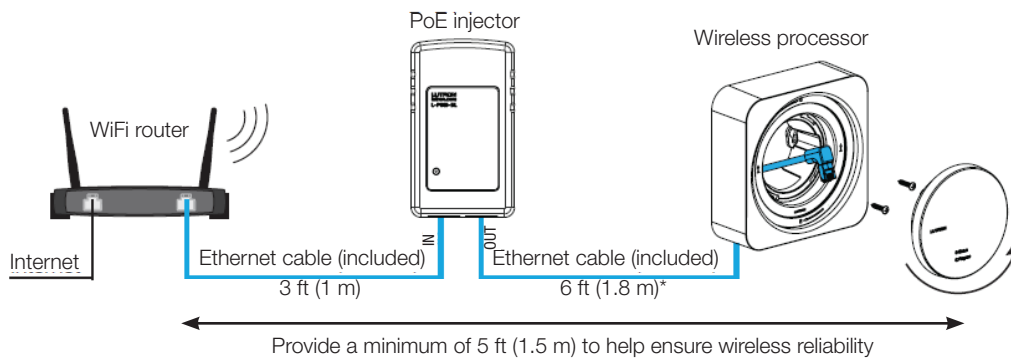# LUTRON

RadioRA 3 Wireless Setup Guide

Clear Connect is Lutron's ultra-reliable wireless brand of technology used to provide high-performance lighting control solutions to end users; it's wireless that just works. Clear Connect wireless allows the use of existing house wiring for the ultimate flexibility in new construction or retrofit/remodel applications. To help ensure reliable wireless performance of a RadioRA 3 system, please follow the requirements provided in this Setup Guide.

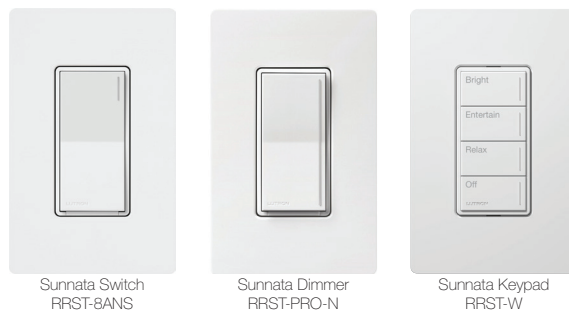## RadioRA 3 Device Types and Design Rules

RadioRA 3 Wireless Processor (Clear Connect – Type A and Clear Connect – Type X)

- 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), WiFi routers, and other 2.4 GHz wireless devices.
- **DO NOT** mount Radio Powr Savr sensors within 4 ft (1.2 m) of HVAC vents, halogen or incandescent light bulbs, microwave ovens, WiFi routers, IOT cameras, or other non-Clear Connect wireless devices. When using Clear Connect – Type X devices, ensure sensor is mounted at a distance of 2 ft (0.6 m) or greater from the devices.
- PoE switch or injector requirements: Powered by an IEEE 802.3af, IEEE 802.3at or IEEE 802.3bt compliant Power over Ethernet.

Provide a minimum of 5 ft (1.5 m) to help ensure wireless reliability

* **Note:** Cannot exceed 100 ft (30.48 m)

Sunnata Keypads, Dimmers, and Switches (Clear Connect – Type X)

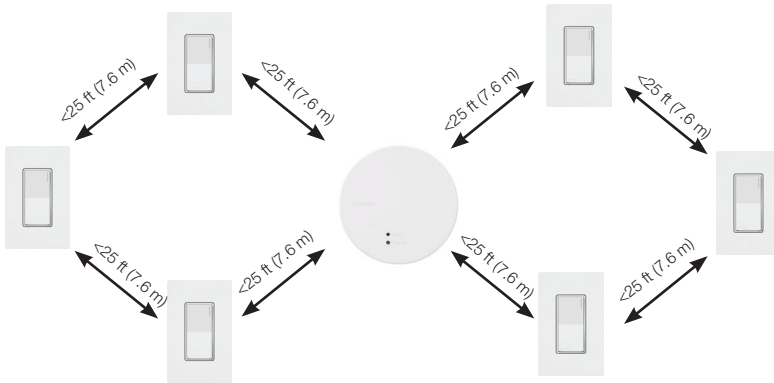| Sunnata Switch | Sunnata Dimmer | Sunnata Keypad |
| RRST-8ANS | RRST-PRO-N | RRST-W |

- Maximum of 100 Sunnata devices per processor
- Each Sunnata device must be within 75 ft (22.8 m) of the processor
- Each Sunnata device must be within 25 ft (7.6 m) of at least two other Sunnata devices, or the processor and one other device
- At least two Sunnata devices must be within 25 ft (7.6 m) of the processor
- To improve the wireless coverage of the system, install additional Sunnata devices to help meet the above wireless range requirements.

