



## DATASHEET



### MaNima DSA-14U

- Possibility of cascade switching for the controllers
- Configure with MaNima configurator (user interface)
- Polarity protection on the power supply, overvoltage protection up to 100 VDC
- Configurable in fixed installation by means of ethernet and unique serial number
- Firmware update possible via ethernet

#### Live mode

The MaNima LED interface can send live data with ArtNet to digital LED strips or one or both DMX ports.

#### Design

The robust design of the MaNima interface delivers a reliable product for industrial applications.

#### Controlling scenes

The recorded scenes can be started by external inputs or DMX channels configured as a DMX port input.

#### Art-Net

The MaNima LED interface can be controlled via ArtNet V1.4. The interface is easy to find and use thanks to the configurable ArtPoll system.

#### Standalone mode

In Stand-Alone mode, the MaNima LED interface plays a recorded scene from the SD card. The scene can be recorded through Art-Net according to the WYSIWYG principle.

#### Easy-to-use GUI

The settings of the MaNima LED interface can easily be changed by a user via the MaNima LED interface configurator.

#### External inputs

Scenes can be started via external inputs. These are digital inputs or analogue inputs; 4-20mA or 0-10V.

#### Synchronization

Multiple MaNima LED interfaces synchronize when playing scenes through a master and slave setup.

#### Multiple protocols at once

Due to the available multiple ports, there is also the possibility of sending different protocols over different ports.



# Technical Specifications

## Technical Specifications:

|                               |   |
|-------------------------------|---|
| <b>Weight</b>                 | 360 Gr  |
| <b>Dimensions</b>             | 90 x 159 x 58 mm  |
| <b>Mounting</b>               | Din rail  |
| <b>IP class</b>               | IP10  |
| <b>Wiring</b>                 | Max. 2.5mm <sup>2</sup>   14 AWG  |
| <b>Connectors</b>             | Power: 12-48 VDC terminal connector, Art-Net terminal connector:RJ45 bus, IO port 5-input/ Output terminal connector, analogue 6-pin terminal connector, +1- volt terminal connector. |
| <b>Input voltage</b>          | 12-48V DC 200mA max   |
| <b>Max. Power consumption</b> | 9.6W  |
| <b>Channels</b>               | 10.240 Art-Net and/or up to 1024 DMX channels   |
| <b>Ethernet</b>               | RJ45 compatible, for 10/100 Base-TX Ethernet with Static IP address or DHCP   |
| <b>Input</b>                  | <i>DMX512 (2 Inputs)   Art-Net   MaNima Configurator   5 Digital Inputs   6 Analogue Inputs  </i>   |
| <b>Output</b>                 | <i>47+ SPI protocols (supported IC's list)   DMX512 (2 outputs)   SPI (6 outputs)   Art-Net  </i>   |
| <b>Directives</b>             | <i>CE, RoHs</i>   |
| <b>Operating temperature</b>  | <i>10°C ~ 60°C</i>  |
| <b>Storage temperature</b>    | <i>10°C ~ 60°C</i>  |
| <b>Warranty</b>               | <i>5 Years</i>  |
| <b>GUI</b>                    | <i>MaNima Configurator</i>  |



