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-A3314-10-00-2A-X3

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.**

INSTALLATION INSTRUCTIONS **ENGLISH**

Product Description

The Leviton Lumina® RF Load Controllers are components within a Lumina RF Standalone Platform and must be paired with a Lumina® RF Room Controller. The LU20S contains a power supply and a 20A relay to provide remote control switching of lighting, motor loads, and plug load control. The LU107 Load Controller is designed for 0-10V dimming loads and to be used for individual or groups of luminaires up to 10A. The LU04P supports individual or groups of luminaires with phase cut dimming of loads up to 800W.

Lumina® RF devices communicate with each other via 2.4 GHz radio frequency. Each wireless device in the system is designed to act as a repeater and will re-transmit the RF signal from one device to another to ensure the signal is received by its intended device. There are several basic system components:

- Lumina® RF SA App: Bluetooth™-enabled, wirelessly communicates with the Room Controller to configure the system.
- Lumina® RF Room Controllers: these are used to coordinate and control all of the wireless devices in a specified space or room. It manages all energy management functionality both as required by code and as desired by the user. Contains a Bluetooth radio to connect to mobile device with the Lumina® RF SA App. Provides dimming, switching, and scene control.
- Lumina® RF Load Controllers: controls individual or groups of fixtures or receptacles for plug load control. Allows for wireless dimming and ON/OFF control of fixtures or receptacles.
- Lumina® RF Switches and Dimmers: provide ON/OFF, 0-10V dimming, or Phase Cut dimming of luminaires. Adds 3-way control of luminaires for spaces with multiple entries.
- Lumina® RF Occupancy Sensors: adds occupancy or vacancy sensing to the system.
- Lumina® RF Photocell: adds daylight harvesting to the system.

NOTE: Each room requires a Room Controller.

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.

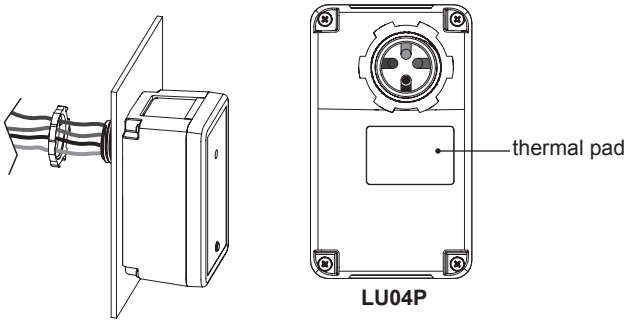
NOTE (LU107): 0-10V Control Wiring - Connect the violet wire to the + 0-10V line and the gray wire to the 0-10V common using Class 1 or Class 2 wiring methods as indicated in these instructions, ballast/fixture/driver instructions or ballast/fixture/driver label markings. Observe all requirements of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

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.

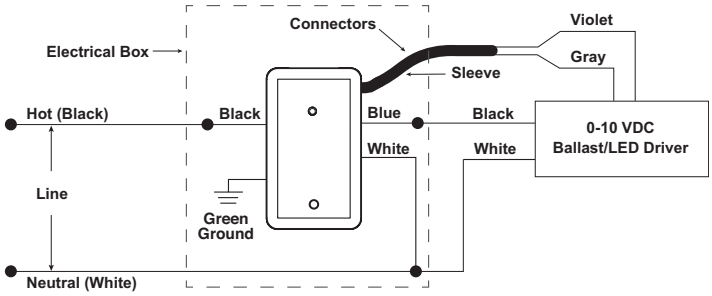
ATTENTION: For LU04P, ensure the thermal pad is in contact with the metal junction box. LU04P is not to be installed in enclosed junction box.



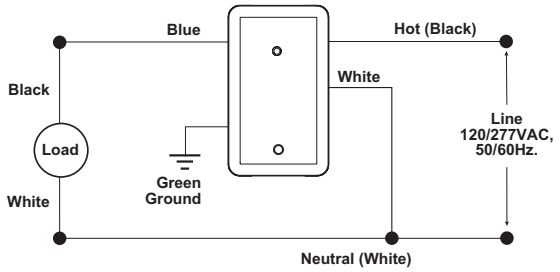
LU04P

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

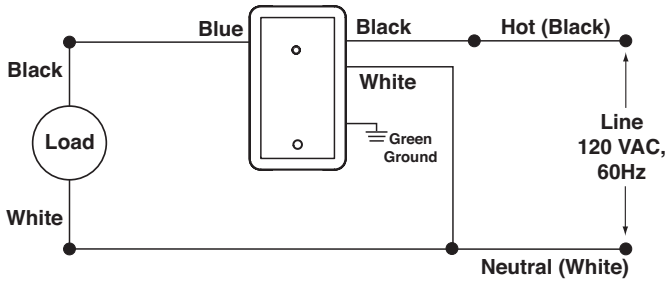
a. LU107 Wiring Diagram



b. LU20S Wiring Diagram



c. LU04P Wiring Diagram



3. Restore power at circuit breaker or fuse.

4. Using the Lumina® RF SA App, connect to room controller to set up device and configure your system.

- From Factory Default, the LU107 and LU20S are in auto join mode.
- For the LU04P, press and hold the button for 7 seconds, then release the button. The locator light will blink amber. Press and release the button without holding. The locator light will flash green and the device will be in join mode.
- When the LU04P is added to the system by the room controller, the locator light will blink green 3 times. If it fails to be added, the locator light will blink red 3 times

Operation

The Load Control device can be turned ON and OFF automatically when the room controller is paired with a Lumina RF Occupancy Sensor and/or photocell for daylighting. When configured with an occupancy sensor, the Load Control device can be programmed for Auto ON (turns ON when occupancy is detected) or Manual ON (turns ON when a Room Controller or switch is engaged). The Load Controllers will turn OFF when occupancy is no longer detected.

Configuration and Programming

1. System Configuration is performed using the Leviton Lumina® RF SA application, downloadable from Google Play or the Apple Store, using any Bluetooth™ enabled Android™ or iOS™ device. Use the application to:

a. Manually add/remove devices to or from the room.
b. Add additional keypads, load controllers, sensors, switches or dimmers to the room.
c. Change Sensor Parameters like Sensitivity, Timeout, target light level, and other settings.
d. Create user defined groups of fixtures.
e. Define Scenes (Meeting, Presentation, Lunch, Dinner, Test, etc.).

2. Factory Default: resets device to out of the box state.

a. For LU20S and LU107:
- Push button on device for more than 20 seconds (but less than 25). Locator light will blink AMBER at 5 and 20 second intervals.**NOTE**: release button after 20 second light flash.
- Release button.
- When complete, device will reboot then revert to auto join mode where it is searching for a network to join. Locator light will blink GREEN slowly while looking for an open network.

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

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 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.

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.

FOR CANADA ONLY

For warranty information and/or product returns, residents of Canada should contact Leviton in writing at **Leviton Manufacturing of Canada Ltd 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.**

LIMITED 5 YEAR WARRANTY AND EXCLUSIONS

Leviton warrants to the original consumer purchaser and not for the benefit of anyone else that this product at the time of its sale by Leviton is free of defects in materials and workmanship under normal and proper use for five years from the purchase date. Leviton's only obligation is to correct such defects by repair or replacement, at its option. **For details visit www.leviton.com or call 1-800-824-3005.** This warranty excludes and there is 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 any implied warranty is required by the applicable jurisdiction, the duration of any such implied warranty, including merchantability and fitness for a particular purpose, is limited to five years. **Leviton 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 are the exclusive remedies under this warranty, whether based on contract, tort or otherwise.

ARTWORK PRINT SPECIFICATIONS

LEVITON

PART NUMBER PK-A3314-10-00-2A-X3 **REV** _____ **DESCRIPTION** Instruction Sheet

SPECIFICATIONS :

* Artwork must be printed at 100% (1:1 scale)

* Thickness: 40 lb.

* Material: _____

* Finish: _____

_____ : _____

* For manuals - designates cover specifications

* Color(s): 1 over 1

1: Black
2: _____
3: _____
4: _____

[X] Spot
[ ] CMYK

* Fonts:

1: Helvetica
2: _____
3: _____
4: _____

Die Line Key: — · · — Perforate; ——— Die Cut; - - - - Fold Line; ——·—— Kiss Cut; ⋮⋮⋮ Cellophane; ≡≡≡ Glue

MANUAL INTERIORS / BINDERY / FOLD SCHEME :

Body Material: _____

Thickness: _____

Bindery

[ ] Die cut [X] Fold [ ] Saddle Stitch

[ ] Perfect Bind [ ] Drill [ ] Trim

Color(s): _____ over _____

1: _____
2: _____
3: _____
4: _____

[ ] Spot
[ ] CMYK

Fonts:

1: _____
2: _____
3: _____
4: _____

PROCESS :

[X] Offset [ ] Flexo

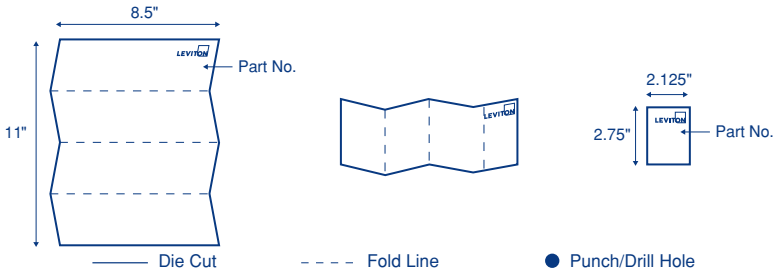
[ ] Other _____

Line Screen: _____

Angle: _____

Resolution: _____

DIMENSIONS / FOLD SCHEME / BINDERY DIAGRAM



COMMENTS :

FOR LEVITON USE ONLY

Approvals:

[X] Plant 08 J. Tang
cc: H. Cai

[ ] Mktg _____

[ ] Cust _____

[ ] CQA _____

[X] Eng R. Brown

[X] Other M. Blonder

[X] PM A. Rogowicz
cc: R. Parks, L. Pukhrambam

[X] S & A D. Moskovkin
cc: F. Tse

[X] Other V. LoNigro

PN-ARN: EM0301-6268 **ECR Number:** _____ **Pilot Rev:** X3

Artist: L. Walsh **Released Artwork Format:** Production PDF **Artwork Release Date:** _____

Notes: _____