  Note: The RadioRA 2 auxiliary repeater (RR-AUX-REP-WH), and Lutron wireless repeater (L-REPPRO-BL) do not extend the wireless range for Sunnata devices and may not be used to meet the above wireless range requirements for Sunnata devices.
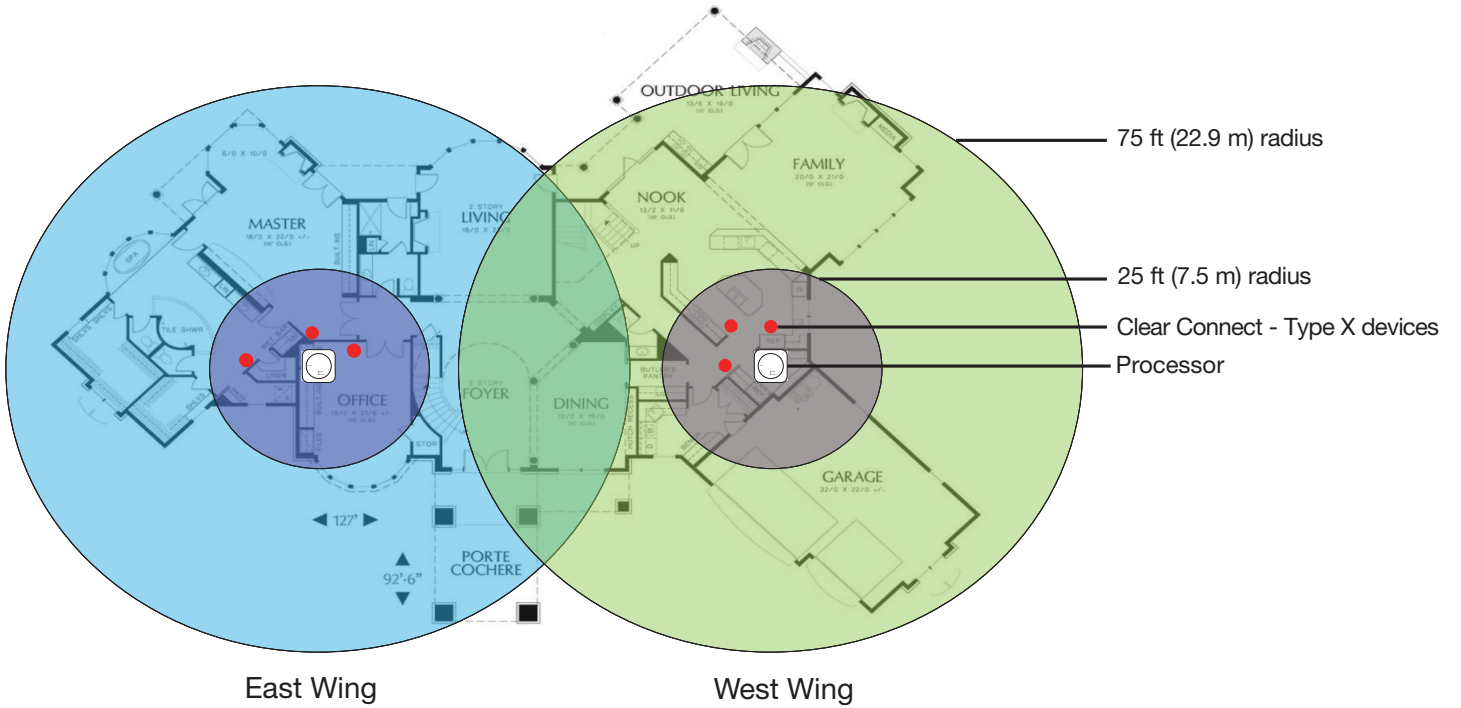
* Clear Connect – Type X devices do not extend the range of RadioRA 2 repeaters.

RadioRA 3 Device Types and Design Rules (cont.)
Sunnata Keypads, Dimmers, and Switches (Clear Connect – Type X)

