

HomeWorks® QS

Save energy with unparalleled total home control

Design & Style Guide



Introduction

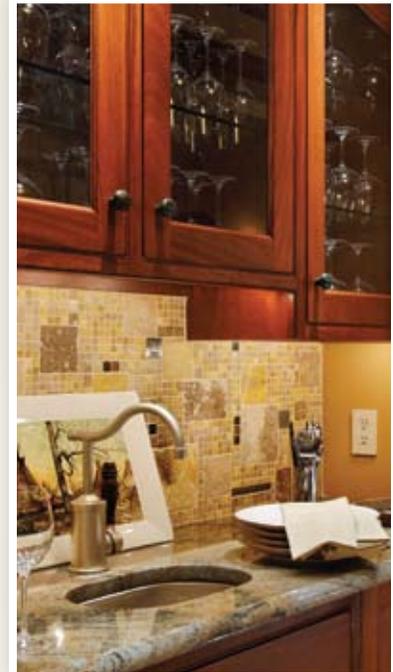


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HomeWorks® has been the leader in light control for exclusive homes for over a decade. And now, we've taken that light control to a new level—total home control.

A total home control system improves the style, comfort, and functionality of your client's home—all while saving energy. While the cornerstone of HomeWorks QS is light control, the system also incorporates HVAC and appliance control, for unparalleled total home control.

Lutron HomeWorks systems are sold and installed by a professional network of qualified Residential Systems Providers (RSPs). These technology experts also provide design, programming, and project management assistance.



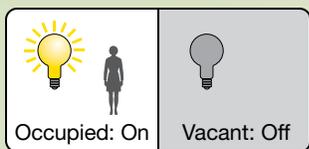
HomeWorks® QS system benefits

Energy savings

A responsible choice

Every time you dim your lights you save energy. Dim them by 25%, for example, and you'll save 20% energy. The more you dim, the more you save.

A HomeWorks QS system also provides other energy-saving benefits.



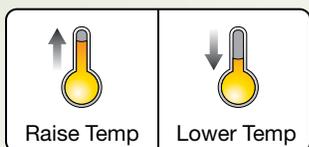
Occupancy sensing

Sensors turn off the lights when the room is empty. Occupancy sensing can save up to 20% lighting energy.



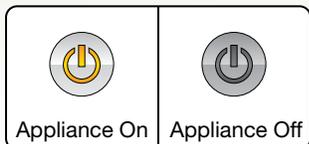
Energy efficient light control

Lutron leads the industry in control of high-efficacy light sources, including LED and fluorescent. Our Hi-lume® A-Series LED driver provides the ultimate dimming performance for LED fixtures from popular OEM fixture brands.



Temperature 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.¹



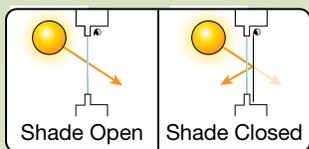
Appliance control

Many appliances—like TVs and stereos—consume energy 24 hours a day amounting to 10% of a typical home's electricity use.² Turning off this standby power as part of a total home control system saves energy.



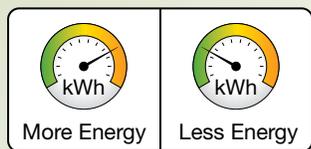
¹ www.energystar.gov

² www.standby.lbl.gov



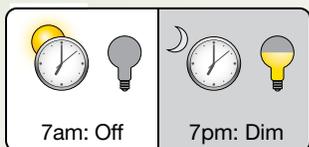
Shades

Controllable window shades can save 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.



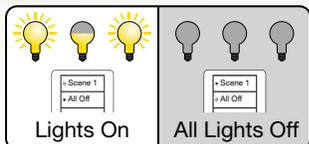
“Green” button

Use the “Green” button to save energy by controlling lights, shades, and temperature with a single touch.



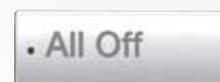
Intelligent Timeclock

The timeclock can be programmed to automatically dim or turn off lights in spaces where lights are often inadvertently left on. The timeclock knows the time of sunrise and sunset, perfect for exterior lights.



“All Off” button

Place an “All Off” button near an entry to conveniently turn off lights throughout the home with a single touch.

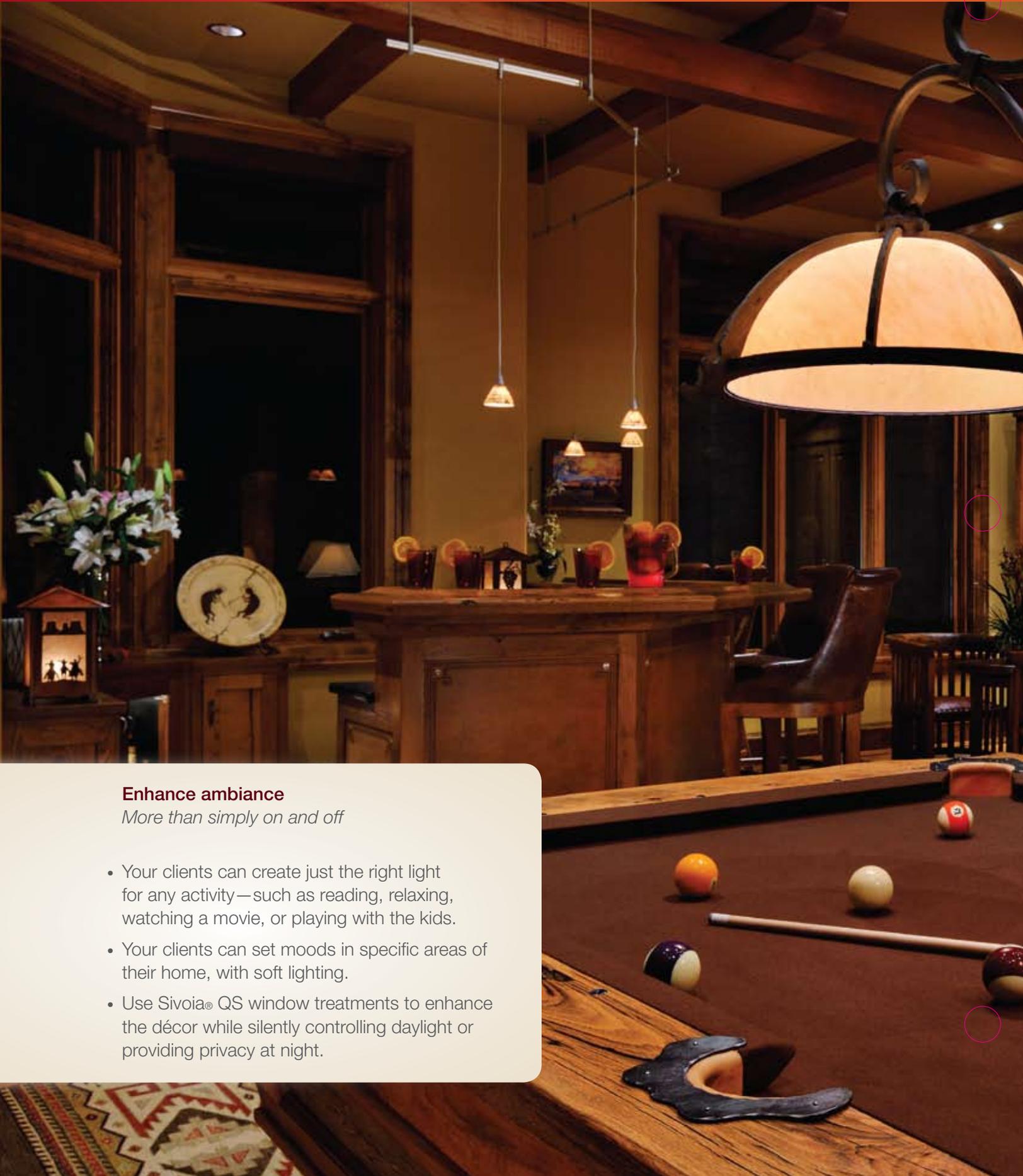


HomeWorks® QS system benefits

Enhance ambiance

More than simply on and off

- Your clients can create just the right light for any activity—such as reading, relaxing, watching a movie, or playing with the kids.
- Your clients can set moods in specific areas of their home, with soft lighting.
- Use Sivoia® QS window treatments to enhance the décor while silently controlling daylight or providing privacy at night.

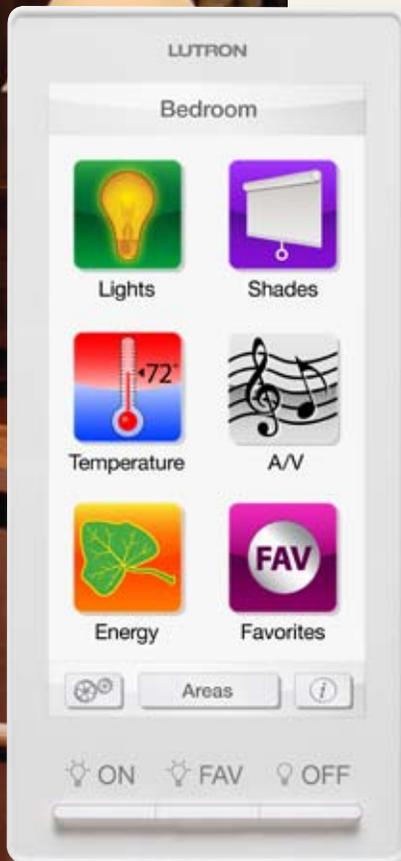




Increase security and safety

Control whether you're home or away

- With automated exterior lighting, your clients will never have to come home to a dark house.
- Enhance the security system by integrating it with HomeWorks QS. If the system is triggered interior lights turn on and outside lights flash to draw attention.
- Vacation mode can be programmed to play back real-life lighting events, so a home looks lived-in even while your clients are away.



Add convenience

Let the system do the work for you

- Control lights, shades, temperature, and more from any location, with wall-mounted or tabletop keypads, hand-held remotes, touchscreens, and mobile devices.
- Occupancy sensors automatically turn on lights when you enter a room, then turn them off when the room is empty.
- Use a favorite "Goodnight" button to put the entire home into the perfect settings at night.

