

OVERVIEW

The Pharos Controllers (TPC, LPC, LPC X, AVC) provide a host of triggering interfaces. However, many installations require more triggering interfaces than the Controllers alone support or may need support for remote locations. The Remote Input Output (RIO) Devices address these additional requirements and any number can be incorporated seamlessly into a Pharos Ethernet system.

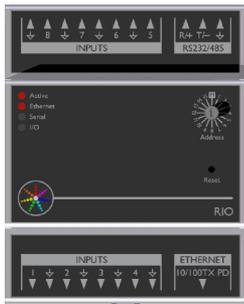
There are five versions available:

RIO 80, 44 & 08

The RIO 80, 44 and 08 provide convenient remote inputs and outputs for Pharos Controllers in a scalable solution for show control over an Ethernet network. Each RIO has a multi-protocol serial port, including DMX output, and a combination of multi-functional digital/analog inputs and relay outputs.



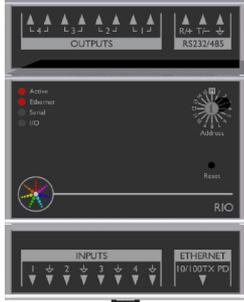
RIO 80



- 8 individually selectable digital or analog inputs.
- Tri-mode digital inputs: active high, low or contact closure.
- RS232/485 multi-protocol serial port, including DMX output.
- Inputs and outputs isolated from network.
- Rotary switch for selecting network address.
- RJ45 socket for 10/100Base-TX Ethernet.
- IEEE 802.3af PoE powered device (Class 1).
- Firmware can be remotely updated over the network.
- 0.200" [5.08mm] plug-in rising clamp terminals (supplied).
- 4 unit wide DIN enclosure.
- Operating temperature range 0°C to 50°C (32°F to 122°F).
- **CE** compliant and **ETL/cETL** listed.
- 5 year warranty.

Part Number: RIO 80

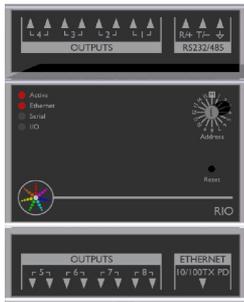
RIO 44



- 4 individually selectable digital or analog inputs.
- Tri-mode digital inputs: active high, low or contact closure.
- 4 individually isolated (1KV) relay outputs (48V 250mA).
- RS232/485 multi-protocol serial port, including DMX output.
- Inputs and outputs isolated from network.
- Rotary switch for selecting network address.
- RJ45 socket for 10/100Base-TX Ethernet.
- IEEE 802.3af PoE powered device (Class 1).
- Firmware can be remotely updated over the network.
- 0.200" [5.08mm] plug-in rising clamp terminals (supplied).
- 4 unit wide DIN enclosure.
- Operating temperature range 0°C to 50°C (32°F to 122°F).
- **CE** compliant and **ETL/cETL** listed.
- 5 year warranty.

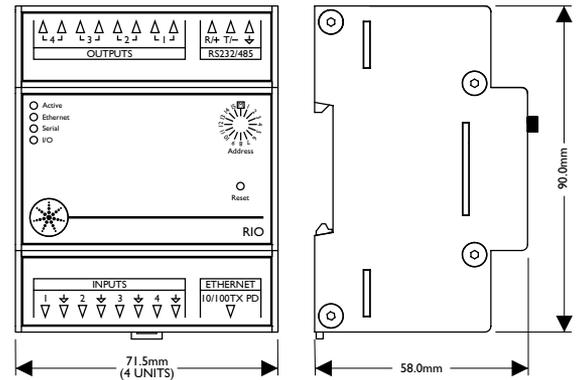
Part Number: RIO 44

RIO 08



- 8 individually isolated (1KV) relay outputs (48V 250mA).
- RS232/485 multi-protocol serial port, including DMX output.
- Inputs and outputs isolated from network.
- Rotary switch for selecting network address.
- RJ45 socket for 10/100Base-TX Ethernet.
- IEEE 802.3af PoE powered device (Class 1).
- Firmware can be remotely updated over the network.
- 0.200" [5.08mm] plug-in rising clamp terminals (supplied).
- 4 unit wide DIN enclosure.
- Operating temperature range 0°C to 50°C (32°F to 122°F).
- **CE** compliant and **ETL/cETL** listed.
- 5 year warranty.

