Casambi Mesh DALI Outdoor Controller with Long Range Antenna

Overview

- Complies with DALI D4i Specifications
- Single Channel DALI Wireless Controller
- Integral Long Range Antenna
- Mounts to Light Fixture/ Luminaire via Zhaga Book18 Quick Connect Receptacle
- Compatible with Casambi Wireless Mesh Systems

- Features High-End and Low-End Trim Adjustment, Zoning & Continuous Dimming
- IP65 Rated for Outdoor or Indoor Applications
- 24VDC Powered
- ioXt Alliance Cybersecurity Certification

For Indoor or Outdoor use

E341446

Applications

The PSC-ZAD-WCM-100-BLE-CB/EXA is a single channel DALI D4i wireless fixture controller with a long range antenna.

The controller is IP65 rated and suitable for exterior use.

This device communicates directly with DALI drivers and is controlled wirelessly via Casambi Mesh technology allowing for wireless dimming of luminaires. The compact size allows for seamless integration to the fixture.

Accessories

The PSC-ZAD-WCM-100-BLE-CB/EXA controller requires 24 VDC power via the Auxiliary Input to operate. See the Wiring Table for designation of wiring tabs/slots.

Operation

Casambi Mesh: The ZAD-WCM controller is compatible with the Casambi wireless mesh network and configured via a mobile app, available as iOS or Android. The app is used for initial setup and subsequent parameter adjustment.

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

Single Channel Control: The controller provides a single channel of D4i compatible DALI output for driver control.

Quick Connector: The controller mounts to a Zhaga Book18 compliant receptacle (sold separately - mwConnect part #PSC-ZAD-R1L). One receptacle is required for mounting each controller.

See the Casambi Mesh Commissioning User Manual for more information.

