



# PIXELATOR MINI – Datasheet

eDMX to SPI Pixel Controller: Transmitting up to 32 Universes of SPI Data Across Long Distances in the PLINK System



The ENTTEC PIXELATOR MINI is a high-performance 8-port Ethernet pixel controller designed for large-scale LED installations, converting up to 32 Universes of Art-Net, sACN, and ESP protocols into SPI within the PLINK ecosystem.

PIXELATOR MINI guarantees reliable data integrity over 300 metres and connects seamlessly to PLINK INJECTORS, extending signals up to 3 metres to pixel fixtures.

Supporting over 20 pre-configured LED protocols with options for custom protocol creation (criteria apply), the PIXELATOR MINI offers versatility for tailored lighting requirements. Configuration management and firmware updates are accessible via its local host web interface, ensuring intuitive control and seamless updates.

For optimal project adaptability, the PIXELATOR MINI can be paired with either indoor or outdoor PLINK INJECTORS to suit your chosen pixel fixtures or with CVC4 Auto-Addressing Constant Voltage LED Dimmers, delivering large-scale LED control with minimal configuration and maximum flexibility.

## Features

- **Converts eDMX (e.g. Art-Net, sACN, and ESP) to SPI for pixel control over long distance.**
- **1\* RJ45 Ethernet inputs (10/100 Mbps) to 8\* RJ45 output ports, fully compliant with Cat5e/Cat6 cable for easy installation.**
- **Up to 32 Universes (4U per port) pixel control featuring overdrive mode.**
- **Active IEEE 802.3AF Active PoE or 12-24v DC power input.**
- **All ports feature ESD surge protection and resettable fuses to block external faults & electrical noise propagation through control infrastructure.**
- **Compatible with ENTTEC PLINK INJECTOR range.**
- **Compatible with ENTTEC CVC4, CCC4 RGBW auto-addressable LED dimmer.**
- **Allows users to create and customise SPI pixel protocols (criteria apply, see see 'Custom Protocol Creation Guide' document).**
- **Pixel arrangement including pixel order, pixel grouping for each PLINK output is individually configurable.**
- **Multiple mounting options: 1U Half Width Rack, 19" Rack, Surface mount, TS-35 DIN mount.**

### Pre-listed Support Protocols\*:

APA 104, GS8208B\*, SPXL (16bit & 8bit), SK6812, SJ1221 (16bit & 8bit), TM1804, TM1812, TM1814, TLC5973 (16bit & 8bit), UCS1903\*, UCS2903\*, UCS2904\*, UCS8903 (16bit & 8bit), UCS8904 (16bit & 8bit), WS2811\*, WS2812\*, WS2812B, WS2813\*, WS2815\*, WS2818\*, 9PDOT (16bit & 8bit).

\* IMPORTANT: If you wish to control a protocol marked with a \* and the option to do so is missing in the current firmware interface for your product, please select WS2811 or WS2812b instead for your LEDs to work properly.

## Specification

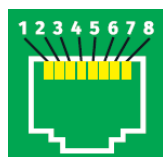
<b>Connectors</b>	8* PLINK output (RJ45)	
	1* Power input (DC Jack)	
	1* Ethernet (RJ45)	
<b>Power Input</b>	12-24V DC / PoE IEEE802.3AF	
<b>Current Draw</b>	100-270mA	
<b>Max. Power Draw</b>	3.2W	
<b>ESD Protection</b>	Resettable fuse & TVS suppression per port.	
<b>Surge Protection</b>	Yes (all ports)	
<b>IP rating</b>	IP20	
<b>LED status indicator</b>	Forward-facing LED indicator	
	Network link/Activity (integrated into RJ45)	
<b>Input Protocols</b>	Art-Net	sACN
	ESP	
<b>Output Protocol</b>	SPI in PLINK System	
<b>Max. Output Universe</b>	32 Universes	
<b>Network Speed</b>	10/100Base-T	
<b>Network Configuration</b>	Static / DHCP	
<b>Configuration &amp; Update</b>	Web Interface	
<b>Cooling Method</b>	Convection	
<b>Environmental Operating Temperature</b>	0°C to 50°C 32°F to 122°F	
<b>Environmental Operating Humidity</b>	5- 95% (non-condensing)	
<b>Body Material</b>	ABS + anodized aluminium	
<b>Unit Weight</b>	0.43kg / 0.95lbs	
<b>Shipping Dimensions</b>	335*265*78 mm	
<b>Shipping Weight</b>	1.15kg / 2.54lbs	
<b>Warranty</b>	3-year return to base manufacturer warranty	

## Certification



## RJ45 Pinout for PLINK Output

- Pin 1: Data +
- Pin 2: Data -
- Pin 7/8: Ground



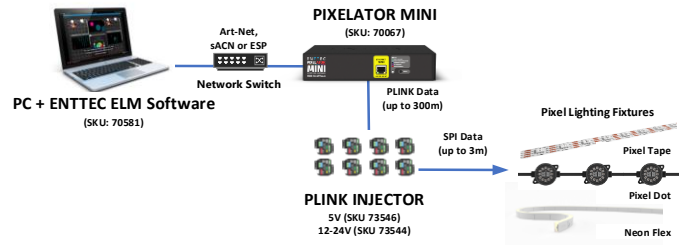
**Do not use crossover cables with any Plink device.**

<sup>1</sup> This datasheet is for PIXELATOR MINI (SKU: 70067) released after SN: 2392325, please load the latest firmware V2.0 onwards. See latest User Manual from website for revision history.

## Box Content

- PIXELATOR MINI (70067)
- 1 x 2m Cat5 cable (79102)
- 1 x 12V PSU adaptor with international plugs.
- Mounting Accessories

## Application Diagram



## Safety

- This unit is intended for indoor use only. Do not expose to rain or moisture, doing this will void the warranty.
- Make all the connections before you power it.
- Do not remove the cover, there are no user serviceable parts inside.
- Never plug this unit into a dimmer.
- Fit this unit in an area that will allow sufficient ventilation.
- Label any PLINK output cable and DO NOT connect to non-PLINK devices (i.e. Ethernet Switches). Connecting incompatible systems could result in permanent damage to equipment.

## Ordering Information

For further support and to browse ENTTEC's range of products visit the [ENTTEC website](https://www.enttec.com).

Item	SKU
PIXELATOR MINI <sup>1</sup>	70067
PLINK INJECTOR (5v)	73546
PLINK INJECTOR (12v-24v)	73544

# enttec.com

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Due to constant innovation, information within this document is subject to change.