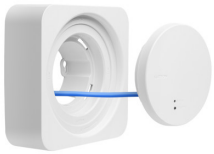

RadioRA3 RR-PROC3 48 V- 100 mA Wireless Processor Instruction Manual

RR-PROC3 48 V- 100 mA Wireless Processor Instruction Manual

Wireless Processor
RR-PROC3
48 V ⎓ 100 mA
P/N 044377 Rev. A
08/2021

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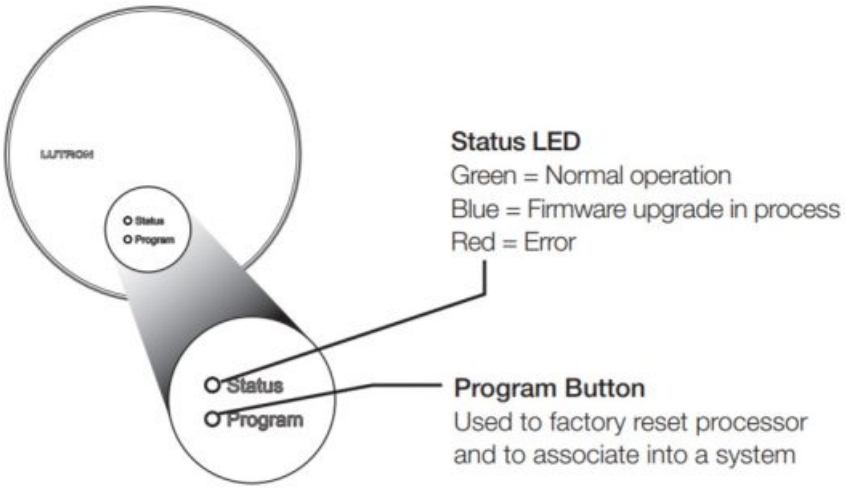
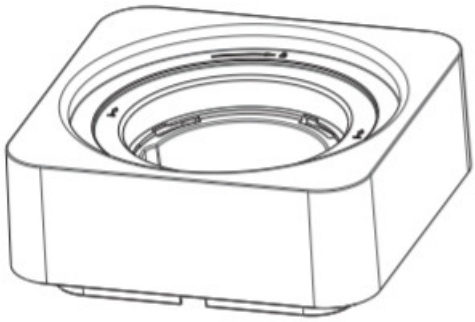
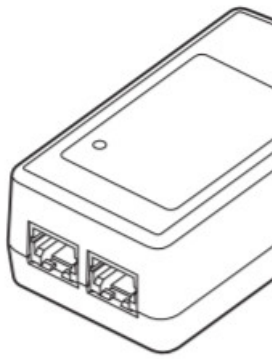
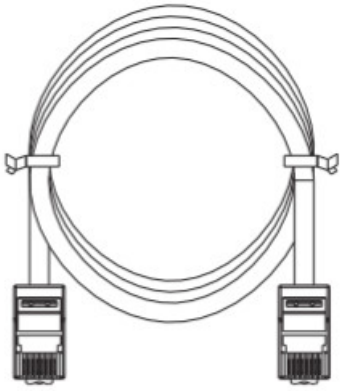
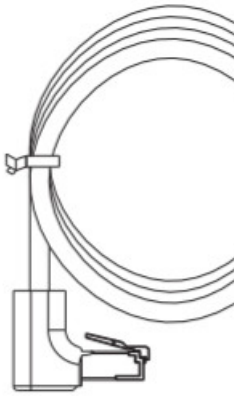
Product Overview



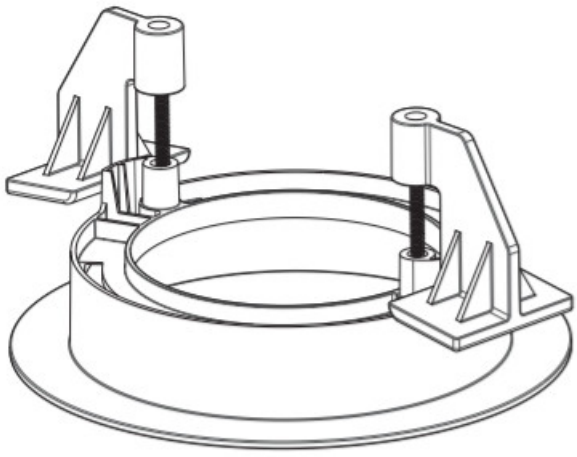
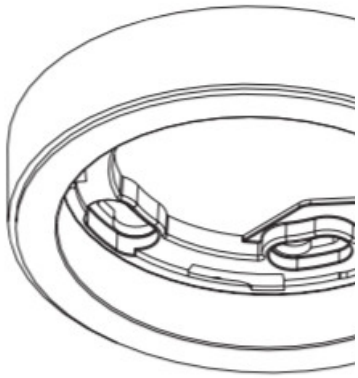
This wireless processor works with RadioRA 3 compatible wireless devices, including Sunnata dimmers/switches/keypads, Maestro dimmers/switches, seeTouch keypads, Pico controls, Radio Powr Savr sensors, RF dimmer and switch modules, plug-in dimmers and switches, and Triathlon and Sivoia QS wireless shades. Other products may also be compatible; see individual product spec sheets for details on system compatibility.
This wireless processor must be powered by an IEEE 802.3af 2003 or 802.3at 2009 compliant LPS / SELV PoE or PoE+ power supply.

