Alena QS and Alena QS Wireless Ripplefold Drapery Systems
Installation Guide—Please Read Before Installing

1 Prepare to Install

⚠ **CAUTION:** RISK OF FALLING OBJECTS. Securely install the shade system per the mounting instructions. Failure to do so could result in minor or moderate injury
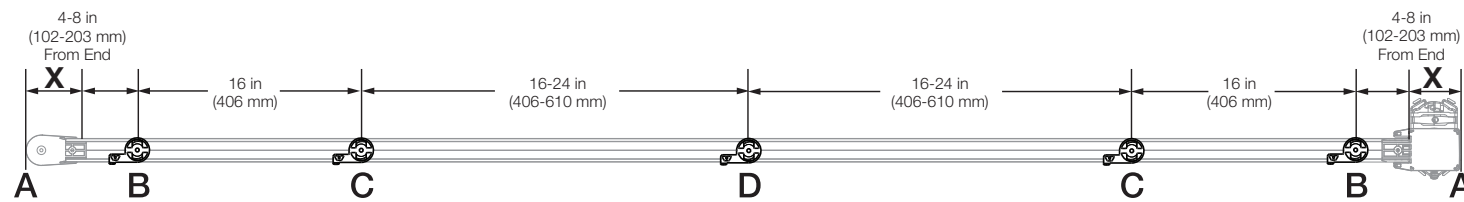
Important Notes

Please Read Before Installing

A. Lutron systems are intended for use with only Lutron hardware and power supplies.

B. Codes: Install in accordance with all local and national electrical codes.

C. Environment: Ambient operating temperature: 32 °F - 104 °F (0 °C - 40 °C), 0 - 90% humidity, non-condensing. Indoor use only.

D. Plan the installation to maintain sufficient clearance between the moving drapery and any object, including window hardware, cranks, lock levers, and stationary drapery.

1.1 Tools required:

- Tape measure
- Small flat-blade screwdriver
- #1 Phillips screwdriver
- #2 Phillips Screwdriver
- Power drill and drill bits
- Level
- Pliers
- 3/32 in hex key (included w/recess-mount system)

1.2 System Components:

Drapery Track
Single-track, center-draw system shown; dual systems will include additional track(s) and EDU(s)

Terminal Block

Included with ceiling-mount track:
Ceiling-Mount Cam Locks*

Included with recess-mount track:
Recess-Mount Bracket*

#8 x 1½ inch Wood Screw*

*Quantity varies with system width

Electronic Drive Unit (EDU) with end motor bracket attached
Model: QSAC-EDU-D105-P
24-36 V⎓ 41 W

2 Ceiling-Mount (for recess-mounting, proceed directly to section 3)

2.1 Fasten the ceiling-mount cam locks to the ceiling:

4-8 in (102-203 mm) From End

16 in (406 mm) | 16-24 in (406-610 mm) | 16-24 in (406-610 mm) | 16 in (406 mm)
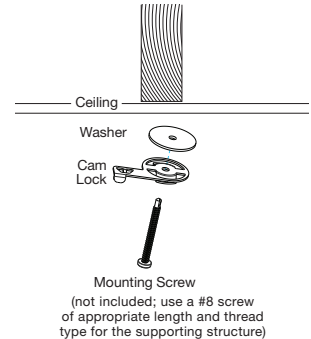
4-8 in (102-203 mm) From End

A B C D C B A

A. Hold the drapery track up to the ceiling, and position it where it will be installed. Verify it is parallel to the window or wall, and use a pencil to make a mark on the ceiling at each end.

B. Mount a cam-lock within 8 in (200 mm) of each end-mark made in Step 2.1.A.

C. Mount the next cam-locks 16 in (400 mm) inward from those mounted in Step 2.1.B.

D. Space the remaining cam-locks 16-24 in (406-610 mm) apart. For non-sheer drapery panels, a 16 in (406 mm) spacing is recommended between brackets at stackback location(s).

