

# Sivoia<sub>®</sub> QS roller 100<sub>™</sub> pocket mount

Installation Instructions



# Sivoia<sub>®</sub> QS | roller 100<sub>™</sub> pocket mount

### Installation instructions

### **Tools required:**

Tape Measure Wire Cutter/Stripper

Pliers

#2 Phillips® Screwdriver

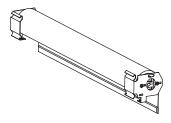
1/4 in Hex-Head Driver

Level

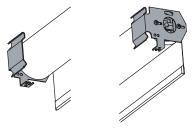
Power Drill

### **Box contents:**

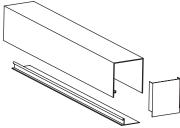
(1) Sivoia QS roller 100



Left and right side shade bracket (attached)



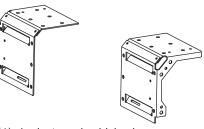
(1) Pocket, (1) flap and (2) end caps (if applicable)



(2) 4 in (102 mm) cable ties



(2) Pocket sub-brackets



(1) 4 pin terminal block



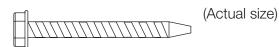
(2) Extra retaining screws (#6 x 1/4 in (#6 x 6 mm) Phillips® head screws





(8) Mounting screws

(#8 x 1.75 in (#8 x 44 mm) Hex headscrews)



(2) 7 in (178 mm) cable ties



# Sivoia<sub>®</sub> QS roller 100<sub>™</sub> pocket mount

## Installation instructions (continued)



**CAUTION:** Risk of bodily injury, follow all installation instructions.

### **Notes:**

- The Sivoia QS roller 100 must be used only with window systems approved by Lutron.
- There must be a clearance of at least 1.3 feet (0.4 meters) between the fully lowered system and any permanent object.
- Installation shall be executed by a qualified electrician according to national wiring rules.
- · Codes: Install in accordance with all local and national electrical codes.
- **Environment:** Ambient operating temperature: 32 °F to 104 °F (0 °C to 40 °C), 0 to 90% humidity, non-condensing. Indoor use only.

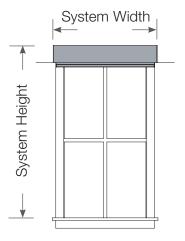
## **Confirm System Dimensions**

1.1

Compare system dimensions on the package label with the window dimensions to verify appropriate window/shade combination.

This information can also be found on the shade tube by lowering the fabric down far enough to expose the tube.

System width must be less than or equal to pocket width.



Wo#

LUTRON
PO:
Tag:

Item #:

SW2390 CHAR/GRE

Ht": System Width
Item Tag:
of Boxes:

LUTRON Shading Solutions

800—446—1503

007

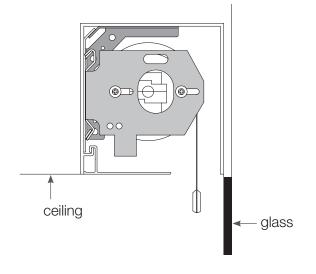
00797773 007

Checked by:

Package Label

1.2

Orient pocket for installation as shown to right. The shade and sub-brackets mount to the inside surface of the pocket that is OPPOSITE the glass. The fabric drop should be closest to the glass unless a reverse roll is specified.



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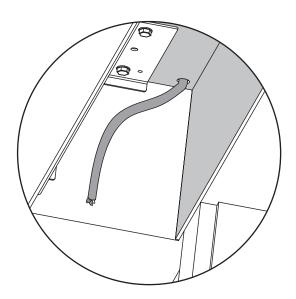
## Pre-drill pocket for cable run

2.1

Determine where to drill for cable access into pocket. See options below. Cable should exit from wall, ceiling or jamb on EDU side of pocket.

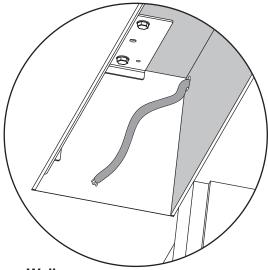
### Note:

- Hole diameter should be large enough to allow adjustment of pocket during installation without pinching the wire.
- Leave 12 to 18 in (305 to 457 mm) of cable exposed.



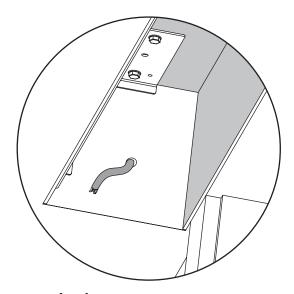
### Ceiling

Drill for cable .5 in (13 mm) from end of pocket and .5 in (13 mm) from back of pocket.



### Wall

Drill for cable .5 in (13 mm) from end of pocket and .5 in (13 mm) from top of pocket.



### **Jamb**

Drill for cable 3.75 in (95 mm) from top of pocket and 2 in (51 mm) from back of pocket.

## Pre-drill pocket for cable run (continued)

**NOTICE:** When installing top/backcover, pocket, or headrail with a motorized window shade the following steps must completed.

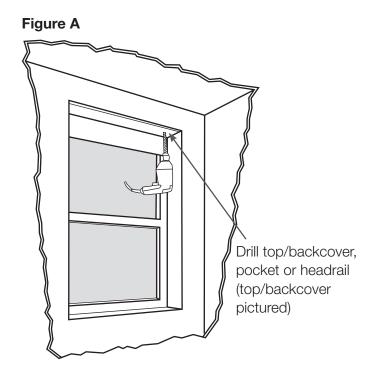
2.2

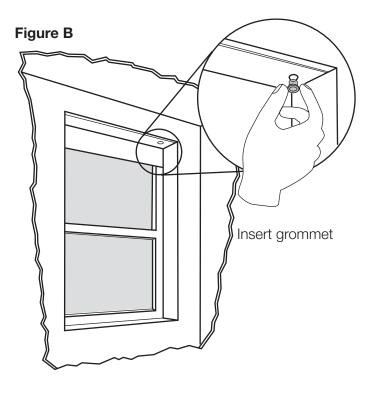
### **Description**

When installing top/backcover, pocket, or headrail with a motorized window shade, a grommet must be used to protect the power wire if it is run through the cover. This will prevent the wire insulation from being cut by any sharp edges caused by drilling the top/backcover, pocket, or headrail.

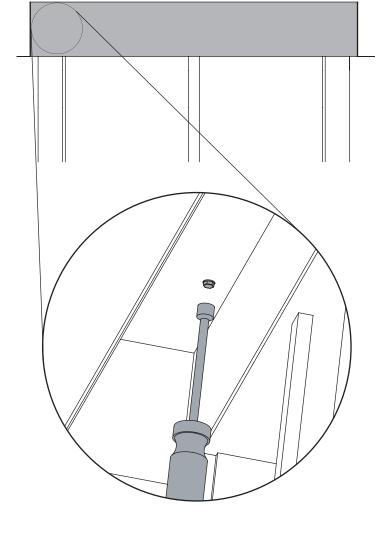
### Installation of grommet

- 1.Insert the enclosed grommet into the hole (be sure it is completely inserted into the hole).
- 2.Run the power wire through the grommet and finish the installation as per the installation instructions enclosed with your unit.





If endcaps are being used, slide them in the ends of the pockets. Endcaps should only be used if the pocket ends will be exposed.



Mount pocket securely using appropriate fasteners.

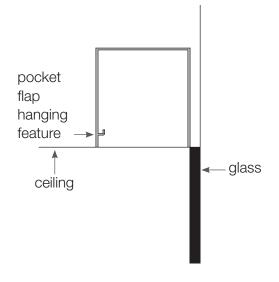


**CAUTION:** Risk of bodily injury from falling heavy object.

The sub-brackets for each pocket must be mounted to support a weight of at least 300 pounds (136 kg). The fasteners provided with the sub-brackets may not be appropriate for use in all applications.

Screws must be at least 6 in (152 mm) inside fabric width to avoid sub-brackets.

Confirm pocket flap hanging feature is on side opposite of glass before tightening screws.



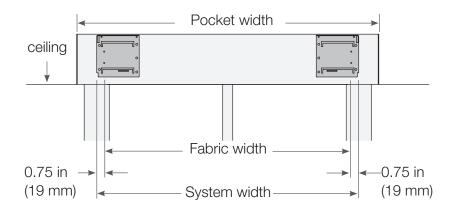
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### **Mount sub-brackets**

4.1

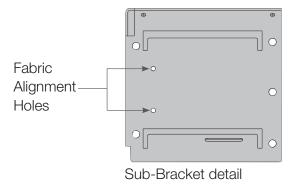
Use fabric alignment holes to position the sub-bracket right to left. The fabric alignment holes will line up with the outside edge of the shade tube.

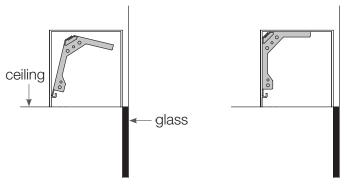
**Note:** Fabric edge may not line up with the edge of tube.



4.2

Once their position has been established, insert sub-brackets by hooking their lower edges behind notch in pocket surface. If endcaps are being used, they must be installed prior to sub-brackets.





