

Roller Shade Blackout System Installation Instructions

CCO or Motorized Lifting Systems
Inside or Outside Mount

Tools Required

- Metal measuring tape
- Level
- Awl or pencil
- Ladder or stepstool
- Motor tester (if shade is motorized). A motor tester can be purchased from the shade supplier
- Power drill with the following bits:
 - 1/16" wood drill bit
 - 3/16" metal drill bit
 - Masonry drill bit (if drilling into concrete or brick)
 - 1/4" and 7/16" hex drivers (magnetic drivers recommended)
 - Standard and Phillips screwdrivers

Special Fasteners

The brackets must be securely attached to the mounting surface, preferably by drilling the screws into wood studs. If studs are not available, you will need special fasteners designed for your mounting surface (not included).

Tips on Special Fasteners

- When drilling into drywall or plaster, use a fastener designed for hollow wall applications.
- When drilling into concrete, stone, brick, or tile, use appropriate plugs, anchors, or screws.
- When drilling into metal, use the included tack screws.
- When selecting your fastener, make sure it is designed to support the weight of the product being installed. Follow the fastener manufacturer's instructions carefully.

Before You Begin: Separate and Identify All Components

The brackets are packaged together with the shade, but in a separate portion of the plastic. There will be a yellow component list packed with the brackets.

Remove the shade from its packing, but leave it rolled up. Do not remove the straps until the shade is installed in the brackets.

Components

- Shade
- Fascia
- Top/back cover
- 2 side channels
- Sill angle (optional)
- 2 brackets—designed to accommodate the shade lifting system. Brackets are *universal*, meaning they can be mounted to the wall, the ceiling, or the sides of the window frame.
- Screws
- Anchors



Figure 1 Fascia—3"



Figure 2 Top/Back Cover



Figure 3 Side Channel

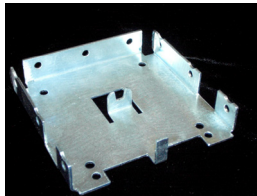


Figure 4
CCO Clutch Bracket—4"

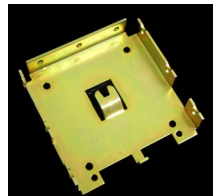


Figure 5
CCO Idler Bracket—4"

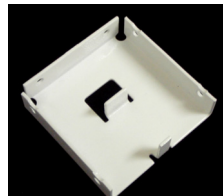


Figure 6
CCO Clutch Bracket—3"



Figure 7
CCO Idler or
400 Series Motor Idler
Bracket—3"

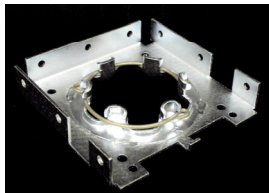


Figure 8
Motor Bracket—4"

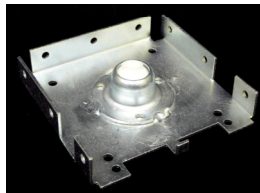


Figure 9
Motor Idler Bracket—4"

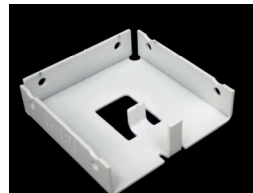


Figure 10
CCO R8 Clutch or
400 Series Motor
Bracket—3"

General Instructions for All Lifting Systems

Inside Mount

Step 1: Predrill the Top/Back Cover

- Predrill 3/16" mounting holes in the top/back cover, positioned according to the following guidelines:
 - Depending on the type of window and the customer's preference, you can mount the top/back cover either to the upper surface of the window frame (ceiling) or to the back surface (wall).
 - For a ceiling mount, center the mounting holes across the depth of the upper surface.
 - For a wall mount, place the mounting holes about 1/2" below the top of the cover.
 - Ensure the mounting holes will not interfere with any hardware already in the window frame.
 - Place a mounting hole about 3" in from each end. (This ensures they will not interfere with the bracket mounting.) For shades over 48" wide, place additional holes approximately every 24".
- If the shade is motorized and the cover was not ordered predrilled at the factory, also drill an appropriate size hole for the motor cords according to the planned electrical connection.