NOTE: The ceiling mount cam-locks must be mounted in a straight and level line. If the contour of the ceiling is not straight and level, use shims (not included) between the cam-lock bracket and the ceiling to compensate for irregularities.

2.2 Mount the drapery track in the cam-locks:

A. Rotate all of the cam-lock lever arms to the unlocked position.

B. Position the track up against the cam-locks. Starting from the center of the track and working toward the ends, rotate each cam-lock lever arm to the locked position, until its tab is against the track.

C. Skip Recess-Mount sections 3 and 4, and proceed to section 5 Installing the Electronic Drive Unit (EDU).

Cam Lock Mounting
Ceiling
Washer
Cam Lock
Mounting Screw
(not included; use a #8 screw of appropriate length and thread type for the supporting structure)
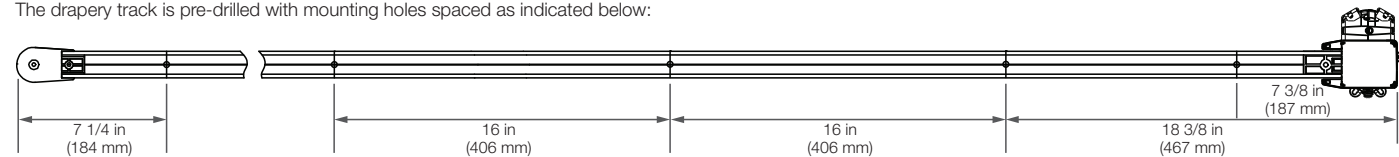
Unlock | Lock
Track
A | B

3 Recess-Mount: Prepare the Drapery Track:

A drapery track with recess-mount brackets can be installed into a structural member using wood screws. Ensure the structural member is of sufficient strength to support the combined weight of the drapery track, EDU, and fabric.
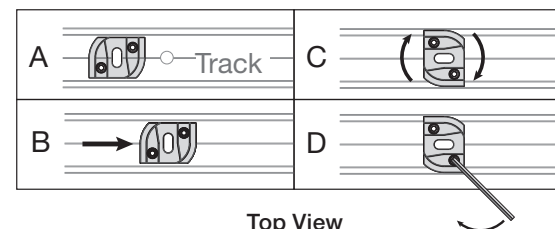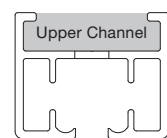
IMPORTANT: If no appropriate structural member is available at the mounting location, it is the responsibility of the installer to ensure blocking is added as needed to safely support the load.

3.1 Prepare the drapery track for mounting:

The drapery track is pre-drilled with mounting holes spaced as indicated below:

7 3/8 in (187 mm)

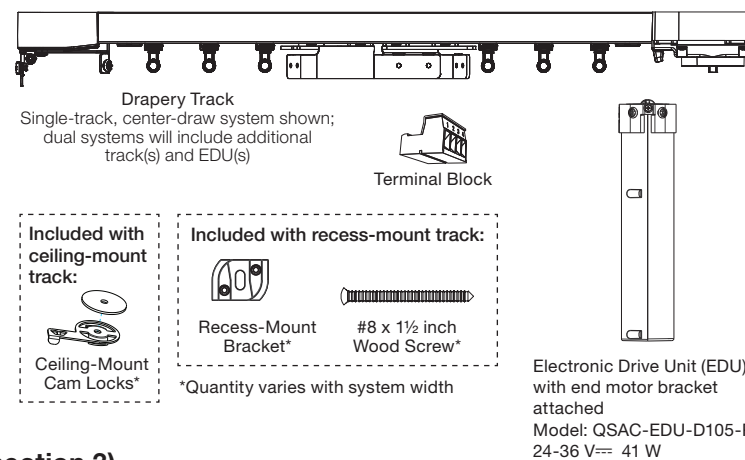7 1/4 in (184 mm) | 16 in (406 mm) | 16 in (406 mm) | 18 3/8 in (467 mm)

A. Insert a recess-mount bracket into the track's upper channel.

B. Align its center hole with a mounting hole in the drapery track. Temporarily insert a mounting screw through both holes to maintain their alignment.

