CLC-1DIMFLV2EX-24V

Wireless In-Ceiling 0-10V Dimmer, for 24VDC Applications

- *Compact 24VDC 2-channel 0-10V dimmer designed for EMerge Alliance® compliant applications*
- *Two independently controlled zone outputs*
- *Onboard inputs for photocell and occupancy sensor*
- *Allows Crestron control of any EMerge Alliance registered fixture*
- *No special wiring—installs inline at the fixture*
- *Maximum 2.5 Amp switched load capacity per channel*
- *Reliable wireless communication using infiNET EX™ mesh network technology*
- *Local controls for testing and maintenance*
- *Built-in support for control via standard momentary or maintained switch*
- *Setup via on-board button or connected switch*
- *Compatible with Armstrong® DC FlexZone™ grid*

infiNET EX™

The CLC-1DIMFLV2EX-24V is a 2-channel 0-10 Volt dimmer capable of dimming 2 independent 24 Volt DC lighting loads in an EMerge Alliance® application. Perfect for use with the Armstrong® DC FlexZone™ ceiling grid[1], its ultra-slim design allows it to be installed in the ceiling, on or near the lighting fixture. Powered by infiNET EX™ technology, the CLC device communicates wirelessly with the Crestron control system, making it perfect for both new and retrofit applications. Additionally, the CLC includes inputs for a photocell, occupancy sensor and standard toggle/momentary switch.

EMerge Alliance Registered

The CLC is 100% EMerge compatible, designed to flawlessly work within a 24VDC room-level power distribution system. The EMerge Alliance is a not-for-profit open industry association leading the rapid adoption of safe DC power distribution in commercial buildings through the development of EMerge Alliance standards[2]. Crestron is a proud member and supporter of the Alliance.

Two Channel 0-10V Dimming

The CLC-1DIMFLV2EX-24V supports dimming 0-10 Volt fluorescent ballasts or LED drivers across two independent channels. Two sets of screw terminals enable easy wiring to each load of up to 2.5 Amps.

Onboard Sensor Inputs

Each CLC comes equipped with onboard inputs for use with photocells and occupancy sensors. This unique feature eliminates the need for extra control wiring to integrate sensors. Not only does this reduce wiring costs, it also eliminates the need for extra hardware.

Out-of-the-box Control via Standard Switch

The CLC provides built-in support for load control via a maintained or momentary switch. Applications that require basic on/off control will benefit by using a typical cost-effective switch. A momentary push-button type switch can be used for cost-effective dimming control; tapping turns the connected loads on and off, while holding the button dims the loads up or down.

Complete Crestron Control

Because it's connected to the Crestron system, the CLC can also be controlled from any keypad, touch panel, remote, or mobile device. Tie in occupancy sensors and photocells together with Crestron Fusion EM™ software for a complete solution to effectively manage energy.

Simple Setup

Setup is simple, especially when using a connected maintained or momentary switch. A specific series of button presses initiates the wireless device acquire mode, so there's no need to climb a ladder to join the device to the infiNET EX network.

infiNET EX™ Communications

Built on steadfast infiNET™ technology, infiNET EX is the new standard in 2-way wireless connectivity. So robust, infiNET EX can handle installations in even the most urban settings. The redundant nature of its mesh networking technology means that a command will never be missed, resulting in faultless operation—something that is of the utmost importance when it comes to lighting control and building automation. The CLC-1DIMFLV2EX-24V harnesses this cutting edge wireless connectivity which affords it a level of robustness and dependability above other solutions.

More information on integrating the CLC-1DIMFLV2EX-24V in a 24VDC system can be found in the Commercial Lighting Design Guide: EMerge Alliance® Registered Products, 24 Volt DC Edition (Doc. 4558).

EMerge™ ALLIANCE REGISTERED

CLC-1DIMFLV2EX-24V Wireless In-Ceiling 0-10V Dimmer

SPECIFICATIONS

Load Ratings

Number of Channels: 2
Maximum Switched Load per Channel: 2.5 Amps @ 24 Volts DC (60W)
Dim Load Types: 0-10V Fluorescent, 0-10V LED; 65mA max sink per channel
Switch Load Types: 24 Volts DC fluorescent ballast, 24 Volts DC LED

Input Voltage

24 Volts DC, non-polarized

Wireless

RF Transceiver: 2-way, 2.4 GHz ISM channels 11-26 (2400 to 2483.6 MHz), IEEE 802.15.4 compliant
Range: 30 m (100 ft) indoors, 55 m (175 ft) outdoors for device to device; 45 m (150 ft) indoors, 75 m (250 ft) outdoors for device to gateway; all distances subject to site specific conditions
Gateway: Requires a CEN-RFGW-EX gateway or MC3

