



# Remote Input Output DALI

The Pharos RIO D (Remote Input Output DALI) device provides a convenient and scalable way to control DALI fixtures and ballasts from Pharos Designer 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 Designer Controller over an Ethernet network.



#### **RIO D 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 Designer 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 Designer 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 Designer 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 Designer 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 Designer system.



## Designer Trigger

Timing is everything. Whatever the stimulus, Designer Trigger can handle it. You can control your lighting with responsive, reactive software. Designer 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.



#### Power-over-Ethernet

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



## Pharos Designer

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



## 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.



#### Network

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





# Capabilities

Control for up to 64 DALI devices including device discovery **DALI Control** 

and configuration

**DALI Receive** Receive DALI messages from other controllers such as wall

panels or occupancy sensors

**Emergency** Schedule automatic Function and Duration tests; automatic Lighting querying for battery level and lamp hours; test result and

error reporting web page

**Bus Power** Detect and report bus power status, a separate DALI bus Detection

power supply is required

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** RI45 socket for 10/100Base-TX Ethernet with Link/Data LEDs;

Static IP or DHCP; Power-over-Ethernet (PoE)

DALI Port can transmit and receive DALI commands \* Supports DALI standards: EN 62386-101:2009,

EN 62386-102:2009, EN 62386-202:2009, EN 62386-209:2011

# **Specifications**

PoE (IEEE802.3af, Class 1), 1.5W typical **Power** Any Pharos Designer Controller Required

**Configuration** Pharos Designer 2

Addressing By rotary selector switch **Temperature** 0°C to 50°C (32°F to 122°F) Humidity 10-50% relative, non-condensing

Ingress

**Physical** 4 unit wide DIN rail mounting enclosure

(DIN43880 / EN60715 (35/7.5 rail)) 7.2 x 9 x 5.8 cm (2.8 x 3.5 x 2.3 in)

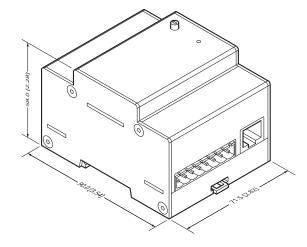
0.3 kg (0.7 lbs)

**Shipping** 20 x 15 x 12 cm (8 x 6 x 5 in)

0.5 kg (1.1 lbs)

Recovery Hardware watchdog and recessed

reset button



## Order Code & Variants

RIO D Designer Remote DALI Device (DALI)

Pharos Designer Controller required

# Warranty & Certifications

Warranty 5 years

**Certifications** CE compliant, UKCA compliant,

ETL/cETL listed.











<sup>\*</sup> Install-friendly 0.200" (5.08mm) plug in rising clamp connectors (included)