Additional Components

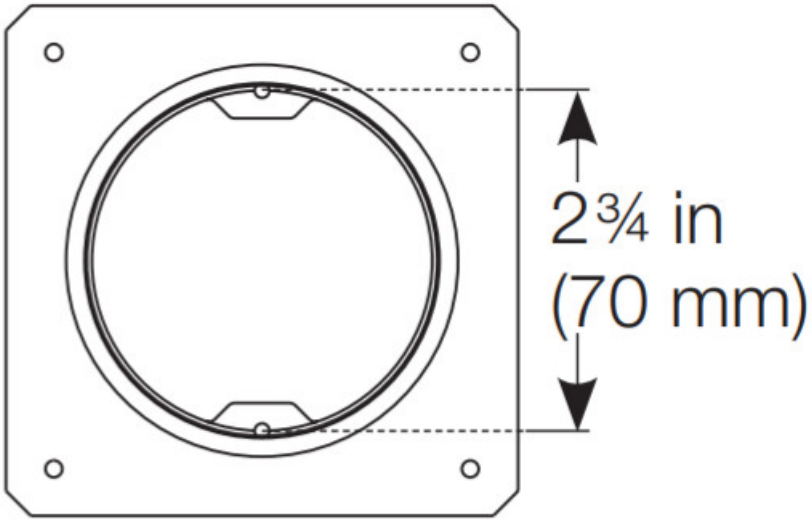
Included in RR-PROC3-KIT

Shelf-mount adapter P/N: L-SMNT-WH	PoE injector and region-specific plugs P/N: L-POEI-BL
	
3 ft (1 m) Ethernet cable	6 ft (1.8 m) Etherne
	

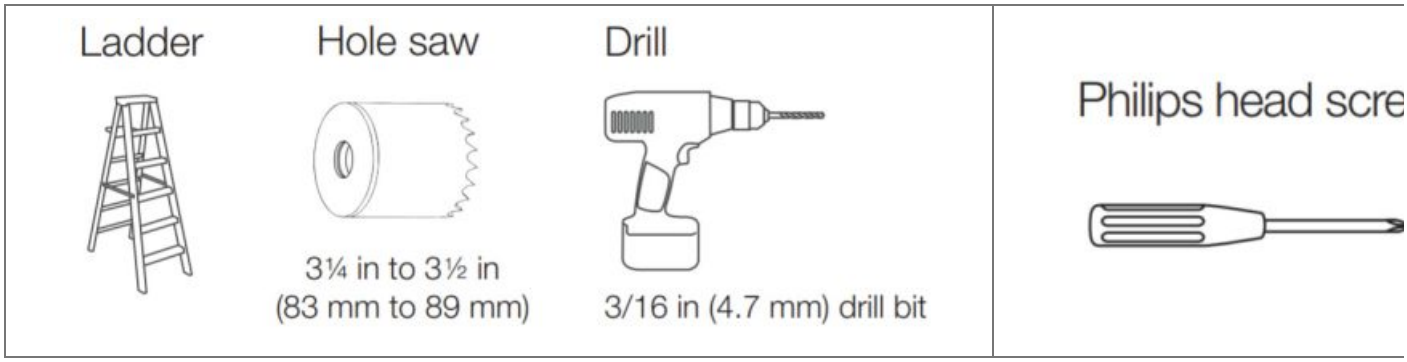
Included in RR-PROC3-CW

Recess-mount adapter P/N: L-CMNT-WH	Junction box mount adapter P/N: L-JMNT-WH
	

Components (not included)
Mud ring



Tools You May Need



Step 1 — Choose a Location to Install

Reliability of Clear Connect wireless communication requires that the wireless processor be centrally-located and within a maximum distance of the specific wireless devices in the system. Wireless processors must be mounted 5 ft (1.5 m) away from wireless interference sources like microwaves, Wireless Access Points (WAPs), etc. PoE wiring must be kept internal to the building. **Do not run PoE wiring outdoors or install the processor in metallic enclosures.**

