

TruBlu 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 Bluetooth® SIG Mesh Systems
- Features High and Low-End Trim Adjustment, Zoning & Continuous Dimming
- IP65 Rated for Outdoor or Indoor Applications
- 24VDC Powered
- Conforms with DLC NLC5 Cybersecurity Standards



For Indoor or Outdoor use



Applications

The PSC-ZAD-WCM-100-BLE-SR/EXA is a single channel wireless fixture controller with a long range antenna. This controller is designed to work with a Bluetooth® SIG mesh system by converting standard Bluetooth® SIG mesh protocol to DALI protocol.

The controller is IP65 rated and suitable for exterior use.

This device communicates directly with DALI drivers and 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.

Accessories

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

Operation

TruBlu™ Mesh: The ZAD-WCM controller is qualified by Bluetooth SIG for its Bluetooth Mesh 1.0.1 specification and is compatible with a Bluetooth mesh network and configured via the TruBlu™ web portal or iOS mobile app. The app is used for initial setup and subsequent parameter adjustment.

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

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 TruBlu™ 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

DALI: Complies with DALI D4i Specifications

Mounting: Mounts to Zhaga Book18 receptacle (PSC-ZAD-R1L) sold separately

Max Bluetooth Range¹:
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

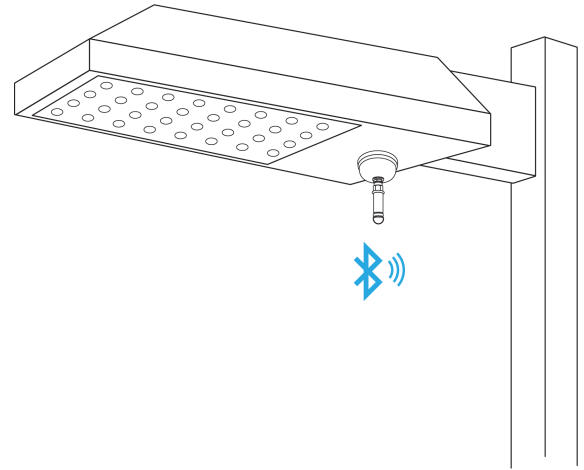
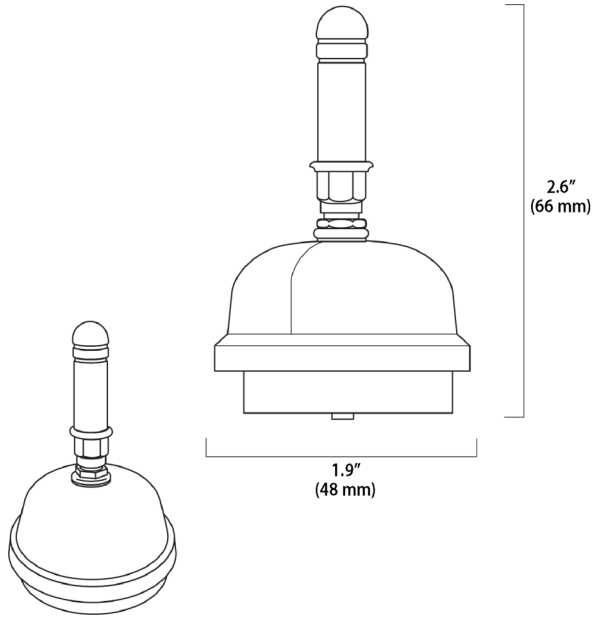
Note:

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

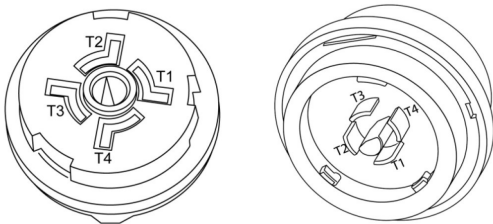
Location/Type

Physical Dimensions



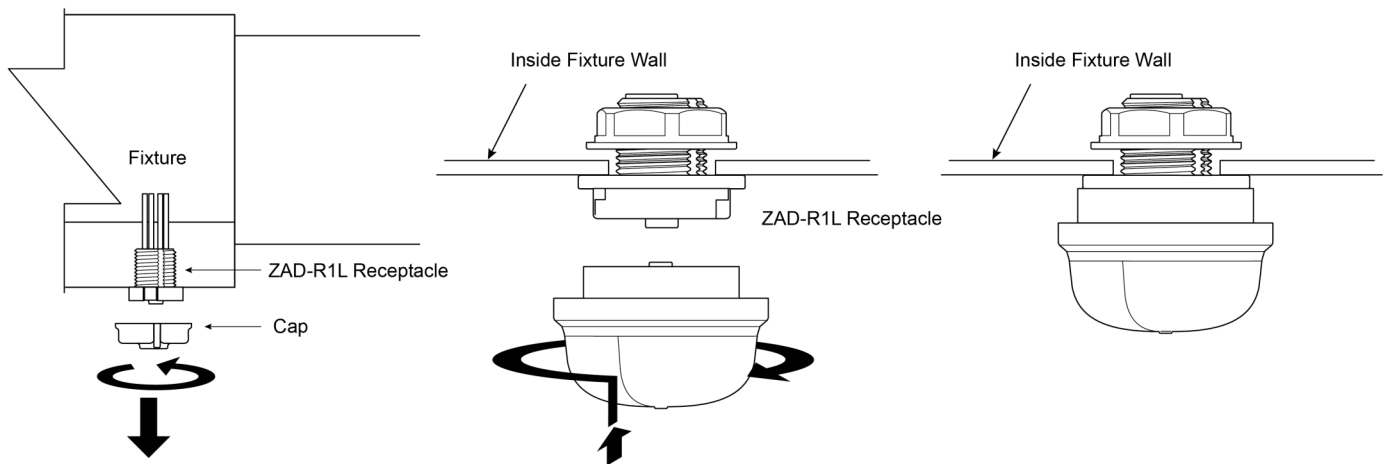
Drawings are not to scale

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

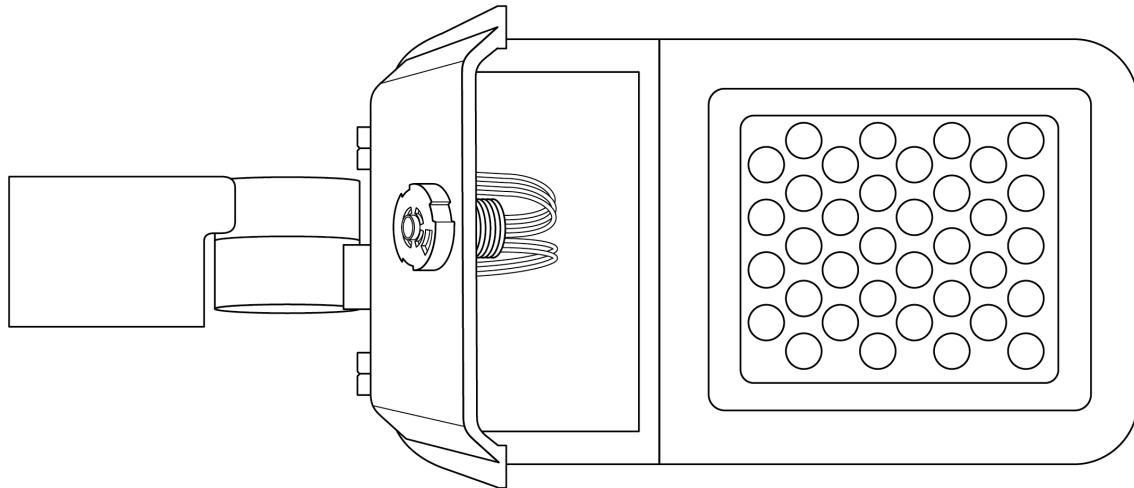
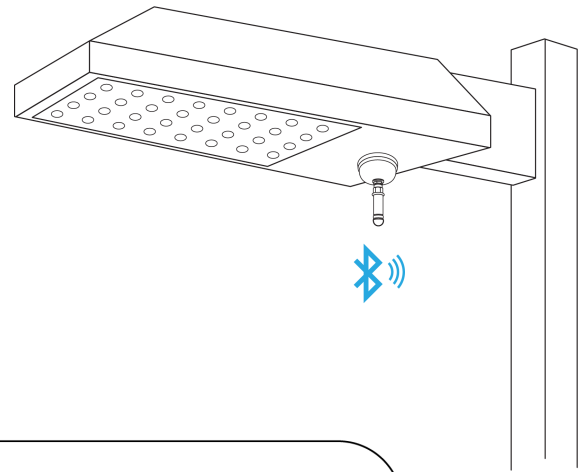
The receptacle for a ZAD controller is installed at fixture manufacturer and is shipped to job site with a protective cap.