Summary

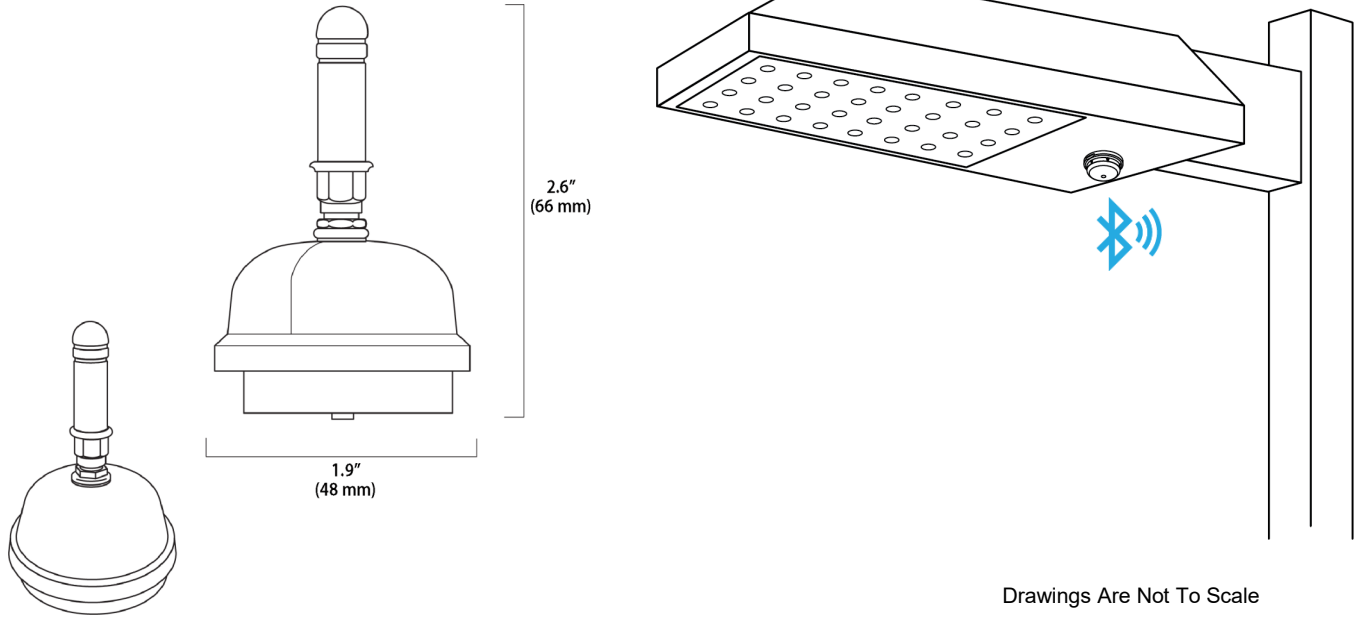|	
Product Type: Single Channel Wireless DALI Controller with Long Range Antenna	
Input Voltage | Current Consumption: 24 VDC | 100 mA max	
DALI: Complies with DALI D4i Specifications	
Mounting: Mounts to Zhaga Book18 receptacle (PSC-ZAD-R1L) sold separately	
Max Bluetooth Range[1]: 1020 feet (310 meters)	
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.
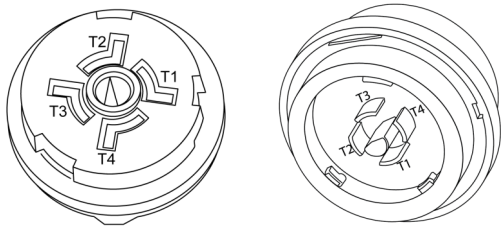
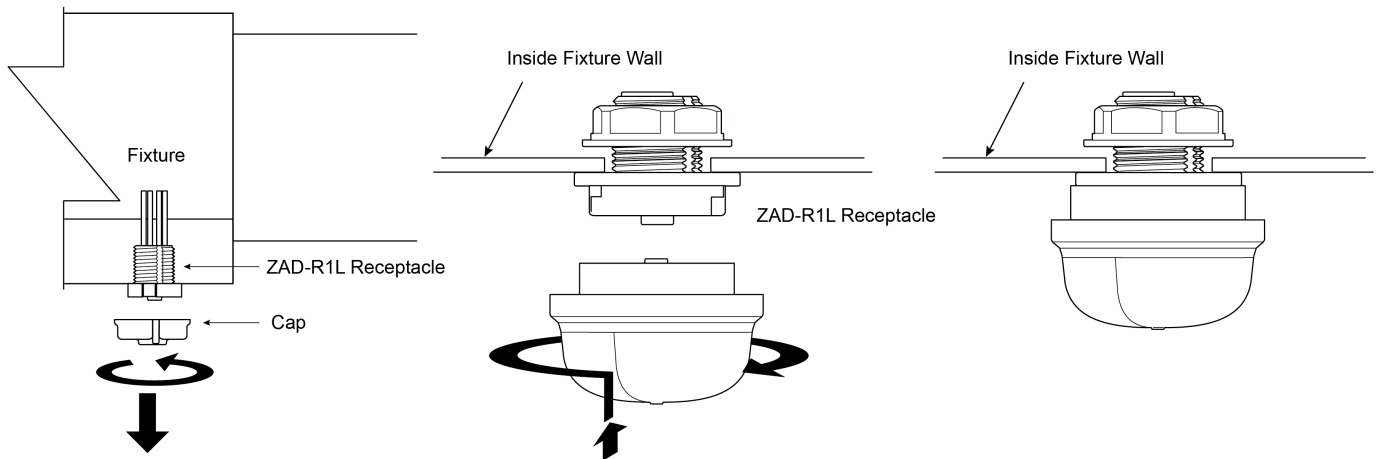| Project	
Location/Type	

![MW Connect logo]

Physical Dimensions

2.6"
(66 mm)

1.9"
(48 mm)

