



Motorized Shades with 1 ½” & 2” roller tube Installation Instructions

Contents

1.0 Tools	3
2.0 Shipped components	3
3.0 Mounting Hardware Options.....	3
3.1 Exposed Bracket – R Series	3
3.2 Exposed Small Motor Bracket.....	4
3.3 Cassette (Three inch and Four Inch)	5
3.4 Fascia Small Motor Bracket (Three Inch and Four Inch)	5
3.5 Fascia Top Back Cover (Three inch and Four Inch).....	8
3.6 Fascia Dual Bracket Installation (Four Inch)	9
4.0 Optional Hardware.....	11
4.1 Sidetrack	11
4.2 Six Inch Valance Installation	11
5.0 Fabric Telescope Adjustment	13

Overview

Instructions for motorized shades that include one of the following motors: IQM-AC2, IQM-ACR2, IQM-ILT-DC, IQM-DCR, BAT-X1-R, and BAT-R.

Shade mounting options are Exposed, Facia, and Cassette systems.

Motorized shades come fully assembled and ready for installation. **Mounting screws are not provided.** The type and size of screw required will vary depending upon the mounting surface.

Important Information about AC motors

An Underwriters Lab (UL) Listed cable clamp or cable gland must be used that is suitable for the diameter of the cable. The outside diameter of the motor cable is nominally 0.340 inches (8.64 mm). This will ensure that the connection between the motor cable and the junction box is stable and reduces strain on the conductors. Any switch, connector, and/or junction box should be UL Listed.

For motorized shades provided with a NEMA 5-15P plug cap, the plug cap must be inserted into a grounded receptacle. “To reduce the risk of electrical shock, this equipment has a grounding type plug that has a third (grounding) pin. This plug will only fit into a grounding type outlet. If the plug does not fit into the outlet, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.”



Any electrical wiring that is designed to be permanent shall be employed as required by local codes.

Ensure there is adequate drip loop length so no condensation can travel to the motor head



Important Information about Power Sources



Motorized Shades with 1 ½” & 2” roller tube Installation Instructions

External battery wands for BAT-R and BAT-X1-R:

1. Reloadable wand uses eight (8) replaceable AA Lithium batteries.
Non-detachable cable that connects to the motor is ~ 5 ½ inches long.

2. Rechargeable wand uses ten (10) Ni-MH batteries with a solar panel.
Non-detachable cable that connects to the motor is ~ 6 inches long.

3. Rechargeable Li-Ion Battery wand.

Non-detachable cable that connects to the motor is ~ 6 inches long.

To aid in future charging of the Li-Ion Battery Wand, optional extension cables are available.
Each cable connects between the end of the battery charger cable and the Li-ion Battery Wand:
8 inch cable (Somfy part number 9021131) or an optional 94.5 inch cable (Somfy part number 9021016).

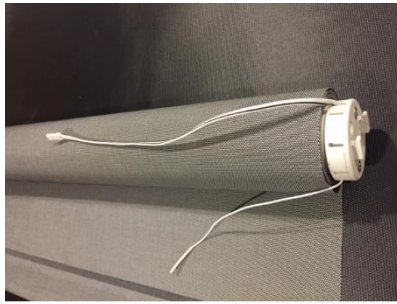
The required external charger includes a non-detachable 76-inch cable (Somfy part number 9025166).

Plan for Battery Cable and Antenna

Plan for placement of the battery wand before installation



BAT-R



BAT-X1-R



IQM-DCR

Battery Cable

BAT-R: Battery cable extends ~ 11 1/2 inches from motor head

BAT-X1-R: Battery cable extends ~ 9 1/2 inches from motor head.

Power Cable

IQM-DCR - power cable extends 12” from the motor head

Antenna

Antenna are ~ 6” long. Ensure the antenna does not contact the shade fabric.

The antenna can be tucked next to the motor bracket, in the cassette, and behind the fascia without impacting radio transmission.



Motorized Shades with 1 1/2" & 2" roller tube Installation Instructions

1.0 Tools

Screw/drill gun with Phillips head bit extender; Hex head driver; Standard and Phillips head screwdriver; level; tape measure; 1/8 inch and 3/16 inch drill bit.

2.0 Shipped components

The roller shade (tube, fabric, motor, hembar), brackets, plus any hardware accessories.

