CSA-DECOR3 Series

Shade Motor Bracket Installation and Motor Programming

The Crestron® CSA-DECOR3 Series with CSA-DECOR3-BRKT shade mounting brackets allow Crestron shades to be mounted on a wall, pocket, or window jamb. The adjustable mounting brackets allow adjustments to the shade installation without removing the mounting brackets from the wall. A QMT® shade motor provides precise and reliable control of the shade.

Shade Mounting

The supplied brackets mount to the wall or window jamb. The roller shade assembly and end caps then attach to the brackets.

CAUTIONS:

- There is risk of personal injury and equipment damage if the shade or associated parts fall during mounting. Use care when mounting. Use proper mounting hardware for the mounting surface (for example, screws or bolts) when securing the brackets to the surface.
- Two or more people are required to properly mount the shades. Three or more people are required to properly mount large shades and medium-sized coupled shades.

NOTES:

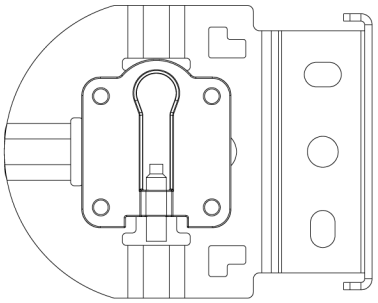
- The screws provided with the mounting brackets are intended for use on walls (or jambs) with wood or metal blocking. These screws should not be used for hollow drywall or masonry installations. It is the responsibility of the installer to make sure that the mounting method used is secure.
- Ensure that all mounting brackets are level and on the same plane.
- All shades must be aligned along a single axis (no off-angle positioning).

Swap the Idler and Motor Ends

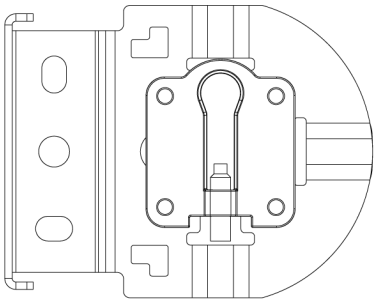
The roller shade assembly can be mounted so that the idler and motor ends are located in the ends of the tube opposite where they were when received from the factory (i.e., the idler end is on the left and the motor end is on the right). When the idler bracket is mounted, the keyhole in the idler bracket must be parallel with the wall; the head of the adjustment screw must face down. Rotate the keyhole so that it is in the correct vertical orientation. Refer to the illustrations below for details.

Swapping the hardware requires a Phillips screwdriver.

Left-Side Idler Bracket Wall Mount

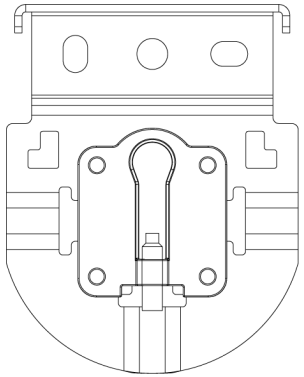


Right-Side Idler Bracket Wall Mount



Shade Motor Bracket Installation and Motor Programming

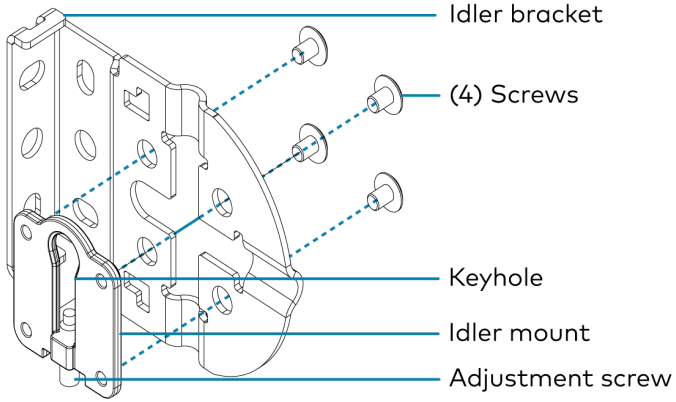
Left- or Right-Side Idler Bracket Ceiling or Header Mount



Rotate the Keyhole

When the idler bracket is mounted, the keyhole in the idler mount must be vertical and the head of the adjustment screw must face up. Rotate the keyhole so that it is in the correct vertical orientation.

1. Using a Phillips screwdriver, remove the four screws holding the idler mount to the idler bracket and then remove the idler mount. Keep all hardware for reassembly.

