

PixLite® E4-S Mk3

Pixel Controller



DATASHEET

Made in Australia
5 Year Warranty

KEY FEATURES

- 24 Universes of Art-Net or sACN
- 4 Non-Powered Pixel Outputs
- Over 80+ Pixel Protocols Supported
- microSD Card Slot for Advatek SHOWTime™
- Auxiliary Port for DMX512 In/Out
- Configure Using Any Web Browser or Advatek Assistant 3 Software
- Electrical Fault Protection on All Ports

ADVATEK
LIGHTING

PixLite® E4-S Mk3

Pixel Controller

PRODUCT OVERVIEW

The **PixLite E4-S Mk3** is an economical, but powerful pixel LED controller built upon Advatek's 3rd generation PixLite Mk3 processor. The feature set of this processor are too significant to fit here, explore in the [PixLite Mk3 Processor Datasheet](#).

The **PixLite E4-S Mk3** drives up to 6 universes of data on each of its 4 outputs for a total of 24 universes of LED pixel control. The easily accessible and removable screw terminal blocks each have three pins [Clock | Data | Ground], which is suitable for installations where pixel power is not routed through the pixel controller.

A CLOSER LOOK AT THE CONTROLLER

SHOW Time

SHOWTime™ unleashes the potential of Advatek PixLite® Mk3 devices to independently drive light shows without a computer or any source of live data.

SHOWTime™ allows users to record and play back pixel shows from the PixLite E4-S Mk3 using the inbuilt microSD slot. Design your own breathtaking pixel shows, record them directly onto the microSD card and play them back as many times as you wish.

SHOWTime™ also unlocks the ability to create up to 25 powerful triggers and use advanced intensity controls to enable true standalone behavior and enhance live environments.

BUDGET FRIENDLY

Lower the cost of your installation with the removal of some features that are standard on most of the PixLite Mk3 range, like powered pixel outputs, smart electronic fuses, dual gigabit Ethernet ports and universe data hardware firewall.

FAULT PROTECTION

Features electrical fault protection on all ports resulting in higher reliability and fewer equipment failures. See details on next page.

AUXILIARY PORT

Versatile RS485 Auxiliary port can be used as either an input or an output.

As an output, connect DMX512 devices to the port and control them via sACN or Art-Net. As an input, connect a DMX512 source directly to the PixLite and use DMX512 as the data source for your pixels, or as a trigger source, or as a live intensity data source.

CERTIFICATIONS



5 YEAR WARRANTY

For your absolute peace of mind, all Mk3 products come with a 5-year warranty. All products need to be used and installed in accordance with their designed purpose and operating environment. Please register your product on our website.

PixLite® E4-S Mk3

Pixel Controller

SPECIFICATIONS

PHYSICAL

| | |
|------------------------------------|---|
| Ethernet Ports | 1 x 10/100 Mbit/s |
| microSD Card Slot | 1 |
| Auxiliary Port | 1 x RS485 Input/Output |
| Pixel Outputs | 4 x Non-Powered |
| Dimensions (inc. connectors) | 115 x 86 x 33mm |
| Weight | 0.1kg |
| Enclosure | ABS |
| Mounting | Flat surface, DIN rail (optional accessory) |

CERTIFICATIONS & MARKS

| | |
|-------------------------------|--|
| North America | ETL Listing (Equivalent to UL Listing) |
| Europe | CE |
| North America | FCC |
| Canada | ICES3 |
| Australia & New Zealand | RCM |
| United Kingdom | UKCA |

PIXEL DATA

EXPANDED MODE DISABLED / ENABLED

| | | | |
|----------------------------------|------|---|-----|
| Pixel Outputs | 4 | / | 8 |
| RGB Pixels per Output | 1020 | / | 510 |
| RGBW Pixels per Output | 768 | / | 384 |
| Universes per Pixel Output | 6 | / | 3 |
| Total Pixel Universes | 24 | / | 24 |

POWER

| | |
|---------------------------------|-------------|
| Input Power | 5V - 24V DC |
| Maximum Power Consumption | 2.5W |