Connectors

24V: (2) Screw terminals for connecting to 24VDC rail via load device cable assembly[3]; terminals are non-polarized
+: (1) Screw terminal provides +24VDC to power sensors
R: (1) Screw terminal for connecting to remote switch
O: (1) Screw terminal for connecting to occupancy sensor
P: (1) Screw terminal for connecting to photocell
-: (1) Screw terminal for connecting common to sensors
-1: (1) Screw terminal for (-) 0-10V signal, channel 1
+1: (1) Screw terminal for (+) 0-10V signal, channel 1
-2: (1) Screw terminal for (-) 0-10V signal, channel 2
+2: (1) Screw terminal for (+) 0-10V signal, channel 2
SW 1 (full circle): (1) Screw terminal for common, channel 1
SW 1 (half circle): (1) Screw terminal for switched 24VDC, channel 1
SW 2 (full circle): (1) Screw terminal for common, channel 2
SW 2 (half circle): (1) Screw terminal for switched 24VDC, channel 2

Controls & Indicators

Setup: (1) Miniature pushbutton for joining an infiNET EX network
Chan. 1: (1) Green LED, indicates load is switched on
Chan. 2: (1) Green LED, indicates load is switched on

Enclosure

Plastic; UL 2043 approved, suitable for mounting in plenum airspace

Environmental

Temperature: 32° to 104°F (0° to 40°C)
Humidity: 10% to 90% RH (non-condensing)

Dimensions

Height: 7 in (178 mm)
Width: 2.13 in (55 mm)
Length: 1.63 in (41 mm)

Weight

7 oz (199 g)

MODELS & ACCESSORIES

Available Models

CLC-1DIMFLV2EX-24V Wireless In-Ceiling 0-10V Dimmer, for 24VDC Applications

Available Accessories

GLS-LCL Crestron Green Light™ Photocell, Closed-Loop
GLS-LOL Crestron Green Light™ Photocell , Open-Loop
GLS-ODT-C-1000 Dual-Technology Ceiling Mount Occupancy Sensor, 1000 Sq. Ft.
GLS-ODT-C-2000 Dual-Technology Ceiling Mount Occupancy Sensor, 2000 Sq. Ft.
GLS-ODT-C-500 Dual-Technology Ceiling Mount Occupancy Sensor, 500 Sq. Ft.
GLS-ODT-W-1200 Dual-Technology Wall Mount Occupancy Sensor, 1200 Sq. Ft.
GLS-OIR-C-1500 Passive Infrared Ceiling Mount Occupancy Sensor, 1500 Sq. Ft.
GLS-OIR-C-450 Passive Infrared Ceiling Mount Occupancy Sensor, 450 Sq. Ft.
GLS-OIR-W-2500 Passive Infrared Wall Mount Occupancy Sensor, 2500 Sq. Ft.
MC3 3-Series Control System (with integrated infiNET EX™ gateway)
CEN-RFGW-EX infiNET EX™ Wireless Gateway

Consult the Commercial Lighting Design Guide: EMerge Alliance® Registered Products, 24 Volt DC Edition (Doc. 4558) for additional compatible products.

Notes:

1. For more information, refer to www.armstrong.com/dcflexzone.
2. Information regarding the EMerge Alliance can be found at www.emergealliance.org.
3. Load device cable assembly by others. Refer to www.emergealliance.org/products for more information.