C. Rotate the recess-mount bracket 90°.

D. Secure the recess-mount bracket using the 3/32 in Allen key provided to tighten both set screws. Remove the mounting screw from the center hole.

E. Repeat steps 3.1.A through 3.1.D to install a recess-mount bracket at each mounting hole location along the entire width of the drapery track.
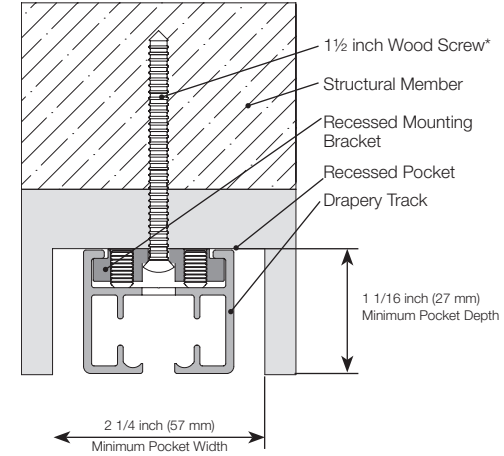
Upper Channel

A — Track
B
C
D

Top View

4 Recess-Mount: Mount the Drapery Track:

4.1 Mount the drapery track:

A. Position the drapery track in the desired location.

B. Insert the 1½ inch wood screw provided through the hole in the track and recessed mounting bracket, and into a structural member in the ceiling, as shown.
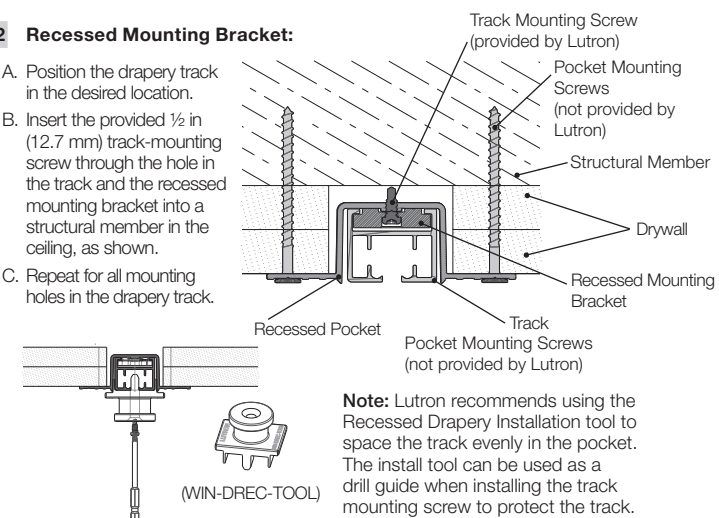
C. Repeat for all mounting holes in the drapery track

NOTE: Ensure the depth of the pocket does not interfere with drapery fabric.

1½ inch Wood Screw*
Structural Member
Recessed Mounting Bracket
Recessed Pocket
Drapery Track

1 1/16 inch (27 mm) Minimum Pocket Depth

2 1/4 inch (57 mm) Minimum Pocket Width

*The wood screws provided are appropriate for driving into wooden structural members only. It is the responsibility of the installer to select and install fasteners that are appropriate for the supporting structure.
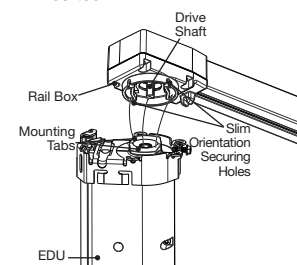
4.2 Recessed Mounting Bracket:

A. Position the drapery track in the desired location.

B. Insert the provided ½ in (12.7 mm) track-mounting screw through the hole in the track and the recessed mounting bracket into a structural member in the ceiling, as shown.

