RadioRA 3 In-Line Load Controls

The RadioRA 3 family of in-line dimmers, switches and fan controls can control lighting, motor, and fan loads and provide a system that is convenient and easy to install.

RadioRA 3 in-line load controls use Lutron patented Clear Connect Type A RF technology which provides reliable, wireless communication with other RadioRA 3 devices. Using a RadioRA 3 processor allows devices to be part of a whole house solution that can be controlled remotely from anywhere in the world.



Control Type	Model Number	Frequency	Country/ Region
Dimmer	RR3K-R25NE-240	868 MHz	UK
Switch	RR3K-R6ANS-240	868 MHz	UK
Fan Control	RR3K-RNFSQ-240	868 MHz	UK

Features

- The reverse-phase dimmer is trailing-edge capable of up to 250 W of incandescent/halogen/ELV loads and up to 1 A/150 W of LED.
- The switch is rated for 6 AX of general purpose lighting load and 2 A/0.5 HP of motor load.
- The four-speed fan control is rated for a single AC ceiling fan up to 100 W.*
- When used with a RadioRA 3 processor, the load controls can be programmed via the Lutron Designer PC Tool[1] and controlled via lighting scenes, scheduled daily events, the Lutron App[2], and other RadioRA 3 system features. Also, the load controls can be controlled from anywhere in the world.
- Small size allows for simple retrofit installation.
- Remote device association allows for in-line controls to be added to a system without physically accessing product.
- When powered on in an unaddressed state (not paired with a Pico wireless control or activated in a system), the fan control will turn on the fan for two (2) minutes to allow the installer to verify that the device is installed and wired correctly.
- The four fan speed settings (low, medium, medium high, and high) can be adjusted to be faster or slower to optimize each for the specific ceiling fan that is being used. This feature is accessible within the device settings in the Lutron app.

* Use to control one AC ceiling fan. Not for use with DC motor fans, fans with integrated light control modules, fans with remote controls, or WI-FI only fans. Not for use with shaded-pole type motors (e.g., bathroom or kitchen exhaust-type fans).

[1] The PC tool requires a 32 or 64 bit processor running Windows 10, with a recommended minimum of 8 GB of RAM, 4 GB disk space, and a 2.67 GHz Core i5 processor.

[2] The Lutron App is required for setup and use with the RadioRA 3 processor. The Lutron App is compatible with iOS and Android devices. See the Apple App Store and Google Play store for the minimum version requirements.

