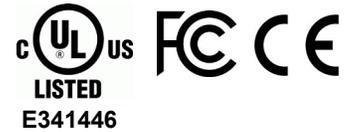# Wireless 2-Channel Fixture Controller
with Tunable White

Overview

- 2-Channel 0-10VDC Dimming for White Tuning
- Mounts in Fixture
- Casambi Wireless Mesh
- High-End Trim, Zoning, Continuous Dimming

- Also available without Relay drive (-EC version)
- Available in standard 12-24VDC
- ioXt Alliance cybersecurity certification

Suitable for indoor use only

cULus LISTED E341446   FC   CE

Applications

The PSC-WCM-100-BLE-CB is a 2-Channel Wireless Fixture Controller that controls 0-10 dimming and white tuning. The standard version has active high output for relay or sensor control, and has a general purpose I/O (-EC version does not have a relay).

These devices are controlled using Casambi Wireless Mesh technology allowing for dimming of LED lighting. The compact size allows for seamless integration to the fixture.

See the "How to Order" for suffixes of part numbers to ensure correct features for Tunable White Drivers.

Accessories

Power Pack: The PSC-WCM-100-BLE-CB operates on 12-24VDC.

These fixture controllers require a separate mwConnect PacWave™ power pack. See mwConnect PacWave™ Power Pack data sheets.

Operation

Casambi Wireless Mesh Controls: The controller connects to a wireless mesh network via a mobile app, available as iOS or Android, to allow initial setup and subsequent parameters adjustments.

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

2-Channel Dimming: allows for two 0-10 dimming channels for tunable white color control. Using light fixtures that have two drivers, with cool and warm LEDs provides the ability to control the color temperature output.

Relay Control: High control output can be used to trigger relays or other control circuitry.

See the mwConnect Casambi Commissioning User Manual for more information.

Summary

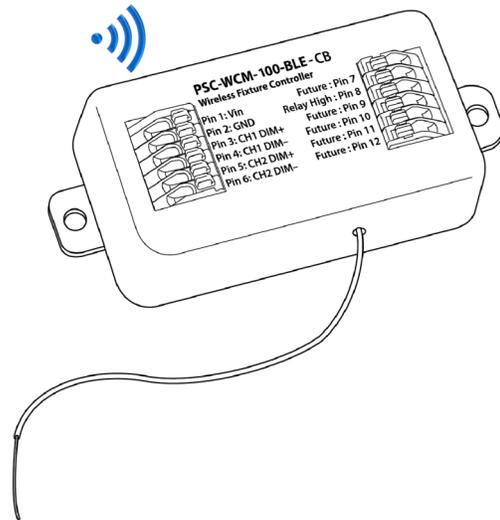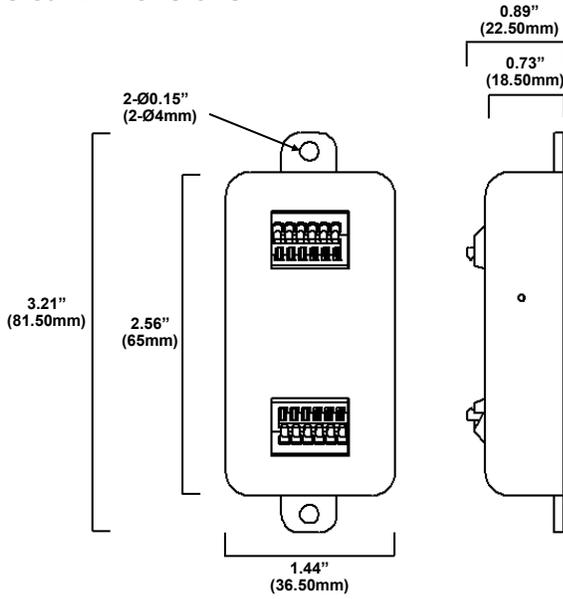|	
Product Type: 2 Channel Fixture Controller	
Input Voltage | Current Consumption: 12-24 VDC | 100 mA	
0-10V Output (x2): 30 mA	
Output: Active High—Vin-2.5V 30mA source	
Mounting: Fixture Mount	
Max Wireless Range[1]: 100ft (30.4m)	
Operating Temperature: -30° C to 70°C	
Storage Temperature: -40° C to 80°C	
Relative Humidity: 90-95% non-condensing	
Color: White	
Warranty: 5 years	

