

# Wireless Single Channel Controller 20A 120/277VAC

## Overview

- 1-Channel 0-10VDC Dimming
- Mount On Electrical Enclosure Or On Fixture
- Casambi Wireless Mesh
- High-End Trim, Zoning, Continuous Dimming
- Sensor/Control Input (Active High)
- Relay With Zero-Crossing
- 120-277VAC Input Voltage
- 12VDC Auxiliary Output
- Approved For Lighting And Plug Loads
- ioXt Alliance Cybersecurity Certification



Suitable For Indoor Use Only



## Applications

The Wireless Room Controller (PSC-WCM-450-BLE-CB) is made to fit into a Casambi wireless mesh system for wireless control of room lighting.

With an input voltage of 120-277VAC, this unit is controlled wirelessly via qualified Casambi wireless mesh system, allowing for wireless dimming of LED lighting and seamless integration of Casambi software solutions. The unit comes with a threaded male nipple for junction box mounting, and tabs for fixture mounting.

The PSC-WCM-450-BLE-CB offers additional features, including 12VDC auxiliary power supply for sensors or other products, and sensor input.

## 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.

**1-Channel Dimming:** allows for one 0-10 dimming channel for zone control.

**Relay:** 20A relay to control multiple fixtures in the zone.

Low voltage wires are in heat shrink tubing as a barrier from line voltage wiring (UL approved).

See the McWong Casambi Commissioning User Manual for more information.

## Summary

Product Type:  
Wireless Room Controller

Input Voltage | Current Consumption:  
120-277VAC 50/60Hz | 100 mA

Auxiliary Power Supply: 12VDC 200mA (Input Voltage <= 200VAC) 12VDCC 300mA (Input Voltage > 200VAC)

Sensor Input: Active High  
10-24VDC, 30mA

0-10V Output: 100 mA sink

Load (20A Relay) :  
@120/277VAC Max.16A, E.Ballast, LED, CFL@120/277VAC Max.20A Resistive

Mounting: Junction Box

Max Bluetooth Range<sup>1</sup>:  
100ft (30.4m)

Operating Temperature:  
-40° C to 40° C

Storage Temperature:  
-40° C to 85° C

Relative Humidity:  
90-95% non-condensing

Color: White

Warranty: 5 years

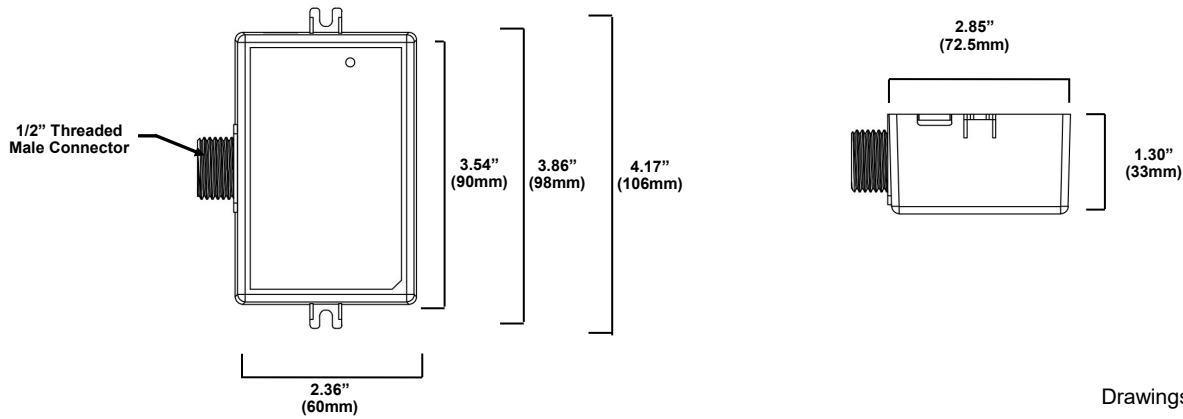
Note:

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

Project

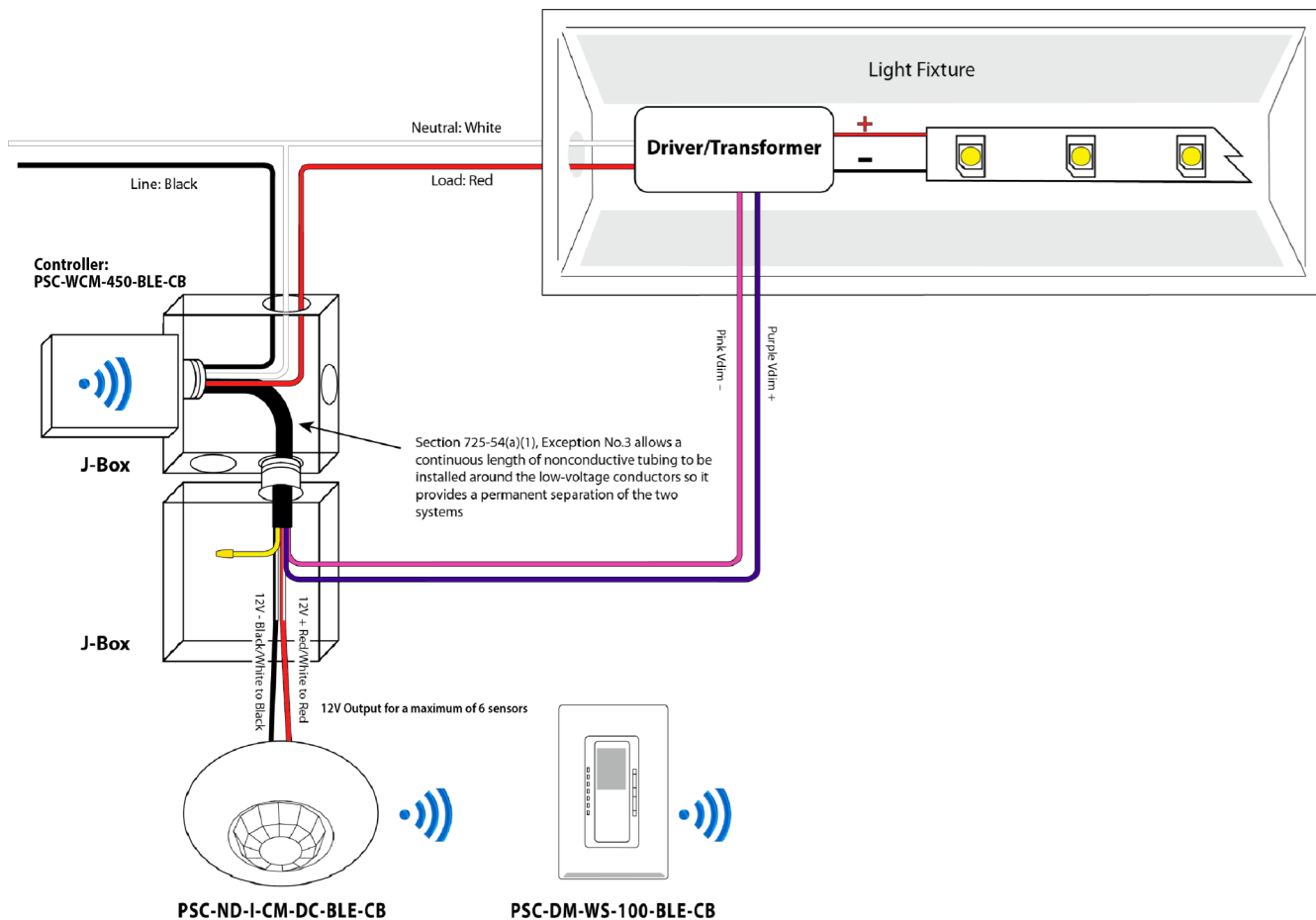
Location/Type

**Physical Dimensions**



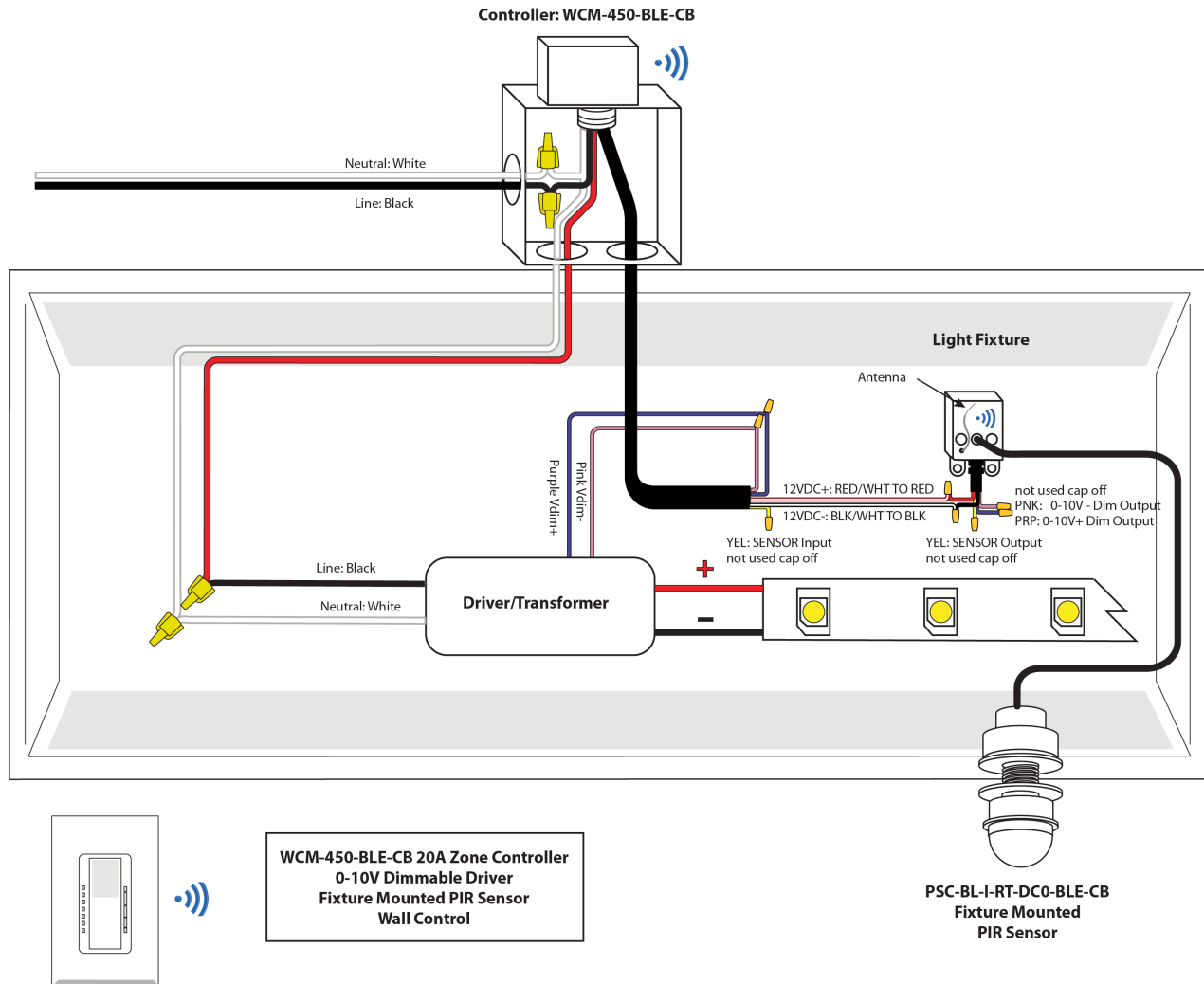
Drawings Are Not To Scale

**Wiring Example Application: Controller Installed In Electrical Box, Wired Sensor And Wireless Switch**



**PSC-WCM-450-BLE-CB**  
**PIR Sensor**  
**Wireless Wall Dimmer**  
**0-10V Dimming Driver**

**Wiring Example Application: Controller Installed In Electrical Enclosure, Wired Sensor In Fixture And Wireless Switch**



**Wiring Table**

Wire	Designation	Notes	Size
Black	Line Input	Connect to Line Power	
White	Neutral Input	Connect to Neutral Power and Luminaire Power Input	#12 AWG, 180+/- 20mm, Strip 10, Tin Plated
Red	Load Output	Connect to Luminaire Power Input	
Red/White	12VDC+ Power Output	Connect to Sensor Power Input (12V+)	#18 AWG, 180+/-20mm, Strip 10mm Tin Plated
Black/White	12VDC- Power Output	Connect to Sensor Power Input (12V-)	
Purple (Violet)	0-10VDC+ Dim Output	Connect to Luminaire Dim Input (0-10V+)	
Pink	0-10VDC- Dim Output	Connect to Luminaire Dim Input (0-10V-)	#22 AWG, 180+/-20mm, Strip 10mm Tin Plated
Yellow	Control Input	Connect to Sensor Output or Similar Device	

**How to Order**

Model No.	Description	Input Voltage	Relay	Dimming Output	Aux. Output	Sensor Input
PSC-WCM-450-BLE-CB	Line Voltage Room Controller, Single Channel , Casambi Wireless Mesh	120-277VAC	20A	0-10V, 100mA	12V,300mA	YES

Design and specifications are subject to change without notice.