Distances for Wireless Devices

seeTouch keypads, Maestro dimmers, Pico wireless controls, Sivoia QS wireless shades, etc. (Clear Connect – Type A)

- Each device must be within 30 ft (9 m) of a repeater or wireless processor.
- Repeaters can be spanned up to 60 ft (18 m) apart from other repeaters to create the network.

Sunita dimmers, switches, keypads, etc. (Clear Connect – Type X)

- All devices associated with the wireless processor must be within a 75 ft (23 m) radius of the processor.
- There must be a minimum of two devices within 25 ft (7.6 m) of the wireless processor.
- Each Clear Connect – Type X device should have two or more non-battery-powered Type X devices within 25 ft (7.6 m) of another compatible Clear Connect – Type X device. Using more than two devices is ideal for creating an ultra-high-performance mesh network.

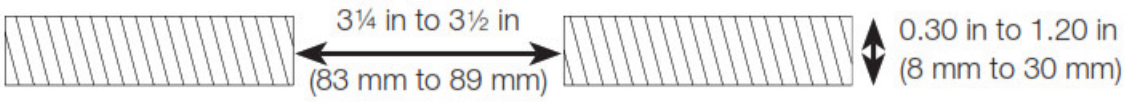
For more information, please refer to the Wireless Setup Guide which can be found in the RA3 Support Center: www.lutron.com/RA3support

Step 2 — Select the Mounting Adapter for your Installation

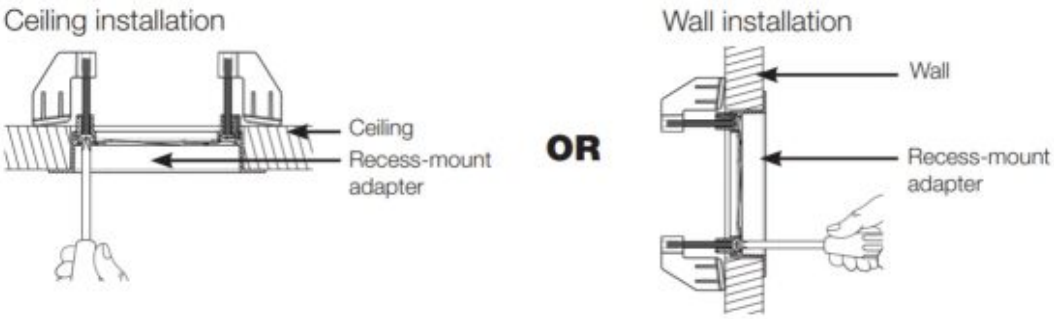
Depending on which package you have, each wireless processor comes with various mounting adapters.

Step 3 — Provide Opening for Adapter

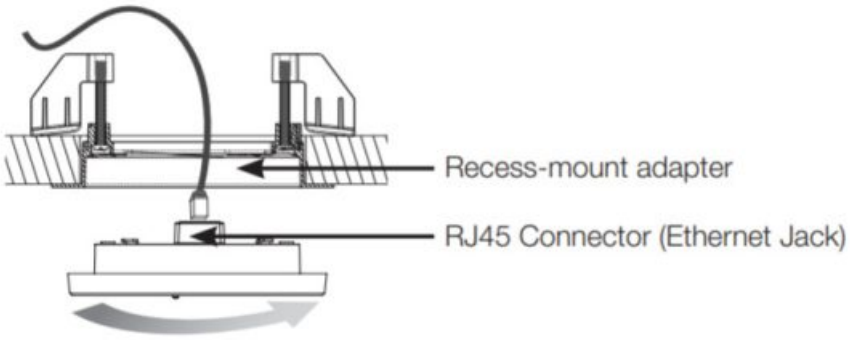
(recess-mount and junction box mount adapter ONLY)



