

## Overview





The Pharos LPC X (Lighting Playback Controller X) offers an extreme level of power and integration, making it an ideal solution for landmark lighting installations with significant channel counts. It integrates with the full range of Pharos products and offers an optional real-time video input.

### **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.

### Video Input

Optional DVI-D input for mapping live video, supporting up to 1080p60 with configurable scaling and X/Y pixel offset.

#### **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.















# **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

sACN USITT E1.31 (with per fixture priority)

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

**KINET** KiNET V1 (DMX out) and V2 (Port out): PDS/Data Enabler

**Pathport** Pathway Connectivity protocol

DVI-I DVI-I output for video-mapped fixtures

DMX512 Via any eDMX node

**DALI** Via RIO D (supplied separately)

Scalable Synchronises with up to 40 Pharos Controllers over network Multiple protocols can be in operation simultaneously. Limited by **Simultaneous** 

patched channels, not universes used

# **Triggering & Integration**

Startup Commences programmed playback automatically on receiving

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

triggers

Astronomical Sunrise/Sunset/Twilight and Lunar phases

UDP, TCP, Multicast; send/receive any Ethernet message **Ethernet RS232 Serial** Configurable port; send/receive free syntax in ASCII, HEX or

eDMX sACN or Art-Net

Inputs Contact closure, active low, active high or 0-24V analog level via

RIOs

Isolated relay outputs (48V 250mA) via RIOs **Outputs** MIDI MIDI Notes, SysEx or Timecode via RIO A

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

**Audio Level** Stereo 30-band spectrum analysis via RIO A

**RS485 Serial** Via RIO; configurable port; send/receive free syntax in ASCII, HEX

or decimal

**DALI** Trigger on any message, via RIO D

Web Interface Built-in or custom designed **Wall Stations** Integrate with BPS, TPS or TPC **Conditions** Full conditional logic support Scripting Lua scripting for total flexibility Scalable Supports Pharos Remote Devices

### Interfaces

**Ethernet** Neutrik etherCon (RJ45 compatible) for 10/100/1000Base-TX

Ethernet with Link/Data LEDs; Static IP or DHCP

**eDMX** Dedicated Ethernet port for eDMX; Neutrik etherCon (RJ45

compatible) for 10/100/1000Base-TX Ethernet with Link/Data

LEDs; Static IP or DHCP

**DVI-I Output** DVI-I output for monitoring or video mapped fixtures

Serial RS232 via DB9 connector

**IISB** Two USB 2.0 Type A ports (for future development) **Audio Outputs** Stereo analog & digital audio ports (for future development)

**DVI-D** Input Video input up to 1080p60 (with DVI-D IN option)

# **Specifications**

Certifications CE compliant, ETL/cETL listed 100-240VAC / 50-60HZ / 0.4-0.2A Power

40W typical (50W maximum) IEC connector with switch UK, EU and US cable supplied Internal 16GB SSD (supplied)

**Data Storage** Configuration Pharos Designer 2.2 or later **Temperature** 0°C to 50°C (32°F to 122°F) Humidity 10-50% relative, non-condensing

Ingress

**Physical** 19" rack unit, 1U, 13.5" deep

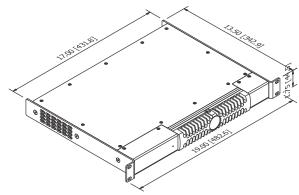
3.1 kg (6.8 lbs)

Shipping 57 x 45 x 18 cm (22" x 18" x 7") 5.0 kg (11 lbs)

Recovery Hardware watchdog and recessed reset

button

Warranty 5 years



## Order Code & Variants

LPC 10	Lighting Playback Controller 10 (5,120
	channels eDMX/DVI)

**LPC 20** Lighting Playback Controller 20 (10,240

channels eDMX/DVI)

**LPC 30** Lighting Playback Controller 30 (15,360

channels eDMX/DVI)

**LPC 40** Lighting Playback Controller 40 (20,480

channels eDMX/DVI)

**LPC 50** Lighting Playback Controller 50 (25,600 channels eDMX/DVI)

Lighting Playback Controller 60 (30,720 **LPC 60** channels eDMX/DVI)

Lighting Playback Controller 70 (35,840

channels eDMX/DVI)

**LPC 70** 

**LPC 80** 

Lighting Playback Controller 80 (40,960 channels eDMX/DVI)

**LPC 90** Lighting Playback Controller 90 (46,080

channels eDMX/DVI) **LPC 100** Lighting Playback Controller 100

(51,200 channels eDMX/DVI)

**DVI-D IN** DVI-D Input upgrade (HD capture card)

