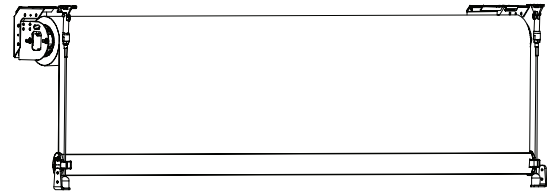


Cable Guided Roller Shade Install Guide

English

Installation Guide (please read before installing)

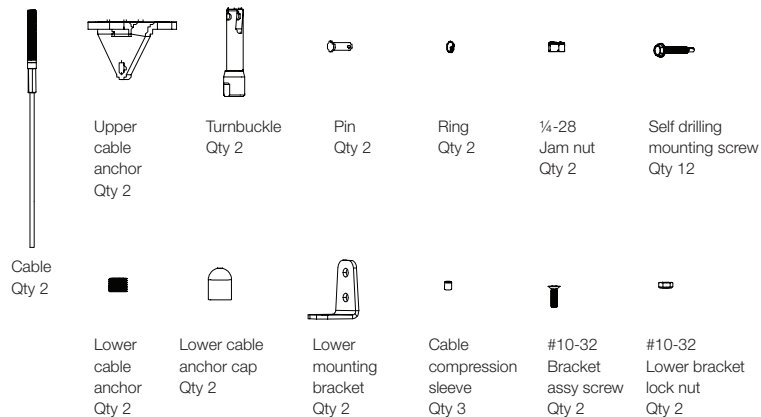


Cable Guided Roller Shade Install Guide is a complement to the enclosed Chassis Install Guide and Basic Wiring and Setup Guide. The Chassis Install Guide describes the mechanical installation for the particular mounting style you have. The Cable Guided Roller Shade Install Guide shows how to incorporate the cable guided mechanism into the installation. The Basic Wiring and Setup Guide describes the wiring and setup for proper function of the roller shade.

Tools required:

- Nicopress tool #64 - CGMP (For cable with 3/32 in (2.4 mm) nylon outer dia. and 1/16 in (1.6 mm) bare cable dia.)
- Available from:
 - McMaster-Carr (www.mcmaster.com) Item # 3582T1
 - ALP Industries(www.alpind.com) Item # 0464CGMP06
- Nicopress tool #51 - MJ (For cable with 1/8 in (3.2 mm) nylon outer dia. and 3/32 in (2.4 mm) bare cable dia.)
- Available from:
 - McMaster-Carr (www.mcmaster.com) Item # 3582T22
 - ALP Industries (www.alpind.com) Item # 0464CGMP06
- 3/8 in and 7/16 in wrenches
- # 2 Phillips screwdriver
- Drill
- Hex extension bit
- 1/4 in socket
- 7/16 in socket
- Soft jaw pliers
- Utility knife
- Cable cutter
- Needle nose pliers
- Wire stripper
- Laser level/plumb

Parts Included



- Environment:** Ambient operating temperature: 32 °F to 104 °F (0 °C to 40 °C), 0 to 90% humidity, non-condensing. Indoor use only.
- CAUTION:** Risk of falling objects. Securely install the cable guided system per the mounting instructions. Failure to do so could result in minor or moderate injury.
- Do not apply any bleach-based products to any part of the cable guided shade assembly
- Cables are for use with Lutron shading products only and are to be used only as described herein.



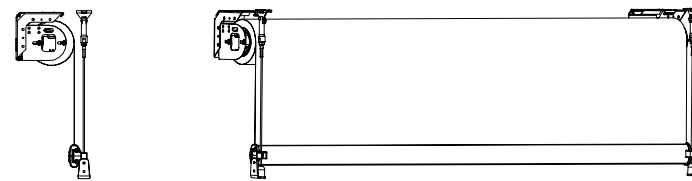
1 Install the shade

- 1.1 Install the shade per the Chassis Install Guide provided with the shade.

Note: Ensure there is adequate space to install the upper and lower cable anchors, and any resulting sag of the shade fabric will not interfere with the operation of the shade.