HomeWorks® QS system benefits



Complement aesthetics

Add elegance and style

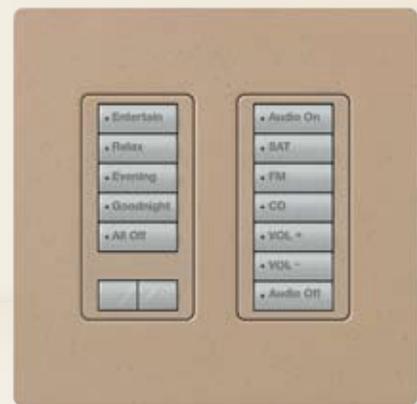
- Complement the décor with system controls available in 50 colors and finishes.
- Complete your design with matching accessories including receptacles, phone jacks, cable jacks, and more.
- Shades are available in a variety of styles and fabrics, so you can add a tasteful finishing touch to any room.



Control daylight

Use the sun to your advantage

- Shades enhance privacy—and convert harsh glare into soft, pleasing light—while preserving your client’s view.
- Shades protect expensive furnishings and artwork from harsh UV rays.
- Shades can reduce solar heat gain in summer and harvest it in winter—reducing energy used by the HVAC.
- Blackout fabrics can darken any room to transform it into a real theater experience.



Expand integration

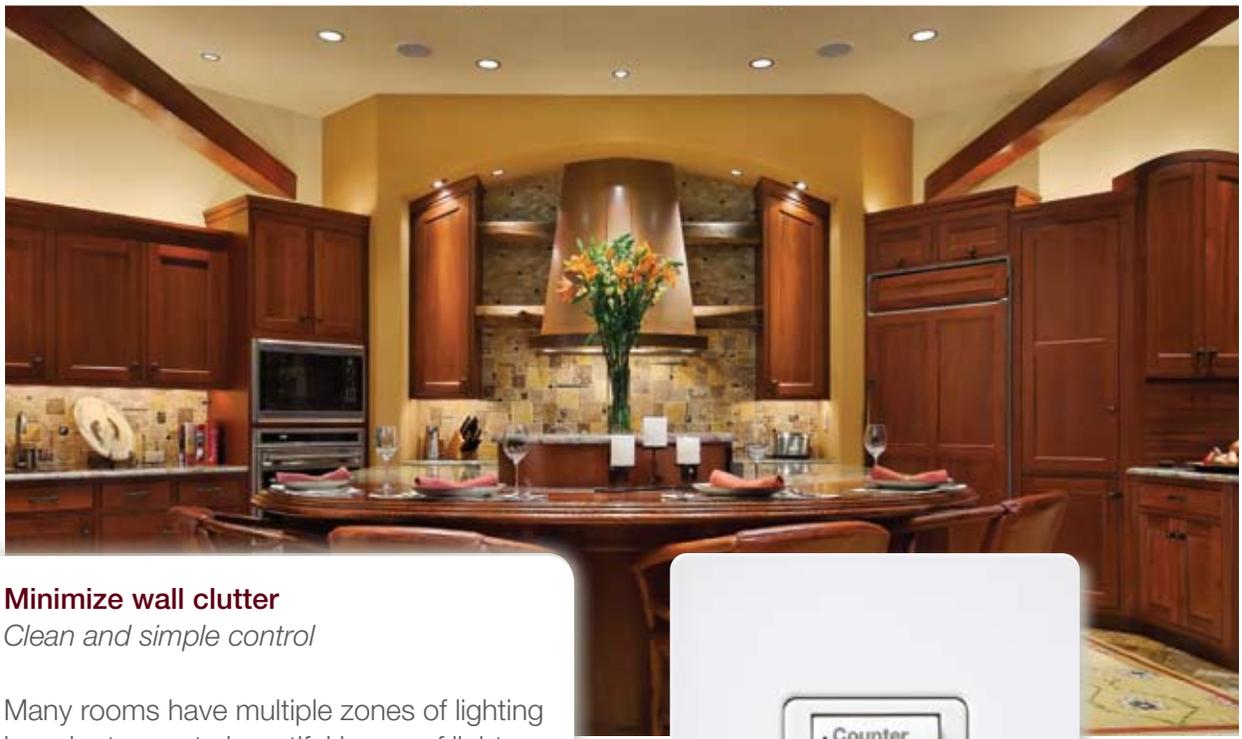
For increased control

- HomeWorks QS can integrate with other home systems for convenient control of HVAC, sprinklers, audio/video equipment, and more.
- You can combine keypads with other manufacturers’ controls to maintain consistent aesthetics and to eliminate wall clutter.



MODE by SpeakerCraft®
with seeTouch® keypad

HomeWorks® QS system benefits



Minimize wall clutter

Clean and simple control

Many rooms have multiple zones of lighting in order to create beautiful layers of light balanced with functional task lighting.

The kitchen in the photo has four zones of light to control:

- Counter downlights
- Island downlights
- Under-cabinet lights
- Cove lights

Because each of these zones would normally be controlled by a local dimmer or switch, four controls would be needed on the wall.



Switches

Dimmers



Keypad

A keypad offers a clean solution to multiple controls, as well as additional functionality—such as turning lights in the whole room on or off with one button press.



Quantum® system architecture

The power of Quantum in your home

Quantum was developed to meet the challenges of creating systems that can scale to accommodate thousands of lighting zones and thousands of shades, in buildings that are often in use 24 hours a day.

The demand to save energy and boost productivity in these buildings required our Quantum system to have a virtually unlimited number of inputs and outputs, driven by powerful processing hardware and software.

Using the Quantum architecture in HomeWorks® QS provides for powerful control over daylight and electric light, from small systems through large applications. The new architecture also provides unparalleled energy savings.

HomeWorks QS provides simple communications wiring, and powerful design, programming, and documentation software to make your project workflow easier and faster.



Photo ©Nic Lehoux

The robust architecture of Quantum can control thousands of lights and shades in buildings—as it does in The New York Times headquarters.

How does the system work?

Basic communication flow

1 **Input:**
button pressed



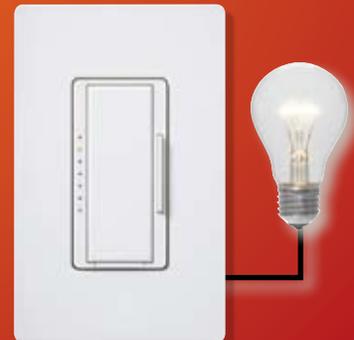
System
keypads

2 **Processing:**
programming analyzed



Processor

3 **Output:**
dimmer turns on light



System
dimmers

One or
many
fixtures

HomeWorks® QS has many different types of inputs that cause things to happen.

The processor is the brain of the system and when an input is received it decides what should happen based on its programming.

The outputs of HomeWorks QS are connected to and control the home's lights, shades, HVAC, and more to produce the desired result.

Types of inputs

Types of outputs



A keypad button is pressed

Dimmer sets a light level, shades adjust, fan turns on



Occupancy sensor detects room is vacant

Laundry room lights turn off



System timeclock reaches sunrise

Landscape lighting turns off, shades open to softly awaken you, temperature is set to day mode



Home theater controlled by iPhone®

Lights turn off, shades close, projector starts, sound system turns on

Component overview

System input devices

Input devices provide convenient, intuitive, and sometimes automated actions in the home along with status feedback.

Radio Powr Savr™ sensors



Ceiling-mounted occupancy/vacancy sensor



Wall-mounted occupancy/vacancy sensor



Daylight sensor



Temperature sensor



Dynamic keypad



Architectural seeTouch keypad



Designer seeTouch keypad



Hybrid seeTouch keypad



seeTemp temperature display



seeTouch tabletop keypad



Pico wireless control



Car visor transmitter



iPhone



iPad



Third-party touchscreen

Processor and interfaces



Processor



Hybrid repeater

System output devices

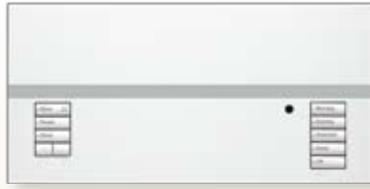
Output devices directly control lighting, shading, and temperature in the home.



Maestro®
dimmer



Maestro
switch



GRAFIK Eye® QS
room control



Lamp dimmer



Appliance module



Sivoia® QS
roller shade



Sivoia QS
drapery track



Sivoia QS
Roman shade



Sivoia QS
Venetian blind



Sivoia QS
tensioned shade



RS-232
interface



I/O
interface



Car visor
receiver



HVAC
controller



Remote
power
panel



Specification
grade panel



QS power
panel



Wallbox power
module

Understanding design themes

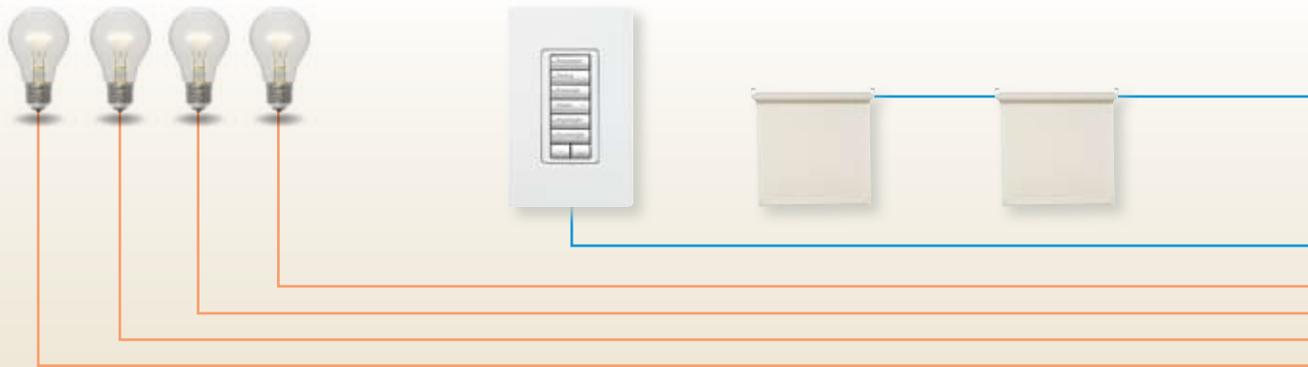
HomeWorks® QS offers a balance between reducing controls on the wall and simple installation. Localized design can replace switches in a room with system dimmers and switches, or centralized design can minimize the controls on the wall by using remote power panels located out of sight.