C. Repeat for all mounting holes in the drapery track.

Track Mounting Screw (provided by Lutron)
Pocket Mounting Screws (not provided by Lutron)
Structural Member
Drywall
Recessed Mounting Bracket
Recessed Pocket
Track
Pocket Mounting Screws (not provided by Lutron)

(WIN-DREC-TOOL)

Note: Lutron recommends using the Recessed Drapery Installation tool to space the track evenly in the pocket. The install tool can be used as a drill guide when installing the track mounting screw to protect the track.

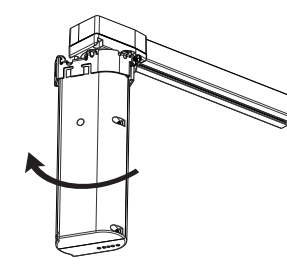## Installing the EDU in Slim Orientation (Recommended for Fold Style Drapery)

5a

5.1 Insert

A. Insert the EDU mounting flange into the rail box by aligning the mounting tabs and drive shafts.

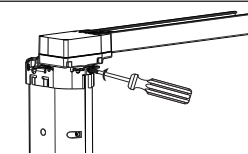B. Push the EDU into the railbox until the mounting tabs are fully inserted.

5.2 Rotate

Rotate the EDU inside the mounting flange and align the desired holes for the securing screw on the motor bracket. Ensure the wire harness is not pinched.

Drive Shaft
Rail Box
Mounting Tabs
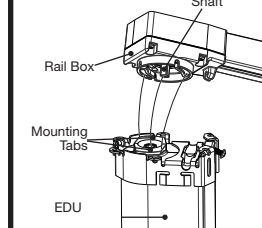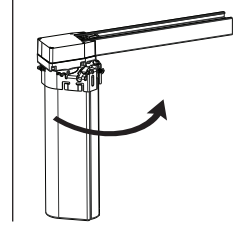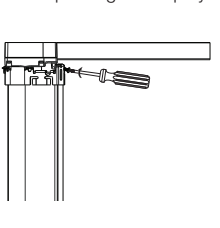Slim Orientation Securing Holes
EDU

5.3 Secure

Install the securing screw.

NOTE: The securing screw is necessary to safely secure the EDU. Verify that it is installed and tightened before operating the drapery.
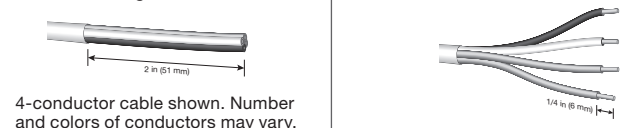
5b Installing the EDU in Original Orientation

5.1 Insert

A. Insert the EDU mounting flange into the rail box by aligning the mounting tabs and drive shafts.

B. Push the EDU into the railbox until the mounting tabs are fully inserted.

5.2 Rotate

Rotate the EDU inside the mounting flange and align the holes for the securing screw. Ensure the wire harness is not pinched.

5.3 Secure

Install the securing screw.

NOTE: The securing screw is necessary to safely secure the EDU. Verify that it is installed and tightened before operating the drapery.

Drive Shaft
Rail Box
Mounting Tabs
EDU

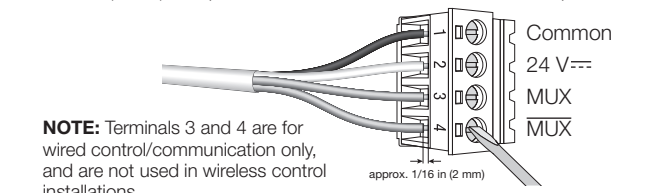## 6 Basic Wiring

6.1 Prepare the cable:

⚠ **WARNING:** SHOCK HAZARD. Lock the supply breaker in the OFF position, or remove fuse, before wiring to terminal block. Failure to do so could result in death or serious injury.