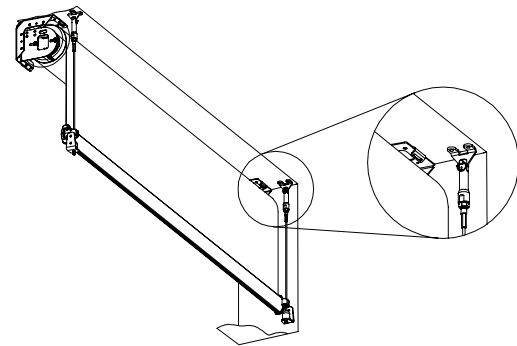
2 Planning the location of the upper and lower cable anchors

- 2.1 Cable Width must equal Fabric Width. Cables are to be plumb and square. Consider using a laser to help you align the top and bottom mounting points, or check diagonal measurements from the top of one cable to the bottom of the other cable.
- 2.2 The Upper Cable Width and Lower Cable Width must be equal, within 1/2 in (13 mm). Cables should be in the same plane when viewed from the side. Cables which are out of plane will result in uneven fabric sag.



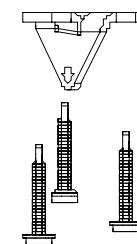
CAUTION: Upper and lower cable anchors, when installed, must be able to withstand up to 300 lb (135 kg). Failure to do so could result in minor or moderate injury.

3 Install the upper cable anchor bracket assembly



- 3.1 Attach the bracket assembly to the wall, ceiling, or jamb with the three mounting screws, or the appropriate fasteners for your mounting conditions.
- 3.2 Repeat for the second bracket assembly

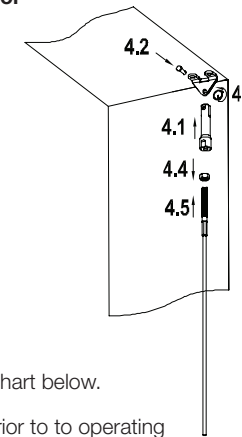
CAUTION: Upper cable anchors, when installed, must be able to withstand up to 300 lb (135 kg). Failure to do so could result in minor or moderate injury.



Ceiling mount

4 Attach the cable to the upper cable anchor

- 4.1 Align hole in turnbuckle with hole in upper cable anchor.
- 4.2 Insert pin through the holes.
- 4.3 Insert retaining ring into hole in pin and rotate to secure.
- 4.4 Turn jam nut fully onto threaded end of cable.
- 4.5 Thread end of cable into the turnbuckle per chart below.



Note: Cable will need to be final tensioned prior to operating shade as per step 8.

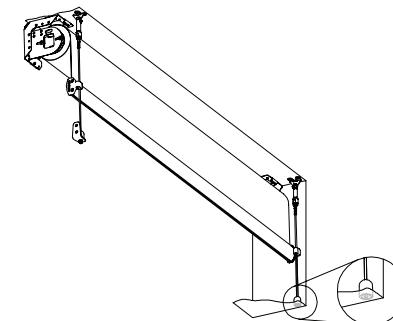
Cable Length				Initial Number of Turns of Cable End Into Turnbuckle	
in		mm		Cable With 3/32 in (2.4 mm) Nylon Outer Diameter	Cable With 1/8 in (3.2 mm) Nylon Outer Diameter
Over	Up to	Over	Up to	○	○
-	24	-	600	18	32
24	36	600	900	17	32
36	48	900	1200	16	32
48	60	1200	1500	15	31
60	72	1500	1800	14	30
72	84	1800	2100	13	30
84	96	2100	2400	12	29
96	108	2400	2700	11	29
108	120	2700	3000	10	28
120	132	3000	3400	9	27
132	144	3400	3700	8	27
144	156	3700	4000	---	26
156	168	4000	4300	---	26
168	180	4300	4600	---	24
180	192	4600	4900	---	23
192	204	4900	5200	---	22
204	216	5200	5500	---	21
216	228	5500	5800	---	19
228	240	5800	6100	---	17

(*) dia of outer nylon coating

5 Mounting the lower cable anchors

The lower cable anchor can be mounted directly to the floor or sill. It also can be mounted to the wall or jamb, by first mounting it to the lower mounting bracket. Choose the option that best suits your application.

Option A (Floor/Sill Mount)

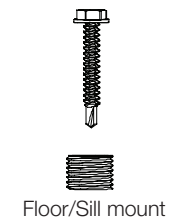


1. Mount the lower cable anchor to the floor or sill with a self-drilling mounting screw, using a 1/4 in socket, or with the appropriate fastener for your mounting conditions.

CAUTION: Lower cable anchors, when installed, must be able to withstand up to 300 lb (135 kg). Failure to do so could result in minor or moderate injury.

