RadioRA_® 2

New! seeTemp™ wall control



Lutron_® iPad[®] app for total home control



Save energy with wireless total home control





What is RadioRA_®2?

RadioRA 2 is a wireless total home control system that provides convenient and intuitive control of lights, shades, appliances, and temperature in a single room or throughout a whole home. It installs easily, programs quickly, and operates reliably thanks to Clear Connect_™ RF Technology.

What's New?

Look for NEW! as you read this brochure to see recently added features and components.







Table of contents



page 02 How RadioRA 2 saves energy



page 04
System components



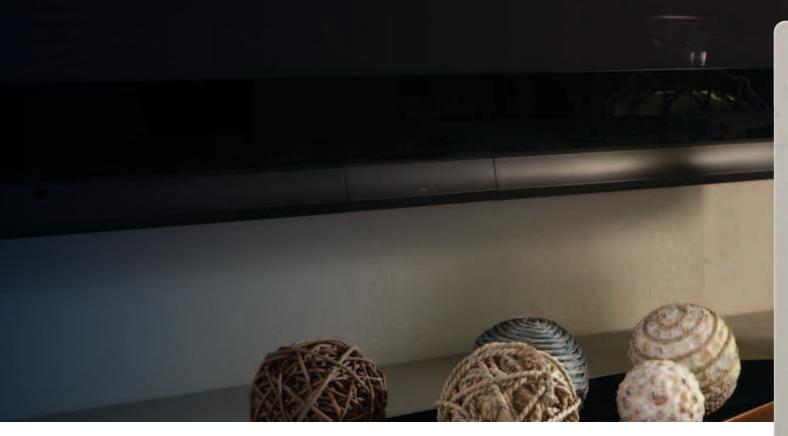
page 08
Open integration



page 10Easy installationand programming



page 12Scalable, flexible, reliable





seeTouch® wall-mounted keypad in stone

What are the benefits?

Saves energy

Homeowners today want to cut costs and protect the planet. With RadioRA® 2 they can do both of those things.

The energy-saving benefits of RadioRA 2 are brought to you through a combination of light, shade, temperature, and appliance control.

Open integration

- · Control from remotes, home automation systems, mobile devices, and more—all on one repeater
- · Public integration protocol allows virtually any device capable of sending and/or receiving RS232 or IP commands to control lights and shades
- Two-way functionality provides the ability to monitor the status of lights in the home including light level, respond to button presses, and access database-level system information

Easy to install and program

- PC setup tool saves time during design and programming—define zones, light and shade levels, occupancy/vacancy sensing, and more
- For simple applications, button-press setup requires no PC
- · Wall-mounted hybrid keypad replaces existing switches with no new wiring—perfect for retrofit applications

Flexible, scalable, and reliable

- Choose from a variety of wireless components to customize a system that fits into any space
- Simply add components at any time to grow the system from a single room to a whole home—scale from 2 to 200 devices
- · Works directly with Sivoia® QS Wireless shades and drapes, GRAFIK Eye® QS Wireless, and Radio Powr Savr_m occupancy/vacancy sensors
- Clear Connect_™ RF Technology ensures ultra-reliable wireless communication between components

How RadioRA_® 2 saves energy



Light control

When you dim a standard halogen or incandescent light bulb by 25%, you'll save 20% lighting energy. Dim more and you'll save even more. Sensors and a timeclock also help save energy by turning off lights when they are not needed.

Potential energy savings: 20%

Shade control

Controllable window shades can save you 10% on heating and cooling costs by blocking the sun's rays in summer or letting them in to warm a room during colder months.¹

Potential energy savings: 10%

Temperature control

The perfect complement to light and shade control, temperature control gives you the ability to adjust heating and cooling systems any time of day—even while you're away from home, saving up to 16% or more of your heating and cooling energy usage.²

Potential energy savings: 16%

Appliance control

Many appliances—like A/V equipment—consume energy 24 hours a day amounting to 10% of a typical home's electricity use.³ Turning off this standby power as part of a total home control system saves energy.

Potential energy savings: 10%

- 1 Lutron commissioned simulation by T.C. Chan Center for Building Simulation and Energy Studies, University of Pennsylvania, September 2008.
- 2 www.energystar.gov
- 3 www.standby.lbl.gov

The energy-saving solutions listed below use a combination of light, shade, temperature and appliance control to capitalize on energy savings in the home.



