

## RadioRA 2 RF Plug-In Modules

RadioRA 2 RF Plug-in Modules are simple to install and easy to use. RF Plug-in Modules allow floor and table lamps (RR-3PD-1) as well as general purpose switching loads (RR-15APS-1) to be added to a system quickly and easily using Clear Connect RF Technology. They can be hidden behind furniture or appliances.

The RadioRA 2 Dimming Module (RR-3PD-1) functions much like standard lamp dimmers, but also incorporates advanced features such as fade-on/fade-off, delayed long fade-to-off, and rapid full on.

The RadioRA 2 Appliance Module (RR-15APS-1) switches up to 15 A of general purpose loads. It features Lutron's patented Softswitch technology to prevent the relay contacts from arcing, extending the average life of the switch.



RR-3PD-1



RR-15APS-1

### Model Numbers

**RR-3PD-1-XX\*** 300 W/300 VA Dimming Module (1 receptacle)

**RR-15APS-1-XX\*** 1/2 HP or 15 A General Purpose Plug-In Appliance Module (1 receptacle)

<i>Packages</i>	<i>Includes</i>
RR-1ZONE-L-WH	1 RR-3PD-1-SW (dimming module in Snow) 1 CW-1-WH (single-gang faceplate in White) 1 PJ2-3BRL-GWH-L01 (3-button with raise/lower Pico wireless control in White/Gray) 1 PICO-WBX-ADAPT (Pico wallbox adapter)
RR-2ZONE-L-WH	2 RR-3PD-1-SW (dimming module in Snow) 1 CW-1-WH (single-gang faceplate in White) 1 PJ2-3BRL-GWH-L01 (3-button with raise/lower Pico wireless control in White/Gray) 1 PICO-WBX-ADAPT (Pico wallbox adapter)

\*See **Colors and Finishes** on page 5.

## RadioRA 2 RF Plug-In Modules

### Specifications

<b>Model Numbers</b>	RR-3PD-1-XX, RR-15APS-1-XX
<b>Power</b>	120 V~ 50/60 Hz
<b>Typical Power Consumption</b>	0.3 W Test conditions: load is off.
<b>Regulatory Approvals</b>	cUL, UL, FCC, IC, SCT, NOM (-3PD only; -15APS pending)
<b>Environment</b>	Ambient operating temperature: 32 °F to 104 °F (0 °C to 40 °C), 0% to 90% humidity, non-condensing. Indoor use only.
<b>Communications</b>	Plug-In Modules communicate with the system through Radio Frequency (RF) and must be located within 30 ft (9 m) of a repeater. System devices operate on frequencies between 431.0 MHz and 437.0 MHz.
<b>ESD Protection</b>	Tested to withstand electrostatic discharge without damage or memory loss, in accordance with IEC 61000-4-2.
<b>Surge Protection</b>	Tested to withstand surge voltages without damage or loss of operation, in accordance with IEEE C62.41-1991 Recommended Practice on Surge Voltages in Low-Voltage AC Power Circuits.
<b>Power Failure</b>	Power failure memory: should power be interrupted, the RF Plug-In Module will return to its previous state when power is restored.
<b>Warranty</b>	<a href="http://www.lutron.com/TechnicalDocumentLibrary/Warranty.pdf">www.lutron.com/TechnicalDocumentLibrary/Warranty.pdf</a>

**⚠WARNING – Entrapment Hazard –** May result in serious injury or death. These controls should only be used to control equipment which is visible from every control location.

**⚠WARNING – Fire Hazard –** May result in serious injury or death. Only use these controls to operate approved load and equipment types.

#### IMPORTANT NOTE:

Examples of such equipment which must not be operated by these controls include (but are not limited to) motorized gates, garage doors, industrial doors, microwave ovens, heating pads, fireplaces, space heaters, etc. It is the installer's responsibility to ensure that the equipment being controlled is visible from every control location and that only suitable equipment is connected to these controls. Failure to do so could result in serious injury or death.

## Design Features

### Dimming Module (RR-3PD-1)

- On a single-tap of the toggle button, lights fade ON or OFF.
- On a double-tap of the toggle button, lights go to full ON.
- When ON, press and hold the toggle button to engage the delayed long fade to OFF.
- Light levels can be fine-tuned by pressing and holding the raise/lower buttons until the desired light level is reached.
- Control non-dimmable lighting loads in switching mode.

### Appliance Module (RR-15APS-1)

- On a single-tap of the toggle button, load toggles ON or OFF.
- The appliance module may be used with, but is not limited to, the following:
  - Task lighting
  - Monitors
  - Fans
  - Humidifiers
  - Printers

Note: Refer to the manufacturer's guidelines for acceptable switching methods.

