

Project:

Reference Type:

Item Code:

Date:

0-10V Controller with Relay

CBU-ARP-LR

Product Description

The CBU-ARP-LR combines 0-10V and DALI control, relay switching, and motion sensor integration in a single compact controller. Designed for fixture-level applications, it installs easily inside luminaires, ceiling boxes, or outside metal enclosures while delivering reliable wireless control through Casambi's long-range Bluetooth mesh network.

Technical Data

Additional Input / Output: Sensor input (Class 2): Motion (ON/OFF), 12-24 VDC, 2-5 mA • 0-10V output configurable as DALI interface

Control Protocol: 0-10V • DALI

Input Frequency: 50-60 Hz

Input Voltage Range: 120-277 VAC

Load Capacity / Voltage: Mains: 120-277 VAC, max. 2.0 A (Electronic Ballast) • 0-10V output: 0-10 VDC, 7 mA • DALI output: 12 VDC, max. 20 mA (sourcing)

Max Load per Load Type: Electronic Ballast (mains: 120-277 VAC, max. 2.0 A) • 0-10V: max. 7 mA • DALI: max. 20 mA (sourcing)

Max Mains Current: 40 mA

Max Output Current: 0-10V: max. 7 mA • DALI: max. 20 mA (sourcing)

Output Voltage 0-10V / PWM: 0-10 VDC, max. 7 mA

Relay Output Rating: 120-277 VAC, 50-60 Hz, max. 2.0 A

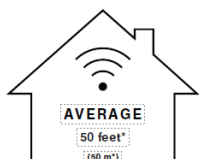
Radio Tranceiver

BLE Frequency: 2.402...2.480 GHz

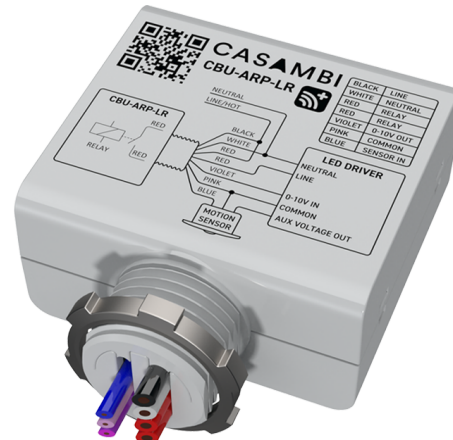
Casambi Tested BLE Range: Up to 200 feet (50 m)

Range

Average 50ft distance



*The wireless range of a Casambi unit is dependent on several factors; how it has been integrated into a luminaire, where it has been installed; taking into consideration surrounding obstacles such as walls and other building materials that may block signals. [Learn More](#)



Mechanical Data

Ambient Temperature: -4...+113°F (-20...+45°C)

Dimension: 55.0 x 49.4 mm (64.2 with threaded nipple) x 27.0 mm / 2.2" x 1.9" (2.5" with threaded nipple) x 1.1"

Environmental Rating: Indoor use only

Humidity: 0...80%, non-cond.

Install Notes: Disconnect mains power before installation. Secure the CBU-ARP-LR using the supplied 1/2" NPT locknut and follow the appropriate wiring diagram for your application. Use AWG16 conductors for mains connections and AWG20 conductors for 0-10V and sensor wiring. Ensure all unused wires are individually insulated. When installing inside a luminaire or other heat-sensitive enclosure, do not exceed the specified ambient temperature rating. For optimal wireless performance, avoid installing the device inside metal enclosures.

IP Rating: IP20

Max Case Temperature: +158°F (+70°C)

Mounting Type: 1/2" knockout (NPT-thread locknut) • switch box exterior, inside luminaire, or ceiling outlet box

Certifications

Contains FCC ID: T7V1780 • Contains IC: 216Q-1780 • UL: 5LE6 / E494741

Warning!