## SPI Protocols

APA102, APA102\_8bit, APA104, APA106

BS0901

CX808

DM412

GW6205\_400kHz, GW6205\_800kHz, GS8208

INK1003

LD1510, LPD6803

MBI6024, MB16120, MY9221, MY9231, MY9291

PC5XS301V0500

SK6812, SK6812RGBW, SK6822, SK8922

SM16703, SM16716, SM16726

TM1803, TM1804\_400kHz, TM1804\_800kHz, TM1809, TM1812, TM1814, TM1914A

UCS1903\_400kHz, UCS1903\_800kHz, UCS1904, UCS2903, UCS2904, UCS2912, UCS512B3, UCS5603A, UCS8904, UCS9812

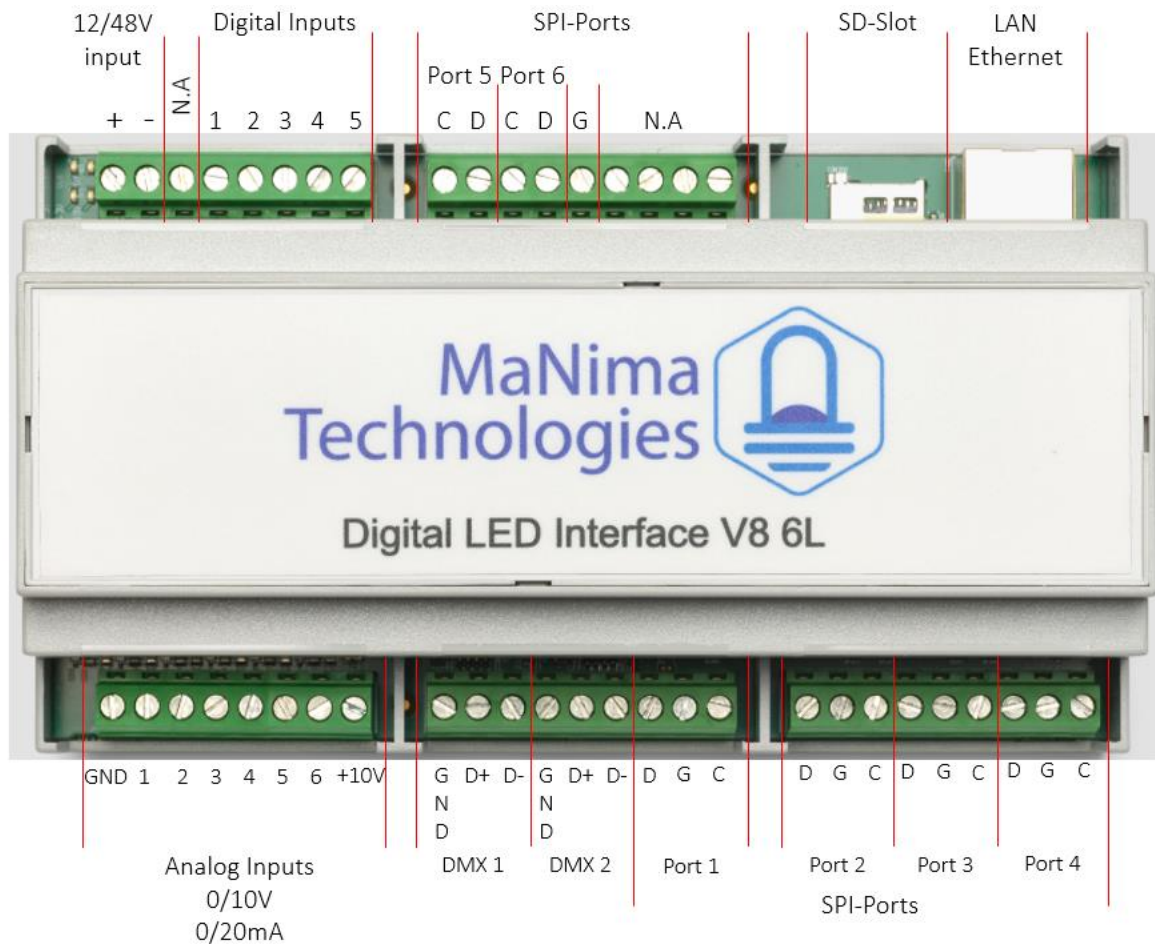
WES9412, WES943

WS2803, WS2811\_400kHz, WS2811\_800kHz, WS2812, WS2812B, WS2812S, WS2813, WS2818



## Connection Diagram

Descriptions of ports from top left to bottom right:



**12/48V Input:** Connect 12/48 Volts to this connector. DO NOT make short circuit while doing this, since it will seriously damage the MaNima LED Interface.

**Digital Inputs:** Digital Inputs are inputs used to control the MaNima LED Interface with voltages between +3,3V and +12V. Inputs can be configured using the 'Inputs' tab.