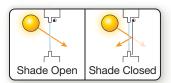
Dimming incandescent or halogen bulbs by 25% saves 20% electricity. Dim more and you'll save even more.



CFLs and LEDs already use less energy than standard bulbs, so dimming these highly efficient bulbs saves additional energy.

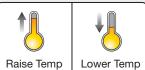


Occupancy sensing turns lights and standby power from electronic appliances off when a person leaves the space.

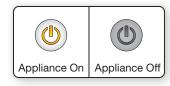


Controllable window shades reduce heating costs in winter and cooling costs in summer.

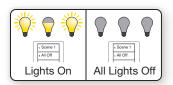




Temperature control can set back the temperature when heating or cooling a room, so you use less energy.



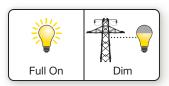
Appliance control eliminates standby power consumed by electronic appliances when you're not using them.



The "All Off" button turns all lights off with a single touch.



Scheduling can dim or turn off lights and standby power from electronic appliances when they're not needed, as well as adjust the temperature when not as much heating or cooling is needed.



Demand response reduces energy use from lights, shades, and heating/cooling systems during peak electricity usage times. **Coming soon!**





The "Green" button reduces energy use from lights, shades, heating/cooling systems, and appliances with a single touch.

System components



Keypads

Use wall-mounted or tabletop keypads to adjust lights, shades, or HVAC. Handheld controls and the car visor transmitter are convenient ways to adjust lights and shades. Available in a wide variety of button configurations and colors.



seeTouch® wall-mounted keypads

install in a standard wallbox to provide control of lights and/or shades individually or in preset scenes. Features backlit buttons and personalized engraving.



seeTouch® **tabletop keypads** are powered by standard AAA batteries or a plug-in adapter (both included). Tabletop keypads provide convenient, portable control of the system with backlit buttons and personalized engraving.



Pico® wireless controls are battery-powered remote controls that can be mounted to any wall surface, placed on available pedestal for tabletop use, or used as a handheld control. Wall-mount option provides the convenience of additional "3-way" control of lights and shades with no new wiring.



1. HomeLink.

The **car visor transmitter** is a three-button, battery-powered control that provides control of lights and shades from your car. HomeLink® compatibility in the visor control receiver (see page 13) allows your car's built-in buttons to adjust lights and shades.

Lighting controls

Lighting controls provide the basic building blocks for the RadioRA® 2 system. Dimmers, switches, and other components are available in a variety of colors and finishes.



The wall-mounted hybrid keypad installs in place of a standard light switch to provide dimming of the attached lighting, plus the benefits of a wall-mounted keypad. Keypad buttons can be programmed to control any other lighting control devices as well as shades.



A wall-mounted dimmer installs in place of a standard light switch to provide dimming control of the attached lighting, as well as system control from keypads and other devices.



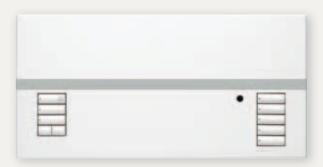
A wall-mounted switch installs in place of a standard light switch to provide switching control of the attached lighting, as well as system control from keypads, sensors and other devices.



The tabletop lamp dimmer provides direct dimming control of an attached table lamp, and provides system control of the lamp from keypads and other devices. The dimmer's "stack-on" plug connects to a standard electrical receptacle and also provides the connection for the lamp.



The plug-in dimming module plugs into a standard receptacle and provides connection for floor or table lamps. Plug-in modules are designed to be concealed behind furnishings. Connected lights can be controlled only from keypads, sensors, and other system devices.



GRAFIK Eye® QS Wireless control units provide integrated control of multiple groups of lighting fixtures and shading groups within a single room. Individual lighting loads and shade groups can be controlled directly from the unit's controls, hidden below a hinged cover.

System components

Sensors

Sensors provide for automated energy savings and added convenience. Radio Powr Savr™ sensors are battery powered and can be installed without the need for any wiring.



Radio Powr Savr wireless occupancy/vacancy sensors work with RadioRA® 2 lighting controls to turn lights on when people enter the room and turn lights off automatically when the room is empty. Available in ceiling, corner, and hallway mount configurations for appropriate sensor coverage in any room.