Note:

1. Wireless Range is highly dependent on the integration of fixtures, surrounding environment and conditions. It is recommended to conduct testing for range accuracy.
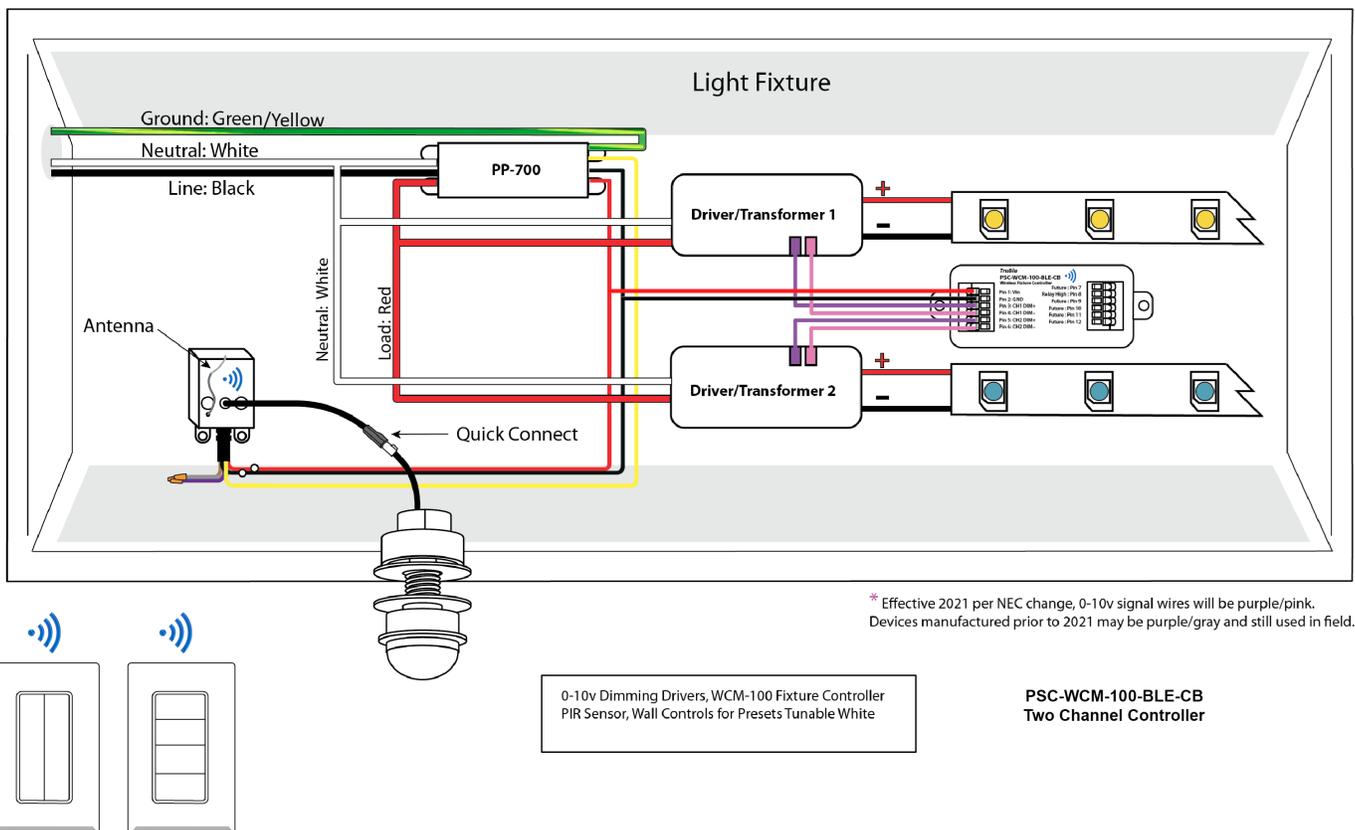
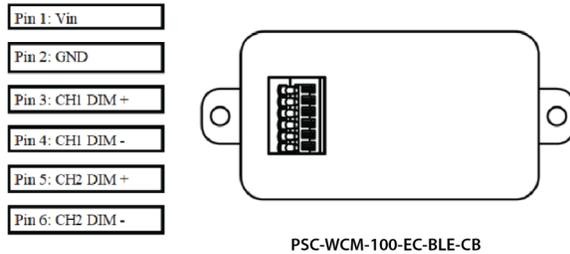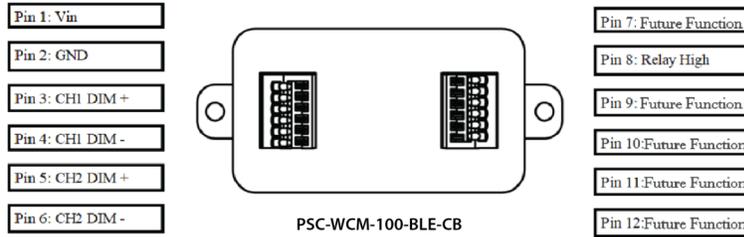| Project	
Location/Type	