**SPI-ports (1-6):** These ports are used as outputs for the Data (D) Ground (G) and the Clock (C). Every port has a D,G and a C output. These ports make sure the LED's will receive the Digital Signal.

**SD-Slot:** An SD card can be placed inside this slot. All scenes are recorded and saved here.

**LAN/Ethernet:** To connect to a network, a LAN or Ethernet cable must be connected to the MaNima LED Interface, using this port.

**Analog Inputs:** These inputs are used as Analog Channels. The +10V is used for these connections (It can also be used for the Digital inputs).

**DMX 1-2:** These ports are used for LED's that need DMX signals instead of SPI-protocols.



## Models

|                                  | Models | MaNima DLP-8U | MaNima DLP-14U | MaNima DLP-20U | MaNima DLP-26U | MaNima DSA-8U | MaNima DSA-14U | MaNima DSA-20U | MaNima DSA-26U |
|----------------------------------|--------|---------------|----------------|----------------|----------------|---------------|----------------|----------------|----------------|
| <i>Functions</i>                 |        |               |                |                |                |               |                |                |                |
| <i>Record/Play 8 Universes</i>   | ✓      | ✓             | ✓              | ✓              | ✓              | ✓             | ✓              | ✓              | ✓              |
| <i>Record/Play 14 Universes</i>  | ✗      | ✓             | ✓              | ✓              | ✓              | ✓             | ✓              | ✓              | ✓              |
| <i>Record/Play 20 Universes</i>  | ✗      | ✗             | ✓              | ✓              | ✓              | ✓             | ✓              | ✓              | ✓              |
| <i>Record/Play 26 Universes</i>  | ✗      | ✗             | ✗              | ✓              | ✓              | ✓             | ✓              | ✓              | ✓              |
| <i>Live playing</i>              | ✓      | ✓             | ✓              | ✓              | ✓              | ✓             | ✓              | ✓              | ✓              |
| <i>Stand-alone playing</i>       | ✗      | ✗             | ✗              | ✗              | ✓              | ✓             | ✓              | ✓              | ✓              |
| <i>Scanner</i>                   | ✓      | ✓             | ✓              | ✓              | ✓              | ✓             | ✓              | ✓              | ✓              |
| <i>Network</i>                   | ✓      | ✓             | ✓              | ✓              | ✓              | ✓             | ✓              | ✓              | ✓              |
| <i>Mapping</i>                   | ✓      | ✓             | ✓              | ✓              | ✓              | ✓             | ✓              | ✓              | ✓              |
| <i>DMX</i>                       | ✓      | ✓             | ✓              | ✓              | ✓              | ✓             | ✓              | ✓              | ✓              |
| <i>Scenes</i>                    | ✓      | ✓             | ✓              | ✓              | ✓              | ✓             | ✓              | ✓              | ✓              |
| <i>Digital Inputs</i>            | ✗      | ✗             | ✗              | ✗              | ✓              | ✓             | ✓              | ✓              | ✓              |
| <i>Analog Inputs</i>             | ✗      | ✗             | ✗              | ✗              | ✓              | ✓             | ✓              | ✓              | ✓              |
| <i>Digital outputs</i>           | ✓      | ✓             | ✓              | ✓              | ✓              | ✓             | ✓              | ✓              | ✓              |
| <i>Analog outputs</i>            | ✓      | ✓             | ✓              | ✓              | ✓              | ✓             | ✓              | ✓              | ✓              |
| <i>ART-NET</i>                   | ✓      | ✓             | ✓              | ✓              | ✓              | ✓             | ✓              | ✓              | ✓              |
| <i>Updating through ethernet</i> | ✓      | ✓             | ✓              | ✓              | ✓              | ✓             | ✓              | ✓              | ✓              |
| <i>SD-Card</i>                   | ✗      | ✗             | ✗              | ✗              | ✓              | ✓             | ✓              | ✓              | ✓              |

# GUI

