



## Touch Panel Controller

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.



## TPS Features



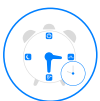
### Touch Interface

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 TPS 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 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.



## Supported Fixtures

|                        |   |
|------------------------|---|
| <b>LEDs</b>            | LEDs in any colour configuration (RGB, RGBW, 8-bit, 16-bit, tuneable white)                           |
| <b>Automated</b>       | Moving heads, yokes or scanners   |
| <b>Generic</b>         | Downlights, spotlights, uplights, etc. via controllable dimmers, relays or ballasts                   |
| <b>Fountain Jets</b>   | Fountain jets for fountain animation or other animatronics  |
| <b>Fixture Library</b> | Pharos offers a cloud library with over 20,000 fixture profiles, for easy download of your luminaires |

## Output

|                     |  |
|---------------------|--|
| <b>sACN</b>         | USITT E1.31 (with per fixture priority) standard   |
| <b>Art-Net</b>      | ArtNet, ArtNet II and ArtNet III (configurable broadcast override)                                     |
| <b>KiNET</b>        | KiNET V1 (DMX out) and V2 (Port out); 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 EXT or EDN, supports discovery and addressing via Designer software                                |
| <b>DALI</b>         | Via EXT or RIO D   |
| <b>Scalable</b>     | Synchronises with up to 40 Pharos Designer Controllers over network                                    |
| <b>Simultaneous</b> | Multiple protocols can be in operation simultaneously. Limited by patched channels, not universes used |
| <b>EDN</b>          | Can natively integrate with and output DMX through the ports of the EDN                                |
| <b>SPI</b>          | Supports synchronous and asynchronous serial data output via the EDN+SDI                               |

## Triggering & Integration

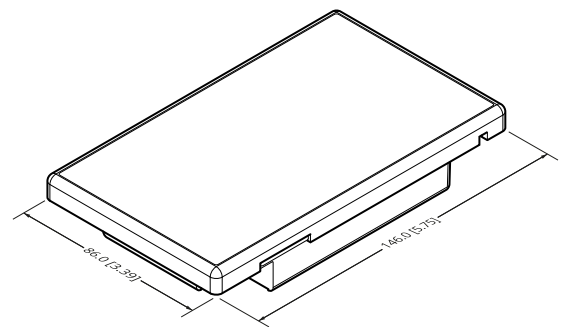
|                      |   |
|----------------------|---|
| <b>Startup</b>       | Commences programmed playback automatically on receiving power                            |
| <b>Touchscreen</b>   | Buttons, sliders, colour picker, etc.   |
| <b>Clock</b>         | Battery-backed real-time clock for 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>          | Trigger on any message, via EXT or RIO D  |
| <b>Serial Data</b>   | RS232 via EXT, RS 323 or RS485 via RIO; send/receive free syntax in ASCII, HEX or decimal |
| <b>MIDI</b>          | MIDI Notes, SysEx or Timecode   |
| <b>Timecode</b>      | Linear Timecode via RIO A (SMPTE, Film, EBU, NTSC)  |
| <b>Audio Level</b>   | Stereo 30-band spectrum analysis via RIO A  |
| <b>Inputs</b>        | Contact closure, active low, active high or 0-24V analog level via EXT or RIOs            |
| <b>Outputs</b>       | Isolate relay outputs (48V 250mA) via RIOs  |
| <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>Scalable</b>      | Supports Pharos Designer Remote Devices   |
| <b>IO Modules</b>    | Supports our extensive IO Module library for easy integration                             |

## 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/m2; 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>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)<br>0.25 kg (0.55 lbs) |
| <b>Shipping</b>     | 20 x 15 x 12 cm (8" x 6" x 5")<br>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>Cream</b>        | Bayblend T45 (UL94 HB) RAL 9001 cream        |
| <b>Signal White</b> | Bayblend T45 (UL94 HB) RAL 9003 signal white |
| <b>Jet Black</b>    | Bayblend T45 (UL94 HB) RAL 9005 jet black    |

## Warranty & Certifications

|                       |  |
|-----------------------|--|
| <b>Warranty</b>       | 5 years  |
| <b>Certifications</b> | CE compliant, ETL/cETL listed, California Title 20/24 compliant. |