In-room controls, lights, and shades

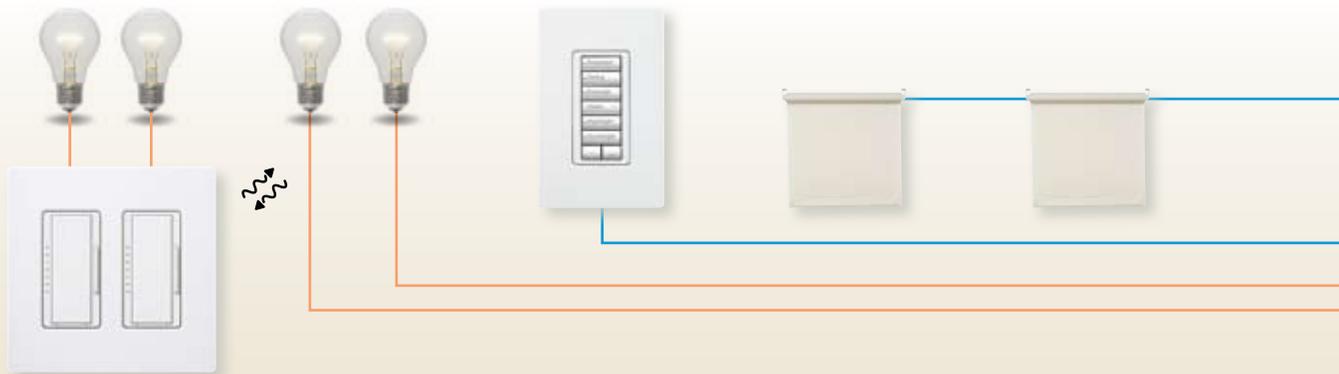
Localized



Centralized



Hybrid



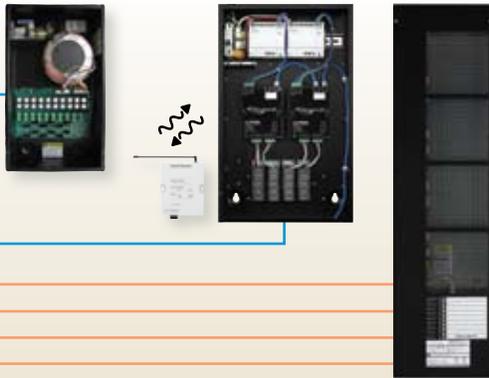
Back room equipment



System design

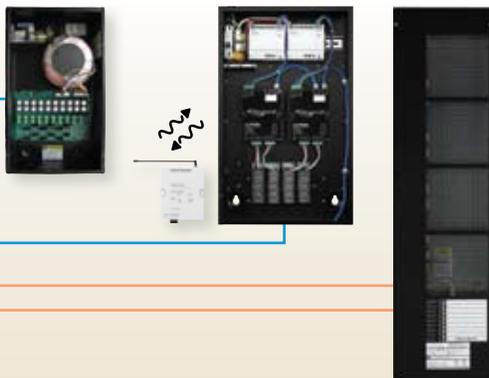
Localized

- Dimmers and switches provide familiar control and operation in every room.
- Keypads at convenient control locations adjust lights and shades throughout the home.
- Using standard line-voltage wiring, a whole-home light control system can be added to new or existing homes.



Centralized

- Remote power panels power all home lighting rather than local dimmers and switches.
- Keypad-only design minimizes wall clutter and provides maximum programming flexibility.
- This design is well suited for new construction or major renovation.



Hybrid

- Remote power panels power lighting in rooms with multiple lighting zones.
- Keypads minimize wall clutter and provide maximum programming flexibility in these rooms.
- Local dimmers provide simple, intuitive control in kids' rooms and guest areas, with fewer lights per room.

Selecting a design theme

A project's construction type plays a major role in determining the system design most suitable to the project. When beginning to specify a system start with the type of construction for the project.

The following pages explain the types of construction and the system designs that are appropriate to each.

New construction

- System can be planned before construction
- Wiring can be run to power lights and shades
- Maximum flexibility in design

Renovation

- If walls are open, the design can be planned into the project
- Wiring can be run to power lights and shades
- May use existing or new wiring to suit customer needs

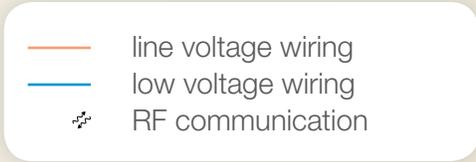
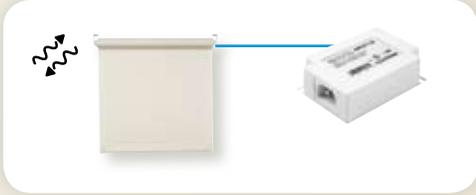
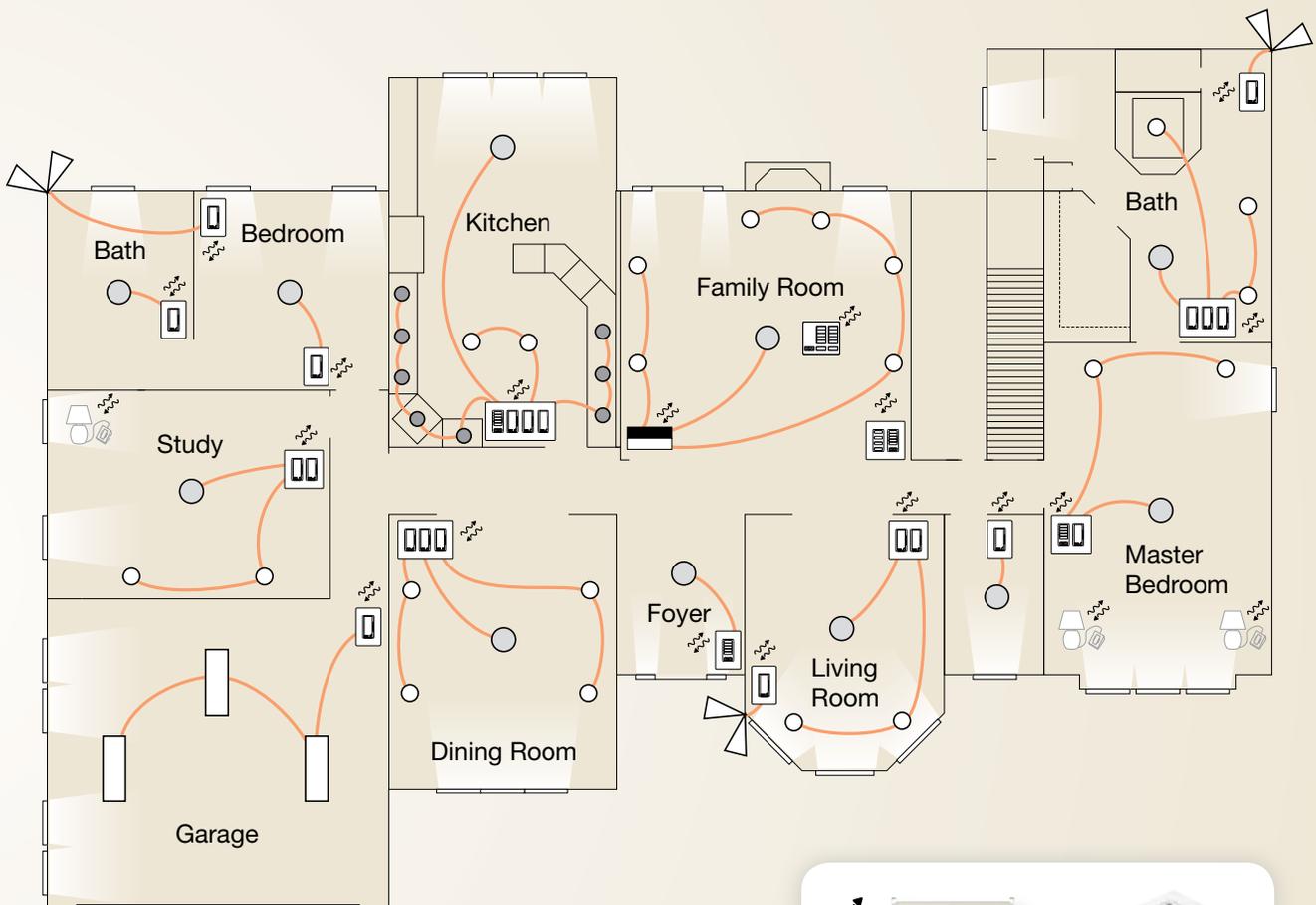
Retrofit

- System is being installed in existing home
- Walls and interior finishes need to stay in place
- Minimum of dust, dirt and time

		System Design Themes		
		Localized <i>see page 17</i>	Centralized <i>see page 18</i>	Hybrid <i>see page 19</i>
Type of Construction	New Construction	YES , uses standard wiring practice	YES , wiring can be planned and run to panels	YES , wiring can be planned and run to panels where desired
	Renovation	YES , uses the existing wiring	YES , if new load wiring is possible NO , if existing load wiring will be used	YES , if new load wiring is possible NO , if existing load wiring will be used
	Retrofit	YES , uses the existing wiring	NO , if running new wiring is difficult or not possible	NO , if running new wiring is difficult or not possible

