TruBlu Mesh DALI Outdoor Controller with Long Range Antenna

Overview

- Bluetooth® NLC Certified
- 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

- Features High and Low-End Trim Adjustment, Zoning & Continuous Dimming
- IP65 Rated for Outdoor or Indoor Applications
- 24VDC or DALI Bus Powered Options
- 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 Bluetooth® NLC certified and 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.

Two Power Input options are available. The Aux Powered (-100) model requires 24VDC power to operate. The DALI Bus Powered (-200) model uses DALI Bus power to operate. See the product wiring information for wiring designations.

Operation

TruBlu™ Mesh: The ZAD-WCM/EXA controller is a Bluetooth NLC certified device by the Bluetooth SIG and offers true multi-vendor interoperability. Configuration of the device and mesh network is accomplished 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:
24VDC | 100 mA max (Aux Powered)
16VDC | 100 mA max (DALI Bus Powered)

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
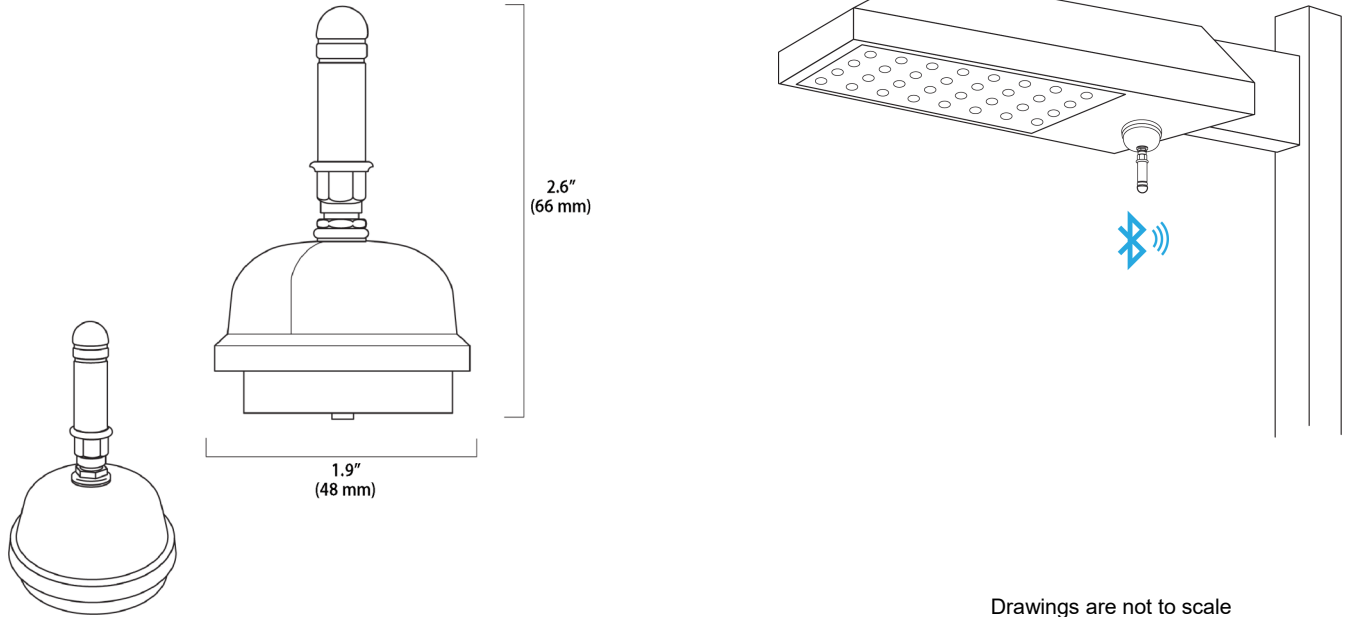
Color: Clear/Transparent Housing

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.
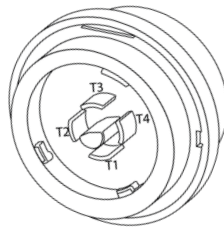
Project	
Location/Type	

Physical Dimensions

2.6"
(66 mm)

1.9"
(48 mm)

Drawings are not to scale

Product Wiring

View of Back of Device

View of Zhaga Book 18
Device Receptacle

Tab/Slot	Wiring Designation	
	-100 Aux Powered Models	**-200 DALI Bus Powered Models**
T1	24VDC+ Power to Sensor-Controller	Reserved
T2	DALI- (Negative DALI Bus) & 24VDC- Ground Power to Sensor-Controller	DALI (16VDC DALI Bus) Polarity Independent
T3	DALI+ (Positive DALI Bus)	DALI (16VDC DALI Bus) Polarity Independent
T4	Reserved	Reserved

