Crestron **Drapery Track**
Programming & Setup Guide

INTRODUCTION

The Crestron® drapery track motors allow programming and setup without the use of a control system. Refer to the information in this guide for a detailed overview of the programming and setup of the drapery track motors.

The controls for drapery programming and setup can be found under a protective cover located on the bottom of the motor. Removing this cover also allows the AC power cord and Cresnet® cable to be routed out through the top of the motor housing. To do this, slide the wiring cover on the side of the motor off.

Removing the Wiring Cover
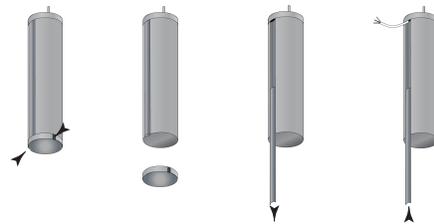
CONTROLS AND INDICATORS

The drapery motor interface has black **OPN**, **CLS** and **SET** push buttons that allow programming and setup of the drapery. The interface also has green, amber and red LEDs that provide confirmation, operating mode and error state feedback. Refer to the visuals and table below for a description of the LED and push button locations.

Push Button and LED Location (infiNET Drapery Controller)
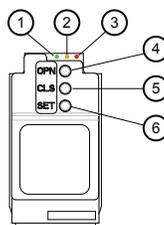
Push Button and LED Location (Cresnet Drapery Controller)
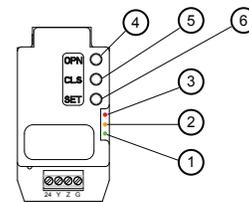
Drapery Track Controls & Indicators

#	DESCRIPTION	#	DESCRIPTION
1	Green LED	4	**OPN** button
2	Amber LED	5	**CLS** button
3	Red LED	6	**SET** button

RESET MOTOR SETTINGS AND SET INITIAL LIMITS

After fabric is installed on the drapery track, reset all motor settings before operating the motor. This procedure can also be used if the "Setup - Set Custom Limits" procedure on page 2 fails to set limits as desired.

To reset all motor settings, press and hold the **SET** button until the red LED begins blinking and the drapery jogs twice (about 15 seconds). Release the **SET** button. The drapery jogs twice again and cycles between the open and closed positions to set initial limits. It then jogs three times to indicate the touch motion feature has been reset to the default.

While the drapery cycles, observe to ensure that it travels to the anticipated open limit and then back to the expected close limit unobstructed. The drapery should not make contact with any building materials. If the drapery stops before reaching its anticipated open or close limit, or if the initial limits are not appropriate for the installation, follow the procedures in "Setup - Set Custom Limits" on the following page.

TEST MOTOR DIRECTION

After limits are set, the motor must be tested to ensure that the motor direction is correct.

Press and hold the **OPN** button to open the drapery. If the drapery begins to close the motor direction must be reversed.

To reverse the drapery direction use the following steps:

1. Ensure the drapery is not at the open or close limits. If necessary, use the **OPN** and **CLS** buttons to move the drapery away from the open or close limits.
2. Press and hold the **SET** button until the drapery jogs and the red LED flashes (about 3 seconds). Release the button.
3. Press and hold the **SET** button again until the red LED stops flashing. The drapery then opens and closes to set its initial limits.

NOTE: Reversing the direction of the motor resets any limits to the drapery track end-stops that were set from the factory or during the "Set Custom Limits" procedure. Follow the procedure in "Setup - Set Custom Limits" on the following page to reassign the limits if necessary.

Set Custom Limits

Follow these steps if either the open limit or the close limit needs to be reset after initial configuration. If this procedure fails to set limits as desired, perform the procedure in "Reset Motor Settings and Set Initial Limits" on page 1 and then attempt to set custom limits again.

NOTE: Ensure that no obstacles prevent the drapery from traveling to the open or close limits during this procedure, as this may result in incorrect limits being set.

To set the open limit for the drapery, complete the following steps:

1. Press and hold **OPN** to move drapery to existing open limit.
2. Press and hold **SET** until the red LED begins to flash rapidly, indicating the drapery is in *Open Limit Setup* mode. The drapery jogs open and closed once.
3. Move drapery to the desired position using the **OPN** or **CLS** push buttons.
4. Press and hold **SET** until the red LED turns off. The drapery jogs open and closed once to indicate the open limit has been set. The red LED flashes rapidly and the drapery moves to the close limit and back to the open limit to calibrate travel time. The red LED turns off.

NOTE: After fabric is installed on the track, the drapery carrier may be unable to move to its existing open limit because of the fabric stack back. If this occurs, the motor must be reset before a new open limit can be stored (refer to "Reset Motor Settings and Set Initial Limits" on page 1).

To set the close limit for the drapery, complete the following steps:

1. Press and hold **CLS** button to move drapery to the existing close limit.
2. Press and hold **SET** until the red LED begins to flash rapidly, indicating the drapery is in *Close Limit Setup* mode. The drapery jogs open and closed once.
3. Move drapery to the desired position using the **OPN** or **CLS** push buttons.
4. Press and hold **SET** until the red LED turns off. The drapery jogs open and closed once to indicate the close limit has been set. The red LED flashes rapidly and the drapery moves to the open limit, to the close limit, and back to the open limit to calibrate travel time. The red LED turns off.