Appliance control

Appliance controls save energy by shutting off standby power to electronic appliances such as printers and computer monitors when they're not in use.



The **plug-in appliance module** plugs into a standard receptacle and provides connection for electrical appliances. Plug-in modules are designed to be concealed behind furnishings. The connected appliance can be switched off only from keypads, sensors, and other system devices.

Temperature controls

Add Lutron's thermostat to your RadioRA 2 system for convenient temperature control from keypads, mobile devices and the timeclock. Save energy by reducing your HVAC using the "eco" button.



seeTemp_™ wall control displays current temperature and allows you to adjust set point and system mode (heating, cooling, auto, fan on/off).

Battery-powered, **wireless temperature sensor** is surface-mounted to the wall in the space to be conditioned. It detects temperature and transmits that information to the HVAC controller.

The **HVAC controller** connects to the home's mechanical equipment using standard thermostat wiring.

Behind the scenes

System repeaters are required for system setup and operation. They create a wireless network in the home and ensure reliable performance. The visor control receiver allows system control using car visor transmitters.



Main repeater provides open integration with other systems, devices, and the Web. Included astronomic timeclock allows system control based on time of day as well as sunrise/sunset. Required for system setup and operation.



Auxiliary repeater extends system RF range in larger applications, outdoor spaces, and between buildings. Can be used wirelessly within the home or be wired to another repeater to span longer distances.



Visor control receiver enables system control from car visor transmitters. Security feature turns on and flashes selected lights when the security system is activated. Contact closure outputs enable remote control of garage door openers.

Sivoia, QS Wireless shades

Sivoia QS Wireless offers ultra-quiet, precision control of the full family of Lutron® window treatment styles at the touch of a button.



Roller shades provide precision control of daylight with near-silent operation and minimal, symmetrical light gaps of 0.75 inch on each side. Available in a variety of sheer, dim-out, and blackout fabrics.



Roman shades with CERUS™ (Cord Eliminating Roman Uptake System) technology are the first cord-free Roman shades. Available in soft fabrics and woven woods as part of the Avant Collection™.



Venetian blinds with Intelligent Tilt Alignment™ technology offer precision alignment of both tilt and lift position. They are an attractive way to ensure privacy, while still allowing sunlight to filter a space.



Complete drapery systems provide the option for pinch pleat or ripple fold style of drapes. Drapery fabric panels are now available in over 70 soft fabrics as part of The Avant Collection.



Kirbé_™ **vertical drapery systems** smoothly pulls fabric up and completely out of the way, an industry first.



Tensioned shades reliably control daylight and heat gain through skylights and angled windows. They can be installed at a variety of slopes to provide bottom-up angled window and skylight solutions.

Open integration

08 Lutron

RadioRA® 2 can be integrated with popular control and automation systems. RS232/Ethernet By utilizing standards such as TCP/IP, and providing well-documented integration communication protocols, Lutron ensures that its products work as well in integrated environments as they do in stand-alone systems. 24 V control relays RS232/Ethernet seeTemp™ wall control, wireless temperature sensor, and HVAC controller Clear Connect_™ RF communication Main repeater LILLICE COLLEGE COLLEG Hybrid keypad Pico_® wireless GRAFIK Eye® QS Wireless controller RS485 Contact closure input Plug-in dimming module (left) Keypad with IR Sivoia® QS Table lamp Plug-in appliance module (right) Wireless shades dimmer Auxiliary repeater Contact closure output Wall-mounted and Dimmer and switch Radio Powr Savr™ Visor control receiver tabletop keypads wireless occupancy/ and transmitter

vacancy sensor

Non-Lutron devices



HVAC system



IR remote control



Security system



Garage door opener





Touch panel control



A/V equipment

Lutron works with many other manufacturers to ensure that our systems integrate reliably with a wide variety of control and automation systems.

- AMX
- Control4
- FLAN
- HAI
- HomeLogic
- Life|ware

- NetStreams
- Philips
- RTI
- Savant
- Universal Electronics Inc.
- Universal Remote Control

Remote control and monitoring

Lutron® Home applications allow you to control and monitor your RadioRA® 2 system right from your mobile device—at home or while away.



Full two-way functionality allows your iPhone^{®1}, iPod touch^{®1} or Android^{™2} to update in real time when dimmers or keypads are adjusted in the home. The app supports multiple RadioRA 2 systems—perfect for users with multiple residences.