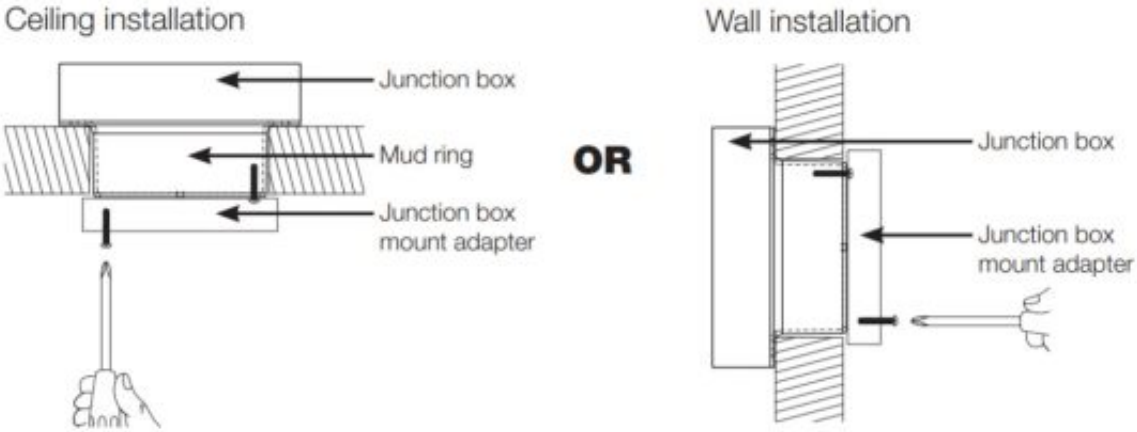
Step 4a — Installation using the Recess-Mount Adapter



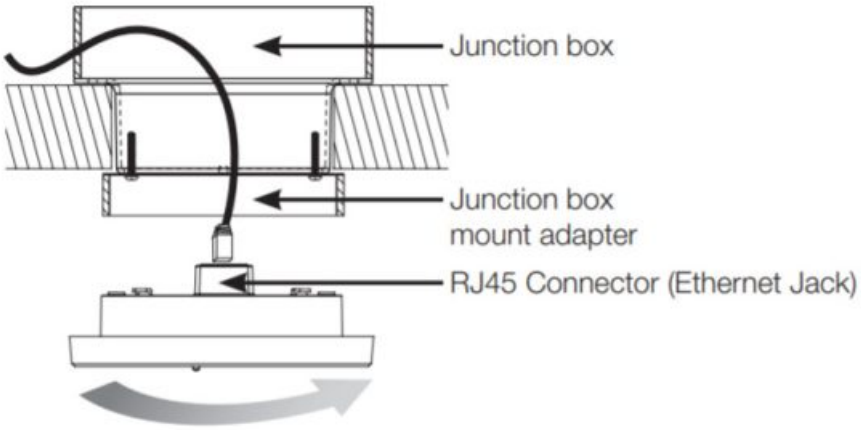
Plugin Ethernet cable and attach processor to PoE-enabled network switch or PoE injector