A. Strip 2 in (51 mm) of outer jacket off cable coming from the wall.

B. Strip 1/4 in (6 mm) insulation off each individual wire.

2 in (51 mm)

1/4 in (6 mm)

4-conductor cable shown. Number and colors of conductors may vary.
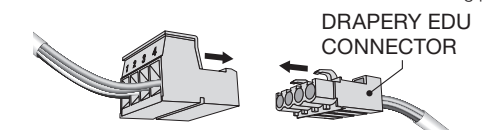
6.2 Wire the 4-pin terminal block:

Wire the 4-pin terminal block (provided) to the cable using a small, flat-blade screwdriver to tighten screws securely on the exposed wire. Leave approximately 1/16 in (2 mm) of exposed conductor to ensure insulation is not pinched.

1 Common
2 24 V⎓
3 MUX
4 MUX

NOTE: Terminals 3 and 4 are for wired control/communication only, and are not used in wireless control installations.

approx. 1/16 in (2 mm)

6.3 Connect the EDU or RF Receiver (optional):

Connect the EDU connector and the 4-pin terminal block.
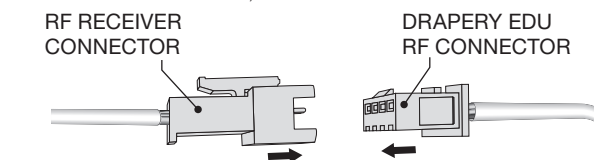
IMPORTANT: DO NOT supply power to the EDU until after the drapery fabric is installed. Follow the instructions in sections 7 and 8 on the following page.

DRAPERY EDU CONNECTOR

NOTE: Arrange and secure the cables in a location that prevents them from interfering with moving parts.

For detailed system wiring, programming, and troubleshooting information, please refer to P/N 045314 Sivoia QS Wiring & Programming Guide

If an RF Receiver is installed, connect the RF Receiver to the EDU as shown below.
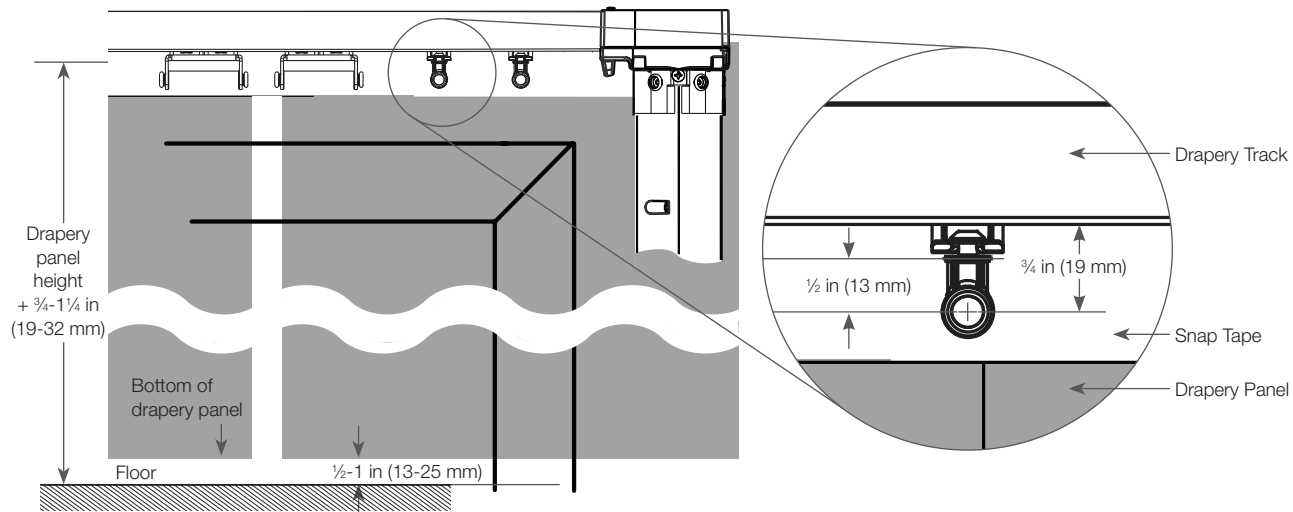
RF RECEIVER CONNECTOR | DRAPERY EDU RF CONNECTOR

NOTE: Arrange and secure the cables in a location that prevents them from interfering with moving parts.

