

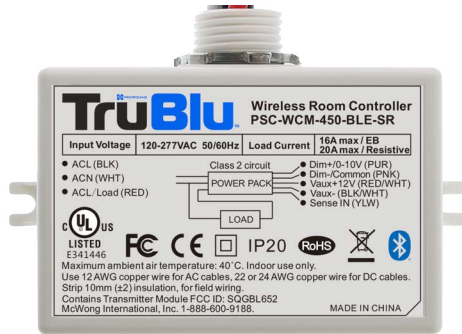
## Install Guide

### Wireless Single Channel Controller with Integral Relay



#### Models:

- PSC-WCM-450-BLE-XX
- PSC-WCM-300-BLE-XX



## Device Overview

The mwConnect™ wireless mesh circuit controller uses an integral relay with 0-10V output to control loads up to 20A. The controller communicates with other wireless mesh devices that provide input to control/dim loads. The optional auxiliary power output and load control input allows other devices such as sensors to interact with the controller. The controller mounts to most luminaires or electrical enclosures via a nominal 1/2" knock-out.

## Installation Preparation

**WARNING:** Controlling a load in excess of the specified rating will damage the device and may cause fire, shock or death. Ensure connected load does not exceed device rating.

**IMPORTANT:** Disconnect power when servicing any switch, controller or sensor.

**NOTICE:** Use this device with copper or copper clad wire only.

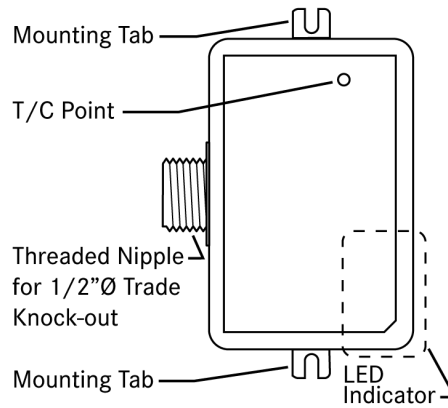
**REMEMBER:** This device requires an unswitched circuit leg.

**RESTRICTION:** Do not attempt to disassemble or repair.

**ATTENTION:** Wireless range is dependent on device spacing, surrounding environment, and conditions. It is highly recommended to test for signal strength and accuracy.

## Configurations

Figure 1: PSC-WCM-450/300-BLE



## Wiring Designation Information

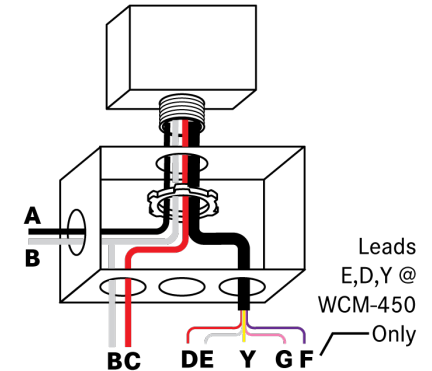
Wire	Designation	Size
A) Black	Line Input (120-277VAC)	#12 AWG, 7" (180mm)
B) White	Neutral Input (120-277VAC)	#12 AWG, 7" (180mm)
C) Red	Load Output	#12 AWG, 7" (180mm)
F) Purple (Violet)	0-10VDC+ Dim Output (Current Sinking, 100mA)	#22 AWG, 7" (180mm)
G) Pink (or Gray)	0-10VDC- Dim Output (Current Sinking, 100mA)	#22 AWG, 7" (180mm)
D) Red/White (WCM-450 only)	Aux Power Output (12VDC+, 300mA max)	#22 AWG, 7" (180mm)
E) Black/White (WCM-450 only)	Aux Power Output (12VDC-, 300mA max)	#22 AWG, 7" (180mm)
Y) Yellow (WCM-450 only)	Load Control Input (10-14VDC, 30mA max)	#22 AWG, 7" (180mm)

**NOTICE:** Wire lengths are +/- 0.75" (20mm)

## Installation

1. Check and confirm mains voltage input circuit is disconnected from power source.
2. Prepare the knock-out (KO) hole on junction box or electrical enclosure.
3. Pull all wire leads through the KO opening. Secure the nipple using the electrical nut provided.

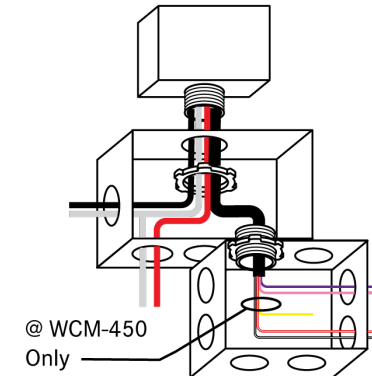
Figure 2: Wiring Designations



**NOTE:** Only the WCM-450 has Auxiliary Output and Load Control Input

4. Connect the 0-10V Dimming leads (if needed, else cap off).

Figure 3: Wiring Designations



**NOTE:** Check with applicable codes to determine separation requirements for high/line voltage and low voltage leads.

5. (WCM-450 only) Connect the 12VDC Auxiliary Power leads (if needed, else cap off).

