



Type(s)

Project

Date

Notes

GENERAL INFORMATION

The Mosaic Remote DALI 4-Port module (MRIO-D4) is a remote input/output device that expands the advanced control capabilities of Mosaic to control Digital Addressable Lighting Interface (DALI) drivers and ballasts. The MRIO-D4 supports control for four DALI subnets, which can be configured as outputs for control and configured to receive DALI commands that trigger the Mosaic system. Mosaic affords you the most convenient and scalable way to control DALI fixtures and ballasts. Each DALI port supports up to 64 devices and each Mosaic system supports up to 500 DALI interfaces. The MRIO-D4 is a DIN rail mounted PoE device that can be deployed in the system anywhere it is needed and connects to a compatible Mosaic Controller over an Ethernet network.

ORDERING INFORMATION

REMOTE DALI 4-PORT MODULE

Model	Description
MRIO-D4	Remote DALI 4-Port Module

APPLICATIONS

- Retail stores
- Ballrooms
- Mixed-use spaces
- Integrated DALI lighting systems

FEATURES

- Controls four DALI subnets across four DALI interfaces (up to 256 DALI devices total per module)
- Supports DALI discovery and configuration commands
- Multiple MRIO-D4 devices can be combined on the same network to build the ideal scalable network of DALI devices
- Supports emergency DALI devices
- Power over Ethernet (PoE) powered for optimal distributive control over an Ethernet network

ADDITIONAL ORDERING INFORMATION

Mosaic Controllers

MODEL	DESCRIPTION
MSC	Mosaic DIN rail Controller
MSC X Mk3	Mosaic High Output Rack-mount Controller
MALC	Mosaic Atlas Controller
MALCP	Mosaic Atlas Pro Controller

Mosaic RIOs

MODEL	DESCRIPTION
MRIO-A	Mosaic Audio/Timecode Remote Device
MRIO-D4	Mosaic DALI Remote Device
MRIO-__	Mosaic Input/Output and Serial Remote Device

Mosaic Accessories

MODEL	DESCRIPTION
M-TS5	Mosaic 5-inch Touchscreen
M-TS8	Mosaic 8-inch Touchscreen
M108-__	Mosaic 8-button Station
MSC-NET Mk3	Mosaic DIN rail Network Switch
MSC-PS24	Mosaic 24 V DIN rail Power Supply



PRODUCT SPECIFICATIONS

FUNCTIONAL

- DALI Master
 - Control for up to 64 DALI Devices per interface including DALI device discovery and configuration
 - (Mosaic Designer only) Emergency lighting schedule, automatic function and duration tests; automatic querying for battery level and lamp hours; test result and error reporting web interface
- DALI Slave
 - Supports command input from external DALI systems, wall stations, or sensors to trigger Mosaic timelines
- Bus power detection and reporting of external DALI power supply
- Scalable support for up to 200 RIO modules, including MRIO-D4 modules, shared across multiple controllers in a single Mosaic Designer project. Device limits assigned to the connected Mosaic controllers depend on the controller type.
 - 64 for MSC 1, 2, and 4
 - 100 for MSC X / MALC / MALCP
- Support for up to 500 DALI Interfaces shared across multiple controllers in a single Mosaic Design project. Device limits assigned to the connected Mosaic Controllers depend on the controller type:
 - 16 for MSC 1
 - 32 for MSC 2
 - 64 for MSC 4
 - 100 for MSC X / MALC / MALCP
- Hardware watchdog and recessed reset button

MECHANICAL

- Six-unit wide DIN rail mounting enclosure complies with EN60715 (35/7.5 rail)
- Compact, plastic enclosure
- Rotary switch for selecting network address
- DALI wiring connections use pluggable rising clamp terminals

ELECTRICAL

- RJ45 connection supports 10/100Base-TX Ethernet
 - Link/Data LEDs
 - Static IP or DHCP addressing support
- PoE powered (IEEE 802.3af, Class 2) 7 W max
- Ports can transmit and receive DALI commands* and supports DALI standards: EN 62386-101:2009, EN 62386-102:2009, EN 62386-202:2009, EN 62386-209:2011
 - *DALI wiring connections made using pluggable 5.0 mm (0.2 in) rising clamp terminals
 - DALI bus isolated from Ethernet connection

THERMAL

- Ambient temperature: 0°C to 50°C (32°F to 122°F)
- 10%–90% relative humidity, non-condensing
- IP40 Ingress protection

REGULATORY AND COMPLIANCE

- cULus Listed
- CE/UKCA compliant

Remote Module Dimensions†

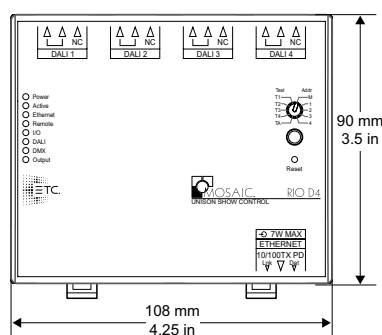
MODEL	HEIGHT		WIDTH		DEPTH	
	mm	in	mm	in	mm	in
MRIO-D4	90	3.5	108	4.25	40	1.6

Remote Module Weight†

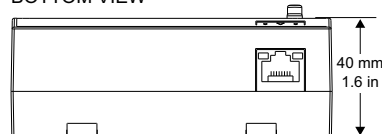
MODEL	WEIGHT		SHIPPING WEIGHT	
	kg	lb	kg	lb
MRIO-D4	0.2	0.5	0.4	0.9

†Weights and dimensions are typical.

FRONT VIEW



BOTTOM VIEW



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