



## Touch Panel Controller

The Pharos TPC (Touch Panel Controller) is an elegant lighting controller with a customisable, 4.3" capacitive touchscreen, 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.



## TPC Features



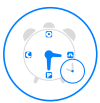
### Touch Interface

A 4.3" vivid colour capacitive touchscreen makes navigating your project's controls appealing and intuitive. It's quick and easy to activate presets, manual overrides, or use a custom colour picker to personalise your lighting. The TPC puts control of your Pharos Designer system at your fingertips.



### 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.



### 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 Remote Devices to further extend the network. Whether one Controller or many, it's all easily programmed using our Designer software.



### 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 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.



### 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 macOS – 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.



## Supported Fixtures

<b>LEDs</b>	Any colour configuration e.g. RGB, RGBW, 8-bit, 16-bit, tuneable white
<b>Generic</b>	Downlights, spotlights, uplights, etc. via controllable dimmers, relays or ballasts
<b>Intelligent</b>	Moving and multi-parameter fixtures
<b>Fountain Jets</b>	Fountain jets for fountain animation or other animatronics
<b>Fixture Library</b>	Pharos offers a cloud library with over 30,000 fixture profiles, for easy download of your luminaires

## Output

<b>sACN</b>	USITT E1.31 (with per fixture priority) standard
<b>Art-Net</b>	Art-Net I, Art-Net II and Art-Net 3. Configurable broadcast override
<b>KiNET</b>	KiNET V1, V2, V3; PDS/Data Enabler discovery
<b>Pathport</b>	Pathway Connectivity protocol
<b>DMX512</b>	Via EXT or second port on LPC 1
<b>RDM</b>	Via Art-Net, EXT or EDN: supports discovery and addressing via Designer 2 software
<b>EDN</b>	Via EDN: natively integrate, and output DMX, with the EDN
<b>SPI</b>	Via EDN+SDI: synchronous and asynchronous serial data output
<b>DALI</b>	Via EXT or RIO D
<b>Simultaneous</b>	Multiple protocols can be in operation simultaneously. Limited by patched channels, not universes used
<b>Scalable</b>	Synchronises with up to 40 Pharos Designer Controllers over network

## Triggering & Integration

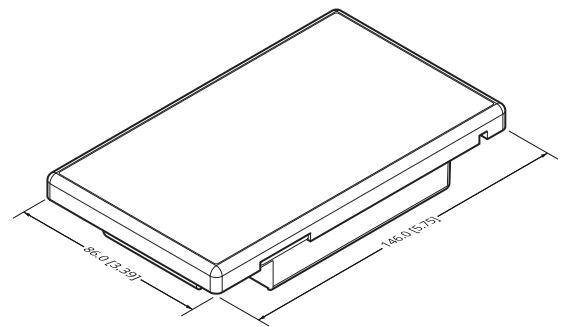
<b>Startup</b>	Commences programmed playback automatically on receiving power
<b>Touchscreen</b>	Buttons, sliders, colour picker, etc.
<b>Clock</b>	Battery-backed real-time clock for calendar and time-based triggers
<b>Astronomical</b>	Sunrise/Sunset/Twilight and Lunar phases
<b>Temperature</b>	Trigger on changes or entering a range
<b>Ethernet</b>	UDP, TCP, Multicast; send/receive any Ethernet message
<b>eDMX</b>	sACN or Art-Net
<b>DALI</b>	Via EXT or RIO D: transmit and receive DALI commands
<b>Serial Data</b>	Via EXT: RS232; via RIO: RS232 or RS485; configurable ports; send/receive free syntax in ASCII, HEX or decimal
<b>MIDI</b>	MIDI Notes, SysEx or MIDI Time Code
<b>Timecode</b>	Via RIO A: Linear Timecode (SMPTE, Film, EBU, NTSC)
<b>Audio Level</b>	Via RIO A: stereo 30-band spectrum analysis
<b>Inputs</b>	Via EXT or RIO: contact closure, active low, active high or 0-24V analog level
<b>Outputs</b>	Via RIO: isolated relay outputs (48V, 250mA)
<b>Web Interface</b>	Built-in or custom designed
<b>Wall Stations</b>	Integrate with BPS, TPS or TPC
<b>Conditions</b>	Full conditional logic support
<b>Scripting</b>	Lua scripting for total flexibility
<b>IO Modules</b>	Supports our extensive IO Module library for easy integration
<b>Scalable</b>	Supports Pharos Designer Remote Devices

## Interfaces

<b>Ethernet</b>	RJ45 socket for 10/100Base-TX Ethernet with Link/Data LEDs; Static IP or DHCP; Dual IP address for eDMX
<b>Touchscreen</b>	4.3" capacitive touch, 480x272 24bpp; 340 cd/m <sup>2</sup> ; magnetic overlay
<b>IR Sensor</b>	Learning IR sensor for remote control
<b>Temperature</b>	Built-in ambient temperature sensor

## Specifications

<b>Power</b>	PoE (IEEE802.3af, Class 2), 4W typical
<b>Configuration</b>	Pharos Designer 2
<b>Data Storage</b>	Removable SD Card (supplied)
<b>Temperature</b>	0°C to 50°C (32°F to 122°F)
<b>Humidity</b>	10-50% relative, non-condensing
<b>Ingress</b>	IP40
<b>Physical</b>	Wall mounted, partly recessed in UK 2-gang 35mm or custom US 2.5" backbox (supplied separately) 14.6 x 8.6 x 3.2 cm (5.8 x 3.4 x 1.3 in) 0.25 kg (0.55 lbs)
<b>Shipping</b>	20 x 15 x 12 cm (8 x 6 x 5 in) 0.6 kg (1.3 lbs)
<b>Recovery</b>	Hardware watchdog and recessed reset button



## Order Code & Variants

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

If no colour is specified, TPC BB will be shipped by default

### Colour Information

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

## Warranty & Certifications

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

