lumina®

RF Wireless Load Control 20A Switching Relay, RF Wireless Load Control 0-10V Dimmer and RF Wireless Load Control 800W Dimmer
Cat. Nos. LU20S, LU107 and LU04P

LEVITON®

PK-A3314-10-00-2B

WARNINGS
• **TO AVOID FIRE, SHOCK, OR DEATH; TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND TEST THAT POWER IS OFF BEFORE WIRING!**
• To be installed and/or used in accordance with appropriate electrical codes and regulations.
• If you are unsure about any part of these instructions, consult an electrician.

CAUTIONS
• Use this device with **copper or copper clad wire only.**
• For indoor applications only.

• **SAVE THESE INSTRUCTIONS.**

Product Description

Lumina RF Load Controllers are a component within a larger wireless control system. They require a compatible Room Controller for enrollment and creation of networks and ultimately to determine system functionality.

Lumina RF Devices communicate with each other, and the Room controller, via a 2.4Ghz radio on a wireless mesh network. Each line voltage powered device is a repeater to ensure the signal get's out to all parts of the network.

Before Installation

• Install to outside or inside of junction box or outside of luminaire.
• If mounted inside, a plastic cover must be used (metal will limit the RF signal).
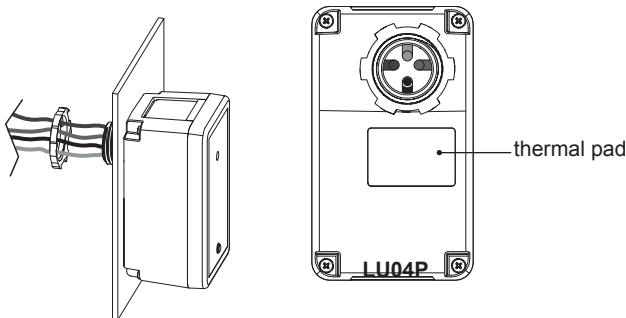• LU107 uses 0-10Vdc low voltage control wires which may be installed as Class 1 or Class 2.

NOTE (LU107): 0-10V Control Wiring - Connect the violet wire to the + 0-10V line and the pink wire to the 0-10V common using Class 1 or Class 2 wiring methods as indicated in these instructions, ballast/fixture/driver instructions or ballast/fixture/driver label markings. Observe all requirements of any authority having jurisdiction with respect to wire type, sleeving, isolation methods, and the like.
NOTE: Depending on date of manufacture, the pink 0-10V wire may be gray
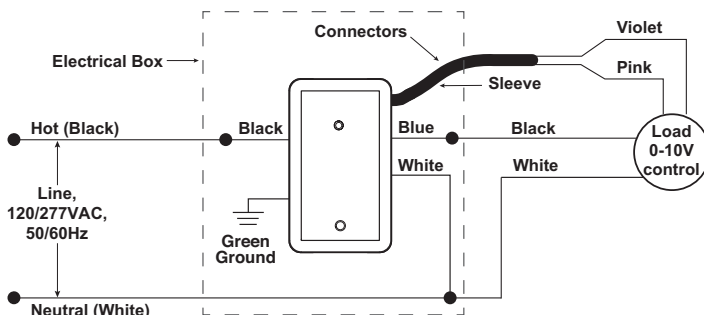
Installation

WARNING: **TO AVOID FIRE, SHOCK, OR DEATH; TURN OFF POWER** at circuit breaker or fuse and test that power is off before wiring!

1. Mount the Load Control device to junction box or luminaire through 1/2 in hole or knockout and secure with provided locknut.
  ATTENTION: For LU04P, ensure the thermal pad is in contact with the metal junction box. LU04P is not to be installed in enclosed junction box.
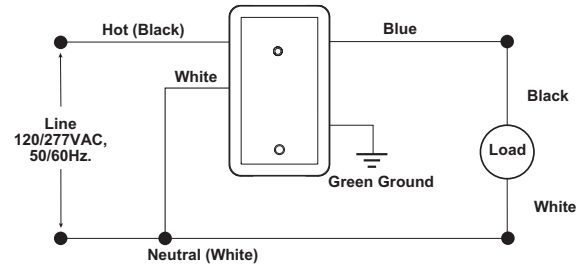

thermal pad

LU04P

2. Strip wires 3/4 in and connect as per wiring diagram. Ensure wires are firmly attached and there is no exposed copper.
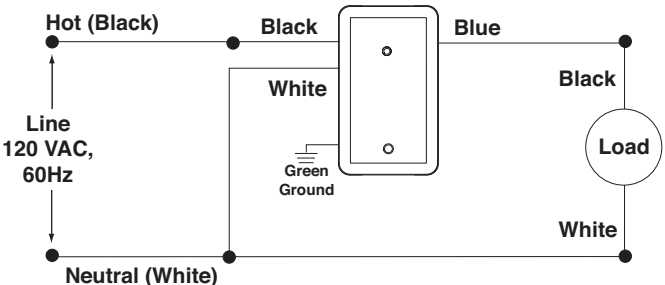
a. LU107 Wiring Diagram

b. LU20S Wiring Diagram

c. LU04P Wiring Diagram

3. Restore power at circuit breaker or fuse.

4. Confirm system wiring by using the test button to turn on/off the device and cycle through pre-set dimming levels. This will confirm that wiring is complete.

