



PIXELATOR MINI MK2 – Datasheet

eDMX to SPI Pixel Controller: Converting up to 128 Universes of SPI pixel data cross long distance.



The ENTTEC PIXELATOR MINI MK2 is a high-performance 16-port Ethernet pixel controller designed for large-scale LED installations, converting up to 128 Universes of Art-Net, sACN, and ESP protocols into SPI within the PLINK system.

PIXELATOR MINI MK2 guarantees reliable data integrity over 300 metres and connects seamlessly to PLINK INJECTORS, extending signals up to 3 metres to pixel fixtures.

Equipped with dual Ethernet ports for daisy-chaining and Power over Ethernet (PoE) support, the PIXELATOR MINI MK2 streamlines network setup and power delivery for complex installations.

Supporting over 20 pre-configured LED protocols with options for custom protocol creation, it offers unmatched versatility for tailored lighting requirements. Configuration and firmware updates are managed via an intuitive localhost web interface.

Paired with indoor or outdoor PLINK INJECTORS or CVC4 dimmers, the PIXELATOR MINI MK2 delivers scalable, reliable LED control for even the most demanding installations, combining adaptability, performance, and simplicity.

Features

- Converts eDMX (e.g. Art-Net, sACN, and ESP) to SPI for pixel control over long distance.
- Dual RJ45 connectors for daisy-chain connectivity at 10/100 Mbps speeds.
- 16* RJ45 output ports fully compliant with Cat5e/Cat6 cable for easy installation.
- Up to 128 Universes (8U per port) pixel control.
- 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 '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

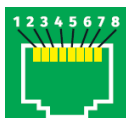
Connectors	1* Power input (DC Jack)	
	2* Ethernet (RJ45)	
	16* PLINK output (RJ45)	
Power Input	12-24V DC / PoE IEEE802.3AF	
Current Draw	100-270mA	
Max. Power Draw	3.2W	
ESD Protection	Resettable fuse & TVS suppression per port.	
Surge Protection	Yes (all ports)	
IP rating	IP20	
Network Speed	10/100Base-T	
Network Configuration	Static / DHCP	
Configuration & Update	Web Interface	
Input Protocols	Art-Net	sACN
	ESP	
Output Protocol	SPI in PLINK Data	
Max. Output Universe	128 Universe	
Max Refresh Rate	100fps	
LED status indicator	Forward-facing LED indicator	
	Network link/Activity (integrated into RJ45)	
Cooling Method	Convection	
Environmental Operating Temperature	0°C to 50°C 32°F to 122°F	
Environmental Operating Humidity	5- 95% (non-condensing)	
Body Material	ABS + anodised aluminium	
Unit Weight	0.47kg / 1.04lbs	
Shipping Dimensions	335*265*78 mm	
Shipping Weight	1.2kg / 2.65lbs	
Warranty	3-year return to base manufacturer warranty	

Certification



RJ45 Pinout for PLINK Output

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

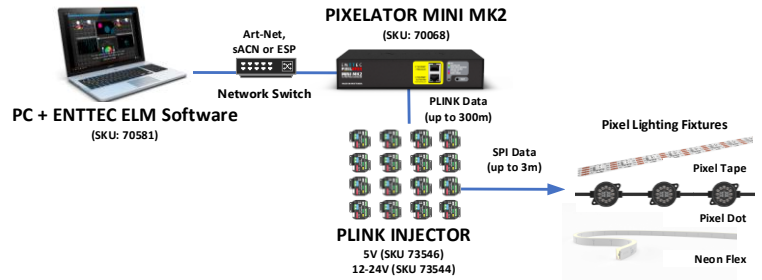


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Box Content

- PIXELATOR MINI MK2 (70068)
- 1 x 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 MK2	70068
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.