Localized design

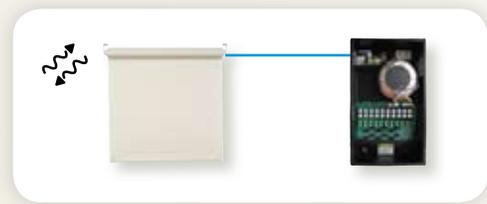
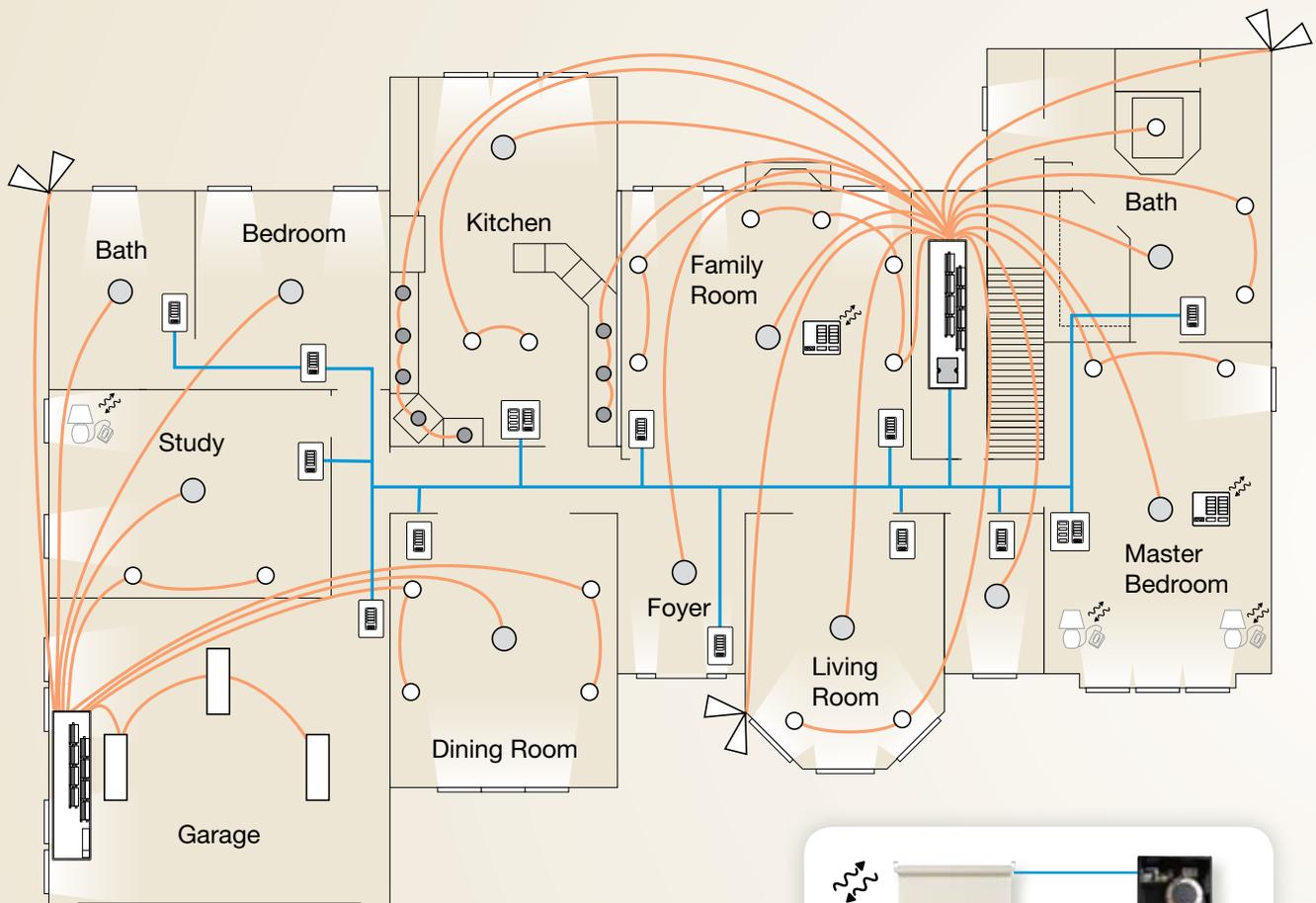
- Switches are replaced with system dimmers or switches
- Table and floor lamps controlled by lamp dimmers
- Tabletop and wall-mounted hybrid keypads add whole-home control
- Processor and repeater in utility space



Selecting a design theme

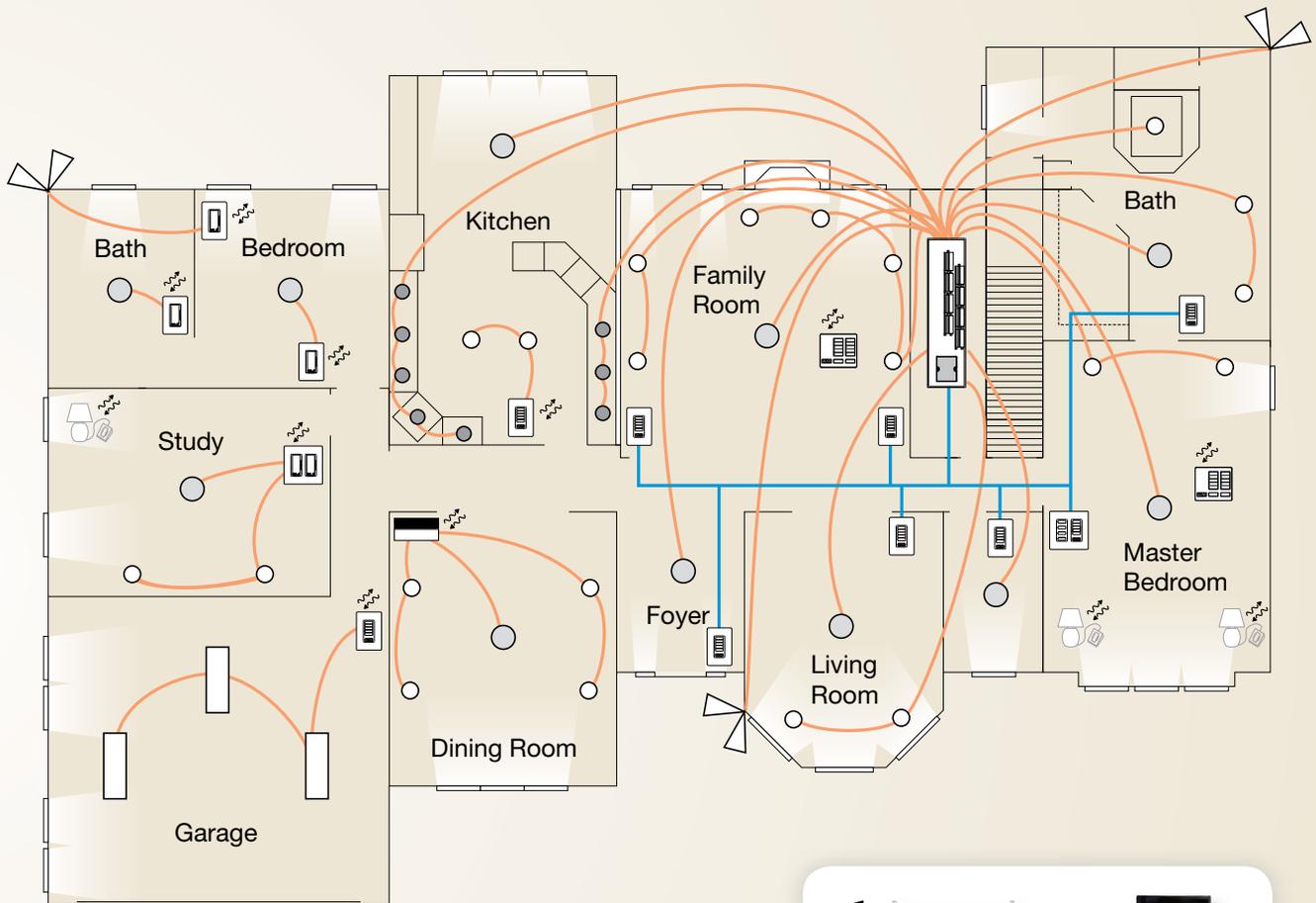
Centralized design

- All lights are powered by remote power panels
- Wired and/or wireless keypads provide control in rooms as well as whole-home control
- Wall clutter is minimized



Hybrid design

- Centralized design in rooms with many lights
- Keypads provide control in these rooms and whole-home control
- Local controls in guest rooms, powder room, etc.



— line voltage wiring
— low voltage wiring
RF communication

Elements of system design

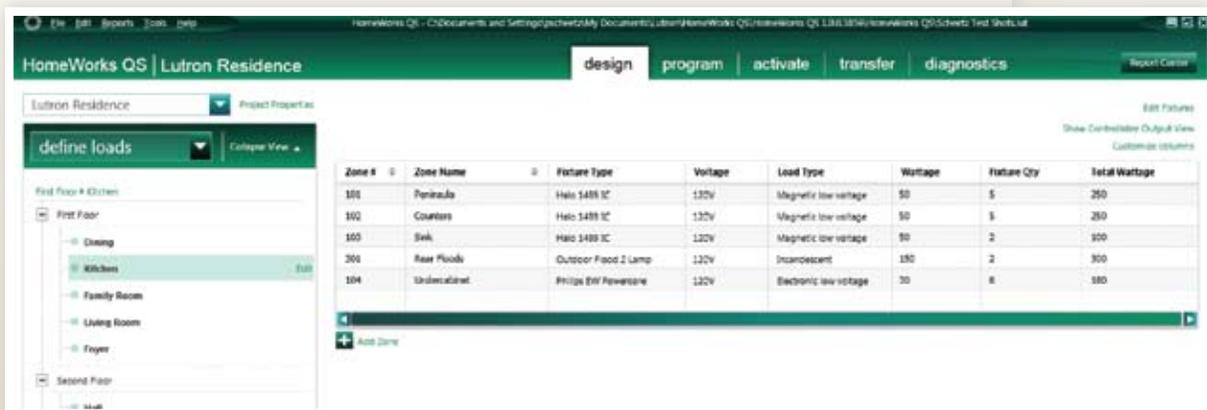
The architectural goals of your vision for the project are documented to form the building blocks of a system design. An authorized Lutron RSP can help guide you through these design details.

1

Determine your lighting plan.

Decide the location and type of fixtures to be installed.