3.0 Mounting Hardware Options

3.1 Exposed Bracket - R Series

Determine mounting position of shades. The order width is the bracket-to-bracket dimension. The brackets are universal and can be mounted for inside, outside, and ceiling mounts using the appropriate holes. For inside mount, this is typically the opening width. For outside mount, mark the location of the brackets noting that the outside bracket width equals shade width. For proper shade operation, brackets must be mounted perfectly level. Determine operator side as ordered. Mount brackets to wall or ceiling with #6 or #8 x 1 1/2" pan head or hex head screw (not provided).

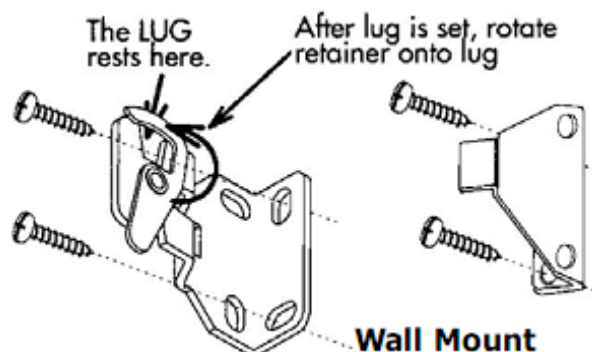
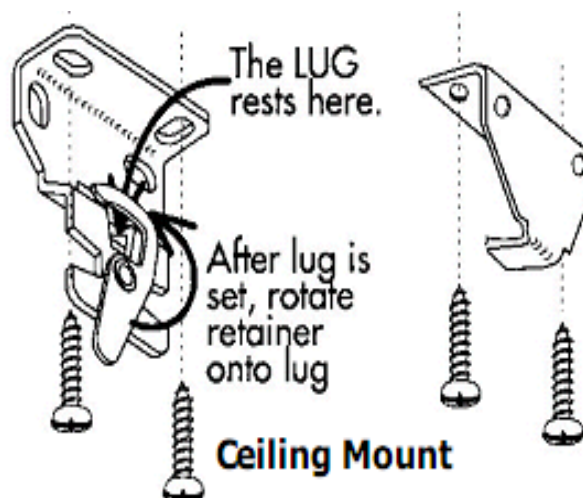
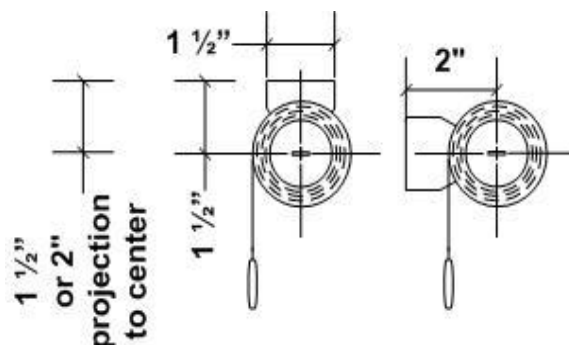
Shade installation. Install the shade by pushing the motor straight onto the blade of its bracket. The motor should be installed so the program buttons and charging or battery ports hang straight down. Lower the lug of the end plug onto the "V" of its bracket. The roller should fit in the brackets securely, with just a little play. Rotate the riveted retainer portion to lock the lug in position.

Shade removal

Rotate the riveted retainer portion to unlock the lug. Raise the idler out of the idler bracket and carefully slide the motor out of the motor bracket tang.

Shade operation

Refer to appropriate programming instructions for shade operation.





Motorized Shades with 1 1/2" & 2" roller tube Installation Instructions

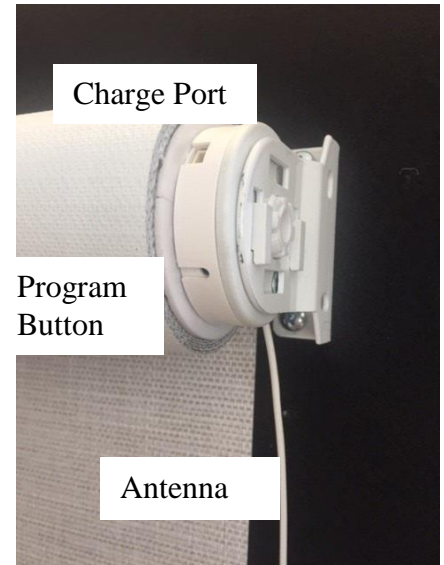
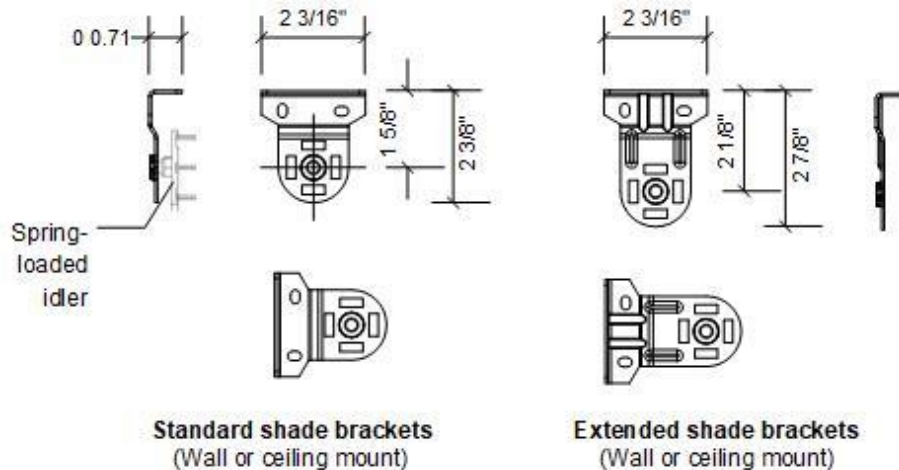
3.2 Exposed Small Motor Bracket

