

## OVERVIEW

The Pharos control solution has two complementary parts: the Controllers (LPC, AVC), which form a permanent part of the installation, and the Designer software which runs on any personal computer and is only required when creating or modifying the project.

Many playback controllers for lighting installations store the show as frames of control data and so playback consists of outputting these frames in sequence. However this is a very limited way to control lighting. Because the show data is stored in such a raw form it takes up a lot of memory and that imposes limits on the length of the show. Furthermore it can only reproduce its output exactly as programmed every time, which means that there is no ability to separate the lighting into multiple zones with discrete intensity control or provide interactive triggering beyond a simple start and stop.

The Pharos Lighting Playback Controllers (LPC) are intended to be price-competitive with these frame-store solutions but offer genuine lighting control functionality. Lighting is programmed on timelines with a particular timeline having control data for one, some or all the lighting fixtures being controlled. Multiple timelines are supported and so a single unit can control multiple distinct zones, or more complex presentations can be programmed with external triggers coming from multiple systems.

The LPCs are provided in a compact DIN-rail compatible housing for mounting within an electrical cabinet, or alternatively they can be wall-mounted. For easy installation most connections are provided as plug-strips. The solid state design with efficient, embedded firmware ensures unparalleled reliability.

The extensive range of external triggering interfaces supported by the LPC includes Ethernet, RS232 serial, MIDI and digital inputs. Additional interfaces are supported by optional LPC Expansion Modules. Conditional logic, variables and scripts provide powerful show control functionality.

Multiple units can be used together for larger installations and synchronized automatically over Ethernet. The units have an internal web interface giving status and configuration information for remote monitoring, and either Ethernet or USB can be used to connect to the PC running the Designer software during programming.

## VERSIONS

There are two versions of the Lighting Playback Controller:

### LPC 1:

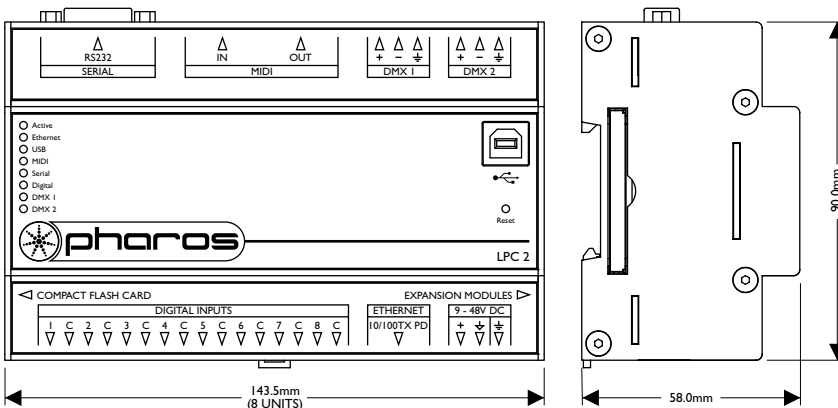
- 512 control channels (DMX512 or eDMX protocols).
- Triggering via Ethernet, RS232 serial, MIDI and digital inputs.
- Realtime clock with astronomical and daylight saving functionality.
- Supports Expansion Modules for other protocols and interfaces.
- Scalable with other Pharos Controllers & Remote Devices over Ethernet.
- Integrated web interface with custom page(s) support.
- Removable Compact Flash Card data storage.

Part Number: LPC 1

### LPC 2:

- 1024 control channels (DMX512 or eDMX protocols).
- Other features as the LPC 1.

Part Number: LPC 2



## SPECIFICATIONS

### General:

- Microprocessor based system specifically designed for the control of lighting in an architectural or entertainment application.
- Project data stored in non-volatile solid-state memory, uploaded from a remote personal computer over an Ethernet, USB or web connection.
- Operating System stored in non-volatile solid-state memory, remotely updated when necessary from a personal computer over an Ethernet or USB connection.
- Commences playback automatically on receiving power without additional external trigger.
- Internal realtime clock operates when power is absent.
- Supports LPC Expansion Modules for other interfaces and protocols, including RS485, audio, timecode and DALI.
- Integrated web interface.
- 5 year warranty.

### Physical:

- Enclosure and mounting complies with DIN43880 and EN60715 (35/7.5 rail) respectively.
- 8 unit wide DIN enclosure.
- Operating temperature range 0°C to 50°C (32°F to 122°F).
- CE compliant and ETL/cETL listed.

### Electrical:

Supports the following wire terminations (Camden Electronics CTB9208 5.08mm plug-in rising clamp terminals, supplied):

- 9V to 48V DC power.\*
- Isolated DMX512 ports, RDM compatible (2).
- Isolated digital inputs (8, tri-mode: active high, active low or contact closure).

In addition there are the following standard connectors:

- RJ45 socket for 10/100Base-TX Ethernet
- IEEE 802.3af PoE powered device.\*
- USB-B socket for USB 1.1.
- 9-pin D plug for isolated RS232 serial.
- 5-pin DIN socket for MIDI In.
- 5-pin DIN socket for MIDI Out.
- 25-pin D socket for Expansion Modules only.

\* Unit may be powered either via DC input or PoE.