Adjust Drapery Motor Speed Setting (Optional)

The factory default speed of the drapery motor is recommended, but the speed can be changed using the following procedure if desired:

1. Press and hold **SET** and **OPN** until red LED flashes rapidly and drapery begins cycling between open and close limits.
2. Tap **OPN** to increase the motor speed or **CLS** to decrease it. The drapery cycles more quickly or slowly as the button is tapped.
3. Press and hold **SET** for 2 seconds. The motor jogs to confirm new speed. It then cycles between limits to calibrate travel time.

Adjust Touch Motion Settings (Optional)

The touch motion feature automatically opens or closes the drapery when someone attempts to manually open or close it. If the drapery is manually pulled toward the closed position, the motor operates to fully close the drapery. If the drapery is pulled toward the open position, the motor operates to fully open the drapery.

There are three touch motion settings: off, low sensitivity, and high sensitivity. The default setting is high sensitivity.

- Off - Disables the touch motion feature.
- Low sensitivity - Requires a longer pull of the drapery to engage the motor.
- High sensitivity - Requires a shorter pull of the drapery to engage the motor.

To change the touch motion setting, press and hold **SET** and **CLS** simultaneously for approximately 3 seconds. The red LED begins flashing and the drapery jogs three times. The new setting is saved when the red LED turns off. This takes approximately 20 seconds.

Each time the touch motion setting is adjusted the setting advances to the next state in the following order: high sensitivity → off → low sensitivity → high sensitivity.

Joining an infiNET EX Network (infiNET EX Devices Only)

Before the device can be used in a Crestron control system, it must first join an infiNET EX® network by being acquired by an infiNET EX gateway.

NOTE: The device can be acquired by only one gateway.

NOTE: Before a drapery motor can be acquired by the gateway, the gateway or MC3 must be updated to the following minimum version:
- CEN-RFGW-EX: 2.001.0046
- MC3: 1.003.0008

To have the drapery motor acquired by a gateway, perform the following:

1. Put the gateway into *Acquire* mode, from the unit itself or from Crestron Toolbox™, as described in the latest revision of its operations guide, which is available from the Crestron Web site (www.crestron.com/manuals).

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

2. Place the drapery motor into the *Acquire* mode by doing the following:
    a. Tap the **SET** button three times then press and hold it down (tap-tap-tap-press+hold) until the red LED blinks once (this can take up to 10 seconds).
    b. When the LED blinks, release the button to start the acquire process.
        · The motor is acquired when the LED stops blinking.
        · If the acquire process fails, the LED flashes rapidly until the **SET** button is pressed.
3. Once all motors are acquired, take the gateway out of the *Acquire* mode. Refer to the latest revision of its operations guide, which is available from the Crestron Web site.

Leaving an infiNET EX Network

To leave a network, place the device into *Acquire* mode (refer to step 2 of "Joining an infiNET EX Network") when there is no gateway in *Acquire* mode.

The following table provides a list of possible LED patterns encountered during normal operation of the drapery.

LED Patterns

LED PATTERN	LED COLOR	OPERATING MODE
Two fast blinks then pause (1/8 second on, 1/8 second off, 1/8 second on, 5/8 second off)	Red	Firmware upgrade over Cresnet
Solid	Red	In bootloader
Fast blink (1/4 second on, 1/4 second off)	Red/ Green/ Amber	*Identify* mode. The Crestron Toolbox allows users to **Identify** a device; the LED of the corresponding shade blinks to identify itself
Slow blink (1/2 second on, 1/2 second off)	Green	Shade moving from local button press
Solid	Amber	Drapery communicating with control system program
Slow blink (1/2 second on, 1/2 second off)	Amber	Not communicating with control system program

Crestron drapery track motors display error codes using the red LED on the motor. The LED blinks a specific pattern to indicate an error. The blink patterns listed below are described as 3-5 or 3-6. This means that, for a 3-5 blink code, the LED blinks three times, pauses for 1 second, blinks five times, pauses for 5 seconds, and then repeats until the error is corrected. A 3-6 blink code blinks three times, pauses for 1 second, blinks six times, pauses for 5 seconds, and repeats this code until the error is corrected. Refer to the "Troubleshooting" section below for possible corrections.

LED Blinking Patterns

LED PATTERN	ERROR STATE
Error code 3-5	Motor duty cycle error exists. Reduce operating duty cycle of motor.
Error code 3-6	Communication error with motor. Ensure card is seated correctly.

The following table provides corrective action for possible trouble situations. If further assistance is required, please contact a Crestron customer service representative.

Crestron Drapery Track Motor Troubleshooting

TROUBLE	POSSIBLE CAUSE(S)	ACTION
LEDs on interface are all off and motor cannot be controlled.	No power being delivered to motor.	Check power connections.
	Poor connection between motor and interface.	Check connections between motor and interface.
Drapery is not responding to open or close commands and amber LED is not illuminated.	The infiNET EX connection has been lost.	Verify shade is within range of gateway.
		Verify shade is acquired by gateway.
	Cresnet connection has been lost.	Check Cresnet connections and ensure program is running.
Motor moves in opposite direction.	Motor direction is reversed.	Reverse motor direction. Refer to the "Test Drapery" section on the previous page.
Motor intermittently stops working.	Motor is exceeding maximum duty cycle.	Reduce duty cycle of motor operation.
	Motor is encountering an obstacle or excessive friction causing it to stop.	Verify all components are aligned and running smoothly.
	Load on motor is exceeding maximum rating.	Verify fabric weight and drapery travel does not exceed rating for motor.
Solid red LED displayed.	Motor stuck in bootloader.	Reload firmware to drapery track motor interface.