

Transmittal

To: Devin Gates / Paric

Date: 7/27/2017
Client: Paric
Project: Webster ISB

We are sending: ☐ Drawings ☐ Literature ☐ Installation Drawings ☐ Proposal
 ☐ Samples ☐ Specs ☐ Fabrics/Finishes ☒ See Below

Transmitted for: ☐ Your Information ☐ Pricing
 ☐ Your Approval ☒ See Below

Sent via: ☐ Our Messenger ☐ Fax 847.325.1001
 ☐ Mail ☐ Overnight Delivery
 ☒ E-mail

Remarks:

Attached are the Window Shade Product Operation, Care & Maintenance Manuals.

Copies to: _____

Thank you,

Name: Cory Van Britson
Title: Project Manager



Care and Maintenance of Window Treatments





Contents

Care and Cleaning Methods	3
---------------------------	---

Maintenance and Care by Product Type

Roller Shade Products	4
Drapery Tracks	5
Honeycomb Shades	6
XL Pleat Shades	7
Wood, Aluminum, and Leather Venetian Blinds	8
CERUS® Roman Shades - Soft Fabrics	9
CERUS® Roman Shades - Grasses, Reeds, Woven Woods	10
Kirbé® Vertical Draperies	11
Upholstered Cornices	12
Aluminum Lineals	12

Care and Cleaning Methods by Fabric/Material

Classico™ Collection Roller Shades	13
Gallery Collection Roller Shades	14
The Avant Collection™ Draperies, Cornices and CERUS® Romans	15
The Avant Collection™ Kirbé® Vertical Draperies	15
The Avant Collection™ Woven Woods	16
The Avant Collection™ Venetians: Premium, Elite and Aluminum	16
Lutron® Honeycomb Shades: Serena	17
Lutron Coulissee Collection: Elegance (Roller Shades)	17
Lutron Coulissee Collection: Tranquil (Roller Shades)	18
Lutron Coulissee Collection: Bold (Roller Shades)	19
Lutron Coulissee Collection: Impact (XL Pleat shades)	20
Lutron Coulissee Collection: Impact (Venetian blinds)	20
Additional Resources	21
Application Notes	22



Care and Cleaning Methods



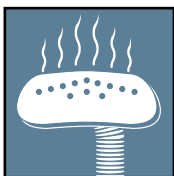
Hand Dusting

Most routine care of Lutron window treatments will consist of dust removal. Hand dusting is best done using gentle methods which minimize the possibility of damaging or disturbing woven fabrics, lift cords, venetian slats, etc. Soft filament and feather dusters are recommended. Careful wiping with a soft, lint-free cloth may also be effective.



Vacuuming with a Soft Brush Attachment

As stated above, most routine care of Lutron window treatments will consist of dust removal. When hand dusting isn't practical due to the height of a window or other factors, vacuuming is an effective method. Use a soft brush attachment to temper the strength of suction and help lift unwanted dust and fibers from the surface of fabrics, cornices, and lineals.



Low Heat Steaming

Steam cleaning is not recommended as a method of regular care of Lutron® window treatments. However, application of low heat steam as a means of wrinkle removal is acceptable for many of the fabrics in the Lutron collections. Be sure to check the Care and Cleaning Methods by Fabric/Material chart starting on page 13 before applying steam.



Spot Cleaning

In the event that fabric in a Lutron® window treatment becomes soiled or stained, spot cleaning with a mild detergent and water may be appropriate. Use detergent that is intended for fabrics without bleach or fabric softener additives. Apply diluted detergent by blotting with a clean cloth. Do not rub. Then, use a second clean cloth to apply a clear-water rinse. Allow to dry thoroughly.

Be sure to check the Care and Cleaning Methods by Fabric/Material chart starting on page 13 before spot cleaning. Any cleaning product should be tested on a small, inconspicuous area prior to broad application on the shade panel. An 8" x 10" sample of the fabric may also be obtained through Lutron Customer Service for testing purposes.



Professional Cleaning

Reputable drapery and upholstery cleaning services are experts in fabric care and the cleaning methods that work best for specific materials. The methods referenced in this guide are:

Ultrasonic: Usually involves taking down the window treatment and dipping in an ultrasonic bath. This is a very effective cleaning method, and may even include anti-static treatment to help repel dust.

Injection/Extraction: Similar to the popular carpet cleaning method, loose dust and dirt are removed with a vacuum, then, a cleaning solvent is applied, (injection), and immediately suctioned out, (extraction). This heat and agitation-free method can often be performed with shades and drapes left in place.

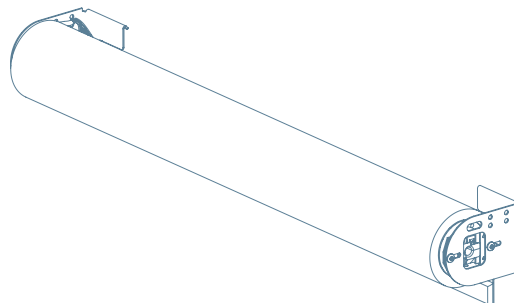
Dry Cleaning: Typically appropriate for drapery fabrics, this method is actually similar to injection/extraction, but is usually done off-site, although service providers who offer on-site dry cleaning do exist.

Be sure to check the Care and Cleaning Methods by Fabric/Material chart starting on page 13 before ordering or allowing any type of professional cleaning.



Roller Shade Products

- Sivoia® QS single and coupled roller shades
- Sivoia® QS Wireless single and coupled roller shades
- Sivoia® QED single and coupled roller shades
- Lutron® AC roller shades
- Lutron® Stanza roller shades
- Lutron® manual roller shades



Maintenance

Lutron roller shade systems are manufactured to provide maintenance-free performance for the life of the product. All internal and external components are designed to function without user intervention aside from normal operational input. After the shades have been installed correctly by a qualified installer, there is no mechanical upkeep required. In the event adjustments or repairs are needed, the original provider of the systems should be notified. All adjustments and repairs must be made by qualified personnel.

Lutron Roller Shades are backed by Lutron's limited 8-Year Warranty on all components.

http://www.lutron.com/TechnicalDocumentLibrary/Window_Systems_Warranty.pdf



Fabric Care

Lutron roller shade fabrics are manufactured and process treated for extra strength to prevent wear. Lutron roller shade fabrics are not easily damaged and require only light maintenance to keep them dust and dirt free. Fabrics can be periodically dusted in place using a feather duster or vacuum with a soft brush attachment.

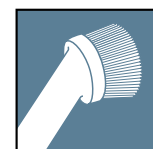
If staining occurs, most* fabrics may be cleaned with a mild detergent and water applied with a soft cloth. Follow this with a thorough rinsing of clean water and allow the shade to air dry in an unrolled position. There are also numerous restorative vinyl cleaners on the market that can clean and revitalize vinyl and PVC coated sheer weave fabrics, if desired.

Any mild cleaning product should be tested on a small, inconspicuous area prior to broad application on the shade panel. An 8" x 10" sample of the fabric may also be obtained through Lutron Customer Service for testing purposes.

* Refer to the Cleaning Methods by Fabric/Material chart starting on page 13 for Roller Shade fabrics that allow for spot cleaning.



Hand Dust



Soft Brush Attachment



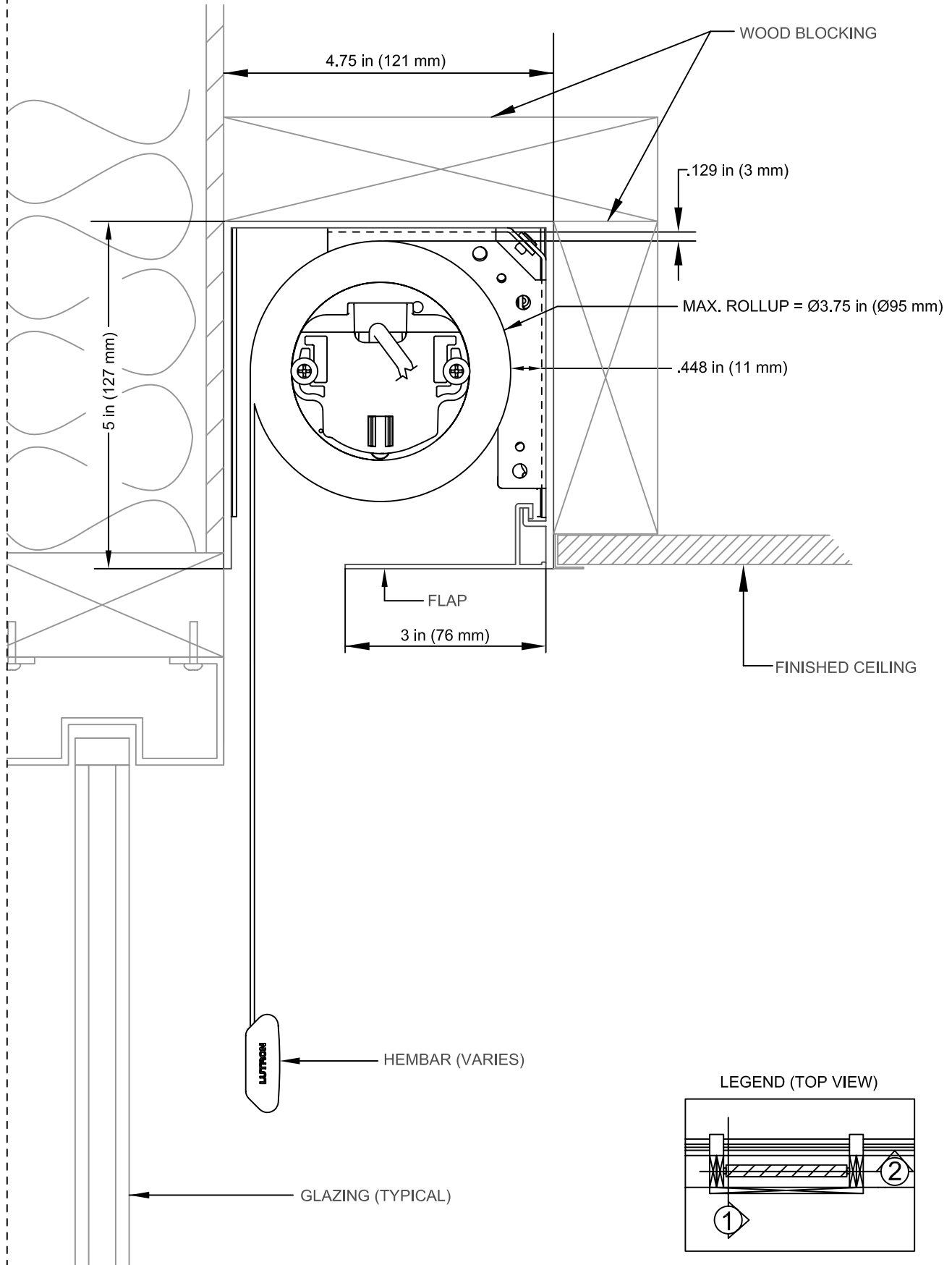
Spot Clean

Care and Cleaning Methods by Fabric / Material								
Product	Composition	Gentle Hand Dusting (soft cloth/feather duster)	Gentle Vacuum w/Soft Brush Attachment	Low Heat Steaming	Gentle Spot Cleaning (soft cloth/mild det./rinse)	Professional		
						Ultrasonic	Injection/Extraction	Dry Cleaning

Classico™ Collection Roller Shades									
☐	Greenscreen Revive	Recycled Polyester							
☐	Sheerlite	Polyester/Vinyl							
☐	Value Select 2	Polyester/Vinyl							
☐	Value Select 3 (Discontinued)	Polyester/Vinyl							
☐	Basketweave 90 (SW 2500, 2410, 2360, 2390)	Vinyl/Fiberglass							
☐	Basketweave ES (E-Screen)	Vinyl/Fiberglass							
☐	Basketweave E Screen With Koolblack™ Technology	Vinyl/Fiberglass							
☐	Basketweave MS (M-Screen)	Vinyl/Fiberglass							
☐	Basketweave 4000/Eco (SW 4000, 4100, 4400)	Vinyl/Polyester							
☐	Basketweave 3000	Vinyl/Fiberglass/Polyester							
☐	Basketweave 2000 (SW 2000, 2100)	Vinyl/Fiberglass							
☐	Vela	Polyester							
☐	Basket Weave NT (Natte)	Vinyl/Fiberglass							
☐	Basketweave ST (Satine)	Vinyl/Fiberglass							
☐	Basketweave TS (T-Screen)	Vinyl/Fiberglass							
☐	Basketweave Eco2 (Infinity)	Thermoplastic Olefin							
☐	Jacquard (SW 5000)	Polyester/Vinyl							
☐	Cinq	Trevira® CS (Polyester)							
☐	Opac	Trevira® CS (Polyester)							
☐	Proton	Trevira® CS (Polyester)							
☐	Basketweave 27 (SW 2701, 2703, 2705, 2710)	Vinyl/Fiberglass							
☐	Basketweave Silver (Silverscreen)	Vinyl/Fiberglass/Aluminum Backing							
☐	Value Select 1	Vinyl/Polyester							
☐	Basketweave (Translucent - SW 4800)	Vinyl/Polyester							
☐	Translucent P	Fiberglass							
☐	Obion (Discontinued)	Fiberglass/Acrylic/Cotton							
☐	Standard Blackout (NLFG)	PVC/Fiberglass							
☐	Premiere X (Discontinued)	Polyester							
☐	Black-Out Premiere (Flocke)	Fiberglass/Acrylic/Cotton							
☐	Black-Out Edessa	Polyester/Acrylic							
☐	Black-Out Avila	Polyester/Acrylic							
☐	Black-Out Value Premiere (SW 7000, 7100)	Polyester/Acrylic							