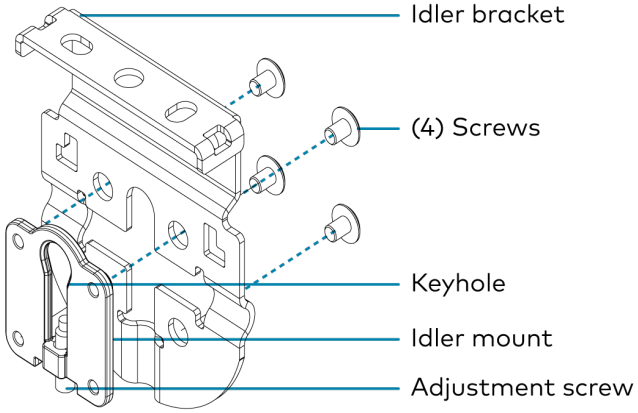


Remove the screws and separate the idler mount from the idler bracket.

2. Reassemble the idler mount to the idler bracket, ensuring that the keyhole is vertical when the idler bracket is mounted. The screw head on the vertical adjustment screw must face up.

Shade Motor Bracket Installation and Motor Programming

3. Secure the idler mount with the screws removed in step 1.



Mount the Brackets

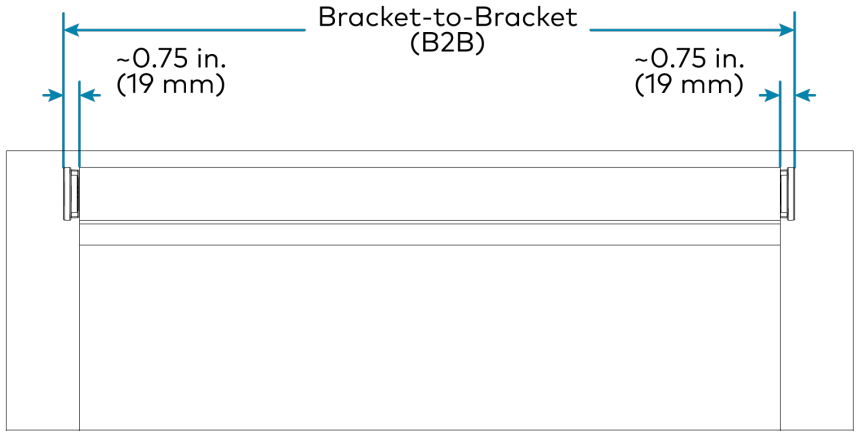
CAUTION: There is risk of personal injury and equipment damage if the shade or associated parts fall during or after installation. Use care during installation. Use mounting hardware (for example, screws or bolts) that is appropriate for the mounting surface when securing the brackets.

To mount the shade brackets:

1. Check for a proper fit by holding the roller shade assembly in the approximate mounting location.
2. Mark the locations of the brackets.
   - The mounting points must be level, plumb, and on the same plane. Use a laser level to make sure that the brackets are level.
   - Space the brackets according to the specifications on the order form.

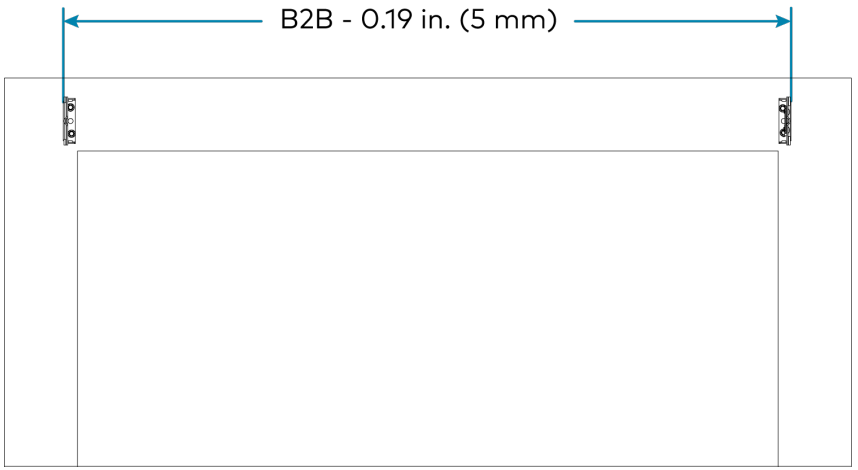
NOTE: End caps are used only when the shade is outside mounted is used. If inside mounted, end caps are not required unless the shade brackets protrude from the window opening. Adding end caps for an inside mount increases the light gap.

