Overview

The Pharos LPC (Lighting Playback Controller) is an award-winning, all-in-one control solution for themed entertainment and LED lighting installations. It features individually controllable and independently running timelines and scenes, letting you build dynamic, precise, fully customisable pre-programmed lighting effects with the freedom of real-time manual overrides and the versatility of powerful show control and integration features.

Features

**Pharos Engine**
The intelligent Pharos Engine gives you complete control of your installation. Based on individually controllable and independently running timelines and scenes, it lets you build dynamic, precise, fully customisable pre-programmed lighting displays, all while giving you the freedom of real-time manual overrides, flexible multi-zone control, prioritisation and more.

**Pharos Mapping**
Design the big picture; control every pixel. Create a map of your fixtures within the Designer software, then use Pharos Mapping to create visually striking effects or play video across the entire array. Powerful controls allow you to build maps fast with pixel-precise adjustment. Multiple maps can be created to support different zones or for modelling different views of your installation.

**Pharos Trigger**
Timing is everything. Whatever the stimulus, Pharos Trigger can handle it. You can control your lighting with responsive, reactive programming. 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 for unlimited flexibility.

**Scalable**
The right fit for every installation. Multiple Pharos Controllers can be seamlessly linked together to work as one via a standard Ethernet network giving impressive scalability. For additional integration options simply add Remote Devices to further extend the network. Whether one Controller or many, it’s all easily programmed using our Designer software.

**Flexible**
Be limited by your design brief, not your control system. Our products support a vast range of different fixture types and can output multiple DMX-over-Ethernet (eDMX) lighting protocols at the same time. No other system gives you this level of flexibility and control over your project.

**Remote Management**
The control you need in your browser – from anywhere. Pharos Controllers can be connected to a network, making it possible for you to remotely manage your installation. The built-in web server lets you check the Controller’s status, inputs and outputs, trigger timelines, view a full history log and much more.

**Custom Interfaces**
Create a custom web interface for your installation that gives your users the control they need and the look they expect. Our built-in web server supports an extensive JavaScript API and access control with multiple user levels.

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

**Reliable**
Hardware and firmware are self-sufficient, so no PC needs to be left on site. Rugged, compact unit designed for 24/7 operation and reliability.

**Installer Friendly**
Made for permanent installation, with installer-friendly connectors and easy DIN rail mounting.

**5 Year Warranty**
Designed and manufactured in the UK, with quality and reliability our top priority.

**Certifications**
CE compliant, ETML/CETL listed, and California Title 20/24 compliant.
Supported Fixtures

LEDs
LEDs in any colour configuration (RGB, RGBW, 8-bit, 16-bit, tuneable white)

Automated
Moving heads, yokes or scanners

Generic
Downlights, spotlights, uplights, etc. via controllable dimmers, relays or ballasts

Fountain Jets
Fountain jets for fountain animation or other animatronics

Fixture Library
Pharos offers a cloud library with over 13,000 fixture profiles, for easy download of your luminaires

Output

DMX512
2 ports (max 512 channels each) USITT E1.11-2008

RDM
Supports discovery and addressing via Designer software

sACN
USITT E1.31 (with per fixture priority) standard

Art-Net
ArtNet, ArtNet II and ArtNet III (configurable broadcast override)

KINET
KINET V1 (DMX out) and V2 (Port out); PDS/Data Enabler discovery

Pathport
Pathway Connectivity protocol

DALI
Via RIO D (supplied separately)

Scalable
Synchronises with up to 40 Pharos Controllers over network

Simultaneous
Multiple protocols can be in operation simultaneously. Limited by patched channels, not universes used

Startup
Commences programmed playback automatically on receiving power

Contact Closures
Connect an external volt-free switch between input and ground (internal 2.2k pull-up to 5V)

Digital In
Connect an external voltage source between input and ground (24V maximum; internal 2MΩ pull-down to 0V); software-configurable low/high threshold

Analog In
Connect an external voltage source between input and ground (24V maximum); software-configurable range

Clock
Battery-backed real-time clock for calendar and time-based triggers

Astronomical
Sunrise/Sunset/Twilight and Lunar phases

Ethernet
UDP, TCP, Multicast; send/receive any Ethernet message

Serial Data
RS232, RS485; configurable port; send/receive free syntax in ASCII, HEX or decimal

MIDI
MIDI Notes, SysEx or Timecode

Timecode
Linear Timecode via RIO A (SMPTE, Film, EBU, NTSC)

Audio Level
Stereo 30-band spectrum analysis via RIO A

eDMX
sACN or Art-Net (option to pass-thru on local DMX output)

DALI
Trigger on any message, via RIO D

Web Interface
Built-in or custom designed

Wall Stations
Integrate with BPS or TPC

Conditions
Full conditional logic support

Scripting
Lua scripting for total flexibility

Scalable
Supports Pharos Remote Devices

Specifications

Certifications
CE compliant, ETL/cETL listed

Power
9V to 48V DC * or PoE (IEEE802.3af, Class 2) 4W typical

Data Storage
Removable SD Card (supplied)

Temperature
0°C to 50°C (32°F to 122°F)

Humidity
10-50% relative, non-condensing

Ingress
IP40

Physical
8 unit wide DIN rail mounting enclosure (DIN43880 / EN60715 (35/7.5 rail))

Shipping
20 x 15 x 12 cm (8” x 6” x 5”)

Recovery
Hardware watchdog and recessed reset button

Warranty
5 years

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

Order Code & Variants

LPC 1
Lighting Playback Controller 1 (512 channels DMX/eDMX)

LPC 2
Lighting Playback Controller 2 (1,024 channels DMX/eDMX)

LPC 4
Lighting Playback Controller 4 (2,048 channels eDMX incl 1,024 ch DMX)