



## **TPC Extension**

The Pharos EXT is an extension for the Pharos TPC and together they form a standalone, mainspowered lighting controller with versatile output and show control options. The TPC is a powerful lighting controller with Ethernet-based output and integration options. However, many DMX and DALI installations don't need the added complexity of network infrastructure. The EXT provides local DMX and DALI output for the TPC, as well as power and other hardware interfaces.





#### **EXT Features**



#### Extend

The EXT is an optional extension for a single Pharos TPC. Together they can function as a standalone control system, or scale with other Designer devices over a network. The EXT supplies power and data to the TPC via a single cable, and provides physical interfaces including both DMX and DALI.



#### 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.



### DALI Control

Control up to 64 DALI devices from the EXT, with support for commissioning with DALI discovery and configuration commands. Pharos Designer includes a convenient drag-and-drop interface for DALI patching and timeline programming. DALI emergency ballasts are also supported with the ability to schedule automatic Function and Duration tests, automatic querying for battery level and lamp hours, and a full test result and error reporting web page.



#### Serial Data

The EXT has an RS232 serial port, whose data rate and format settings (baud, parity, stop bits, etc.) are configurable in software.



# Pharos Designer

Programmed and configured using the free Pharos Designer software – available for Windows or Mac OS X – with upload over Ethernet or USB.



#### Flexible Inputs

Each input is individually configurable in one of three modes. As a Contact Closure an external volt-free switch may be connected across the input. As a Digital Input an external voltage source (up to 24V) can be connected across the input and thresholds for 'high' and 'low triggering can be set. As an Analog Input a variable external voltage can be measured within a configurable range.



### **Installer Friendly**

Made for permanent installation, with installer-friendly 0.200" (5.08mm) plug-in rising clamp terminals, a rugged, compact enclosure, and easy DIN rail mounting.





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**Contact Closure** Connect an external volt-free switch between input and ground

(internal 2.2k pull-up to 5V)

Connect an external voltage source between input and ground (24V maximum; internal 2MOhm pull-down to 0V); software **Digital In** 

configurable low/high threshold

Connect an external voltage source between input and ground Analog In

(24V maximum); software-configurable range

**Serial Data** RS232; configurable port; send/receive free syntax in ASCII, HEX

Control for up to 64 DALI devices; DALI discovery and **DALI Master** 

configuration commands

**DALI Slave** Use DALI messages from other systems or wall panels as

triggers in Pharos

**Emergency Lighting** Schedule automatic Function and Duration tests; automatic

querying for battery level and lamp hours; test result and error

reporting web page

**Bus Power Detection** A separate DALI bus power supply is required – but the EXT can

detect and report bus power errors

## Interfaces

**TPC PoE** RI45 socket with Link/Data LEDs for direct connection to TPC

only (100m max distance)

**Ethernet** RJ45 socket for 10/100Base-TX Ethernet with Link/Data LEDs; Fixed IP or DHCP; Power-over-Ethernet (PoE)

DMX512 Isolated DMX port, RDM compatible \* **DALI** Master (up to 64 devices) or Slave \*

RS232 \* Serial

Inputs Individually selectable operating mode for contact closure,

digital or analog input (24V maximum) \*

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

(included)

## **Specifications**

**Power** Mains-powered; 100-240VAC / 50-60Hz /

0.1A (10W typical)

Required Pharos TPC

**Temperature** 0°C to 50°C (32°F to 122°F) Humidity 10-50% relative, non-condensing

Ingress IP40

8 unit wide DIN rail mounting enclosure **Physical** 

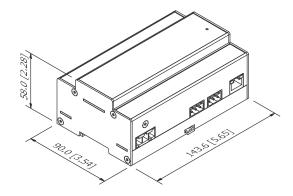
(DIN43880 / EN60715 (35/7.5 rail)) 0.5 kg

(1.1 lbs)

20 x 15 x 12 cm (8" x 6" x 5") Shipping

0.7 kg (1.6 lbs)

Recovery Hardware watchdog and recessed reset



# **Order Code & Variants**

**EXT** 

Designer Extension for TPC connectivity (DMX, DALI, IO, serial, mains-powered)

Pharos Designer TPC required

# Warranty & Certifications

Warranty

5 years

Certifications

CE compliant, ETL/cETL listed, California Title

20/24 compliant.

















Distributed in the UK by Experience Lighting Limited