- A reflected ceiling plan shows fixture locations.
- A fixture schedule shows manufacturer, load type and wattage.
- The combined details can be documented in a spreadsheet or directly in the HomeWorks® QS design tool.



The screenshot shows the HomeWorks QS software interface for a project named "Lutron Residence". The "design" tab is active. On the left, there is a "define loads" panel with a tree view showing the project structure: First Floor > Kitchen. The main area displays a table with the following data:

Zone #	Zone Name	Fixture Type	Voltage	Load Type	Wattage	Fixture Qty	Total Wattage
100	Peninsula	Halo 1488 IC	120V	Magnetic low voltage	50	5	250
102	Counters	Halo 1488 IC	120V	Magnetic low voltage	50	5	250
103	Isle	Halo 1488 IC	120V	Magnetic low voltage	50	2	100
200	Rear Porch	Outdoor Flood 2 Lamp	120V	Incandescent	150	2	300
104	Undercabinet	Philips BHF Recessed	120V	Electronic low voltage	20	4	80

2

Include daylight control in your plan.

Decide the location and type of controllable window treatments to be installed.

- Roller, drapery, skylight, Venetian, and Roman options are available.
- Determine window dimensions, configuration of pockets, millwork, and trim.
- The shades to be controlled can be documented in a spreadsheet or directly in the HomeWorks QS design tool.



3 Consider control station locations.

Electrical and building codes provide a starting point for your control stations.

- Most codes require an entrance control to each room.
- A dimmer or switch can control a zone in a room.
- A keypad can control many zones in a room, or throughout the home.
- Control stations can be documented on the plan and entered in the HomeWorks QS® design tool.



4 Add convenience and expand functionality.

Complete the design with tabletop keypads, lamp dimmers and plug-in appliance control modules.

- Tabletop keypads provide control at the bedside or countertop locations.
- Tabletop lamp dimmers add system control to your table and floor lamps.
- Appliance modules can reduce standby current draw from home electronics.
- Tabletop controls can be documented on the plan and entered in the HomeWorks QS design tool.



5 Plan your panel locations.

Allow space for backroom equipment in utility spaces.

- Centralized design reduces wall clutter by routing load wiring to remote dimming panels.
- Controllable window treatments are driven by power panels.
- Wiring for power and control can be tailored to reduce wire and labor costs.



Product reference guide



Product reference guide contents

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- 26** Maestro® dimmers and switches
- 27** Hybrid seeTouch keypad
- 28** Dynamic keypad
- 29** GRAFIK Eye® QS
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- 36** Colors and finishes
- 38** Remote system monitoring and control
- 39** Open integration
- 40** Window treatment styles
- 44** Window treatment fabrics and finishes
- 46** Remote power panels
- 47** Enclosures and power supplies
- 48** Processor
- 49** Hybrid repeater

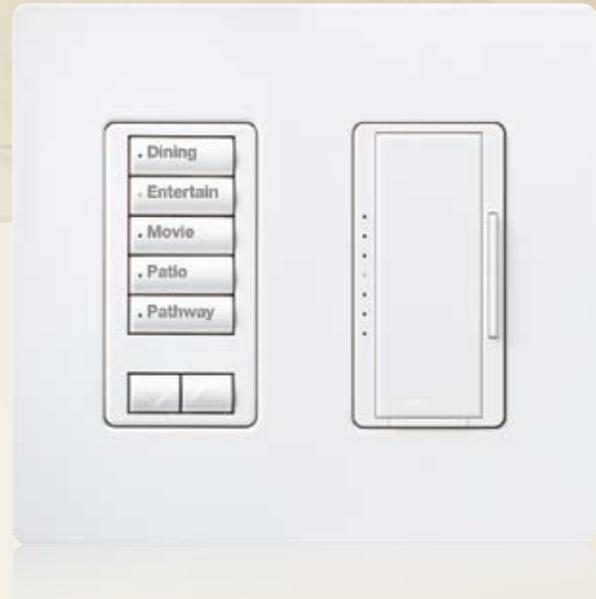
A HomeWorks® QS system includes a wide range of component types. This product reference guide provides an overview of the available products.

Color, finish and aesthetic options are illustrated, along with information on the features of the control types and styles.

More information, along with detailed specifications can be found at www.lutron.com/homeworksqs

Choose your style

Many of the HomeWorks® QS products, including seeTouch® keypads and matching accessories, are available in either Architectural or Designer styles. See page 36 for colors and finishes.



Architectural

The Architectural style is defined by beveled edges and precise corners on the wallplates. Architectural controls are available in 10 Architectural matte and 12 metal finishes or, for that perfect finishing touch, we can custom match a color or finish of your choice.

Designer

The Designer style is characterized by rounded corners and a designer opening wallplate. Other products such as audio controls often use the same designer opening, creating a harmonious look on the wall. Designer controls are available in seven gloss colors and 21 Satin Colors®.

seeTouch® keypads



Architectural keypad without insert in bright brass



Architectural keypad with insert in bright brass

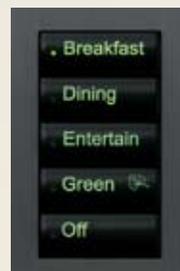


Designer keypad in stone

seeTouch keypads provide attractive and intuitive control for your clients and minimize wall clutter by eliminating the need for several switches. seeTouch keypads are available in both Architectural and Designer styles.

seeTouch buttons

- Large, easy-to-use, rounded buttons are angled upward for easy readability
- Various button configurations offer flexibility
- Each button is programmed to meet the needs of the homeowner
- Illuminated button labels are easy to read day or night
- Custom engraving is included



Backlit text



Backlit buttons

Available button configurations

All configurations are available in Architectural keypads without insert (shown), Architectural keypads with insert, and Designer keypads.



W1B



W2BS



W3BS



W3BSRL



W4BS



W4S



W5B



W5BRL



W5BIR



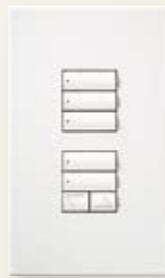
W6B



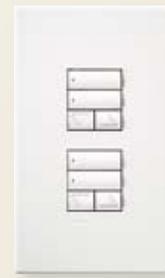
W6BRL



W7B



W1RLD

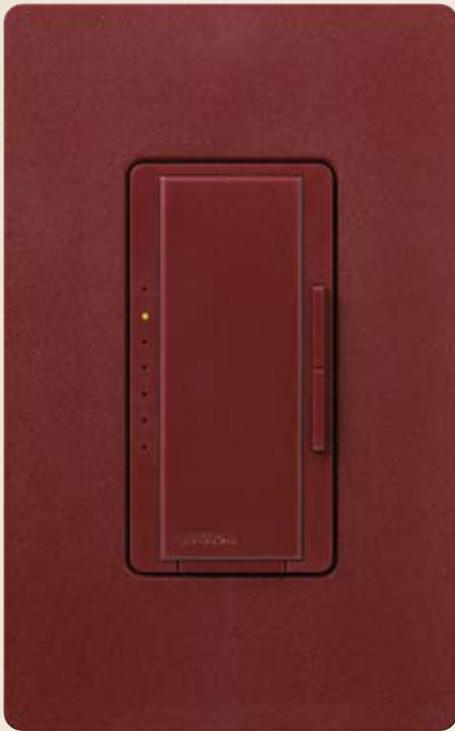


W2RLD

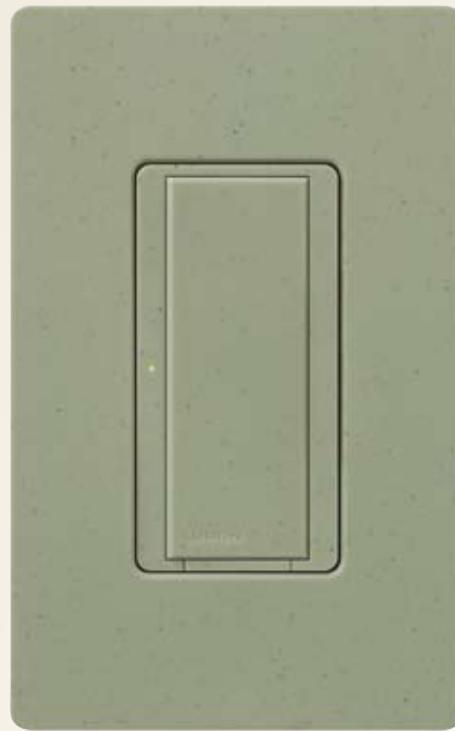


W3BD

Maestro® dimmers and switches



Dimmer in merlot



Switch in greenbriar

Wireless Maestro dimmers and switches replace the standard light switches in a home. They have the same wiring as standard light switches, which makes them perfect for any construction type.

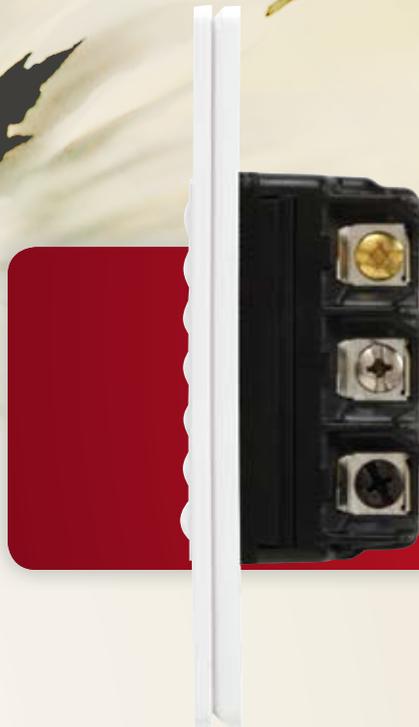
Dimmers are available for all lighting load types including dimmable fluorescents and LEDs. Switches are available for non-dimmable light sources and fans.

- LED provides status of the load
- Lights softly fade on and off
- Multi-location dimming
- Available in Designer gloss and Satin Colors®

Hybrid seeTouch® keypad



Hybrid seeTouch keypad in snow



Hybrid seeTouch keypad profile shows the connections to the lighting load.