Step 2: Attach the Top/Back Cover

- Place the top/back cover in its correct position and mark the positions of the mounting holes on the window frame.
- Drill 1/16" pilot holes at the marked mounting hole locations.
- Attach the top/back cover using the long hex head screws provided.

Step 3: Attach the Brackets

- Determine the correct bracket placement depending on whether the shade lifting system is on the right or left. Make sure the shade will fall off the back of the roll.
- Snap each bracket into the top/back cover by placing the front corner of the bracket under the front lip of the top cover (Figure 11) and then rotating the bracket upward until it snaps into place (Figure 12).
- Temporarily place the shade in the brackets (see instructions for the applicable lifting system) and ensure that the brackets are correctly spaced. (If necessary to ensure the shade is held securely, move the brackets slightly closer to the center. Insert shims between the brackets and the window frame as needed.) Remove the shade from the brackets.
- If you are mounting the brackets to the back frame of the window rather than the sides, drill 3/16" holes in the back cover through the holes in the brackets. (Do not drill into the window frame.)
- Drill 1/16" pilot holes in the window frame at the bracket mounting hole location.
- Attach the brackets using the long hex head screws provided.
- Complete the installation by following the steps that apply to the lifting system of the shade (see page 5 for motorized shades or page 7 for CCO shades).

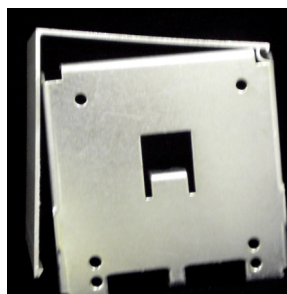


Figure 11 Bracket Going Onto Top/Back Cover

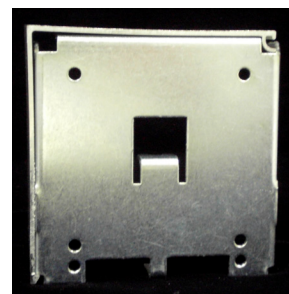


Figure 12 Bracket Snapped into Top/Back Cover

Outside Mount

Step 1: Predrill the Top/Back Cover

- Position the top/back cover in its correct location over the window, making sure it is level and centered.
Important: For the shade to operate properly, it must be perfectly level.
- Mark the location of the cover on the wall, ceiling, or window frame.
- Take down the top/back cover and predrill 3/16" mounting holes according to the following guidelines:
 - For a ceiling mount, center the mounting holes across the depth of the upper surface.
 - For a wall mount, place the mounting holes about 1/2" below the top of the cover.
 - Place a mounting hole about 3" in from each end. (This ensures they will not interfere with the bracket mounting.) For shades over 48" wide, place additional holes approximately every 24".
 - If possible, position the mounting holes so that the mounting screws will reach a stud or solid backing. If you cannot mount to solid backing, you must use secure fasteners (not included).
- If the shade is motorized and the cover was not ordered predrilled at the factory, also drill an appropriate size hole for the motor cords according to the planned electrical connection.

Step 2: Attach the Top/Back Cover

- Place the top/back cover in its correct position and mark the positions of the mounting holes on the wall, ceiling, or window frame.
- Drill 1/16" pilot holes at the marked mounting hole locations.
- Attach the top/back cover using the long hex head screws provided.

Step 3: Attach the Brackets

- Determine the correct bracket placement depending on whether the shade lifting system is on the right or left. Make sure the shade will fall off the back of the roll.
- Snap the brackets into the top/back cover by placing the front corner of the bracket under the front lip of the top cover (Figure 11 on page 3) and then rotating the bracket upward until it snaps into place (Figure 12 on page 3). Be sure you are placing the motor or CCO bracket on the correct side so that the shade will hang from the back of the roll.
- Temporarily place the shade in the brackets (see instructions for the applicable lifting system) and ensure that the brackets are correctly spaced. (If necessary to ensure the shade is held securely, move the brackets slightly closer to the center. Insert shims between the brackets and the window frame as needed.)
- Remove the shade, and drill 3/16" holes in the back cover through the holes in the brackets. (Do not drill into the mounting surface behind the cover.)
- Drill 1/16" pilot holes in the wall, ceiling, or window frame at the bracket mounting hole locations.
- Attach the brackets, using the long hex head screws provided.
- Complete the installation by following the steps that apply to the lifting system of the shade you are installing.

