RadioRA3

Installation Instructions

Please Read Before Installing

Wireless Processor

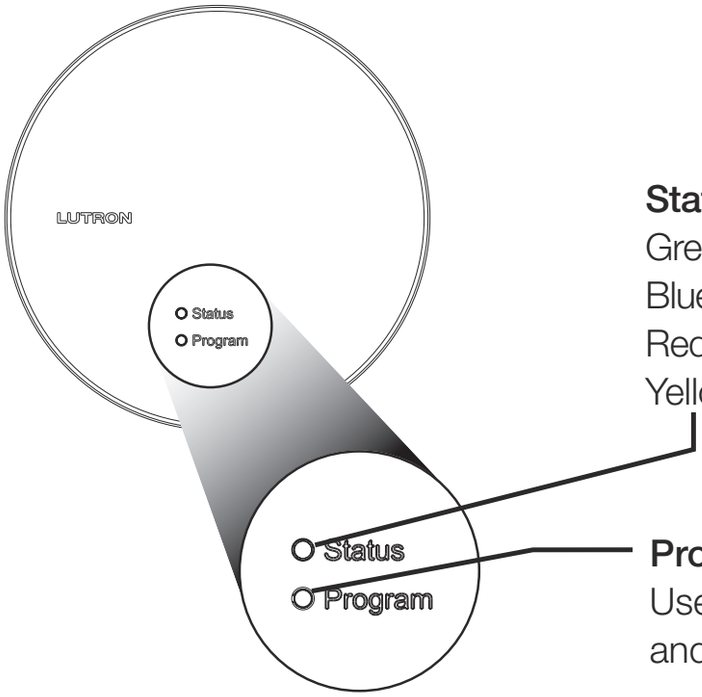
RRKE-PROC3

48 V⎓ 100 mA

English

P/N 044411 Rev. A
12/2024

Product Overview



Status LED

Green = Normal operation

Blue = Firmware upgrade in process

Red = Error

Yellow = No Internet connection/access

Program Button

Used to factory reset processor and to associate into a system

This RadioRA 3 wireless processor works with compatible wireless devices, including standard and hybrid keypads, Pico controls, Radio Powr Savr sensors, RF dimmer and switch modules, plug-in dimmers, and Triathlon, Sivoia QS wireless and Palladiom wire free shades. Other products may also be compatible; see individual product spec sheets for details on system compatibility.

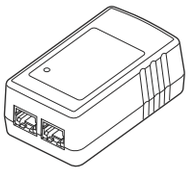
This wireless processor must be powered by an IEEE 802.3af, IEEE 802.3at or IEEE 802.3bt compliant LPS/SELV PoE or PoE+ power supply.

Additional Components

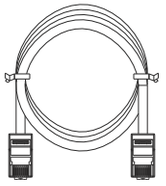
Note: Mounting adapter must be purchased separately. Available mounting adapters are: L-SMNT-WH shelf-mount, L-CMNT-WH recess-mount, and L-JMNT-WH junction box mount

Included in RRKE-PROC3-KIT1

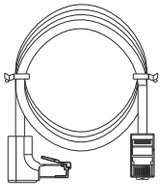
PoE injector and region-specific plugs
P/N: L-POEI-G-BL



1 m Ethernet cable

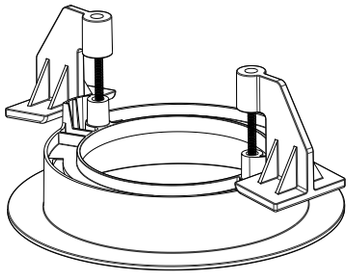


1.8 m Ethernet cable

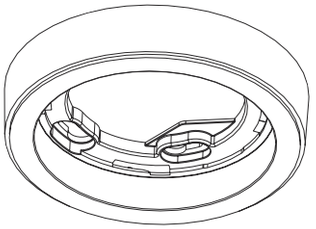


Included in RRKE-PROC3-CW

Recess-mount adapter
P/N: L-CMNT-WH

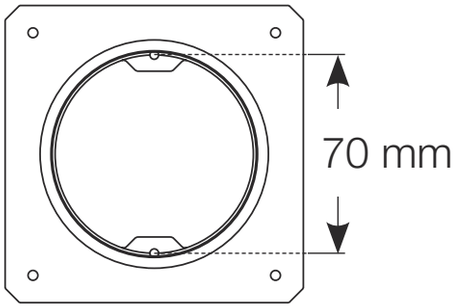


Junction box mount adapter
P/N: L-JMNT-WH



Components (not included)

Plaster ring

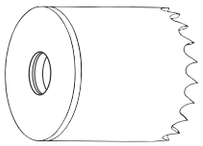


Tools You May Need

Ladder

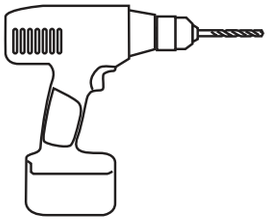


Hole saw



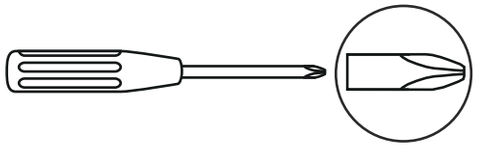
83 mm to 89 mm

Drill



4.5 mm drill bit

Philips head screwdriver



Pencil

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 2 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

Clear Connect – Type A Devices (in-line RF dimming and switching modules and plug-in lamp dimmers, Pico wireless controls, Sivoia QS wireless shades, etc.)

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

Clear Connect – Type X Devices

- All devices associated with the wireless processor must be within a 23 m radius of the processor.
- There must be a minimum of two devices within 6 m of the wireless processor.
- Each Clear Connect – Type X device should have two or more non-battery powered Type X devices within 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. Groups or clusters of Clear Connect – Type X devices must not be separated by more than 6 m.

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

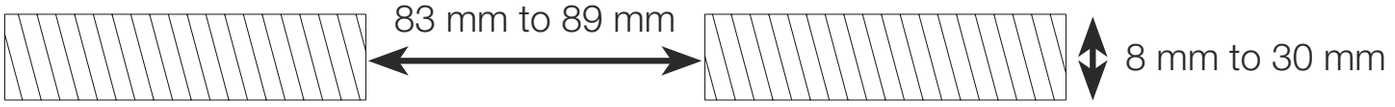
For myLutron users, please see Application Note 842 for additional information on Clear Connect - Type X Best Practices at www.lutron.com/europe

Step 2 — Select the Mounting Adapter for your Installation

RRKE-PROC3-CW comes with a recess-mount adapter and a junction box mount adapter. For model RRKE-PROC3-KIT1, the mounting adapters are sold separately. Available mounting adapters are: L-SMNT-WH shelf-mount, L-CMNT-WH recess-mount, and L-JMNT-WH junction box mount

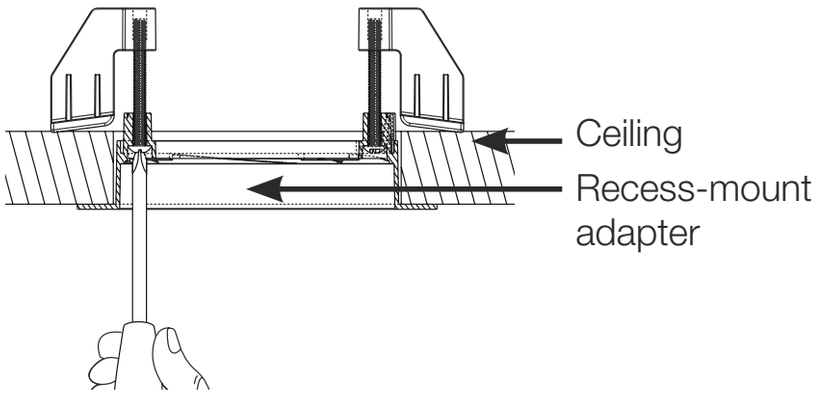
Step 3 — Provide Opening for Adapter

(recess-mount and junction box mount adapter ONLY)



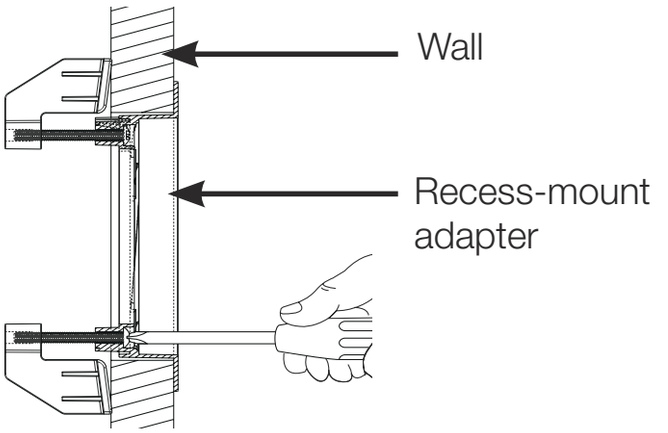
Step 4a — Installation using the Recess-Mount Adapter

