



MADRIX[®] NEBULA is a flexible interface to directly control a wide range of digital LEDs.

The MADRIX® NEBULA directly connects to your LED pixels. This advanced SPI decoder receives control data over USB or Art-Net over Ethernet network and is built to provide excellent image quality.

Direct Connection

Directly connect to a wide range of supported LEDs via two 4-pin screw terminals. A signal frequency of up to 24 MHz is available. Supply power over USB or 5 V to 24 V over a 2-pin screw terminal.

SPI Converter

Art-Net is directly converted to SPI without the need for an additional interface. Reliably distribute data from any compatible software or hardware controller. Use USB or Art-Net for all the great features of the MADRIX® software.

Supported LEDs

• APA104 • APA106

• LPD6803

• LPD8806

• SM16703

• TLS3008

• TM1804 • TM1809

- TM1812
- TM1829 • UCS1903
 - WS2801
 - WS2803
- WS2811
- WS2812
 - - WS2812B

Additional LED types will be supported with future firmware updates.

Connectivity

- 2x OUT (screw terminals)
- 1x RJ45 Ethernet port
- 1x USB port
- 1x Power (screw terminal)

Quality Output Of 8 Universes

Each device drives up to 1,360 RGB pixels while ensuring responsive delivery of high-quality signals to each individual LED. You can choose the output protocol separately for each of the two ports.

MADRIX[®] Sync Mode

Simply use several units at the same time for larger projects. Only MADRIX[®] software and hardware allow you to fully synchronize Art-Net data for all ports and across multiple devices to get an optimal image on the LEDs without visual interruptions.

Designed For DIN Rails Or Walls

Its non-conductive enclosure and standardized design for 35 mm top-hat rails make mounting quick, easy, and safe. 2 extra brackets are provided for optional wall mounting. 4 indicators quickly show the device status with the option to turn them off.

Invaluable Features

The device is ready within seconds after startup. HTP Merging is automatically available for two Art-Net sources. You can change specific device settings using the built-in web configuration tool.

Package Contents

- MADRIX® NEBULA
- Set of screw terminals (2x 4-pin and 1x 2-pin)
- USB cable
- MADRIX[®] software (license not included)
- 2 wall-mount brackets