For Lutron RF Receiver installation information, please refer to P/N 045168 Sivoia QS Wireless Basic Wiring & Setup Guide
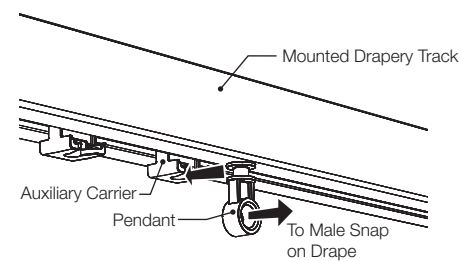
7 Hanging Drapery Fabric

7.1 Drapery Panel Height

Drapes are typically sized so the bottom of the drapery track and top of the drapery panel are located 4 in (101 mm) above the window casing. Location may need to be adjusted to accommodate the specific drapery panel height and application. It is recommended that a space of ½-1 in (13-25 mm) be maintained between the bottom of drapery panel and the floor.
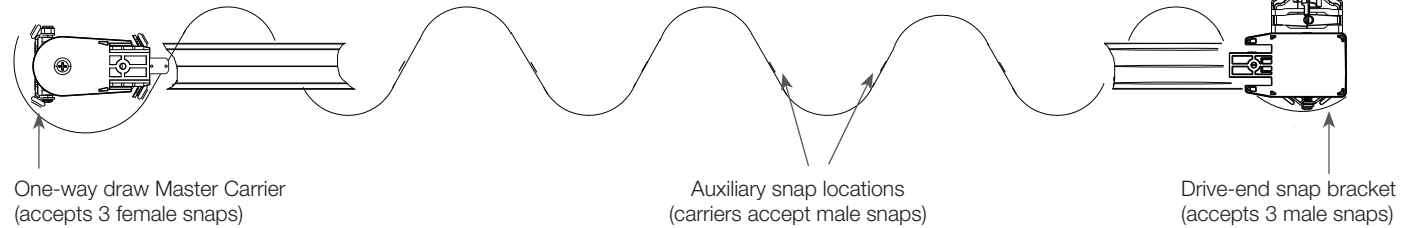

Drapery Track
½ in (13 mm)
¾ in (19 mm)
Snap Tape
Drapery Panel

Drapery panel height + ¾-1¼ in (19-32 mm)
Bottom of drapery panel
Floor
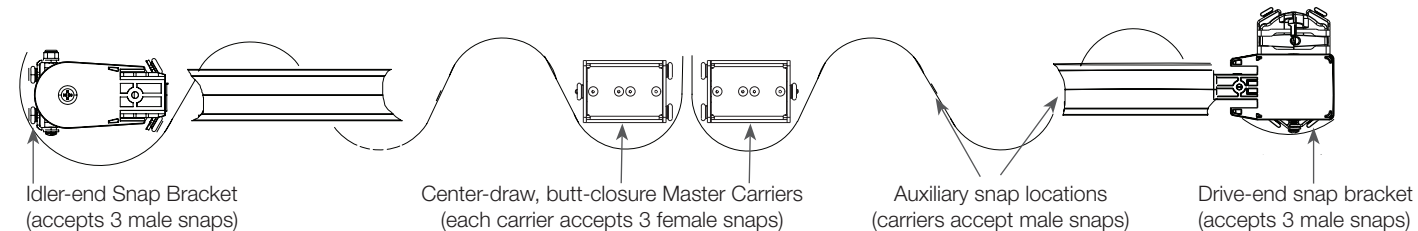½-1 in (13-25 mm)

