

Casambi Mesh Single Channel Controller with Integral Relay

Overview

- Single channel controller with 0-10VDC dimming output
- Mounts to 1/2" knockout (light fixture or enclosure)
- Compatible with Casambi wireless mesh systems
- Features high end trim adjustment, zoning & continuous dimming
- Sensor/control input (active high) for relay/load control
- Switching relay with zero-crossing
- Line voltage input (120-277 VAC)
- 12VDC Auxiliary output
- Approved for lighting and outlet plug loads
- Approved for use in plenum applications
- ioXt Alliance cybersecurity certification



Applications

The Wireless Room Controller (**RLY**) provides wireless control of room lighting with an integral 20A relay and single channel of 0-10VDC dimming output. This unit is compatible with Casambi Wireless Mesh technology.

With an input voltage of 120-277VAC, this unit is suited for mounting to an electrical enclosure (via 1/2" knockout) or to a fixture/luminaire (via mounting tabs).

The **RLY** is rated for use in Plenums and offers additional features, including 12VDC auxiliary power supply for sensors or other products and load control input that operates the integral relay.

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 parameter adjustments.

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

Single Channel Dimming: Allows for zone control of one 0-10VDC dimming channel.

Power Multiple Sensors: A 12VDC auxiliary device power output is available to power multiple devices including occupancy sensors.

Integral Relay: Features a 20A relay to control multiple fixtures in a lighting zone.

Contact the factory for more information.

Summary

Product Type:
Single Channel Wireless Room Controller

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

Auxiliary Power Output: 12VDC 200mA
(Input Voltage up to 200VAC); 12VDC 300mA (Input Voltage over 200VAC)

Sensor Control Input: Active High 10-14VDC, 30mA

0-10VDC Output: 100mA Current Sinking

Max Load Rating (20A Relay):
16A for Elec.Ballast, LED, CFL
20A for Resistive

Mounting: 1/2" Threaded Nipple to Fixture or Electrical Enclosure

Max Bluetooth Range¹: 100ft (30.4m)

Operating Temperature:
-40 to 104°F (-40 to 40°C)

Storage Temperature:
-40 to 185°F (-40 to 85°C)

Relative Humidity:
90-95% non-condensing

Color: White

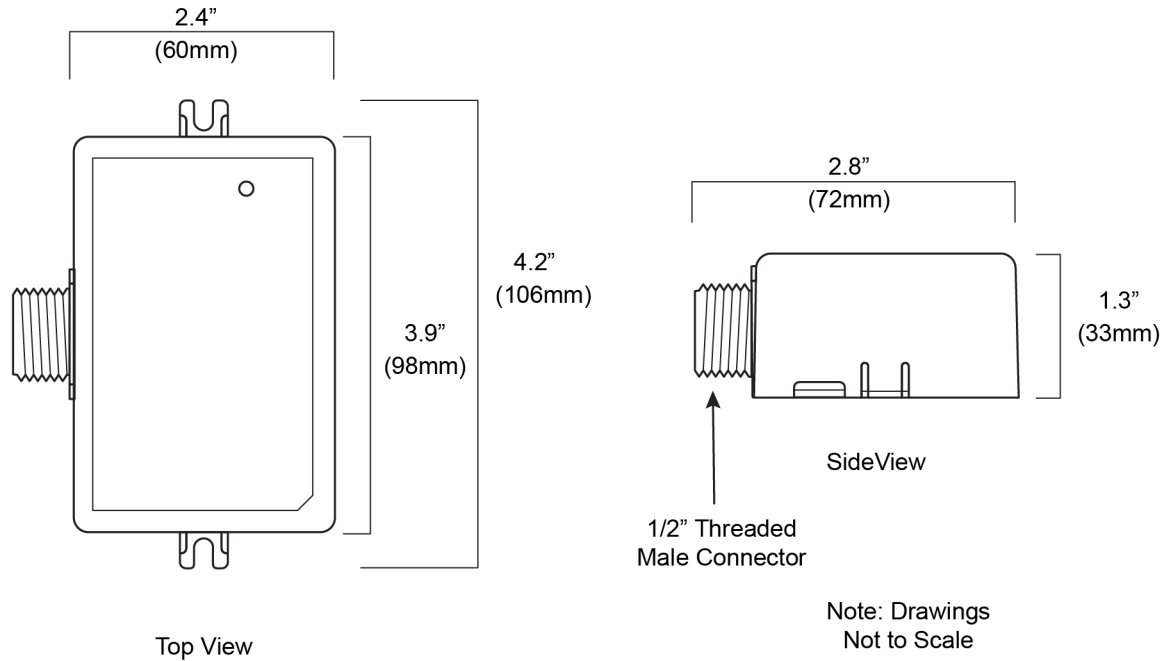
Warranty: 5 years

Note:

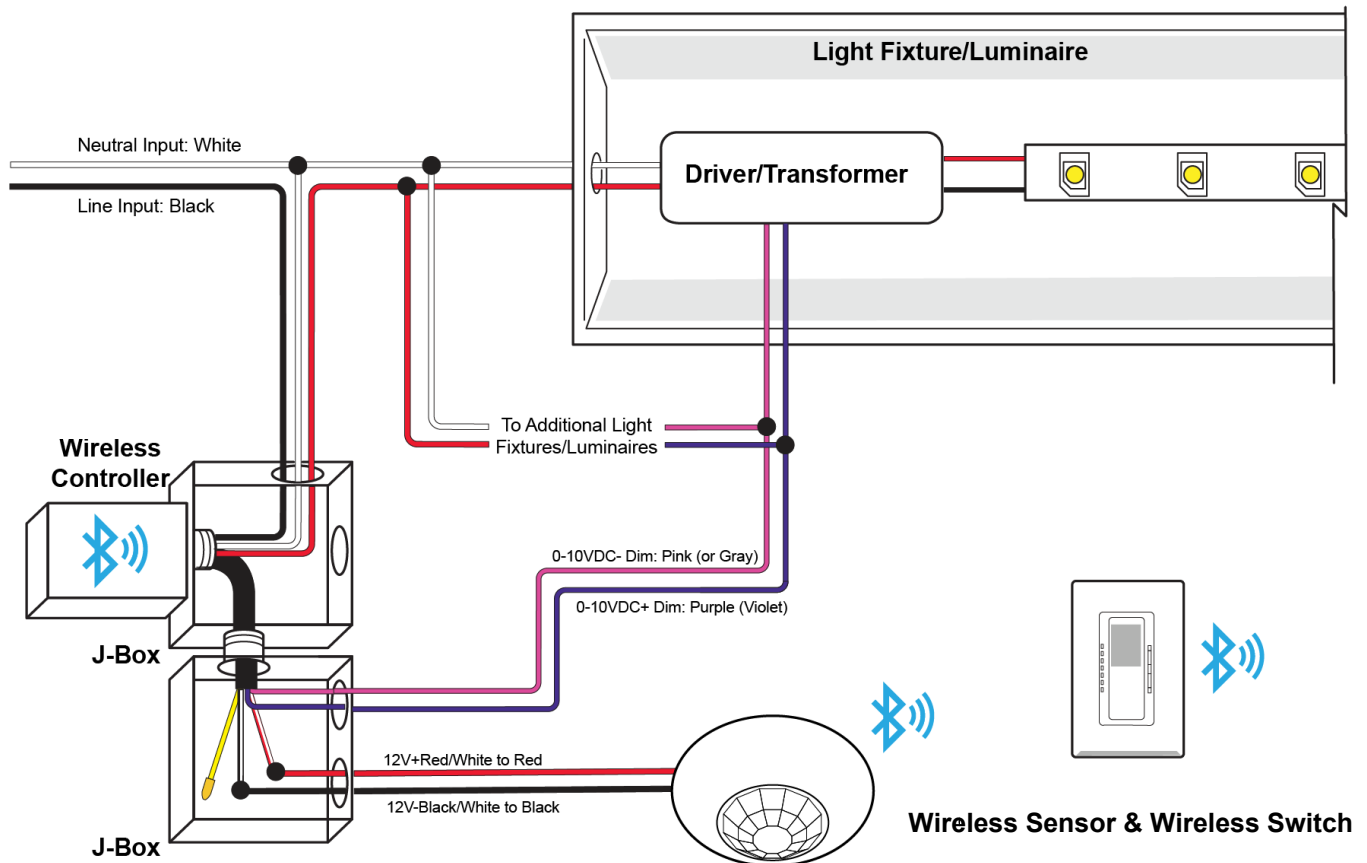
1. Bluetooth Range is highly dependent on the integration of fixtures, surrounding environment and conditions. It is recommended to conduct testing for Bluetooth range accuracy.

(MW Connect model: PSC-WCM-450-BLE-CB)