With Endcaps

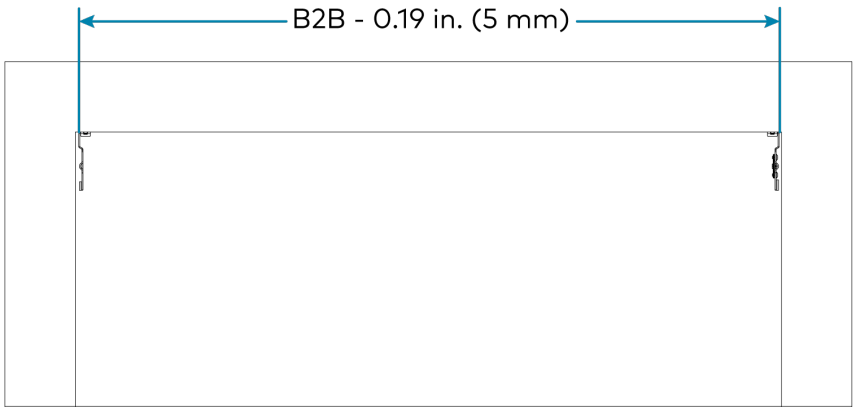


Shade Motor Bracket Installation and Motor Programming

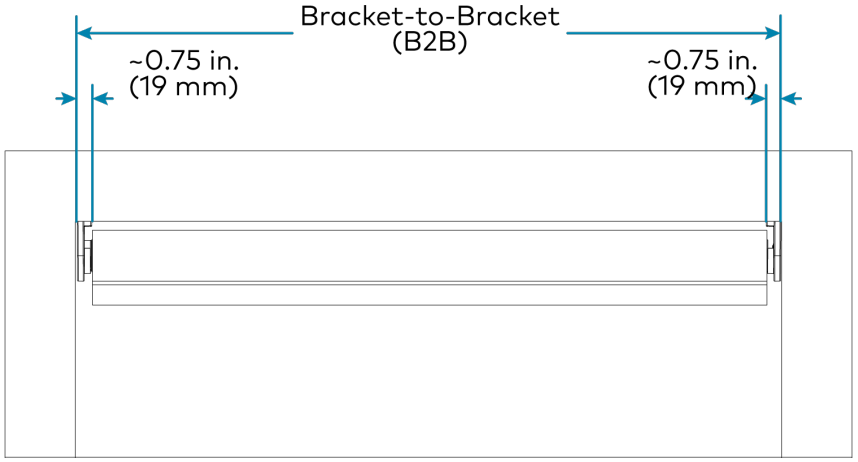
Without Endcaps



Without Endcaps (Inside Frame)



With Endcaps (Inside Frame)



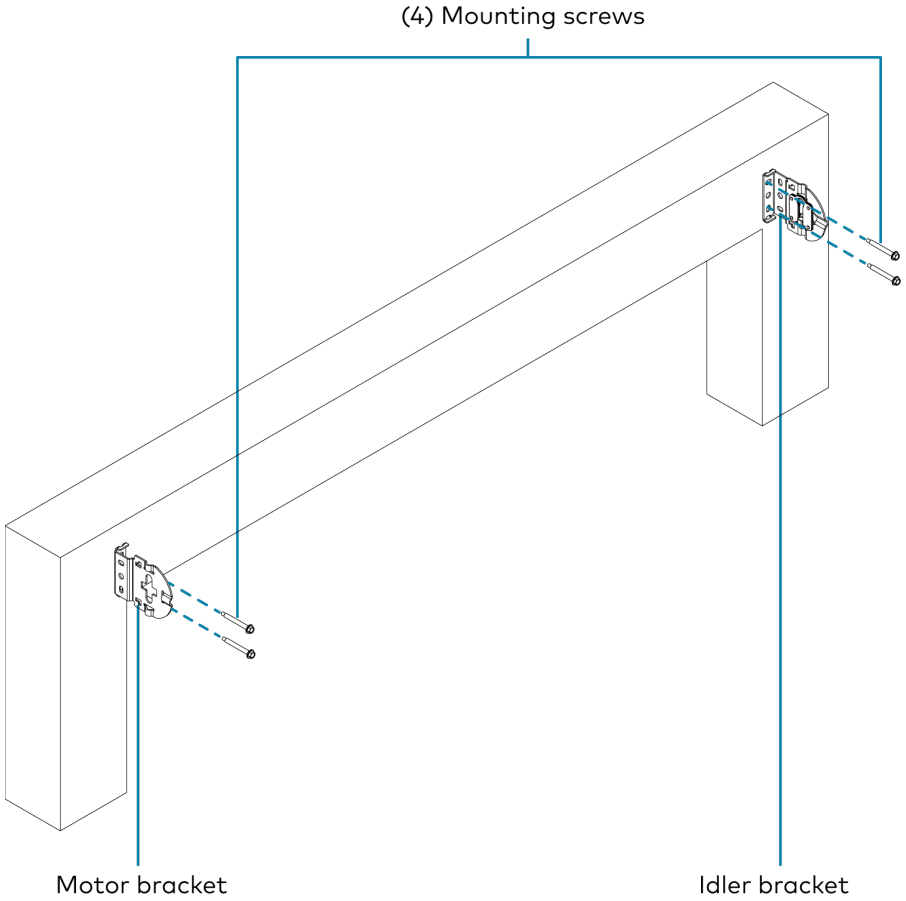
Shade Motor Bracket Installation and Motor Programming

3. Mount the brackets to the outside of the window frame (outside mount) or the inside of the window frame (inside mount). Use hardware that is appropriate for the mounting surface. Make sure the brackets are level and mounted to a flat surface.

