

# MaNima Interface

## DATASHEET



### MaNima Magnus 14 Digital LED Interface

- Master-Slave function.
- Up to 7168 SPI channels
- Up to 1024 DMX channels.
- Analog and Digital Triggers
- Additional features

#### Recording and Playing

The MaNima Magnus is able to record and play up to 26 universes according to the WYSIWYG principle.

#### Reliable and Stable

The MaNima Magnus has been proven to be a reliable and stable product when used for high-end LED projects

#### EMC proof product

All of MaNima's products are EMC proof and are an ideal choice for use near EMC vulnerable systems.

#### Art-Net

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

#### Stackable

Connect dozens of MaNima Interfaces together to create huge LED projects with the least amount of parts.

#### 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. And UDP commands.

#### Synchronization

Multiple MaNima Interfaces can 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

Weight	<i>360 Gr</i>
Dimensions	<i>90 x 159 x 58 mm</i>
Mounting	<i>Din rail</i>
IP class	<i>IP10</i>
Wiring	<i>Max. 2.5mm<sup>2</sup>   14 AWG</i>
Connectors	<i>Power: 12-48 VDC terminal connector, Art-Net terminal connector:RJ45 bus, IO port 5-pin input/ Output terminal connector, analogue 6-pin terminal connector, +10 volt terminal connector.</i>
Input voltage	<i>12-48V DC 200mA max</i>
Max. power consumption	<i>9.6W</i>
Channels	<i>10.240 Art-Net and/or up to 1024 DMX channels</i>
Ethernet	<i>RJ45 compatible, for 10/100 Base-TX Ethernet with Static IP address or DHCP</i>
Input	<i>DMX512 (2 Inputs)   Art-Net   MaNima Configurator   5 Digital Inputs   6 Analogue Inputs   UDP commands</i>
Output	<i>50+ SPI protocols (supported IC's list)   DMX512 (2 outputs)   SPI (6 outputs)   Art-Net</i>
Directives	<i>CE, RoHs</i>
Operating temperature	<i>10°C ~ 60°C</i>
Storage temperature	<i>10°C ~ 60°C</i>
Warranty	<i>5 Years</i>
Gui	<i>MaNima Configurator</i>