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

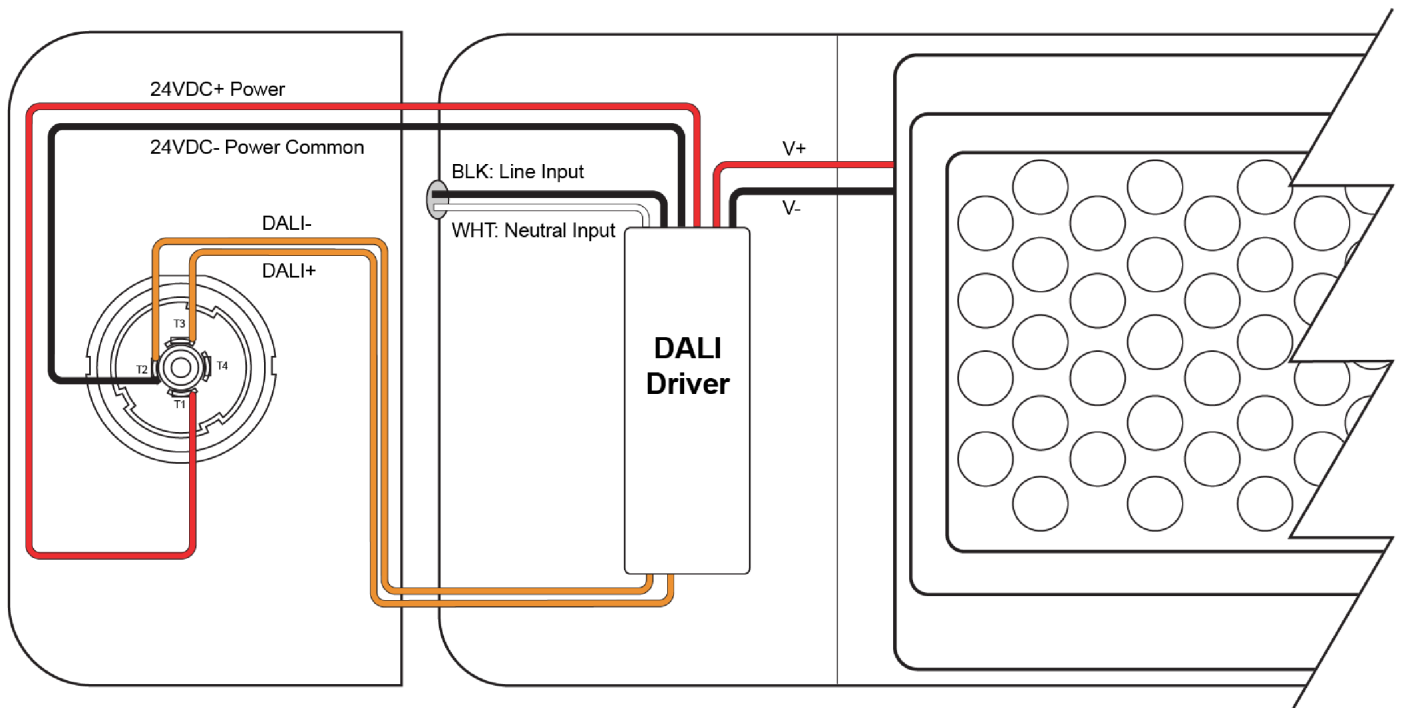
To install the ZAD controller insert, push up and rotate to lock. No tools required. Luminaires can be easily and quickly upgraded.