Drawings Are Not To Scale

Installation Of Controller

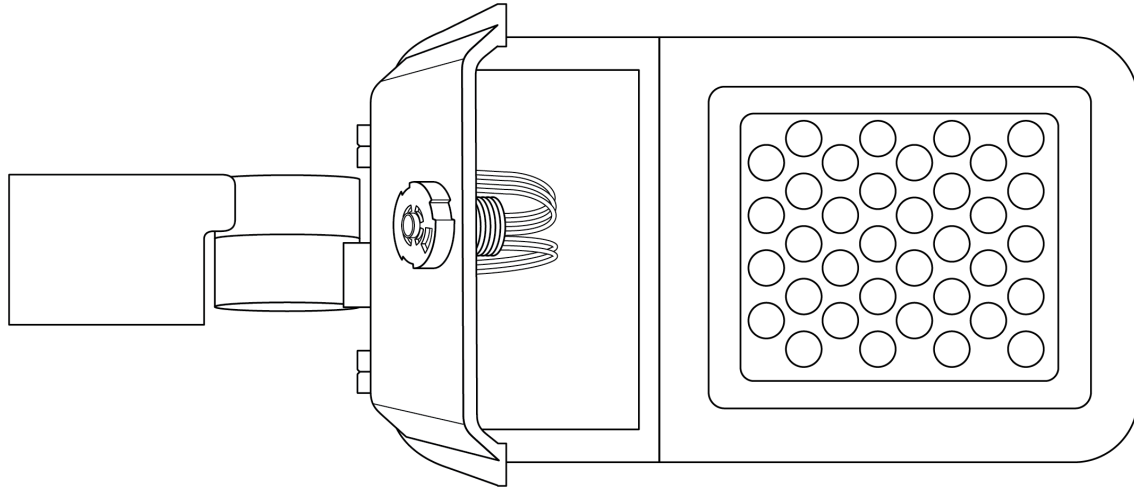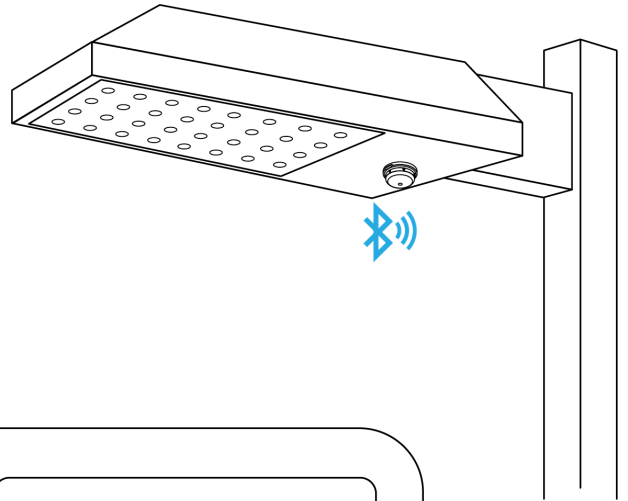| Tab/Slot	Designation
T1	24VDC+ Power to Controller
T2	DALI- (Negative DALI Bus) & 24VDC- Ground Power to Controller
T3	DALI+ (Positive DALI Bus)
T4	Reserved

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

Fixture

ZAD-R1L Receptacle

Cap

Inside Fixture Wall

ZAD-R1L Receptacle

Inside Fixture Wall

To install ZAD controller, first remove the protective cap on the Zhaga receptacle by pushing up and rotating counterclockwise.
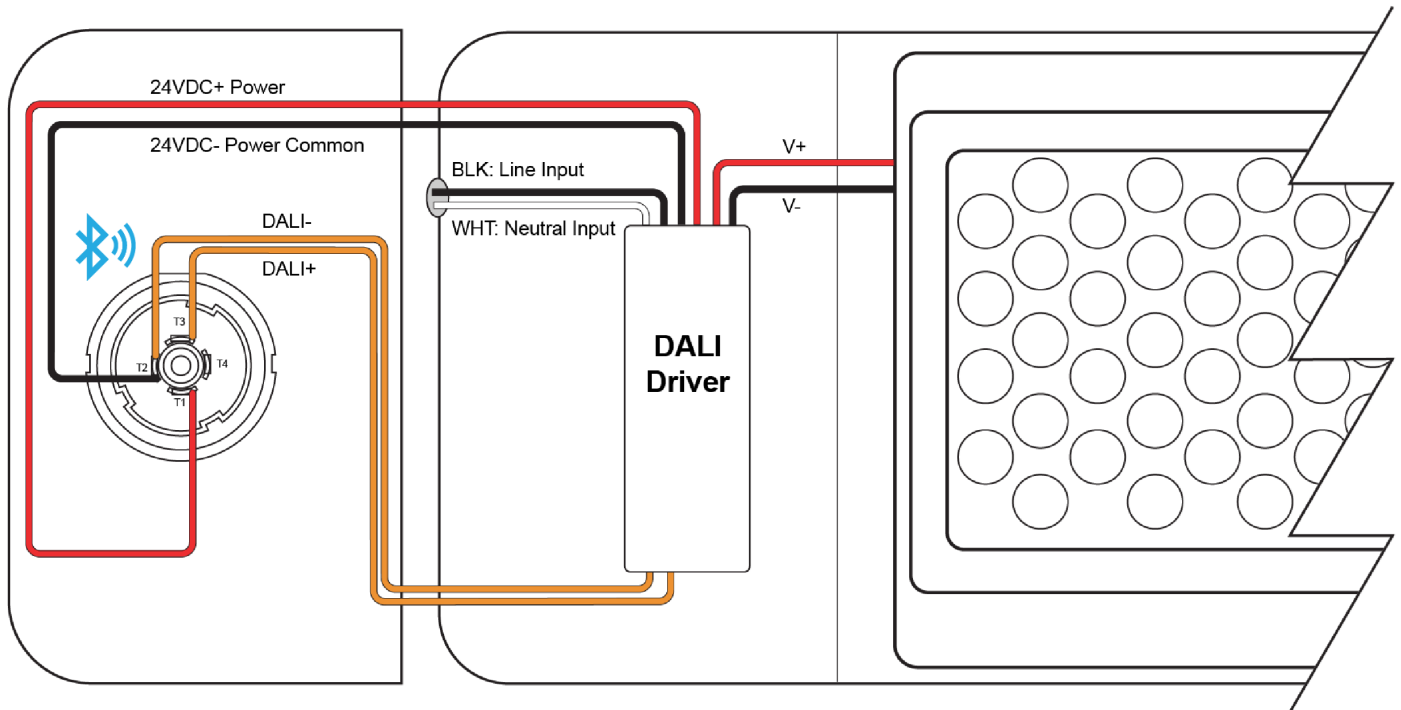
To install ZAD controller insert, push up and rotate to lock. No tools required. Luminaires can be easily and quickly upgraded.

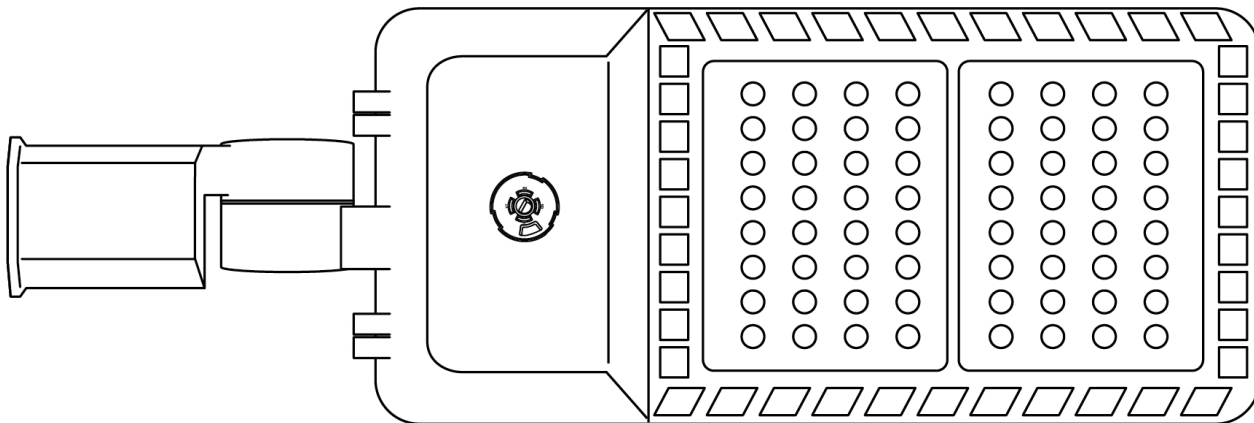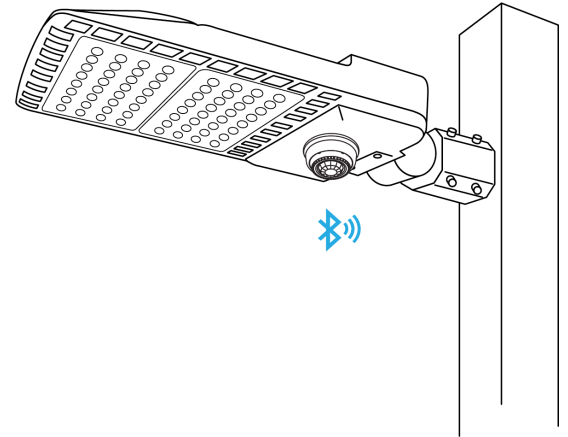**Example Application: Controller Installed with DALI driver**