7.2 Attach the Drapery Panel

A. Attach a pendant to each male auxiliary snap on the drape.
B. Hang the pendant in the corresponding auxiliary carrier as shown.
C. Fasten the remaining snaps to the drive/idler snap brackets and master carrier(s) according to the drapery configuration, following the appropriate example below, creating a ripple pattern as shown.
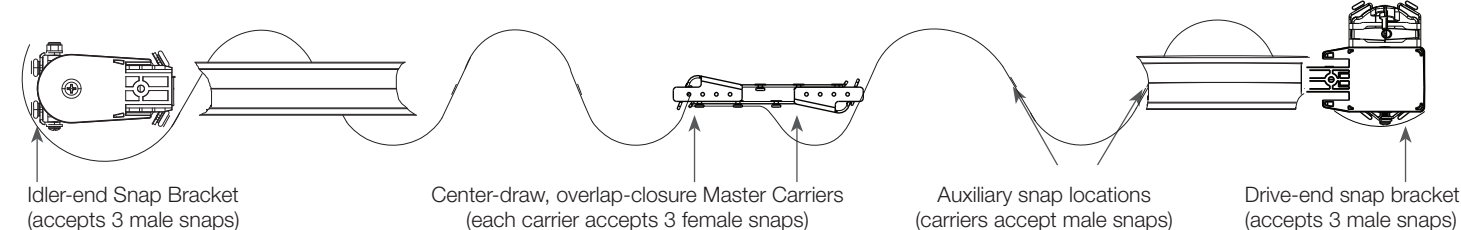

Mounted Drapery Track
Auxiliary Carrier
Pendant
To Male Snap on Drape

One-way draw

One-way draw Master Carrier (accepts 3 female snaps)
Auxiliary snap locations (carriers accept male snaps)
Drive-end snap bracket (accepts 3 male snaps)

Center draw, butt-closure

Idler-end Snap Bracket (accepts 3 male snaps)
Center-draw, butt-closure Master Carriers (each carrier accepts 3 female snaps)
Auxiliary snap locations (carriers accept male snaps)
Drive-end snap bracket (accepts 3 male snaps)

Center draw, overlap-closure

Idler-end Snap Bracket (accepts 3 male snaps)
Center-draw, overlap-closure Master Carriers (each carrier accepts 3 female snaps)
Auxiliary snap locations (carriers accept male snaps)
Drive-end snap bracket (accepts 3 male snaps)

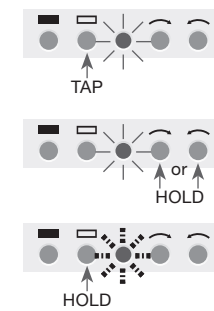## 8 Power Up the Drapery Drive and Set Limits

8.1 Power up the drive and set limits automatically using Pull-to-Start

A. Manually move the drapery to the fully-open position.
B. Connect the power supply to an appropriate power source. The LED on the EDU will flash a red/green pattern as the EDU powers up.
C. Grasp the leading edge of the fabric panel and gently tug in the close direction, then release. The EDU will move the drapery to the fully-closed position.
D. After the drapery stops in the fully-closed position, wait 5 seconds, then grasp the leading edge of the fabric panel and gently tug in the open direction, and release. The EDU will move the drapery to the fully-open position.
E. The drapery is now ready to operate, with Open and Close Limits automatically learned and set at fully-open and fully-closed, respectively. To set custom Open and Close Limits, follow the steps in sections 8.2 and 8.3.

IMPORTANT: After a custom limit is set, the automatic limit-learning method described in step 8.1 becomes permanently unavailable.
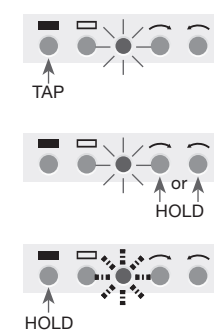
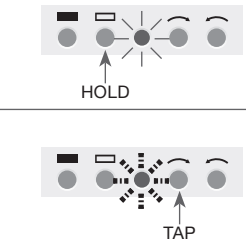### 8.2 Setting a Custom Open Limit (OPTIONAL)

A. Tap the ▭ button.
The green LED illuminates.

TAP

B. Use the Directional buttons (press and hold the one which moves the drapery in the desired direction) to move the drapery to the desired Open Limit position.