2. Repeat for the second lower cable anchor.

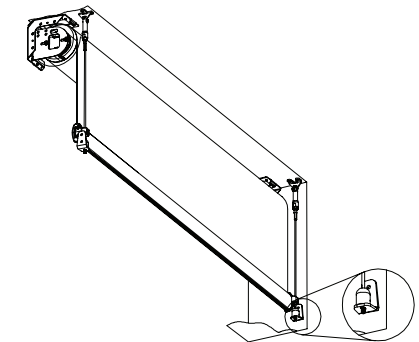
5 Mounting the lower cable anchors (continued)



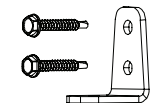
Floor/Sill mount

Note: Both cables must be parallel within 1/2 in (13 mm) and at the same width as the shade fabric.

Option B (Wall/Jamb Mount)

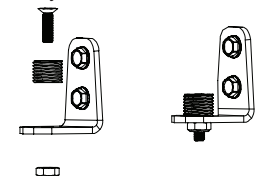


1. Attach the lower mounting bracket to the wall using two self-drilling mounting screws or with the appropriate fastener for your mounting condition.



CAUTION: Lower cable anchors, when installed, must be able to withstand up to 300 lb (135 kg). Failure to do so could result in minor or moderate injury.

2. Fasten the lower cable anchor to the lower mounting bracket with the lower bracket assembly screw and lower bracket assembly nut.



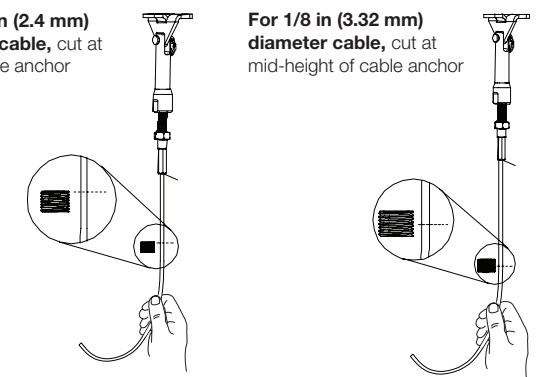
3. Repeat for the second lower mounting bracket and cable anchor.

6 Prepare the lower end of the cable

- 6.1 Verify the cable is attached to the upper cable anchor assembly, completed in step 4.
- 6.2 Pull cable tight, position adjacent to the lower cable anchor and cut per the illustration below.

For 3/32 in (2.4 mm) diameter cable, cut at top of cable anchor

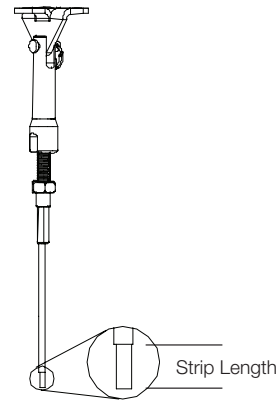
For 1/8 in (3.32 mm) diameter cable, cut at mid-height of cable anchor



6 Prepare the lower end of the cable (continued)

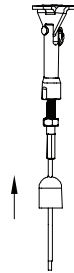
6.3 Using a utility knife or wire stripper, strip the outer nylon coating off the cable as indicated. Two cable diameters are available. Using the table below, strip the specified length for your cable diameter.

Nylon Outer Diameter		Strip length	
3/32 in (2.4 mm)	○	3/8 in (10 mm)	
1/8 in (3.2 mm)	○	1/2 in (13 mm)	

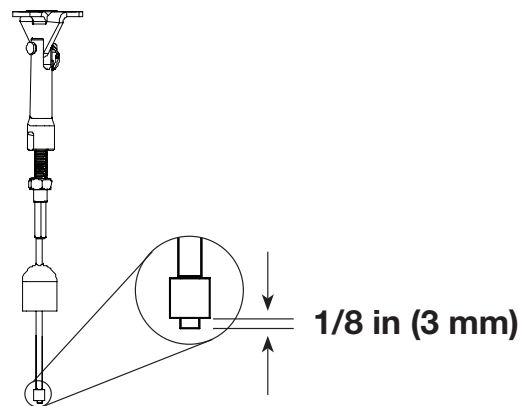


NOTICE: Step 6.4 must be completed before proceeding. Failure to do so will require the cable to be re-cut and will likely result in the cable being too short to complete the installation.

6.4 Slide the lower cable anchor cap, domed side up, onto the stripped end of the cable.



6.5 Slide the cable compression sleeve onto the stripped section of the cable until 1/8 in (3 mm) of cable is visible.

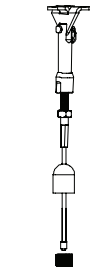


6.6 Swage the sleeve onto the cable using the Nicopress tool indicated in the table below, based on the your cable diameter.