ZAD-R1L Zhaga Book18 receptacle on outside of fixture

Drawings Are Not To Scale

24VDC+ Power
24VDC- Power Common
DALI-
DALI+
BLK: Line Input
WHT: Neutral Input
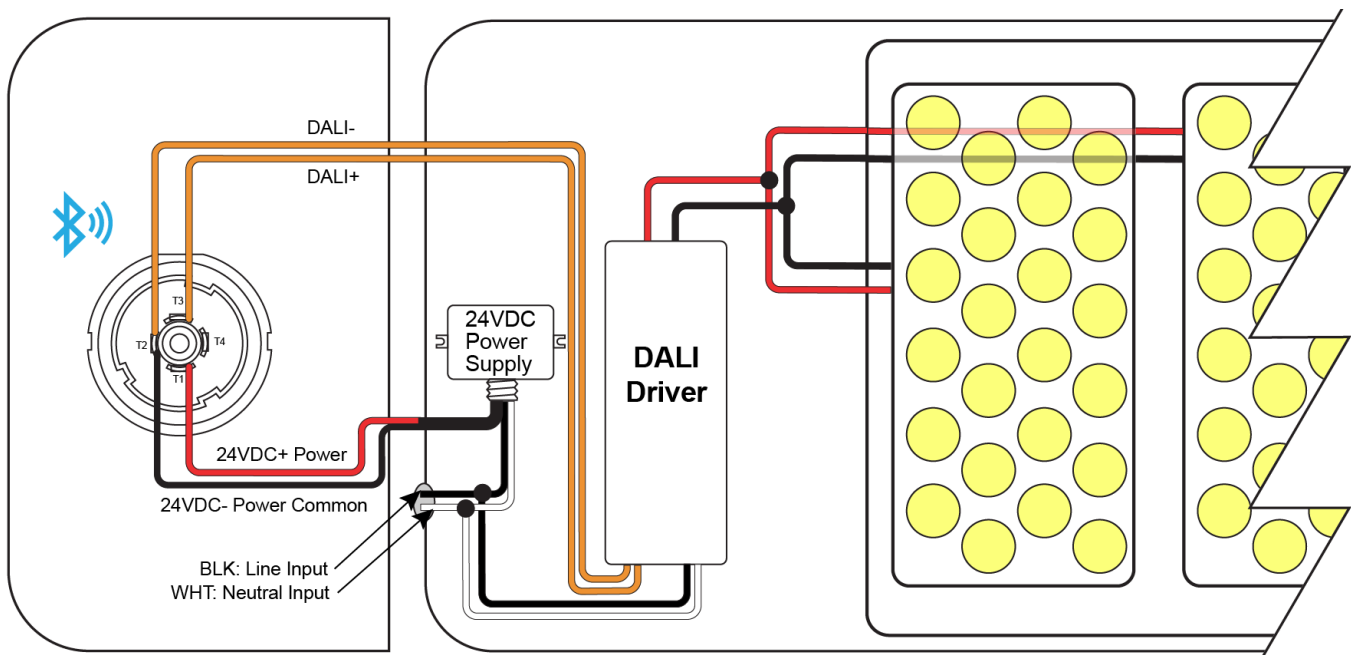V+
V-
T1 T2 T3 T4
DALI Driver

Example Application: Controller Installed with DALI Driver and 24 VDC Power Supply

ZAD-R1L Zhaga Book18 receptacle on outside of fixture

Drawings Are Not To Scale

DALI-

DALI+

T3

T2

T4

T1

24VDC Power Supply

DALI Driver

24VDC+ Power

24VDC- Power Common

BLK: Line Input

WHT: Neutral Input

How To Order

Model No.	Description	Input Voltage	Output
PSC-ZAD-WCM-100-BLE-CB/EXA	Casambi Mesh DALI Controller with Long-Range Antenna, Clear Housing	24VDC	DALI
PSC-ZAD-R1L	Zhaga Book18 Quick-Connect Receptacle for use with Sensor-Controllers, Black Finish		

Design and specifications are subject to change without notice.