Step 4b — Installation using the Junction Box Mount Adapter

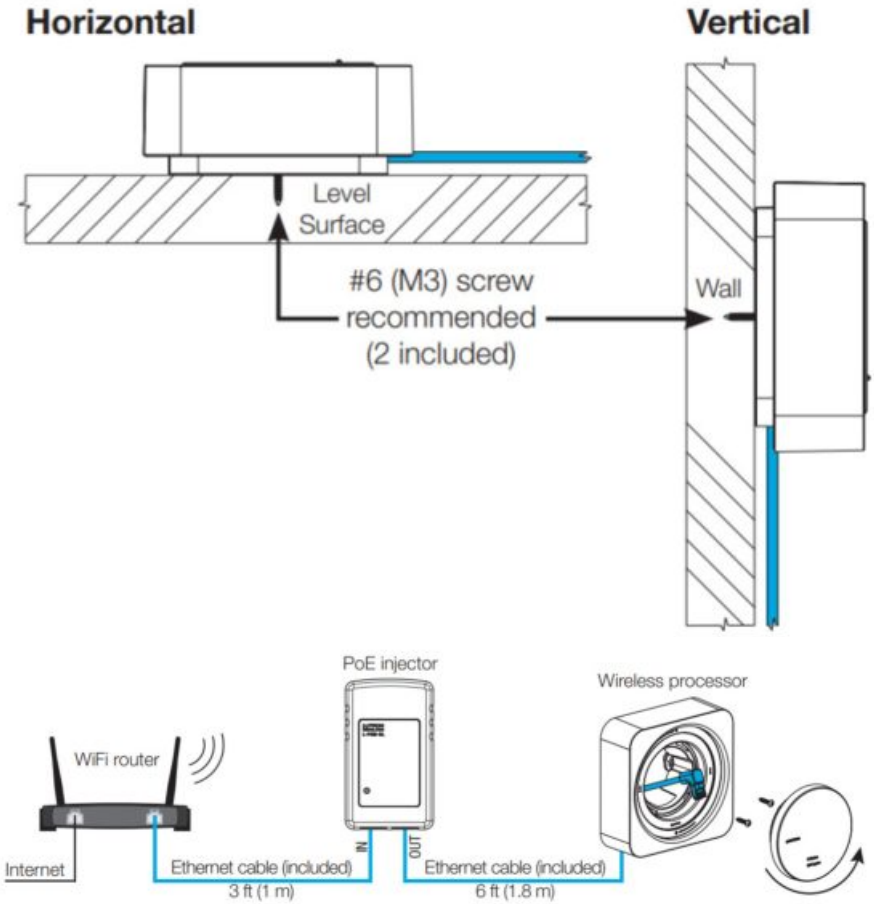


Plug in Ethernet cable and attach processor to PoE-enabled network switch or PoE injector



Step 4c — Installation using the Shelf-Mount Adapter

- Hold the adapter to the wall in the desired location.
- Using a pencil, mark the location of the screw holes.
- If using drywall, prep for anchors Partially drive two (2) screws at least 1/4 in (6.3 mm) into the wall or the drywall anchors.
- **Feed right-angle connector of the 6 ft (1.8 m) Ethernet cable through the adapter BEFORE tightening screws.**
- Tighten screws.
- Select and attach the appropriate region-specific adapter plug to the PoE injector.
- Plug in PoE injector.
- Attach processor to the adapter.



Step 5 — System Setup

For more information, please refer to the Getting Started Guide, which can be found in the RA3 Support Center: www.lutron.com/RA3support

LED Diagnostics

Processor

Mode/Error	LED Pattern Description
Normal Operation	Status LED blinks green every 10 seconds
Software Update	Status LED blinks blue
Error	Status LED remains solid red
Processor Identify	Status LED blinks green rapidly

PoE Injector

Mode/Error	LED Pattern Description
Unit is “ON” Active with No Load	Status LED blinks green
Unit has detected an Invalid Load	Status LED blinks yellow and green
Unit has detected a Valid IEEE 802.3af Load	Status LED remains solid green
Unit is in Over Load/Short Condition	Status LED blinks yellow

Troubleshooting

Symptom	Probable Cause
Unit does not power on	A PoE switch is not being used or is not configured as a PoE switch
	The other end of the Ethernet cable is not connected to a PoE switch or injector
	Ensure the IN/OUT connections on the PoE Injector are correct (refer to Step 4C)
Unit cannot be found in the setup software	The Ethernet cable is not connected to the same LAN as the setup software
	Ethernet run is longer than the supported 328 ft (100 m) and a PoE extender is needed
	Ensure the IN/OUT connections on the PoE Injector are correct (refer to Step 4C)
Unit does not control surrounding lights	Lights are out of range of the wireless processor
	Processor lost power/Ethernet wire run too long and PoE booster is required

For additional troubleshooting information, please see www.lutron.com/RA3support

FCC/IC /IFT Information

This device complies with part 15 of the FCC Rules and 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. Modifications not expressly approved by Lutron Electronics Co., Inc. could void the user's authority to operate this equipment.

Note: 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.

This Class B digital apparatus complies with Canadian ICES-003.
This equipment complies with FCC/ISED radiation exposure limits set for an uncontrolled environment. The user should avoid prolonged exposure within 7.9 in (20 cm) of the antenna, which may exceed the FCC/ISED radio frequency exposure limits.

Controlling this HomeKit®-enabled accessory automatically and away from home requires a HomePod®, Apple® TV, or iPad® set up as a home hub. It is recommended that you update to the latest software and operating system.

Works with Apple HomeKit

Communication between iPhone, iPad®, Apple Watch®, HomePod®, or Mac® and the HomeKit® enabled RadioRA 3 processor is secured by HomeKit® technology. Use of the Works with Apple® badge means that an accessory has been designed to work specifically with the technology identified in the badge and has been certified by the developer to meet Apple® performance standards. Apple® is not responsible for the operation of this device or its compliance with safety and regulatory standards.

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Customer Assistance
For questions concerning the installation or operation of this product, please visit

www.lutron.com/RA3support

Limited Warranty

For warranty information, please scan the code below with a smartphone.

https://qrco.de/bc6q1V

Documents / Resources

	RadioRA3 RR-PROC3 48 V- 100 mA Wireless Processor [pdf] Instruction Manual RR-PROC3, 48 V- 100 mA Wireless Processor

Manuals+,