NOTES:

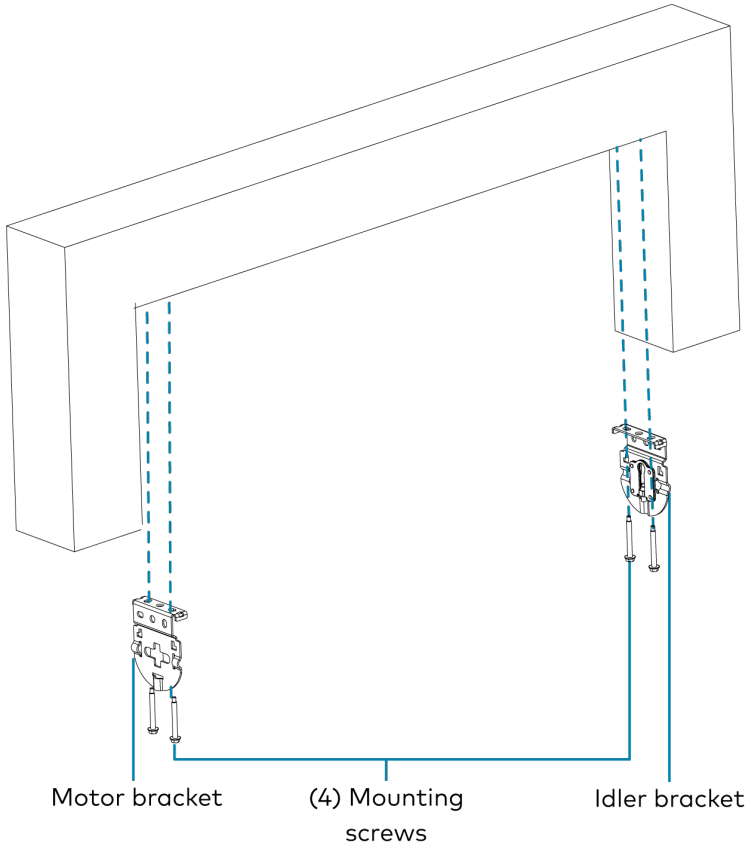
- For inside mounts, secure the mounting brackets to the window jamb or the window header.
- The screws provided with the mounting brackets are intended for use on walls (or jambs) with wood or metal blocking. These screws should not be used for hollow drywall or masonry installations. It is the responsibility of the installer to ensure that the mounting method used is secure.

Outside Mount



Shade Motor Bracket Installation and Motor Programming

Inside Mount

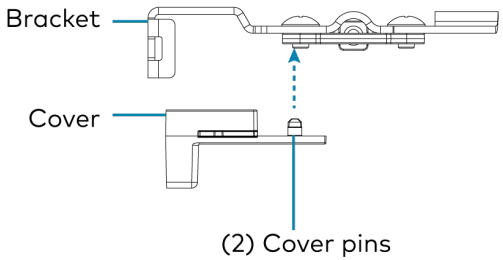


Attach the Rear Covers

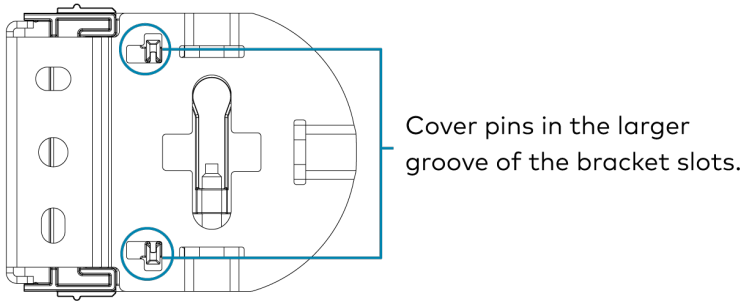
Attach the rear covers to the inside of each bracket.

1. Place the cover on the inside of the bracket and insert the cover pins into the bracket slots. The pins fit into the larger groove of the slots.