Shades with Motorized Lifting Systems

Begin with Steps 1–3 under General Instructions for All Lifting Systems.

Note: After step 5, the motor must be connected by a qualified electrician. Switch wiring diagrams are included in a separate document.

Inside or Outside Mount

Motorized Step 4: Attach the Shade

400 Series Motors

- Attach the motor end of the shade by pushing it onto the motor bracket spear.
- Lift the idler end up over the bracket notch, rotating as needed, and drop the idler end pin into the idler bracket.

500 Series Motors

- Place the idler end of the shade in the idler end bracket.
- Align the motor end to the motor bracket with the limit switches facing down, and allow it to spring into place. Push the motor end firmly into the bracket so it snaps into the locking ring.

Note: If you need to remove the motor end after locking it into place, use a screwdriver to pry the ring out and push it back on the bracket.

Motorized Step 5: Test the Shade and Set the Limit Switches

- Connect the motor tester (by clamping each lead onto the motor wire of the same color), and verify that the motor is operational.
- Raise and lower the shade and check to see that it tracks properly and the lower edge is level. See Troubleshooting on page 11 if the shade telescopes to either side or does not raise and lower evenly.
- Check that the shade raises and lowers to the correct positions. If it does not, adjust the motor limit switches (instructions included in a separate document).
- Disconnect the motor tester and have the motor connected by a qualified electrician (wiring diagram included in a separate document).

Motorized Step 6: Snap the Fascia Onto the Brackets

- Position the lip of the fascia over the lip of the top/back cover (Figure 13).
- Rotate the fascia toward the wall and snap it into place (Figure 14).

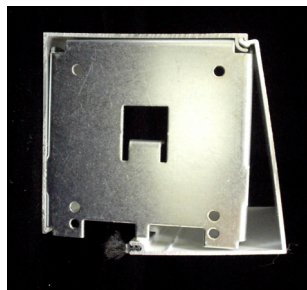


Figure 13 Fascia Going Onto Bracket

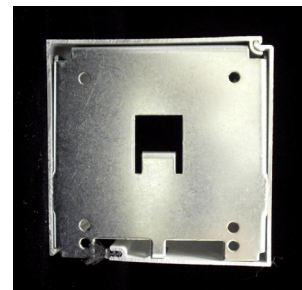


Figure 14 Fascia Snapped On Bracket

Inside Mount

Motorized Step 7: Install the Side Channels

- Predrill 3/16" mounting holes in the outside edge of each side channel according to the following guidelines:
 - Ensure the mounting holes will not interfere with any hardware already in the window frame.
 - Place holes about 1" from each end (Figure 15) plus one near the center.
 - For long channels, place additional holes about every 24".
- Place the side channels in position below the back cover (Figure 16) and use an awl to mark the positions of the predrilled mounting holes on the window frame.
- Drill 1/16" pilot holes in the window frame at the marked locations.
- Install the side channels using the hex head screws provided. (For convenience, a magnetic hex driver bit is recommended.)
- Insert the bottom rail of the shade into the side channels.

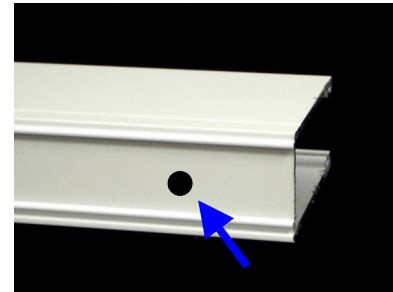


Figure 15 Side Channel Drill Point

Motorized Step 8: Install the Sill Angle (Optional)

If the windowsill is not level, the shade may require a sill angle. If the sill is level or close to level the light seal on the hem bar is sufficient to seal out all light, and the sill angle is not required.