Multi-Processor System

75 ft (22.9 m) radius

25 ft (7.5 m) radius

Clear Connect - Type X devices
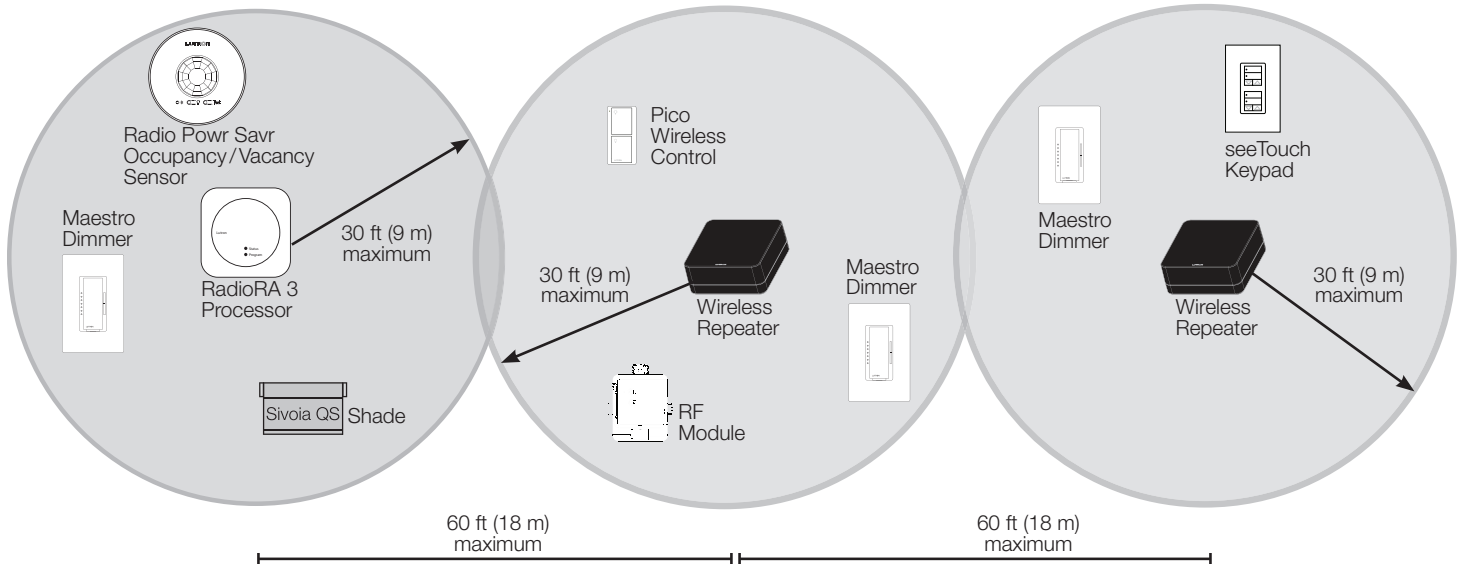
Processor

East Wing

West Wing

RadioRA 3 Device Types and Design Rules (cont.)

seeTouch, Maestro, Shades, Pico Wireless Controls, VCRX, and Sensors (Clear Connect – Type A*)

Maestro PRO
LED+ Dimmer
RRD-PRO

seeTouch Keypad
RRD-W2RLD

seeTouch Tabletop Keypad
RR-T5RL

Pico Wireless
Control
PJ2-3BRL

Visor Control Receiver
RR-VCRX

Radio Powr Savr
Wireless Sensors
LRF2-OCR2B-P

Sivoia QS Wireless and
Sivoia QS Triathlon Shades

- Maximum of 100 Clear Connect – Type A devices or 100 zones per link (includes 4 auxiliary / wireless repeaters and 1 processor address).
- RF range between Clear Connect – Type A Repeaters is 60 ft (18 m) and 30 ft (9 m) to other devices, with a total possible coverage area of 2500 ft^2 (232 m^2) per repeater / processor.
- Clear Connect – Type A devices and repeaters do not extend the range of Type X devices.

Radio Powr Savr
Occupancy / Vacancy
Sensor

Maestro
Dimmer

RadioRA 3
Processor

30 ft (9 m)
maximum

Sivoia QS Shade

Pico
Wireless
Control

30 ft (9 m)
maximum

Wireless
Repeater

RF
Module

Maestro
Dimmer

Maestro
Dimmer

seeTouch
Keypad

Wireless
Repeater

30 ft (9 m)
maximum

60 ft (18 m)
maximum

60 ft (18 m)
maximum

* Examples only; not a complete list of all Clear Connect – Type A devices.

Lutron Contact Numbers

WORLD HEADQUARTERS
USA
Lutron Electronics Co., Inc.
7200 Suter Road
Coopersburg, PA 18036-1299
TEL: +1.610.282.3800
FAX: +1.610.282.1243

support@lutron.com

www.lutron.com/support

North & South America
Customer Assistance
USA, Canada, Caribbean:
1.844.LUTRON1 (1.844.588.7661)
Mexico:
+1.888.235.2910
Central/South America:
+1.610.282.6701

UK AND EUROPE:
Lutron EA Limited
125 Finsbury Pavement
4th floor, London EC2A 1NQ
United Kingdom
TEL: +44.(0)20.7702.0657
FAX: +44.(0)20.7480.6899
FREEPHONE (UK): 0800.282.107
Technical Support: +44.(0)20.7680.4481

lutronlondon@lutron.com

ASIA:
Lutron GL Ltd.
390 Havelock Road
#07-04 King's Centre
Singapore 169662
TEL: +65.6220.4666
FAX: +65.6220.4333
Technical Support: 800.120.4491

lutronsea@lutron.com

Asia Technical Hotlines
Northern China: 10.800.712.1536
Southern China: 10.800.120.1536
Hong Kong: 800.901.849
Indonesia: 001.803.011.3994
Japan: +81.3.5575.8411
Macau: 0800.401
Taiwan: 00.801.137.737
Thailand: 001.800.120.665853
Other Countries: +65.6220.4666

LUTRON