Physical Dimensions

0.89"
(22.50mm)

0.73"
(18.50mm)

2-Ø0.15"
(2-Ø4mm)

3.21"
(81.50mm)

2.56"
(65mm)

1.44"
(36.50mm)

PSC-WCM-100-BLE-CB
Wireless Fixture Controller

Pin 1: Vin
Pin 2: GND
Pin 3: CH1 DIM+
Pin 4: CH1 DIM-
Pin 5: CH2 DIM+
Pin 6: CH2 DIM-

Future : Pin 7
Relay High : Pin 8
Future : Pin 9
Future : Pin 10
Future : Pin 11
Future : Pin 12

Drawings are Not to Scale

Wiring Diagram

Light Fixture

Ground: Green/Yellow
Neutral: White
Line: Black

PP-700

Driver/Transformer 1

Driver/Transformer 2

Neutral: White

Load: Red

Antenna

Quick Connect

Trulite
PSC-WCM-100-BLE-CB
Wireless Fixture Controller

Pin 1: Vin
Pin 2: GND
Pin 3: CH1 DIM+
Pin 4: CH1 DIM-
Pin 5: CH2 DIM+
Pin 6: CH2 DIM-

Future : Pin 7
Relay High : Pin 8
Future : Pin 9
Future : Pin 10
Future : Pin 11
Future : Pin 12

*Effective 2021 per NEC change, 0-10v signal wires will be purple/pink.
Devices manufactured prior to 2021 may be purple/gray and still used in field.

0-10v Dimming Drivers, WCM-100 Fixture Controller
PIR Sensor, Wall Controls for Presets Tunable White

PSC-WCM-100-BLE-CB
Two Channel Controller

Wiring Terminations

| Pin 1: Vin |
| Pin 2: GND |
| Pin 3: CH1 DIM + |
| Pin 4: CH1 DIM - |
| Pin 5: CH2 DIM + |
| Pin 6: CH2 DIM - |

| Pin 7: Future Function |
| Pin 8: Relay High |
| Pin 9: Future Function |
| Pin 10:Future Function |
| Pin 11:Future Function |
| Pin 12:Future Function |

PSC-WCM-100-BLE-CB

| Pin 1: Vin |
| Pin 2: GND |
| Pin 3: CH1 DIM + |
| Pin 4: CH1 DIM - |
| Pin 5: CH2 DIM + |
| Pin 6: CH2 DIM - |