The wireless hybrid seeTouch keypad is the combination of a seeTouch keypad and a Maestro dimmer that gives you the advantages of both. As a dimmer, it connects to a lighting load using standard wiring. As a keypad, its buttons can be programmed to control any system function.

The hybrid seeTouch keypad is perfect in a retrofit application where you only have one light switch but you want to control multiple loads such as lights, shades, and HVAC from that location.

- Available in 6BRL button configuration
- Can be used for single-pole or multi-location dimming/switching for 3-way/4-way applications
- Incandescent and magnetic low voltage lighting loads
- Available in Designer gloss and Satin Colors®

Dynamic keypad



Dynamic keypad in white

Profile



Lights

Control and monitor lighting scenes or individual lights in multiple areas of the home.



Shades

Control and monitor individual or groups of shades in multiple areas of the home.



Temperature

View the current temperature and adjust set point, system mode, and schedule.



Audio/Video

Access basic controls for audio or video equipment by integrating with a third-party A/V control processor.



Energy

View current energy saving mode and adjust "Green" button settings.



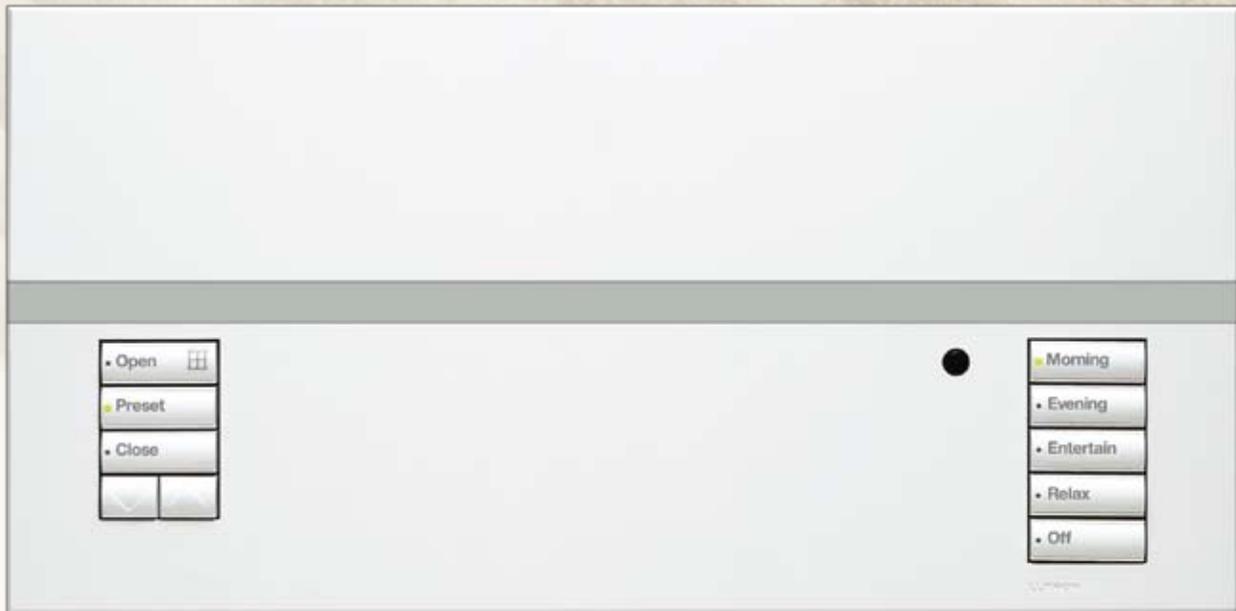
Favorite

Quickly access most frequently used system functions.

The new dynamic keypad allows simple, intuitive control of lights, shades, HVAC, and audio/video equipment from a single location. The touch interface provides a rich user experience and flexible control for a single room or an entire home. Available in white or black.

- Use individual pages for simple control of lighting, shades, and temperature in rooms throughout the home.
- Create or modify on-screen button labels easily.
- Three hard buttons provide control of frequently used lighting functions.
- QS wired communication or Clear Connect™ RF technology ensures reliable system control.
- Mounts in a custom backbox (included).
- 5 1/8" high x 2 3/8" wide, 1/2" side profile
- Screen size is 4.2" diagonal

GRAFIK Eye® QS



With GRAFIK Eye QS, your client can control multiple lights and shades, creating just the right mood for any activity.

GRAFIK Eye QS has long been the benchmark for home theater control, but it's also perfect for rooms such as the dining room or master suite. It includes an infrared receiver so that lights and shades can be controlled by handheld remotes.

- Controls up to six lighting zones and up to three groups of shades.
- Mounts in a four-gang wallbox.
- Available in a variety of colors and finishes, visit www.lutron.com/grafikeyeqs for details.

Plug-in controls

Plug-in appliance module

The plug-in appliance module allows for switching control of appliances and other non-lighting loads. Used with appliances such as printers or monitors and audio/video equipment, it can save energy by turning off standby power.

Available in snow and midnight



Tabletop lamp dimmer



Plug-in dimming module

Lamp dimmers

Tabletop lamp dimmers and plug-in dimming modules allow you to easily control table and floor lamps. Use the tabletop lamp dimmer if your client needs local on/off and raise/lower control. The plug-in dimming module can be placed out of sight with a keypad providing control in the space.

Available in snow and midnight

Portable controls



Pico® wireless control

The versatile Pico wireless control can function as a lightweight handheld remote, a stylish tabletop control, or a wall-mounted keypad within a Lutron® Claro® designer faceplate.

Available in Designer gloss colors



seeTouch® tabletop keypad



Car visor control

seeTouch tabletop keypad

The tabletop keypad allows your client to have total home control from wherever it's convenient. Perfect for bedside or countertop locations, it's available in 5-button, 10-button, and 15-button configurations. It can operate on batteries or with a plug-in transformer.

Available in snow, midnight, and Architectural metal finishes

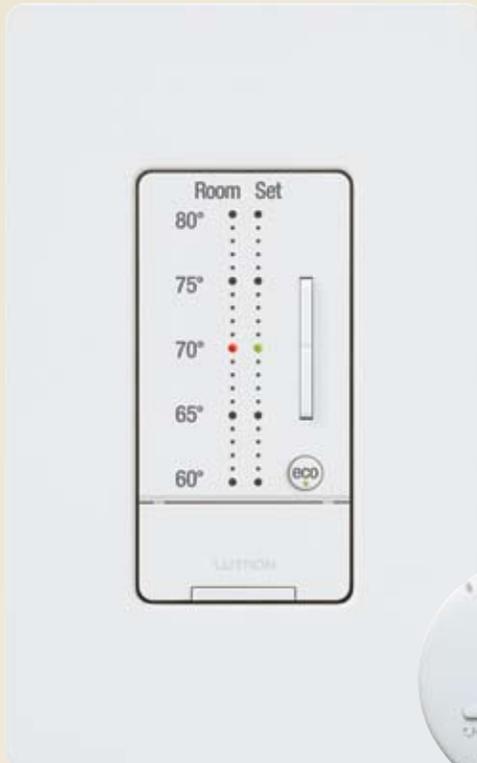
Car visor control

The visor control transmitter is a battery-powered control for use from the car.

Available in white



Temperature control



seeTemp™ in white



Temperature sensor



HVAC controller

seeTemp, remote temperature sensor, and HVAC controller

seeTemp puts temperature control where it makes sense for you in an easy to use, aesthetically pleasing design.

- System control of HVAC
- Simple user interface
- seeTemp, sensor, and HVAC controller communicate via Clear Connect™ RF Technology
- Remote temperature sensors allow the temperature to be measured in the optimum location
- The HVAC controller connects to the mechanical equipment using standard thermostat wiring
- Simply push the "eco" button to set back the temperature and save energy
- seeTemp control can be mounted in locations which would not normally be appropriate for a thermostat, such as exterior walls and sunny locations
- Designer gloss colors and Satin Colors® beautifully coordinate with Lutron dimmers, keypads, switches, and accessories

Sensors



Wall-mounted occupancy/vacancy sensors also available

Ceiling-mounted occupancy/vacancy sensor



Daylight sensor

Radio Powr Savr™ occupancy/vacancy sensors

Occupancy/vacancy sensors are ideal for laundry rooms, bathrooms, walk-in closets, and other rooms where lights are often inadvertently left on. By turning lights off automatically you can save up to 20% of the energy used.

Reliable Clear Connect™ RF Technology ensures system communication, while XCT™ technology enhances the sensor's ability to detect fine motions—such as reading—so occupants aren't left in the dark.

Multiple sensors can be used together in a space.

Radio Powr Savr daylight sensor

Use these wireless daylight sensors to provide the perfect balance of daylight and electric light. The sensor adjusts the lights to take advantage of natural daylight, saving energy.

Radio Powr Savr sensors are battery powered and wireless, so they are easy to place in the space, and can be repositioned if needed.

Coordinating accessories

Coordinating accessories are the finishing touch for every room of the home. HomeWorks® QS products and coordinating accessories, including receptacles, phone/data jacks, and cable jacks, come in a wide variety of colors and finishes to complement the décor of any home. See page 36 for colors and finishes.



Architectural

Complete the look of your system with the beveled edges and precise corners of Architectural accessories. Wallplates without visible screws lend a clean, finished look to your project. This unique look is available in Architectural matte and metal finishes or custom painted.



Designer

Designer products feature smooth, rounded corners and a designer opening wallplate with no visible screws. Controls and accessories by others blend seamlessly in this standard opening size. Seven designer gloss colors and 21 Satin Colors® are available.

Colors and finishes

Stylish colors and finishes

HomeWorks® QS products come in a variety of colors and finishes to complement the design style of each room in the home. In addition to the colors and finishes on these pages, we can custom paint Architectural wallplates or match a custom metal finish. Contact Lutron for more information about custom colors and finishes.