World Headquarters 1.610.282.3800 | Customer Service and 24/7 Technical Support 1.888.445.8063

© 2013 Lutron Electronics Co., Inc. | P/N 368-3231 REV B



TYPICAL SECTION

SCALE: 1/2

ROLLER SHADE DETAIL DRAWING

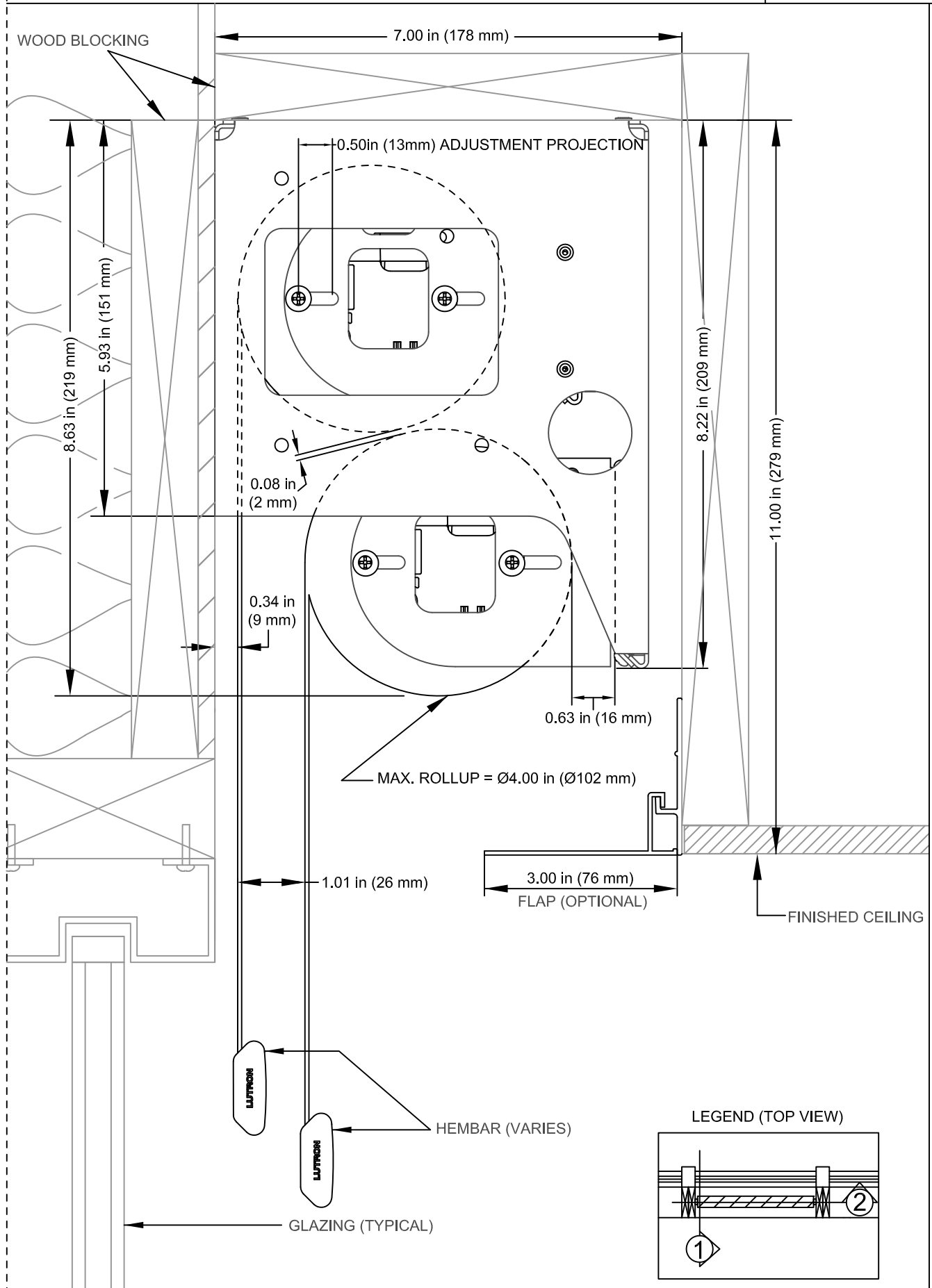
SCALE: 1/2

0051-R100-DMT-S

ROLLER 100 / 200CW - DUAL BRACKET MOUNT
REV: A
DRAWING #

Lutron Electronics Co., Inc.
7200 Sutter Road | Coopersburg, PA 18036 | USA
1(800) 446-1503 | fax: (610) 282-7439
shadinginfo@lutron.com

LUTRON
Copyright © 2009 Lutron Electronics Co., Inc.



1

TYPICAL SECTION

SCALE: 1/2

Inline-Coupled Roller Shade Addendum

Shade Mounting & Adjustment Guide for Inline-Coupled Roller 100, 150, 200CW, & 300—Please Read Before Installing

English

CAUTION: RISK OF FALLING OBJECTS. Read and follow all instructions for mounting the shade system. Failure to follow these instructions could result in minor to moderate injury.

Important Notes: Please Read Before Installing

- A.** Plan the installation to maintain sufficient clearance between the shade and any other object, including window trim, hardware, cranks, lock levers, and drapery.
- B.** For safety, all shades and coupled panels must be installed by 2 people.
- C.** The shade system must be mounted to blocking or other suitable structural material. It is the responsibility of the installer to choose and install fasteners that are appropriate for the mounting surface.
- D.** Lutron systems are intended for use with only Lutron hardware, controls, and power supplies.

NOTE: The pictures and instructions in this document detail the installation of wall-mount sub-brackets. The sequence and methods for installing other types of sub-brackets are the same or similar. Refer to the chassis mounting instructions included with your sub-brackets.

Customer Assistance

USA and Canada: +1.800.523.9466 (24 hrs / 7 days)
UK +44.(0)20.7680.4481 – 08.00 - 18.00 GMT
support@lutron.com | forums.lutron.com

Worldwide Headquarters | USA

Lutron Electronics Co., Inc.
7200 Suter Road, Coopersburg, PA 18036-1299 USA
USA, Canada, Caribbean: 1.844.LUTRON1 (588-7661)
Mexico: +1.888.235.2910
Central & South America: +1.610.282.6701
Online: www.lutron.com/help | email: support@lutron.com

Europe Headquarters | United Kingdom

In EEA imported by: Lutron EA Ltd
6 Sovereign Close, London, E1W3JF, UK
TEL: +44.(0)20.7702.0657 | FAX: +44.(0)20.7480.6899
Tech Support: +44.(0)20.7680.448 | FREEPHONE: 0800.282.107

Asian Headquarters | Singapore

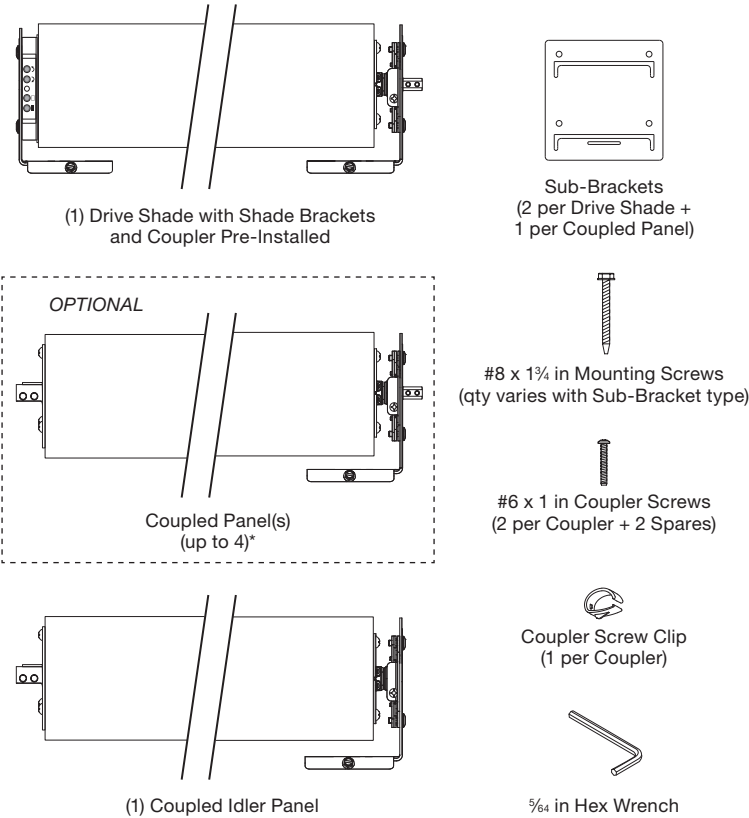
Lutron GL Ltd.
390 Havelock Road, #07-04 King's Centre, Singapore, 169662
TEL: +65.6220.4666 | FAX: +65.6220.4333 | asiasales@lutron.com

For product warranty information, please see:

www.lutron.com/TechnicalDocumentLibrary/Window Systems Warranty.pdf

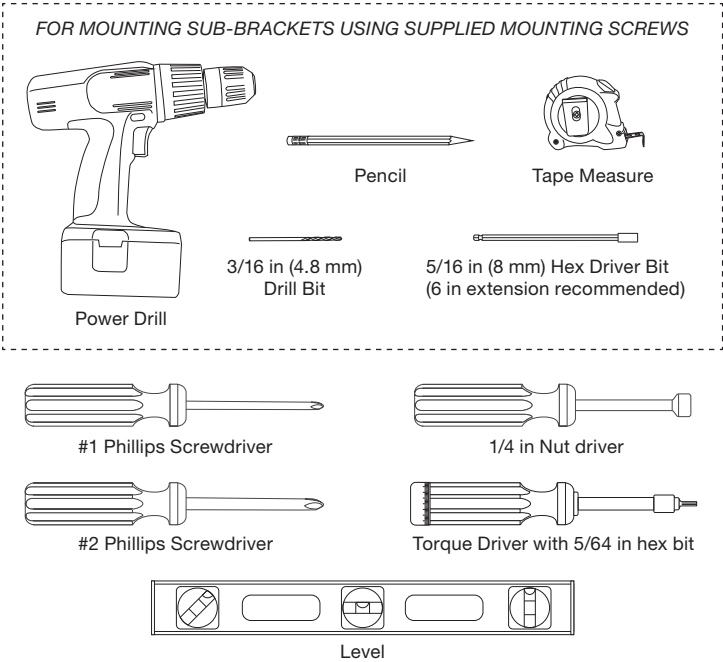
1 Prepare to Install

1.1 Included with inline-coupled shades:



*A total of 6 panels may be coupled, including the drive shade and coupled idler panel. (Subject to limitations based on drive capacity, panel sizes, and fabric selection; contact Lutron for more information.)

1.2 Additional items you'll need:

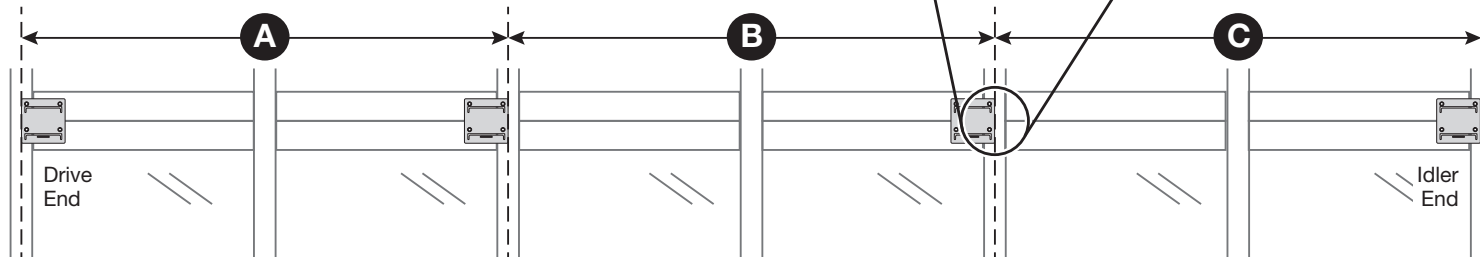


2 Install the Sub-Brackets

Lay out the sub-brackets at the originally specified bracket-to-bracket distances, as shown below. Verify that all sub-brackets are level and aligned.

Typical 3-Shade Combination*

- A** Drive shade bracket-to-bracket width
- B** Coupled panel bracket-to-bracket width
- C** Coupled idler panel bracket-to-bracket width

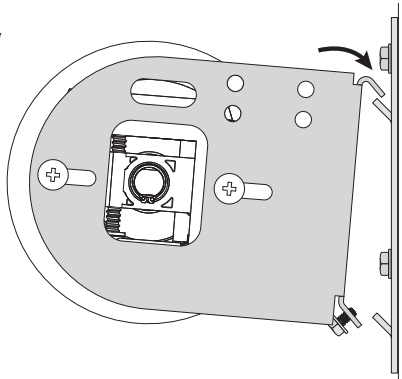


*A total of 6 panels may be coupled, including the drive shade and idler panel.
(Subject to limitations based on drive capacity, panel sizes, and fabric selection; contact Lutron for more information.)