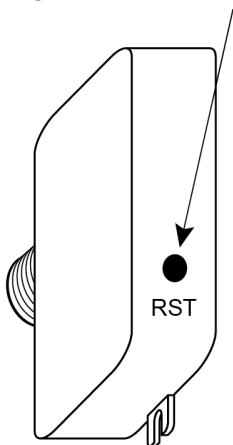
**Installation Note: PSC-WCM-450/300-BLE-XX - Wireless Single Channel Controller with Integral Relay**

6. (WCM-450 only) Connect the Load Control Input lead (if needed, else cap off).
- NOTE:** Load Control Input signal should be Active High.
7. Connect the mains voltage Neutral Input lead.
8. Connect the Red load output lead.
- WARNING:** For multiple luminaires, connect the load and neutral leads before connecting Line Input.
9. Finally connect the mains voltage Line Input lead.
10. Re-energize the mains voltage input circuit.

**Device Reset with Magnet**

**NOTE:** Magnetic Reset only works with -SR TruBlu devices. To factory reset the device, hold a magnet (with 20lb pull strength) against the dot labeled RST (reset).

**Figure 4:** Magnetic Reset Location  
Magnetic Reset Location



When the load/luminaire controlled by the controller cycles on/off 3 times then stays on, remove the magnet. The controller is now reset to factory conditions and ready to be reprogrammed.

**NOTE:** To factory reset -CB Casambi devices, refer to the [Casambi Commissioning Guide](#).

**Troubleshooting**

TruBlu ( -SR) Condition	Action
The Status LED is OFF.	The device either is not powered or the daughterboard is missing/ disconnected. Confirm the device is powered. If the device is powered and Status LED is still OFF, contact Customer Service.
The status LED light is blinking ON/OFF 2-3 times per second (2.5Hz).	The device is powered and in an un-commissioned state. Proceed with commissioning the device.
Upon power up, the connected load cycles ON/OFF three times, then stays ON.	The device is powered and in an un-commissioned state. Proceed with commissioning the device.
The status LED light is blinking ON/OFF 1 time every 2 seconds (0.5Hz).	The device is powered and in a commissioned state. The device is connected and operating on a Lighting Control System. No action is required.
Upon power up, the connected load energizes to 100% briefly, then goes to the last known state (or level configured in the TruBlu lighting network) and responds to control input.	The device is powered and in a commissioned state. The device is connected and operating on a Lighting Control System. No action is required.

Casambi ( -CB) Condition	Action
The Status LED is OFF.	The device either is not powered or the daughterboard is missing/ disconnected. Confirm the device is powered. If the device is powered and Status LED is still OFF, contact Customer Service.

Casambi ( -CB) Condition	Action
The Status LED is ON.	The Status LED ON indicates the device is powered. No action required; the device is operating as expected. Proceed with commissioning (if device is not yet commissioned).
Upon power up, the connected load energizes to 100% and does not respond to control input.	The device is powered and in an un-commissioned state. Proceed with commissioning the device.
Upon power up, the connected load energizes to the last known state (or level configured in the Casambi lighting network) and responds to control input.	The device is powered and in a commissioned state. The device is connected and operating on a Lighting Control System. No action is required.

**TruBlu Commissioning Guide**



For TruBlu models (partID ending in -SR), use this link to the Commissioning Guide: [https://mwconnect.us/trublu\\_commissioning/](https://mwconnect.us/trublu_commissioning/)

**Casambi Commissioning Guide**



For Casambi models (partID ending in -CB), use this link to the Commissioning Guide: [https://mwconnect.us/casambi\\_commissioning/](https://mwconnect.us/casambi_commissioning/)

## Device Specifications

Specifications	
Input Voltage	120-277VAC, 50/60Hz
Maximum Load	(20A Relay): 16A for Elec.Ballast, LED, CFL; 20A for Resistive
Aux. Power Output	12VDC 300mA
Load Control Input	Active High 10-14VDC, 30 mA
Current Consumption	100 mA
Environment	Dry
Operating Temperature	-40°F to 104°F (-40°C to 40°C)
Storage Temperature	-40°F to 185°F (-40°C to 85°C)

## Limited 5 Year Warranty

mwConnect™ warrants, to the original or first end user purchaser and not for the benefit of anyone else, that this product at the time of its sale by mwConnect is free of defects in materials and in workmanship under normal and proper use for five years from the manufacture date. mwConnect's only obligation to correct such defects is by repair or replacement or by extending credit in the amount of the purchase, at its option. For details visit <https://mwconnect.us/> or call 1-888-600-9188. This warranty excludes and there is a disclaimed liability for labor for removal of this product or reinstallation. This warranty is void if this product is installed improperly or in an improper environment, overloaded, misused, opened, abused or altered in any manner, or is not used under normal operating conditions or not in accordance with any labels or instructions. There are no other or implied warranties of any kind, including merchantability and fitness for a particular purpose, but if implied warranty is required by the applicable jurisdiction, the duration of any such implied warranty, including merchantability and fitness for use is limited to five years. mwConnect is not liable for incidental, indirect, special, or consequential damages, including without limitation, damage to, or loss of use of, any equipment, lost sales or profits or delay or failure to perform this warranty obligation. The remedies provided herein and the exclusive remedies under this warranty, whether based on contract, tort or otherwise.

## Contact

For Technical Assistance Call: 1-888-600-9188.

## Certifications

- UL Listed
- FCC
- Bluetooth V5.1