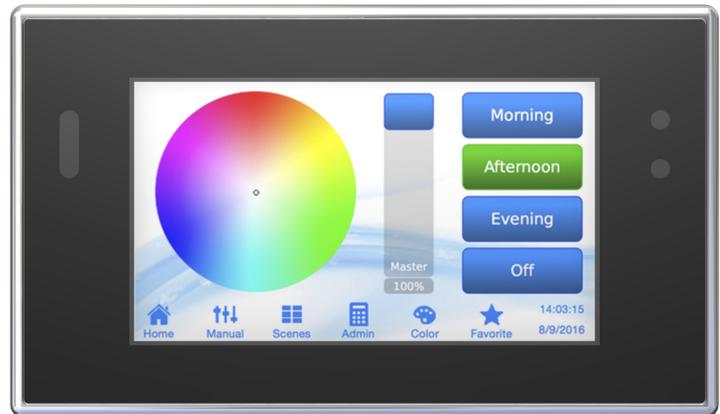## Overview

The Pharos TPC (Touch Panel Controller) is an elegant lighting controller with a customisable, 4.3″ capacitive touch screen, 512 channels of eDMX output and vast interfacing potential, all over a single Power-over-Ethernet (PoE) network connection. TPCs are available in a range of different coloured bezels and overlays.

Features

Touch Interface

Touch screen user interface is fully customisable using the free Pharos Designer software. Create multiple pages of controls including buttons, sliders, keypads and colour pickers, and configure their appearance and visual feedback. Make it eye-catching by importing your own graphics or picking from one of our attractive themes.

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 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.

Pharos Mapping

Design the big picture; control every pixel. Create a 2D 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.

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.

Remote Management

The control you need in your browser - from anywhere. Pharos Controllers can be connected to Pharos Cloud, a secure remote management service from SixEye. 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 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.

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.

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.

EXT

DIN rail mounting companion product provides PoE power, DMX and DALI outputs, RS232 serial and 8 digital/analog inputs for triggering and integration.

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

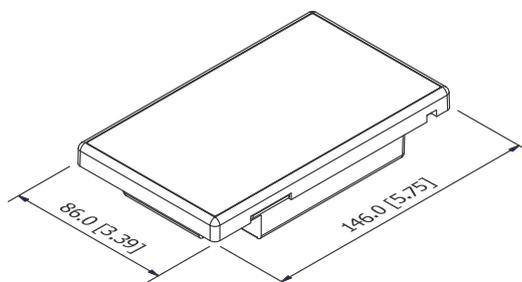|	
sACN	USITT E1.31 (with per fixture priority)
Art-Net	ArtNet, ArtNet II and ArtNet III (configurable broadcast override)
KiNET	KiNET V1 (DMX out) and V2 (Port out); PDS/Data Enabler discovery
Pathport	Pathway Connectivity protocol
DMX512	Via EXT or second port on LPC 1
RDM	Via EXT or EDN, supports discovery and addressing via Designer software
DALI	Via EXT or 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
EDN	Can natively integrate with and output DMX through the ports of the EDN (Ethernet Data Node, supplied separately)

Triggering & Integration

Startup	Commences playback automatically on receiving power
Touchscreen	Buttons, sliders, colour picker, etc
Clock	Battery-backed real-time clock for calendar and time-based triggers
Astronomical	Sunrise/Sunset/Twilight and Lunar phases
Temperature	Trigger on changes or entering a range
Ethernet	UDP, TCP, Multicast; send/receive any Ethernet message
eDMX	sACN or Art-Net
DALI	Trigger on any message, via EXT or RIO D
Serial Data	RS232 via EXT; RS232 or RS485 via RIO; 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
Inputs	Contact closure, active low, active high or 0-24V analog level via EXT or RIOs
Outputs	Isolated relay outputs (48V 250mA) via RIOs
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
IO Modules	Supports our extensive IO Module library for easy integration

Interfaces

Ethernet	RJ45 socket for 10/100Base-TX Ethernet with Link/Data LEDs; Static IP or DHCP; Dual IP address for eDMX
Touchscreen	4.3" capacitive touch; 480×272 24bpp; 340 cd/m2; magnetic overlay
IR Sensor	Learning IR sensor for remote control
Temperature	Built-in ambient temperature sensor

Specifications

Certifications	CE compliant, ETL/cETL listed
Power	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	Wall mounted, partly recessed in UK 2-gang 35mm or custom US 2.5" backbox (supplied separately) 0.25 kg (0.55 lbs)
Shipping	20 x 15 x 12 cm (8″ x 6″ x 5″) 0.6 kg (1.3 lbs)
Recovery	Hardware watchdog and recessed reset button
Warranty	5 years

Order Code & Variants

TPC BB	Touch Panel Controller Black-on-Black (512 channels eDMX)*
TPC CC	Touch Panel Controller Cream-on-Cream (512 channels eDMX)
TPC WW	Touch Panel Controller White-on-White (512 channels eDMX)
TPC FBB	Flush back box
TPC SBB	Surface back box
EXT	Extension for TPC connectivity (DMX, DALI, IO, serial, mains-powered)

* TPC BB is default colour and shipped as standard

Colour Information

Cream	Bayblend T45 (UL94 HB) RAL 9001 cream
Signal White	Bayblend T45 (UL94 HB) RAL 9003 signal white
Jet Black	Bayblend T45 (UL94 HB) RAL 9005 jet black