RadioRA 3 In-Line Load Controls

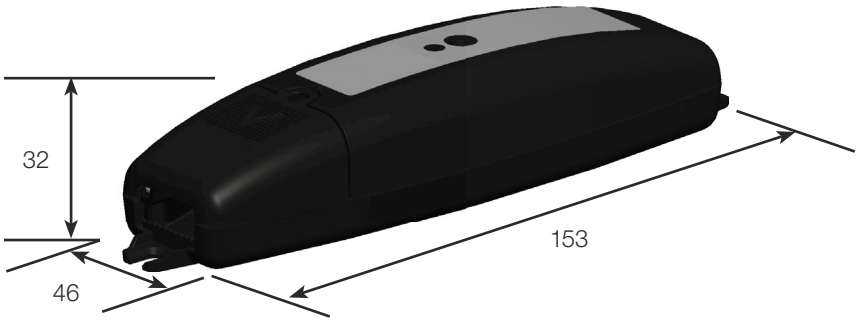
Specifications

Power	220–240 V~ 50/60 Hz
Typical Power Consumption	***Dimmer / Switch / Fan Control:*** <0.5 W Test conditions: Load and LED are off
Regulatory Approvals	Lutron Quality Systems registered to ISO 9001:2015 CE Marked UKCA Marked RoHS Compliant
Environment	Ambient operating temperature: 0 °C to 40 °C, 0% to 90% humidity, non-condensing. Indoor use only.
Communications	RadioRA 3 in-line load controls communicate with the system through Radio Frequency (RF). They must be located within 18 m line-of-sight or 9 m through walls of a Pico wireless control, Radio Powr Savr sensor, processor, or wireless repeater. System devices operate on 868 MHz.
ESD Protection	Tested to withstand electrostatic discharge without damage or memory loss, in accordance with IEC 61000-4-2.
Surge Protection	Tested to withstand surge voltages without damage or loss of operation, in accordance with IEEE C62.41-1991 Recommended Practice for Surge Voltages in Low-Voltage AC Power Circuits.
Power Failure	Power failure memory: should power be interrupted, the control will return to its previously set level prior to the interruption when power is restored.
Mounting	Allow adequate space to ensure convective cooling of load control. Remove any insulation, heat generating equipment, or obstructions within 120 mm of the load control. For optimal RF performance, no metal or other electrically conductive material should be present within 120 mm around the top and sides of the load control. The load control is not suitable for installation in places where it is fully enclosed in metal (e.g., metal enclosures, electrical cabinets) or within metal ceilings.
Wiring	RadioRA 3 in-line controls accept wire gauges between 0.5 mm^2 to 2.5 mm^2. Note: All outside wire diameters must be the same and must be between 5.2 mm–8.5 mm.
Device Limits	***With repeater:*** Up to 100 devices (e.g., load controls, Pico wireless controls, Radio Powr Savr sensors, shades, and repeaters) are supported per RF link. The processor counts as one device and four locations are reserved for wireless repeaters. Note: Load controls have load type and capacity limits. For more information, see **Load Type and Capacity**.
Warranty	www.lutron.com/europe/Service-Support/Pages/Service/Warranty

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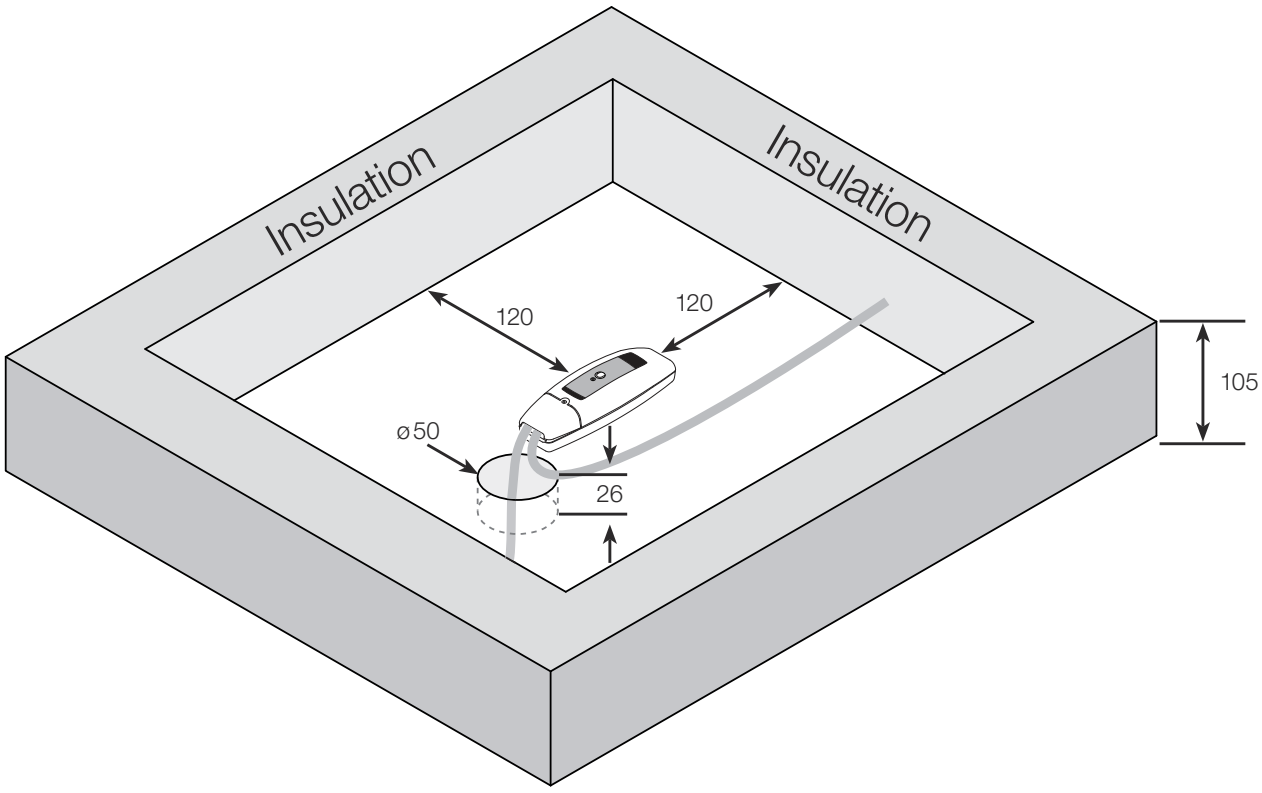
Dimensions