Idler Bracket and Cover Profile

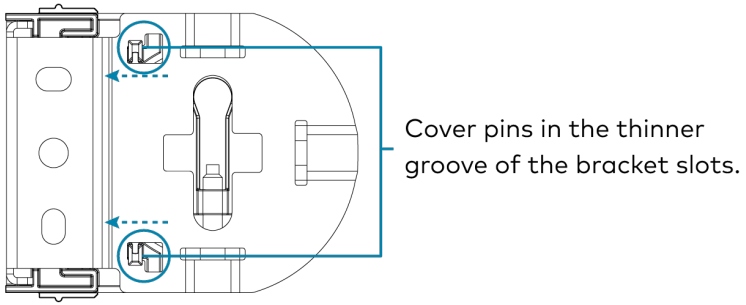


Idler Bracket and Cover Attached



Shade Motor Bracket Installation and Motor Programming

2. Move the cover so that the pins slide to the thinner groove of the bracket slots and the cover clicks into place.



Mount the Roller Shade Assembly

Mount the roller shade assembly to the mounting brackets.

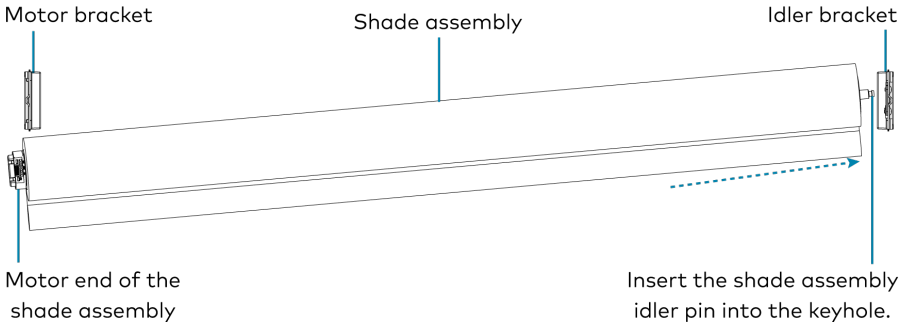
CAUTIONS:

- There is risk of personal injury and equipment damage if the shade or associated parts fall during or after installation. Use proper mounting hardware (for example, screws or bolts) for the mounting surface when securing the brackets to the surface.
- Two or more people are required to properly mount the shades. Three or more people are required to properly mount large shades and medium-sized coupled shades.

To mount the roller shade assembly:

1. Insert the idler pin into the top of the keyhole on the idler bracket (shown on the right-hand side). Slide the pin down into the keyhole. The idler pin should sit securely on the vertical adjustment screw.

Insert the Idler Pin into the Keyhole

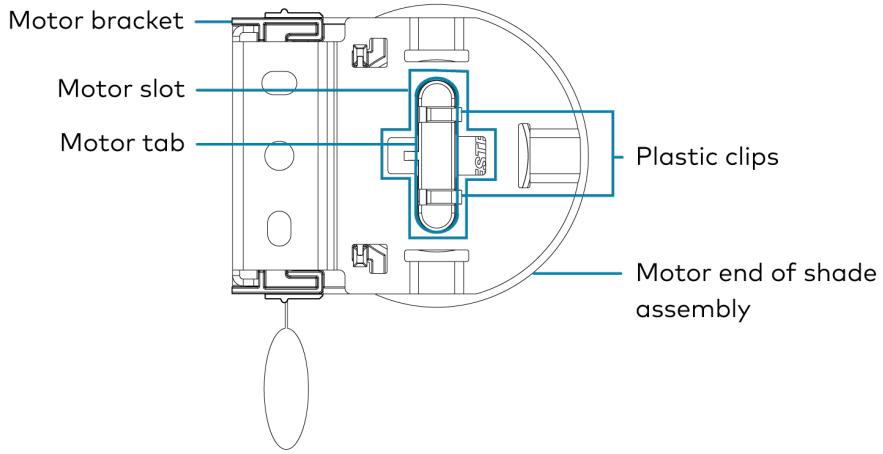


2. Raise and align the motor end of the roller shade assembly to the motor bracket.
3. Push the roller shade assembly toward the idler bracket to compress the spring on the idler pin.

Shade Motor Bracket Installation and Motor Programming

4. Push the tab on the motor end of the shade assembly into the motor slot of the motor bracket. When the shade is properly seated, the two plastic clips spring down to secure the motor to the motor bracket. Make sure that the shade is properly mounted before letting go.

Secure the Motor to the Motor Bracket



Maneuver the motor end of the shade assembly into the bracket slot. Plastic clips lock the motor into the motor bracket when the motor is fully inserted. Pull the motor end gently away from the motor bracket to ensure that the motor is securely locked into place.

