

Lighting Playback Controller X Series 3

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 Designer products and offers an optional real-time video input. The LPC X S3 is a next generation hardware platform with improved connectivity and new functionality with Audio In for Linear Timecode.

LPC X Features



Designer Engine

The intelligent Designer 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.



Designer Trigger

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



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.

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.



Remote Management

Future-proof your lighting projects by connecting your Designer controllers to Pharos Cloud. This allows direct control of your Controllers from anywhere in the world, letting you check all of your Controllers' statuses, inputs and outputs, firing triggers, scheduling events, uploading new projects and much more. All Pharos Designer Controllers also have their own Web Interface that can be accessed on a local area network that provides real-time statuses, access to the full log and the ability to fire triggers on the controller.



DESIGNER

00.00.12.48

Designer Mapping

Design the big picture; control every pixel. Create a map of your fixtures within the Designer software, then use Designer 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.

Scalable

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

Pharos Designer

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

Reliable

Hardware and firmware are self-sufficient, so no PC needs to be left on site. Rugged 19" rack mount unit designed for 24/7 operation and reliability.

Timecode

The stereo balanced line level audio input can receive linear timecode on both channels. The format is autodetected and supported formats are 24fps (film), 25fps (EBU), 29.97fps (NTSC) & 30fps (SMPTE). A software flywheel with error correction and jump support ensures smooth but responsive timecode playback.

Video Input

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





	Supported Fixtures
LEDs	Any colour configuration e.g. RGB, RGBW, 8-bit, 16-bit,
Generic	Luneable white Downlights, spotlights, uplights, etc. via controllable dimmers, relays or ballasts
Intelligent Fountain Jets Fixture Library	Moving and multi-parameter fixtures Fountain jets for fountain animation or other animatronics Pharos offers a cloud library with over 30,000 fixture profiles, for easy download of your luminaires
	Output
sACN Art-Net KiNET Pathport EDN SPI DisplayPort DMX512 RDM	USITT E1.31 (with per fixture priority) standard Art-Net I, Art-Net II and Art-Net 3. Configurable broadcast override KiNET V1, V2, V3; PDS/Data Enabler discovery Pathway Connectivity protocol Via EDN: natively integrate, and output DMX, with the EDN Via EDN+SDI: synchronous and asynchronous serial data output Output for video-mapped fixtures Via the EDN or any other eDMX node Via Art-Net or EDN, supports discovery and addressing via Designer 2 software
DALI Audio Out	Via RIO D Audio Output with two audio layers; a background layer for ongoing audio, and an alert layer for high-priority overriding
Simultaneous Scalable	Multiple protocols can be in operation simultaneously. Limited by patched channels, not universes used Synchronises with up to 40 Pharos Designer Controllers
	over network
	Triggering & Integration
Startup Clock	Commences programmed playback automatically on receiving power Battery-backed real-time clock for calendar and time-based
Astronomical Ethernet RS232 Serial	triggers Sunrise/Sunset/Twilight and Lunar phases UDP, TCP, Multicast; send/receive any Ethernet message Configurable port; send/receive free syntax in ASCII, HEX or decimal
RS485 Serial	Via RIO: configurable port; send/receive free syntax in ASCII, HEX or decimal
eDMX Timecode Inputs	SACN or Art-Net Linear Timecode (SMPTE, Film, EBU, NTSC) Via RIO: contact closure, active low, active high or 0-24V analog level
Outputs MIDI Audio Level DALI Web Interface Wall Stations Conditions Scripting IO Modules Scalable	Via RIO: isolated relay outputs (48V, 250mA) Via RIO A: MIDI Notes, SysEx or MIDI Time Code Via RIO A: stereo 30-band spectrum analysis Via RIO D: transmit and receive DALI commands Built-in or custom designed Integrate with BPS, TPS or TPC Full conditional logic support Lua scripting for total flexibility Supports our extensive IO Module library for easy integration Supports Pharos Designer Remote Devices
	Interfaces
Ethernet	Network port for device access and management; Neutrik etherCON (RJ45 compatible) for 10/100/1000Base-TX Ethernet with Link/Data LEDs; Static IP or DHCP

Dedicated Ethernet port for lighting data; Neutrik etherCON

Two USB 2.0 Type A ports (for future development) Stereo balanced line level analog port * / SPDIF (RCA) port Stereo balanced line level analog port *

DisplayPort for monitoring or video-mapped fixtures

Video input up to 1080p60 (with HDMI IN option)

(RJ45 compatible) for 10/100/1000Base-TX Ethernet with Link/

Specifications

Power	100-240V AC, 50-60Hz, 0.4-0.2A, 40W typical (50W maximum), IEC connector with switch (power cable not supplied)
Configuration	Pharos Designer 2.11 or later
Data Storage	Internal 128GB SSD (supplied)
Temperature	0°C to 50°C (32°F to 122°F)
Humidity	10-90% relative, non-condensing
Ingress	IP20
Physical	19" rack unit, 1U, 13.5" deep 48.3 x 34.3 x 4.5 cm (19 x 13.5 x 1.8 in) 3.5 kg (7.7 lbs)
Shipping	57 x 45 x 17 cm (22 x 18 x 7 in) 5.5 kg (12 lbs)
Recovery	Hardware watchdog and recessed reset button



Order Code & Variants

LPC X S3 10	Designer Lighting Playback Controller X S3 10 (5,120 channels eDMX)
LPC X S3 20	Designer Lighting Playback Controller X S3 20 (10,240 channels eDMX)
LPC X S3 30	Designer Lighting Playback Controller X S3 30 (15,360 channels eDMX)
LPC X S3 40	Designer Lighting Playback Controller X S3 40 (20,480 channels eDMX
LPC X S3 50	Designer Lighting Playback Controller X S3 50 (25,600 channels eDMX)
LPC X S3 60	Designer Lighting Playback Controller X S3 60 (30,720 channels eDMX)
LPC X S3 70	Designer Lighting Playback Controller X S3 70 (35,840 channels eDMX)
LPC X S3 80	Designer Lighting Playback Controller X S3 80 (40,960 channels eDMX)
LPC X S3 90	Designer Lighting Playback Controller X S3 90 (46,080 channels eDMX)
LPC X S3 100	Designer Lighting Playback Controller X S3 100 (51,200 channels eDMX)

For HDMI IN option order codes, please refer to website or price list

Warranty &	Certifications
------------	----------------

warranty	5 years
Certifications	CE compliant, UKCA compliant, ETL/cETL listed, may be used as part of a Title 24 compliant lighting control system.

...

FAMILY



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

RS232 *

Data LEDs; Static IP or DHCP



eDMX

Serial

Audio Outputs

Audio Input Video Output

HDMI Input

USB

DESIGNER LPC X