

MaNima Interface

The State of the Art LED Interface



MaNima Magnus Manual V3.8

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.

ArtNet

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

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 Magnus 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- slave setup.

Multiple Protocols at once

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



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Foreword

First of all, thank you for using the MaNima Magnus Digital LED Interface!

The MaNima Magnus Digital LED Interface is a very powerful product. With the ability of recording and playing up to 26 universes at once, it is the most powerful LED interface on the market.

This manual has been made for the MaNima Magnus Digital LED Interface. It is important that anyone, who has to work with the MaNima Magnus, reads this manual.

MaNima Technologies



Safety Instructions

To make sure the product is properly handled, these precautions and safety instructions must be followed:

- Read the entire manual before installing the MaNima Magnus.
- These instructions should be handed out to the technicians/end-users responsible for installing and/or operating this product.
- The installations of this product should only be carried out by certified personal.
- Do not repair this device. Any unapproved modifications or reparations conducted by anyone other than MaNima Technologies B.V., will void product warranty.
- Do not connect the wiring to this product in any other manner than described in this manual.
- Never use this product when it is damaged, has visible damage, does not work correctly or when the product shows any other questionable behaviour that is out of the ordinary with electrical devices.
- Make sure the power source has no short-circuit.
- Make sure the input voltage is between 12-48VDC when power is turned on. Higher voltages might damage the product.
- Do not use more than one power source for the MaNima Magnus.
- To turn-off the MaNima Magnus, it must be disconnected from the power source.
- The MaNima Magnus must be protected against wet environments. Any moist will damage the product.



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°C ~ 60°C	
	Operating temperature	10°C ~ 40°C	
	Warranty	5 Years	
	Directives	CE, RoHs	
Input	Wiring	Max 1.5mm ² 15 AWG	
	Own Power Consumption	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	✗	✓



The MaNima Configurator

In this chapter there will be everything you need to know about the MaNima Configurator.

The MaNima Configurator

The MC (MaNima Configurator) is the program used by the operator to configure the MaNima Magnus. The MC must be installed on a computer on the same network where the MaNima Magnus is connected to. To work with the MC, it is recommended to install the MaNima Magnus first and connect it to the network, since most (if not all) options won't be available without a connection between the computer and the MaNima Magnus.



The MaNima Configurator - Opening the MC

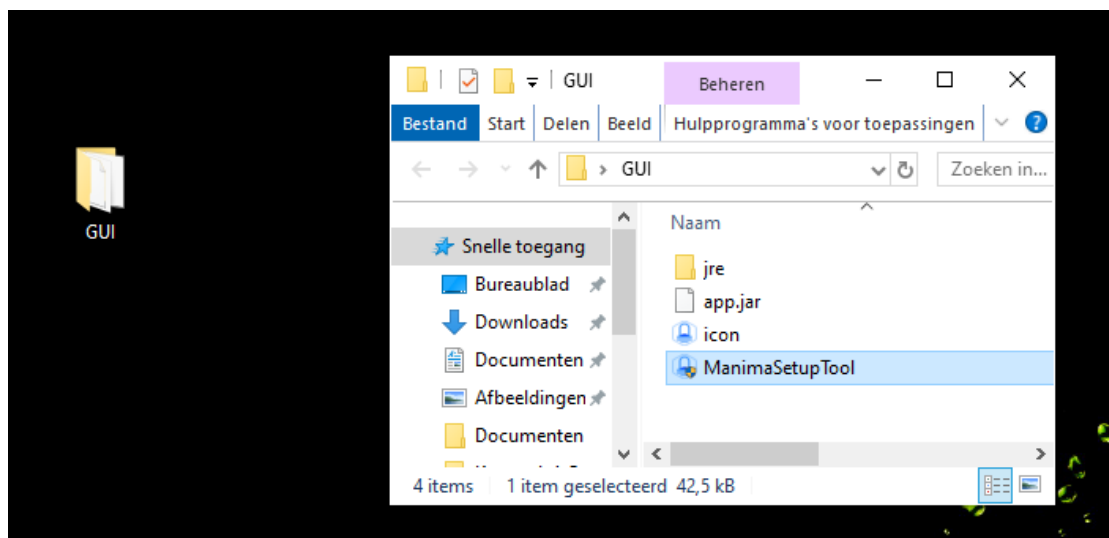
The MaNima Configurator can be downloaded here:

[Downloads | MaNima Technologies \(manima-technologies.com\)](https://manima-technologies.com)

The MC is opened by adding the “GUI” file to the computer. In this file the user will find all of the files needed to use this program. You can place the ‘GUI’ in any file, but for this manual, the file will be placed in the desktop.

The computer on which the MC will be installed on, needs the newest version of Java. Java can be downloaded on: <https://www.java.com/en/>

- **Open the file with the left mouse button and double click on “ManimaSetupTool” (highlighted blue on the image below).**



- **To open the MC directly from your desktop, you can create a shortcut using the right mouse button on the “ManimaSetupTool” file. The “ManimaSetupTool” can’t be placed outside the file, if done so, the MC will give an error.**

The MaNima Configurator- The UI (User Interface)


On the left side of the MC window there are multiple tabs which are used to configure the MaNima Magnus. A short explanation is given to each tab below:



The MaNima Configurator- Scanner

The scanner is the tab used to search for different MaNima LED Interfaces. Follow the instructions below to configure your own device.

Make sure your computer and MaNima Magnus are connected to the same Ethernet/Wi-Fi network! The interface should be in the scanner no matter what IP-adress it has.

Scanner		Currently editing: ManimaInterface (192.168.1.185)				
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"/>	
▶ ManimaInterface 	192.168.1.186	70:B3:D5:DD:90:22	Magnus 8	V 2.0.7	<input type="checkbox"/>	

Currently editing: 'name' ('IP-address') = This shows which device is currently being edited.

Device name = Device name is the name given to a device. The user will know which device is which. You can change the device name in the "settings" tab

IP Address = The IP-address is the number given to a device. Using this address the user will know which device is which. Multiple devices can have the same IP!

MAC = The MAC address is the name given to the MaNima LED Interface by the manufacturer. MAC addresses are, unlike IP addresses, never identical to each other.

Version = This shows the version of the used hardware in the MaNima LED Interface.

Software Version = This shows the software version of the connected MaNima LED Interface.

Identify = If identify is switched on you can see which LED is controlled by that device, as they will be performing an RGB(W) test cycle.

 = This icon shows which Interface is the master of a group.

 = This icon shows that the Interface has extensions connected. Press the symbol to see which.

 = Press this button to connect or disconnect an extension.

To connect to the MaNima Magnus, left click on the interface. If the connection is successful, there should be “Currently editing: (IP-address)” instead of “Currently editing: None”. Note that the MaNima Magnus cannot be configured without a SD-card.

Failure to Connect

If the MC is unable to find the MaNima Magnus, there are multiple things that may have gone wrong. So, make sure the following is correct:

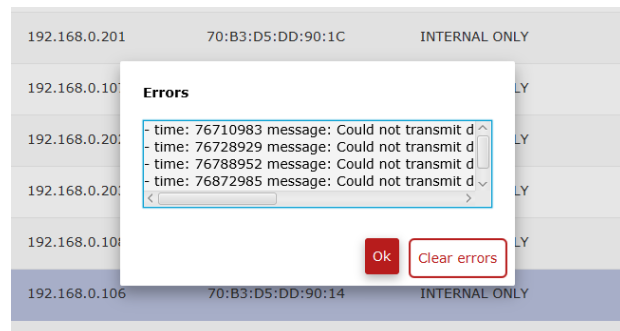
1. The MaNima Magnus is connected to the same network as the computer.
2. The network has a DHCP.
3. The IP-address is in the IP-address range of the MC.
4. The MaNima Magnus is powered or has the correct voltage.
5. Restart the MC if the MaNima Ignis still cannot be found.

Error Warning

The error warning is shown when the interface has encountered a problem. In the example given here, the interface has encountered a problem where there are too many universes in a port. This can be fixed by lowering the FPS in the live playing software.



When such an error occurs, follow the instructions written in the error message.



The MaNima Configurator - Network Configurator

The network tab is used to edit the IP-address of the device. The IP-address can be edited manually by disabling the DHCP, or automatically by enabling the DHCP.

DHCP = turn off and on using the switch

Turning off DHCP enables the manual configuration of the network settings.

Network

DHCP

Set IP address 192.168.1.185

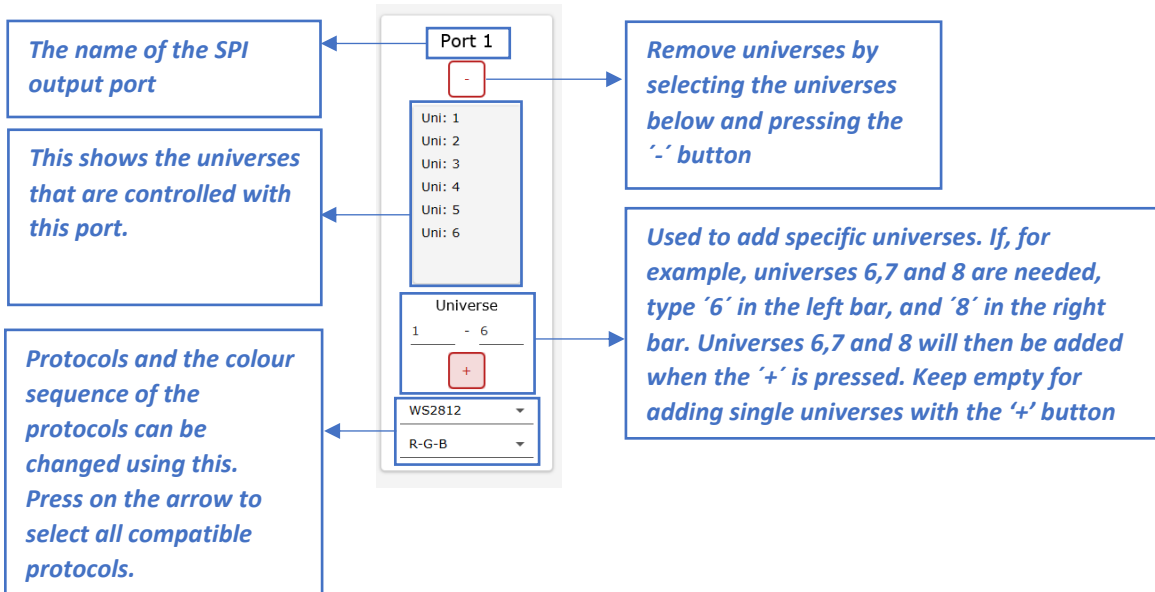
Set subnet mask 255.255.255.0

Set gateway address 192.168.0.1



The MaNima Configurator – Port Configurator

The mapping tab is used to configure the SPI-output ports on the MaNima Magnus.



The screenshot shows the 'Port 1' configuration interface. It includes a list of universes (Uni: 1 to 6), a 'Universe' section with a range '1 - 6' and a '+' button, and two dropdown menus for 'WS2812' and 'R-G-B'. Callout boxes provide the following instructions:

- The name of the SPI output port**: Points to the 'Port 1' label.
- This shows the universes that are controlled with this port.**: Points to the list of universes.
- Protocols and the colour sequence of the protocols can be changed using this. Press on the arrow to select all compatible protocols.**: Points to the dropdown menus.
- Remove universes by selecting the universes below and pressing the '-' button**: Points to the '-' button.
- Used to add specific universes. If, for example, universes 6,7 and 8 are needed, type '6' in the left bar, and '8' in the right bar. Universes 6,7 and 8 will then be added when the '+' is pressed. Keep empty for adding single universes with the '+' button**: Points to the 'Universe' section.

Multiple protocols at once

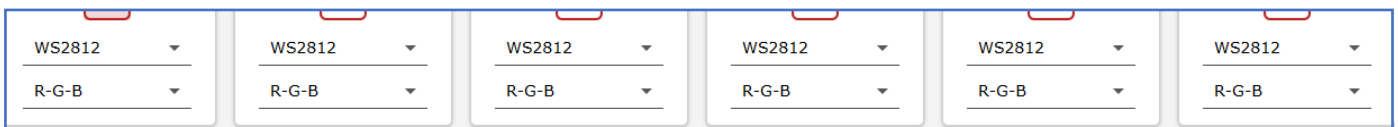
Due to the multiple available ports, there is also the possibility of sending different protocols over different ports. This is done by selecting a different protocol for each port.

Colour sequence

You have the possibility to change the colour sequence of the protocols.

SD-card

The SD-card saves all the mapping configurations. When there is no SD-card, the MaNima Magnus cannot be configured.



The MaNima Configurator – DMX Input / Output

The DMX tab is used to configure the MaNima Magnus between three different DMX modes. These modes are:

Disabled: The interface will not be or be affected by different interfaces and will operate by itself.

Master: Master mode will enable the output of the DMX connections. This has to be enabled to send DMX protocols to devices.

Slave: This mode will enable the DMX input channels on the interface. Using this, the interface can be commanded with DMX.

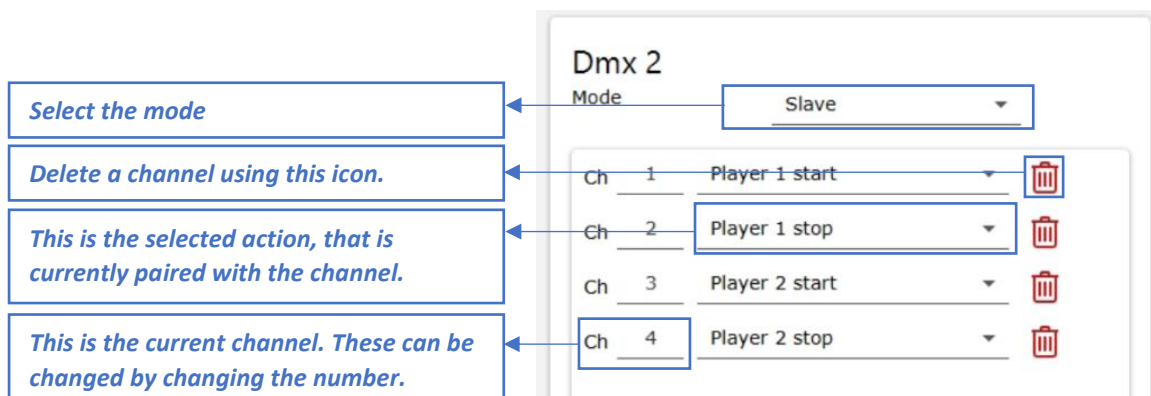
Master Mode:

The master mode sets the DMX port as an output to be connected to other devices.



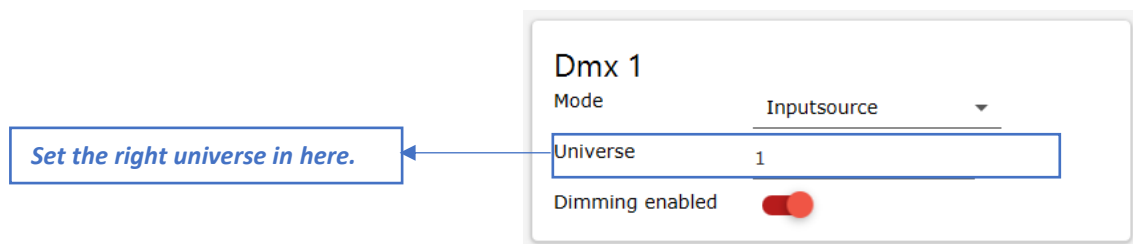
Slave mode:

Set triggers for actions activated by Input DMX signals.



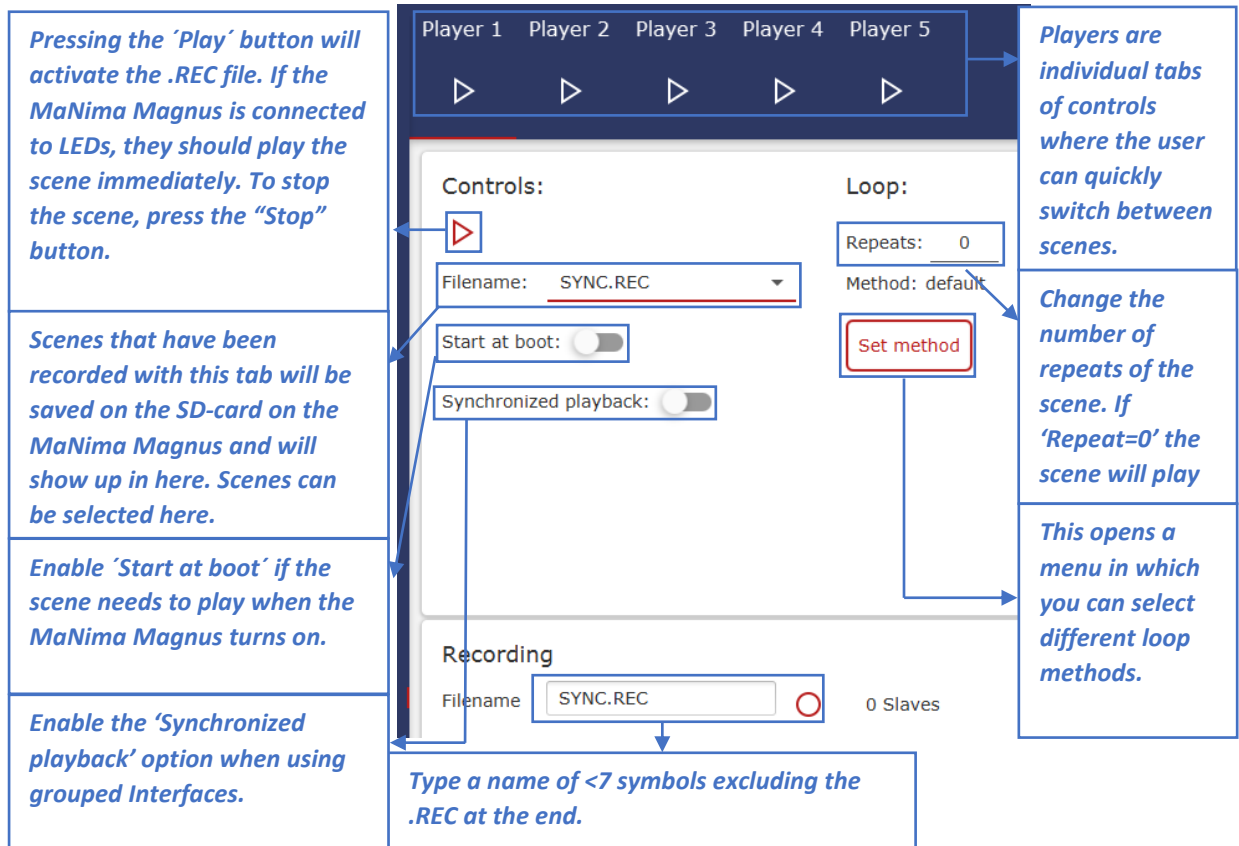
Inputsource Mode:

Inputsource mode enables the user to send DMX signals to the MaNima Magnus.



The MaNima Configurator - Scenes

With scenes .REC files can be recorded on the MaNima LED Interface.



The screenshot shows the MaNima Configurator interface with five player tabs (Player 1 to Player 5) at the top. The main area is divided into 'Controls' and 'Recording' sections. The 'Controls' section includes a play button, a filename dropdown (set to SYNC.REC), 'Start at boot' and 'Synchronized playback' toggle switches, and a 'Loop' section with a 'Repeats' input (set to 0) and a 'Set method' button. The 'Recording' section includes a filename input (set to SYNC.REC) and a '0 Slaves' indicator. A 'Set method' button is highlighted with a red box. Blue callout boxes provide instructions: 'Pressing the 'Play' button will activate the .REC file...' points to the play button; 'Scenes that have been recorded with this tab will be saved on the SD-card...' points to the filename dropdown; 'Enable 'Start at boot' if the scene needs to play when the MaNima Magnus turns on.' points to the 'Start at boot' toggle; 'Enable the 'Synchronized playback' option when using grouped Interfaces.' points to the 'Synchronized playback' toggle; 'Players are individual tabs of controls where the user can quickly switch between scenes.' points to the player tabs; 'Change the number of repeats of the scene. If 'Repeat=0' the scene will play' points to the 'Repeats' input; 'This opens a menu in which you can select different loop methods.' points to the 'Set method' button; and 'Type a name of <7 symbols excluding the .REC at the end.' points to the 'Recording' filename input.

Recording scenes

If a scene must be recorded, there needs to be an output signal going through the SPI or DMX outputs of the MaNima Magnus. Universes must be added in the 'LED Output' or 'DMX' tab before sending data through the SPI or DMX ports. When a scene is playing, press record.

Live recording with 3rd party LED editing software

Using 3rd party software which is compatible with the MaNima Magnus is important. Follow the instructions of the LED editing software to 'Live edit' the LEDs that are to be programmed. Make sure the used universes are in the mapping of the MC. All LED editing software that uses ArtNet is compatible with the MC and the MaNima Magnus.

If the LEDs are being controlled with the 3rd party software through the MaNima Magnus, you can name the file and press "record" on the MC and press 'Stop' to save the file.

The filename must be written with capital letters and cannot exceed 7 symbols.

The file is now saved on the SD-card of the MaNima Magnus and can be selected. To test if the file is working, select the file in the player and press 'Start' (instructions for synchronised recording and playing, visit the master-slave function chapter).



Loop functions

The MaNima Configurator has built in 'loop functions', these functions are used to make smooth transitions between the start and end of a scene.

To use loop functions, click on 'Set method' when having a scene selected:

Loop:

Repeats:

Method: default

[Set method](#)

A window pops up in which you can select the effect you want to use:

Set loop effect

Select effect

- Default
- Autoloop
- Bounce
- Fader
- Fade and Bounce

[Previous](#)
[Next](#)
[Cancel](#)
[Finish](#)

Autoloop:

Set loop effect

Enter effect parameters:

Duration

Minimum time to find loop

Equality

How equal must the frame be in percentage

[Previous](#)
[Next](#)
[Cancel](#)
[Finish](#)

The autoloop effect is an effect where the MaNima Configurator searches for nearly identical frames. When the MaNima Configurator has found the nearly identical frames, it cuts the recording there. If the end frame and the start frame are the same, it is nearly impossible to spot the beginning of a new recording.

The duration parameter sets the time until the IF may start searching for an identical frame.

The equality parameter gives the minimum frame equality between the two frames. If the IF can't find an equal frame, set a lower parameter.

Bounce:

The bounce effect is an effect in which the recording will be reversed at the end of the scene.

Fade:

Set loop effect

Enter effect parameters:

Duration
Time for fade to complete

Fadein
Fade at start of scene

Fadeout
Fade at end of scene

The fade effect is an effect which will slowly dim the recording at the beginning and/or end.

Fade and bounce:

The fade effect is an effect where the ending and/or beginning of a scene are fading in/out. After the fading, the scene will be reversed.

Controlling scenes

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

ArtNet

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

Live Playing

The MaNima Magnus is able to instantly receive ArtNet and send a SPI protocol to the digital LEDs.

Playing recorded scenes

The MaNima Magnus is capable of recording live data and playing this back later. The recorded files are saved on the SD-card. **IMPORTANT: Make sure that the Live ArtNet data from the 3rd party LED editing software/hardware is disabled!**



The MaNima Configurator - Groups

Group configuration

Use a group to make several interfaces work together. This is used when using synchronised recording and synchronised playback.

If you want to work with multiple interfaces at the same time, you can do this via the “Group” tab. In the box " Group Number " you fill in the number at the devices you want to use together. Also enter the number you entered in the other device that you want to use together.

Group Currently editing: ManimaInterface (192.168.1.185)

Use a group to make several interfaces work together. This is used when using synchronized recording and synchronized playback.

Interfaces in group 0 Identify group

IP Address	Name	GroupNumber
192.168.1.185	ManimaInterface	0
192.168.1.186	ManimaInterface	0

Set a group here. Only grouped Interfaces are able to see each other

Synchronized master-slave groups

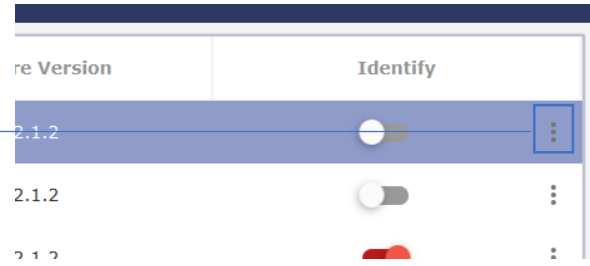
If you want multiple groups of master-slave setups, and don't want to interfere with other groups of interfaces when using synchronised recording or playing, use the 'Group' function. When a certain set of interfaces is set under a certain group, a synchronised recording won't allow for other interfaces (outside the group) to be recording.



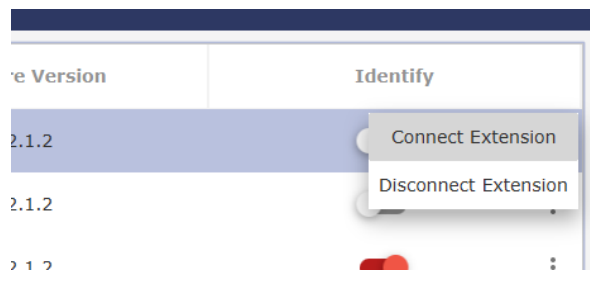
The MaNima Configurator – Connecting the MaNima Pollux

Connecting a MaNima Pollux to the MaNima Magnus enables the use of dimming with sensor inputs.

Press the 'extension' button on the scanner tab to view the available options.



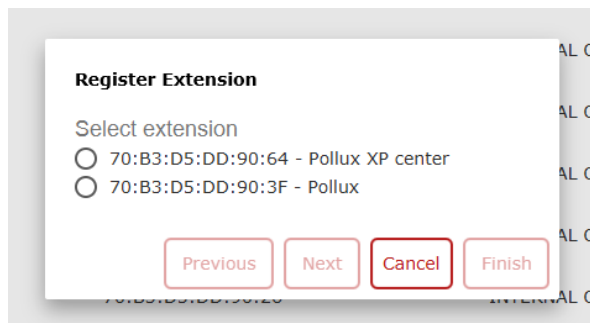
Press 'Connect Extension' or 'Disconnect Extension' to add or remove devices to the MaNima Magnus in the same network.



All available extensions are shown in this tab. Select which extension must be connected to the selected MaNima Magnus.

When the extension has been selected, press 'Finish'.


To set the dimming values of the MaNima Pollux, read the MaNima Pollux Manual.



The MaNima Configurator – Extensions

Extensions can be configured in this tab.


To configure the extensions, select the device you want to configure in this screen.

Device Name	Mac Address	Mode
 Pollux X...	70:B3:D5:DD:90:64	MONITOR


Extension Inputs

The actions of the NTC sensors can be configured here:

Select which sensor must be used for this Interface here




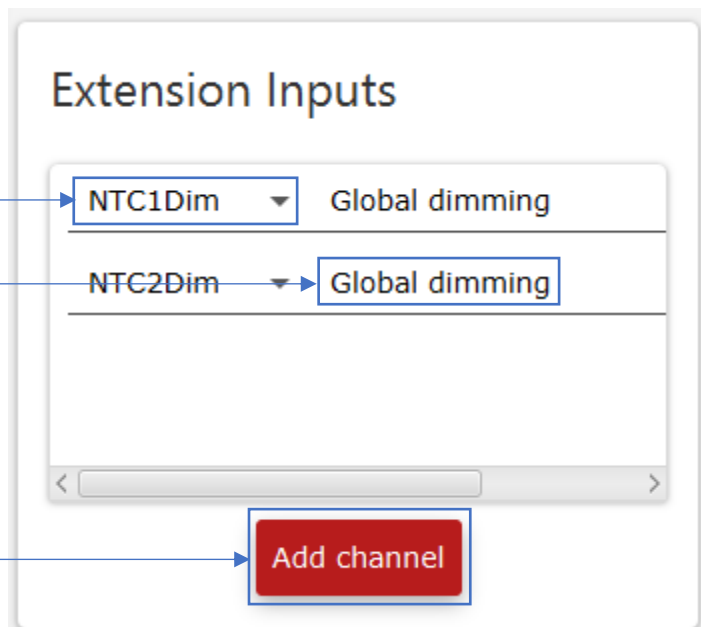
Select the action the Interface must perform when the parameters of the Pollux are changed



Add more channels here

Add channel





Global Dimming

The Global dimming function enables the automatic dimming of the MaNima Magnus. To configure the parameters of the NTC sensors, select the MaNima Pollux in the scanner. Consult the MaNima Pollux manual for more information.

The MaNima Configurator – Analog/Digital Inputs/Outputs

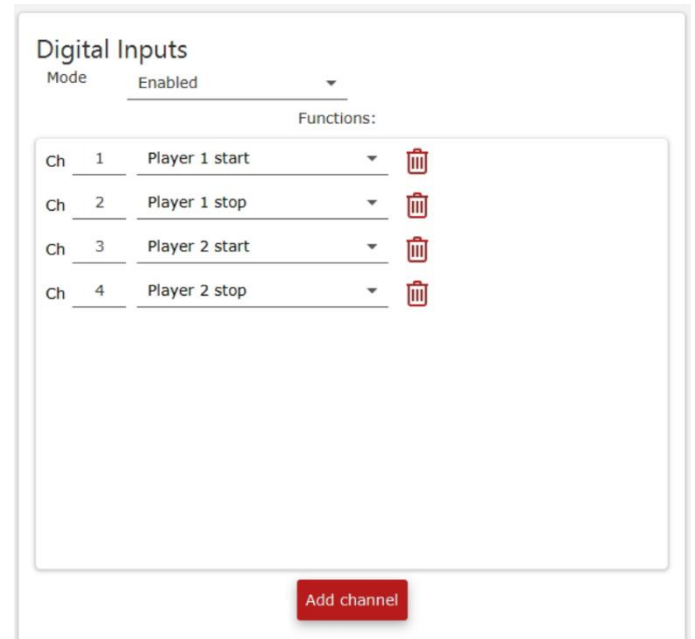
Scenes can be started via external inputs. There are digital or analogue inputs; 4-20mA or 0-10V.

The digital and analogue inputs can be configured with the inputs tab.

Digital inputs:

To set the digital inputs, follow the steps below:

1. Set the digital inputs mode to 'Enabled'.
2. Press 'Add channel' on the bottom of the screen.
3. Set the channel to the corresponding connector (see chapter 'Installation and wiring - port descriptions').
4. Select the action you want to happen when the input is triggered.
5. Done.



Analog inputs

There are three different modes for the analog inputs. These are:

Disabled: This disables the analog inputs. Set this mode to disabled when not using the analog inputs.

Functions: With functions, you can set the required input signal to a voltage signal or a current signal for the required channel.





Channels can be added at the bottom of the screen by pressing 'Add channel'.

The channels can be configured by changing the number. The action of the channel can be changed by pressing the arrow, which will show a dropdown menu with all the possible actions.

Analog Inputs

Mode	Functions	
Channel 1	0 - 10V	▼
Channel 2	0 - 10V	▼
Channel 3	0 - 10V	▼
Channel 4	0 - 10V	▼
Channel 5	0 - 10V	▼
Channel 6	0 - 10V	▼

Functions:

Ch	1	Player 1 start	▼	
Ch	2	Player 1 stop	▼	
Ch	3	Player 2 start	▼	
Ch	4	Player 2 stop	▼	

Add channel

LED Data:

When mode 'LED data' is selected, the analog inputs will be coupled with a universe. When this has happened, you can control digital LEDs with the SPI or DMX ports (depending on the configurations of the universe).

Every input corresponds with one channel. This means that 6 channels or 2 RGB LEDs can be controlled with all the analog inputs together.

The amount of light depends on the amount of volt or ampere, with 0V being 0% light (0/255) and 7V being 70% (179/255) light.

Analog Inputs

Mode	LED data	
Channel 1	0 - 10V	▼
Channel 2	0 - 10V	▼
Channel 3	0 - 10V	▼
Channel 4	0 - 10V	▼
Channel 5	0 - 10V	▼
Channel 6	0 - 10V	▼

Universe

Offset



The MaNima Configurator - Update

Because MaNima Technologies B.V. is constantly improving their products, there is an update tab available which allows the user to update the software version of the interface without needing access to the physical interface. This is only possible if there is an ethernet connection to the interface.

Step by step:

1. Download the latest (or required) update from the MaNima website: [Downloads | MaNima Technologies \(manima-technologies.com\)](#)
2. Select the downloaded file by pressing the 'Select file' button.
3. Make sure the correct file is selected, then press 'Start update'.

To update a group of MaNima Interfaces, press Batch update and select which Interfaces you want to update.



Update **Currently editing: ManimaInterface (192.168.1.185)**

To update the firmware of the interface, please download the latest firmware from our website:
<http://manima-technologies.com/software>

Current firmware version: V 2.0.7
 Licence: Magnus 8

Update **Select file**

Start update

Batch update

When encountering problems during your use of the MaNima Interface, make sure the latest update of the software is downloaded on the MaNima Interface. Also make sure the latest version of the MaNima Configurator is installed.

Installation & Wiring

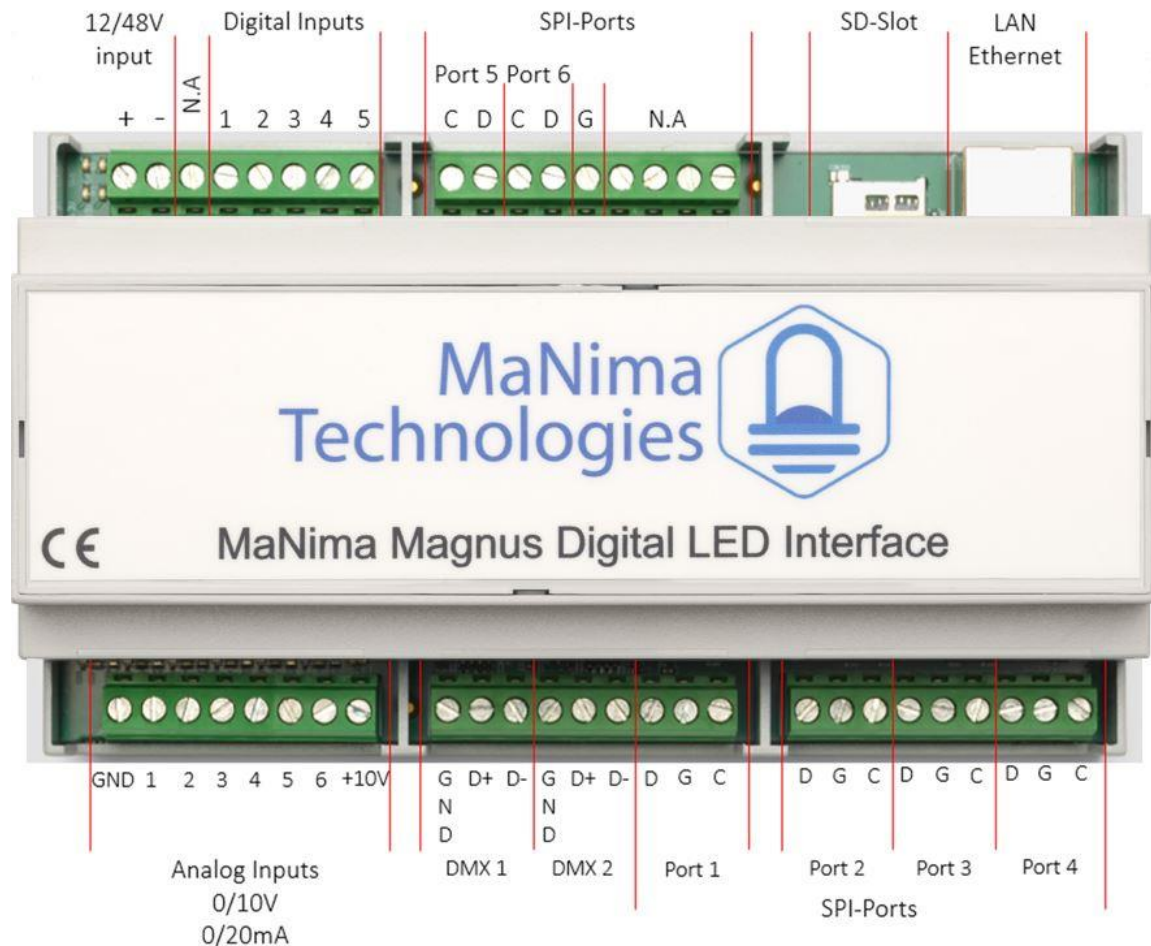
In this chapter there will be a description about every available port on the MaNima Magnus.

For additional wiring diagrams, visit the MaNima website → support and download the wiring diagrams.



Installation & Wiring - Port Descriptions

Descriptions of ports from top left to bottom right:



12/48V input: Connect 12/48 Volts to this connector to power the MaNima Magnus.

Digital inputs: Digital inputs are inputs used to control the MaNima LED Magnus 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 LEDs will receive the digital signal.

SD-Slot: An SD card can be placed inside this slot. All scenes and configurations are 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.

Installation & Wiring – SPI-Ports

There are six SPI-ports on the MaNima Magnus. 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. If the device is using an SPI-protocol, these connectors should be used. These ports should be directly and correctly connected to the device. If there are any mistakes made, the MaNima Magnus could be damaged.

Notice that ports 5-6 are different from ports 1-4. This is because the ports 5 and 6 have no Grounds in between the Clock and Data. The Ground of 5 and 6 is marked on the previous chapter with a 'G'. Keep this in mind while connecting the ports.

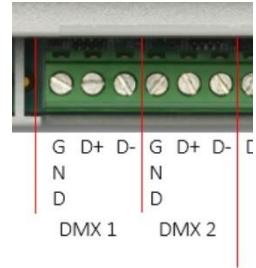


Installation & Wiring – DMX-Ports

There are two different DMX ports on the MaNima Magnus.

Each DMX port has three different connections:

- GND: Ground
- D+: Data +
- D-: Data –



DMX connections should only be used for devices that can receive the DMX-protocol.

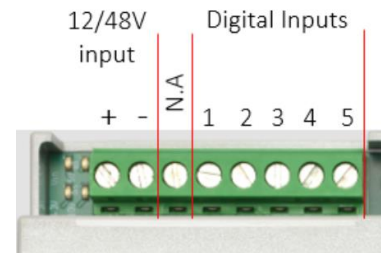
Installation & Wiring – Setting Digital/Analog Inputs

Digital inputs

Digital inputs are used to trigger certain actions. These actions are defined in the MC (see MC inputs).

These digital inputs need the same positive voltage from the same power supply as the MaNima Magnus. Or you can use the +10V from the analogue input side, which is recommended.

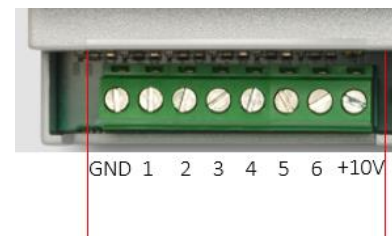
There are five digital inputs, all of which are configurable in the MC.



Analog Inputs

The analogue inputs can (just like the digital inputs) perform certain actions when triggered. These actions are defined in the MC. There is a total of six analogue inputs, all of which are accessible through the MC.

The analogue inputs are activated by a voltage of 0 - +10V or by a current of 0-20 mA. Make sure to define this in the MC. The +10V can be used as a supply of +10V for the analogue or digital inputs, this is also recommended.



Analog Inputs
0/10V
0/20mA

Installation & Wiring – Reset & Indications

In this chapter, there will be an explanation about the various buttons and indications that are present on the PCB of the IF. To access most indications and buttons, remove the top from the casing of the IF. **ONLY OPEN THE MANIMA MAGNUS DIGITAL LED INTERFACE WHEN YOU HAVE BEEN GRANTED PERMISSION BY MANIMA TECHNOLOGIES B.V.**



Use a flat tool to remove the top by inserting it in between the top and side and lift the top off.

Reset:

To restart the IF, press the RESET button once for <1 sec. Only use when restarting from the MC is not possible.

Factory Reset:

To perform a factory reset of the IF. Hold the reset button down for 20 sec, until all LEDs on the right side of the RESET button are turned on.

The factory reset will return all settings (MAC-address and recorded scenes) back to the original settings. Only use when a factory reset from the MC is not possible.



IMPORTANT: When performing a Factory reset, also **format the SD-card (FAT32)**

Default Setting are:
IP: 192.168.0.185
DHCP: OFF

Error LED:

The Error LED is the 1st LED of the row of indication LEDs. The LED is turned off when the MaNima Magnus is functioning normally. This LED is red (or starts flashing red) when the frame rate will be too high or when the amount of data is too much for the IF to handle.

HB LED:

The HB (HeartBeat) LED is the 4th LED. If the HB LED is slowly blinking (like a heartbeat), the MaNima Magnus is healthy. If the HB doesn't blink, perform a factory reset.

Power LEDs:



The four LEDs next to the power supply, indicate if the IF is turned on. All four LEDs must be green if the IF is powered.

Master-Slave Function

Synchronised recording

If multiple MaNima Magnus interfaces must play the same scene at the same time, it is recommended that all interfaces are synchronised. This means that there is one scene that has recorded all interfaces.

Step by step guide:

1. Open the 'Scenes' tab.
2. Connect more than 1 MaNima Magnus on the same network.
3. Go to the 'Group' tab and change the group number to anything above 0. To synchronise 2 interfaces, they need to have the same group number.
4. Start the recording as usual, make sure the LEDs are working.
5. Stop recording to save the recording.

There should now be a file on every MaNima Magnus that is on the same network and group as the master.

Synchronised playing

To start a scene on multiple MaNima Magnus at once, it is easy to use the synchronised playing option. This is done by having the synchronised recording in the player and pressing the synced playback option. If all connected devices have the same filename in their player, all of them will play the scene at the same time.

Step by step guide:

1. Open the 'Groups' tab and change the group numbers according to your specifications.
2. Open the 'Scenes' tab.
3. Press 'Synced' playback and select the correct recording.
4. Press 'Play', now the LEDs should play out the recording. If there are no errors, every MaNima Magnus with the same filename in its SD-card should play the scene.
5. Press 'Stop' to stop the scene.

Synchronised playing with groups

If you need groups of interfaces working together on the same network, visit the 'Groups' tab.



List of Supported ICs

In the list below you can find every supported IC.