Example Application: Controller Installed with DALI driver

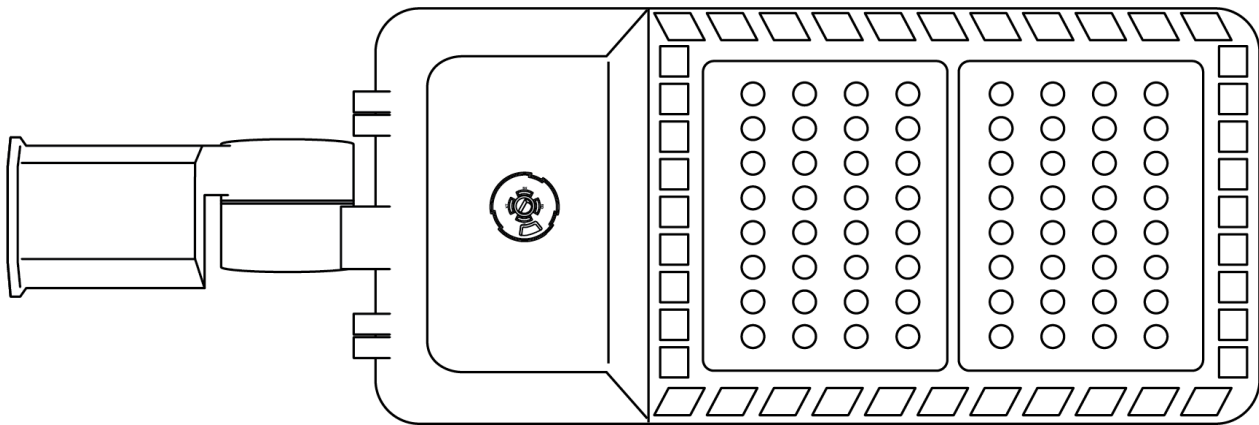
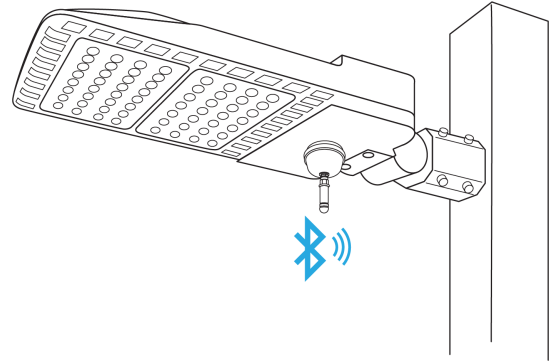


