CLS-EXP-DIMU

iLux® Universal Dimmer Expansion Module



- Works with Crestron iLux®, CLW, DIN, and CLX series dimmers
- Emulates the characteristics of the dimmer that controls it
- Up to 5 Expansion Modules can be connected to a single iLux dimmer channel
- Supports 120, 230, and 277 V LED, ELV, MLV, incandescent, and 2-wire dimmable fluorescent loads
- Auto-selects forward or reverse phase dimming
- Includes threshold adjustment for setting minimum fluorescent dimming level
- Built-in air gap relay at the output
- Mounts to a wall or above a suspended ceiling
- CEC Title 24 2013 Compliant

The CLS-EXP-DIMU expands iLux® Integrated Lighting Systems (CLS-C6 series) and other Crestron® lighting dimmers to allow for dimming of both forward and reverse phase type loads. Supported loads include LED¹, electronic low-voltage, magnetic low-voltage, incandescent, or 2-wire dimmable fluorescent. A single CLS-EXP-DIMU supports 120, 230, or 277 V loads up to 16 A.

System Compatibility

Any output channel of the iLux system can be used to control the CLS-EXP-DIMU to dim a fully loaded circuit. It is also compatible with CLW Series² in-wall dimmers, DIN series dimmers, and select CLX Series lighting control modules³.

Auto-Detecting Universal Dimming

The CLS-EXP-DIMU simplifies installation by auto-detecting the dimmable load type connected to it and selecting the appropriate operating mode to control that load. Reverse phase (trailing edge) mode supports incandescent and electronic low-voltage load types, while forward phase (leading edge) mode handles magnetic low-voltage, and other inductive load types.

Mounting

The metal enclosure is designed for mounting to a vertical surface⁴, and can be installed in an environmental air-handling space above a suspended ceiling. Conduit knockouts are provided on the bottom and lower sides. All connections are made via screw terminals behind the front cover.

Specifications

Load Ratings

Dimmer Channels

Load Rating 16 A

Minimum Load 25 W

Load Types LED¹, electronic low voltage, incandescent,

magnetic low voltage, 2-wire dimmable fluorescent (Advance Mark 10 Powerline® or equivalent)

Input Voltages

Line Power 120 to 277 VAC, 50/60 Hz

Control Input 120 or 230 VAC, 50/60 Hz, phase independent of line power and load

Connections

INPUT, CTRL (1) Captive screw terminal⁵;

Control input from CLS(I)-C6 Series, CLW-DIM Series², CLX(I)-DIM Series, GLXX-2DIM8, DIN-1DIM4, or DIN-1DIMU4

dimmers;

NOTE: Presents a 25 W load to the controlling dimmer; a maximum of 5 CLS-EXP-DIMU modules may be connected to the controlling dimmer, which cannot be wired to control any other loads besides the CLS-EXP-DIMU modules

INPUT, NEUT (1) Captive screw terminal⁵;

Neutral connection for control input

OUTPUT, DIM (1) Captive screw terminal⁵;
OUT Dimmed load output

OUTPUT, HOT (1) Captive screw terminal⁵;

Line power input



CLS-EXP-DIMU

iLux® Universal Dimmer Expansion Module

OUTPUT, NEUT (1) Captive screw terminal⁵;

Neutral connection for line power input and

load

GROUND (1) 3-terminal chassis ground bus bar

Controls and Indicators

FLOURESCENT

(1) recessed screwdriver-adjustable trim pot

behind removable cap;

THRESHOLD

Adjusts minimum brightness level

PHASE

(1) Yellow LED behind front panel; Illuminates when operating in reverse-phase

.....

STATUS

(1) Red LED behind front panel;

Illuminates when load output is on

POWER

(1) Green LED behind front panel;

Indicates line power is applied to the HOT

torminal

S1

(1) 2-position DIP switch behind front panel;

Selects forward, reverse, or auto-detect

dimming mode

S2

(1) 2-position DIP switch behind front panel;

Enables/disables zero-cross detection filter

Enclosure

Surface mount⁴ module with (2) integral mounting flanges, galvanized steel with gray matte powder coat front panel, extruded aluminum heat sink, (4) 0.5 in. (13 mm) or 0.75 in. (19 mm) conduit knockouts provided on bottom and lower left and right sides

Environmental

Temperature

32° to 104° F (0° to 40° C)

Humidity

10% to 90% RH (noncondensing)

Heat Dissipation 200 BTU/Hr at maximum load, 16 A

Dimensions

Height

8.82 in. (224 mm)

Width

6.39 in. (163 mm)

Depth

3.18 in. (81 mm)

Weight

3.34 lb (1.52 kg)

Compliance

UL® Listed, CEC Title 24 2013 Compliant

Models

CLS-EXP-DIMU

iLux® Universal Dimmer Expansion Module

Notes:

- For a list of compatible ballasts, visit
 www.crestron.com/lightingcompatibility
- 2. CLW-Series device must have a dedicated neutral.
- 3. Compatible only with forward-phase dimming modules.
- 4. Must be oriented upright, mounted to a vertical surface, with 6 in. (153 mm) minimum spacing above and below for proper ventilation and heat dissipation
- Captive screw terminals accept up to two 22 to 12 AWG (0.34 to 4.0 mm²) wires per terminal.

This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/How-To-Buy/Find-a-Representative or by calling 855-263-8754.

This product is covered under the Crestron standard limited warranty. Refer to www.crestron.com/warranty for full details.

 $\label{lem:contain} \textbf{Crestron products contain open source software}. For specific information, please visit <math display="block"> \underline{\textbf{www.crestron.com/opensource}}.$

Crestron, the Crestron logo, and iLux are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. Mark 10 Powerline is either a trademark or registered trademark of Koninklijke Philips Electronics NV in the United States and/or other countries. UL and the UL logo are either trademarks or registered trademarks of Underwriters Laboratories, Inc. in the United States and/or other countries. Other trademarks, registered trademarks, and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Crestron disclaims any proprietary interest in the marks and names of others. Crestron is not responsible for errors in typography or photography.

Specifications are subject to change without notice.

©2020 Crestron Electronics, Inc.

Rev 07/01/20



iLux® Universal Dimmer Expansion Module

