

TruBlu Mesh DALI Outdoor Controller

Overview

- Complies with DALI D4i Specifications
- Single Channel DALI Wireless Controller
- Mounts to Light Fixture/Luminaire via Zhaga Book 18 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
Receptacle Sold Separately



Applications

The PSC-ZAD-WCM-100-BLE-SR and the PSC-ZAD-WCM-110-BLE-SR are a series of Single Channel DALI D4i Wireless Fixture Controllers. These controllers are designed to work with a Bluetooth® SIG mesh system by converting standard Bluetooth® SIG mesh protocol to DALI protocol.

The controllers are IP65 rated and suitable for exterior use. The PSC-ZAD-WCM-110-BLE-SR version also has an integral photosensor.

These devices communicate directly with DALI drivers and are controlled wirelessly via Bluetooth® 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-SR and the PSC-ZAD-WCM-110-BLE-SR controllers require 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.

Photosensor: An integral photosensor (PSC-ZAD-WCM-110-BLE-SR model only) provides ambient light level sensing for automatic control of daytime or nighttime designated scenarios.

Quick Connector: The controller mounts to a Zhaga Book 18 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:
Wireless DALI Controller

Input Voltage | Current Consumption:
24 VDC | 100 mA max

DALI: Complies with DALI D4i Specifications

Mounting: Mounts to Zhaga Book 18 receptacle (PSC-ZAD-R1L) sold separately

Max Bluetooth Range¹:
100ft (30.4m)

Operating Temperature:
-40°F to 158°F (-40°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: Dark Brown, Black or White

Warranty: 5 years

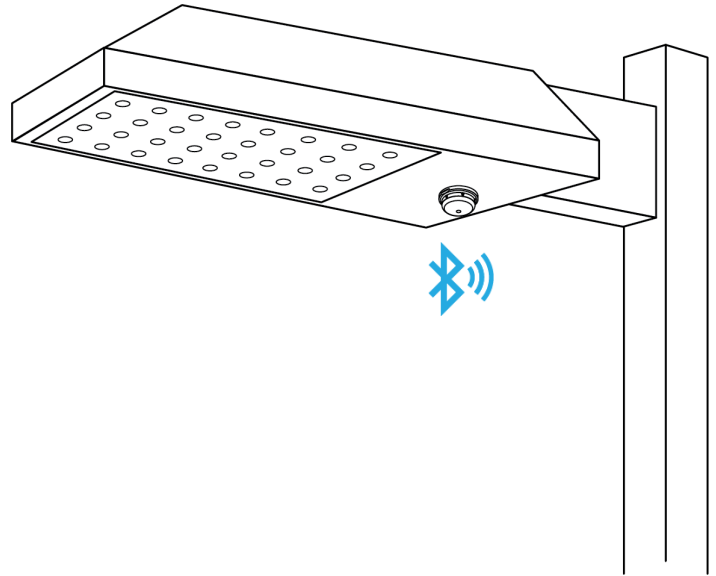
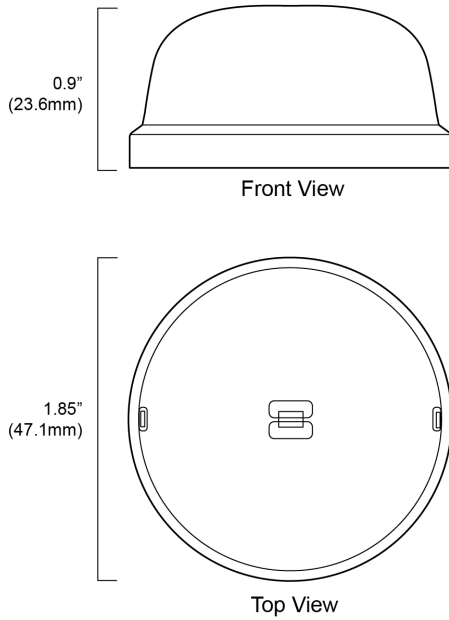
Note:

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

Project

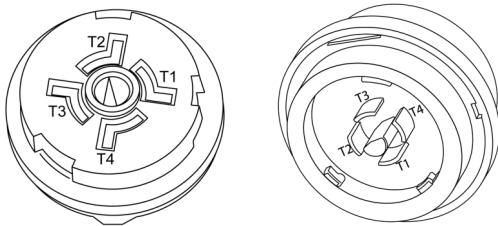
Location/Type

Physical Dimensions



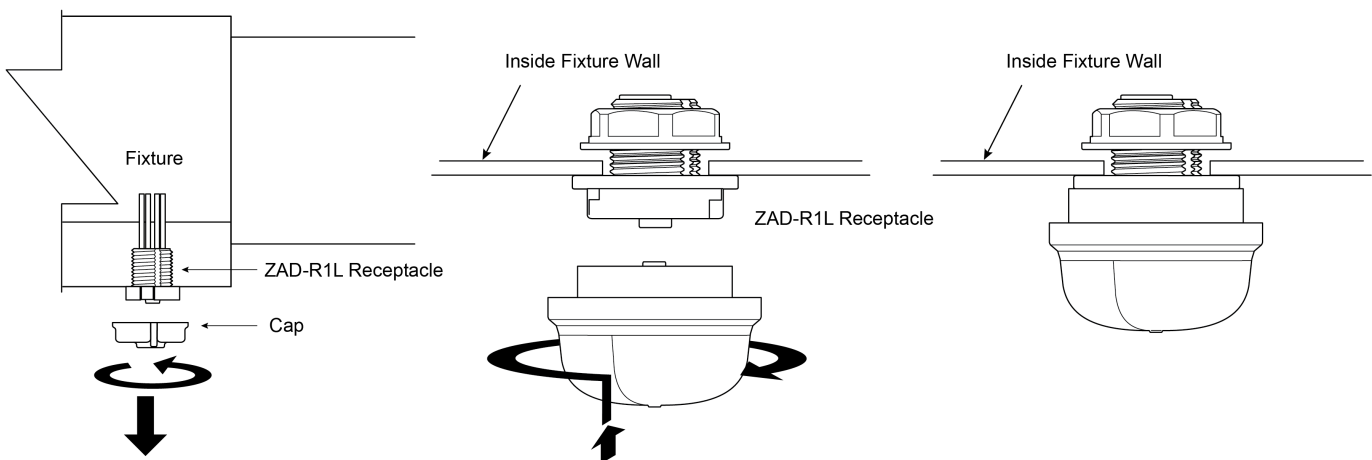
Drawing Are Not To Scale

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

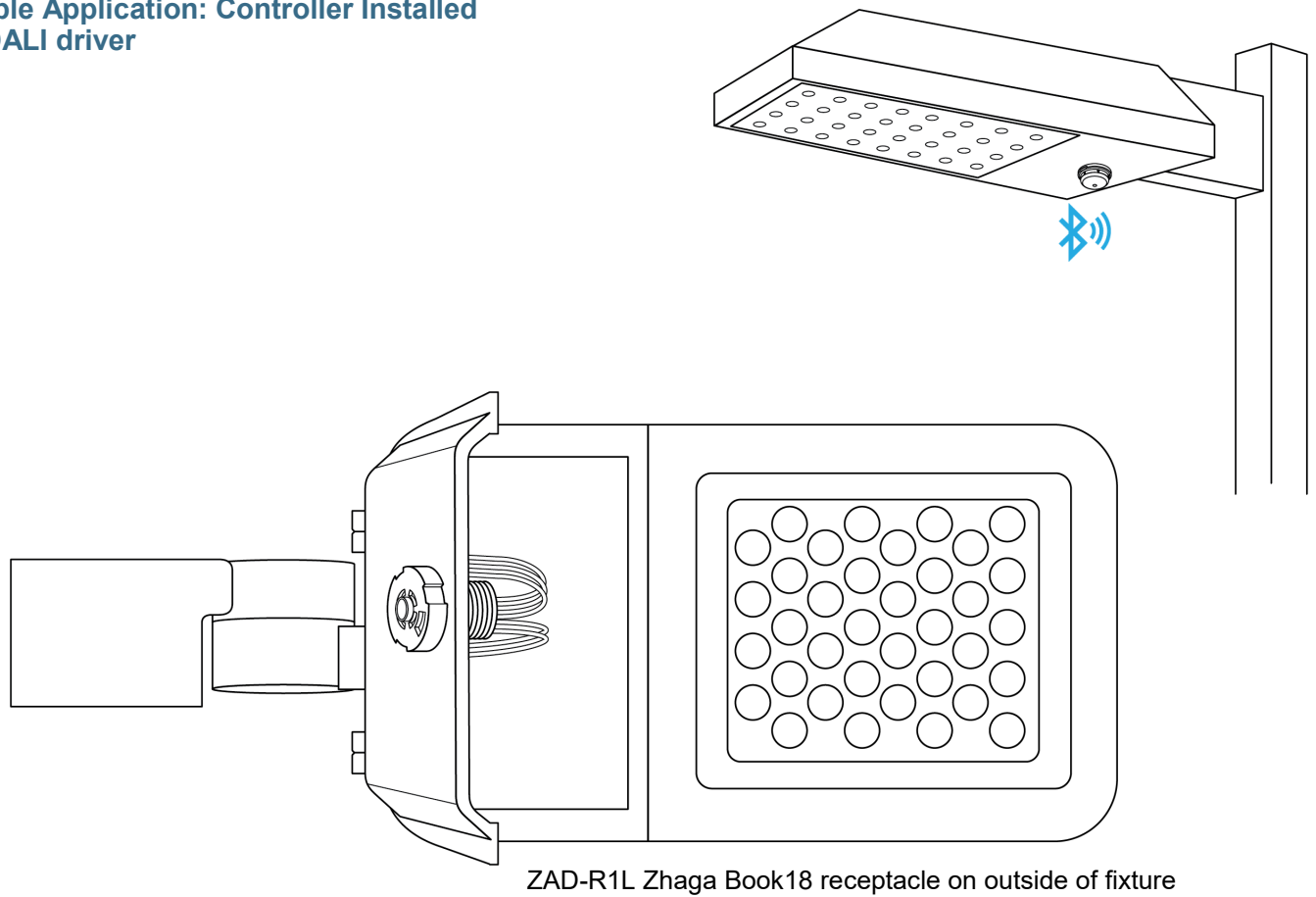
The receptacle for ZAD controller is installed at fixture manufacturer and is shipped to job site with a protective cap.