Finished position

## Mount sub-brackets (continued)



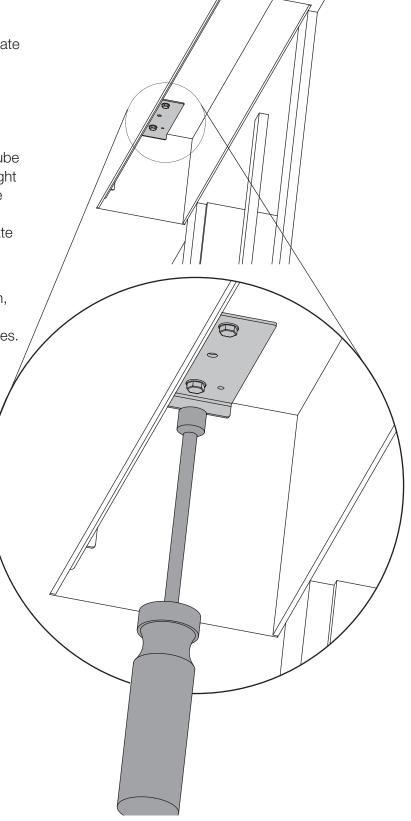
Mount sub-brackets using appropriate fasteners.



**CAUTION:** Risk of bodily injury from falling heavy object.

The sub-brackets for each shade tube must be mounted to support a weight of at least 300 pounds (196kg). The fasteners provided with the sub-brackets may not be appropriate for use in all applications.

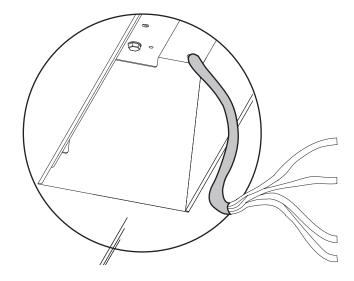
If pocket width equals system width, mount the outside edge of both sub-brackets flush with pocket edges.



## Wire 4-pin terminal block

5.1

Strip 2 in (50 mm) of the jacket off the cable run from the wall.

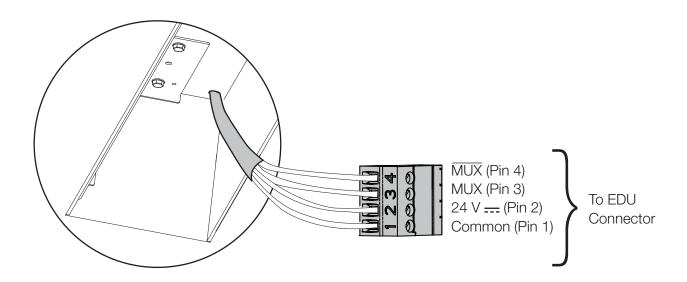


5.2

Wire the 4-pin terminal block (provided) to the cable using a screwdriver. Make sure to tighten the screws tightly and that no insulation is inside of the terminal block.

### **Notes:**

- The EDU connector will support wire sizes from 12 AWG (2.5 mm²) to 26 AWG (0.2 mm²). See the instruction sheet for your power supply to choose an appropriate wire size for your application.
- · Strip insulation from wires so that 0.25 in (6 mm) of bare wire is exposed.



### Mount shade to sub-bracket

**NOTICE:** Shades wider than 4 ft (1.2 m) require two people to install.

Note: If installing a coupled shade system, install the shade with the EDU first.

**Note:** Leave protective wrapping on shade during installation.

6.1

Remove retaining screws from shade brackets.



Lift shade up into pocket. Hook the lip of each shade bracket onto the top of each sub-bracket.

**Note:** Partial cutaway shown in pocket.

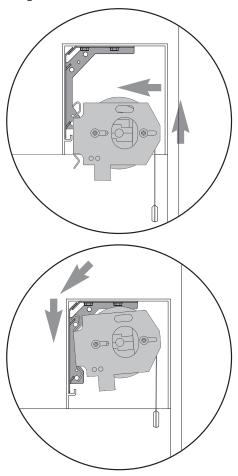


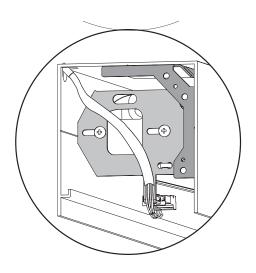
Swing shade down until bottom of shade brackets rest against sub-brackets.

**Note:** Ensure cable is kept outside the shade bracket.



**Final position -**Note placement of cable.





### Center and secure shade



Move the shade left or right until centered.



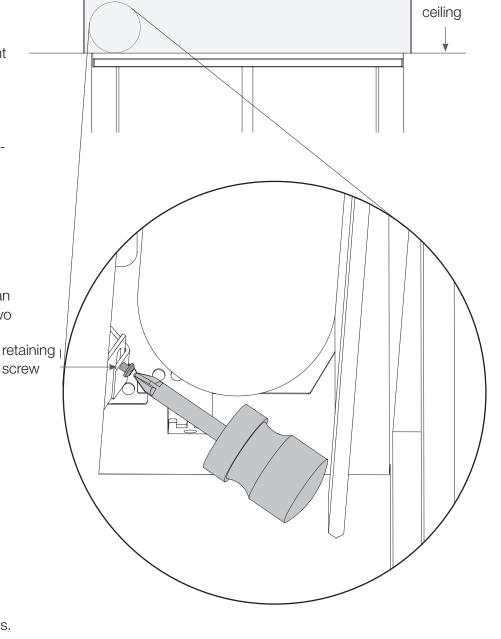
**CAUTION:** Risk of bodily injury Shade must be secured during adjustment procedures. Shade is not secured to the wall during the adjustment procedure. Extreme movement from side-toside may cause shade to fall. Attention should be paid to the shade brackets' engagement into the sub-bracket as side-to-side movement is not restricted at this point. Shades wider than 4 ft (914 mm) require two people to center the shade.

7.2

Insert and tighten retaining screws on BOTH brackets to secure the shade into position. Screws should be tightened down all the way.



**CAUTION:** Risk of bodily injury from falling heavy object.
Verify shade is secured with the retaining screws. After installing retaining screws, gently push up and pull down on the roller shade to ensure a secure installation.





Turn leveling screw to raise or lower idler side of shade until level.

Adjust shade projection from window so that it clears any window trim or hardware when operating. It may be necessary to remove the shade from the pocket to make this adjustment.

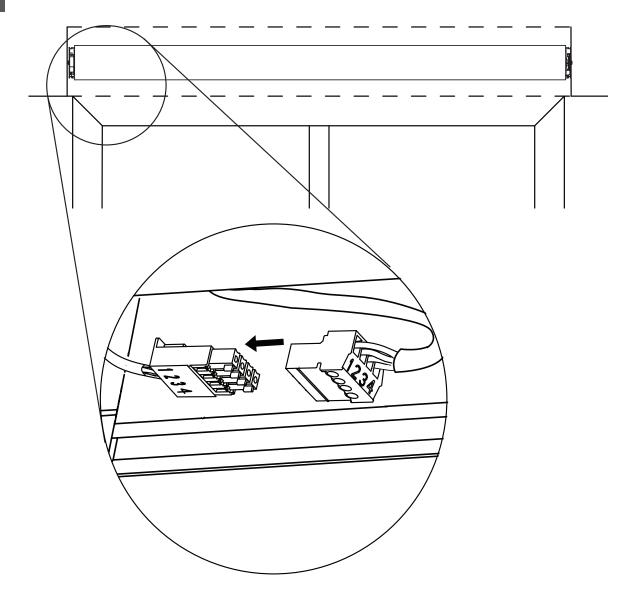
Confirm roller tube turns freely without rubbing on pocket. ceiling



Plug 4-pin terminal block on cable into EDU terminal block (a cable tie can be used to secure the terminal blocks together).

9.2

Dress wires to ensure fabric does not rub while the shade is moving.



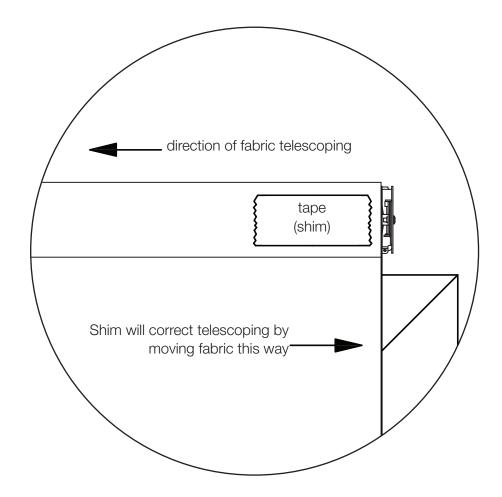
### Secure and check the shade

# 10.1

Use the programming stylus to run the shade up and down using the adjustment buttons (25), re-level if needed.

**NOTICE:** Pay careful attention to the shade roll up to ensure that it does not telescope extremely to one side or the other.

**Tip:** Slight telescoping is normal. However, if the shade is telescoping severely to one side and it is level, press the "close limit button" (■), and lower the shade all the way down using the adjustment buttons (୬). Place a piece of tape on the side of the tube that the fabric is telescoping away from. When finished press the "close limit button" (■) once. This technique is referred to as "shimming". The shade will always track towards the side that the tape (shim) is placed on.



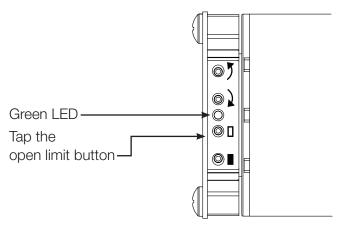
## **Setting limits from the EDU**

### Setting the open limit from the EDU

The open and close limits define the top and bottom of the shade, and are used to determine which direction the shade must turn in order to raise or lower. Refer to the keypad's instruction sheet to set the limits remotely.

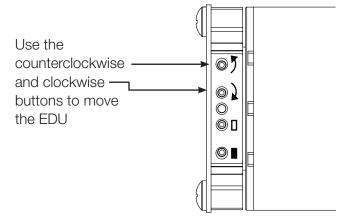
11.1

Tap the "Open limit button" (1). The green LED on the roller 100 EDU will turn on steady, indicating that the EDU is in "Set open limit mode."



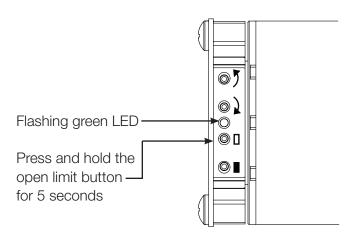
11.2

Adjust the position of the EDU to the desired open limit using the clockwise and counterclockwise buttons (25).



11.3

Press and hold the "open limit button" (1) for 5 seconds. The green LED on the roller 100 EDU will flash for 2 seconds, then go dark, indicating that the current position has been stored as the open limit.

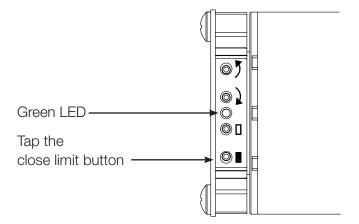


## Setting limits from the EDU (continued)

### Setting the close limit from the EDU

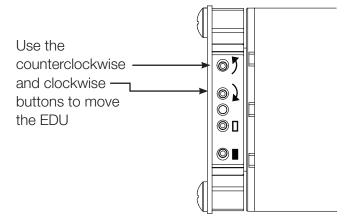
11.4

Tap the "close limit button" (■). The green LED on the roller 100 EDU will turn on steady, indicating that the EDU is in "set close limit mode".



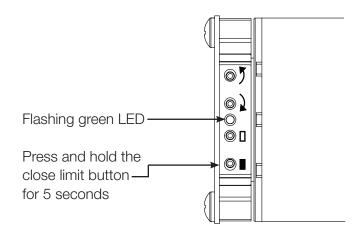
11.5

Adjust the position of the EDU to the desired close limit using the clockwise and counterclockwise buttons (25).



11.6

Press and hold the "close limit button" (■) for 5 seconds. The green LED on the roller 100 EDU will flash for 2 seconds, then go dark, indicating that the current position has been stored as the close limit.



# 12 Verify Limits

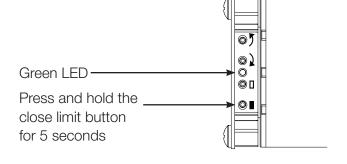
Verify the open limit by double-tapping the open limit  $(\square)$  button. The shade will travel to the open limit.

Verify the close limit by double-tapping the close limit (1) button. The shade will travel to the close limit.

## **Verify communications**

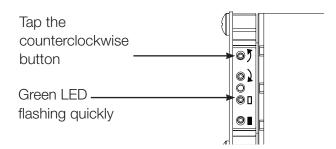
13.1

Enter "link diagnostics mode" by pressing and holding the "close limit button" ( ) on the EDU for 5 seconds. The green LED will flash quickly for two seconds then turn on steady, indicating the EDU is ready to begin verifying communications with other devices.



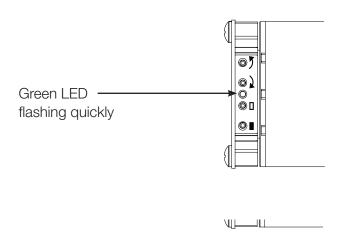
13.2

Initiate "link diagnostics mode" by tapping the "counterclockwise button" (5). The green LED will begin to flash quickly (8 times per second), and the EDU will begin to raise and lower a short distance ("wiggle").



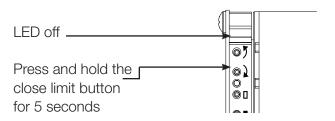
13.3

This EDU is now trying to communicate with all other devices. All EDUs communicating on the link will wiggle and flash their green LED quickly. Verify that all other devices are able to communicate with this device. If you discover any EDUs that are not wiggling, verify that the EDU is powered and wired properly. "Link diagnostics mode" will automatically time out after 10 minutes.



13.4

Exit "Link Diagnostics Mode", by pressing and holding the "Close Limit Button" ( ) on the EDU for 5 seconds. All EDUs on the link will stop wiggling and their LED will turn off.



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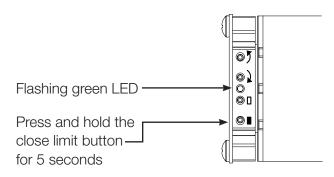
# Programming restoring default settings

### Returning an EDU to its factory default setting

Returning an EDU to its factory defaults will clear out any programming to keypads, but will not affect the limits.

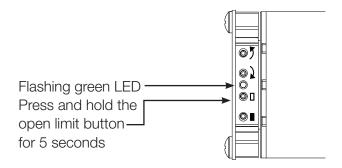
14.1

Press and hold the "close limit button" ( ) on the EDU for 5 seconds. The green LED on the EDU will flash quickly for two seconds then turn ON steady.



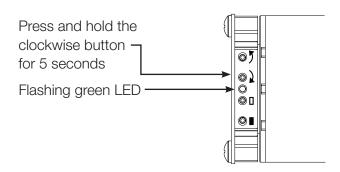
14.2

Press and hold the "open limit button" (1) for 5 seconds. The green LED on the EDU will flash then turn ON steady.



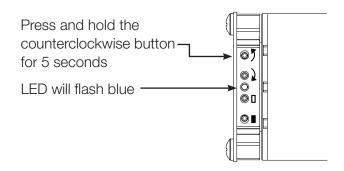
14.3

Press and hold the "clockwise button" (戊) for 5 seconds. The green LED on the EDU will flash then turn ON steady.



14.4

Press and hold the "counterclockwise button" (5) for 5 seconds. The LED on the EDU will flash blue briefly, and then the EDU will reset. The EDU is now restored to factory default settings. The limits will not be affected.



# **Troubleshooting**

Symptom	Solution
Shade will not move using adjustment buttons on EDU.	EDU is not powered - check EDU Power by unplugging and re-plugging in EDU. LED should flash for 5 seconds. Shade is caught on something - free shade.
Shade does not fully open or fully close.	Limits have been set incorrectly - refer to "Set open limit" and "Set close limit" sections.
	Shade is caught on something - free shade.
Fabric is not level.	Check that brackets are mounted level.
	Check that fabric is tracking correctly on the shade tube.
Fabric is not centered over window.	Check that brackets are centered.
Shade does not move smoothly.	Check for binding of shade fabric on side channels. Check fabric tracking.
EDU does not move, and the LED is blinking red slowly four times, and then turning off for 4 seconds.	The EDU has reached its maximum run-time. Wait 20 minutes before attempting to move the shade.
EDU has its red LED on steady.	The EDU is unable to establish communication. Check your wiring.
EDU is blinking its blue LED quickly.	The EDU does not have enough power to operate properly. Refer to the power supply's instruction sheet to verify your installation.  This EDU is being powered by an AC supply. Use an approved 24 V=== supply, such as the QSPS-P1-10-60.
Keypad does not control shade or sends it to the wrong level.	Limits have been set incorrectly - refer to "Set open limit" and "Set close limit" sections.  Refer to the keypad instruction sheet for programming instructions.

### **Limited Warranty**

### SCOPE

This limited warranty ("Warranty") covers the Lutron supplied (a) Sivoia® QS Shade System ("Sivoia® QS Shade System"), (b) Sivoia QED® Shade System ("Sivoia QED® Shade System"), (c) manual shade system and (d) alternating current or a/c shade system (each of the foregoing being a "System"). Customer acknowledges and agrees that use of the System constitutes acceptance of all terms and conditions of this Warranty.

### LIMITED WARRANTY

Subject to the exclusions and restrictions described below, Lutron warrants that each System will be free from manufacturing defects from the date of shipment by Lutron for a period of (a) one year as to the wall controls, interfaces and system accessories of the Sivoia® QS Shade System ("External Sivoia® QS Components") and (b) eight years as to the other Systems and the electronic drive unit. shade fabric and shade hardware of the Sivoia® QS Shade System. If any manufacturing defect exists in the External Sivoia® QS Components, so long as Customer promptly notifies Lutron of the defect within the one year warranty period and, if requested by Lutron, returns the defective part(s), Lutron will, at its option, either repair the defective part(s) or provide comparable replacement part(s). If any manufacturing defect exists in any of the components of a System other than the External Sivoia® QS Components, so long as Customer promptly notifies Lutron of the defect within the eight year warranty period and, if requested by Lutron, returns the defective part(s). Lutron will. at its option, either repair the defective part(s) or issue a credit to the Customer against the purchase price of comparable replacement part(s) purchased from Lutron as provided below:

Number of years from date of shipment	Percentage of cost of replacement parts credited by Lutron
Up to 2	100%
More than 2 but not more than 5	50%
More than 5 but not more than 8	25%
More than 8	0%

Replacement parts for the System provided by Lutron or, at its sole discretion, an approved vendor may be new, used, repaired, reconditioned, and/or made by a different manufacturer.

### **EXCLUSIONS AND RESTRICTIONS**

This Warranty will be void, and Lutron and its suppliers will have no responsibility under this Warranty, if Lutron or its representatives cannot access any components of the System to inspect, diagnose problems with or repair the System or any of its components as a result of concealment or inaccessibility of such components within a building structure.

This Warranty does not cover, and Lutron and its suppliers are not responsible for:

- 1. Damage, malfunction or inoperability diagnosed by Lutron or a Lutron approved third party as caused by normal wear and tear. abuse, misuse, incorrect installation, neglect, accident, interference or environmental factors, such as (a) use of incorrect line voltages fuses or circuit breakers; (b) failure to install, maintain and operate the System pursuant to the operating instructions provided by Lutron and the applicable provisions of the National Electrical Code and of the Safety Standards of Underwriter's Laboratories: (c) use of incompatible devices or accessories; (d) improper or insufficient ventilation; (e) unauthorized repairs or adjustments or alterations; (f) vandalism; (g) an act of God, such as fire, lightning, flooding, tornado, earthquake, hurricane or other problems beyond Lutron's control; or (h) direct exposure to corrosive materials.
- 2. On-site labor costs to diagnose issues with, and remove, repair, replace, adjust, reinstall and/or reprogram the System or any of its components.
- 3. Components and equipment external to the System, such as, non-Lutron lighting and automation systems; building wiring audio-visual equipment; and non-Lutron time clocks, photosensors and motion detectors.
- 4. The cost of repairing or replacing other property that is damaged when any System does not work properly, even if the damage was caused by the System.

THIS WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES. ALL IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO EIGHT YEARS FROM THE DATE OF SHIPMENT, EXCEPT THAT SUCH IMPLIED WARRANTIES ARE LIMITED TO ONE YEAR FROM THE DATE OF SHIPMENT AS TO THE EXTERNAL Sivoia QS COMPONENTS.

NO LUTRON AGENT, EMPLOYEE OR REPRESENTATIVE HAS ANY AUTHORITY TO BIND LUTRON TO ANY AFFIRMATION, REPRESENTATION OR WARRANTY CONCERNING THE SYSTEMS. UNLESS AN AFFIRMATION, REPRESENTATION OR WARRANTY MADE BY AN AGENT, EMPLOYEE OR REPRESENTATIVE IS SPECIFICALLY INCLUDED HEREIN, OR IN STANDARD PRINTED MATERIALS PROVIDED BY LUTRON, IT DOES NOT FORM A PART OF THE BASIS OF ANY BARGAIN BETWEEN LUTRON AND CUSTOMER AND WILL NOT IN ANY WAY BE ENFORCEABLE BY CUSTOMER.

IN NO EVENT WILL LUTRON OR ANY OTH-ER PARTY BE LIABLE FOR EXEMPLARY, CONSEQUENTIAL, INCIDENTAL OR SPE-CIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO DAMAGES FOR PERSONAL INJURY, FAILURE TO MEET ANY DUTY, INCLUDING OF GOOD FAITH OR REASON-ABLE CARE, NEGLIGENCE, OR ANY OTHER LOSS WHATSOEVER), NOR FOR ANY RE-PAIR WORK UNDERTAKEN WITHOUT LU-TRON'S PRIOR WRITTEN CONSENT ARIS-ING OUT OF OR IN ANY WAY RELATED TO THE INSTALLATION. DEINSTALLATION. USE OF OR INABILITY TO USE THE SYSTEM OR OTHERWISE UNDER OR IN CONNEC-TION WITH ANY PROVISION OF THIS WAR-RANTY, EVEN IN THE EVENT OF THE FAULT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, BREACH OF CONTRACT OR BREACH OF WARRANTY OF LUTRON OR ANY OTHER PARTY, AND EVEN IF LUTRON OR SUCH OTHER PARTY WAS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