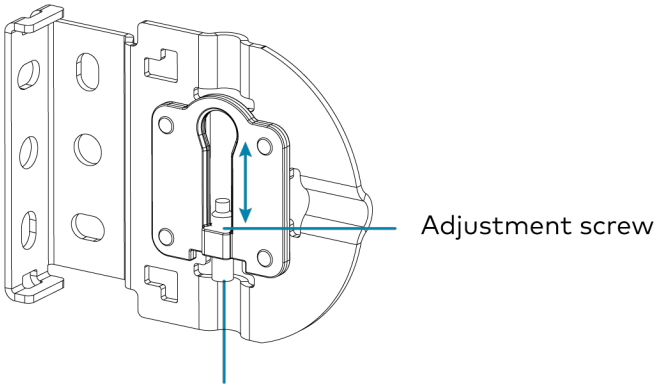
Level and Center the Shade Assembly

Once the roller shade assembly is mounted, make adjustments to level the shade and center it in the opening.

WARNING: If the roll-up diameter is close to the maximum allowance, do not use the vertical adjustment screw to level the shade. The fabric can be damaged from contact with the bracket or other hardware. Remount the bracket to level the shade.

To level and center the shade assembly, use the adjustment features built into the shade bracket.

Adjust the CSA-DECOR3 Bracket



To level the shade, use a 1.5 mm allen key (not included) to tighten or loosen the screw.

Fabric telescoping is when the shade fabric shifts to the left or right during operation. Telescoping typically occurs when the shade assembly is not level. Situations that may cause telescoping:

- The shade is not perfectly level.
- The shade bumps into objects while traveling up or down.
- The HVAC ductwork is blowing on the shade, or air is coming in through a window.

Shade Motor Bracket Installation and Motor Programming

- A foreign object is stuck to the shade fabric (for example tape, bugs, dust, etc.).

To prevent telescoping:

- Make sure there are no obstructions near the window area that the shade could bump into while traveling (for example, latches and cranks).
- Direct HVAC airflow away from the shade, and make sure that windows are closed while operating the shade.
- Lower the shade down to the bare tube. Inspect the front and back of the shade to make sure that no foreign objects are stuck to the shade fabric.

If the shade is still telescoping, shim using a small (1 in. x 1 in.) piece of tape on the bare tube. The shade must be rolled down past its lower limit to expose the tube.

- **Fabric is telescoping to the left:** Place the tape on the right side of the tube.
- **Fabric is telescoping to the right:** Place the tape on the left side of the tube.

Motor Wiring

Routing the Cables

To ensure proper functionality and a clean look, consider the following when routing cables and making connections:

- The cables should exit the wall near the motor end of the shade assembly.
- Route the cables so that they remain out of sight.
- The brackets provide a cutout in the upper corner, which allows wiring to be easily run to the motor.
- A 2-pin connector may be required for shades with a large roll-up diameter.
- Use cable ties to secure the cables to the loop on the bracket.
- Ensure that the cables and connectors do not make contact with the shade fabric.

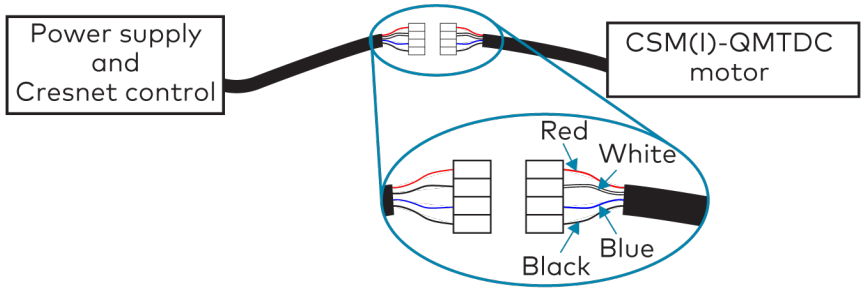
Shade Motor Bracket Installation and Motor Programming

Making the Connections

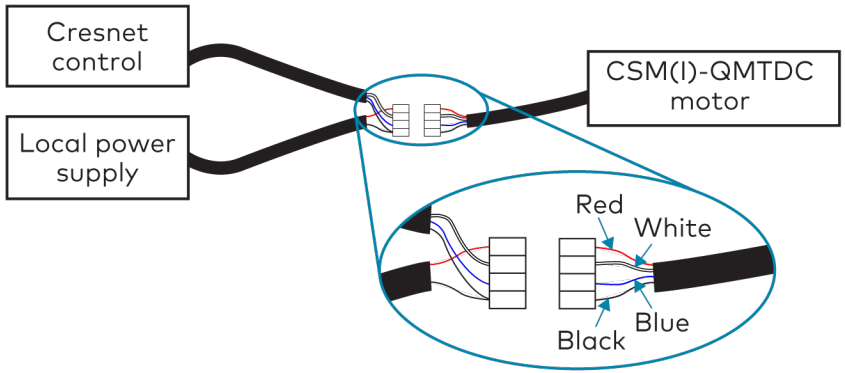
NOTES:

- When making the connections, do not use CRESNET-HP cable with the small connector. When using CRESNET-HP cable, replace the connector on the motor pigtail with the larger connector that is supplied with the shade.
- All shades should be home run from the power supply (CSA-PWS40 and CSA-PWS10S-HUB-ENET, both sold separately).