ZAD-R1L Zhaga Book18 receptacle on outside of fixture

Drawings Are Not To Scale

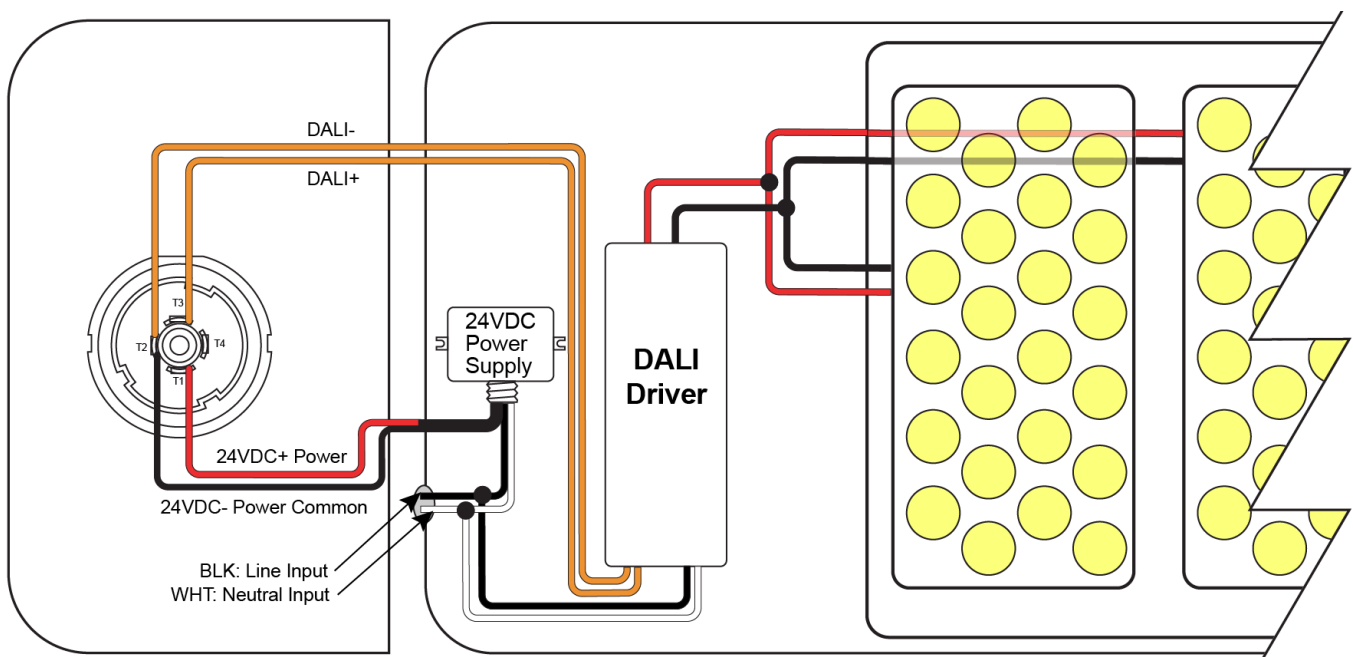


Example Application: Controller Installed with DALI Driver and 24 VDC Power Supply



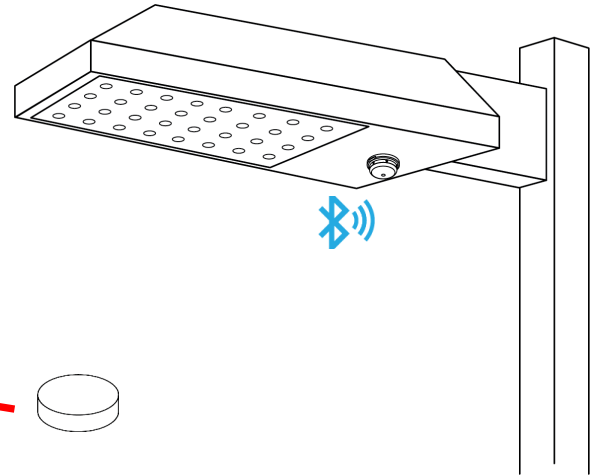
ZAD-R1L Zhaga Book18 receptacle on outside of fixture

Drawings Are Not To Scale

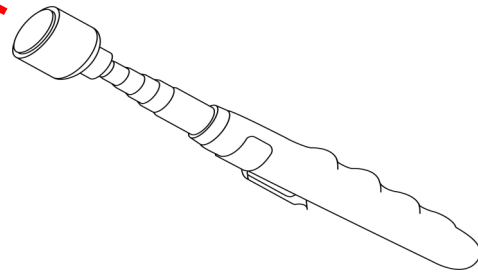


Reset Instructions

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-ZAD-WCM-100-BLE-SR/EXA	TruBlu™ Mesh DALI Controller with Long-Range Antenna, Clear Housing, Silvair Technology Partner	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.