## Supported ICs

APA102, APA102\_8bit, APA104, APA106, HD107S

BS0901

CX808, CS8812

DM412, DMX

GW6205\_400kHz, GW6205\_800kHz, GS8208

INK1003

LD1510, LPD6803

MBI6024, MB16120, MY9221, MY9231, MY9291

PC5XS301V0500

SK6812, SK6812RGBW, SK6822, SK8922

SM16703, SM16716, SM16726, SM16904

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

UCS1903\_400kHz, UCS1903\_800kHz, UCS1904, UCS2903, UCS2904, UCS2912, UCS512B3, UCS5603A, UCS8904, UCS9812, UCS8903

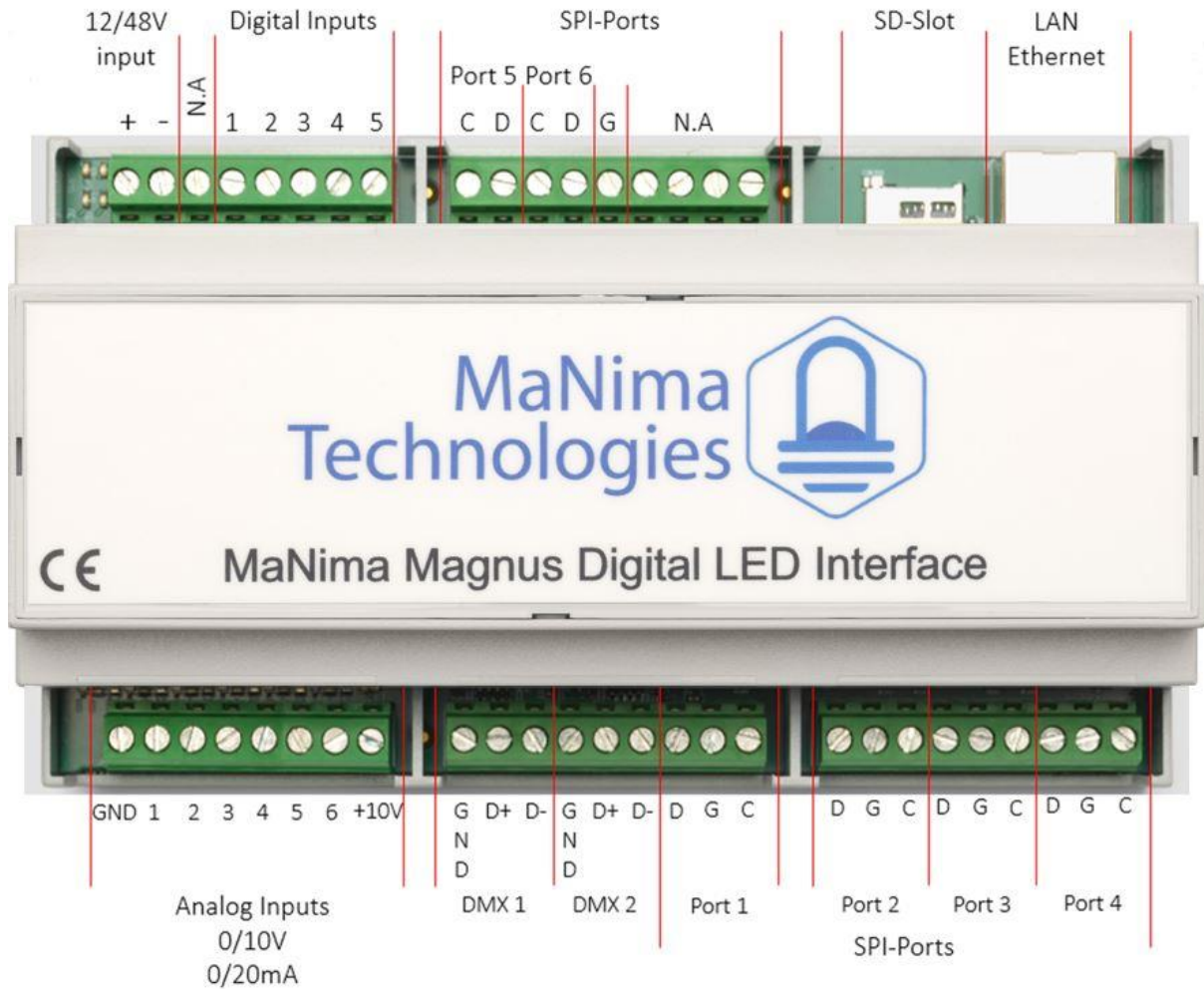
WES9412, WES943

WS2801, WS2803, WS2811\_400kHz, WS2811\_800kHz, WS2812, WS2812B, WS2812S, WS2813, WS2815, 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 devices that need DMX signals.

# Models

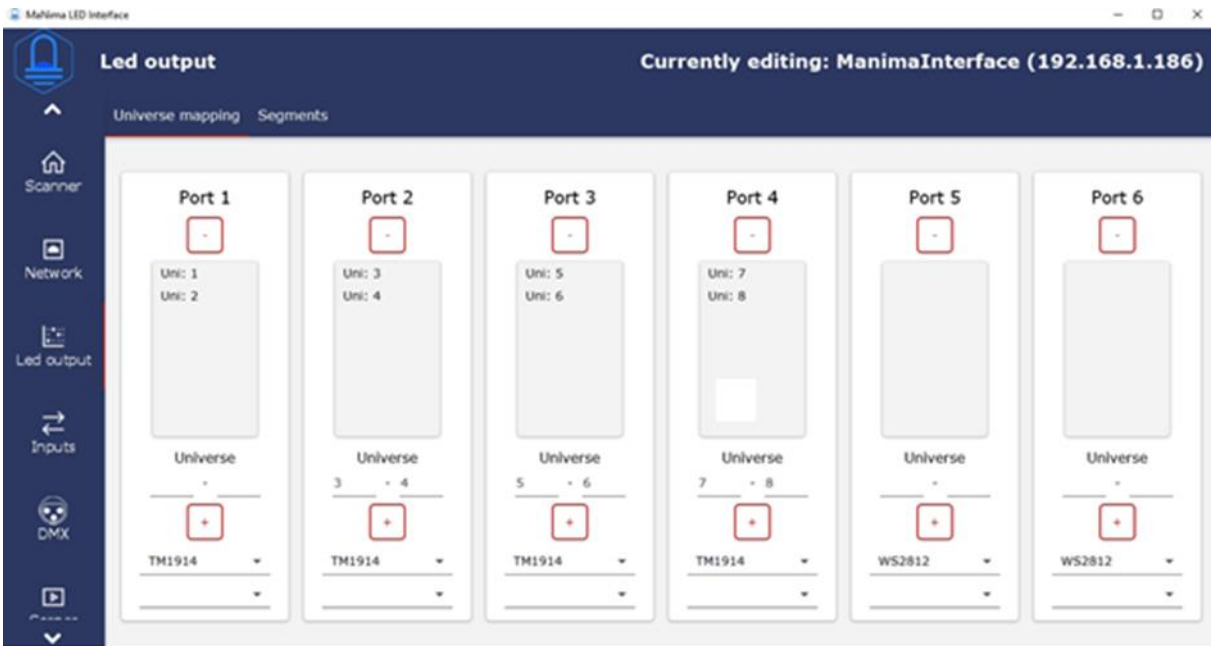
	Models	MaNima Magnus	MaNima Ignis	MaNima Nexus	MaNima Pollux
<i>Functions</i>					
26 universes SPI*	✓	✓	✗	✗	✗
DMX	✓	✓	✗	✗	✗
SPI recording and playing	✓	✗	✗	✗	✗
Segments	✗	✓	✗	✗	✗
Digitale triggers	✓	✓	✗	✓	✓
Analoge triggers	✓	✓	✗	✓	✓
NTC input	✗	✗	✗	✓	✓
PWM output	✗	✗	✗	✓	✓
LDR input	✗	✗	✗	✓	✓
Wi-Fi**	?	?	✓	?	✓
DALI	✗	✗	✓	✗	✗
Ethernet	✓	✓	✓	✓	✓
Art-Net	✓	✗	✓	✗	✗
UDP	✓	✓	✓	✗	✗
Custom API	✗	✓	✓	✗	✗
M2M	✗	✗	✓	✗	✗
2nd power source	✗	✗	✗	✓	✓

\*The amount of universes depend on the licence

\*\*When yellow; WiFi is available with an additional module



# GUI



## Contact Info

### MaNima Technologies B.V.

#### Address:

Hastelweg 260-B  
5652 CN, Eindhoven  
Netherlands

#### Contact:

E: [info@manima-technologies.com](mailto:info@manima-technologies.com)  
W: [www.manima-technologies.com](http://www.manima-technologies.com)  
T: 040 202 49 04

Dutch chamber of Commerce registration number/KvK-nummer: 71614605

#### YouTube

Link: [MaNima Technologies - YouTube](#)