For Wiring Diagrams featuring the PSC-ZAD product series, visit the following link:

http://mwconnect.us/wiring/PSC-ZAD

Installation of Device
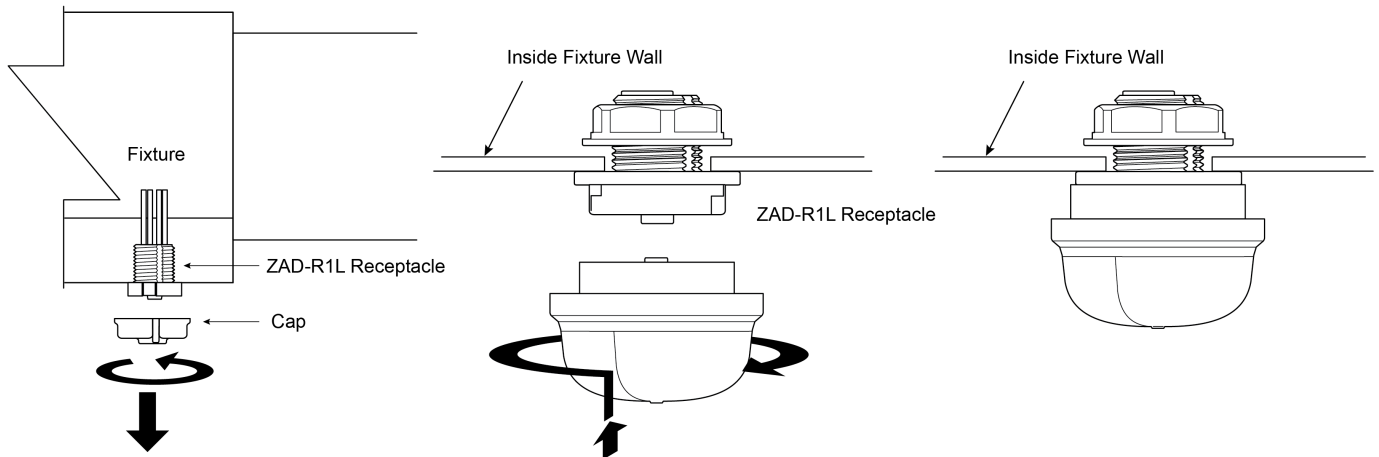
To install a ZAD device, first remove the protective cap on the Zhaga Book 18 receptacle by pushing up and rotating counterclockwise.

To install ZAD devices insert, push in and rotate clockwise to lock. No tools are required. Luminaires can be easily and quickly upgraded.

The receptacle for ZAD devices is typically installed by luminaire manufacturer and is shipped to job site with a protective cap.

Reset Instructions

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

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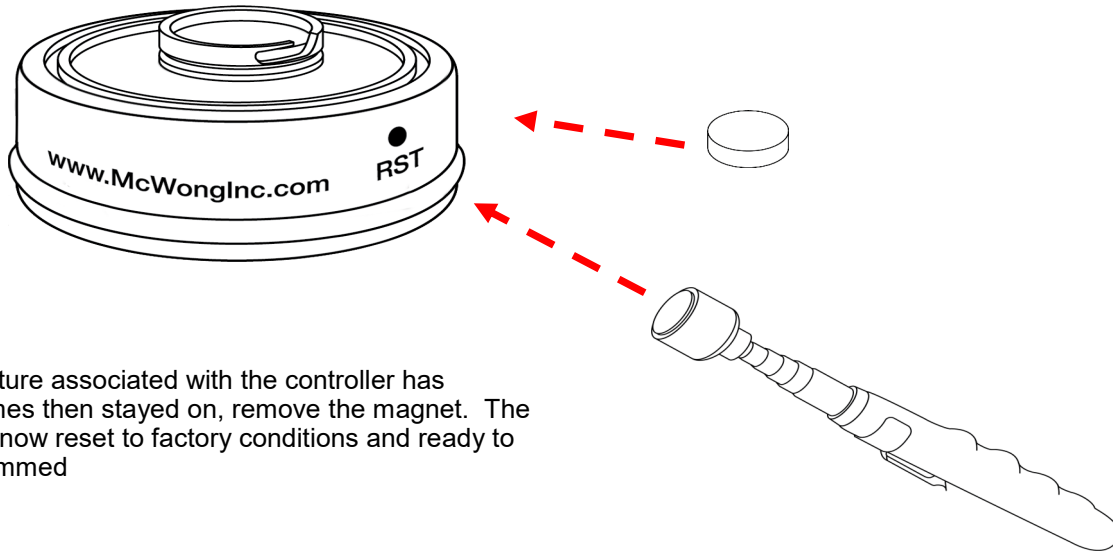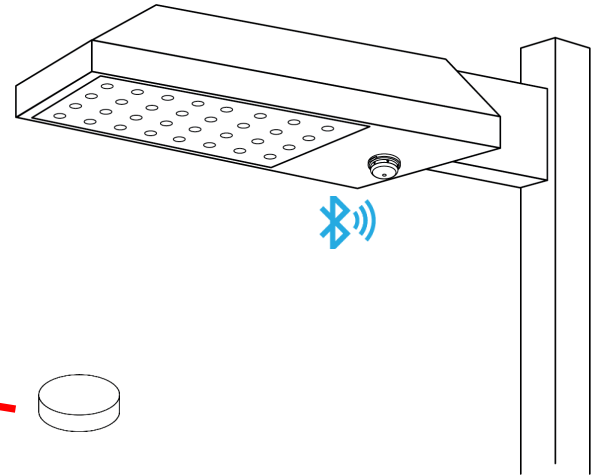
Once the fixture associated with the controller has flashed 3 times then stayed on, remove the magnet. The controller is now reset to factory conditions and ready to be reprogrammed

How To Order

Model No.	Description	Input Voltage	Output
PSC-ZAD-WCM-100-BLE-SR/EXA	TruBlu Mesh Aux Powered DALI Controller with Long-Range Antenna, Clear Housing	24VDC	DALI
PSC-ZAD-WCM-200-BLE-SR/EXA	TruBlu Mesh DALI Bus Powered DALI Controller with Long-Range Antenna, Clear Housing	16VDC	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.