The brackets support surface or ceiling mount applications.

The order width is the bracket-to-bracket dimension. For inside mount, this is typically the opening width.

Optional end caps add a total of 1/8" to the bracket-to-bracket width.

Depending on the shade height, a pair of standard or extended brackets are supplied.



Bracket location and mounting.

Determine the operator side of the shade.

Mark the location of the brackets noting that the bracket-to-bracket width equals shade width.

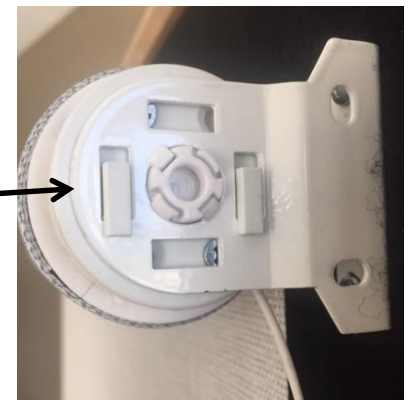
For proper shade operation, brackets must be mounted perfectly level. Mount brackets with at least #6 or #8 x 1 1/2" pan head or hex head screw (not provided)

Shade installation.

The motor head adapter is installed prior to shipment.

Install the shade by carefully inserting the idler pin into the bracket bushing, and compress the idler so the motor head mounting plate bypasses the bracket.

Align the motor head adapter lugs to fit into the rectangular slots in the bracket. Push down on the motor head adapter to ensure the lugs are fully seated in the slots.



Shade removal

Remove the shade from the motor bracket by lifting up the motor head so the adapter lugs are not fully seated. Move the shade toward the idler to compress the idler enough so that the motor head adapter lugs can swing by the motor bracket. Remove the idler pin from the idler bracket.

Shade operation

Refer to appropriate programming instructions for shade operation.



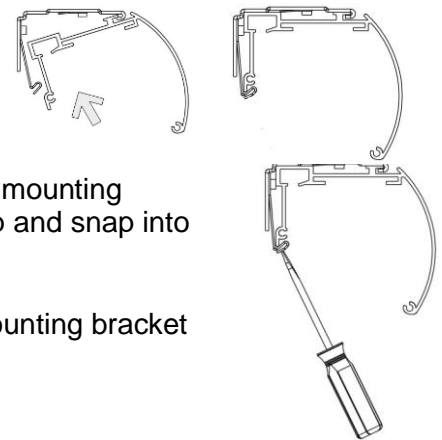
Motorized Shades with 1 ½" & 2" roller tube Installation Instructions

3.3 Cassette (Three inch and Four Inch)

Cassette system is shipped assembled. Cassette system utilizes universal mounting brackets that can be installed for wall or ceiling application. Three-inch cassette with mounting brackets shown below:



Determine wall or ceiling mount. Mount two outer brackets approximately 1 ½" – 2" in from the end of the cassette. On wider units install center bracket(s) supplied. Attach brackets with at least #6 or #8 x 1 ½" pan head or hex head screw (not provided).



Snap cassette into mounting brackets. Hook top of extrusion into front of mounting brackets as shown in diagram. Rotate the back bottom corner of cassette up and snap into bracket.

Cassette removal. To remove cassette, insert flat head screwdriver into mounting bracket slot provided, then back to release cassette.