All dimensions are shown as: mm



Mounting and Installation

All dimensions are shown as: mm



RadioRA 3 In-Line Load Controls

Load Type and Capacity

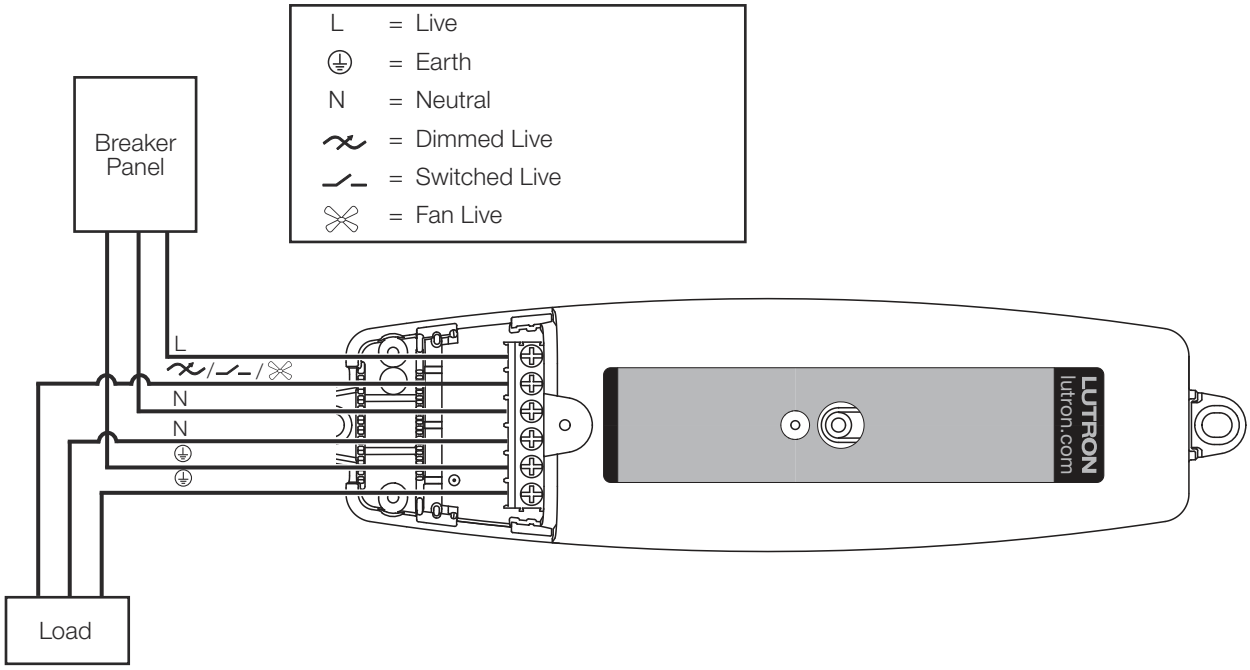
Model	Voltage	Load Types
RR3K-R25NE-240	220–240 V~ 50/60 Hz	1 A 250 W – Incandescent, halogen, ELV 1 A 150 W – LED*
RR3K-R6ANS-240		6 AX Lighting (all types) 2 A/0.5 HP Motor Ⓜ
RR3K-RNFSQ-240		100 W max. one (1) AC ceiling fan**

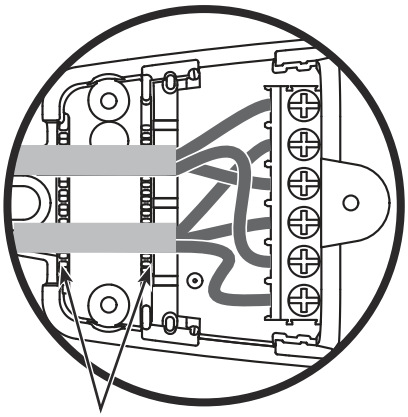
* LED rating is 1 A. If no current rating is specified, a power rating of 150 W can be used. Higher ratings (up to the incandescent rating) can be achieved for specific LED fixtures based on Lutron testing results. Refer to lutron.com/ledtool for compatibility testing results and the maximum number of LED fixtures. Using LED fixtures that are not tested can result in the fixtures not turning on or poor dimming quality. LED dimming performance can vary from fixture to fixture and cannot be guaranteed.