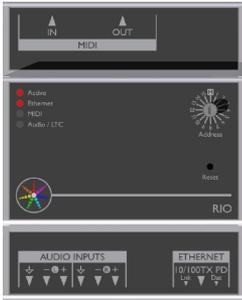
Part Number: RIO 08



RIO A

The RIO A provides remote audio triggering options for the Pharos Controllers. Harness multi-band stereo audio spectrum analysis to the Controller's flexible playback engine to achieve realtime control of intensity, colour and timeline playback to create sophisticated sound-to-light or 'light organ' effects.

Linear Time Code (LTC) support allows a presentation to be synchronised with third-party show control equipment. MIDI input and output and MIDI Time Code (MTC) is also supported for triggering and synchronisation from MIDI devices.

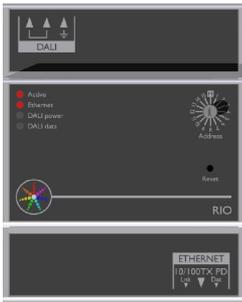


- Stereo balanced line level audio input.
- Auto or manual gain, adjustable in software.
- Up to 30 band spectrum analysis per audio channel or for combined channels, configurable in software.
- Per band audio peak analysis.
- Per channel or combined volume level analysis.
- Linear Time Code (LTC) via either audio channel.
- 24fps (film), 25fps (EBU), 29.97fps (NTSC) & 30fps (SMPTE).
- Software fly-wheel, error correction routines and jump support.
- MIDI Time Code (MTC) via MIDI input.
- Inputs isolated from network.
- Rotary switch for selecting network address.
- RJ45 socket for 10/100Base-TX Ethernet.
- IEEE 802.3af PoE powered device (Class 1).
- Firmware can be remotely updated over the network.
- 0.200" [5.08mm] plug-in rising clamp terminals (supplied).
- 5-pin DINs for MIDI In & Out.
- 4 unit wide DIN enclosure.
- **CE** compliant and **ETL/cETL** listed.
- 5 year warranty.

Part Number: RIO A

RIO D

The RIO D provides distributed DALI control over an Ethernet network. Pharos LPCs can send DALI ballast configuration and control signals via multiple RIO Ds, each connected to a DALI bus with up to 64 ballasts. RIO Ds acting in Slave mode listen to all commands on the local DALI bus and transmit them back over Ethernet to the Controller to be used as triggers for the Pharos system.



- DALI Master or Slave mode, complies with EN60929.
- Control up to 64 ballasts per device.
- Interrogate ballasts remotely via Designer software.
- Trigger Pharos Controllers from DALI wall/touch panel.
- Augment an existing DALI installation with LED and automated lights.
- DALI bus connection isolated from network.
- Rotary switch for selecting network address.
- RJ45 socket for 10/100Base-TX Ethernet.
- IEEE 802.3af PoE powered device (Class 1).
- Firmware can be remotely updated over the network.
- 0.200" [5.08mm] plug-in rising clamp terminals (supplied).
- 4 unit wide DIN enclosure.
- **CE** compliant and **ETL/cETL** listed.
- 5 year warranty.

Part Number: RIO D

SYSTEM INTEGRATION & TOPOLOGY

By utilising Power-over-Ethernet (PoE) technology, a simple and reliable topology is achieved using CAT5 cabling and RJ45 connectors which are familiar to all installers. All that is required is a PoE switch or repeater with sufficient ports to accommodate the required number of Controllers, Remote Devices and Button Panels Stations:

