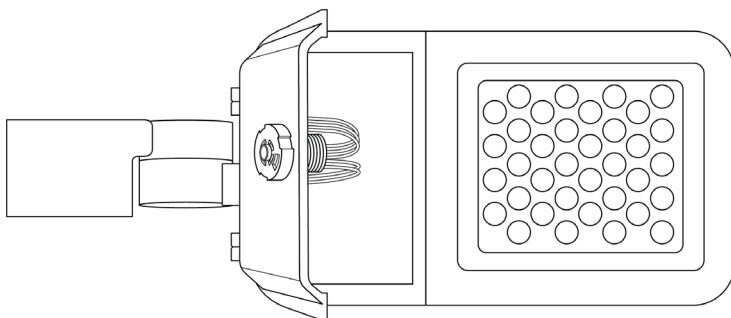
Tab/Slot	Designation	Notes
T1	12-24VDC+ Power To Controller	Red Wire (Receptacle)
T2	12-24VDC- Power And 0-10VDC-/Common	Black Wire (Receptacle)
T3	0-10VDC+ Control Signal from Controller	Purple (Violet) Wire (Receptacle)
T4	10-22VDC Load Control Output (Active High)	Yellow Wire (Receptacle)



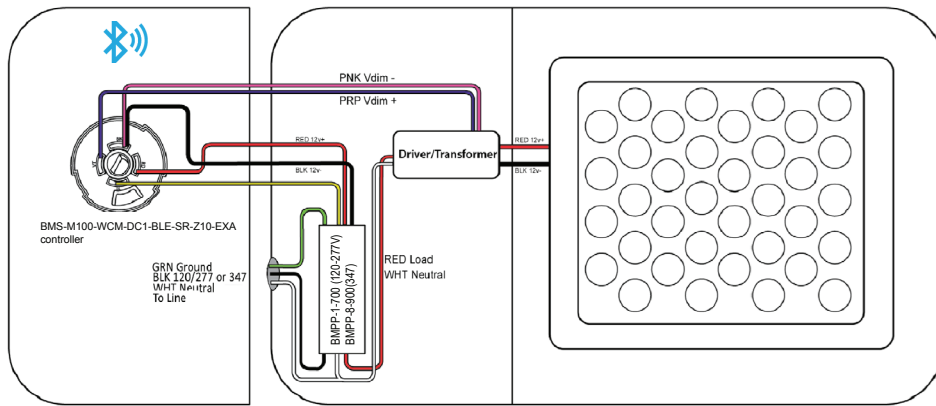
To install controller, first remove the protective cap on the BMRC-ZKV-R1L receptacle by pushing up and rotating counterclockwise.

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

Example Application: Controller nstalled With Power Pack (BMPP-8-700 or BMPP-8-900) - Single Fixture

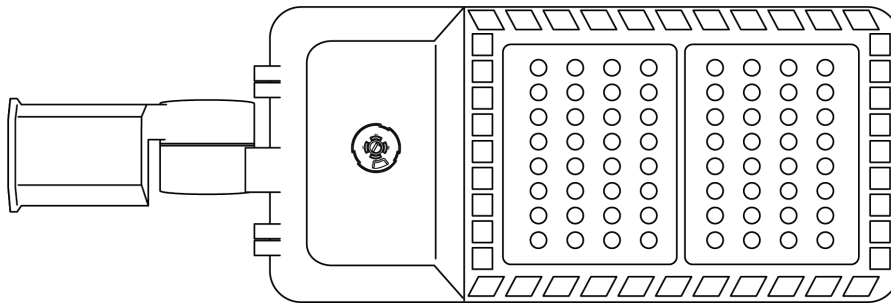


Receptacle on outside of fixture

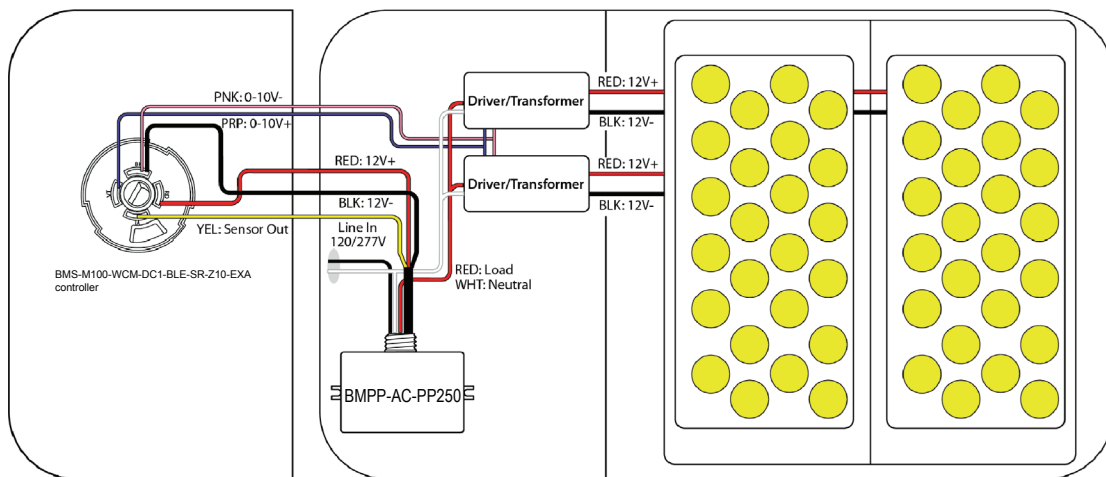


BMRC-ZKV-R1 receptacle with BMPP-8-700 power pack, and LED dimmable driver

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

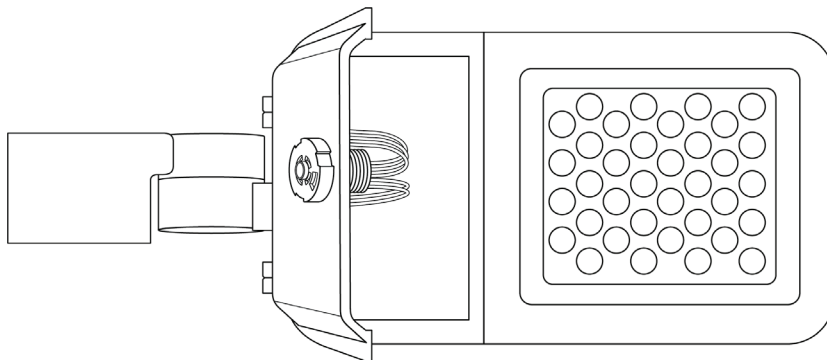
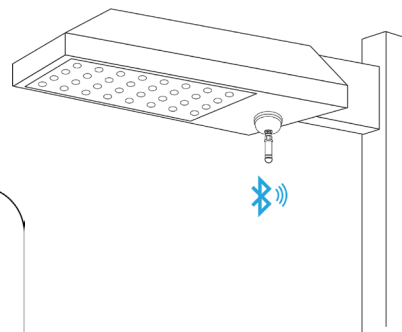


BMRC-ZKV-R1 Receptacle on outside of fixture

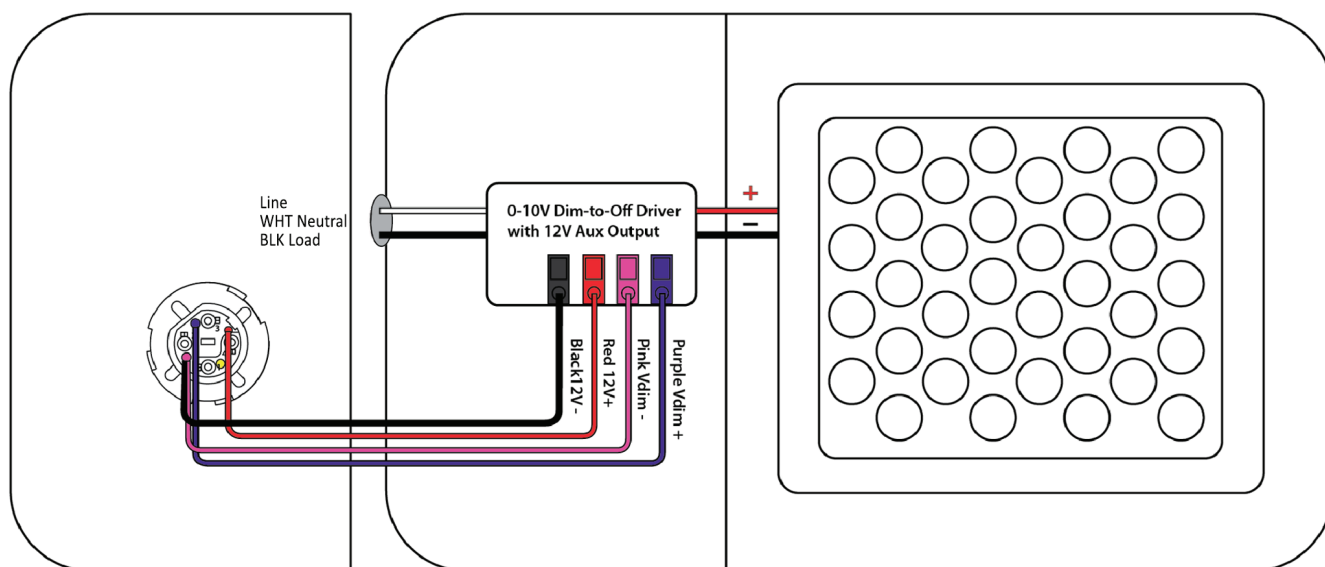


BMRC-ZKV-R1 Receptacle with PP-250 power pack, and LED dimmable driver

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



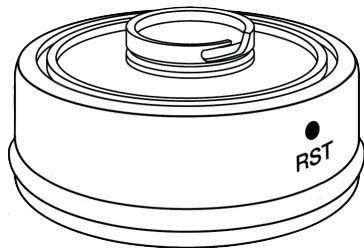
BMRC-ZKV-R1 Receptacle on outside of fixture



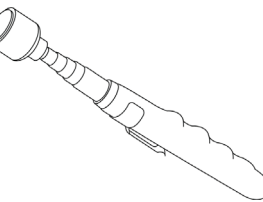
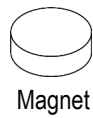
Receptacle, 0-10V dim to off driver with 12v auxiliary output (open wiring compartment)

Reset Instructions

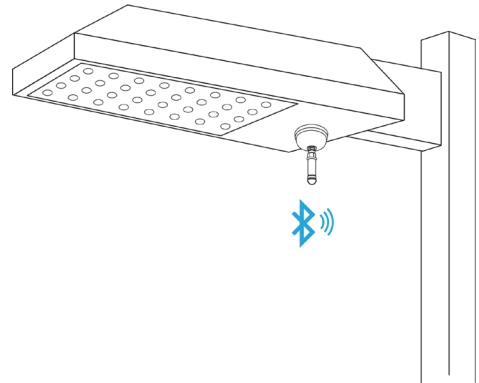
Using a magnet (pull strength), hold the magnet against the dot labeled RST (reset).



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



Telescoping Magnet



WARRANTY

Five year limited warranty.

Specifications subject to change without notice.