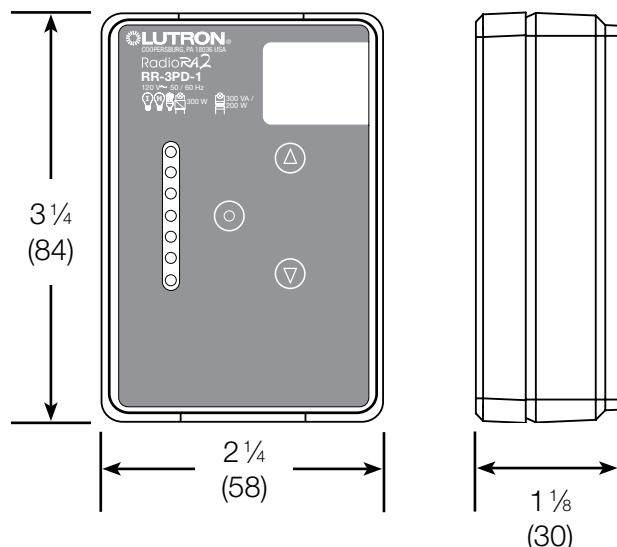
- The appliance module may NOT be suitable for use with devices that require any of the following:
  - Shut-down process before power is interrupted, such as computers.
  - Cool-down process before power is interrupted, such as projectors.
  - Programming, such as clocks or DVRs.
  - Long warm-up cycle.
- If an over-temperature condition is detected, the LED on the unit will flash a unique sequence (double-blink, then pause) and turn the load off. Proper installation and conformance to all specifications should be ensured before proceeding. To return the device to normal operation, cycle power to the device.

## RadioRA 2 RF Plug-In Modules

### Dimensions

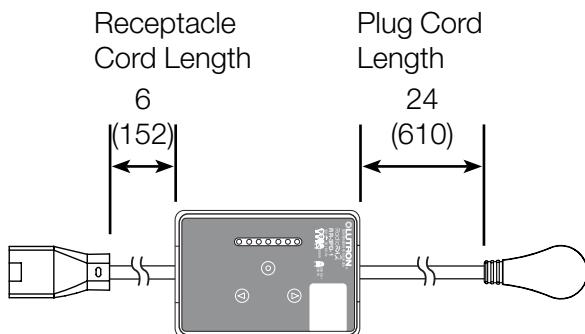
All dimensions are shown as: in (mm). Images below are for reference only.

**Front View**



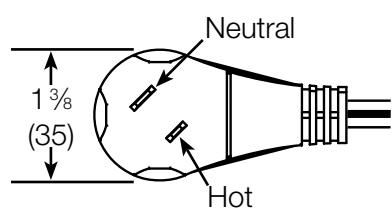
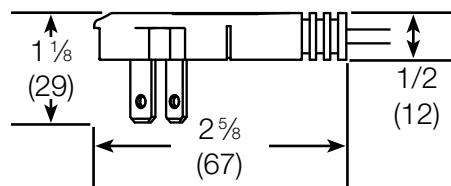
**Side View**

**Cord Length**

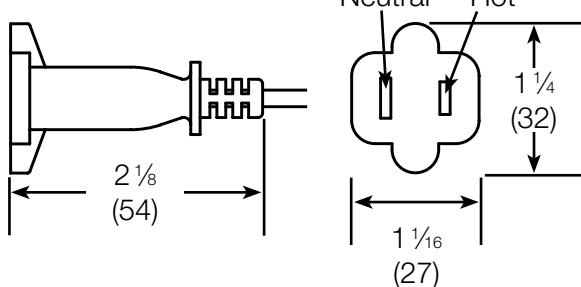


### Dimming Module (RR-3PD-1)

**Plug**

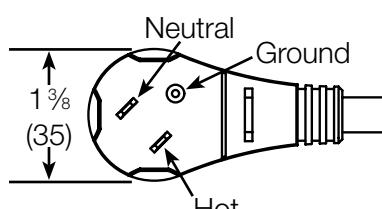
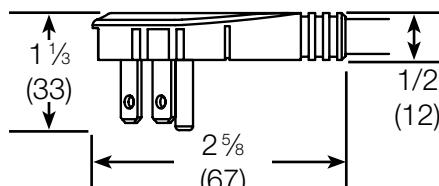