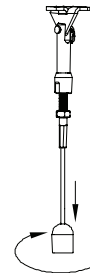
Cable diameter (Incl nylon coating)	Swaging tool
3/32 in (2.4 mm)	Nicopress #64 –CGMP (slot C)
1/8 in (3.2 mm)	Nicopress #51 – MJ (slot J)

7 Attach the cable to the lower cable anchor

7.1 Insert swaged end into lower cable anchor.



7.2 Slide the lower cable anchor cap to the bottom of the cable.



7.3 Screw the cap onto the anchor. Tighten with soft jaw pliers to prevent damage to the surface of the cap.

8 Tensioning the cable

8.1 Remove any remaining slack in the cable by finger tightening the end of the cable into the turnbuckle.

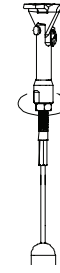


8.2 Using a wrench, final tension the cable by rotating the turnbuckle the number of additional turns indicated in the table below.

Cable Length				Turns Past Finger Tight	
in		mm		Cable With 3/32 in (2.4 mm) Nylon Outer Diameter	Cable With 1/8 in (3.2 mm) Nylon Outer Diameter
Over	Up to	Over	Up to	○	○
-	24	-	600	2	2 1/4
24	36	600	900	3	2 1/4
36	48	900	1200	4	2 1/4
48	60	1200	1500	5	3
60	72	1500	1800	6	3 1/2
72	84	1800	2100	7	4
84	96	2100	2400	8	4 3/4
96	108	2400	2700	9	5 1/4
108	120	2700	3000	10	5 3/4
120	132	3000	3400	10 3/4	6 1/2
132	144	3400	3700	11 3/4	7
144	156	3700	4000	---	7 1/2
156	168	4000	4300	---	8 1/4
168	180	4300	4600	---	9 1/2
180	192	4600	4900	---	10 3/4
192	204	4900	5200	---	12 1/4
204	216	5200	5500	---	13 1/2
216	228	5500	5800	---	15 1/4
228	240	5800	6100	---	16 3/4

8 Tensioning the cable

8.3 Tighten jam nut.

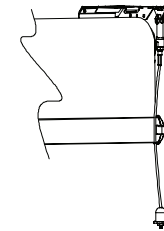


8.4 Repeat for the second cable.

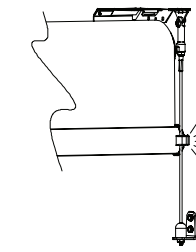
9 Attaching shade bottom bar to the cables

9.1 Using the buttons on the drive unit, move shade to 50% open position

9.2 Pull the cable around the front of the bottom bar endcap and slide between the endcap and bottom bar.



9.3 Snap the cable into the slot in the slot in the endcap.



9.4 Repeat on the other end of the bottom bar

9.5 With both cables in the proper position, the shade should be free to move up and down without binding.

9.6 If cables are binding in the endcaps, the shade and/or cable position may need to be adjusted.

10 Adjust limits if necessary

Refer to the Basic Wiring and Setup Guide included with the roller shade for instructions on setting the open and close limits.

11 Troubleshooting

Symptom	Solution
Cables are not parallel or in the same plane as the shade.	Adjust position of upper and/or lower cable anchors
Shade sags and hits window	Verify cables are tensioned properly Reposition shade to allow room for sag
Shade sags more on one side than the other, and/or hembar is not level	Verify shade is mounted level and both cables are tensioned the same, per the table in section 8.2 Verify cable is centered in bottom bar end cap loop – adjust position of lower cable anchor if necessary
Hembar binds on cables	Laterally adjust the shade Verify cables are parallel with the edge of the shade fabric
Shade telescopes	Refer to App note 411 for additional recommendations

Limited Warranty

SCOPE
This limited warranty ("Warranty") covers the Lutron supplied (a) Sivoia[®] Shade System ("Sivoia[®] Shade System"), (b) Sivoia Shade System ("Sivoia[®] 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 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:

- 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.
- On-site labor costs to diagnose issues with, and remove, repair, replace, adjust, reinstall and/or reprogram the System or any of its components.
- Components and equipment external to the System, such as, non-Lutron lighting and automation systems, building wiring audiovisual equipment; and non-Lutron time clocks, photosensors and motion detectors.
- 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 MERCHANTABILITY AND 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.

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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.

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