DIN Rail 2-Channel DALI® Interface



- Interfaces with 2 independent DALI® loops
- DALI-2[™] certified
- Controls up to 128 DALI ballasts
- Cresnet® or PoE communication for single-wire installation
- Integrated DALI power supply
- Crestron® DALI commissioning tool for easy setup
- Override input
- 9M wide DIN rail mounting
- CEC Title 24 2013 Compliant

The <u>DIN-DALI-2</u> is a DALI-2[™] certified DALI® interface for Crestron® systems that provides control of up to 2 individual DALI loops. Housed in a DIN-rail enclosure, the DIN-DALI-2 is a low-profile Cresnet® or Ethernet companion to most Crestron DIN rail processors and control systems. In addition to controlling the DALI data bus, it includes an integrated DALI power supply. Single-wire connectivity simplifies both new and retrofit installations, and Power-over-Ethernet (PoE) versatility assists in situations with existing CAT5 infrastructure.

This product is only available as part of a complete engineered and commissioned Crestron Green Light® system Contact Sales Support Services to obtain a quote for Factory Engineering Services and On-Site Commissioning.

Two DALI Channels

The dual-channel DALI outputs on the DIN-DALI-2 makes controlling up to 128 individual DALI ballasts easy. The Digital Addressable Lighting Interface (DALI) is a protocol used for the control of lighting in buildings and is found on ballasts available from many manufacturers. Since it offers ballast-level control, lighting loads powered from the same feed can be controlled individually. DALI is a great choice for retrofit lighting systems because it does not require changes in line voltage wiring. Likewise, DALI provides ultimate flexibility by allowing reconfiguring of zones after a system is installed.

Integrated DALI Power Supply

The innovative design of the DIN-DALI-2 eliminates the need for the external power supplies required by other DALI controllers on the market. Power is delivered via PoE or Cresnet¹, creating a true single-wire installation. Both Cresnet and PoE are capable of powering all 128 DALI ballast controllers. If desired, an external power supply may be used in conjunction with the DIN-DALI-2. An on-board switch allows the installer to choose the required mode during setup.

Commissioning Tool

Designed specifically for the DIN-DALI-2, the Crestron DALI commissioning software tool facilitates system setup. The intuitive menu-driven wizard provides step-by-step configuration of ballast properties, groups, and scenes. Guided by the software, one can simply set the ballast address and check connectivity status, edit minimum/maximum levels and fade time, and change ballast groupings and scenes. This powerful software makes ballast replacement straightforward through automatic identification of new hardware IDs. Settings from old ballasts are transferred to replacements with just a few mouse clicks, saving time and eliminating guess work and frustration.

Familiar Programming Interface

Controlling a DALI ballast is just like controlling any Crestron dimmer. Familiar visual Crestron configuration tools, as found in D3 Pro® and SIMPL, replace complex hardware addressing and communication protocols. Crestron D3 Pro software eliminates the need for custom programming, providing a complete design, development, and documentation solution for the lighting professional.

Override Input

An override input is provided to allow an external contact closure to momentarily override the control system program and force each ballast into its defined System Failure Level. States can be set and saved locally from the front panel, or remotely via software.

DIN Rail Installation

The DIN-DALI-2 is designed to snap onto a standard DIN rail for installation in a wall mount enclosure. Wiring connections are made using screw terminals positioned along the top and bottom, clearly accessible from the front for easy installation and servicing. All setup controls and indicators are positioned on the center front panel. When the DIN-DALI-2 is installed in an enclosure utilizing 45 mm cutouts, the front panel stays accessible while the connections are concealed.

Cresnet® and PoE

The DIN-DALI-2 communicates with a DIN-DALI-2 Automation Processor, or most other Crestron control systems, via the Cresnet control network or Power-over-Ethernet (PoE). A pair of Cresnet ports on the DIN-DALI-2 allows for easy daisy-chaining of several DIN Rail Series automation control modules. A standard Ethernet jack



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accommodates data and power to be delivered to the unit over one CAT5 cable.