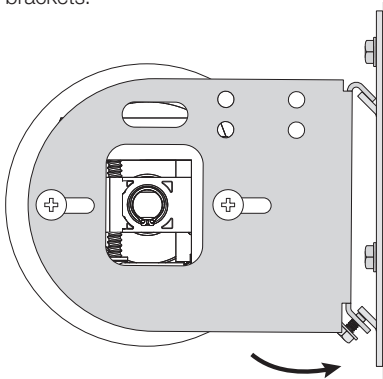
3 Install the Drive Shade (for more information and other bracket types, refer to the chassis installation instructions packaged with the shade)

- a.** Position the drive shade in front of the mounted sub-brackets and hang the top hook of each shade bracket on the upper hook of the sub-bracket as shown.
- b.** Swing the shade down, allowing the lower part of the shade brackets to rest against the sub-brackets.

Profile View

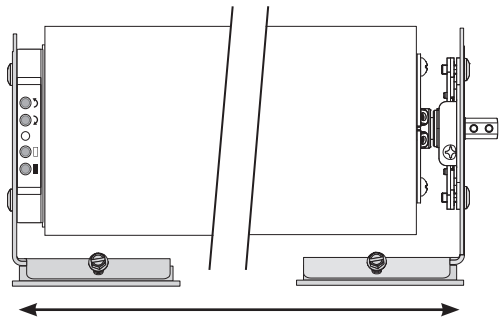


Profile View

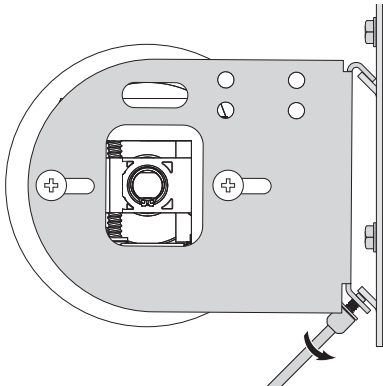


- c.** Adjust the position of the shade left-right as needed to center the fabric panel on the window opening.
- d.** Use the 1/4 in nut driver to tighten the securing screw of each shade bracket.

View from Below



Profile View



CAUTION: RISK OF FALLING OBJECTS. The shade bracket securing screw is factory-installed in the shade bracket, and must be tightened firmly into the sub-bracket to ensure safe installation of the shade. If the securing screw is missing, **DO NOT** substitute a different type of screw or omit Step **d**. Check the hardware kit for spare shade bracket securing screws, or contact Lutron for replacement screws. Failure to follow these instructions could result in minor to moderate injury.

4 Alignment & Adjustment

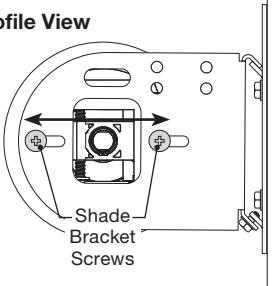
As coupled panels are added, it is essential for smooth operation that the coupled shade tubes form as straight a line as possible. Depending on the straightness of the sub-bracket mounting surface and the level-alignment of the mounted sub-brackets, it may be necessary to adjust the shade tube projection (distance from the sub-brackets), and/or the level (idler height). Start with the drive shade, then make adjustments as needed to each coupled panel after it is added, before adding the next panel.

4.1 Projection Adjustment:

Each shade bracket provides for projection adjustment as shown.

- a. Use the #2 phillips screwdriver to loosen both shade bracket screws.
- b. Slide the shade toward or away from the sub-bracket.
- c. Re-tighten the shade bracket screws.

Profile View

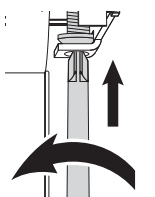
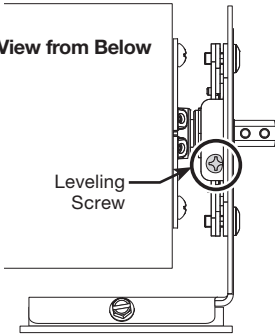


NOTE: When projection adjustment is necessary, it is the responsibility of the installer to maintain adequate clearance around the shade, and to ensure the fabric roll does not come in contact with any surrounding objects; e.g., ceiling, pocket, fascia, brackets, mounting hardware, etc.

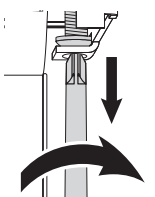
4.2 Level Adjustment:

Each idler, coupling and non-coupling, features a leveling screw, accessible from below the shade, which can be used to raise or lower the idler-end of the shade tube. Use the #2 phillips screwdriver.

View from Below



Turn the leveling screw counter-clockwise to raise the idler



Turn the leveling screw clockwise to lower the idler

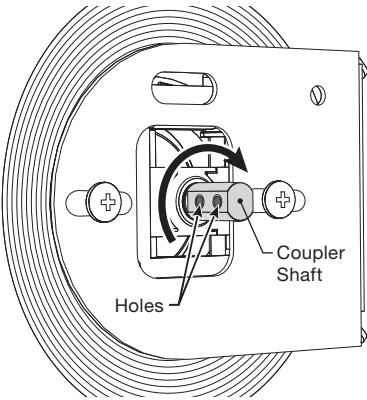
Complete the Setup of the Drive Shade:
Follow the instructions in the Sivoia QS Basic Wiring & Setup Guide included with the drive shade to connect power and perform operational setup of shade. Ensure that the shade is mounted securely and operating properly, with all wiring dressed and secured, before proceeding to the next Section.

5 Install a Coupled Panel

NOTE: The instructions in Sections 5 and 6 pertain to all coupled panels, including the coupled idler panel. Complete both sections for each coupled panel before another coupled panel is added.

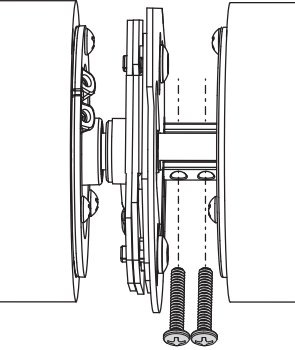
5.1 Position the Coupler Shaft

Use the Arrow buttons (↔) on the EDU controls to rotate the drive shade (and any previously-installed coupled panels, if applicable), so that the holes in the coupler shaft are facing downward.



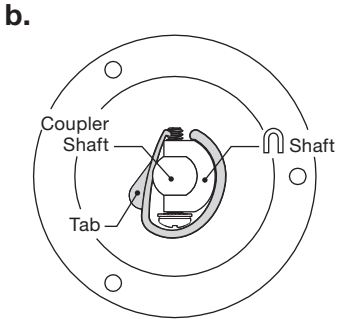
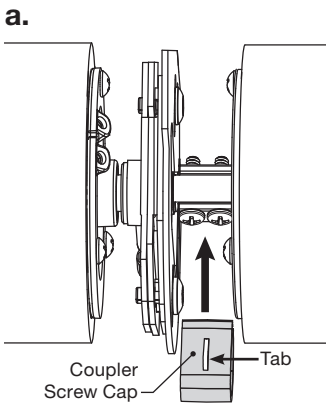
5.3 Secure the Coupled Panel

- a. Install both coupler securing screws, threading them through the joined coupler shaft and ⌒ Shaft. Use the #1 phillips screwdriver to tighten until the heads are fully seated.
- b. Adjust the position of the coupled panel left-right as needed to center the fabric on the window opening. (The coupler shaft is extendable.)
- c. Use the hex-head driver to tighten the securing screw of the coupled panel shade bracket, as shown in Step d of Section 3.



5.4 Install the Coupler Screw Cap

- a. Push the Coupler Screw Cap over the joined Coupler Shaft and ⌒ Shaft until it snaps into place.
- b. The closed side of the Coupler Screw Cap must cover the screw heads, and the tab must be located on the open side of the ⌒ Shaft as shown.



Profile View of Assembled Coupling

- c. Complete all of the steps in Section 6 before adding another coupled panel.

6 Alignment & Adjustment of Coupled Panels

6.1 Adjust Projection

Follow the instructions in Step 4.1 to adjust the projection of the newly-added coupled panel, if necessary.

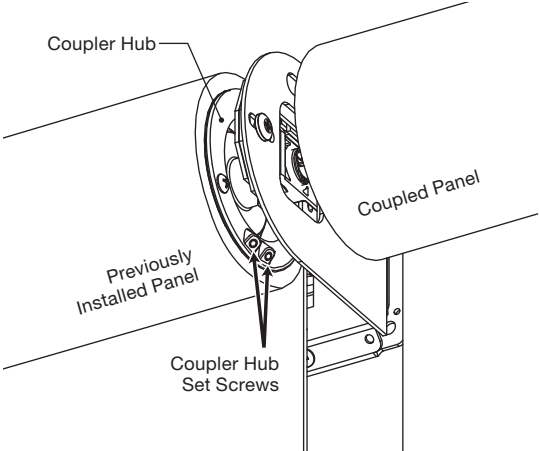
6.2 Adjust Level

Follow the instructions in Step 4.2 to adjust the level of the newly-added coupled panel, if necessary.

NOTE: Before leveling a coupled panel, recheck and verify that the drive shade and any previously installed coupled panels are level, and correct as needed.

6.3 Adjust Hembar Alignment

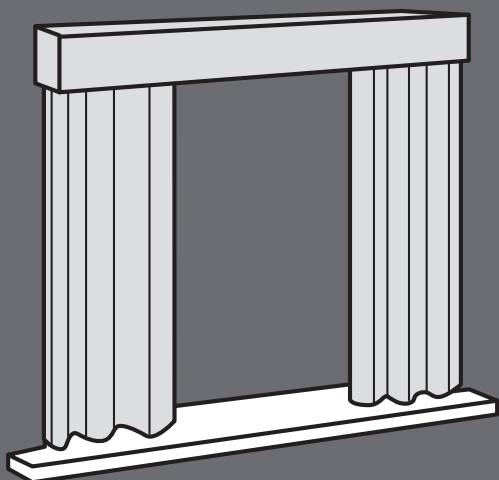
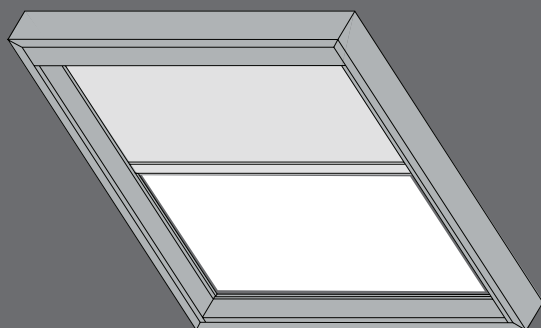
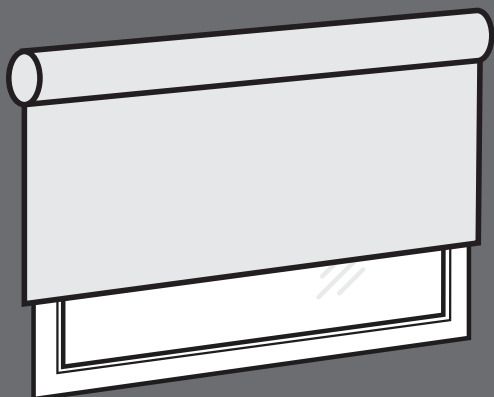
- a. Use the Arrow buttons (↔) on the EDU controls to rotate the drive shade so that the set screws in the coupler hub are accessible.



- b. While the second person holds the coupled panel fabric roll in place to prevent it from unrolling, loosen the coupler hub set screws.
- c. Carefully rotate the coupled panel to align its hembar with the hembar of the previously-installed panel.
- d. With the hembars aligned, use the torque driver to re-tighten the coupler hub set screws to a torque of 6.0 in-lbs (0.7 N•m).

CAUTION: RISK OF FALLING OBJECTS. The coupler hub set screws are tightened at the factory to a torque of 6.0 in-lbs (0.7 N•m). Failure to re-tighten the coupler hub set screws to a torque of 6.0 in-lbs (0.7 N•m) could result in minor to moderate injury.

- e. Repeat all of the steps in Sections 5 and 6 for each additional coupled panel.



Sivoia® QS

wiring and
programming
guide

Sivoia® QS Wiring and Programming Guide

Sivoia QS Drives are available for control of Draperies, Roller Shades and Tensioned Shades. *Sivoia* QS Shades and Draperies can be controlled as part of a QS System, incorporating *GRAFIK Eye* QS lighting controls, or as a *Shades/Draperies only* System, without lighting controls.

Sivoia QS Drives and Keypads are powered from a 24 V_{DC} power supply. All drives, power supplies, keypads and other control devices are linked together with the same four wire communication link. This link provides 24 V_{DC} to all components.

The Shades/Draperies can also be operated via an infrared Hand-Held Remote Control. These can be used in either a *GRAFIK Eye* QS Integrated System or *Sivoia* QS Standalone System. The IR remotes can move the Shade or Drapery to the open and close limit. They also provide the additional functions of storing and recalling a favorite preset, and setting open and close limits remotely.

