ENTTEC

DIN PIXIE – Datasheet

SPI Pixel Strip/Dot controller: controls up to 4 universes of LED pixels over two outputs featuring standalone mode

AUSTRALIAN DESIGNED + MADE

ENTTEC DIN PIXIE simplifies complex lighting setups with its versatile input modes and output options. In DMX mode, it takes in 1 DMX universe per port and controls a total of 2 universes SPI pixels. However, in USB mode and when recording from Art-Net using EMU Software for a standalone show, it unleashes its full potential, offering an impressive 4 universes of SPI pixel control.

Users can seamlessly switch between live control and standalone mode and make use of advanced grouping functions and precise DMX-512A data distribution across two output ports. These ports support numerous protocols including custom protocol creation (criteria apply, see user manual), offering flexibility for various installation needs.

In standalone mode, DIN PIXIE can record and playback pre-recorded sequence with options like play count, loop delay, and play on power-up.

The user-friendly device allows easy configuration, updates, and standalone show uploads through a robust USB type-B port via ENTTEC's free EMU software. Alternatively, users can control it through the USB Type-B connector using the API.

With a broad power input range of 5-48vDC, it's compatible with various LED pixel strips and dots when connected to the same power source. DIN PIXIE truly simplifies lighting control.

Features

- Controls/records up to 4 universes SPI pixels

- Operates between USB Mode, DMX Mode or Standalone Mode.

- 2U pixel control when receiving 1U DMX512 per port in DMX Mode.

- 4U pixel control when recording or using live input in USB Mode.

- Supports over 20 SPI protocols and custom protocols for pixel strips and dots.

- Records from either Art-Net or DMX port for Standalone show playback using inbuilt flash memory (4000 frames [~100 seconds]).

- Precisely configures data distribution across two output ports with advanced output controls: DMX start address and pixel grouping function.

- Option to play a show on DMX loss or blackout output.

- All ports feature ESD surge protection and resettable fuses to block external faults & electrical noise propagation through control infrastructure.

- Configuration and updates via USB Type-B port using EMU software.

- Backward compatible with API for USB -> SPI control.

Pre-listed Support Protocols*:

APA 104, GS8208B, SPXL (16bit & 8bit), SK6812, TM1804, TM1812, TM1814, UCS1903*, UCS2903*, UCS2904*, UCS8903* (16bit & 8bit), UCS8904* (16bit & 8bit), WS2811, WS2812, WS2812B, WS2813, WS2815, WS2818*, AHL003 (16bit & 8bit), SJ1221(16bit & 8bit), TLC5973(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.

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Specification

Connectors	1* USB 2.0 Type-B Input
	2* DMX Input (RJ45 port)
	2* SPI Output (3 Pin Phoenix)
ESD Protection	Resettable fuse & TVS suppression per port.
Surge Protection	Yes (all ports)
Other Protection	Diode & Resettable fuse to block stray power on the data line in fault situations.
IP Rating	IP20
LED Indicator	Yes
Input Protocol	USITT DMX512-A
Data Output Type	SPI Protocols (customisable)
Maximum Output per port	2 universes (1,024ch) (duplicable on both ports)
Max. Output Refresh Rate	40FPS
Latency	5 milliseconds
Input Voltage	5 – 48V DC (Via USB or output port VCC terminal)
Max. Power Draw	1.5W
Max. Rated Current per screw terminal (VCC / VCC0)	10A
Configuration Software	ENTTEC EMU Software
Firmware Updates	ENTTEC EMU Software
Environmental Operating Temperature	-20°C to 50°C -4°F to 122°F
Environmental Operating Humidity	5- 95% (non-condensing)
Body Material	ABS plastic
Mounting option	DIN
Unit weight	95g/ 0.21lbs
Shipping Dimensions	140*140*40mm
Shipping weight	0.22kg / 0.49lbs
Warranty	3-year return to base manufacturer warranty

Box contents

- DIN PIXIE
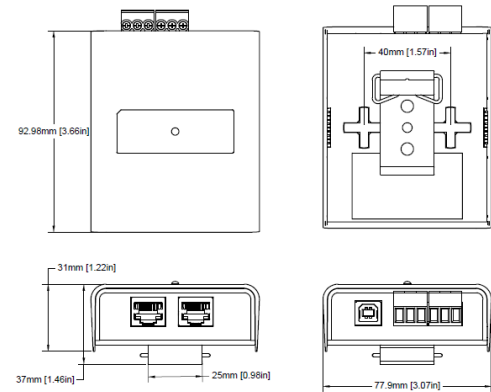- DIN Mounting Bracket
- USB Type A -> USB 2.0 Type B cable
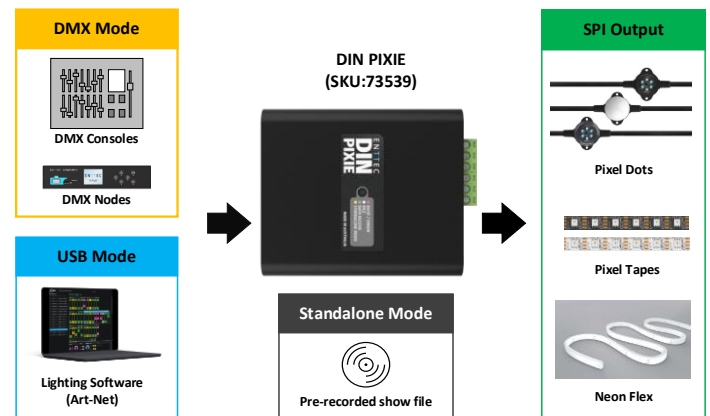
Certification

CE UKCA FC ✓ 🗑

RJ45 Pin for DMX Input

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

Pin numbering in accordance with ANSI E1.27-2

Physical Dimension

Application diagram

See the User Manual for a detailed wiring guide.

Safety

- This unit is intended for indoor use only. Do not expose to rain or moisture, doing this will void the warranty.
- Never plug this unit into a dimmer.
- Always be sure to mount this unit in an area that will allow sufficient ventilation.
- Label any Cat5/6 DMX connector and DO NOT connect to non-DMX ports (i.e. Ethernet Switches). Connecting unlike systems could result in permanent damage.

Ordering information

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

Item	SKU
Din PIXIE Rev B[1]	73539

enttec.com

MELBOURNE AUS / LONDON UK / RALEIGH-DURHAM USA / DUBAI UAE
Due to constant innovation, information within this document is subject to change.

[1] *This datasheet is for DIN PIXIE Rev. B released from SN 2358765 compatible firmware version 2.0 onwards.*