THERMAL

| | |
|-------------------------------------|----------------|
| Storage Temperature | -20°C to +70°C |
| Ambient Operating Temperature | -20°C to +70°C |

FAULT PROTECTION

| | |
|-------------------------------------|-----------------------------|
| Electrostatic Discharge (ESD) | All ports protected |
| Power Input | Reverse polarity protection |
| Auxiliary Port | +/- 48V DC fault protection |
| Pixel Output Clock/Data | +/- 36V DC fault protection |

TESTING STANDARDS

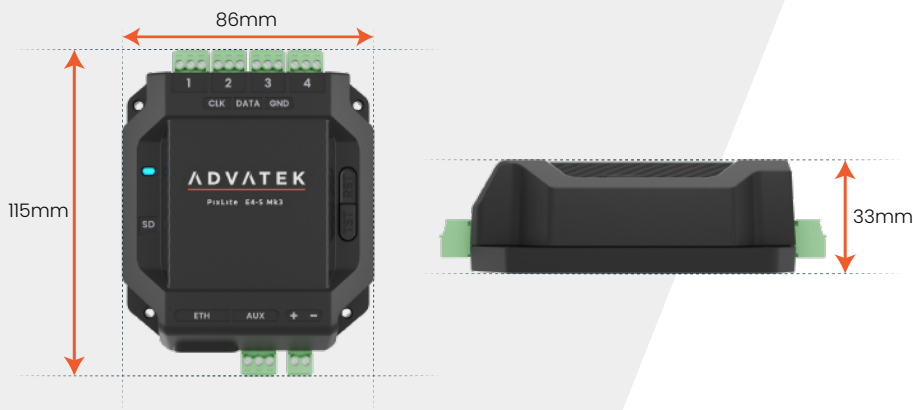
| | |
|--|--|
| Audio/Video & ICTE - Safety Requirements | UL 62368-1 |
| Radiated & Conducted Emissions | EN 55032 & FCC Part 15 |
| Multimedia Immunity | EN 55035 |
| Restriction of Hazardous Substances | RoHS 3 + DD 2011/65/EU + 2017/2102/EU + 2015/863/EU |

INSTALLATION

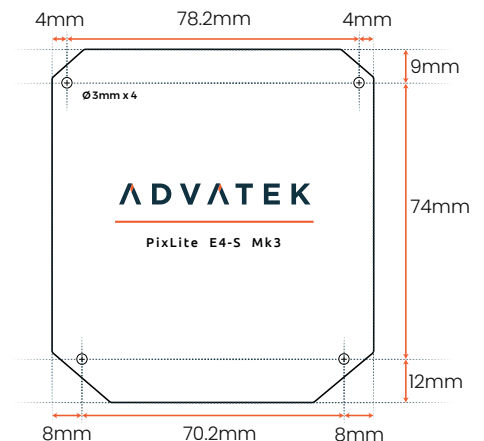
Refer to installation instructions in the Product User Manual for acceptable use and storage requirements.

| | |
|------------------------------|---|
| Standard | Indoors Only |
| With Conformal Coating | May be installed outdoors when installed inside a weatherproof enclosure |

OVERALL DIMENSIONS



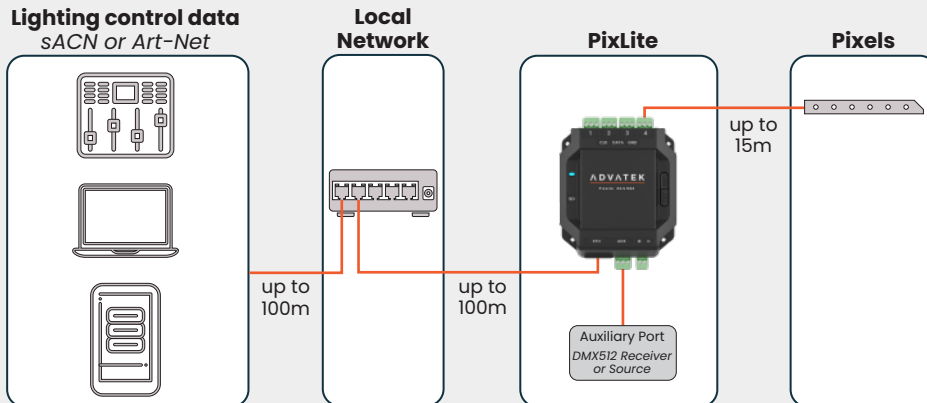
MOUNTING DIMENSIONS



PixLite® E4-S Mk3

Pixel Controller

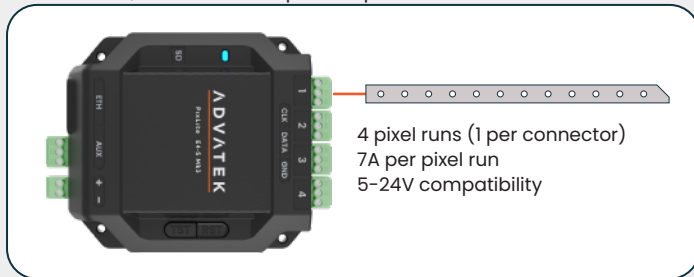
TYPICAL WIRING DIAGRAM



COMPATIBLE SYSTEMS

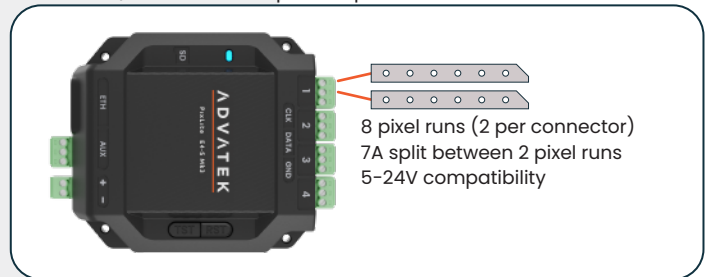
Expanded Mode Disabled

Any pixel type
1020 RGB / 768 RGBW pixels per run



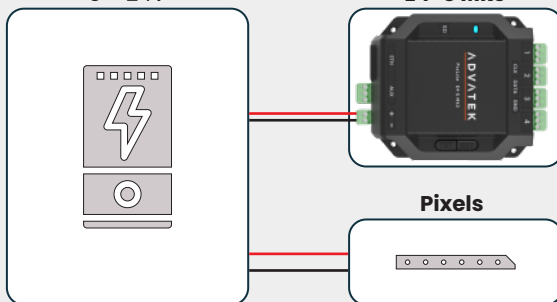
Expanded Mode Enabled

Data-only pixel types
510 RGB / 384 RGBW pixels per run



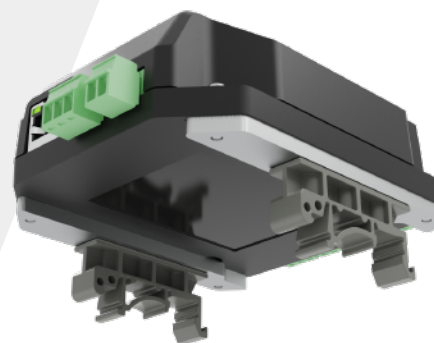
POWERING PIXELS

DC Power Supply 5 - 24V



OPTIONAL ACCESSORIES

Din-Rail Mounting Bracket



CONNECTIONS TO PIXELS

| Normal Usage | Expanded Mode | Differential DMX512 | Select Pixels ² |
|--------------------|---------------|---------------------|----------------------------|
| Clock ¹ | Data 1 | DMX D- | Backup |
| Data | Data 2 | DMX D+ | Data |
| Data Return | Data Return | Data Return | Data Return |

ORDER CODES

| | |
|---|------------|
| PixLite E4-S Mk3 | PIXE4S3 |
| PixLite E4-S Mk3 with Conformal Coating | PIXE4S3-CC |
| DIN Rail Mount Kit (Suits Single R2F-S, R4D-S, E4-S, E16-S) | MNT0101 |

¹ For pixels that do not have a clock input, this pin is not connected.

² Many pixels with a backup data input do not require it to be connected to the PixLite as shown. See pixel glossary on the Advatek website to confirm pixels which require a backup connection to the PixLite.