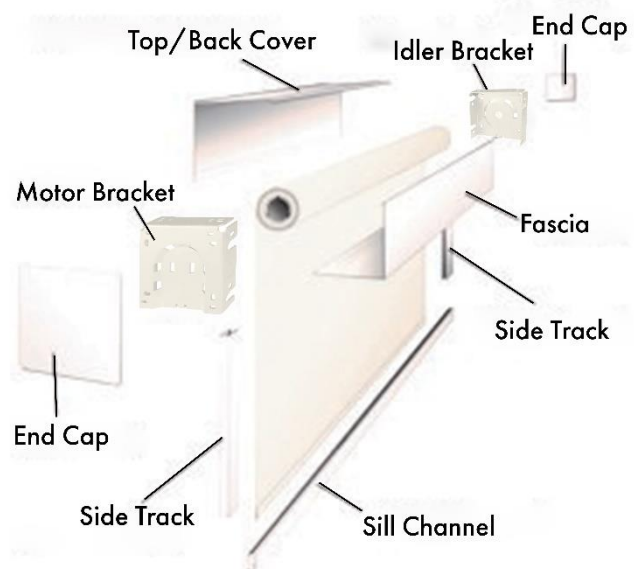
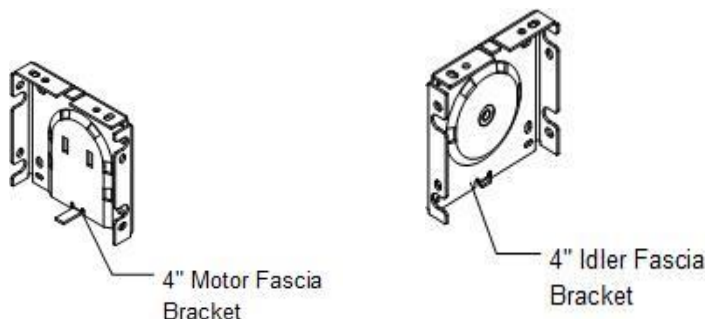
Shade operation

Refer to appropriate programming instructions for shade operation

3.4 Fascia Small Motor Bracket (Three Inch and Four Inch)

Shades may be installed with fascia, or fascia plus top/back cover. Top/back cover installed in a reverse roll application only uses a four-inch bracket.

The three and four-inch fascia Small Motor Bracket is different than the R Series bracket due to a different Small Motor Bracket motor head adapter and a different Small Motor Bracket idler. The fascia, fascia bracket end cap, and the sidetrack are the same as currently shipped by Insolroll.





Motorized Shades with 1 1/2" & 2" roller tube Installation Instructions

Bracket location and mounting.

Determine the operator side of the shade.

Mark the location of the brackets noting that the bracket-to-bracket width equals shade width.

For proper shade operation, brackets must be mounted perfectly level.

Mount brackets to wall or ceiling with at least #6 or #8 x 1 1/2" pan head or hex head screw (not provided).

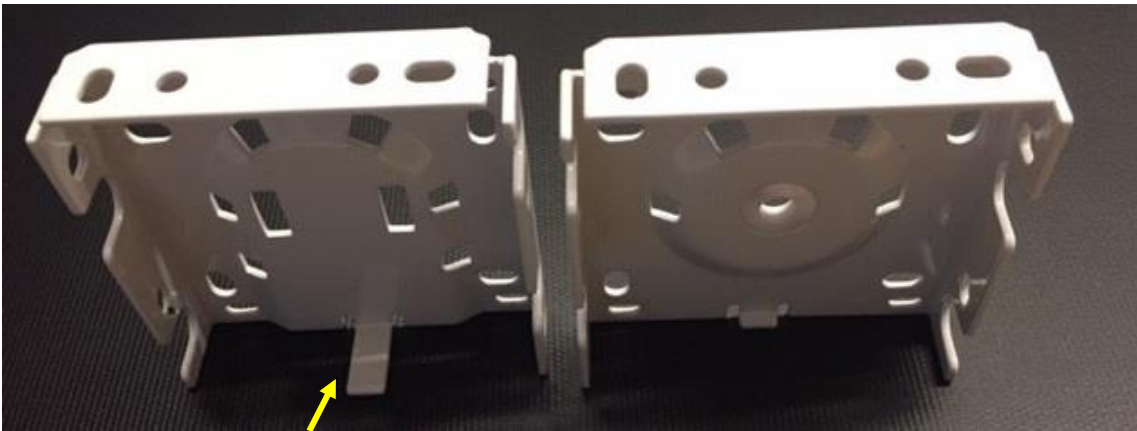
Shade installation.

The motor head adapter is installed on the motor head prior to shipment.

