

Using Wired Sensors with Wireless Systems Through the Use of a WLCU301-CPN6814

Overview

Using wired sensors with wireless systems is possible through the use of a WLCU301-CPN6814, which takes a wired occupancy sensor input and transmits Lutron Clear Connect commands similar to a Radio Powr Savr occupancy sensor. The WLCU301-CPN6814 can be used in place of a Radio Powr Savr occupancy sensor. The WLCU301-CPN6814 can be paired to a QS Sensor Module (QSM) in a QS standalone or Quantum system. The WLCU301-CPN6814 can be paired to a PowPak module, Maestro Wireless dimmer, or Maestro Wireless switch in a Vive system.

Limits

Up to three sensors can be connected to the WLCU301-CPN6814 occupancy input using the occupancy signal wire from the sensor. These sensors will act as one functional group. If any one of them becomes “occupied”, an occupancy message will be transmitted. **ALL** of the sensors must become “vacant” for a vacancy message to be transmitted. If using the dry relay contact output of a sensor, such as the LOS-CDT-2000R-WH, up to 10 sensors may be connected.

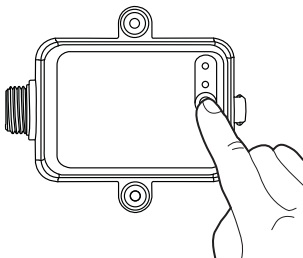
A maximum of three sensors can be powered by the WLCU301-CPN6814. Additional sensors must be powered with a PP-DV or other power source.

Design Considerations

- For association, use the button on the WLCU301-CPN6814. See instructions for the device you are pairing to for more information.
- Can provide control of lighting devices within a range of 30 ft (9 m) through walls and 60 ft (18 m) line-of-sight.
- All sensor settings are set on the sensor itself. The WLCU301-CPN6814 does not add any additional timeout or affect sensor settings in any way.
- The WLCU only works as an occupancy sensor for RF commands.
- Important: Do not connect the red (unused) wire on the line voltage side of the load. The WLCU301-CPN6814 uses wireless communication to talk to a QS Sensor Module, Powpak device, or other Lutron RF device.

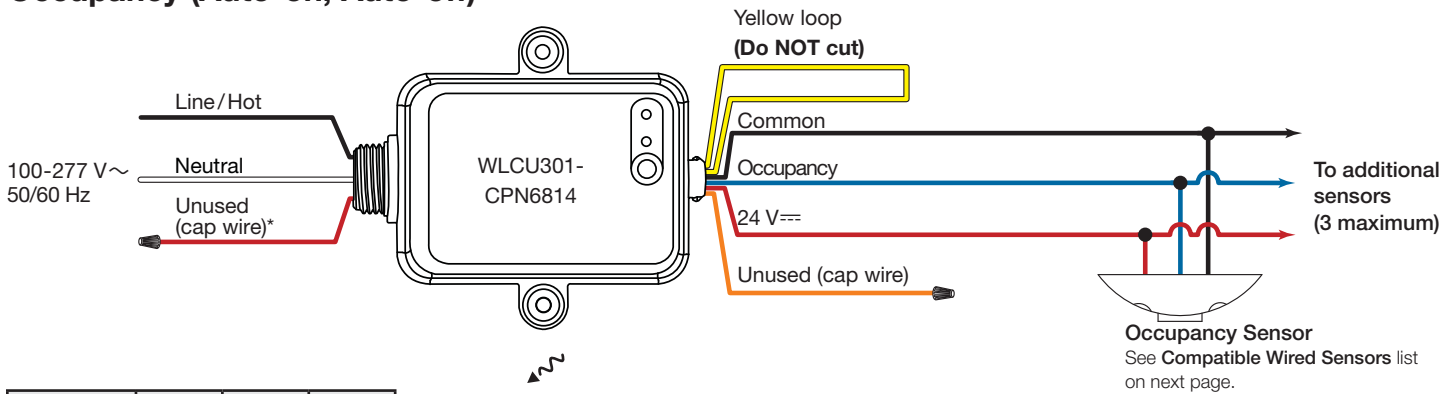
Pairing Instructions

Use the button on the WLCU301-CPN6814 to pair it to another Lutron device. This button can be used in place of the “Q” button on a Radio Powr Savr occupancy/vacancy sensor. For example, in a Vive system, adding a sensor prompts the user to press and hold the “Q” button on a Radio Powr Savr occupancy/vacancy sensor. If using the WLCU301-CPN6814 instead of a Radio Powr Savr occupancy/vacancy sensor, press and hold the button on the WLCU301-CPN6814.



