ENTTEC

OCTO MK2 (71521)
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OCTO MK2 – Datasheet

eDMX to SPI pixel controller with standalone mode and an added overdrive feature capable of transmitting up to 16 universes of SPI data in a compact 4-module DIN-rail form factor.

AUSTRALIAN DESIGNED + MADE

Take your projects to the next level with the ENTTEC OCTO MK2. This robust SPI LED controller efficiently converts up to 16 universes of DMX over Ethernet to pixel data (8U per output), with auto activation of Overdrive mode when configured to output more than 4U per port.

Make LED strip and pixel dot system deployment a breeze with the OCTO MK2. With network chaining and direct power from the LED pixel source, fast installation has never been easier.

The user-friendly OCTO MK2 comes equipped with convenient features such as an identity button for wiring checks and a wide input voltage range (4-60VDC) all packed into a slim 4 DIN form factor.

The OCTO MK2 supports over 20 pre-listed pixel output protocols and supports immediate custom pixel protocol creation (criteria apply, see user manual).

With the inbuilt Fx engine, the OCTO MK2 allows you to create and edit gradient effects with real-time preview effortlessly. The device's web interface offers a seamless editing experience and can be configured to run standalone upon power-up, eliminating the need for a DMX source.

Note: OCTO does not provide power to lighting fixtures.

Features

■ **Dual pixel outputs with Data and Clock support.**

■ **Supports up to 16 universes of Art-Net, sACN , ESP and KiNet.**

■ **Multiple pixel output protocols supported.**

■ **Ability to create custom pixel output protocols (criteria apply, see user manual).**

■ **Expandable network with daisy-chaining through Ethernet connections.**

■ **DHCP or Static IP address support.**

■ **Grouping functionality to reduce input channel count.**

■ **Surface or TS35 DIN rail mounting options.**

■ **Identify/Reset button for quick wiring verification without a network connection.**

■ **Intuitive device configuration and updates through the built-in web interface.**

■ **Inbuilt Fx engine allowing gradient effect in standalone operation without a DMX source.**

Specification

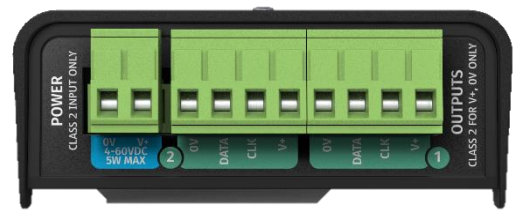| Connectors	2* Network (RJ45)	
	2* SPI Output (4-Pin Phoenix)	
	1* Power (2-Pin Phoenix)	
IP rating	IP20	
LED indicators	Forward-facing LED indicator	
	Network link/activity (integrated into RJ45 ports)	
eDMX input protocol	Art-Net	sACN
	ESP	KiNet
Data output type	SPI (NZR)	
Max. eDMX -> pixel conversion per device	16 Universes (8,192 channels)	
Max. pixels controllable per device	RGB	1360 (680 per port)
	RGBW	1024 (512 per port)
Network speed	10/100Base-T	
Network discovery	ENTTEC's EMU software	
Network configuration	Static (Default 192.168.0.10) / DHCP	
Recommended network device quantity per chain	Chains of up to 8 devices give optimum synchronization between outputs	
Firmware updates	V4.0 onwards[1]	
Input voltage	4-60V DC	
Max. power draw	5W	
Max. heat dissipation	4.5 W	
Max. output voltage	5V	
Max. output current	50mA	
Cooling method	Convection	
Operating temperature	-20°C to 50°C / -4°F to 122°F	
Operating humidity	5 to 95% (non-condensing)	
Body material	ABS plastic	
Mounting options	Surface & TS35 DIN Rail mount	
Unit dimensions	100.5*72.25*34 mm	
Unit weight	0.11kg / 0.24lbs	
Shipping Dimensions	160*140*40 mm	
Shipping weight	0.18kg / 0.39lbs	
Warranty	3-year return to the base manufacturer warranty	

Certification

Box Content

- OCTO MK2
- 2 x WAGO connectors
- 1 x Din mounting clip & screws

Phoenix Connector

Supported Pixel Protocols (Pre-listed):
APA 102, APA 104, GS8208B, SJ1221 (16bit & 8bit), SPXL (16bit & 8bit), SK6812, TLC5973 (16bit & 8bit), TM1804, TM1812, TM1814, 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.

Safety

- Please refer to the OCTO MK2 User Guide for wiring diagrams & Installation guidance.
- Always refer to this product's safety notes before handling or specifying it on your project.

Ordering information

For further support and to browse ENTTEC's range of products visit the ENTTEC website.

Item	SKU
OCTO MK2	71521

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[1] This datasheet is for OCTO MK2 (SKU: 71521) units released after SN: 2374307 that only compatible with firmware V4.0 onwards.