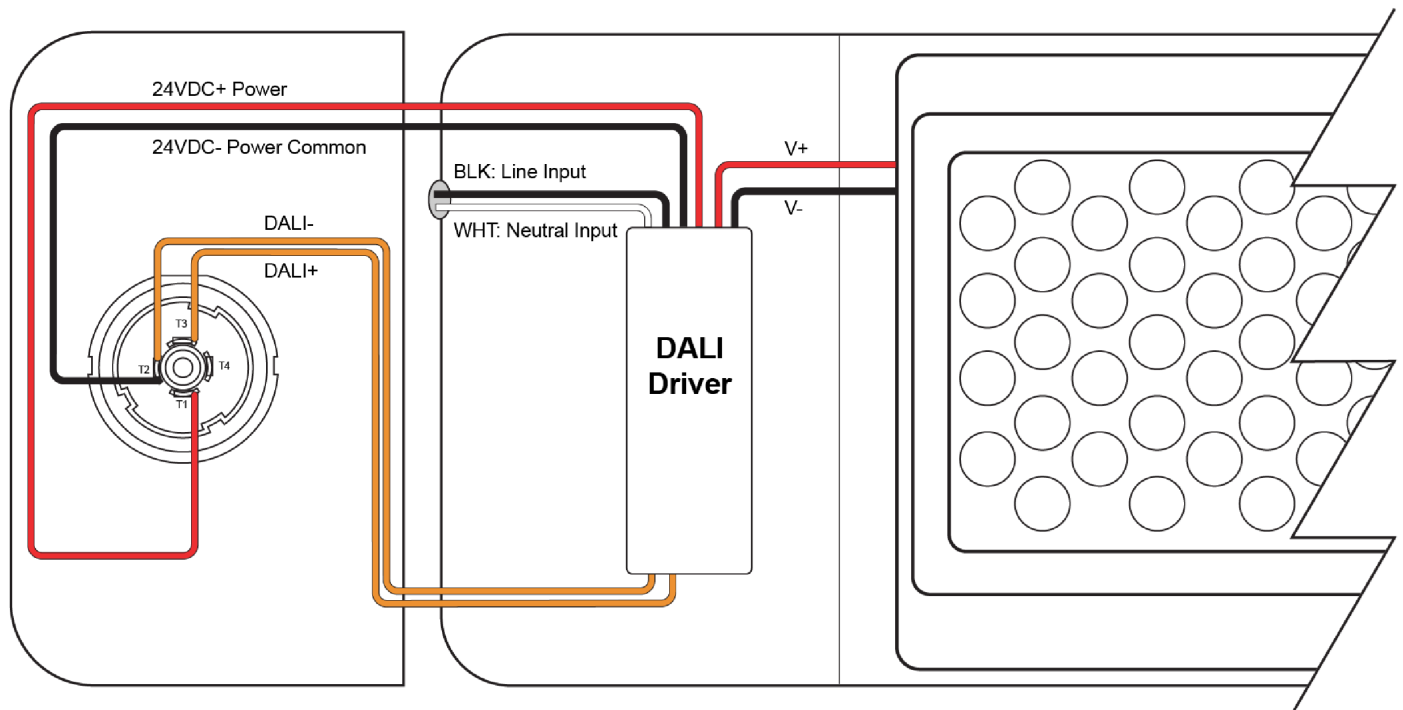
To install ZAD controller, first remove the protective cap on the Zhaga receptacle by pushing up and rotating counterclockwise.