Wiring

QS link power supply	3
Smart panel - one shade per output	4
Smart panel - two shades per output	5
Smart panel - three shades per output	6
GRAFIK Eye QS integration	7
Wire length chart	8

Setting limits

From the drive	9
From a keypad	12

Verifying communication

From the drive	10
From the smart panel	10

Programming

Assigning shades/draperies to keypads	11
Storing presets from a keypad	13
Individual level adjust	14

Restoring defaults

Drive	15
Keypad	16

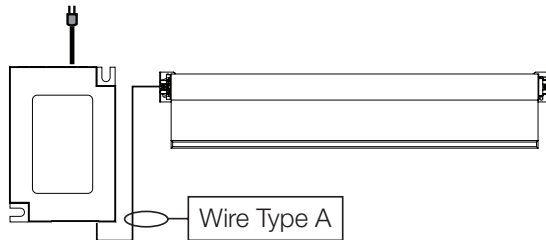
Troubleshooting

Troubleshooting Chart	17
-----------------------------	----

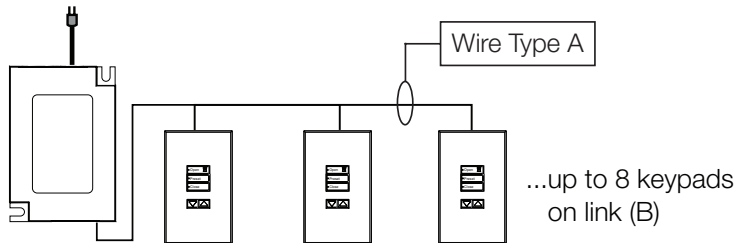
1

System Wiring Overview: QS Link Power Supply

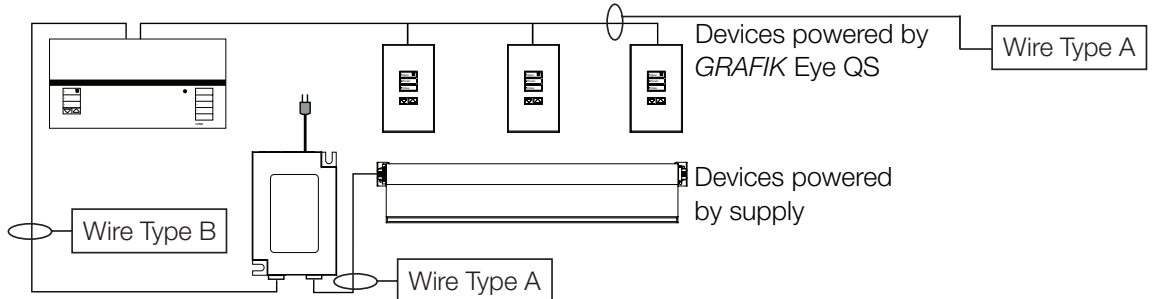
Example: Powering one shade / drapery drive unit
(max of one shade / drapery drive unit per output of a power supply)



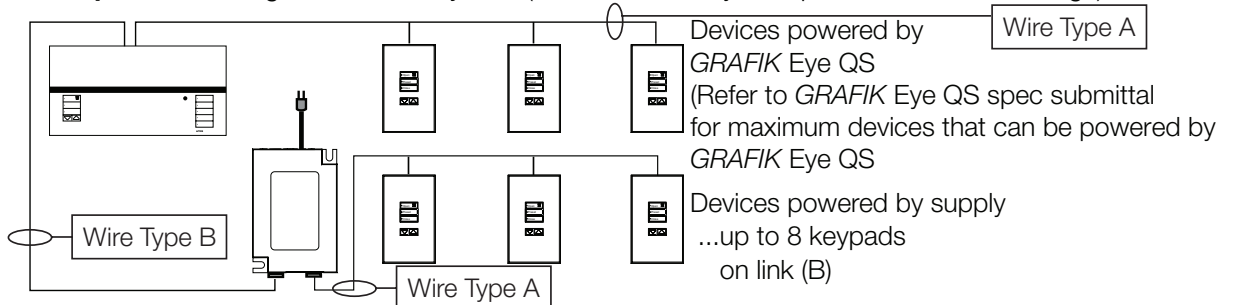
Example: Powering keypads



Example: Connecting to a GRAFIK Eye® QS (**Note:** GRAFIK Eye QS powered from line voltage)



Example: Connecting to a GRAFIK Eye QS (**Note:** GRAFIK Eye QS powered from line voltage)



Wiring Type Key

Type A Power and communication link (4 conductor)
Provides power and communication to QS shades or keypads
12-26 AWG (4-0.15 mm²) standard, twisted/shielded

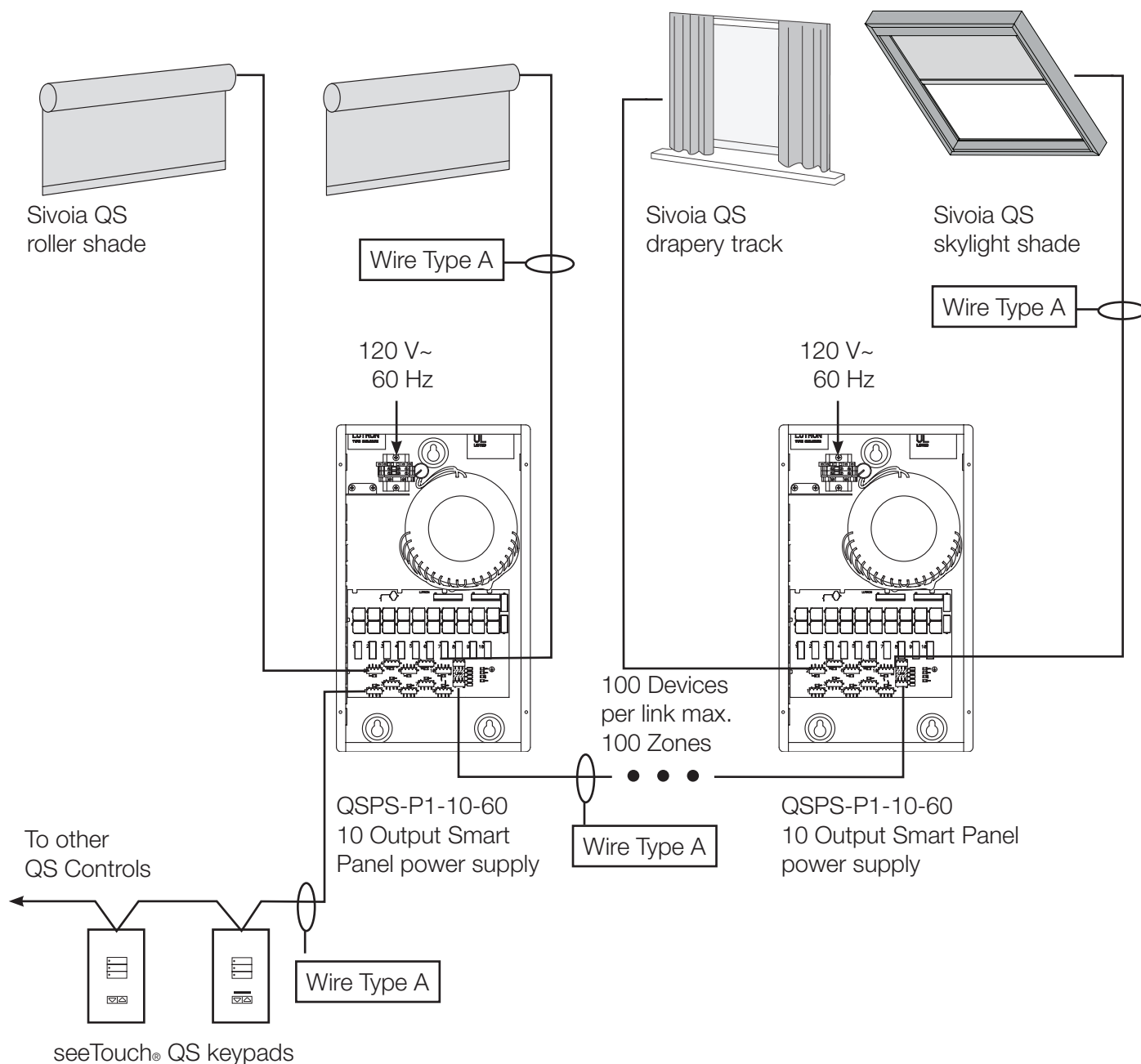
Type B Communication link (3 conductor)
Communications used to connect power supplies to each other or to GRAFIK Eye QS
12-26 AWG (4-0.15 mm²) standard, twisted/shielded

Refer to wiring guide on pg 8 for wire gauge based on distance.

Note: Secondary wiring must be of type CL2, CL2P, CL2R, CL2X or other cable with equivalent or better electrical, mechanical, and flammability ratings in accordance with local and national electric code.

2

Sivoia QS System Wiring: Smart Panel power supply, single shade per output



Wiring Type Key

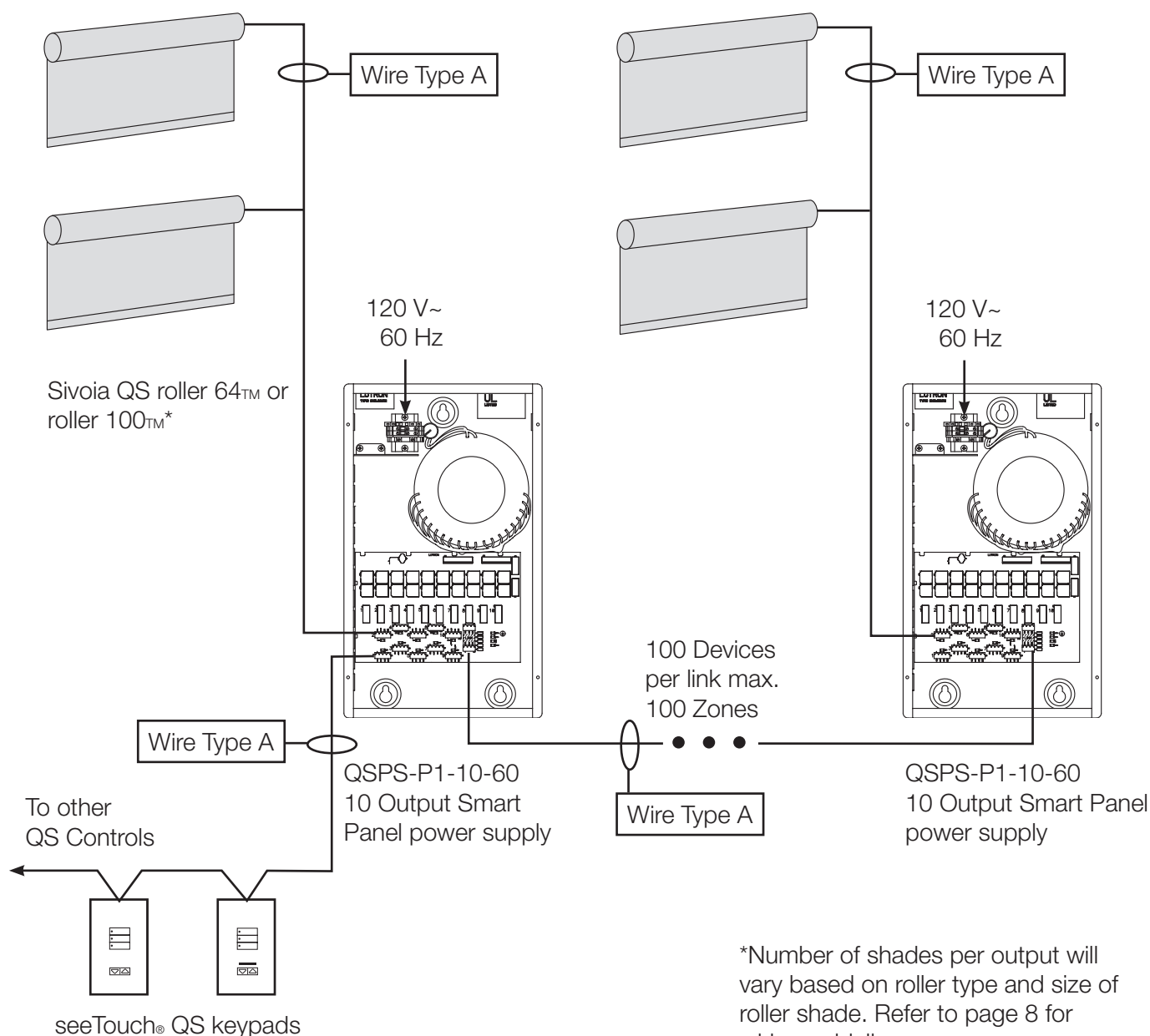
Type A

Communications Link: 4 Conductor (twisted and shielded), listed for application
Refer to wiring guide on pg. 8 for wire gauge based on distance
Maximum comm. link: – Up to 2000 ft (600 m) connecting
all QSPS-P1-10-60 panels

Note: Secondary wiring must be of type CL2, CL2P, CL2R, CL2X or other cable with equivalent or better electrical, mechanical, and flammability ratings in accordance with local and national electric code.

