DIN-DALI-2

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 DIN-DALI-2 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 Cresnet[1], 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

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 Requirements[1]

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 (per channel)	Maximum: 0.25A
	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-0 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)

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

UL Listed, CE, CEC Title 24 2013 Compliant

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

Model

DIN-DALI-2
DIN Rail 2-Channel DALI® Interface

Notes:

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

6.26 in.
(159 mm)

2.28 in.
(58 mm)

3.71 in.
(94 mm)

3.5 in.
(90 mm)

2.342 in.
(59.5 mm)

DALI 1   DALI 2
DA+ DA- DA+ DA- DA+ DA-

INT   EXT
DALI POWER

NET ID

TEST

CRESTRON
DIN-DALI-2
2-CHANNEL DALI INTERFACE
WITH BUS POWER SUPPLY

SETUP OVR PWR NET

RESET

NET
24 Y Z G   24 Y Z G

OVERRIDE
OVR G   OVR G

COMPUTER

LAN PoE

CE

CRESTRON