

# MaNima Interface

## DATASHEET



### MaNima Magnus 8

- Master-Slave function.
- Up to 8 universes
- Easy to configure.
- Update the Firmware with the GUI
- Additional features
- Custom API

#### Live mode

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

#### Custom API

A custom API makes it possible to let your system communicate with the MaNima LED Interface.

#### Controlling scenes

The recorded scenes can be started by external inputs, DMX; 4-20mA or 0-10V, UDP and HMI.

#### 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

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   Custom API</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>



# SPI Protocols

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

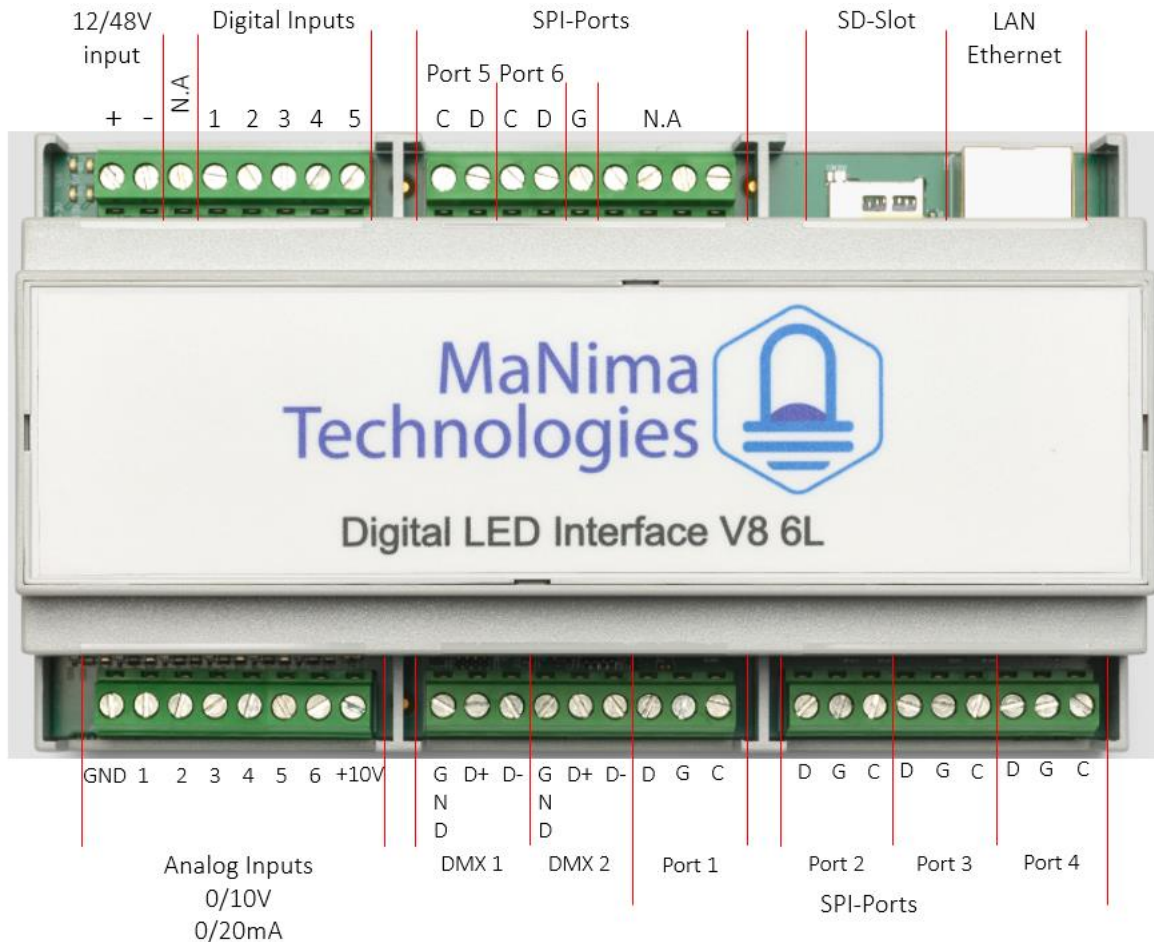
WES9412, WES943

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).

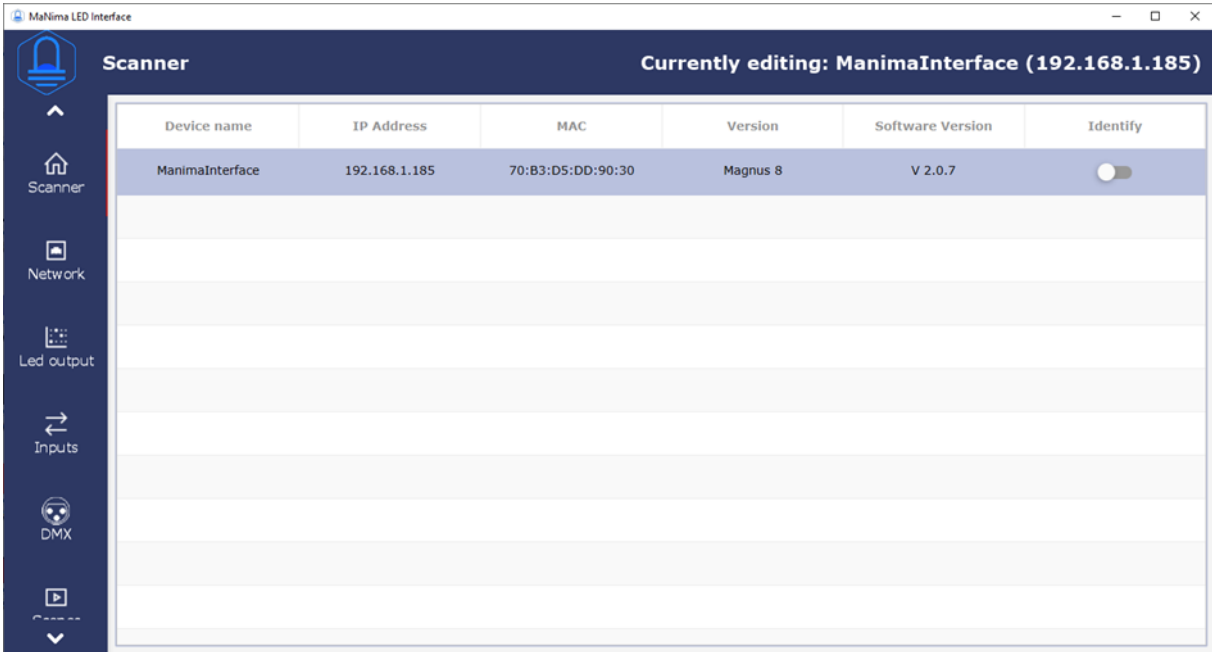
**DMX 1-2:** These ports are used for devices that need DMX signals.