5. Proceed to system configuration and programming. Refer to your room controller.

System Configuration and Programming

1. Devices must be enrolled to a room controller for system functionality. Enrollment method/process varies by device type.

  a. LU107, LU20S

  Devices are in "auto-join" mode when they power up. This means they are seeking a network and will join a Room Controller when it allows them to join with no specific action required by the user. Refer to your Room Controller programming information for more details

  If your LU107/LU20S does not join automatically, reset it to factory factory defaults and try again

  b. LU04P
  i. Device enrollment must be triggered manually
  ii. Put your Room Controller in enrollment mode.
  iii. Press and Hold the Toggle/Reset button for 7 seconds, then release. The LED will blink amber. Press and release the button without holding. The LED will flash green and it will start seeking a network
  iv. When enrollment has been completed:
    1. Successful enrollment: The locator LED will blink GREEN 3 times.
    2. Failed enrollment: The locator LED will blink RED 3 times.

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2. Reset to factory default – if your device can not be added to a network, or, for other reason you desire to reset it to factory out-of-box state, perform the following actions.

  a. LU107, LU20S
- i. Push button on device for 20 seconds (but less then 25 seconds) until the LED blinks Amber the second time. (It will blink Amber once at 5 seconds, then, a second time at 20 seconds)
- ii. Release Button
- iii. During the reset, the LED will flash amber and green rapidly. When the flashing stops the device reverts to auto join mode and is searching for a network to join. The locator light will be green if the load is off and off if the load is on. The locator light will briefly flash off-on-off every 30 seconds while looking for an open network.

  b. LU04P
- i. Press and hold button for 14 seconds. The locator light quickly flash red/amber.
- ii. Release button.
- iii. When reset is complete, device will reboot. Follow the LU04P instructions in Installation section to add it into a system.
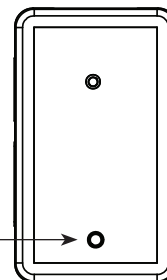
3. Indicators and Switch Functions

  a. LED Indicator Light
- GREEN when load is ON
- Unlit when load is OFF
- Flashes GREEN/RED/AMBER during enrollment and factory default

  b. Toggle/Reset Button - allows for manual activation and test of load by a short press/release. On/Off/Dim sequence varies by device and is as follows:
- LU107: Off →10%→50% →100%
- LU20S: Off →On
- LU04P: Off →On

SPECIFICATIONS

Catalog Nos.	LU20S-DNW Switching Relay	LU107-DNW 0-10V Dimmer, 50 mA Sink	LU04P-1NW Phase Cut Dimmer
Input Voltage/Frequency	120-277VAC, 50/60Hz	120-277VAC, 50/60Hz	120VAC, 60Hz
Input Current			
120V	Standby: 0.2W Max: 0.5W+Load Current	Standby: 0.2W Max: 0.5W+Load Current	Standby: 1.0W Max: 1.2W+Load Current
277V	Standby: 0.3W Max: 0.6W+Load Current	Standby: 0.3W Max: 0.6W+Load Current	Not rated for use
Load Ratings			
General Purpose Rating @ 120V	20A	Not rated for use	Not rated for use
LED, CFL, Electronic Ballast @ 120V	10A	8A	360W
LED, CFL, Electronic Ballast @ 277V	10A	5A	Not rated for use
Mark 10® @ 120V	Not rated for use	Not rated for use	800VA
Magnetic Ballast @ 120V	10A	10A	800W
Magnetic Ballast @ 277V	10A	10A	Not rated for use
Resistive, Tungsten @ 120V	6.67A	6.67A	800W
Resistive, Tungsten @ 277V	6.67A	6.67A	Not rated for use
Motor @ 120V	1/4Hp (FLA 5.8A)	1/4Hp (FLA 5.8A)	Not rated for use
Motor @ 277V	1/3Hp (FLA 3.0A)	1/3Hp (FLA 3.0A)	Not rated for use
IP Rating	IP30		
Network Connections	IEEE 802.15.4, 2.4GHz, wireless, mesh network up to 75 ft range between device		
Operating Temperature	0°C - 50°C (32°F - 122°F)		
Storage Temperature	-40°C to 85°C (-40°F - 185°F)		
Purpose of Control	Operating control		
Action Control Type	1		
Pollution Degree	2		
Impulse Voltage	4000V	4000V	2500V

Statement Caution

Changes or modifications not expressly approved by Leviton Manufacturing Co., could void the user's authority to operate the equipment.

FCC Statement:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

IC Statement

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device."

TRADEMARK DISCLAIMER

Use herein of third party trademarks, service marks, trade names, brand names and/or product names are for informational purposes only, are/may be the trademarks of their respective owners; such use is not meant to imply affiliation, sponsorship, or endorsement. Lumina is a registered trademark of Leviton Manufacturing Co., Inc. Bluetooth is a trademark of Bluetooth SIG. Android is a registered trademark of Google, LLC. iOS is a trademark of Cisco. Mark 10 is a registered trademark of Advance Transformer Co.

RF EXPOSURE AND CO-LOCATION:

To comply with FCC and ISED RF exposure limits for general population / uncontrolled exposure this device should be installed and operated with a minimum distance of 7.9 inches (20 cm) between the radiator and your body. This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

FCC SUPPLIERS DECLARATION OF CONFORMITY

Lumina RF Load Controller LU04P-1NW manufactured by Leviton Manufacturing, Inc., 201 N Service Road, Melville, NY, www.leviton.com. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FOR CANADA ONLY

For warranty information and/or product returns, residents of Canada should contact Leviton in writing at **Leviton Manufacturing of Canada ULC to the attention of the Quality Assurance Department, 165 Hymus Blvd, Pointe-Claire (Quebec), Canada H9R 1E9** or by telephone at **1 800 405-5320.**

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