- Predrill 3/16" mounting holes in the short side of the sill angle according to the following guidelines:
 - Center the holes across the depth of the sill angle
 - Ensure the mounting holes will not interfere with any hardware already in the window frame.
 - Place a mounting hole about 1" from each end plus one in the center.
 - For long sill angles, place additional holes about every 24".
- Position the sill angle on the windowsill, mark the positions of the mounting holes, and drill 1/16" pilot holes in the windowsill at the mounting hole locations.
- Attach the sill angle to the windowsill using the hex head screws provided.

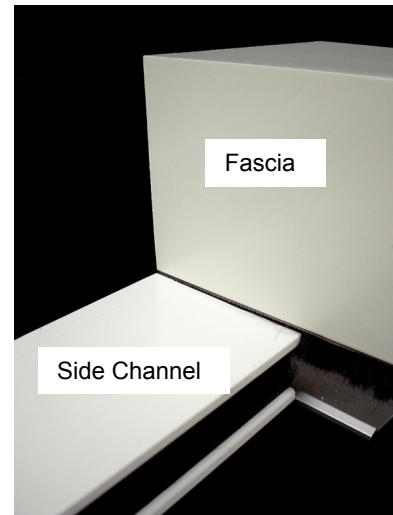


Figure 16 Side Channel Under Fascia

Outside Mount

Motorized Step 7: Install the Side Channels

- Drill 3/16" mounting holes in the side channels opposite the large factory-predrilled holes.
- Align the side channels below the back cover (see Figure 16). Make sure they are flush with the ends of the back cover and the large predrilled holes are facing out. Make sure the sill channel fits correctly between them and use a level to ensure they are perpendicular.
- Mark the positions of the mounting holes on the wall or window frame.
- Drill 1/16" pilot holes in the wall at the mounting hole locations.
- Attach the side channels using the hex head screws provided. If you do not reach solid backing, use the anchors provided or the appropriate secure fasteners (not included).
- Place the hole covers on the side channel holes.
- Insert the bottom rail of the shade into the side channels.

Motorized Step 8: Install the Sill Channel

- Drill 3/16" mounting holes in the sill channel opposite the large factory-predrilled holes.
- Position the sill channel on the wall between the side channels and make sure it is level and flush with the ends.
- Mark the positions of the mounting holes, and drill 1/16" pilot holes in the wall at the mounting hole locations.
- Attach the sill channel to the wall using the hex head screws provided.
- Place the hole covers on the sill channel holes.

Motorized Step 9 (for 4" Fascia Only): Place the End Covers

- On each end of the fascia, orient the end cover with the logo in the lower front corner. Align the pegs in the end cover with the holes in the bracket and push the end cover onto the bracket.

Shades with CCO Lifting Systems

Important: A CCO lifting system with a 3" fascia does not provide complete light blocking. The clutch projects below the bracket, which creates a gap between the bracket and the side channel allowing some light seepage.

Inside or Outside Mount

Begin with Steps 1–3 under General Instructions for All Lifting Systems.

CCO Step 4: Attach the Shade

- Attach the clutch end by pushing the clutch onto the bracket spear with the chain facing the floor (Figure 17).
- Lift the idler end up over the bracket notch, rotating as needed, and drop the idler end pin into the bracket (Figure 18).



Figure 17 CCO Clutch in Bracket



Figure 18 Idler in Bracket

CCO Step 5: Adjust the Shade

- Remove the packing strap, and raise and lower the shade. Check to see that it tracks properly and that the lower edge is level. See Troubleshooting on page 11 if the shade telescopes to either side or does not raise and lower evenly.

Warning: Do not lower the shade more than one inch below its finished height. For the shade to stay securely fastened, several inches of shade cloth must stay wrapped around the tube.

CCO Step 6: Set the Lower Bead Stop

A CCO lifting system has two bead stops on the chain to limit how far the shade can be raised or lowered. The bead stop for the upper limit, which also connects the chain, is put in position at the factory; the lower stop is placed when the shade is installed to allow it to be adjusted precisely for the window.