3

Sivoia QS System Wiring: Smart Panel power supply, two shades per output*



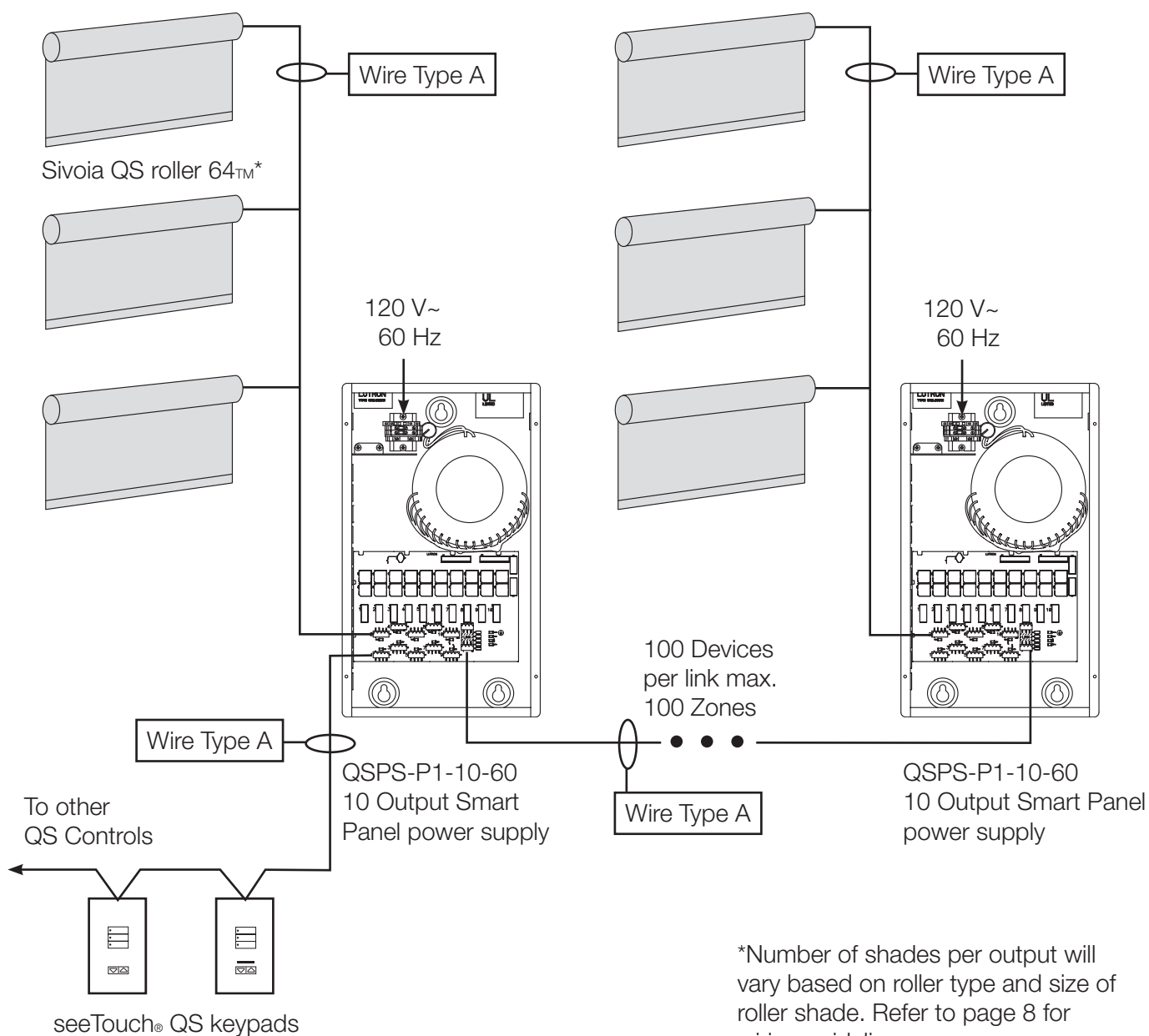
Wiring Type Key

Type A

Communications Link: 4 Conductor (twisted and shielded), listed for application
Refer to wiring guide on pg. 8 for wire gauge based on distance
Maximum comm. link: – Up to 2000 ft (600 m)
connecting all QSPS-P1-10-60 panels

Note: Secondary wiring must be of type CL2, CL2P, CL2R, CL2X or other cable with equivalent or better electrical, mechanical, and flammability ratings in accordance with local and national electric code.

Sivoia QS System Wiring: Smart Panel power supply, three shades per output*



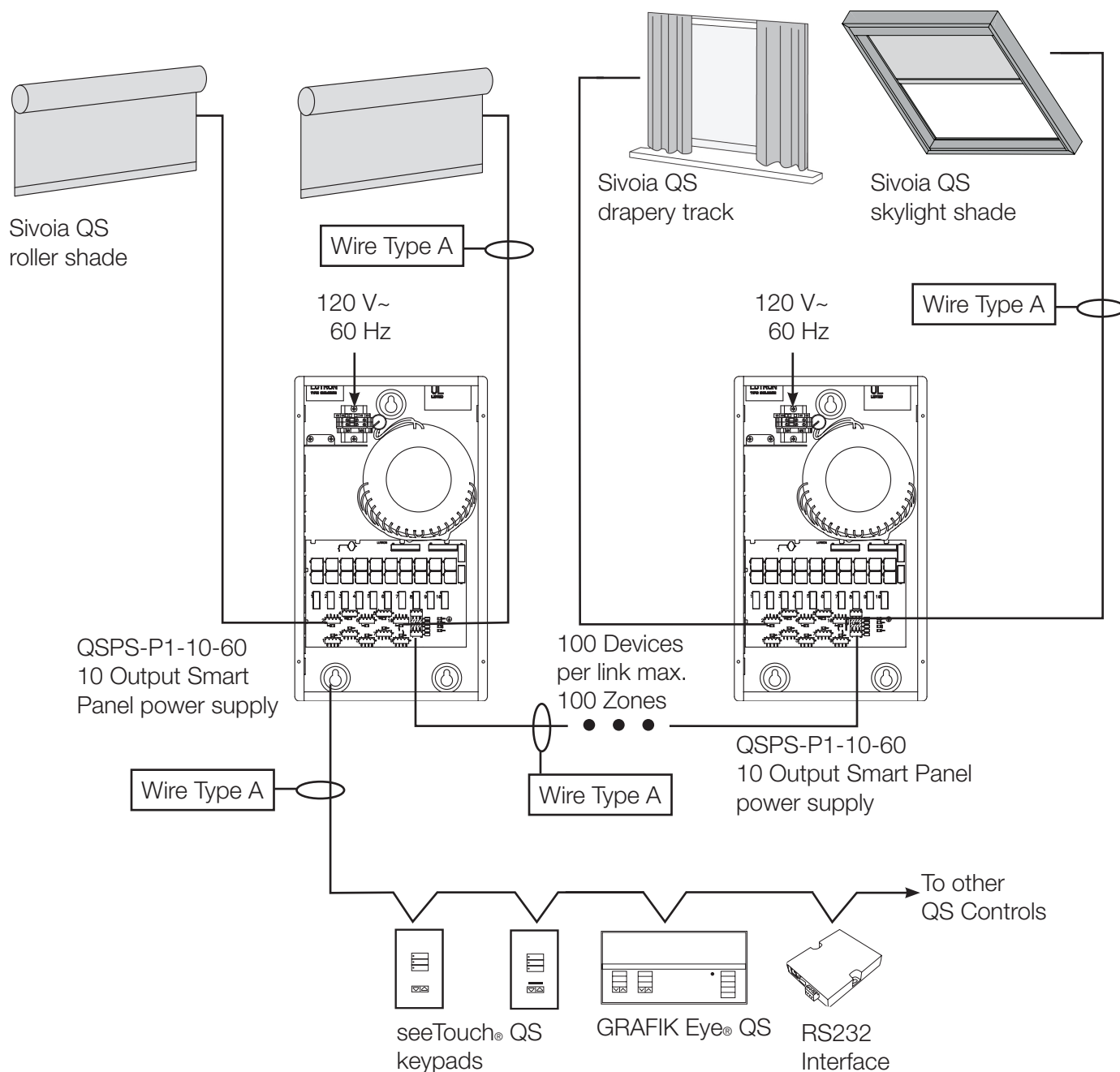
Wiring Type Key

Type A

Communications Link: 4 Conductor (twisted and shielded), listed for application
Refer to wiring guide on pg. 8 for wire gauge based on distance
Maximum comm. link: – Up to 2000 ft (600 m)
connecting all QSPS-P1-10-60 panels

Note: Secondary wiring must be of type CL2, CL2P, CL2R, CL2X or other cable with equivalent or better electrical, mechanical, and flammability ratings in accordance with local and national electric code.

Sivoia QS with GRAFIK Eye® QS System Wiring: Smart Panel power supply, single shade per output*



Wiring Type Key

Type A

Communications Link: 4 Conductor (twisted and shielded), listed for application
 Refer to wiring guide on pg. 8 for wire gauge based on distance
 Maximum comm. link: – Up to 2000 ft (600 m)
 connecting all QSPS-P1-10-60 panels

Note: Secondary wiring must be of type CL2, CL2P, CL2R, CL2X or other cable with equivalent or better electrical, mechanical, and flammability ratings in accordance with local and national electric code.

Wire Length Chart

QS Smart Panel Power Supply Wiring Guide

Link Rules

- Maximum of 100 devices (such as GRAFIK Eye® QS, seeTouch® QS keypad, smart panel power supply, or Sivoia® QS shade/drapery drive unit)
- Maximum of 100 zones (such as Sivoia QS shade/drapery drive unit, or a lighting zone on a GRAFIK Eye QS)
- Maximum 2000 ft. (600 m) of cable connecting all smart panel power supplies
- Maximum 2000 ft. (600 m) of cable to devices wired from each smart panel power supply
- Only use cable with at least one twisted/shielded pair for communications

Use this chart to determine the number of shades and/or controls that can be run from one output on the Sivoia QS Smart Panel power supply, depending on the size of the shade. Then, verify the maximum cable length for the output configuration, based on the wire gauge that will be used.

Maximum devices per one output		Maximum distance per one output based on wire gauge		
Shades + Controls		12 AWG 4 mm ² QSH-CBL-L-500 QSH-CBLP-L-500	16 AWG 1.5 mm ² QSH-CBL-M-500 QSH-CBLP-M-500	18 AWG 1 mm ² GRX-CBL-346S-500
None	Up to 8 seeTouch QS keypads	1200 ft (350 m)	500 ft (150 m)	300 ft (90 m)
1 Sivoia QS shade/drapery drive unit	Up to 1 seeTouch QS keypad	500 ft (150 m)	200 ft (60 m)	125 ft (35 m)
2 Sivoia QS roller 64, ≤ 30 sq ft (2.75 sq m) each	None	200 ft (60 m)	75 ft (20 m)	50 ft (15 m)
3 Sivoia QS roller 64, ≤ 20 sq ft (1.80 sq m) each	None	200 ft (60 m)	75 ft (20 m)	50 ft (15 m)
2 Sivoia QS roller 100, ≤ 50 sq ft (4.6 sq m) each	None	200 ft (60 m)	75 ft (20 m)	50 ft (15 m)

QS Link Power Supply Wiring Guide

Link Rules

- Only use cable with at least one twisted/shielded pair for communications
- Total length of power supply link (A) wire plus device link (B) wire in entire system must be less than 2000 ft. (600 m)

Use this chart to determine the number of shades and/or controls that can be run from one QS Link power supply. Then, verify the maximum cable length for the output configuration, based on the wire gauge that will be used.

Maximum devices from one QS Link power supply		Total wire length based on wire gauge		
Shades + Controls		12 AWG 4 mm ² QSH-CBL-L-500 QSH-CBLP-L-500	16 AWG 1.5 mm ² QSH-CBL-M-500 QSH-CBLP-M-500	18 AWG 1 mm ² GRX-CBL-346S-500
None	Up to 8 seeTouch QS keypads	1200 ft (350 m)	500 ft (150 m)	300 ft (90 m)
1 Sivoia QS shade*/drapery drive unit	Up to 1 seeTouch QS keypad	250 ft (75 m)	100 ft (30 m)	50 ft (15 m)

Note: Secondary wiring must be of type CL2, CL2P, CL2R, CL2X or other cable with equivalent or better electrical, mechanical, and flammability ratings in accordance with local and national electric code.

* 2 seeTouch QS keypads may be exchanged for 1 control interface (QSE-CI-NWK-E)

Page 8

7

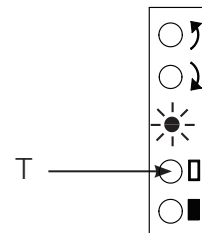
Setting Limits From the Drive

The open and close limits define the travel range of the shade or drapery. Limits can be set at the Drive, or from a keypad or an IR Remote previously assigned to that Drive. It is recommended that limits be set initially at the Drive.

Setting Open Limit

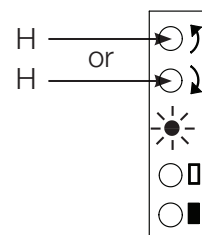
7.1

Tap Open Limit button. Green LED will turn on.



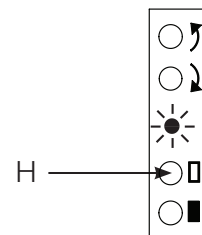
7.2

Move the Shade or Drapery to desired Open Limit by pressing arrow buttons.



7.3

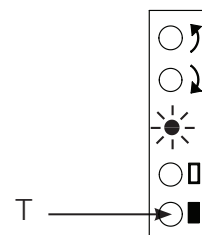
Press and hold the Open Limit button until the Green LED flashes. Open Limit is stored.



