MaNima Magnus

MaNima Technologies

DATASHEET

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 Tested Product

All of MaNima's products are EMC tested and can safely be used in critical applications.

Art-Net

The MaNima Magnus can be controlled via Art-Net 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

Model		MaNima Magnus	MaNima Ignis
General	Weight	360 gram	
	Dimensions	90 x 159 x 58 (B x L x H)	
	Mounting	DIN Rail 35mm	
	IP class	IP10	
	Storage temperature	10℃ ~ 60℃	
	Operating temperature	10℃ ~ 40℃	
	Warranty	5 Years	
	Directives	CE, RoHs	
Input	Wiring	Max 1.5mm² | 15 AWG	
	Own Power Consumtion	1,5W	
	Efficiency	Approx. 99,8%	
	Power Input	12-48VDC 200mA Max	
	DMX512 Inputs	2 inputs (or output)	
	Digital Inputs	5	
	Analogue Inputs 0-10V or 0-20mA	6	
	Ethernet	Ethernet terminal connector: RJ45 bus	
	Input protocols	ArtNet, sACN	
Output	SPI Outputs	6 outputs with data, clock and ground	
	ArtNet Universes	up to 26 universes total (see 'supported IC's' for more information)	
	DMX512 Outputs	2 Outputs (or inputs)	
	Max FPS	Depends on IC type, see 'supported ICs'	
Electronic Protection	Over voltage protection	Yes, up to 50 Volts	
	Short circuit protection	Short circuit protection on Power Input (< 10µs response)	
Magnus Features	MaNima Configurator	✔	✔
	Live- and Standalone player	✔	✔
	trigger with digital and analog inputs	✔	✔
	Segment function	✔	✔
	Master-Slave and grouping function	✔	✔
	DMX Input and output	✔	✔
	Extension function	✔	✔
Ignis Features	Remote control with MaNima Cloud	✘	✔
	Cloud Database	✘	✔
	Cloud Datalogging	✘	✔
	Cloud Back-up of configurations	✘	✔
	Cloud Feedback	✘	✔
	INP compatible	✘	✔
	UDP Compatible	✘	✔
	OTA software updates	✘	✔
	Artnet player	✘	✔
	astronomic timetables	✘	✔
	Custom API	✘	✔