Three Inch Fascia

Motor Bracket

Idler Bracket



Due to the length of the motor bracket tang, install the shade by aligning the motor head adapter lugs to fit into the rectangular slots in the bracket, push down on the motor head adapter to ensure the lugs are fully seated in the slots then compress the idler pin by hand and carefully insert the idler pin into the nylon bracket bushing.

Four Inch Fascia

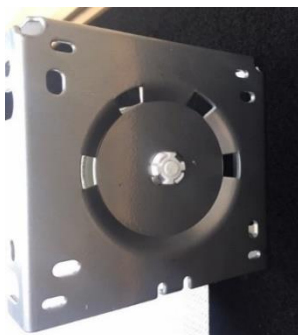
Since there is more room between the motor bracket tang compared to three-inch fascia, install the shade by carefully inserting the idler pin into the bracket bushing, and compress the idler so the motor head mounting plate bypasses the bracket.

Align the motor head adapter lugs to fit into the rectangular slots in the bracket.

Push down on the motor head adapter to ensure the lugs are fully seated in the slots.

Idler Bracket

Motor Bracket





Motorized Shades with 1 ½" & 2" roller tube Installation Instructions

Fascia installation.

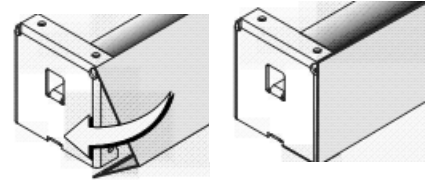
Insert fascia into the top lip of both brackets. Push fascia toward the back of the lower part of the bracket.

The fascia snaps onto the tang of both brackets. The fascia is secure.

If the fascia is not secure, check the tang to ensure it is not bent.

If necessary, carefully bend the tang down so the fascia engages with the tang.

For outside mount, secure the end caps.



Fascia and Shade removal

Remove the fascia by pulling down on the fascia outer edge near the brackets to ease the fascia over the edge of each bracket. Carefully remove the fascia and place on a scratch resistant surface.

Three Inch Fascia



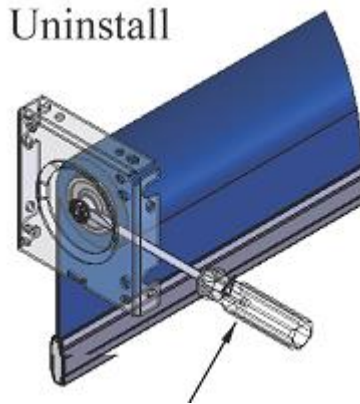
The idler pin is stepped so there is a little flat area that will accept a flat head screwdriver.

Carefully wedge the screwdriver between the idler and the bracket.

Maintain pressure against the idler pin while moving the shade down and away from the nylon bushing. The idler spring can exert enough force on the bushing to force the bushing out of the bracket.

Lift the motor side of the shade so the motor head adapter lugs are out of the bracket and remove the shade

Uninstall



Four Inch Fascia

Remove the shade from the motor bracket by lifting the motor head so the adapter lugs are not fully seated. Move the shade toward the idler to compress the idler enough so that the motor head adapter lugs can swing by the motor bracket. Remove the idler pin from the idler bracket.

Shade operation

Refer to appropriate programming instructions for shade operation.



Motorized Shades with 1 ½" & 2" roller tube Installation Instructions

3.5 Fascia Top Back Cover (Three inch and Four Inch)

Regular roll top/back cover is used with three and four-inch fascia systems.

Reverse roll top/back cover is only used with four-inch fascia system

Fascia Adhesive tape. On each end of the top/back cover is double sided adhesive tape as shown.

An orange strip of plastic protects the top of the adhesive tape.

The tape assists in holding the top/back cover and brackets together.



Do not remove the protective strip on the orange adhesive tape until instructed.

Bracket location.

The brackets support surface or ceiling mount applications.

Determine the operator side of the shade.

Mark the location of the brackets noting that the bracket-to-bracket width equals shade width.

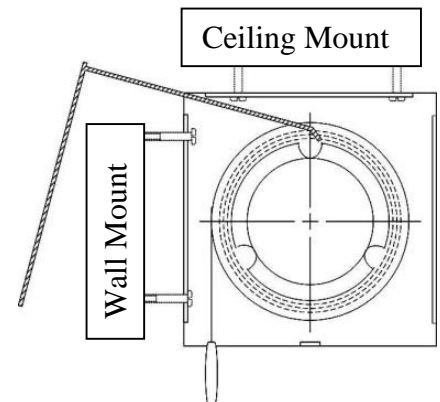
Do not mount the brackets.

Top/back cover pre-drill

Ceiling mount.