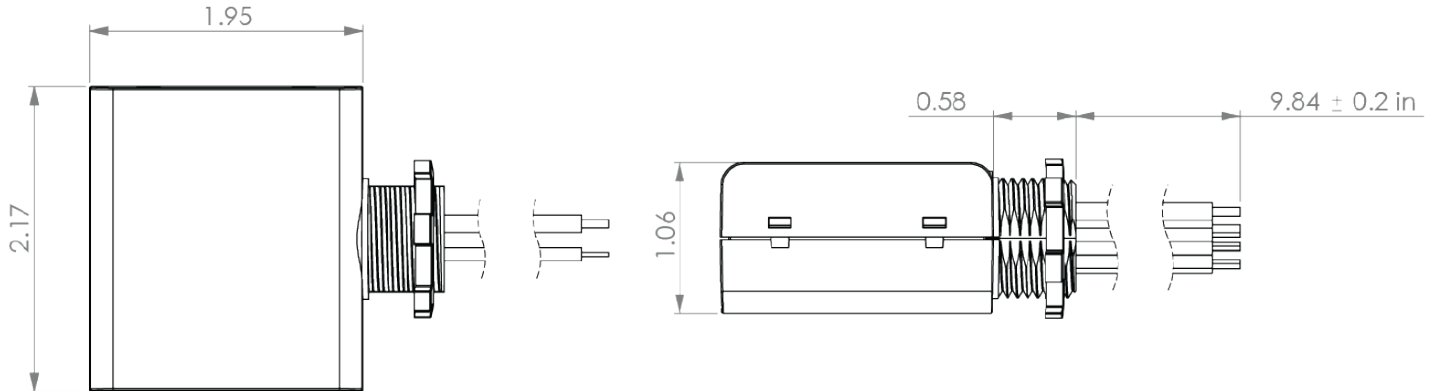


Hazardous voltages. Risk of electric shock or fire. Only qualified professionals should make the connections. Disconnect the mains power supply and verify its absence prior to installation.

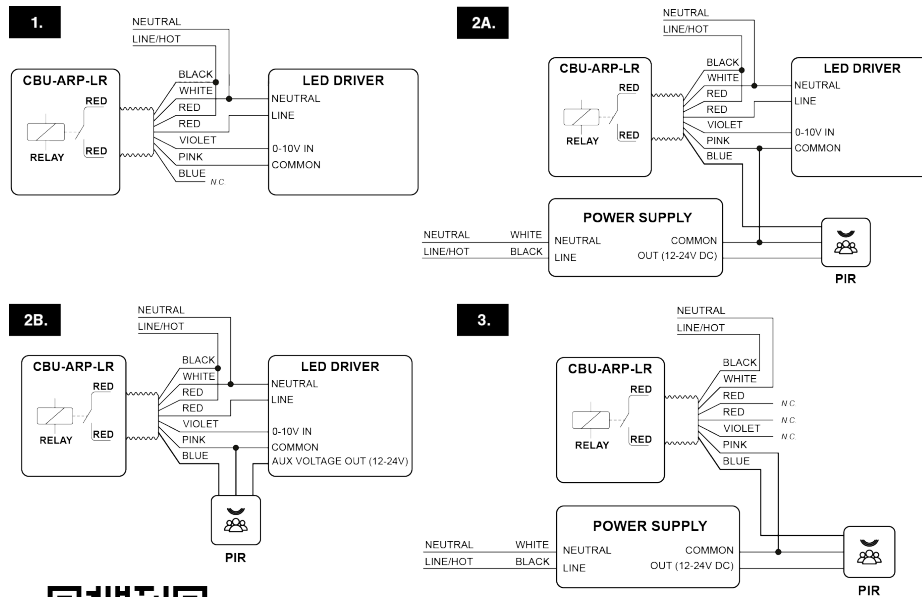
0-10V Controller with Relay

CBU-ARP-LR

Physical Dimensions



Wiring Diagrams



Scan the QR code to access the available spec sheets, wiring diagrams, and additional resources for this product.