Setting Close Limit

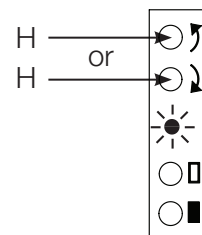
7.4

Tap the Close Limit button. The Green LED will turn on.



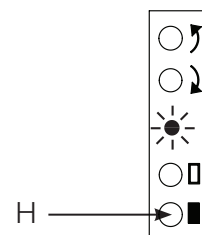
7.5

Move the Shade or Drapery to desired Close Limit by pressing arrow buttons.



7.6

Press and hold the Close Limit button until the Green LED flashes. Close Limit is stored.



8

Verify Communication

From a Drive:

8.1

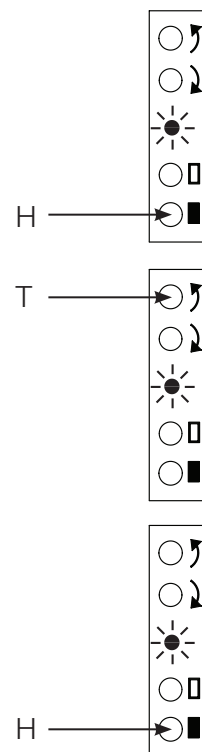
Press and hold Close (■) for 5 seconds,

8.2

Tap CCW (↶) to enter Link Diagnostics mode
-All shades/draperies will wiggle*

8.3

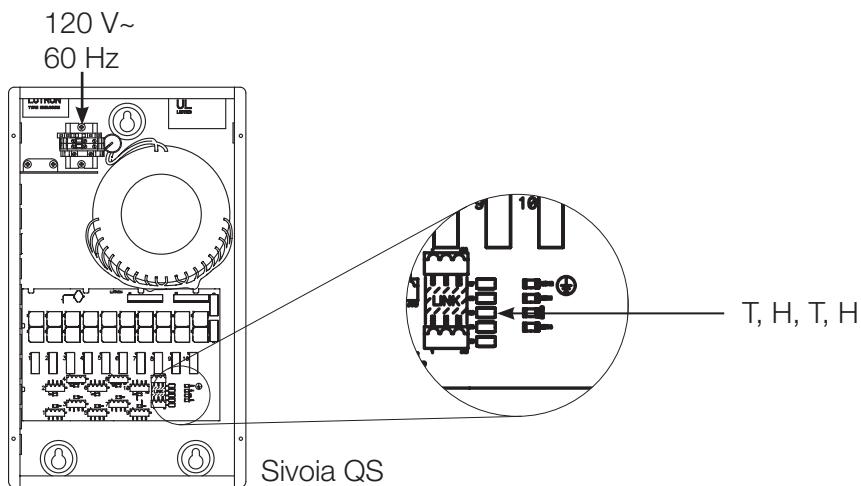
Press and hold Close (■) to exit Link Diagnostics Mode.



From the Sivoia QS Smart Panel:

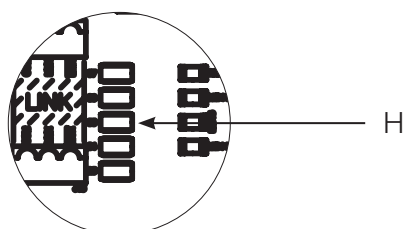
8.4

Tap Open, hold Open 5 seconds., tap Open, hold Open 5 seconds.
- All shades/draperies will wiggle*



8.5

Press and hold Open 5 sec. to exit Link Diagnostics mode



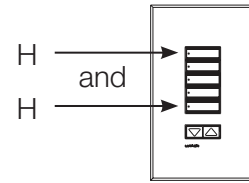
(*) If any shade/drapery is not wiggling, check the wiring

9

Assigning Shades/Draperies to Keypads

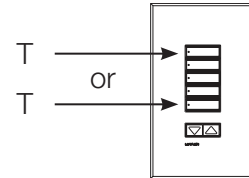
9.1

Press and hold Open and Close simultaneously for 5 seconds
 -Shades/draperies that are assigned will move to close (down)
 -Shades/draperies that are unassigned will move to open (up)



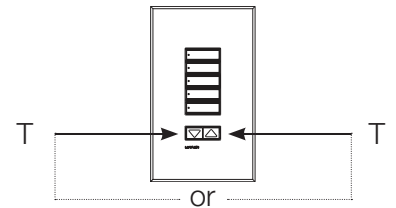
9.2

Tapping Open jogs “forward, Close jogs “backward”
 through the shades/draperies



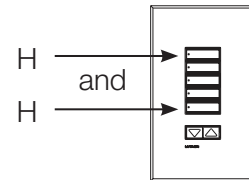
9.3

Tap the Lower (▽) to assign or Raise (△) to
 unassign a shade/drapery



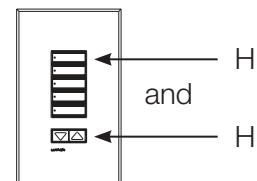
9.4

Press and hold Open and Close simultaneously
 for 5 seconds to exit

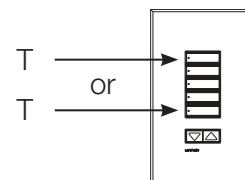


10 Setting Limits From a Keypad

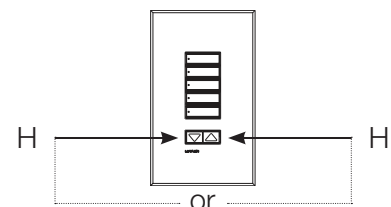
- 10.1 Press and hold Open and Raise ($\triangle$) simultaneously for 5 seconds



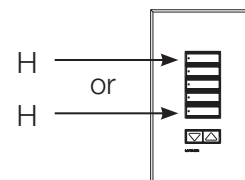
- 10.2 Tapping Open jogs “forward, Close jogs “backward” through the assigned shades/draperies



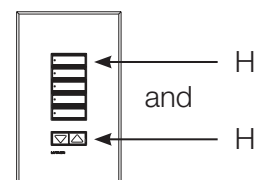
- 10.3 Use Raise ($\triangle$) and Lower (∇) to adjust shade/drapery position



- 10.4 Press and hold Open for 5 seconds to store the open limit or Close for 5 seconds to store the close limit



- 10.5 Press and hold Open and Raise ($\triangle$) simultaneously for 5 seconds to exit

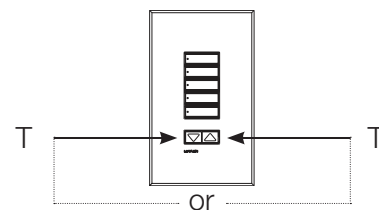


11

Storing Presets from a Keypad

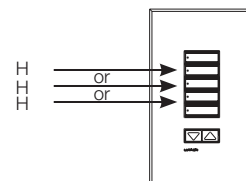
11.1

Adjust the shade/drapery to the desired position using raise or lower buttons.



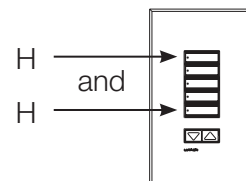
11.2

Store the current position of the shade/drapery by pressing and holding the desired Preset button for 5 seconds

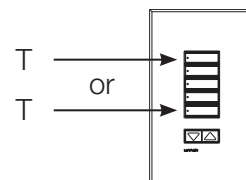


12 Individual Level Adjust

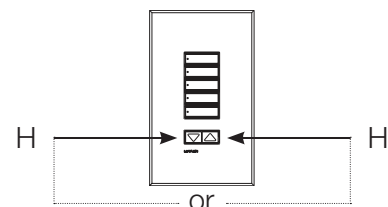
- 12.1** Press and hold Open and Close simultaneously for 5 seconds
-Shades/draperies that are assigned will move to close (down)
-Shades/draperies that are unassigned will move to open (up)



- 12.2** Tapping Open jogs “forward, Close jogs “backward” through the assigned shades/draperies

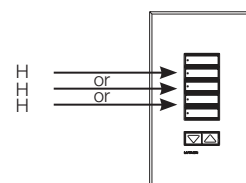


- 12.3** Use Raise ($\triangle$) and Lower (∇) to adjust shade/drapery position

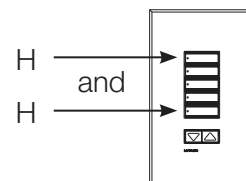


- 12.4** Repeat steps 12.2 & 12.3 to adjust additional shades/draperies

- 12.5** Store the current position of the shades/draperies by pressing and holding the desired Preset button for 5 seconds



- 12.6** Press and hold Open and Close simultaneously for 5 seconds to exit



13

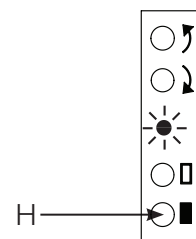
Programming | Restoring Drive Default Settings

- Restoring a Drive to factory defaults will reset all keypad assignments but will not affect the open and closed limits.

Returning a Drive to its Factory Default Setting

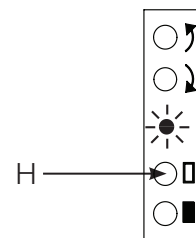
13.1

Press and hold Close Limit button until LED flashes Green then turns on steady.



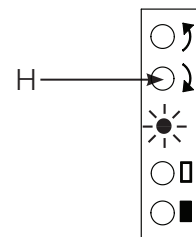
13.2

Press and hold Open Limit button until LED flashes Green then turns on steady.



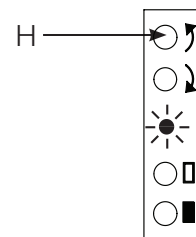
13.3

Press and hold CW arrow button until LED flashes Green then turns on steady.



13.4

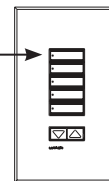
Press and hold CCW arrow button until LED flashes Green then turns on steady.



14.1

Triple tap and hold the top button on the keypad.
DO NOT release the button after the third tap.

T, T, T, H



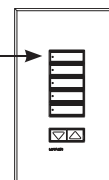
14.2

Keep the button pressed on the third tap until
the LED next to the top button turns on solid
(approximately 3 seconds).

14.3

Immediately release the button and triple tap it again.
The LED next to the top button will flash quickly. When
the LED stops flashing, the control has been returned
to Factory Settings.

T, T, T



Symptom	Solution
Drive will not move	Drive is not powered - Check Drive power
	Fabric is obstructed - Free obstruction
	Drive not connected to keypad
Drive does not fully open or fully close	Limits have been set incorrectly - try using raise and lower buttons
	Fabric is obstructed - Free obstruction
Drive opens when pressing close button, and closes when pressing open button	Open and close limits have been reversed - Refer to "setting limits"
	Keypad wired incorrectly - Refer to wiring diagram
Drive does not move smoothly.	Check for binding of fabric
Keypad will not operate drive	Check that keypad is wired properly
IR controls will not operate shade, keypads work properly	IR transmitter does not have line of sight to IR receiver
	Out of range - Move to within 30 ft of IR receiver
Tripping fuse or breaker in power supply	Verify there is no obstruction in the path of the shade, drapery or carriers
	Verify the drapery stackback is not being over compressed
	Verify the Master Carrier is not driving into the idler end or adjacent Master Carrier

Limited Warranty

SCOPE

This limited warranty ("Warranty") covers the Lutron supplied (a) Sivoia Shade Systems ("Sivoia Shade Systems"), (b) manual shade system and (c) 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 Shade System ("External Sivoia Components") and (b) eight years as to the other Systems and the electronic drive unit, shade fabric and shade hardware of the Sivoia Shade System. If any manufacturing defect exists in the External Sivoia 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 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 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 OTHER PARTY BE LIABLE FOR EXEMPLARY, CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO DAMAGES FOR PERSONAL INJURY, FAILURE TO MEET ANY DUTY, INCLUDING OF GOOD FAITH OR REASONABLE CARE, NEGLIGENCE, OR ANY OTHER LOSS

WHATSOEVER), NOR FOR ANY REPAIR WORK UNDERTAKEN WITHOUT LUTRON'S PRIOR WRITTEN CONSENT ARISING OUT OF OR IN ANY WAY RELATED TO THE INSTALLATION, DEINSTALLATION, USE OF OR INABILITY TO USE THE SYSTEM OR OTHERWISE UNDER OR IN CONNECTION WITH ANY PROVISION OF THIS WARRANTY, 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 REASON WHATSOEVER (INCLUDING, WITHOUT LIMITATION, ALL DIRECT DAMAGES AND ALL DAMAGES LISTED ABOVE), THE ENTIRE 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, DELIVERY, USE, REPAIR, OR REPLACEMENT OF THE SYSTEM, AND CUSTOMER'S SOLE REMEDY FOR THE FOREGOING, WILL BE LIMITED TO THE AMOUNT PAID BY CUSTOMER FOR THE SYSTEM. THE FOREGOING LIMITATIONS, EXCLUSIONS AND DISCLAIMERS WILL APPLY TO THE MAXIMUM EXTENT ALLOWED BY APPLICABLE LAW, EVEN IF ANY REMEDY FAILS ITS ESSENTIAL 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.

USA and Canada (24 hrs/7days)

(800) 523-9466

Other countries (8 a.m. – 8 p.m. ET)

(610) 282-3800

Fax (610) 282-3090

<http://www.lutron.com>

Worldwide Headquarters | USA

Lutron Electronics Co., Inc.

7200 Suter Road

Coopersburg, PA 18036-1299 USA

TEL: 1.610.282.3800

FAX: 1.610.282.3090

Technical Support: 1.800.523.9466 or 1.610.282.6701

Toll Free: 1.888.LUTRON

EMAIL: shadinginfo@lutron.com

WEB: www.lutron.com/shadingsolutions

Europe Headquarters | United Kingdom

Lutron EA Ltd

6 Sovereign Close

London, E1W 3JF, UK

TEL: +44.(0)20.7702.0657

FAX: +44.(0)20.7480.6899

Technical Support: +44.(0)20.7480.6899

FREEPHONE: 0800.282.107

Asian Headquarters | Singapore

Lutron GL Ltd

15 Hoe Chiang Road

#07-03

Singapore, 089316

TEL: +65.6220.4666

FAX: +65.6220.4333

Technical Support: 800.120.4491

©2009 LUTRON Electronics Co., Inc.

P/N 045-314 REV. A

SHADING SOLUTIONS – Eight Year Limited Warranty

SCOPE

This limited warranty ("Warranty") covers the Lutron® supplied (a) Serena™ Shades, (b) Sivoia® Shade Systems ("Sivoia Shade Systems"), (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 Shade System ("External Components") and (b) eight years as to the other Systems and the electronic drive unit, shade fabric and shade hardware of the Shade System. If any manufacturing defect exists in the External 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 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 5	100%
More than 5 but not more than 8	50%
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



SHADING SOLUTIONS – Eight Year Limited Warranty

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 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 OTHER PARTY BE LIABLE FOR EXEMPLARY, CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO DAMAGES FOR PERSONAL INJURY, FAILURE TO MEET ANY DUTY, INCLUDING OF GOOD FAITH OR REASONABLE CARE, NEGLIGENCE, OR ANY OTHER LOSS WHATSOEVER), NOR FOR ANY REPAIR WORK UNDERTAKEN WITHOUT LUTRON'S PRIOR WRITTEN CONSENT ARISING OUT OF OR IN ANY WAY RELATED TO THE INSTALLATION, DEINSTALLATION, USE OF OR INABILITY TO USE THE SYSTEM OR OTHERWISE UNDER OR IN CONNECTION WITH ANY PROVISION OF THIS WARRANTY, 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 REASON WHATSOEVER (INCLUDING, WITHOUT LIMITATION, ALL DIRECT DAMAGES AND ALL DAMAGES LISTED ABOVE), THE ENTIRE LIABILITY OF LUTRON AND OF ALL OTHER PARTIES UNDER THIS WARRANTY ON ANY CLAIM FOR DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE



SHADING SOLUTIONS – Eight Year Limited Warranty

MANUFACTURE, SALE, INSTALLATION, DELIVERY, USE, REPAIR, OR REPLACEMENT OF THE SYSTEM, AND CUSTOMER'S SOLE REMEDY FOR THE FOREGOING, WILL BE LIMITED TO THE AMOUNT PAID BY CUSTOMER FOR THE SYSTEM. THE FOREGOING LIMITATIONS, EXCLUSIONS AND DISCLAIMERS WILL APPLY TO THE MAXIMUM EXTENT ALLOWED BY APPLICABLE LAW, EVEN IF ANY REMEDY FAILS ITS ESSENTIAL 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.

USA and Canada (24 hrs/7 days)
(800) 523-9466
Other countries (8 a.m. – 8 p.m. ET)
(610) 282-3800
Fax (610) 282-3090
<http://www.lutron.com>

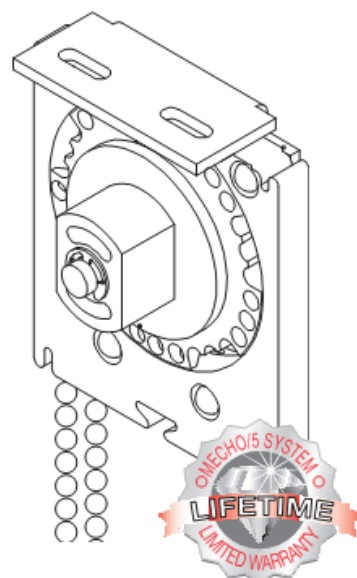
The MechoShade® Manual Drive System

Mecho®/5

Mecho®/5, MechoShade's latest patented design featuring an overrunning clutch, self lubricating components and larger diameter sprocket, providing 67% more lift capacity. As a result, Mecho/5 increases the shade size range that a manual drive system can lift before motorization is required. Plus, the Mecho/5 carries a **Lifetime*** Limited Warranty on the hardware and shadecloth.

Mecho/5 requires no adjustments, resulting in faster, easier installation. Mecho/5 has been field tested and performance proven on hundreds of thousands of shades installed worldwide. Available in Standard, Pocket Extended, Extended and DoubleShade® bracket sizes.

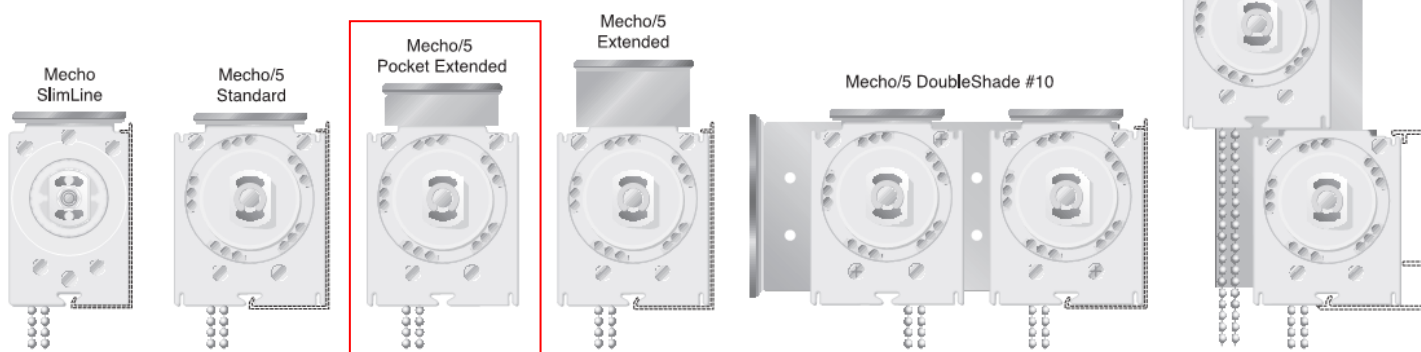
The Mecho/5 can accommodate shades up to 126" (320cm) wide by 180" (457cm) high.



Mecho® SlimLine™:

SlimLine™ is MechoShade's compact heavy-duty bracket system designed for small shades in narrow spaces, uses the Mecho®/3 operating system and carries a 10-Year Limited Warranty† on the hardware and shadecloth.

MechoShade® brackets are available in a variety of sizes:



Bracket Type	Max. Roll Diameter With Fascia	Max. Roll Diameter Without Fascia	Bracket Dimensions Without Optional Fascia, Roll Up Diameter or Wall Mount Bracket
Mecho® SlimLine™	2-1/4" (57mm)	2-3/4" (70mm)	2-3/8" (60mm) W x 3-3/4" (95mm) H
Mecho®/5 Standard	2-3/4" (70mm)	2-3/4" (70mm)	3" (76mm) W x 3-3/4" (95mm) H
Mecho®/5 Pocket Extended	N/A	4" (102mm)	3" (76mm) W x 4-3/8" (111mm) H
Mecho®/5 Extended	3-7/16" (87mm)	5" (127mm)	3" (76mm) W x 4-13/16" (122mm) H
Mecho®/5 DoubleShades®			
#10 Rear shade Blackout	2-3/4" (70mm)	2-3/4" (70mm)	7-1/2" (191mm) W x 3-3/4" (95mm) H
#10 Front shade Sunscreen	2-3/4" (70mm)	2-3/4" (70mm)	
#15 Top shade Blackout	2-3/4" (70mm)	3-3/8" (86mm)	4-5/16" (110mm) W x 7-9/32" (185mm) H
#15 Bottom shade SunScreen	2-3/4" (70mm)	4-5/16" (110mm)	

*Mecho/5 Lifetime Limited Warranty: for the life of the interior project, not to exceed 25 years. See pages 2.26 – 2.28 for specific details.

† See pages 2.26 – 2.28 for details.

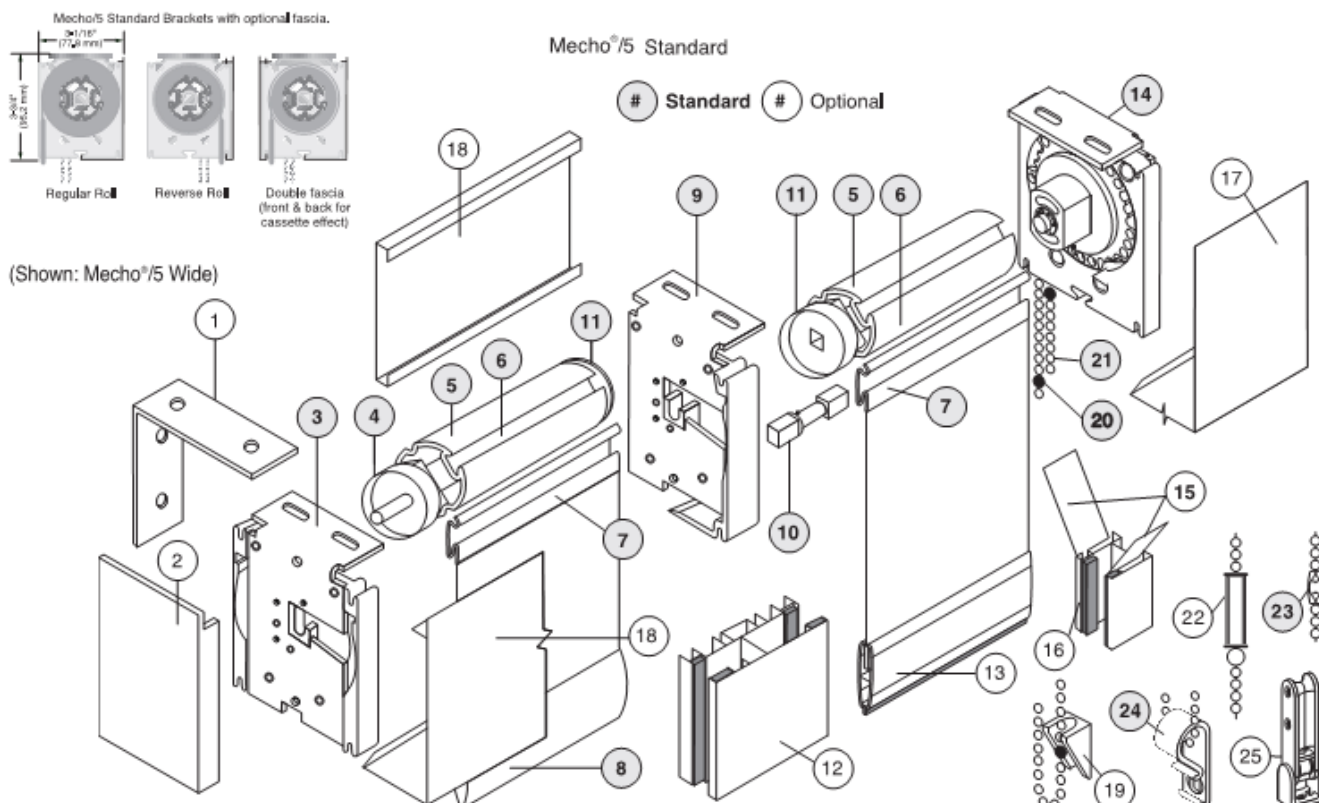
MechoShade Systems, Inc.
42-03 35th Street, Long Island City, NY 11101
Telephone: 718-729-2020
Fax: 718-729-2941 / 800-899-8081

E-mail: info@mechoshade.com
Internet Web Site: www.mechoshade.com

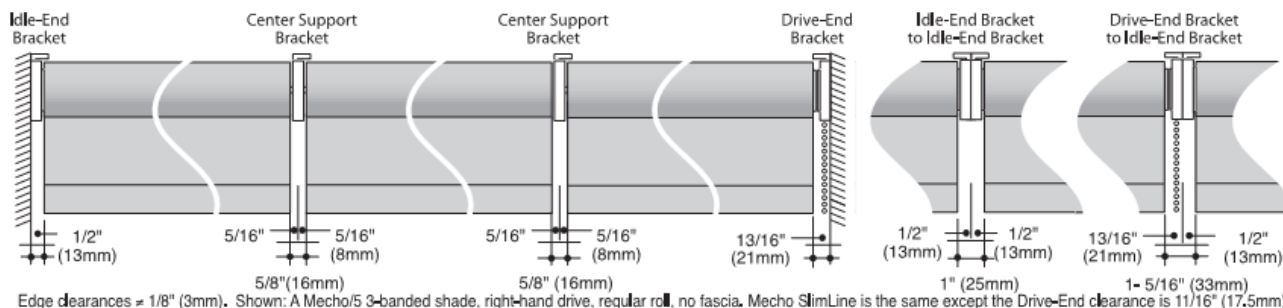


MechoShade® Parts, Components and Optional Accessories

Multiband MechoShade® exploded view and edge clearances



Edge clearances



MechoShades are available in a choice of two drive systems in multiple bracket sizes.