Slide the top/back into the left and right bracket so the top/back cover is underneath the top bracket flange.

Using the side of the bracket, mark the bracket holes on the top/back cover. Pre-drill the marked holes in the top of the top/back cover using a 3/16-inch drill bit



Wall mount.

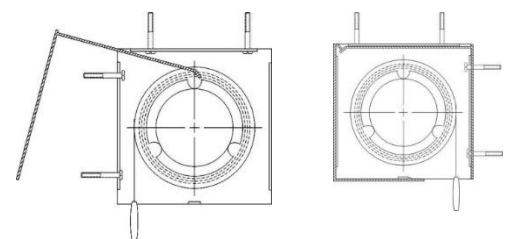
Use the same process as ceiling mount except the holes are marked on the back of the top/back cover instead of the top of the top/back cover.

Slide the top/back into the left and right bracket so the top/back cover is underneath the top bracket flange for both brackets. Using the top of the bracket, mark the bracket holes on the top/back cover. Pre-drill the marked holes in the top of the top/back cover using a 3/16-inch drill bit

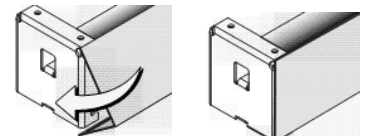
1. Top/back cover with three- and four-inch fascia (regular roll only).

Remove the orange protective strip then slide the top/back cover inside the top of the bracket.

Mount the brackets and the top/back cover simultaneously to surface or ceiling using at least #6 or #8 x 1 ½" pan head or hex head screws (not provided). For proper shade operation, brackets must be mounted perfectly level



Fascia application. Snap on fascia. Hook the lip in the fascia over the end brackets and swing the fascia down until the bottom of fascia snaps securely into place.



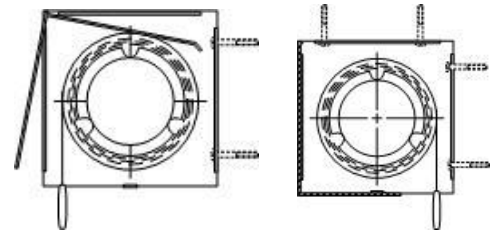


Motorized Shades with 1 ½" & 2" roller tube Installation Instructions

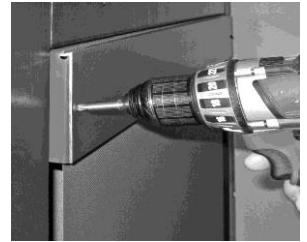
2. Top/back cover only (reverse roll).

Fascia is not used in the application.

Remove orange protective strip from the top of the double-sided tape on the top/back cover. Slide the top/back cover in the open bracket slot so the top/back cover is underneath the top flange of the bracket. Mount the brackets and top/back cover at the same time. For proper shade operation, brackets must be mounted perfectly level



This application requires a screw through the front of the reverse roll fascia. Pre-drill 1/8" hole through fascia into flange on steel bracket. Attach with provided #8 x 3/8" pan head screw.



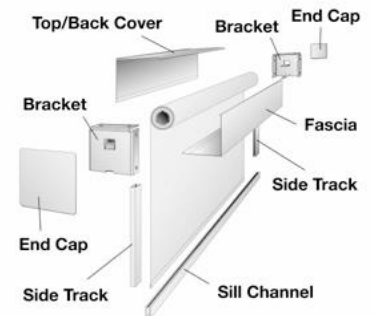
Shade installation. Install the shade by pushing the motor straight onto the blade of its bracket. The motor should be installed so the program buttons and charging or battery ports hang straight down. Lower the lug of the end plug onto the "V" of its bracket. The roller should fit in the brackets securely, with just a little play. Rotate the riveted retainer portion to lock the lug in position.

Shade operation

Refer to appropriate programming instructions for shade operation.

3.6 Fascia Dual Bracket Installation (Four Inch)

Shades may be installed with fascia, or fascia plus top/back cover.



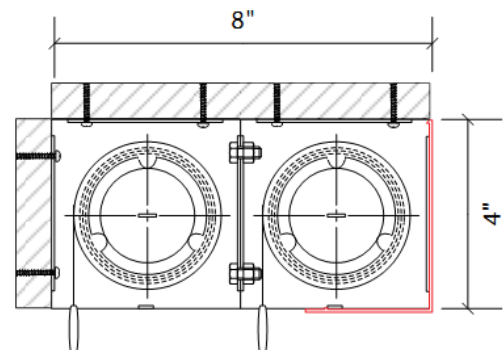
Bracket location and mounting.

