

## Description

The Crestron<sup>®</sup> CLCI-MCEX is a motor controller that provides open and close control of one shade or shutter motor. The CLCI-MCEX has outputs for raise/open and lower/close control.

Its ultra-slim design allows it to be installed in the ceiling, either next to or near the motor. Powered by infiNET EX<sup>®</sup> technology, the CLCI-MCEX communicates wirelessly with the control system, making it perfect for both new and retrofit applications. Install an in-line switch to provide local control of the shade or shutter motor.

### Additional Resources

Visit the product page on the Crestron website (<u>www.crestron.com</u>) for additional information and the latest firmware updates. Use a QR reader application on your mobile device to scan the QR image.



## Important Notes

CAUTION: Observe the following points:

Install the CLCI-MCEX only on 10 A branch circuits

- Install using wires that are 1 mm<sup>2</sup> to 2.5 mm<sup>2</sup> and that comply with IEC 60227-5 and local electrical codes.
- Use the CLCI-MCEX with loads that have a power factor of 0.50 or greater.
- To meet radiated emissions requirements, ensure that 3 feet (1 meter) of wiring leading to and from the CLCI-MCEX is straight and that there are no loops in the wiring.

NOTE: Observe the following points:

- Codes: This product must be installed by a licensed electrician and in accordance with all local and national electrical codes.
- Wiring: The CLCI-MCEX requires a neutral connection to operate.
- Wiring: Use copper wire only. For supply connections, use wires rated at least 75  $^\circ\text{C}.$
- Motor Type: For use with a permanently installed motor.
- Temperature: For use where temperatures are between 0° and 40 °C (32° and 104 °F).
- Transportation and Storage: Transport and store this device when temperatures are between -25° and 60  $^\circ C$  (-13° and 140  $^\circ F).$
- Spacing: If mounting one device above another, leave at least 115 mm (4-1/2 in) vertical space between them.

#### Installation

**WARNING:** To avoid fire, shock, or death, turn off the power at the circuit breaker or fuse and test that the power is off before wiring!

- Install the CLCI-MCEX:
  - 1. Turn off the power at the main circuit breaker.
  - WARNING: The device should be mounted in a well-ventilated and dry area.
  - 2. Identify the installation location for the CLCI-MCEX.
  - 3. Remove the end caps from the device by unfastening the two screws shown.



4. Loosen the strain relief clamp screw and rotate the clamp to the side for wiring.



5. To mount the device (optional), use two M3 X .05 screws (not included).



- Wire the device as shown in the illustration in the "Wiring" section.
  CAUTION: Use with wires that are 1 mm<sup>2</sup> to 2.5 mm<sup>2</sup>.
- 7. Tuck the wires under the strain relief clamps, and tighten the clamp screws. The jacketed cable must be clamped under the strain relief clamps.



- 8. Replace the end caps.
- 9. With the device still accessible, turn on the main circuit breaker.

## Wiring

**WARNING:** To avoid fire, shock, or death, turn off the power at the circuit breaker or fuse and test that the power is off before wiring!

Wire the CLCI-MCEX and a remote switch.







Remote Momentary (Multiway)

Live



## Local and Remote Mode

The CLCI-MCEX can operate in Local mode (without the use of a control system) or in Remote mode (with the use of a control system). The functionality and the type of switch that can be used differs based on the operating mode.

**NOTE:** Before using the CLCI-MCEX, ensure the device is using the latest firmware. Check for the latest firmware for the CLCI-MCEX at <u>www.crestron.com/firmware</u>. Firmware is loaded onto the device using Crestron Toolbox<sup>™</sup> software.

#### Local Mode

In Local mode, the CLCI-MCEX is controlled using a momentary switch. When the momentary switch is pressed, the shutter motor cycles through open, stop, close, and stop functions. For example, if the shutter motor was opened and then stopped, on the next press the shutter motor closes the shutters. The press after that stops the shutter motor.

NOTE: Holding the momentary switch performs no action.

#### Remote Mode

In Remote mode, the device must be connected to a control system. Changing the symbol in the control system program from momentary to maintained allows a maintained switch to be used with the device. When the maintained switch is up, the shutter motor opens the shutters. When the maintained switch is down, the shutter motor closes the shutters.

