

# Sivoia® QS Wireless Cellular Shades

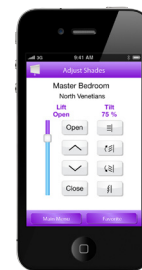
## Operation

### What is the difference between a Sivoia QS Wireless cellular shade and a Serena™ remote controlled cellular shade, i.e. a “system” versus a “non-system” cellular?

Sivoia QS Wireless cellular shades can be integrated into a whole home automation system such as RadioRA® 2, GRAFIK Eye® QS, or HomeWorks® QS. (We can also integrate these shades with HomeWorks® Illumination using RadioRA 2 software.) This [app note](#) provides instructions on interfacing cellulars with HomeWorks Illumination.

When integrating Sivoia QS Wireless cellular shades, into a RadioRA 2 or HomeWorks QS system you can:

- create preset scenes that allow you to control shades, as well as adjust the temperature and lights and turn on/off standby power to small appliances at the touch of a button.
- have a variety of control options, including Pico® wireless controls, GRAFIK Eye QS, seeTouch® keypads, timeclock events, and mobile devices, such as your iPad®, iPhone®, iPod Touch®, and Android™\*.
- integrate your shades with a 3rd party control system, such as a touchscreen or universal remote.



**Serena remote controlled cellular shades** are a standalone solution that cannot be updated to work as a Sivoia QS Wireless system solution. With Serena remote controlled cellular shades, you can control one or more shades via a Pico wireless control or IR remote.

- Pico wireless controls communicate via Clear Connect™ Radio Frequency (RF) technology. The Pico is ideal for a window with drapery, a valance, or a cornice because the remote's RF signal doesn't require line-of-sight, so it can travel through those window treatments.
- IR remotes communicate via infrared technology and operate by sending a signal from the remote to the shade via line-of-sight. Window treatments such as a drapery, valance, or cornice will obstruct the IR signal. Serena IR codes can be learned, allowing you to control your TV and shades from the same universal IR remote.



IR remote

Pico

### Do these shades operate quietly?

Just as with all Lutron® shading solutions, cellular shades defy the current sound level that is standard in the industry today. At a sound level of less than 44 dBA from 3 feet away, Lutron cellular shades are the same sound level as you'd find in a quiet room or a library.

### What is the warranty coverage for this product?

Our shade warranty is an 8-year limited warranty. [Learn more](#)

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## Technical FAQ

# Sivoia® QS Wireless Cellular Shades

### **Can I use an extra output on a Sivoia® QS Wired or Sivoia QS Wireless 24 V DC power panel to power up my cellular shade?**

No. Because cellular shades are a 12 V DC system, attempting to power these units up with more than 12 V could damage your shade.

### **How many cellular shade power panels can I power off a 15 amp circuit breaker?**

You can power 5 power panels off a 15 amp circuit breaker, and 10 power panels off a 30 amp circuit breaker.

### **How far away will the controls work?**

Both IR and RF controls will work at least 30 feet away from the shade.

### **How do I set upper and lower limits on a cellular shade?**

You can set the limits from the control you're using: the Pico® wireless control, an IR remote, a seeTouch® keypad, or GRAFIK Eye® QS. If your cellular shades are part of a system, you can set the limits from the RadioRA® 2 or HomeWorks® QS design and programming software.

### **I have two shades next to each other. Will they move in line with each other?**

Yes. Our digital control circuitry makes sure that your shades move at the same speed. In fact, this circuitry can even compensate for differences in battery voltage. If you have one shade (with brand new batteries) right next to another shade (with old batteries), they will still move at the same speed!

### **Will I damage my cellular shade if I manually pull it closed?**

No, you won't damage your shade; in fact, when the shade is pulled down, our intelligent drive tracks the shade's position, so the press of a button on a control will operate the shade normally.



### **Will other RF devices such as Wi-Fi interfere with the operation of my RF cellular shades?**

No. Sivoia QS Wireless and Serena™ RF shades use our Clear Connect™ RF technology, which operates in the 434 MHz band—far away from the 900 MHz and 2.4 GHz frequencies that are often used by cordless phones, security systems, baby monitors, and microwaves.



When we developed our first RF products back in 1991, we knew that reliable communication was essential. Today, we have millions of RF devices installed throughout the world, and they have a reputation for extreme reliability. Please review our [Clear Connect™ RF White Paper](#) for more details.

# Sivoia® QS Wireless Cellular Shades

## Batteries

### Where are the batteries installed?

The batteries are conveniently housed inside the headrail, providing a clean look without the need for an external battery pack.

### Do the batteries really last 3 years?

Yes, the batteries will last over 3 years on a 3 ft x 5 ft light filtering shade, assuming the shade moves up and down twice a day, 365 days a year. That means the shade has the potential to move over 4,000 times on a single set of batteries.

- Battery life can vary 2 to 5 years depending on shade size and fabric selection.

### Why do the batteries last so long?

The 3-year battery life is a result of our Triathlon™ Power Technology. This technology:

- utilizes standard alkaline batteries, which are known for having a very long shelf-life (up to 7 years).
- has an efficient hybrid-drive design (like a hybrid car, we augment our motor with an energy storage system, allowing us to more efficiently raise and lower the shade).
- utilizes ultra-low standby power (which is the electricity that's still drawn from electronics even when they're turned off). Old electronics, like TVs, may draw 10 watts of electricity or more when the device is in standby. Modern "green" devices draw up to 1 watt of power when in standby. Our shades draw only 1/1,000th of a watt in standby!

### How will I know the batteries are getting low?

Shortly before the batteries need to be replaced, the shade will start moving at half speed, and the LED on the drive will turn red while the shade is in motion. We estimate that for most users, this gentle reminder should occur roughly 1 month prior to the batteries needing to be replaced.

### Do batteries ship with the shades?

No—due to shipping costs, it's cheaper to buy batteries for yourself than to pay for Lutron® to ship them to you. When ordering a shade, we will specify the quantity and type of batteries needed to power the shade.

### Can I use rechargeable batteries?

You can, but we don't recommend them. Rechargeable batteries tend to have a very high "self-discharge rate" and don't hold onto a charge for very long. In other words, if you place a rechargeable battery on the table, it will drain in just a few months, even when not in use!



# Sivoia® QS Wireless Cellular Shades

## Can I use lithium batteries?

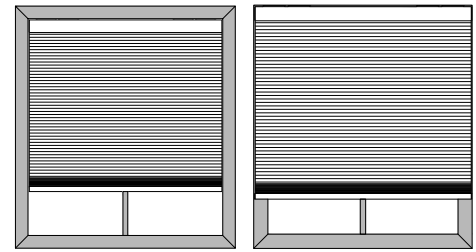
Shades wider than 27 inches utilize D cell batteries. We haven't seen any 1.5 volt lithium D cells. If you find some, please let us know. And while we have seen 3.6 volt lithium D cells, these operate at too high a voltage for our cellular shades.

NOTE: Due to space constraints, some very narrow shades (<27" wide) utilize AA batteries. For these shades, we recommend using lithium batteries for best battery life.

## Insulation and Energy Savings

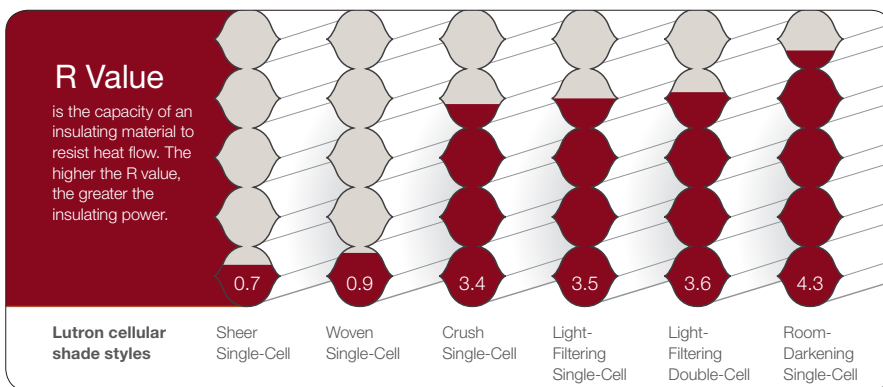
### Do these shades completely block sunlight from entering a room?

Our room-darkening fabrics do not allow any light to pass through the shade material. Whether there are light gaps (sunlight that can enter a room through the space between the edge of the shade and the window frame) depends upon the installation of the shade. With inside mount applications, where the headrail is mounted inside the window frame, there will be a 1/4-inch light gap on each side of the shade. With outside mount applications – either on or above the trim – it is possible to fully cover the window frame and trim, eliminating any light gaps.



