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 FAMILY

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.
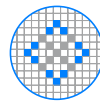
Custom Interfaces

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 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.
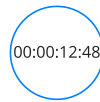
Pharos Designer

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 auto-detected 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, tuneable white
Generic	Downlights, spotlights, uplights, etc. via controllable dimmers, relays or ballasts
Intelligent	Moving and multi-parameter fixtures
Fountain Jets	Fountain jets for fountain animation or other animatronics
Fixture Library	Pharos offers a cloud library with over 30,000 fixture profiles, for easy download of your luminaires

Output

sACN	USITT E1.31 (with per fixture priority) standard
Art-Net	Art-Net I, Art-Net II and Art-Net 3. Configurable broadcast override
KiNET	KiNET V1, V2, V3; PDS/Data Enabler discovery
Pathport	Pathway Connectivity protocol
EDN	Via EDN: natively integrate, and output DMX, with the EDN
SPI	Via EDN+SDI: synchronous and asynchronous serial data output
DisplayPort	Output for video-mapped fixtures
DMX512	Via the EDN or any other eDMX node
RDM	Via Art-Net or EDN, supports discovery and addressing via Designer 2 software
DALI	Via RIO D
Audio Out	Audio Output with two audio layers; a background layer for ongoing audio, and an alert layer for high-priority overriding
Simultaneous	Multiple protocols can be in operation simultaneously. Limited by patched channels, not universes used
Scalable	Synchronises with up to 40 Pharos Designer Controllers over network

Triggering & Integration

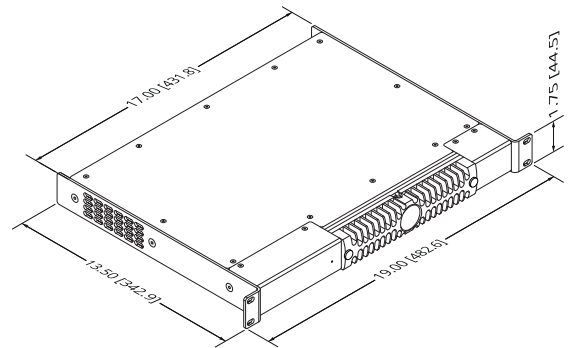|	
Startup	Commences programmed playback automatically on receiving power
Clock	Battery-backed real-time clock for calendar and time-based triggers
Astronomical	Sunrise/Sunset/Twilight and Lunar phases
Ethernet	UDP, TCP, Multicast; send/receive any Ethernet message
RS232 Serial	Configurable port; send/receive free syntax in ASCII, HEX or decimal
RS485 Serial	Via RIO: configurable port; send/receive free syntax in ASCII, HEX or decimal
eDMX	sACN or Art-Net
Timecode	Linear Timecode (SMPTE, Film, EBU, NTSC)
Inputs	Via RIO: contact closure, active low, active high or 0-24V analog level
Outputs	Via RIO: isolated relay outputs (48V, 250mA)
MIDI	Via RIO A: MIDI Notes, SysEx or MIDI Time Code
Audio Level	Via RIO A: stereo 30-band spectrum analysis
DALI	Via RIO D: transmit and receive DALI commands
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
IO Modules	Supports our extensive IO Module library for easy integration
Scalable	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
eDMX	Dedicated Ethernet port for lighting data; Neutrik etherCON (RJ45 compatible) for 10/100/1000Base-TX Ethernet with Link/Data LEDs; Static IP or DHCP
Serial	RS232 *
USB	Two USB 2.0 Type A ports (for future development)
Audio Outputs	Stereo balanced line level analog port * / SPDIF (RCA) port
Audio Input	Stereo balanced line level analog port *
Video Output	DisplayPort for monitoring or video-mapped fixtures
HDMI Input	Video input up to 1080p60 (with HDMI IN option)

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

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.