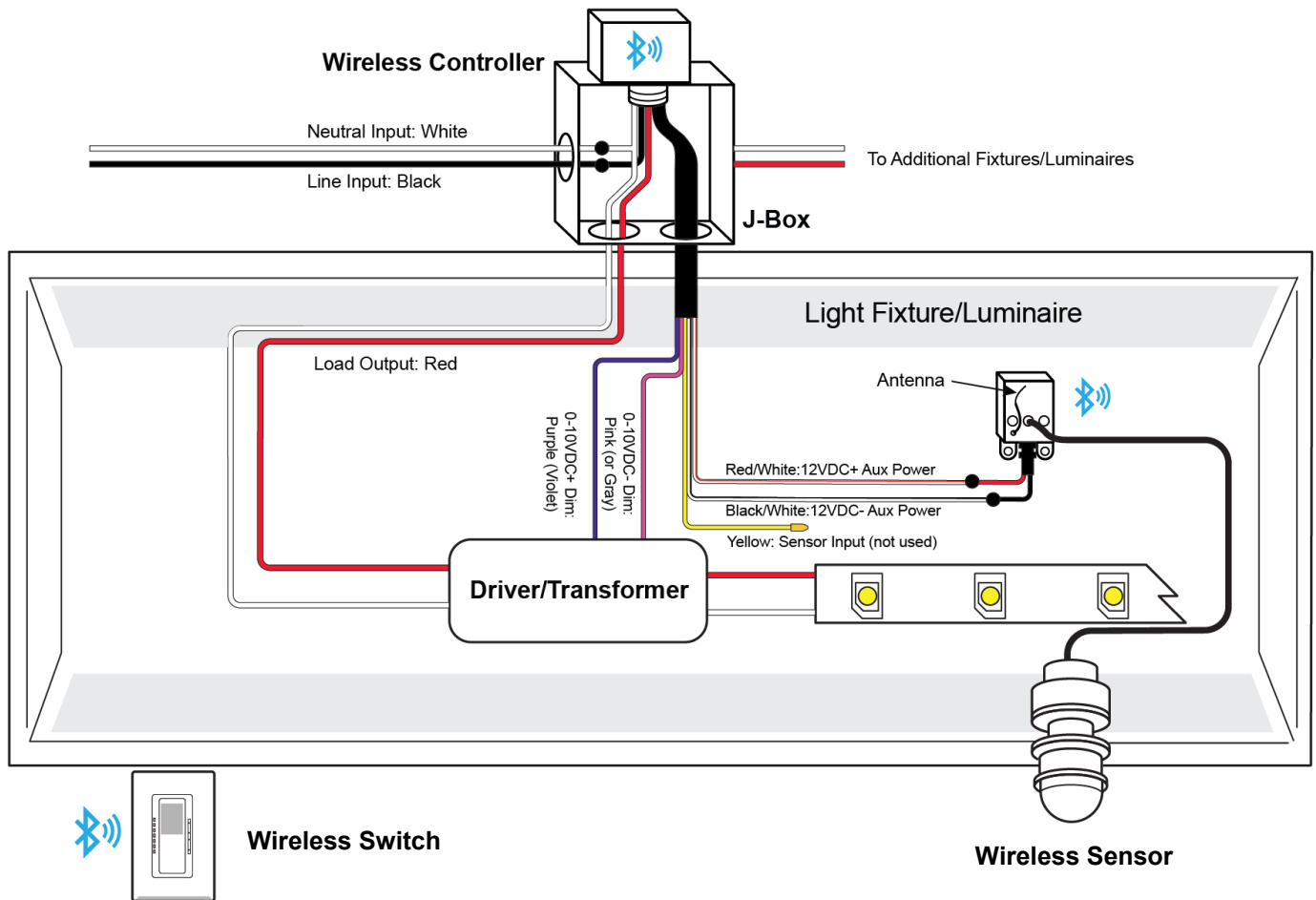
Physical Dimensions



Wiring Application Example: Controller Installed in Electrical Enclosure with Wireless Sensor and Wireless Switch



Wiring Application Example: Controller Installed In Electrical Enclosure with Wired Sensor in Fixture and Wireless Switch



Wiring Table

Wire	Designation	Notes	Size
Black	Line Input (120-277VAC)	Connect to Line Power (120 to 277 VAC, 50 or 60 Hz)	#12 AWG, 180+/- 20mm, Strip 10, Tin Plated
White	Neutral Input (120-277VAC)	Connect to Neutral Power and Luminaire Power Input	
Red	Load Output	Connect to Luminaire Power Input (Voltage matches Line Input)	
Red/White	Aux Power Output (12VDC+)	Connect to Auxiliary Device Power Input (12VDC+)	#22 AWG, 180+/-20mm, Strip 10mm Tin Plated
Black/White	Aux Power Output (12VDC-)	Connect to Auxiliary Device Power Input (12VDC-)	
Purple (Violet)	0-10VDC+ Dim Output (Current Sinking)	Connect to Current Sourcing Luminaire Dim Input (0-10VDC+)	
Pink (or Gray)	0-10VDC- Dim Output (Current Sinking)	Connect to Current Sourcing Luminaire Dim Input (0-10VDC-)	
Yellow	Load Control Input (12VDC)	Connect to Sensor Output or Similar Device (Active High)	

How to Order

Accessory	Description	Input Voltage	Relay	Dimming Output	Aux. Output	Sensor Input
RLY	Casambi Bluetooth Mesh Line Voltage Single Channel Wireless Room Controller with Integral Relay	120-277VAC	20A	0-10V, 100mA	12V, 300mA	YES

Note: RLY is compatible with Casambi devices