### What is "R value"?

"R value" is a measurement of thermal resistance—basically, how good of a job something does at insulating. Higher R values mean better insulation, which translates to lower heating and cooling costs. Cellular shades have a fantastic R value—as high as 4.3 (room-darkening fabric). A typical double-pane window has an R value of 2.0, so adding a cellular shade can significantly increase the insulation of your windows. The air pockets in cellular shades trap air coming through the windows, keeping the space inside cool in the summer and warm in the winter.



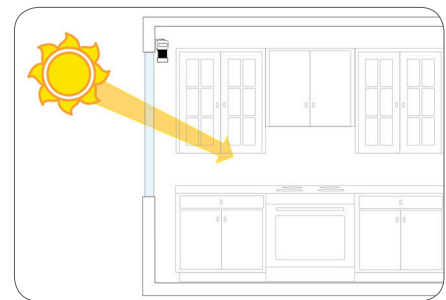
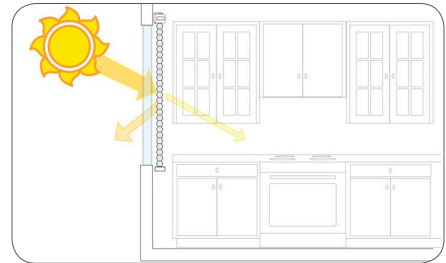
# Sivoia® QS Wireless Cellular Shades

### How do shades save energy?

Shades save energy by:

- reducing heating and cooling costs. Lowering shades in the summer prevents the daylight from heating a room (and causing air conditioners to work overtime), while raising them in the winter captures heat from those rays. In fact, adjusting shades based on the season can save you up to 10-30%\* on heating and cooling costs.
- providing insulation. Cellular shades have air pockets built into their fabric. These air pockets act as insulation, meaning your house stays cooler in the summer and warmer in the winter. In fact, cellular shades can double the insulation properties (“R value”) of your window—even for some of the best windows on the market!

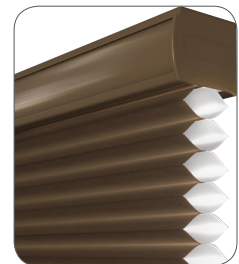
With Sivoia QS Wireless cellular shades, you can raise and lower the window treatments automatically through programmed, time clock events—either welcoming in the warm daylight or blocking the midday heat.



## Fabrics

### What are “dual sided” fabrics?

All of our cellular shades are “dual sided,” meaning every fabric has a white backing. With this, every room can have a signature look, while still maintaining a uniform appearance on the outside of your home. This will help meet certain building regulations, such as those put in place by some homeowners’ associations. This white backing also reflects the sun’s rays, helping reduce your HVAC costs and save energy.



### What is the material and durability of fabric?

Cellular shades are made of polyester material and have proved durable under various testing conditions, such as high heat and humidity levels.

### Are cellular shade fabrics currently fire rated?

Cellular shade fabrics are not currently fire rated, however it is possible to treat the material to achieve fire rated status. Contact [shadingquotes@lutron.com](mailto:shadingquotes@lutron.com) for this custom request.

\* Lutron® commissioned simulation by T.C. Chan Center for Building Simulation and Energy Studies, University of Pennsylvania, September 2008.

## Technical FAQ

# Sivoia® QS Wireless Cellular Shades

### How do I clean my cellular shade fabric?

#### Regular Cleaning

- Dust with a feather duster.
- Lightly vacuum fabric with a brush type vacuum attachment.

#### Soil Removal

- Sponge with a mild detergent and warm water solution and blot dry.
- Blot with a solution of 1 part mild detergent and 3 parts warm water, then blot dry.

#### Important Notes

- Use extra care when cleaning blackout fabrics, as the fabrics could become permanently creased.
- Do not use strong detergents or spot removers. We don't recommend dry cleaning due to the differences in ultrasonic cleaning operators.

## Non-Standard Requests

### Can I switch a battery powered shade to a wired powered shade?

No. Upon ordering your cellular shade, you must specify your source of power—either battery or wired. A battery powered shade is a different model than a wired powered shade. It's important to understand the needs of the application prior to placing your cellular shade order.

### What if I need a cellular shade larger than the current system capacity?

For height requirements beyond specification in the SCT, please contact shading quotes at [shadingquotes@lutron.com](mailto:shadingquotes@lutron.com).

[www.lutron.com](http://www.lutron.com)



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