or
HOLD

C. Press and hold the ▭ button.
The green LED flashes, then turns off.
The Open Limit is set.

HOLD

8.3 Setting a Custom Close Limit (OPTIONAL)

A. Tap the ▬ button.
The green LED illuminates.

TAP

B. Use the Directional buttons (press and hold the one which moves the drapery in the desired direction) to move the drapery to the desired Close Limit position.

or
HOLD

C. Press and hold the ▬ button.
The green LED flashes, then turns off.
The Close Limit is set.
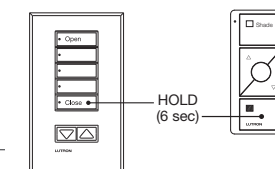

HOLD

9 Assigning Drapery Drives to RF Controls

9.1 Placing One or More Drapery Drives in Assignment Mode

A. Press and hold the ▭ button until the green LED flashes, then comes on solid.

HOLD

B. Tap the ⌒ button. The green LED's on the drapery drive and on the wireless receiver will flash twice immediately, and every 4 seconds thereafter, the drive is now ready to be assigned to a control.

TAP

C. Repeat for all drapery drives that are being assigned to the same control. To complete the assignment process, proceed to step 9.2.

9.2 Completing the Assignment Process

A. Press and hold the Bottom button on the control for 6 seconds. The drapes will move a short distance in each direction, or "wiggle" one time. This confirms their drive(s) have been assigned to the control, and exits the control and drapery drives from assignment mode.

HOLD (6 sec)

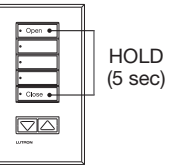B. Repeat steps 9.1 and 9.2-A to assign more drapery drives and/or additional controls.

NOTE: Draperies can be assigned to multiple controls. To un-assign devices, see "Restoring Factory Default Settings".

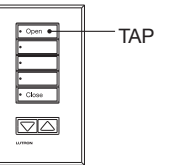## 10 Assigning Drapery Drives to Wired Controls

10.1 Enter Programming Mode

Press and hold the Open and Close button simultaneously for 5 seconds.
Assigned drapes will close.
Unassigned drapes will open.
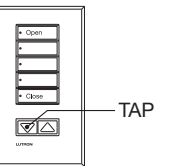

HOLD (5 sec)

10.2 Select Drapery Drive

Tap the Open button.
The selected drapery will move a short distance in each direction, or "wiggle" one time.
(Tap the Open button again to cycle forward to the next drive. Tap the Close button to cycle backwards.)
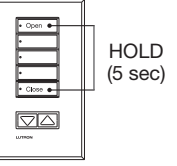

TAP

10.3 Assign Drapery Drive

Tap the Lower Button to assign the selected drive.
The selected drapery will move to its Close limit.
This confirms it is now assigned.

TAP

10.4 Assign Additional Drapery Drives
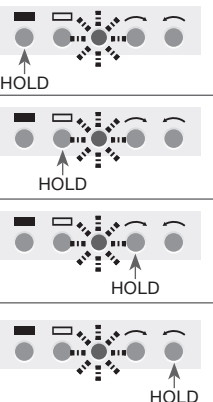
10.5 Exit Programming Mode

Press and hold the Open and Close button simultaneously for 5 seconds to exit the programming mode.

HOLD (5 sec)

Restoring Factory Default Settings

This procedure will un-assign this drapery drive from all wireless controls, but will not affect the open and lower limit.

A. Press and hold the ▬ button until the green LED flashes. Release.

HOLD

B. Press and hold the ▭ button until the green LED flashes. Release.

HOLD

C. Press and hold the ⌒ button until the green LED flashes. Release.

HOLD

D. Press and hold the ⌒ button until the LED flashes a multicolor sequence, indicating the factory default settings have taken effect. Release.

HOLD

For detailed system wiring, programming, and troubleshooting information, please refer to P/N 045314 Sivoia QS Wiring & Programming Guide.

To find the meaning of LED blink codes, see: lutron.com/TechnicalDocumentLibrary/Sivoia QS Shades.html