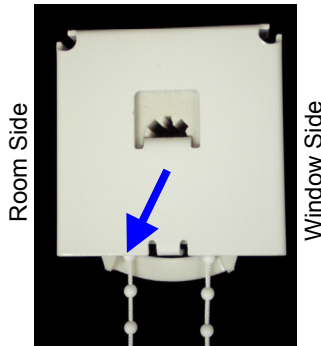


Figure 19 Clutch End

- Pull the back length of the chain down until the shade is at its lowest position in the window.
- Grasp the bead that is at the top front of the clutch (Figure 19), pull it down, and attach the bead stop at that bead. On a plastic chain, simply snap the bead stop onto the chain (Figure 20). For a metal chain, crimp the stop onto the chain with grooved pliers (Figure 21).



Figure 20
Plastic Chain
Stop



Figure 21 Crimp Metal
Stop

CCO Step 7: Snap the Fascia Onto the Brackets

- Position the lip of the fascia over the lip of the top/back cover (Figure 22).
- Rotate the fascia toward the wall and snap it into place (Figure 23).

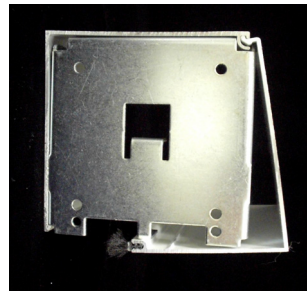


Figure 22 Fascia Going Onto
Bracket

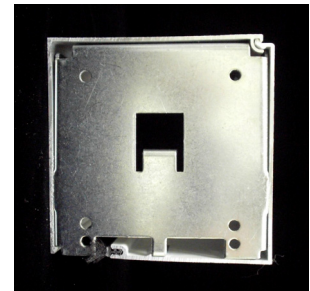


Figure 23 Fascia Snapped
On Bracket

Inside Mount

CCO Step 8: Install the Side Channels

- Predrill 3/16" mounting holes in the outside edge of each side channel according to the following guidelines:
 - Ensure the mounting holes will not interfere with any hardware already in the window frame.
 - Place holes about 1" from each end (Figure 24) plus one near the center.
 - For long channels, place additional holes about every 24".
- Place the side channels in position below the back cover and use an awl to mark the mounting hole positions on the window frame. (For 3" systems, place the shorter side channel on the clutch side.)
- Drill 1/16" pilot holes in the window frame at the marked locations.
- Install the side channels using the hex head screws provided. (For convenience, a 1/4" magnetic hex driver bit is recommended.)
- Insert the bottom rail of the shade into the side channels.

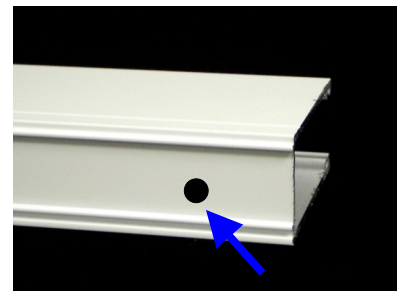


Figure 24 Side Channel Drill Point

CCO Step 9: Install the Sill Angle (Optional)

If the windowsill is not level, the shade may require a sill angle. If the sill is level or close to level the light seal on the hem bar is sufficient to seal out all light, and the sill angle is not required.

- Predrill 3/16" mounting holes in the short side of the sill angle according to the following guidelines:
 - Center the holes across the depth of the sill angle.
 - Ensure the mounting holes will not interfere with any hardware already in the window frame.
 - Place mounting holes about 1" from each end plus one in the center.
 - For long sill angles, place additional holes about every 24".
- Position the sill angle on the windowsill, mark the positions of the mounting holes on the sill, and drill 1/16" pilot holes in the windowsill at the mounting hole locations.
- Attach the sill angle to the windowsill using the hex head screws provided.

CCO Step 10: Attach the Chain Holder

Important: *The chain holder is a necessary feature to avoid strangulation hazard and to prevent damage to the clutch. Do not omit this step.*

- Hold the chain holder upright and position it against the wall or window frame, allowing enough slack so that the bead stops can rotate around the chain holder easily.
- Mark the location of the installation hole on the wall, and drill a 1/16" pilot hole.
- Attach the chain holder to the wall or window frame using the mounting screw provided. If you do not reach solid backing, use a secure fastener (not included).
- Roll the shade up and down to verify that it operates correctly. See Troubleshooting if the shade telescopes to either side or does not raise and lower evenly.