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

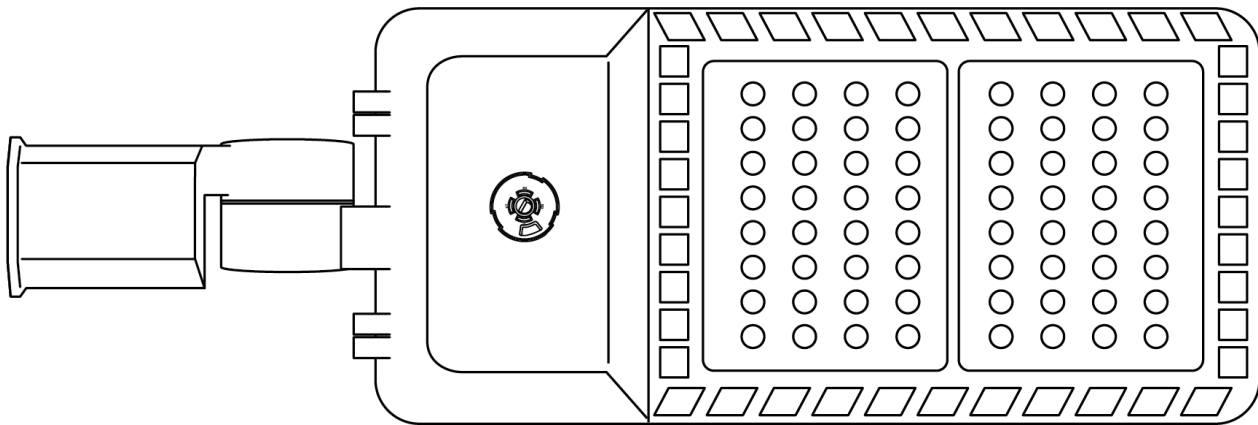
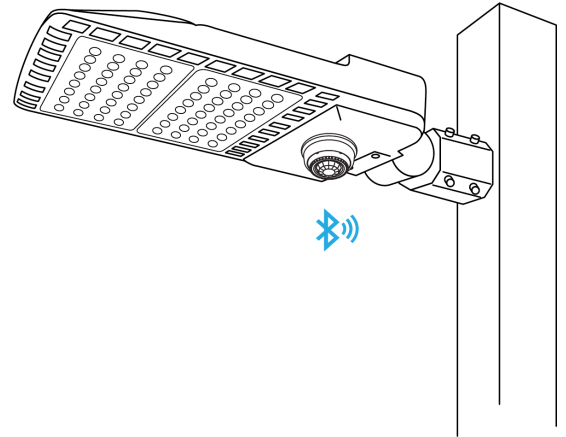
Example Application: Controller Installed with DALI driver