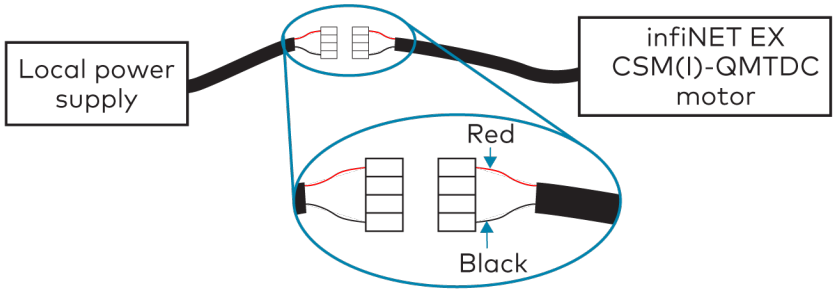
Cresnet QMT® Shade Motor with the Power and Control Coming from the Same Source



Cresnet QMT® Shade Motor with the Power and Control Coming from Separate Sources



Wire the inNET EX® Wireless QMT® Shade Motor



Shade Motor Bracket Installation and Motor Programming

Attach End caps

To attach the end caps:

1. Align the end cap with the bracket.
2. Slide the end cap over the bracket.

Motor Programming

Program the QMT® shade motor using the buttons on the motor.

> **NOTE:** The procedures described in this document can also be performed remotely using a control system.

Controls and Indicators

The Crestron QMT® shade motors have **UP**, **SET**, and **DN** (down) push buttons that are used to program the shade. The shade motors have a multicolor LED that lights red, amber, green, blue, or white to provide confirmation, operating mode, and error state feedback. The **UP** button is located closest to the LED, the **SET** button is the second button from the LED, and the **DN** button is the third button from the LED.

Shade Motor Bracket Installation and Motor Programming

Test the Shade Travel

Test the travel of the shade fabric to ensure that it does not come in contact with building materials and that the upper and lower shade limits are properly set.

WARNING: Care has been taken to ensure that the shade is properly balanced. Prior to initial operation, confirm that the shade assembly is level and centered and that the brackets are level and plumb. To prevent damage to the fabric, do not leave the shade unattended during the first few open and close cycles. Failure to follow these instructions may result in damage to the shade fabric, which is not covered by the warranty.

To test the shade travel:

1. Press **DN** to lower the shade until it reaches its lower limit. **Stop immediately if the following occurs:**
   - The shade fabric contacts the mounting brackets or building materials.
   - The shade fabric telescopes.
2. Verify that the shade stops at the desired lower limit. If the shade does not travel to the desired lower limit, adjust the shade limits. For details, refer to Adjust the Shade Limits.
3. Press **UP** to raise the shade until it reaches its upper limit. **Stop immediately if the following occurs:**
   - The shade fabric contacts the mounting brackets or building materials.
   - The shade fabric telescopes.
4. Verify that the shade stops at the desired upper limit. If the shade does not travel to the desired upper limit, adjust the shade limits. For details, refer to Adjust the Shade Limits.
5. After adjusting the shade travel, perform several complete open and close cycles to verify that the shade is functioning properly.

Adjust the Shade Limits

To adjust the lower limit:

1. Press and hold **SET** for 4 seconds to enter **Limit Setup** mode. The LED alternates between amber and green.
2. To begin lower limit setup, press **DN**. The green LED flashes.
3. Press **UP** and **DN** to set the shade to its desired position.
4. Press and hold **SET** for 4 seconds. The LED turns solid red to confirm that the lower limit was successfully set.
5. If the upper limit is not set, the motor automatically enters **Limit Setup** mode for the upper limit. To set the upper limit, refer to step 3 in the procedure below.

To adjust the upper limit:

1. Press and hold **SET** for 4 seconds to enter **Limit Setup** mode. The LED alternates between amber and green.
2. To begin upper limit setup, press **UP**. The amber LED flashes.
3. Press **UP** and **DN** to set the shade to its desired position.
4. Press and hold **SET** for 4 seconds. The LED turns solid red to confirm that the upper limit was successfully set.
5. If the lower limit is not set, the motor automatically enters **Limit Setup** mode for the lower limit. To set the lower limit, refer to step 3 in the procedure above.

Wireless Communications

The device connects to the Crestron network using the Cresnet® wired communications protocol. A CEN-GWEXER or CENI-GWEXER, CEN-GW1, or CENI-GW1 wireless gateway (all sold separately) is required for infiNET EX® wireless communication. Use the procedures outlined below to join or leave the wireless network and to verify communications between the device and the control system.