**Receptacle**

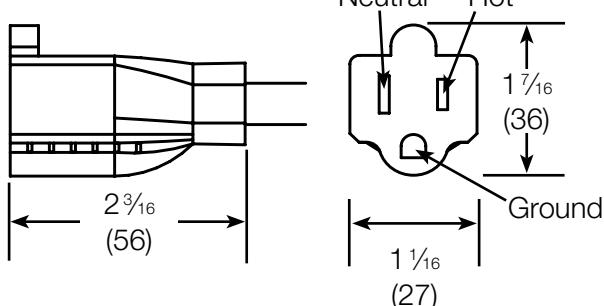


### Appliance Module (RR-15APS-1)

**Plug**



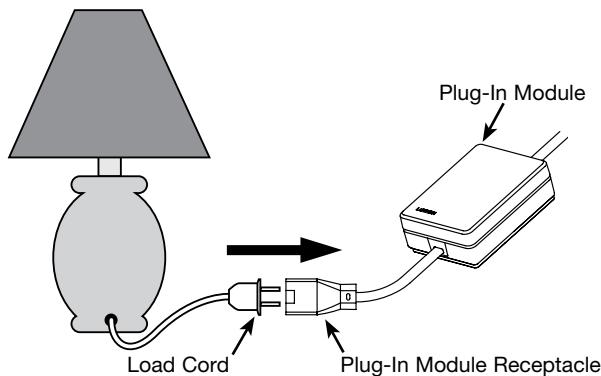
**Receptacle**



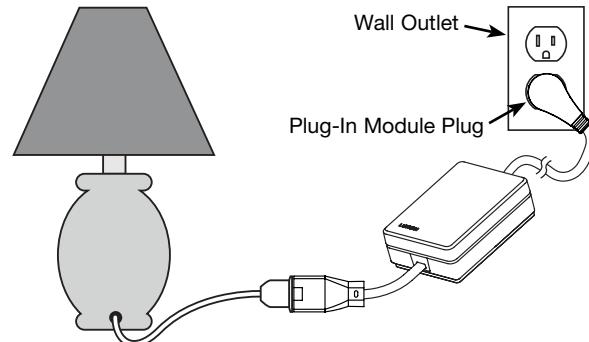
## RadioRA 2 RF Plug-In Modules

### Installation

Plug the load cord into a Plug-In Module receptacle.



Insert the plug of the Plug-In Module into the wall outlet.



**NOTE:** The Plug-In Dimming Module contains a **POLARIZED** cord set. It has a polarized plug (one blade is wider than the other) and outlet (one slot is wider than the other). The polarized plug is not intended to be mated with non-polarized outlets (having both slots the same size). The polarized outlet is intended to mate with a polarized plug in only one way (the longer slot with the wider blade).

### Load Type and Capacity

Control	Load Type	Min. Load	Max. Load
3PD-1 <sup>1</sup>	Incandescent, Halogen	10 W	300 W
	MLV <sup>2</sup>	10 W / VA	200 W / 300 VA
	CFL, Fluorescent, ELV (Switching Mode Only)	10 W	300 W
15APS-1 <sup>3</sup>	General purpose	None <sup>4</sup>	1/2 HP 15 A

<sup>1</sup> The RR-3PD-1 is designed to dim one incandescent, magnetic low-voltage, or tungsten halogen table or floor lamp. The RR-3PD-1 can be configured to switch a CFL, fluorescent, or electronic low-voltage load. Use with lighting loads only. Do not use to control a lamp that contains an integral dimmer or a touch lamp. For a lamp with an integral 3-way switch, the switch should be set to full on position. The RR-3PD-1 may not work with diode light bulbs. Always use a load that complies with the **Load Type and Capacity** table above. Always use a light bulb that remains within the wattage rating of the light fixture.

<sup>2</sup> Low-Voltage Applications: The RR-3PD-1 can be used with magnetic (core and coil) low-voltage transformers in both dimming and switching modes. Use with electronic (solid-state) low-voltage transformers in switching mode only. Operation of a low-voltage circuit with light bulbs inoperative or removed may result in transformer overheating and premature failure. Lutron strongly recommends the following:

- Do not operate low-voltage circuits without operative light bulbs in place.
- Replace burned-out light bulbs as soon as possible.
- Use transformers that incorporate thermal protection or fused transformer primary windings to prevent transformer failure due to overcurrent.

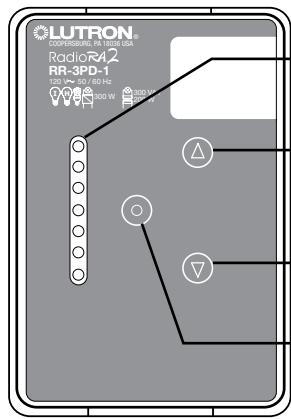
<sup>3</sup> The RR-15APS-1 is designed to switch general purpose loads (lighting, non-lighting, motor-operated, or transformer supplied appliances). Total connected load can not exceed 1/2 HP, or 15 A. Peak horsepower is not reflective of the UL appliance horsepower rating. Consult appliance manufacturer for UL horsepower rating.

<sup>4</sup> Some low wattage loads may try to start when the Appliance Module is OFF due to 0.5 mA leakage current through the module, similar to a night lighted toggle switch. Consult the load manufacturer for compatibility.

## RadioRA 2 RF Plug-In Modules

### Operation

#### Dimming Module (RR-3PD-1)

**Status LEDs**

Indicate light level; glow softly as night light when load is OFF

**Raise Button**

Press to brighten

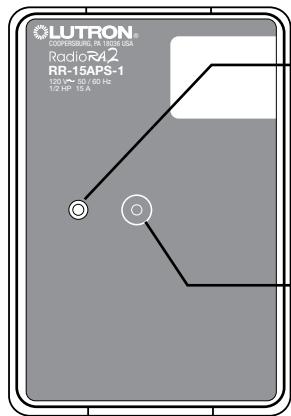
**Lower Button**

Press to dim

**Toggle Button**

Press to toggle ON/OFF; double-tap for full ON; press and hold while ON for delayed long fade to OFF

#### Appliance Module (RR-15APS-1)

**Status LED**

Indicates load status; glows softly as night light when load is OFF

**Toggle Button**

Press to toggle ON/OFF.

### Colors and Finishes

RadioRA 2 RF Plug-In Modules are available in 2 colors.



Snow  
SW



Midnight  
MN

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