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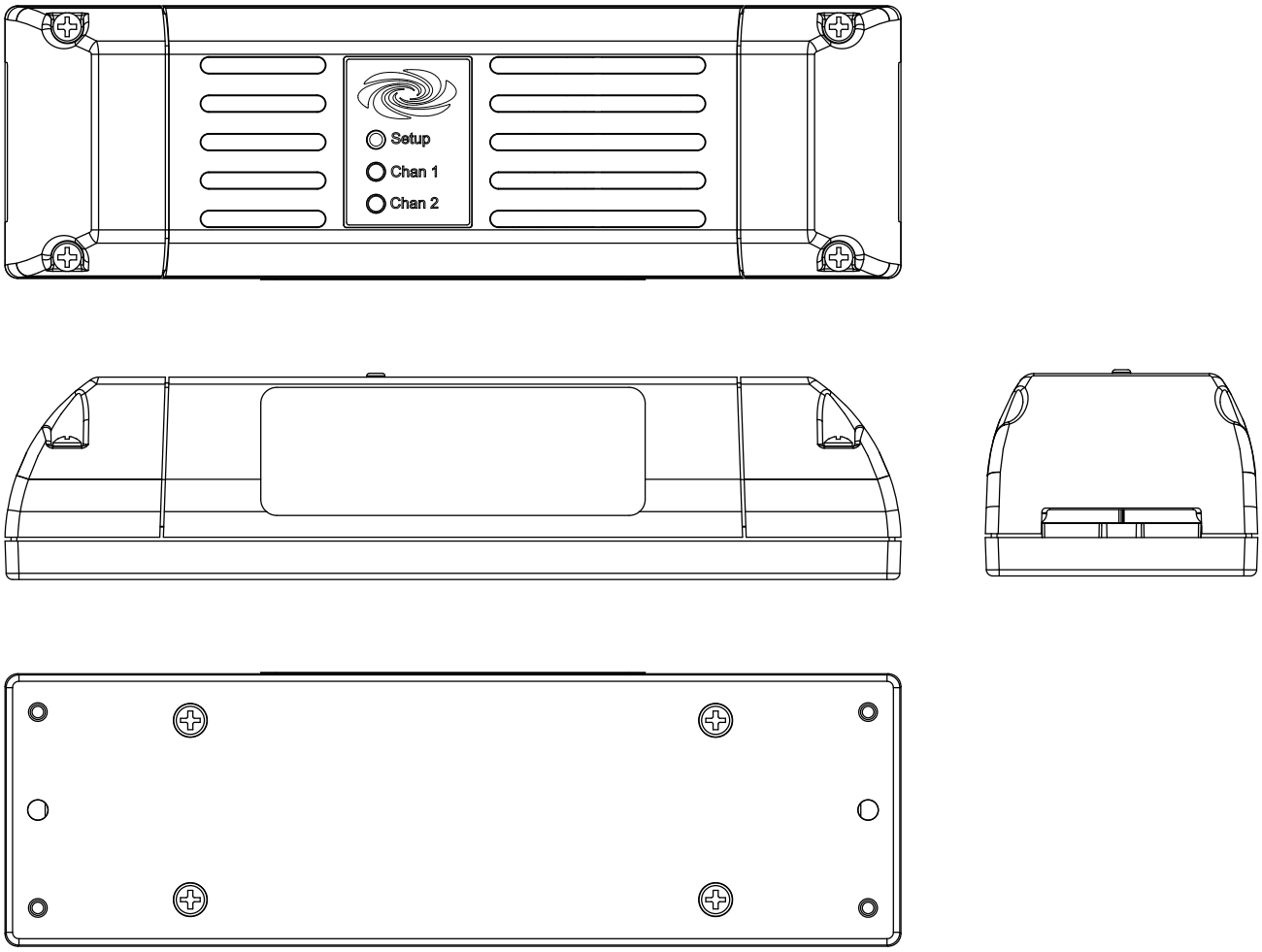
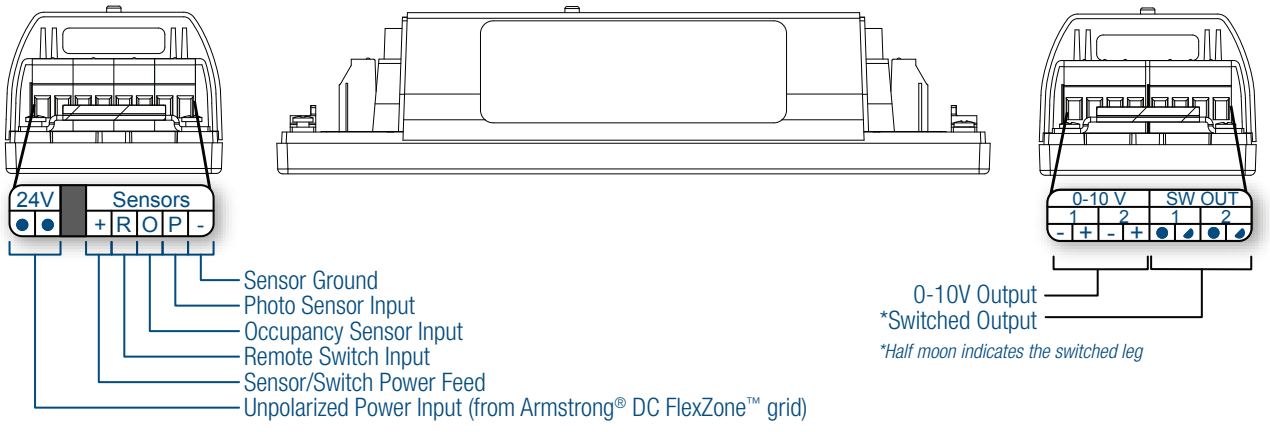
CAD DRAWING