Shade Motor Bracket Installation and Motor Programming

Join a Wireless Network

To join a wireless network:

> **NOTE:** A device can be acquired by only one gateway.

1. Put the gateway into **Acquire** mode from the unit itself, Crestron Home® Setup app, or from Crestron Toolbox.

   > **NOTE:** In an environment where multiple gateways are installed, only one gateway should be in **Acquire** mode at any time.

2. Once all devices have been acquired, take the gateway out of **Acquire** mode. Refer to the gateway's manual for details.

Leave a Wireless Network

To leave a wireless network:

1. Make sure that there are no gateways in **Acquire** mode.
2. Place the device in **Acquire** mode. To place the device in **Acquire** mode, refer to Join a Wireless Network.
3. The device leaves the wireless network when it is searching for a new network. The LED flashes quickly to show that the device left the wireless network and that it did not join a new wireless network. Press the **SET** button to turn off the LED.

Verifying Communications Status

To check the communications status of the device, tap the **SET** button three times and then press and hold it down (tap-tap-tap-press+hold) for up to 2 seconds. The white LED indicates the communications status.

White LED	Communications Status
Turns on for 5 seconds	The device is communicating with the control system.
Flashes three times	The device is communicating with the gateway but the gateway is not communicating with the control system.
Flashes twice	The device was previously joined to the network but is not communicating with the gateway.
Flashes once	The device is not joined to the network.

LEDs

The LED flashes to provide a visual reference that the motor is operating normally or if it is in an error state.

The following table provides a list of possible LED patterns encountered during normal operation. All LEDs extinguish after 1 minute of inactivity.

LED Patterns

LED Pattern	LED Color	Operating Mode
Solid	Blue	The motor is in **Bootloader** mode.
Fast flash (1/4-second on, 1/4-second off)	White	The motor is in **Identify** mode.
Slow flash (1/2-second on, 1/2-second off)	Green	The motor is moving from a local button press.
Solid	Green	The motor is communicating with the control system program.

Shade Motor Bracket Installation and Motor Programming

Troubleshooting

Use the following sections to view corrective actions for possible issues and error states.

Trouble Situation

The following table provides corrective action for possible issues. If further assistance is required, please contact Crestron Support.

Crestron QMT Shade Motor Troubleshooting

Trouble	Possible Cause(s)	Action
The motor cannot be controlled and all of the LEDs are off.	There is no power provided to the motor.	Check the power connections between the power supply and motor.
	The power connection is reversed between the motor and the power supply.	Ensure that the power connection to the motor is not reversed.
The motor moves in the opposite direction.	The motor direction is reversed.	Reverse the direction of the motor.
The motor intermittently stops working.	The motor is exceeding its maximum duty cycle.	Reduce the duty cycle of the motor operation.
	The motor is encountering an obstacle or excessive friction, which is causing it to stop.	Verify that all components are aligned and running smoothly.
	The load on the motor is exceeding its maximum rating.	Verify that the fabric weight and tube size do not exceed the rating for the motor.
The LED is blue.	The motor is stuck in the bootloader.	Reload firmware to the motor.

Error State

Crestron QMT shade motors display error codes using the red LED on the interface. The LED flashes a pattern to indicate the error.

> **NOTE:** The error code does not flash while the motor is in a sleep state. If the error state is still active when the motor wakes up, the LED will continue to flash the code.

For example, when a 3-3 LED flash pattern occurs, the LED flashes three times, pauses for 1 second, flashes three times, pauses for 5 seconds, and then repeats until the error is corrected. When a 2-1 LED flash pattern occurs, the LED flashes two times, pauses for 1 second, flashes once, pauses for 5 seconds, and then repeats this code until the error is corrected.

The flash patterns are listed in the following table. Refer to Troubleshooting for possible corrections.

LED Blinking Patterns

LED Error Code	Error State
2-1	The motor is unable to communicate with the gateway. Check to ensure that proper Cresnet wiring is maintained. Check that the motor is connected to a wireless gateway.
2-2	The motor is not being polled by the control system. Ensure that the NetRF ID matches the control system program and that the program is running on the control system.
3-1	The motor limits are not set.
3-3	An obstruction is blocking the shade fabric from moving freely.
3-4	A motor overcurrent error exists. Check for obstacles or any sources of excessive friction.
3-5	A motor duty-cycle error exists. Reduce the operating duty cycle of the motor to correct the error.

Shade Motor Bracket Installation and Motor Programming

Additional Information

Original Instructions
The U.S. English version of this document is the original instructions.
All other languages are a translation of the original instructions.

Regulatory Model: M202034001

Doc. 7733E

07/31/24