NOTWITHSTANDING ANY DAMAGES THAT CUSTOMER MIGHT INCUR FOR ANY REA-SON WHATSOEVER (INCLUDING, WITHOUT LIMITATION, ALL DIRECT DAMAGES AND ALL DAMAGES LISTED ABOVE), THE EN-TIRE LIABILITY OF LUTRON AND OF ALL OTHER PARTIES UNDER THIS WARRANTY ON ANY CLAIM FOR DAMAGES ARISING **OUT OF OR IN CONNECTION WITH THE** MANUFACTURE, SALE, INSTALLATION, DE-LIVERY, USE, REPAIR, OR REPLACEMENT OF THE SYSTEM, AND CUSTOMER'S SOLE REMEDY FOR THE FOREGOING, WILL BE LIMITED TO THE AMOUNT PAID BY CUS-TOMER FOR THE SYSTEM. THE FOREGO-ING LIMITATIONS, EXCLUSIONS AND DIS-**CLAIMERS WILL APPLY TO THE MAXIMUM** EXTENT ALLOWED BY APPLICABLE LAW, **EVEN IF ANY REMEDY FAILS ITS ESSEN-**TIAL PURPOSE.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

# WARRANTY CLAIMS, TECHNICAL ASSISTANCE AND WARRANTY INFORMATION.

Contact the Lutron Technical Support Center at the numbers provided below or your local Lutron sales representative with questions concerning the installation or operation of the System or this Warranty, or to make a warranty claim. Please provide the exact model number when calling.

The product may be covered under one or more of the following U.S. patents: 6,497,267; 6,983,783; 7,281,565, and corresponding foreign patents. U.S. and foreign patents pending.

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### **Technical Assistance**

### WORLD HEADQUARTERS

Lutron Electronics Co., Inc. 7200 Suter Road Coopersburg, PA 18036 United States

Tel: +1.610.282.3800 Fax:+1.610.282.1243

#### **ASIAN HEADQUARTERS**

Lutron GL Ltd. 15 Hoe Chiang Road #07-03 Tower Fifteen Singapore 089316 Tel: +65.6220.4666 Fax: +65.6220.4333 lutronsea@lutron.com

### EUROPEAN HEADQUARTERS

Lutron EA Ltd. 6 Sovereign Close London, E1W 3JF United Kingdom Tel: +44.(0)20.7702.0657

Fax: +44.(0)20.7702.0657

### CUSTOMER SERVICE/ ORDERING

USA +1.610.282.3800 08.00 - 20.00 EST UK +44.(0)20.7702.0657 09.00 - 18.00 GMT

### CUSTOMER SERVICE/ E-MAIL

shadinginfo@lutron.com

# TECHNICAL SUPPORT & SERVICES

USA +1.610.282.3800 24 hours/7 days UK +44.(0)20.7702.0657 09.00 - 18.00 GMT

### INTERNET:

www.lutron.com

## ADDITIONAL LUTRON SALES OFFICES:

#### Germany

Tel: +49.309.710.4590 Fax: +49.309.710.4591 FREEPHONE: 00800.5887.6635

#### France

Lutron LTC, S.A.R.L. 90 rue de Villiers 92300 Levallois-Perret, France Tel: +33.(0)1.41.05.42.80 Fax: +33.(0)1.41.05.01.80 FREEPHONE: 0800.90.12.18

#### Spain-Madrid

Tel: +34.91.567.84.79 Fax: +34.91.567.84.78 FREEPHONE: 0900.948-944

lutronfrance@lutron.com

#### Spain-Barcelona

Tel: +34.93.496.57.42 Fax: +34.93.496.57.50 FREEPHONE: 0900.948.944

### **Hong Kong**

Tel: +852.2104.7733 Fax: +852.2104.7633

### Beijing

Tel: +86.10.5877.1817 Fax: +86.10.5877.1816

### Shanghai

Tel: +86.21.6288.1473 Fax: +86.21.6288.1751

### **Singapore**

LUTRON GL Ltd. Singapore 15 Hoe Chiang Road #7-03 Tower 15 Singapore 089316 Tel: +65.6220.4666 Fax: +65.6220.4333

#### Japan

Tel: +81.3.5575.8411 Fax: +81.3.5575.8420

### www.lutron.com/shadingsolutions

USA and Canada (24 hrs/7days):

call: 800.523.9466

Other countries (8 a.m. – 8 p.m. ET)

call: +1.610.282.3800 fax: +1.610.282.3090

email: shadinginfo@lutron.com

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