Bright chrome

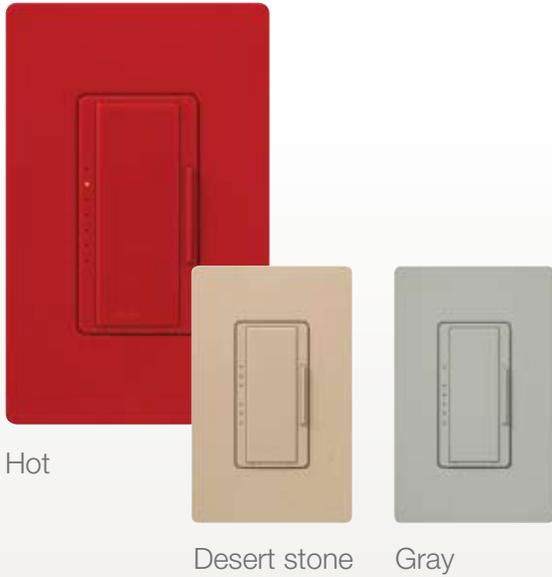
Black anodized aluminum

Architectural matte

White (WH)
Light almond (LA)
Almond (AL)
Beige (BE)
Ivory (IV)
Taupe (TP)
Gray (GR)
Sienna (SI)
Brown (BR)
Black (BL)

Architectural metals

Bright brass (BB)
Satin brass (SB)
Bright chrome (BC)
Satin chrome (SC)
Bright nickel (BN)
Satin nickel (SN)
Gold plated (AU)
Antique bronze (QZ)
Antique brass (QB)
Clear anodized aluminum (CLA)
Brass anodized aluminum (BRA)
Black anodized aluminum (BLA)



Satin Colors®

Snow (SN)
Biscuit (BI)
Eggshell (ES)
Limestone (LS)
Goldstone (GS)
Desert stone (DS)
Stone (ST)
Mocha stone (MS)
Bluestone (BG)
Greenbriar (GB)
Terracotta (TC)
Palladium (PD)
Taupe (TP)
Turquoise (TQ)
Plum (PL)
Hot (HT)
Merlot (MR)
Sienna (SI)
Midnight (MN)
Stainless steel (SS) wallplate only

Designer gloss

White (WH)
Light almond (LA)
Almond (AL)
Ivory (IV)
Gray (GR)
Brown (BR)
Black (BL)

Remote system monitoring and control



Remote system monitoring and control

Lutron® applications for mobile devices give you the ability to control and monitor your HomeWorks® QS system right from your mobile device—at home or while away. Use the iPhone®/iPod touch® Lutron Home Control app to control and monitor lights, shades and keypads. Full two-way functionality allows the app to update in real time as you change the lights in a space.

The Lutron Home Control app provides added information and control on the iPad® for your HomeWorks QS system; your client can adjust scenes, time clock, and thermostat programming himself, as well as save energy using new features like the "Green" button.

Open integration

HomeWorks® QS extends the open integration capability that has always been a foundation of HomeWorks. Serial (RS-232) and Ethernet drivers, as well as the capability to interface with contact closure input or output devices, provide complete control of and from other devices and systems in the home.

Common equipment frequently integrated with HomeWorks QS include:



A/V equipment



Touch panel control



Security system



HVAC equipment



Subsystem automation
(i.e. door locks, pool equipment, irrigation)

Lutron works with many third-party manufacturers to ensure that our systems integrate reliably. Lutron provides documentation along with product and technical support to many manufacturers to ensure that our system works with a wide variety of remotes and automation systems.

AMX®

www.amx.com

Control4®

www.control4.com

ELAN®

www.elanhomesystems.com

HAI®

www.homeauto.com

HomeLogic®

www.homelogic.com

Life|ware®

www.life-ware.com

NetStreams®

www.netstreams.com

Philips®

www.pronto.philips.com

RTI®

www.rticorp.com

Savant®

www.savantav.com

Universal Electronics® Inc.

www.uei.com

Universal Remote Control®

www.universalremote.com

Window treatment styles



Sivoia® QS shading systems seamlessly integrate with Lutron® lighting controls to provide the ultimate in total light control.

Sivoia QS shades can be wired or wireless. A small RF receiver provides wireless communication to the shade, so you can install them in new construction or retrofit applications.

Lutron shades operate at a near-silent level. Shades align within $\frac{1}{16}$ of an inch of each other, creating an elegant, balanced look across multiple windows.

Sivoia QS is easier to wire

- 4-conductor low voltage wire
- 24V DC power

Sivoia QS wireless takes ease of installation to a new level

- Simply run 2-conductor power cable to shade locations.
- Small single-shade power supply can be tucked away near each shade.
- Clear Connect™ RF Technology delivers system communication.



Roller shades

Roller shades offer clean lines across multiple windows and many benefits, including:

- Transforming harsh glare into soft, pleasing light
- Providing privacy while preserving your view
- Protecting valuable furnishings from UV rays
- Changing daytime into nighttime with a blackout fabric
- Reducing solar heat gain and saving energy

Roller shades are available in a variety of tube diameters and sizes.

- Roller 20™
- Roller 64™
- Roller 100™
- Roller 150™
- Roller 225™

See the Lutron® Shade Configuration Tool for size and fabric guidelines.

Tensioned shades

Tensioned shades from Lutron combine electronic drive technology with a new tension system that eliminates the stress on the surrounding structure when installed. Fabric is kept taut and parallel to skylights and angled windows regardless of slope.

- Perfect for skylights, bottom-up, and angled window applications
- Inside, recessed, and surface (ceiling) mounting options available to suit any application
- Concealed cable guides maximize view when open
- Choose from sheer, dim-out, and blackout fabric options from The Classico Collection

Window treatment styles



Venetian blinds with Intelligent Tilt Alignment™

Venetian blinds are an attractive way to ensure privacy, while allowing sunlight to filter into a space.

- Adjust the height without affecting the tilt position.
- Intelligently align both lift and tilt positions between multiple shades within 1/8 of an inch.
- Available in over 60 colors, custom matching also available.

Roman shades with CERUS™ safety technology

Lutron® has revolutionized the design of Roman shades by introducing CERUS—Cord-Eliminating Roman Uptake System—safety technology.

- Sheer uptake bands replace exposed inner cords that may pose a strangulation hazard.
- Uptake bands provide a quiet system with smoother, more even shade travel.
- Patent pending.



Kirbé™ vertical drapery system

An industry first, the Kirbé vertical drapery system smoothly pulls fabric up and completely out of the way.

- Unique design provides greater access to windows and view by eliminating stack back.
- Designed to clear door hardware, allowing full view through French and sliding doors.

Drapery tracks

Silently control pinch pleat or ripplefold draperies for an elegant and convenient transition of a space.

- Single- or multi-bend curved tracks are available including tracks up to 30 ft. long with track splicing.
- Manual override is available.
- 90 degree bends are available.
- Choose fabrics from The Avant Collection™ or provide your own.

Window treatment fabrics and finishes

Lutron offers three fabric collections and its own Venetian blind for style made easy, innovation made beautiful.

		Fabric collections		
		Avant	Classico	Gallery
Treatment style	Roller		X	X
	Tensioned		X	
	Venetian	X		
	Roman	X		
	Kirbé™	X		
	Draperies	X		



The Avant Collectioni - soft fabrics

The Avant Collection™ | Venetian blinds with Intelligent Tilt Alignment™

Venetian blinds are a popular window treatment that use natural woods to control light, enhance privacy, and add a decorative element to a home. A variety of stains, paints, hardwoods, and aluminum slats offer freedom to match any décor. Optional decorative tapes are available to add a colorful accent to blinds. Custom color matching is also available.



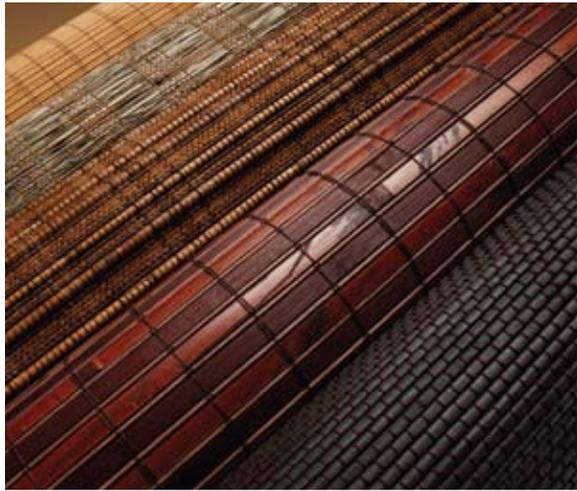
Venetian hardwood samples

The Avant Collection | soft fabrics and woven woods

The Avant Collection provides a palette of shading materials in over 100 soft fabrics, woven woods, and linings, offering a mixture of traditional and contemporary design. The collection can be used with the Kirbé™ vertical drapery system, Roman shades with CERUS™ safety technology, drapery tracks, and cornices.



Avant Collection fabric binder



The Avant Collection - woven woods



Gallery Collection fabrics

The Classico Collection | roller shade fabrics

The Classico Collection is comprised of performance fabrics—ideal for applications in need of durability, wide roll widths, fire-rated materials, or sustainable options such as PVC-free, recycled, and GREENGUARD® certified materials. The collection offers sheer, dim-out, and blackout fabrics.



Classico Collection fabric binder

The Gallery Collection | roller shade fabrics

The Gallery Collection of designer fabrics includes a range of color, texture, and pattern to accent any décor. With sheer and dim-out options, this line of fabrics also offers sustainable options with sophisticated materials, such as ultra-suede and fiber-etched designs.

