EXT

TPC Extension

Overview

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.

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 Pharos 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.

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.

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.

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.

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.

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.

Firmware

Microprocessor-based system supports firmware updates via the network from Designer software or the web interface.

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.

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Specifications subject to change without notice (01-05-2021).

Capabilities

Contact Closure	Connect an external volt-free switch between input and ground (internal 2.2k pull-up to 5V)
Digital In	Connect an external voltage source between input and ground (24V maximum; internal 2MOhm pull-down to 0V); softwareconfigurable low/high threshold
Analog In	Connect an external voltage source between input and ground (24V maximum); software-configurable range
Serial Data	RS232; configurable port; send/receive free syntax in ASCII, HEX or decimal
DALI Master	Control for up to 64 DALI devices; DALI discovery and 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

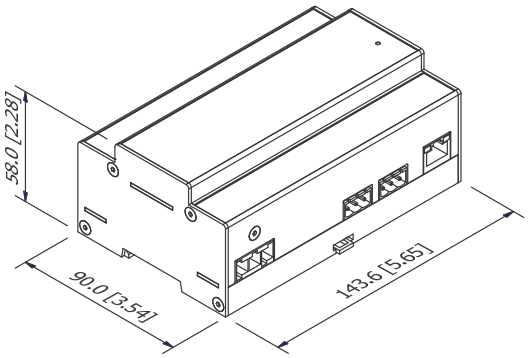
Interfaces

TPC PoE	RJ45 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 *
Serial	RS232 *
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

Certifications	CE compliant, ETL/cETL listed
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
Physical	8 unit wide DIN rail mounting enclosure (DIN43880 / EN60715 (35/7.5 rail)) 0.5 kg (1.1 lbs)
Shipping	20 x 15 x 12 cm (8″ x 6″ x 5″) 0.7 kg (1.6 lbs)
Recovery	Hardware watchdog and recessed reset button
Warranty	5 years



Order Code & Variants

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

Pharos TPC required

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