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

Maximum universes (LEDs) per Port

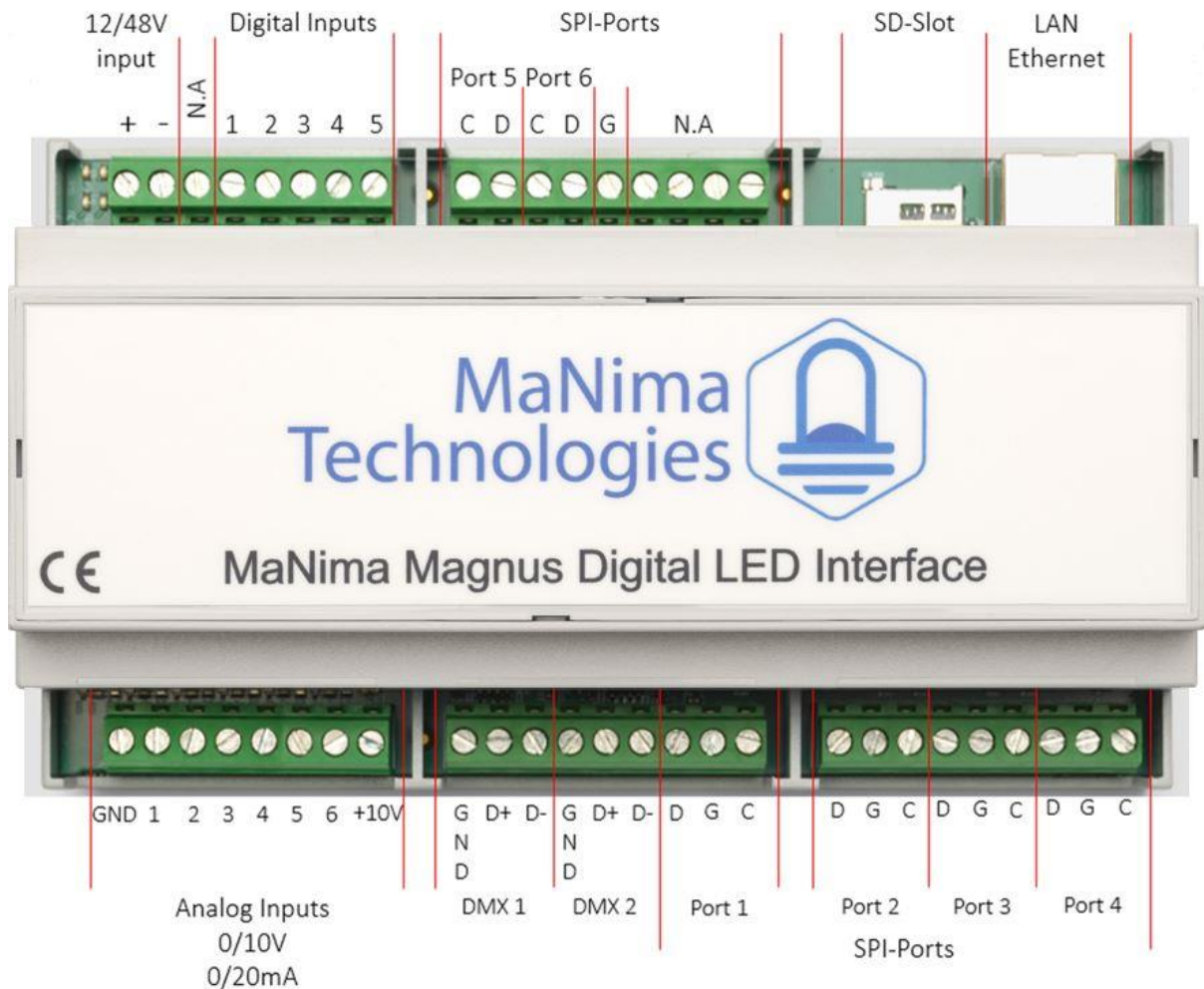Refer to the manual for further information about maximum universes per port.

LED type	30 FPS maximum	60 FPS maximum
APA102, APA102_8bit, APA104, APA106, HD107S	48 (8160 LEDs) *	24 (4080 LEDs) *
TM1914	6 (1020 LEDs)	3 (510 LEDs)
WS2812 RGBW	6 (768 LEDs)	3 (384 LEDs)
TM1814	6 (768 LEDs)	3 (384 LEDs)
WS2811, WS2812, WS2813, WS2815, WS2818	6 (1020 LEDs)	3 (510 LEDs)
GS8205, GS8206	6 (1020 LEDs)	3 (510 LEDs)
SM16703, SM16709, SM16712, SK6812	6 (1020 LEDs)	3 (510 LEDs)
TM1803, TM1804, TM1809, TM1812	6 (1020 LEDs)	3 (510 LEDs)
UCS1903, UCS1909, UCS1912, UCS2903, UCS2904, UCS2909, UCS2912	6 (1020 LEDs)	3 (510 LEDs)
INK1003	6 (1020 LEDs)	3 (510 LEDs)
LX3203, LX1603, LX1103	6 (1020 LEDs)	3 (510 LEDs)

* Theoretical maximum amount, please contact us for further assistance when using APA strip.

Connection Diagram

Descriptions of ports from top left to bottom right:

12/48V input: Connect 12-48VDC to this connector.

Digital inputs: Digital inputs are inputs used to control the MaNima LED Interface with voltages between 5V and the input voltage (maximum 48V).

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 LEDs will receive the digital signal.

SD-slot: An SD-card must be placed inside this slot. Settings and recorded scenes 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 analogue channels. The +10V is used for these connections (it can also be used for the digital inputs).

DMX 1-2: These ports are in- or output ports that can transmit DMX data to LEDs or receive DMX data to control the Magnus.

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