The Lutron Home Control+ app on the iPhone¹, iPod touch¹ and iPad[®] adds a HomeGlance dashboard and the ability to customize the system's energy savings, adjust scenes, timeclock, and thermostat programming.



- ¹ iPhone, iPod touch, and iPad are registered trademarks of Apple®, Inc. registered in the U.S. and other countries.
- Android is a trademark of Google Inc. Use of this trademark is subject to Google Permissions.

Easy installation and programming

RadioRA® 2 is the only system offering you the choice of PC-based or button-press programming. An intuitive PC setup tool saves time on larger projects while easy button-press programming simplifies smaller jobs.



Button-press programming

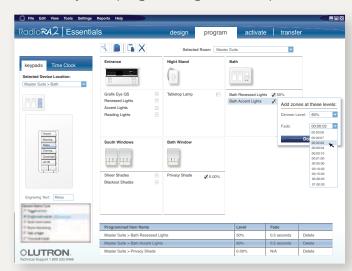
You can assign components to the RadioRA 2 system, configure keypad buttons, and define light and shade levels with simple button presses.

- **1** Activate system components by adding them to the main repeater to create a system.
- 2 Configure keypad buttons to offer LED feedback for scene status or monitoring lights in the home.

- 3 Assign lights and shades to keypad buttons and choose preset levels. Control lights and shades individually or create scenes by controlling multiple lights and shades with a single button.

Four easy steps to PC program RadioRA 2:

- 1 Design system by placing components in rooms
- 2 Program keypad buttons by assigning lights and shades and defining levels
- 3 Activate system devices
- **4** Transfer system programming to main repeater



Screen shot of the PC setup tool for design and programming

You can program RadioRA⊚ 2 via either button-press or PC programming, depending on the features you want.

- Button-press programming offers an easy way to program system keypads to control lights and shades throughout the home. There is no computer or other external equipment required.
- PC programming is available to qualified dealers and offers access to advanced features like an astronomic timeclock and integration with other systems.

Use the table (right) to discover which features are available when using each method:

Note: Button press and PC programming may not be combined on one system.

Button-press	PC programming
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	•
	programming

^{*} Requires L2 dealer qualification

Scalable, flexible, reliable

Ideal for retrofit applications and new construction

System components such as the Radio Powr Savr™ wireless occupancy/vacancy sensor, wall-mounted hybrid keypad, and the Pico® wireless control make it easier than ever to install RadioRA® 2 in any home with no new wires. And because the system is scalable from 2 to 200 devices, you can start with a single room and then expand to multiple rooms—or the entire home.



Wall-mounted hybrid keypad allows you to put a keypad almost anywhere by simply replacing a standard switch—**NO NEW WIRING**.



Mount a Pico wireless control on a wall to easily add control where you never had a switch before—**NO WIRING**.



Radio Powr Savr™ occupancy/vacancy sensors (wall-mounted and ceiling-mounted models available) feature a 10-year battery life—NO WIRING.



Lutron's patented Clear Connect™ RF technology sets the bar for reliability, so you can trust your system will work with precision and accuracy—every time you use it.

- · Quiet frequency band, essentially free of interference
- Dedicated network ensures communication between system devices is reliably delivered
- · Group commands ensure smooth, simultaneous system response



A history of sustainability, innovation, and quality



At Lutron, sustainability is not new to us. Since 1961, we have been designing industry-leading technology that saves energy and reduces greenhouse gas emissions, and are a proud member of the U.S. Green Building Council.

Lutron is a company built on a belief in taking care of the customers, employees, and the community. We innovate in advance of emerging market needs and continually improve our quality, our delivery, and our value.

Lutron owns over 2,000 patents worldwide and manufactures more than 15,000 products. For over 45 years, we have met and exceeded the highest standards of quality and service. Every one of our products is quality-tested before it leaves the factory.

Global service and support

You can count on a level of support unequaled anywhere in the industry and anywhere in the world. Lutron provides 24/7 technical phone support.

For help saving energy on your next project

Call Lutron today at 1.866.2LUTRON and you will be connected to a Lutron representative who will be able to provide you with a plan of action for your application.



www.lutron.com/radiora2

World Headquarters 1.610.282.3800
Technical Support Center 1.800.523.9466 (Available 24/7)
Customer Service 1.888.LUTRON1