Wiring Diagrams

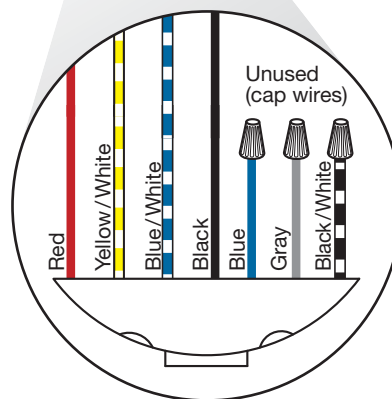
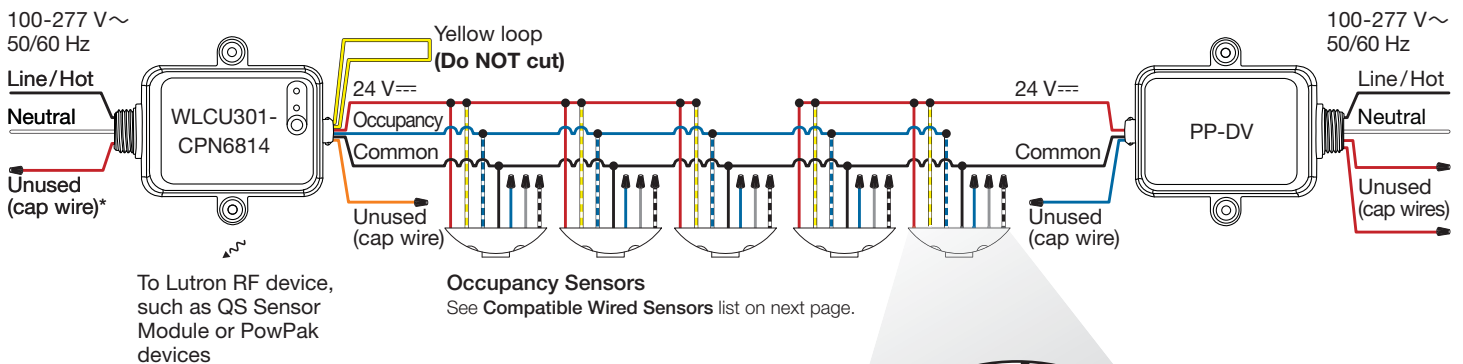
Occupancy (Auto-on, Auto-off)



Number of Sensors	1	2	3
22 AWG	750 ft	375 ft	250 ft
0.5 mm ²	365 m	180 m	120 m
20 AWG	1200 ft	600 ft	400 ft
0.75 mm ²	730 m	365 m	240 m
18 AWG	2400 ft	1200 ft	800 ft

To Lutron RF device, such as QS Sensor Module or PowPak devices

Connecting More Than 3 Sensors



* Important: Do not connect the red (unused) wire on the line voltage side of the load. The WLCU301-CPN6814 uses wireless communication to talk to a QS Sensor Module, Powpak device, or other Lutron RF device.

Compatible Wired Sensors

LOS-CDT-500-WH
LOS-CDT-500R-WH
LOS-CDT-1000-WH
LOS-CDT-1000R-WH
LOS-CDT-2000-WH
LOS-CDT-2000R-WH
LOS-CIR-450-WH
LOS-CIR-1500-WH
LOS-CUS-500-WH
LOS-CUS-1000-WH
LOS-CUS-2000-WH
LOS-WDT-WH
LOS-WDT-R-WH
LOS-WIR-WH
LUT-WSPSM24V-190-CPN6111
LUT-WSPSM24V-360-CPN6111
LUT-WSPSEM24V-180-CPN6112
LUT-WSPSEM-24V-360-CPN6112
All CPN6562 sensors

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