PSC-WCM-100-EC-BLE-CB

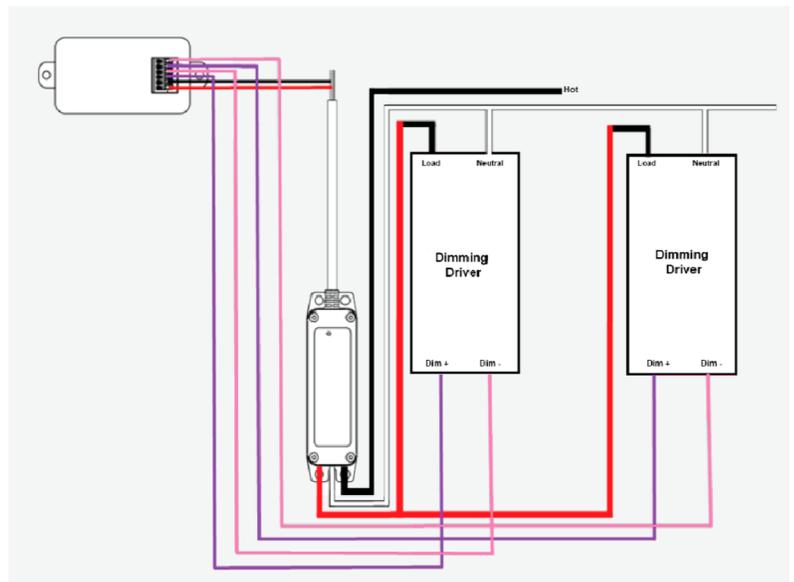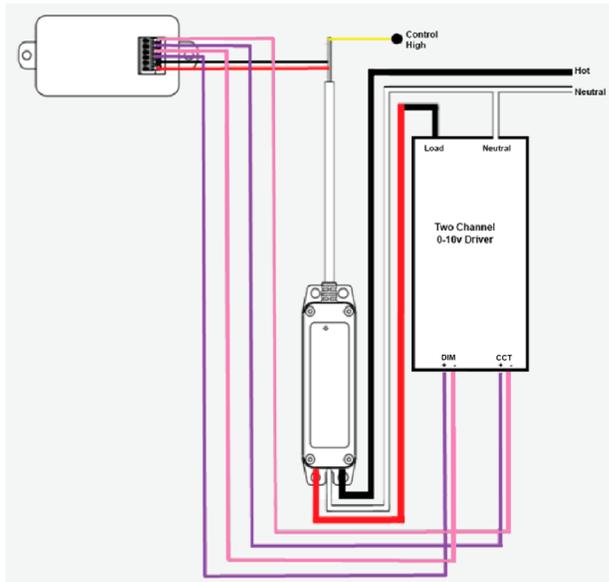**(1) Two Channel Dimming Driver
with Power Pack
WCM-100-BLE-EC-CB-CCT1**

**(2) One Channel Dimming Driver
with Power Pack
WCM-100-EC-BLE-CB-CCT2**

How to Order

Model No.	Description	Input Voltage	Output
PSC-WCM-100-BLE-CB	Wireless Fixture Controller, Casambi Wireless Mesh (no color tuning)	12-24 VDC	0-10 VDC x2 Control High
PSC-WCM-100-BLE-CB-CCT1	Wireless Fixture Controller, Casambi Wireless Mesh, Tunable White (Single Driver with Two Channel Output)	12-24 VDC	0-10 VDC x2 Control High
PSC-WCM-100-BLE-CB-CCT2	Wireless Fixture Controller, Casambi Wireless Mesh, Tunable White (Two Drivers with One Channel Output)	12-24 VDC	0-10 VDC x2 Control High
PSC-WCM-100-EC-BLE-CB	Wireless Fixture Controller, Casambi Wireless Mesh, (No Color Tuning)	12-24 VDC	0-10 VDC x2
PSC-WCM-100-EC-BLE-CB-CCT1	Wireless Fixture Controller, Casambi Wireless Mesh, Tunable White (Single Driver with Two Channel Output)	12-24 VDC	0-10 VDC x2
PSC-WCM-100-EC-BLE-CB-CCT2	Wireless Fixture Controller, Casambi Wireless Mesh, Tunable White (Two Drivers with One Channel Output)	12-24 VDC	0-10 VDC x2

For Line to Low Voltage Power Supply/Controller, please see mwConnect PacWave™ Power Pack data sheets.
Design and specifications are subject to change without notice.