# Models

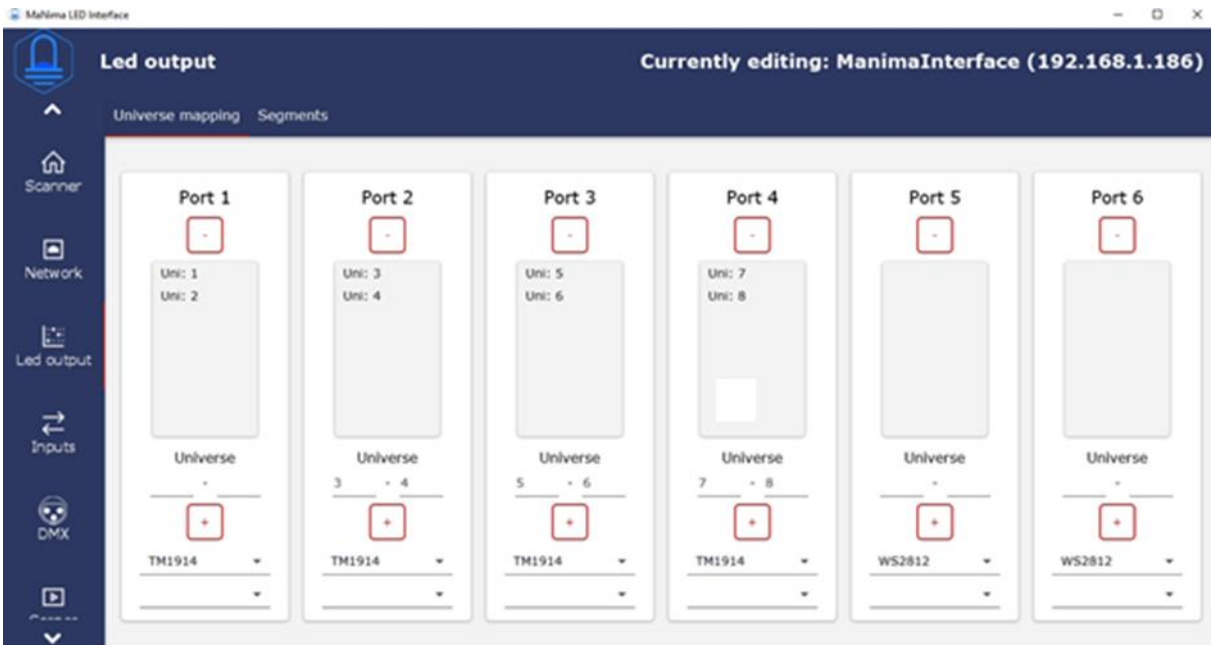
Functions	Models	MaNima Magnus 2	MaNima Magnus 8	MaNima Magnus 14	MaNima Magnus 20	MaNima Magnus 26
Record/Play 2 Universes	✓	✓	✓	✓	✓	✓
Record/Play 8 Universes	✗	✓	✓	✓	✓	✓
Record/Play 14 Universes	✗	✗	✓	✓	✓	✓
Record/Play 20 Universes	✗	✗	✗	✓	✓	✓
Record/Play 26 Universes	✗	✗	✗	✗	✓	✓
Live playing	✓	✓	✓	✓	✓	✓
Stand-alone playing	✓	✓	✓	✓	✓	✓
Autoloop Scanner	✓	✓	✓	✓	✓	✓
Interface Scanner	✓	✓	✓	✓	✓	✓
Network Configuration	✓	✓	✓	✓	✓	✓
Port Configuration	✓	✓	✓	✓	✓	✓
DMX output	✓	✓	✓	✓	✓	✓
DMX Input	✓	✓	✓	✓	✓	✓
Group Configuration	✓	✓	✓	✓	✓	✓
Digital Inputs	✓	✓	✓	✓	✓	✓
Analog Inputs	✓	✓	✓	✓	✓	✓
Digital outputs	✓	✓	✓	✓	✓	✓
Analog outputs	✓	✓	✓	✓	✓	✓
UDP	✓	✓	✓	✓	✓	✓
ART-NET	✓	✓	✓	✓	✓	✓
Ethernet IP	✓	✓	✓	✓	✓	✓
Custom API	✓	✓	✓	✓	✓	✓
Updating through ethernet	✓	✓	✓	✓	✓	✓
SD-Card	✓	✓	✓	✓	✓	✓



# GUI



Device name	IP Address	MAC	Version	Software Version	Identify
ManimaInterface	192.168.1.185	70:B3:D5:DD:90:30	Magnus 8	V 2.0.7	<input type="checkbox"/>



Port	Universe Mapping	LED Type
Port 1	Uni: 1, 2	TM1914
Port 2	Uni: 3, 4	TM1914
Port 3	Uni: 5, 6	TM1914
Port 4	Uni: 7, 8	TM1914
Port 5	Uni: -	WS2812
Port 6	Uni: -	WS2812



## Contact Info

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