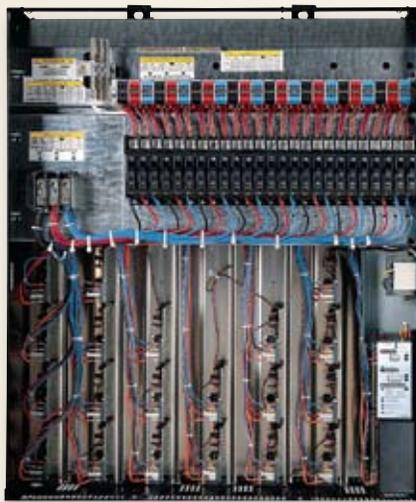


Gallery Collection fabric binder

Remote power panels



Wallbox power module



Specification grade panel



Dimming panel

Remote power panels

Wallbox power module

- Control six lighting zones
- Mounts in standard 4-gang backbox

Specification grade panel

- Higher power capacity than standard dimming panels
- Available prebuilt in many sizes with breakers

Dimming panel

- Available as a feed-through panel or with input breakers
- Available in 8-module and 5-module sizes
- Modules available for all load types

Enclosures and power supplies



Processor enclosure



QS power panel

Local QS power supplies



QS plug-in power supply

- Provides local power for QS shades, devices, or accessories
- Line voltage cord plugs into standard receptacle



QS J-box power supply

- Provides local power for QS shades, devices, or accessories
- Mounts on a 4" J-box

Low voltage enclosures

LV-21 processor enclosure

- Mounts HomeWorks® QS processor and power supply
- Provides wire landing and wire management
- 21" high x 14 3/8" wide

QS power panel

- Powers QS shades, devices, and accessories
- 10 outputs, 24V DC
- Features on-board diagnostics to indicate miswires
- 17 1/2" high x 10 1/2" wide

Interfaces



RS-232 interface

- Interfaces with other equipment using RS-232



I/O interface

- 5 contact closure inputs
- 5 contact closure outputs

Processor



Processor

HomeWorks® QS processor

The center of intelligence and communication, the processor manages events and actions within the system.

System size limits:

- Up to 1,500 wireless devices per system
- Up to 3,200 devices per system

Each processor has two links which can be configured as one of the following:

QS link

Supports up to 100 wired QS devices using any wiring topology

Dimming panel link

Connects to up to 16 HomeWorks® dimming and spec grade panels

Clear Connect™ RF link

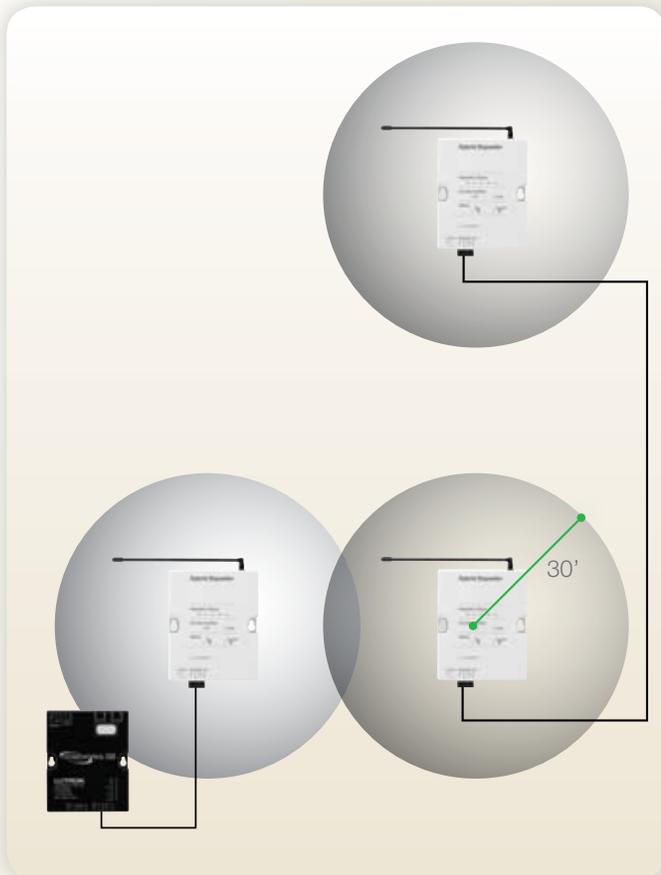
Supports up to 100 devices per link

The processor includes an Ethernet port to easily connect to the home network.

Hybrid repeater



Hybrid repeater



Hybrid repeater

- Creates network of Clear Connect™ RF coverage in the home
- Each repeater covers 2,500 sq. ft. up to 150,000 sq. ft. of coverage
- Repeaters can communicate with each other wirelessly or be wired together to create RF coverage at large distances in remote locations

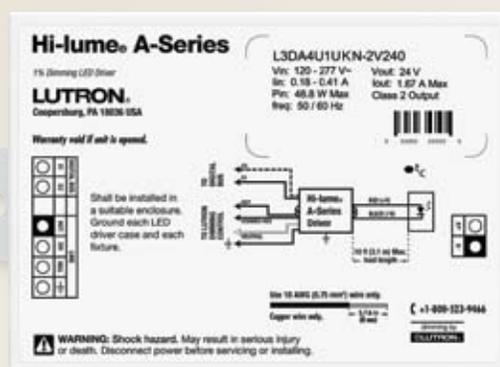
High efficacy sources

High efficacy LED and fluorescent light sources that were once focused on commercial spaces are being used more frequently in residential projects.

New building and energy codes and the desire for low energy cost and sustainable design are driving adoption of these sources. ENERGY STAR®, LEED® for homes and California Title 24 are among the standards to be considered.

Successful control of these sources requires careful planning. Lutron® is the leader in producing high quality controls for these light sources.

Line voltage LED fixtures are increasingly used in residential downlight applications. Fixtures feature ENERGY STAR ratings and meet residential energy codes. Lutron has done compatibility testing on often-requested fixtures. View the results at www.lutron.com/LED.



For a higher level of **LED performance**, Lutron has recently introduced the Hi-lume® A-Series LED driver. This driver provides dimming of LED fixtures down to 1% for the most demanding applications. The driver is available through the OEM fixture manufacturers listed at www.lutron.com/LED.

Fluorescent lighting saves energy in many areas of the home and applications for dimming or switching fluorescent lights are increasing. Switched fluorescent lighting adds utility to rooms such as garages and laundry rooms. Fluorescent dimming of linear or pin-based CFL lamps can be provided down to 1%.



For more information on controlling LED lighting visit www.lutron.com/LED

System comparison

Lutron® offers home control systems for any size and style of home. Your project vision, control style choices and construction type will determine your choice. Work with your Lutron Representative or Residential Systems Provider to choose the system that best fits your client's goals.

Feature	RadioRA® 2	HomeWorks® QS
System size	<ul style="list-style-type: none"> • 200 devices 	<ul style="list-style-type: none"> • 3,200 devices
System design	<ul style="list-style-type: none"> • Local wireless 	<ul style="list-style-type: none"> • Local wireless • Centralized • Hybrid
Maestro® Dimmers and switches	<ul style="list-style-type: none"> • RF Designer 	<ul style="list-style-type: none"> • RF Designer
seeTouch® keypads	<ul style="list-style-type: none"> • RF Hybrid • RF Designer 	<ul style="list-style-type: none"> • RF Hybrid • RF Designer • Wired Designer • RF Architectural • Wired Architectural
GRAFIK Eye® QS	<ul style="list-style-type: none"> • GRAFIK Eye QS wireless 	<ul style="list-style-type: none"> • GRAFIK Eye QS wireless • GRAFIK Eye QS wired
Touchscreen control		<ul style="list-style-type: none"> • Dynamic keypad • Integration—third party
Shades	<ul style="list-style-type: none"> • Sivoia® QS wireless shades 	<ul style="list-style-type: none"> • Sivoia QS wireless shades • Sivoia QS wired shades
Thermostat	<ul style="list-style-type: none"> • seeTemp™ 	<ul style="list-style-type: none"> • seeTemp • Integration—third party
Sensors	<ul style="list-style-type: none"> • RF occupancy/vacancy • RF daylight 	<ul style="list-style-type: none"> • RF occupancy/vacancy • RF daylight
Centralized dimming	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Specification grade panels • Dimming panels
Software	<ul style="list-style-type: none"> • Basic 	<ul style="list-style-type: none"> • Advanced

The Lutron® difference

50 years of innovation

Lutron invented the solid-state dimmer nearly 50 years ago, and since then we have developed a peerless reputation for quality and service. Lutron holds over 480 U.S. patents.

We are proud to be the provider of lighting controls for the White House, the Statue of Liberty, the Guggenheim® Museum in Spain, Louis Vuitton® stores, and many other world renowned locations.



Lutron® quality

All Lutron products are designed and manufactured to the highest quality standards. Lutron was one of the first 20 companies in the U.S. to earn the ISO 9001 international quality certification. Currently 9001:2000 certified, we have the highest confidence in the quality of our products, so we back HomeWorks® QS with an eight-year limited warranty.

24-hour / 7-day technical hotline

Technical specialists are just a toll-free phone call away to answer any question you may have about your HomeWorks system. Simply call 1.800.523.9466 (in the U.S. and Canada). Worldwide technical assistance is also available in 140 languages, at 1.610.282.3800.

Clear Connect™ wireless technology

The Clear Connect architecture implements a network of high-speed signal repeaters to ensure reliable communications throughout any home. The RF network is scalable, providing coverage up to 150,000 sq. feet.

RTISS™ / RTISS-TE™

The utility power delivered to your home is subject to voltage variations, frequency shifts, harmonics, and noise that can cause light levels to fluctuate. Lutron's patented RTISS (Real Time Illumination Stability System) technologies keep your light levels constant.

Softswitch™ technology

When relays are closed, a heat producing arc is developed. The arc and its subsequent heating are the primary cause of wear on relay contacts, which eventually lead to relay failure. Lutron's patented Softswitch technology prevents the arc from ever forming—dramatically extending relay lifetimes past 1,000,000 cycles.

Revolutionary shading technology

Your shading systems should be seen and not heard. Sivoia® QS quiet electronic drive systems are rated at an incredibly low, 38 dBA sound level at a distance of 3 feet. That's about the same ambient noise level of a quiet bedroom in your home. Precision mechanisms and state-of-the-art electronics result in shade positioning accurate to $\frac{1}{16}$ of an inch.

Environmentally friendly

Your HomeWorks QS system is not only good for your client's lifestyle and comfort; it's good for the environment, too. Save energy with unparalleled total home control.



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Technical Support Center 1.800.523.9466
Ask the Expert 1.877.2LUTRON

www.lutron.com/homeworksq

Lutron® locations

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Ashland	Mumbai
Bangalore	Munich
Barcelona	New Delhi
Beijing	New York
Berlin	Panama City
Bogotá	Paris
Chicago	Puerto Rico
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