Drawings Are Not To Scale

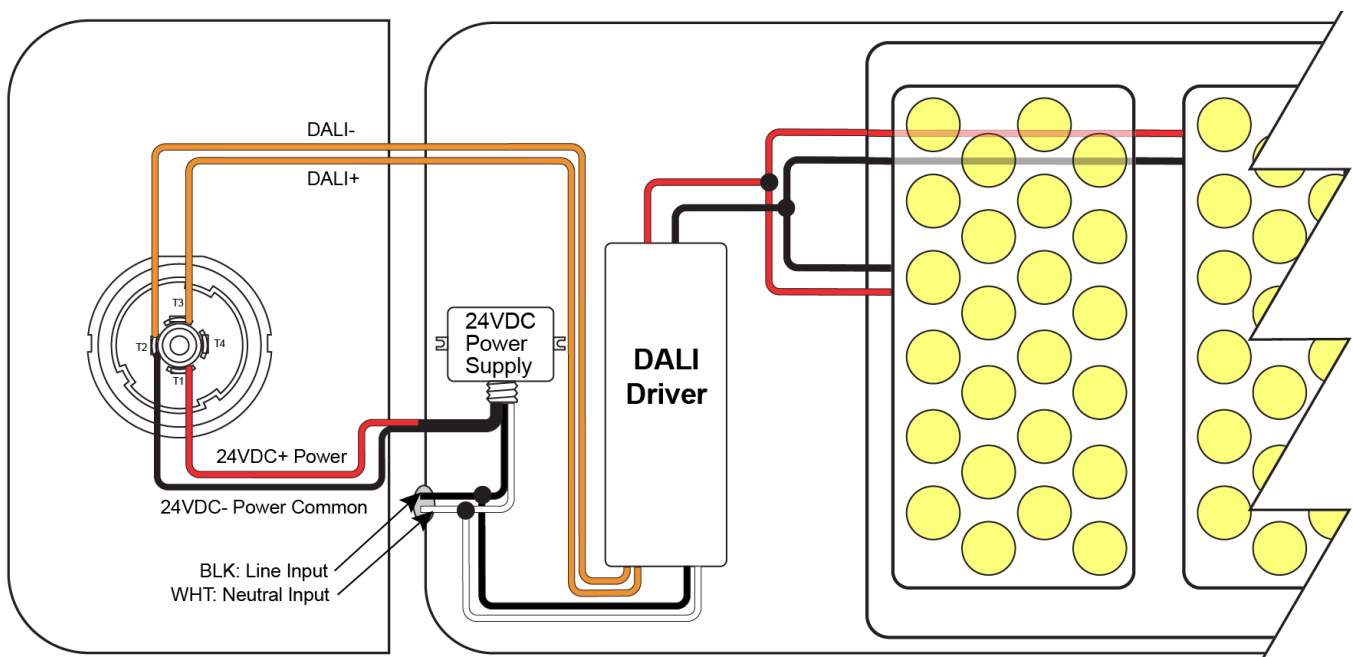


Example Application: Controller Installed with DALI Driver and 24 VDC Power Supply



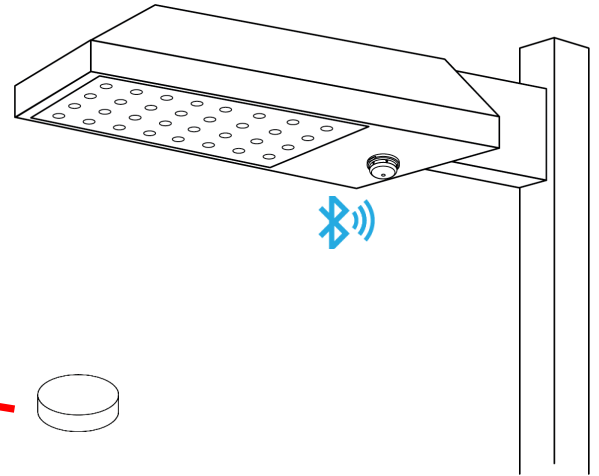
ZAD-R1L Zhaga Book18 receptacle on outside of fixture

Drawings Are Not To Scale

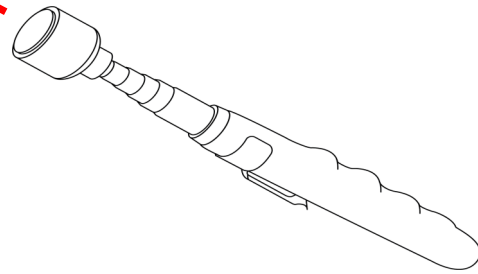


Reset Instructions

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-BN	TruBlu™ Mesh DALI Controller, Dark Brown Finish	24VDC	DALI
PSC-ZAD-WCM-110-BLE-SR-BN	TruBlu™ Mesh DALI Controller with Photocell, Dark Brown Finish	24VDC	DALI
PSC-ZAD-WCM-100-BLE-SR-WT	TruBlu™ Mesh DALI Controller, White Finish	24VDC	DALI
PSC-ZAD-WCM-110-BLE-SR-WT	TruBlu™ Mesh DALI Controller with Photocell, White Finish	24VDC	DALI
PSC-ZAD-WCM-100-BLE-SR-BK	TruBlu™ Mesh DALI Controller, Black Finish	24VDC	DALI
PSC-ZAD-WCM-110-BLE-SR-BK	TruBlu™ Mesh DALI Controller with Photocell, Black Finish	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.