The brackets support surface or ceiling mount applications. Determine the operator side of the shade.

Mark the location of the brackets noting that the bracket-to-bracket width equals shade width.

For proper shade operation, brackets must be mounted perfectly level.

Secure the idler brackets together and the motor brackets together with #8 by 32 screws and nuts (provided).





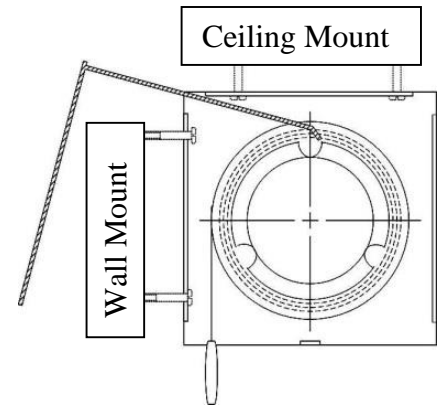
Motorized Shades with 1 1/2" & 2" roller tube Installation Instructions

Top/back cover pre-drill

Ceiling mount.

Slide the top/back into the left and right bracket so the top/back cover is underneath the top bracket flange.

Using the side of the bracket, mark the bracket holes on the top/back cover. Pre-drill the marked holes in the top of the top/back cover using a 3/16-inch drill bit



Wall mount.

Use the same process as ceiling mount except the holes are marked on the back of the top/back cover instead of the top of the top/back cover.

Slide the top/back into the left and right bracket so the top/back cover is underneath the top bracket flange for both brackets. Using the top of the bracket, mark the bracket holes on the top/back cover. Pre-drill the marked holes in the top of the top/back cover using a 3/16-inch drill bit

Fascia Adhesive tape. On each end of the top/back cover is double sided adhesive tape as shown.

An orange strip of plastic protects the top of the adhesive tape. The tape assists in holding the top/back cover and brackets together.

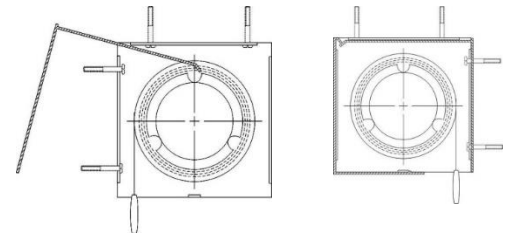
Do not remove the protective strip on the orange adhesive tape until instructed.



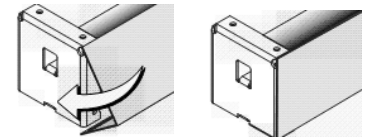
1. Top/back cover with fascia (regular roll only).

Remove the orange protective strip then slide the top/back cover inside the top of the bracket.

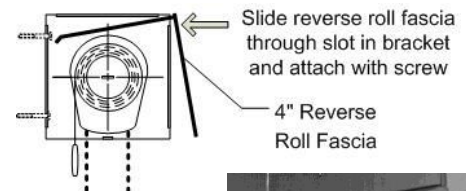
Mount the brackets and the top/back cover simultaneously to surface or ceiling using at least #6 or #8 x 1 1/2" pan head or hex head screws (not provided). For proper shade operation, brackets must be mounted perfectly level



Fascia application. Snap on fascia. Hook the lip in the fascia over the end brackets and swing the fascia down until the bottom of fascia snaps securely into place.



2. Top/back cover only (reverse roll). Remove orange protective strip from the top of the double-sided tape on the top/back cover. Install brackets and top/back cover at the same time.



This application requires a screw through the front of the reverse roll fascia. Pre-drill 1/8" hole through fascia into flange on steel bracket. Attach with provided #8 x 3/8" pan head screw.





Motorized Shades with 1 ½" & 2" roller tube Installation Instructions

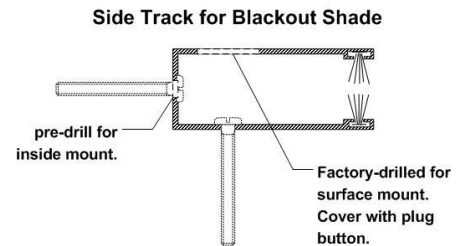
4.0 Optional Hardware

4.1 Sidetrack

1. Complete shade installation

2. Install side tracks. Line up outside track width with outside bracket width. Use level to ensure tracks are plumb.

- For surface mount installations,** screw through pre-drilled side track. Snap plug buttons over hole when complete.
- For inside mount installations,** pre-drill side rail at desired locations before screwing to window jamb.



