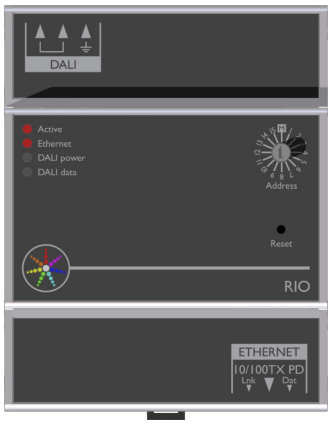
RIO D

Remote Input Output DALI

Overview

The Pharos RIO D (Remote Input Output DALI) device provides a convenient and scalable way to control DALI fixtures and ballasts from Pharos Controllers. Each RIO D supports a single DALI bus, which can be used as an output for control and as an input for triggering. Each device can be placed where it is needed and connected to a Pharos Controller over an Ethernet network.



Features

DALI Control

Control up to 64 DALI devices from each RIO D, with support for commissioning with DALI discovery and configuration commands. Pharos Designer includes a convenient drag-and-drop interface for DALI patching and timeline programming. Multiple RIO D units can be used together as part of a single Pharos system to provide distributed DALI control over an Ethernet network.

Emergency Lighting

DALI Ballasts for emergency lighting have special requirements for regular testing, error detection and fault reporting. Pharos supports this with the ability to schedule automatic Function and Duration tests, automatic querying for battery level and lamp hours, and a full test result and error reporting web page.

Scalable

Up to 200 Remote Devices can be combined with one or more Pharos Controllers on the same network to build the ideal system for your installation. Each Remote Device is easily addressed using a convenient thumb wheel. Whether one Controller or many, it's all easily programmed using our Designer software.

DALI Triggering

Pharos can also integrate with an existing DALI installation by listening in to DALI control messages sent by another control system or a DALI wall panel and using these as triggers for actions within the Pharos system.

Pharos Trigger

Timing is everything. Whatever the stimulus, Pharos Trigger can handle it. You can control your lighting with responsive, reactive software. Pharos Trigger is a rules engine that uses conditional logic and a broad range of interfaces and protocols. Send and receive any command, to and from any system. Conditional logic is supported, along with a powerful built-in scripting language.

PoE Powered

As a Power-over-Ethernet (PoE) device, the RIO can be placed at any remote location and only needs a single Cat5 cable that provides both power and data.

Installer Friendly

Made for permanent installation, with installer-friendly 0.200" (5.08mm) plug-in rising clamp terminals, a rugged, compact enclosure, and easy DIN rail mounting.

Pharos Designer

Programmed and configured using the free Pharos Designer software – available for Windows or Mac OS X – with upload over Ethernet.

Network

Works with any Pharos Controller and links to it using standard protocols over an Ethernet network.

5 Year Warranty

Designed and manufactured in the UK, with quality and reliability our top priority.

Certifications

CE compliant, ETL/cETL listed, and California Title 20/24 compliant.

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Specifications subject to change without notice (01-05-2021).

Capabilities

DALI Master	Control for up to 64 DALI devices; DALI discovery and configuration commands
DALI Slave	Use DALI messages from other systems or wall panels as triggers in Pharos
Emergency Lighting	Schedule automatic Function and Duration tests; automatic querying for battery level and lamp hours; test result and error reporting web page
Bus Power Detection	A separate DALI bus power supply is required – but the RIO D can detect and report bus power errors
Scalable	Support for up to 200 RIO D units in a single system – with each Controller supporting up to 100 (LPC X), 64 (LPC 4), 32 (LPC 2), 16 (LPC 1/TPC) units

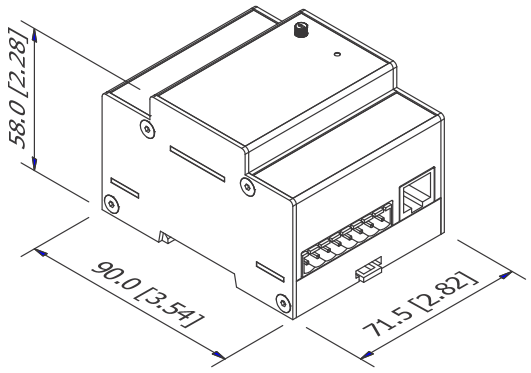
Interfaces

Ethernet	RJ45 socket for 10/100Base-TX Ethernet with Link/Data LEDs; Static IP or DHCP; Power-over-Ethernet (PoE)
DALI	Master (up to 64 devices) or Slave *

* Install-friendly 0.200″ (5.08mm) plug in rising clamp connectors (included)

Specifications

Certifications	CE compliant, ETL/cETL listed
Power	PoE (IEEE802.3af, Class 1) 1.5W typical
Required	Any Pharos Controller
Addressing	By rotary selector switch
Temperature	0°C to 50°C (32°F to 122°F)
Humidity	10-50% relative, non-condensing
Ingress	IP40
Physical	4 unit wide DIN rail mounting enclosure (DIN43880 / EN60715 (35/7.5 rail)) 0.3 kg (0.7 lbs)
Shipping	20 x 15 x 12 cm (8″ x 6″ x 5″) 0.5 kg (1.1 lbs)
Recovery	Hardware watchdog and recessed reset button
Warranty	5 years



Order Code & Variants

RIO D	Remote DALI Device (DALI)

Pharos Controller required

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