Ceiling installation

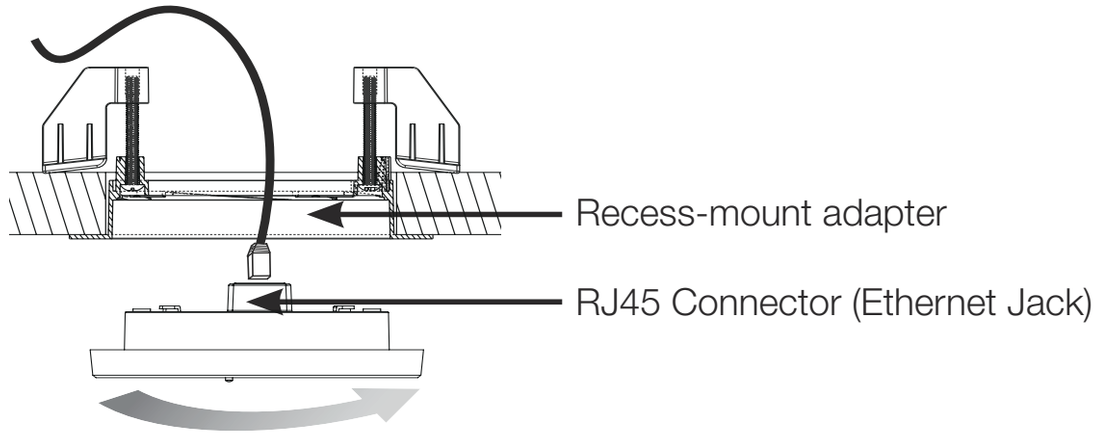


OR

Wall installation

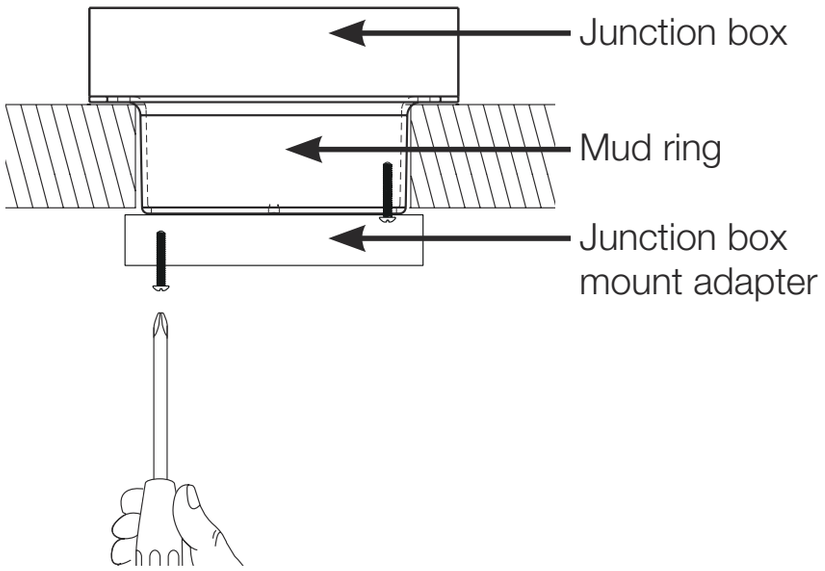


Plug in Ethernet cable and attach processor to PoE-enabled network switch or PoE injector



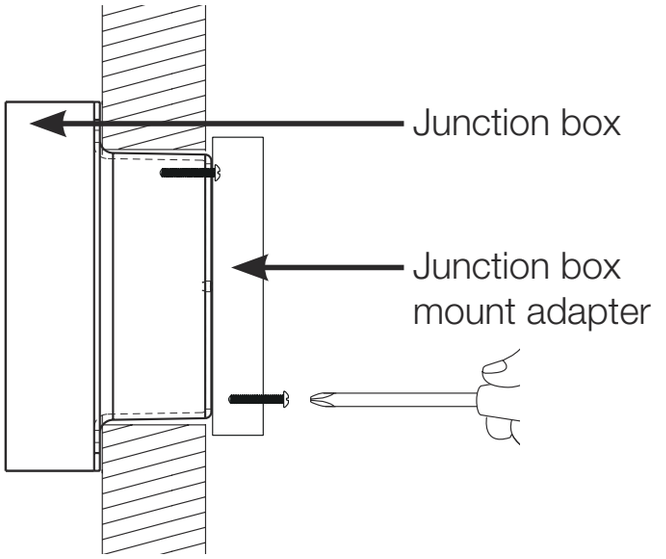
Step 4b — Installation using the Junction Box Mount Adapter

Ceiling installation

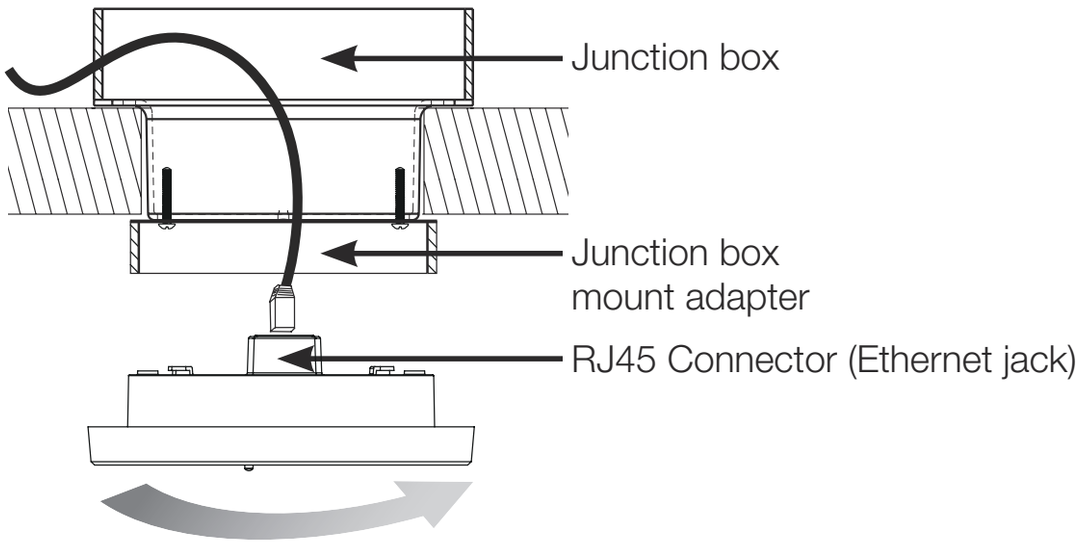


OR

Wall installation

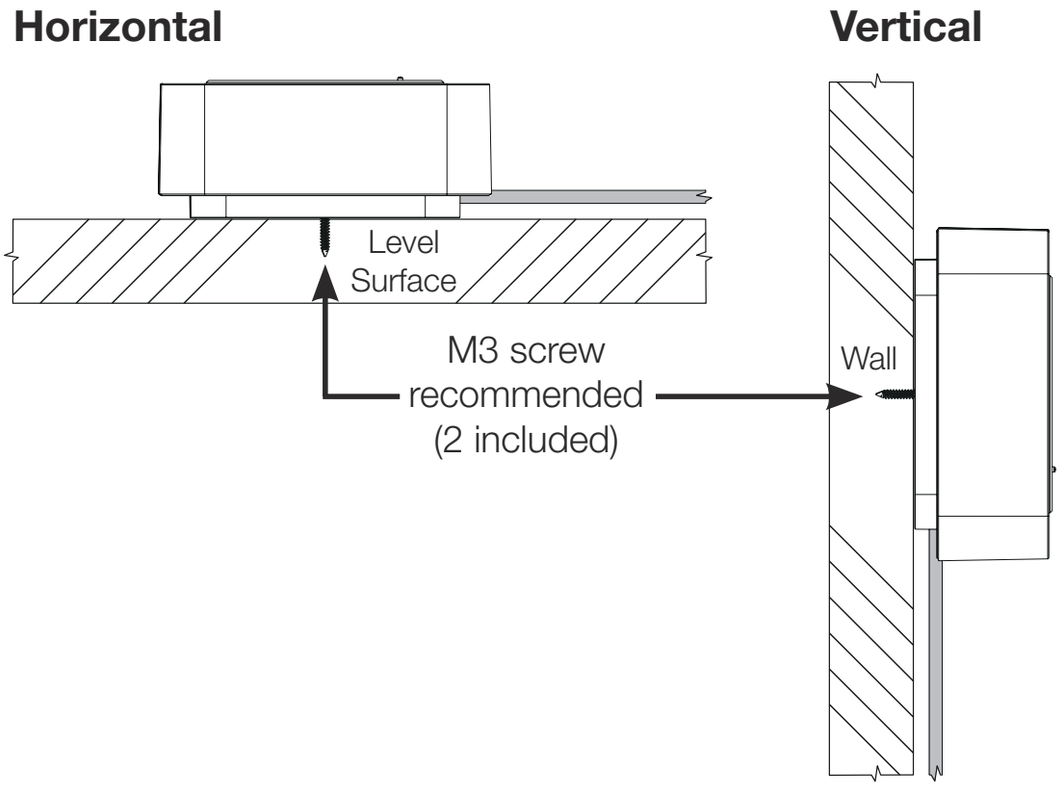


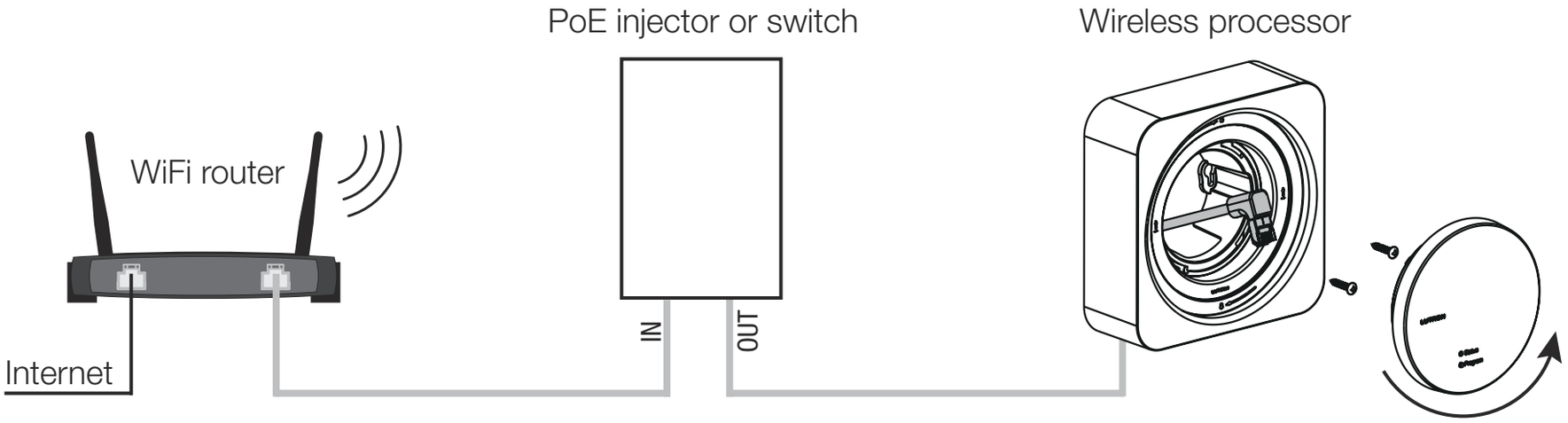
Plug in Ethernet cable and attach processor to PoE-enabled network switch or PoE injector



Step 4c — Installation using the Shelf-Mount Adapter (P/N: L-SMNT-WH, sold separately)

- 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 6.3 mm into the wall or the drywall anchors
- **Feed right-angle connector of the 1.8 m Ethernet cable through the adapter BEFORE tightening screws**
- Tighten screws
- Plug in Ethernet cable and attach processor to PoE-enabled network switch or PoE injector
- Attach processor to 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

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
Processor has no Internet access	Status LED blinks yellow every 5 seconds

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
Unit cannot be found in software	The Ethernet cable is not connected to the same LAN as the wired processor
	Model is not supported (Athena/myRoom vs. HomeWorks)
	Ethernet run is longer than the supported 100 m and a PoE extender is needed
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
LED on unit is blinking yellow every 5 seconds	Processor does not have Internet connectivity. Verify that the processor is connected to a network configured for internet access. Wait for up to 1 minute after implementing any corrective actions.
	Refer to the Application note #760 (048760) at www.lutron.com/europe for network troubleshooting details
LED on unit is solid red	Contact Lutron Tech Support only if maintained more than 30 seconds or if it occurs periodically.

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

Hereby, Lutron Electronics Co. Inc declares that the radio equipment type RRKE-PROC3 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.lutron.com/cedoc

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.