NOTE: The DIN-DALI-2 is not compatible with Crestron 2-Series control systems or earlier.

Specifications

Connectors

NET (2) 4-pin 3.5 mm detachable terminal

blocks, paralleled; Cresnet® server port

OVERRIDE (2) 2-pin 3.5 mm detachable terminal

blocks, paralleled;

Sensing input for external low-voltage

contact closure;

Activates override mode when a closure is

present, forces each driver into its defined System Failure Level; Minimum Closure Rating: 10mA (per

module) at 24V

LAN PoE (1) 8-wire RJ-45 with 2 LED indicators;

10BaseT/100BaseTX Ethernet port; 802.3af Power over Ethernet compliant;

Green LED indicates link status; Yellow LED indicates Ethernet activity

DALI 1 (2) 2-pin 5 mm terminal blocks (D+) and

(D-);

Control a single DALI loop;

Each DALI loop controls up to 64 drivers;

3kVAC isolation between Cresnet/Ethernet ports;

Wire Gauge: 28 AWG to 12 AWG

DALI 2 (2) 2-pin 5 mm terminal blocks (D+) and

(D-)

Control a single DALI loop;

Each DALI loop controls up to 64 drivers;

3kVAC isolation between Cresnet/Ethernet ports; Wire Gauge: 28 AWG to 12 AWG

COMPUTER (1) USB Type-B female, USB 1.1 computer

console port

Controls & Indicators

TEST (2) Yellow LEDs and (2) miniature

pushbuttons for testing on/off and dim up/down for all attached drivers in

channel

DALI POWER (1) 2-position switch, sets DALI power

between internal (INT) and external

(EXT);

When set to INT DALI uses power supplied by the DIN-DALI-2; When set to EXT DALI uses power provided by external power supply (not

included)

NET ID (2) 7-Segment green LED digits and (2)

miniature pushbuttons for setting

Cresnet ID

SETUP (1) Red LED and (1) recessed miniature

pushbutton for enabling setup mode and

touch-settable ID

OVR (1) Red LED and (1) miniature pushbutton

for enabling override mode and saving

override presets

PWR (1) Green LED, illuminates when DC

power is applied to the NET port

NET (1) Yellow LED, indicates communication

with the control processor

RESET (1) Recessed miniature pushbutton, resets

internal processor

Power Requirements¹

PoE Power Usage IEEE 802.3af (802.3at Type 1) Class 0

PoE Powered Device;

capable of powering up to 128 DALI

drivers

Cresnet Power

Usage

9 W (0.375 Amps @ 24VDC), DALI

POWER switch set to INT;

2 W (0.08 Amps @ 24VDC), DALI POWER

switch set to EXT;

capable of powering up to 128 DALI

drivers

Bus Current Supply Maximum: 0.25A

Supply (per channel)

Guaranteed: 0.15A

Environmental

Temperature 32° to 104°F (0° to 40°C)

Humidity 10% to 95% RH (noncondensing)

Heat Dissipation 44 BTU/hr

Enclosure

Light gray polycarbonate housing with polycarbonate label overlay, UL94 V-O rated, 35 mm DIN EN 60715 rail mount, DIN 43880 form factor for enclosures with 45 mm front panel cutout, occupies 9 DIN module spaces (162 mm)



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Dimensions

 Height
 3.71 in. (95 mm)

 Width
 6.26 in. (159 mm)

 Depth
 2.35 in. (60 mm)

Weight

9.58 oz (272 g)

Compliance

Intertek® Listed for US and Canada, CE, CEC Title 24 2013 Compliant

To search for product certificates, refer to support.crestron.com/app/certificates.

Model

DIN-DALI-2

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Notes

 The DIN-DALI-2 may be powered by PoE or Cresnet network power. Unit will default to Cresnet if both are present.

Original Document

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

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The product warranty can be found at $\underline{\text{www.crestron.com/warranty}}.$

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