Figure 25 Chain Holder

Outside Mount**CCO Step 8: Install the Side Channels**

- Drill 3/16" mounting holes in the side channels opposite the large factory-predrilled holes.
- Align the side channels under the back cover and mark their correct positions, making sure they are flush with the ends of the back cover and the large predrilled holes are facing out. Make sure the sill channel fits correctly between them and use a level to ensure they are perpendicular.
- Mark the positions of the mounting holes on the wall or window frame.
- Drill 1/16" pilot holes at the mounting hole locations.
- Attach the side channels using the hex head screws provided. If you do not reach solid backing, use the anchors provided or the appropriate secure fasteners (not included).
- Place the hole covers on the side channel holes.
- Insert the bottom rail of the shade into the side channels.

CCO Step 9: Install the Sill Channel

- Drill 3/16" mounting holes in the sill channel opposite the large factory-predrilled holes.
- Position the sill channel on the wall between the side channels and make sure it is level and flush with the ends.
- Mark the positions of the mounting holes, and drill 1/16" pilot holes in the wall at the mounting hole locations.
- Attach the sill channel to the wall using the hex head screws provided.
- Place the hole covers on the sill channel holes.

CCO Step 10 (for 4" Fascia Only): Place the End Covers

- On each end of the fascia, orient the end cover with the logo in the lower front corner. Align the pegs in the end cover with the holes in the bracket and push the end cover onto the bracket.

CCO Step 11: Attach the Chain Holder

Important: *The chain holder is a necessary feature to avoid strangulation hazard and to prevent damage to the clutch. Do not omit this step.*

- Hold the chain holder upright and position it against the wall or window frame, allowing enough slack so that the bead stops can rotate around the chain holder easily (see Figure 25 on page 9).
- Mark the location of the installation hole on the wall, and drill a 1/16" pilot hole.
- Attach the chain holder to the wall or window frame using the mounting screw provided. If you do not reach solid backing, use a secure fastener (not included).
- Roll the shade up and down to verify that it operates correctly. See Troubleshooting if the shade telescopes to either side or does not raise and lower evenly.

Troubleshooting

Important: When troubleshooting, you might need to pull the shade down to expose part of the tube. However, only expose enough tube to be able to shim the shade, as explained below. If you allow the shade to unroll so much that the entire roll of fabric is falling from the back, the fabric might come off the tube.

Problem:

The shade does not track properly, or rolls up unevenly.

Solution:

The brackets may be installed unevenly. The shade will telescope toward the bracket that is lower. Use a level to check the bracket positions and adjust them using a shim as necessary.

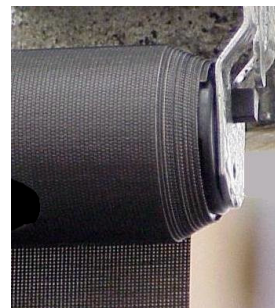


Figure 26 Telescoping to the Left

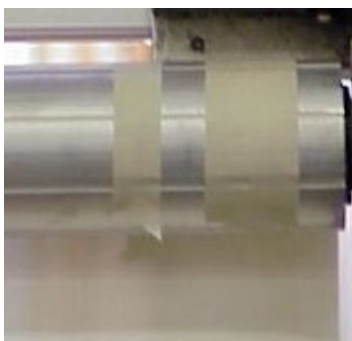


Figure 27 Masking Tape Shims

Problem:

The shade does not track properly, but the brackets are perfectly level.

Solution:

Lower the shade until a small part of the tube is exposed. Adjust the shade for telescoping by shimming with masking tape. Use a piece of masking tape on the side opposite the telescoping end; for example, if the shade telescopes to the left (Figure 26), place the masking tape on the right side of the shade (Figure 27). Raise and lower the shade to test for proper tracking. If the shade still does not track properly, repeat the above procedure. The correct amount of tape needed is determined by trial and error.

Problem:

The shade rolls up unevenly, but the brackets are perfectly level.

Solution:

Lower the shade until a small part of the tube is exposed. Place one or two long strips of masking tape along about half the length of the tube on the side that hangs too low. Raise and lower the shade to see if it now rolls evenly. If the shade still does not roll evenly, repeat the above procedure. The correct amount of tape needed is determined by trial and error.