- | | | | |
|------------------------------------|---|---|--|
| 1. Wall-Mount Angle | 10. Tube Connector ("dog bone") | 16. Room Darkening Side Channel (single) (with Polybond Insert) | 22. Heavy-Duty Bumper |
| 2. Fascia End Caps | 11. Tube Plug (Center Support) | 17. SnapLoc Regular-Roll Fascia | 23. Bead Chain Connector |
| 3. Idle-End Bracket | 12. Room Darkening Center Channel (double) (with Polybond Light Seal) | 18. SnapLoc Reverse-Roll Fascia | 24. Chain Retainer* |
| 4. Tube Plug (idle-end) | 13. Exposed Hembar with Light Seal (Shown with Optional Welt) | 19. Bead Chain Keeper | 25. Optional Spring Loaded Chain Retainer* |
| 5. SnapLoc® Tube | 14. Mecho®/5 Drive-End Bracket | 20. Upper and Lower Bead Chain Stops | |
| 6. SnapLoc Spline Mounting Channel | 15. Room Darkening Shadecloth Guides (pair) | 21. Drive Chain (stainless-steel bead chain) | |
| 7. Snaploc Spline | | | |
| 8. Hembar (standard cloth covered) | | | |
| 9. Center Support Bracket | | | |

* Chain Retainers included for all residential and public facilities.

Optional Regular-Roll Fascia available for: Mecho/5 Standard and Extended brackets and Mecho SlimLine™ brackets.
Optional Reverse-Roll Fascia available for: Mecho/5 Standard brackets. • No Fascia Available: Mecho/5 Pocket brackets.

For Edge Clearances of specific brackets see the last section of this binder.

MechoShade Systems, Inc.
42-03 35th Street, Long Island City, NY 11101
Telephone: 718-729-2020
Fax: 718-729-2941 / 800-899-8081

E-mail: info@mechoshade.com
Internet Web Site: www.mechoshade.com

604/2
REVISION
2.04
MS2200 - 01/01/08



Maintenance Guide for MechoShade® and ElectroShade® Systems

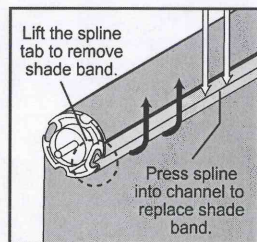
Shadecloth Maintenance

The shadecloth is washable and it is recommended that the shadecloth be cleaned annually. To maintain the shadecloth properly, use a static eliminating chemical on a dry mop to occasionally wipe down the fabric and free it from dust. If the shadecloth should become spotted for any reason, such as from grease, etc., simply use a mild soap to "spot" clean.

MechoShade System

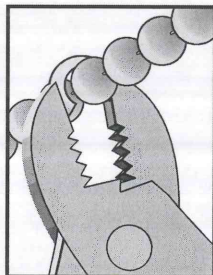
Changing the shadecloth on manually operated shades

Remove the top stop bead and then lower the shade so that the SnapLoc® Spline is visible. The spline, which is welded to the top of the shade cloth, can be removed from the tube by pulling the spline back towards the shade band so that it pops out of the channel a little at a time. A new shade band is easily inserted by centering the shade band left to right on the tube and pressing the spline into the tube. NOTE: Be sure that the winding direction of the shade band, toward or away from the window, is the same as when originally installed. The top stop bead is then reset at its initial position.



MechoShade Brackets and Chain Maintenance

Shade brackets require no maintenance other than the rare repair of a broken chain. If the chain breaks, it can be repaired by splicing with a chain connector or invisibly spliced by utilizing a pair of bead-chain splice pliers. If new chain is required, the length you require is twice the height of the unit less 2 inches. The chain is inserted into the bottom channel of the drive end bracket and led around the sprocket. To guide the chain into the offset-position slot, insert a thin plug into the chain slot to be bypassed. To attach one end of the chain to the other use a clasp which MechoShade Systems supplies. New bead stops should be placed in the same positions on the new chain.

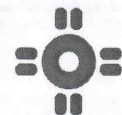


MechoShade Systems, Inc.
42-03 35th Street, Long Island City, NY 11101
Telephone: 718-729-2020
Fax: 718-729-2941 / 800-899-8081

E-mail: info@mechoshade.com
Internet Web Site: www.mechoshade.com

604/2
REVISION

10.01
MS2200 - 01/01/08



One of the best reasons to specify MechoShade is its LIFETIME* of dependability.



Introducing the MechoShade® and ElectroShade® System Lifetime* Limited Warranty.

We are so confident about the quality and dependability of our Manual and Motorized Shading Systems that we gave them a LIFETIME* Limited Warranty. MechoShade Systems, Inc. warrants to original purchasers that the hardware and shade cloths of dependable service of its Mecho/5™ Manual Shade System and ElectroShade Motorized Shade System (interior use products) are free of manufacturing defects in factory materials or workmanship for a LIFETIME*.

LIFETIME* Limited Warranty is defined to be the life of the project for which it was originally purchased, not to exceed 25 years from the date of shipment. This warranty does not depreciate in value.

See full warranty details on page 2.27 – 2.28.

Continued 



MechoShade® Lifetime Limited Warranty (Non-Depreciating)



LIMITED WARRANTY (interior product use)

MechoShade Systems, Inc. warrants to original purchasers that its Interior Use Products are free of manufacturing defects in factory materials or workmanship for the specified warranty period.*

- ThermoVeil®, EuroVeil®, Faux Natural™, EuroTwill™, Equinox™ and Soleil® brand **shadecloths** on the associated MechoShade®, ElectroShade®, or Suburban™/2 brand shade systems are warranted to be free of manufacturing defects in factory materials or workmanship for the specified warranty period.
- MechoShade®, ElectroShade®, SlimLine™, and Suburban™/2 brand **hardware** are warranted to be free of manufacturing defects in factory materials or workmanship for the specified warranty period.
- ElectroShade® Motors and Controls are warranted to be free of manufacturing defects in factory materials or workmanship for 5 years from date of shipment.
- Hardware and shadecloths have a Lifetime Warranty not to exceed 25 year from the date of shipment.
- All Limited Warrantees are subject to the general terms and conditions of sale. Copies are available upon request.

MechoShade®/5 System*

Lifetime Limited Warranty

to original purchasers on all hardware and shade cloths for the life of the interior project for which it was originally purchased, not to exceed twenty-five years.



MechoShade® SlimLine™ System*

10-Year Limited Warranty to original purchasers on all hardware and shade cloths.



ElectroShade® System*

Lifetime Limited Warranty

to original purchasers on all hardware and shade cloths for the life of the interior project for which it was originally purchased, not to exceed twenty-five years.



5-Year Limited Warranty

on Motors and Electronics to be free of manufacturing defects in factory materials or workmanship for 5 years from date of shipment.

Suburban™/2 System*

10-Year Limited Warranty

to original purchasers on all hardware and shade cloths.

A 5-Year Limited Warranty

for motors and electronic controls.



All in accordance with MechoShade Systems, Inc. Warranty General Terms and Conditions. The MechoShade Limited Warranties are exclusive and in lieu of all other warranties, whether written, oral or implied (including any implied warranty of merchantability, fitness for a particular purpose, or otherwise).

Continued

MechoShade Systems, Inc.
42-03 35th Street, Long Island City, NY 11101
Telephone: 718-729-2020
Fax: 718-729-2941 / 800-899-8081

E-mail: info@mechoshade.com
Internet Web Site: www.mechoshade.com

2.27
MS2200 - 01/01/08



MechoShade Systems'® Warranty General Terms and Conditions

From the Warranty portion of the MechoShade Systems, Inc. General Terms and Conditions of Sale (INTERIOR USE PRODUCTS)

VII. WARRANTY

MechoShade Systems, Inc. MSS warrants to the original purchaser that its products are free of manufacturing defects in factory materials or workmanship for the following specified warranty periods:

Hardware and ShadeCloth (interior use):

- Lifetime of the interior project for which it was originally purchased, from date of shipment for the Mecho®/5 and ElectroShade Systems, but not to exceed 25 years.
- 10 years from date of shipment for the Mecho SlimLine System.
- 10 years from date of shipment for the Suburban™/2 System.

Electrical and Electronic Accessories:

- 5 years from date of shipment for ElectroShade products.
- 1 year from date of shipment for Suburban/2 products.

Bead chain in the manual system is a fail safe element and is not warranted.

Monumental Shades:

MechoShade Warrantee for Monumental Shades shall be limited to 10 years for hardware and shade cloth; 5 years for motors and electronics. Monumental Shades are defined to be any shade band over 300 Sq. ft. and shall be wider than 20 ft. and/or higher than 30 ft.

If any part of a MSS product (except for images or artwork on shade cloths) is found in the reasonable judgment of MSS to be defective in factory materials or workmanship during the above-prescribed warranty periods, MSS will repair or replace the defective part at its option. Repair or replacement under this warranty does not include labor or costs for installation, reinstallation, or removal of MechoShade products, parts or components. This warranty extends only to the original purchaser for MSS products installed by an authorized MechoShade dealer representative with a valid written dealer representative agreement with MechoShade® Systems, Inc.

This warranty does not apply if any of the following exclusions exist:

- The product has been subject to misuse, abuse, neglect, negligence, accident, or has been operated in any way contrary to MSS's operating instructions or specifications.
- Damages or conditions that have resulted from improper cleaning, maintenance, care or repair of the product.
- The product has been improperly installed or not installed according to MSS's guidelines or specifications.
- MSS's written instructions for installation and wiring of electrical connections were not followed.
- The product has been used to perform functions or operated in a manner contrary to its design or otherwise is used in a manner contrary to or in excess of MSS's specifications, drawings, or instructions.
- The product is used with electrical accessories or parts, including switches, relays, or other accessory components, that have not been previously approved in writing by the MSS Engineering Department.
- If any electrical accessories and other components have been used in disregard to the basic wiring diagram for which they were designed.
- Failure to comply with all MSS's written instructions and specifications.
- Repairs made necessary from normal wear of the product or by use of parts or accessories which are either incompatible with the product or otherwise adversely affect its operation, performance, or durability.
- Product used for non interior applications or otherwise exposed to outdoor environmental conditions.

MSS reserves the right to change or improve the design of any MechoShade product without assuming any obligation to modify or retrofit any product previously manufactured or supplied.

MSS does not warrant any images or artwork reproduced, printed, or placed on shade cloth by MSS or any imaging supplier, and MSS is not otherwise responsible or liable for fading, discoloration, color shifts, or any other failure or defect in such images or artwork.

MSS requires that the Buyer license or own the right to reproduce all images or artwork, photographs and other intellectual property provided by the Buyer, its agents, or customers. The Buyer shall indemnify, defend, and hold harmless MSS, its imaging supplier, and their employees and officers against any claims or actions for alleged or actual copyright or trademark infringement or any other claims resulting from reproduction of the images or artwork in any form or any other use of the images or artwork by buyer, MSS, its imaging supplier, or other third parties.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER WRITTEN, ORAL OR IMPLIED (INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OTHERWISE). MSS SPECIFICALLY DISCLAIMS ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OTHERWISE IN THEIR ENTIRETY. MSS' OBLIGATION UNDER THIS WARRANTY IS STRICTLY AND EXCLUSIVELY LIMITED TO THE REPAIR OR REPLACEMENT OF DEFECTIVE PARTS AS HEREIN DESCRIBED, AND MSS DOES NOT ASSUME OR AUTHORIZE ANYONE TO ASSUME FOR MSS ANY OTHER OBLIGATION, WHETHER WRITTEN, ORAL OR IMPLIED. NOTWITHSTANDING ANY OTHER REPRESENTATIONS OR AGREEMENTS BY ANY PARTY OR NON PARTY, WHETHER WRITTEN, ORAL OR IMPLIED.

MSS ASSUMES NO RESPONSIBILITY AND SHALL NOT BE LIABLE TO THE ORIGINAL PURCHASER OR ANY OTHER PARTY OR NON PARTY FOR ANY PERSONAL INJURY, LOSS, OR DAMAGE, WHETHER DIRECT, LIQUIDATED, INCIDENTAL, OR CONSEQUENTIAL, INCLUDING BUT NOT LIMITED TO THE LABOR OR COSTS RELATED TO THE REPLACEMENT OF A DEFECTIVE PRODUCT OR PARTS OR INSTALLATION, REINSTALLATION, OR REMOVAL OF SUCH PRODUCT OR PARTS, EXPENSE OF RETURNING A PRODUCT OR PART TO MSS OR ITS AUTHORIZED DEALER OR THE EXPENSE OF DELIVERING IT BACK TO THE ORIGINAL PURCHASER, LOSS OR DAMAGE TO PERSONAL OR REAL PROPERTY, LOSS OF REVENUE, LOSS OF THE USE OF THE PRODUCT, LOSS OF TIME, OR INCONVENIENCE.

This warranty gives the original purchaser specific legal rights, and the original purchaser may also have other rights which vary from state to state.

For a copy of our General Terms and Conditions of Sale, please see the last section of this binder or contact MechoShade Systems, Inc.

MechoShade Systems, Inc.
42-03 35th Street, Long Island City, NY 11101
Telephone: 718-729-2020
Fax: 718-729-2941 / 800-899-8081

E-mail: info@mechoshade.com
Internet Web Site: www.mechoshade.com



3.27
MS2200 - 01/01/08