NOTE: There is no option to stop the shutter motor when using a maintained switch.

## Set Open and Close Times

To determine the maximum open and close heights for the motor, the CLCI-MCEX utilizes max open and max close times. The max open and max close time ranges between 1 second and 360 seconds and is set up in the symbol.

## Setup Button Function

The **Setup** button allows the CLCI-MCEX to join an infiNET EX network and to provide shutter motor control. Refer to "Wireless Communications" for joining an infiNET EX network.

The **Setup** button also provides a means of controlling the motor. Press and hold the **Setup** button to open or close the shade or shutter. Release the **Setup** button to stop the motor. Press and hold the **Setup** button again to reverse the direction of shutter motor.

### Wireless Communications

The device connects to the Crestron network via the infiNET EX communications protocol. Use the procedures outlined below to join or leave an infiNET EX network and to verify communications between the device and the control system.

#### Joining an infiNET EX Network

Before a device can be used in a lighting system, it must first join an infiNET EX network. To join an infiNET EX network, the device must be acquired by an infiNET EX gateway.

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

- Put the infiNET EX gateway into Acquire mode from the unit itself or from Crestron Toolbox. Refer to the gateway's manual at <u>www.crestron.com/manuals</u> for details.
   NOTE: In an environment where multiple gateways are installed, only one gateway should be in Acquire mode at any time.
- 2. Put the device into Acquire mode.

**NOTE:** The acquire process can also be initiated by a remote maintained switch or remote momentary switch (if equipped). Flip the maintained switch or press the momentary switch four times rapidly to enter Acquire mode, the Chan. 1 LED flashes (this can take up to 10 seconds).

a. Tap the Setup button three times and then press and hold it down (tap-tap-tappress+hold) until the Chan. 1 and Chan. 2 LEDs on the device flash once (this can take up to 10 seconds).

As of the date of manufacture, the product has been tested and found to comply with specifications for CE marking.

# CE

## Federal Communications Commission (FCC) Compliance Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following conditions:(1) This device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation. **CAUTION:** Changes or modifications not expressly approved by the manufacturer responsible for

compliance could void the user's authority to operate the equipment.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

- b. Release the button to start the acquire process. Chan. 1 LED and the attached load will flash slowly to show that the device is actively scanning the infiNET EX network.
  - Chan. 1 LED turns on for 5 seconds to show that the device has been successfully acquired by the infiNET EX network.
- If the device fails to acquire, the Chan. 1 LED flashes rapidly until a button is pressed. Ensure the gateway is in Acquire mode and within range before attempting the acquire process again.
- Once all devices have been acquired, take the gateway out of Acquire mode. Refer to the gateway's manual for details.

## Leaving an infiNET EX Network:

- 1. Verify that the device is not within range of a gateway that is in Acquire mode.
- Press the Setup button three times, and then press and hold it down (tap-tap-tap press+hold) until the Chan. 1 LED on the device flashes once (this can take up to 10 seconds), then release the button. The LED flashes slowly.
- 3. The LED then flashes quickly to indicate that the device has left the infiNET EX wireless network.
- 4. Press the **Setup** button to confirm that the device has left the infiNET EX wireless network

#### Verifying Communications Status

To check the communications status of the device, tap the **Setup** button three times and then press and hold it down (tap-tap-tap-press+hold) for up to 2 seconds. The Chan. 1 LED flashes to indicate the communications status. Refer to the following table for details.

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.

#### Specifications

The specifications for the CLCI-MCEX are listed below.

SPECIFICATION	DETAILS
Input Voltage	220-240 VAC, 50/60 Hz line power
Max Load	2.5 A FLA @ 240 VAC 15 A LRA @ 240 VAC
Environmental	
Temperature	0° to 40 °C (23° to 104 °F)
Humidity	10% to 90% RH (noncondensing)

#### Industry Canada (IC) Compliance Statement

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

The product warranty can be found at www.crestron.com/warranty.

The specific patents that cover Crestron products are listed at <u>www.crestron.com/legal/patents</u>. Certain Crestron products contain open source software. For specific information, please visit <u>www.crestron.com/opensource</u>.

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Installation Guide - DOC. 7929A (2049999) 05.18 Specifications subject to change without notice.