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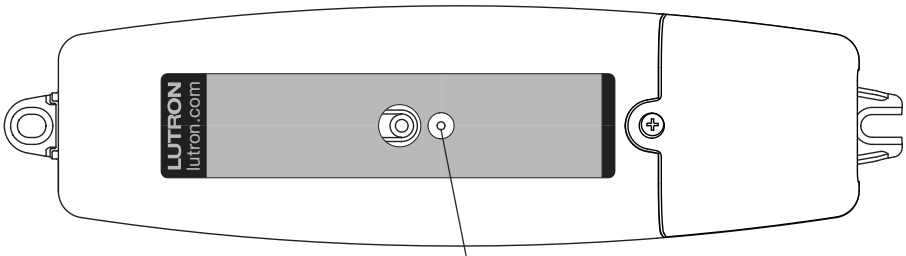
Wiring





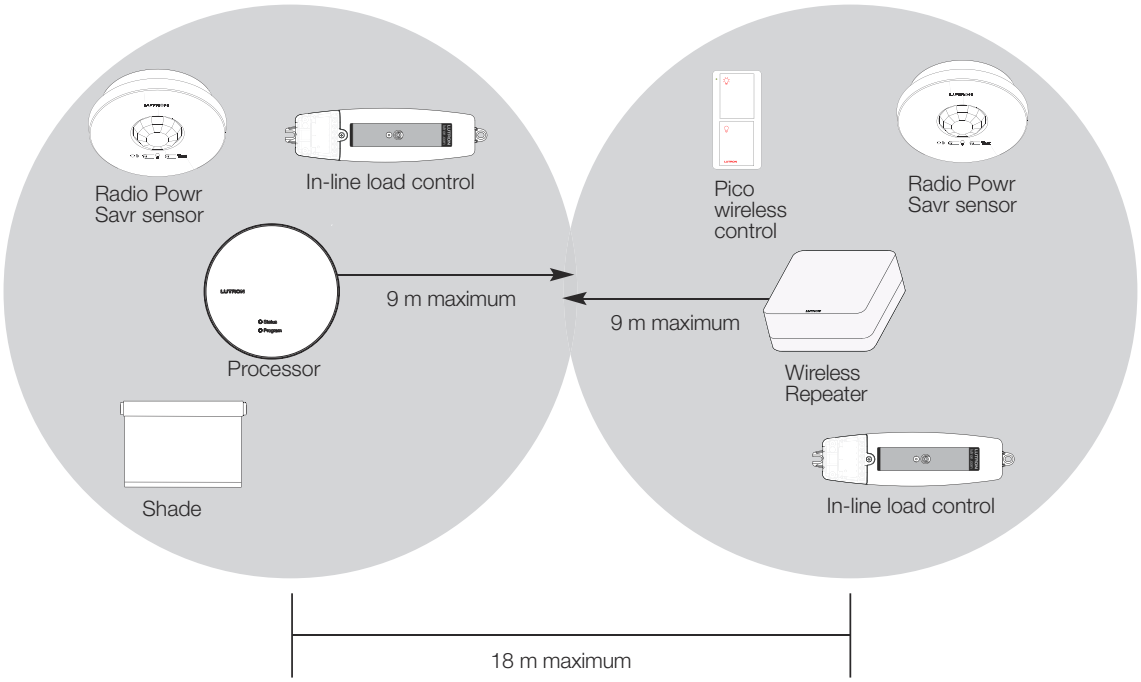
RadioRA 3 In-Line Load Controls

Operation



Green - Blinks when load is toggled
Flashes during association
Blue - Advanced programming mode (APM)
Red - Blinks when error

RF Range



All devices must be located within 9 m of a RadioRA 3 processor or wireless repeater. The range can be extended with up to four wireless repeaters on a single RF link.

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Model Numbers

RR3K-RXXXX-240

Device Type

Device Type
6ANS = Switch (Neutral Required)
25NE = Dimmer (Neutral Required)
NFSQ = Fan Control (Neutral Required)

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