4.2 Six Inch Valance Installation

A six inch valance accomodates a single or dual shade system.

A. Inside Mount and Ceiling Mount Application for Six-Inch Valance

No end plates are included with an inside mount application.

- Determine the location of the idler bracket and the clutch bracket. Follow Exposed Roller Shade installation step 1.
- Hold the valance at the desired location to ensure shade clearance and proper fit for single or dual shade application. Valance may be flush with front of opening or inset to desired location. Ensure that there is sufficient clearance for a chain-operated shade. Mounting the valance too close to the shade will result in the chain contact with the bottom return.
- Pre-drill 3/16 inch holes in the 1½ inch top return of the valance in the extrusion guide groove for direct mount or when using an L bracket when applicable. When using L brackets, recommended spacing between brackets is a maximum of 36 inches. Mount the shade bracket in an orientation as dictated by the application.
- Place valance into opening. Secure the valance by screwing through the top of the valance into the drywall/trim. Screws not provided.



B. Outside Wall Mount Application for Six-Inch Valance

End plates are included for an outside mount application.

- Secure the end plates to the valance with supplied mounting screws. Hold the valance at the desired location to ensure shade clearance and proper fit.
- Determine the location of the shade brackets. Mount shade brackets per Exposed Roller Shade installation step 1.
- Determine the location of the L-brackets. Recommended spacing between L brackets is a maximum 36 inches. Mount L-brackets.

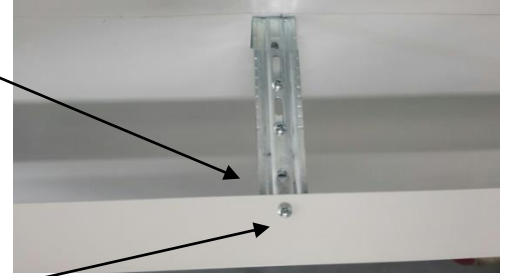


Motorized Shades with 1 ½" & 2" roller tube Installation Instructions

4. The top of the L-bracket must be mounted underneath the 1 ½ inch return.

Dry fit valance on L-brackets to determine the pre-drill hole location. Loosen L Bracket adjustable screws as required for ease of installation.

Pre-drill 3/16 inch holes in the 1 ½ inch top return of the valance in the extrusion guide groove.



Place valance into opening. Using the supplied fasteners, secure the valance to the L-brackets. Position the valance so the end plates are flush with the mounting surface and firmly tighten the L bracket adjustable screws. Mount roller shade back on brackets.

Pocket Installation

1. Attach the end plates to the back cover using the provided screws.
2. Align the brackets in between the bracket location ridges toward the back of the back cover for ceiling or wall mount application. Mark the bracket holes for ceiling or wall mount. Hole spacing should be the same for the left and right side to ensure proper shade operation.
3. The top of the back cover is mounted at the order height. Use a 3/16 drill bit and pre-drill holes for easier installation. Secure the back cover using intermediate mounting points spaced four to six feet apart.
 - a. For wall mount, screw the back cover to mounting surface using #8 x 1 ½ inch or longer pan-head screws (not provided). Ensure that the back cover is level. Be careful not to over-tighten screws as this may cause damage to the back cover.
 - b. For ceiling mount, the head box must be fully assembled before installation. Insert the front cover tongue into the back cover groove. After correctly inserting the front cover in the groove, the front cover will stay engaged as it closes. Secure the front cover to the end plate using the remaining screw position.
4. Screw brackets to wall or ceiling mounting surface through the back cover with #10 x 1 ½ inch or longer pan-head screws (not provided).
5. Install the shade.
6. For wall mount, insert the front cover tongue into the back cover groove. After correctly inserting the front cover in the groove, the front cover will stay engaged as it closes. Secure the front cover to the end plate using the remaining screw position.
7. For wall and ceiling mount, insert the flap in the front cover.



Motorized Shades with 1 ½" & 2" roller tube Installation Instructions

5.0 Fabric Telescope Adjustment

Shades are tested prior to shipment and fabric telescope (excessive horizontal movement of fabric while shade rolls up on the tube) is adjusted prior to shipment.

Refer to appropriate programming instructions for shade operation.

If fabric adjustments are required, roll the shade all the way down so the tube is exposed (this will require removal of motor down stop limit).

Try placing a piece of duct tape, 2" to 4" inches in length about 2"-4" in from the end of the tube, on the side of the tube opposite of the direction the fabric is moving.

Run the shade up. If shade still telescopes, repeat the process. The correct amount of tape can only be determined by trial and error. Re-set the lower limit after completing shade adjustments