CONNECTOR DETAIL

Input Side

Output Side



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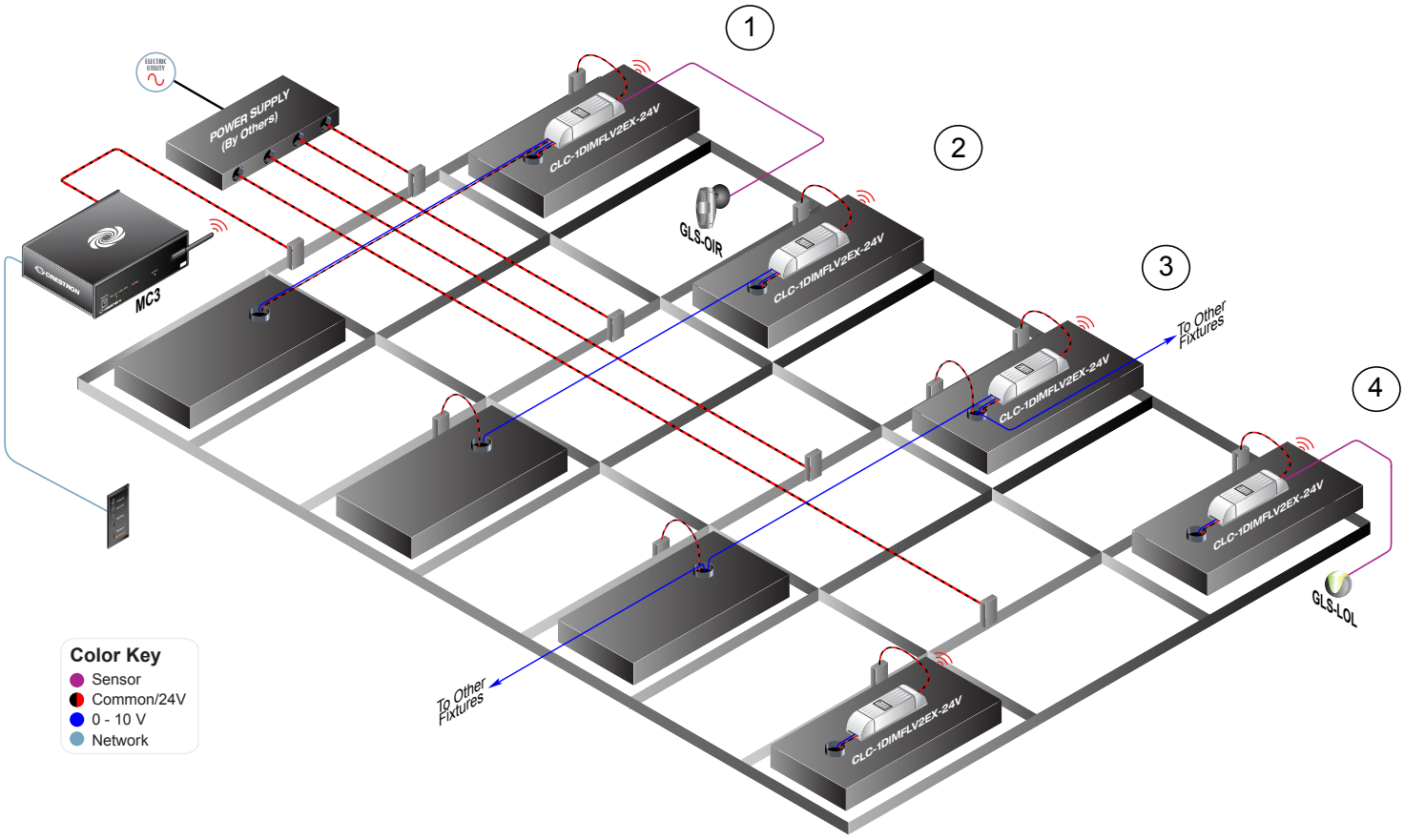
EXAMPLE APPLICATION



This diagram illustrates multiple ways of applying the CLC-1DIMFLV2EX-24V. Each row of lighting, identified by its number, is configured differently. Each method has value in certain applications.

1. A single CLC is powered by the Armstrong DC FlexZone grid. The CLC then passes 0-10V dimming as well as 24VDC power to each lighting fixture.

2. A single CLC is powered by the Armstrong DC FlexZone grid. The CLC then passes 0-10V dimming to each fixture, but only passes 24VDC to one fixture. The second fixture is independently powered directly by the grid.

3. Each lighting fixture and the CLC are independently powered directly from the grid. The CLC passes 0-10V dimming to each attached fixture. This 0-10V signal can be daisy-chained across multiple fixtures.

4. Each fixture is independently powered and controlled by a single CLC.

Note that in a typical system, photocells and occupancy sensors can be connected to the nearest CLC-1DIMFLV2EX-24V.

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All Crestron products are proudly manufactured in the United States.

Specifications subject to change without notice. Revised 05/11/11