APA102, APA102_8bit, APA104, APA106, HD107S

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



MaNima Interface Models

	Models	MaNima Magnus	MaNima Ignis	MaNima Nexus	MaNima Pollux
Functions					
SPI outputs	✓	✓	✗	✗	✗
DMX	✓	✓	✗	✗	✗
SPI recording and playing	✓	✗	✗	✗	✗
Segments	✗	✓	✗	✗	✗
Digital Triggers	✓	✓	✗	✓	✓
Analog Triggers	✓	✓	✗	✓	✓
Sensor Inputs	✗	✗	✗	✓	✓
PWM output	✗	✗	✗	✓	✓
Wi-Fi**	?	?	✓	?	?
DALI	✗	✗	✓	✗	✗
Ethernet	✓	✓	✓	✓	✓
Art-Net / sACN*	✓	✗	✓	✗	✗
UDP	✓	✓	✓	✗	✗
Custom API	✗	✓	✓	✗	✗
MaNima Cloud	✗	✗	✓	✗	✗
Redundant setup	✗	✗	✗	✓	✓

*The amount of ArtNet/aSCN universes depend on the licence

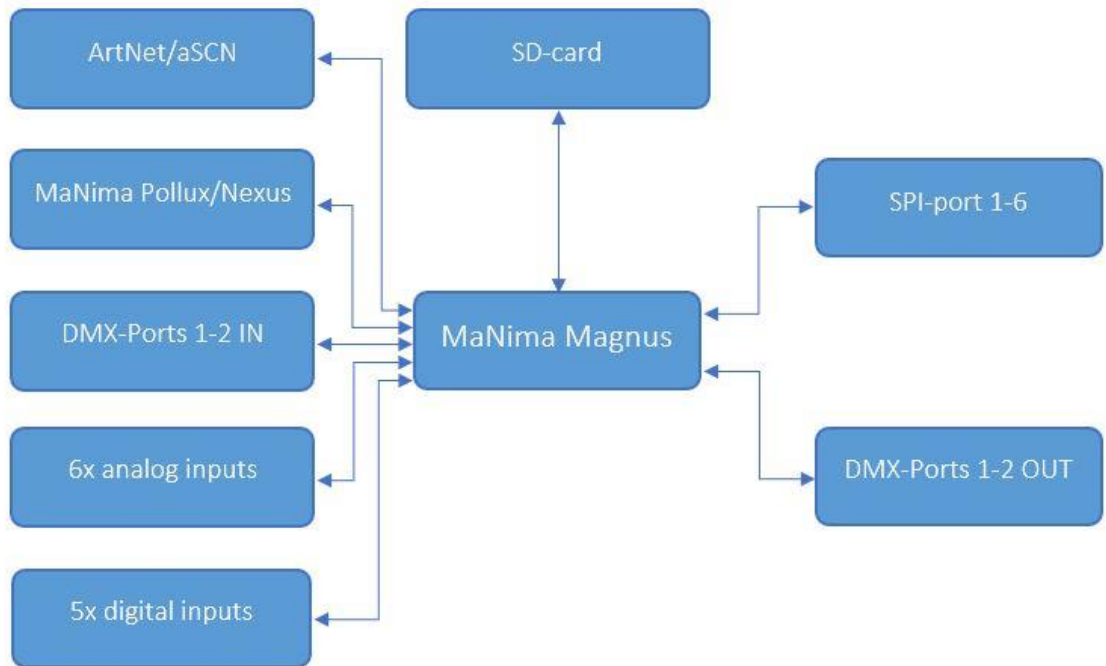
**When yellow; WiFi is available with an additional module



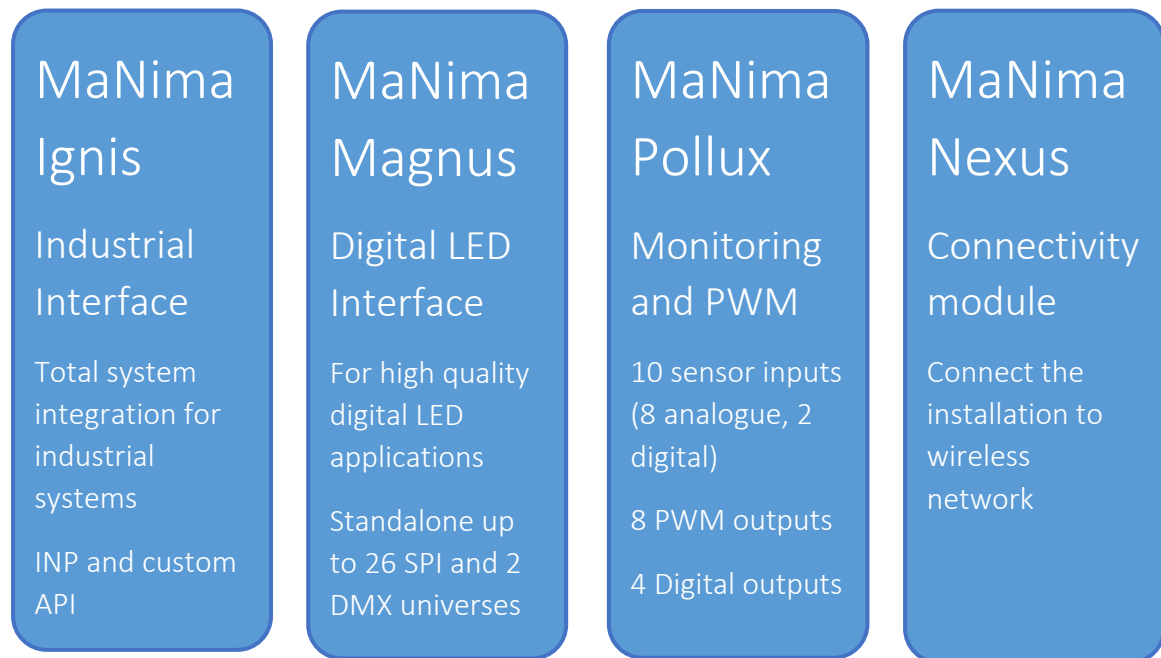
Overview

MaNima Magnus

Overview



MaNima Network Overview



MaNima Magnus: The MaNima Magnus Architectural LED Interface is a professional LED controller with an industrial design made for operating digital LED installations. The interface is also able to control multiple protocols at once.

MaNima Ignis: The MaNima Ignis Industrial Interface is a LED interface designed for the industrial market. The MaNima Ignis is a stable and reliable platform that is used in the Industry for operating LEDs. The MaNima Ignis can communicate with existing systems.

MaNima Nexus: The MaNima Nexus is a module used for connecting advanced and complex systems to a network of MaNima products.

MaNima Pollux: The MaNima Pollux is an industrial PWM driver and LED monitoring module made for the professional market. The MaNima Pollux is a versatile device which can fulfil many different tasks. The MaNima Pollux has been designed to be reliable, stable and fail-safe.



YouTube Tutorials

YouTube tutorial links:

[MaNima Tutorial 1 Connecting the Interface - YouTube](#)

[MaNima Tutorial 2 Mapping and Recording Digital LEDs - YouTube](#)

[MaNima Tutorial 3 Synchronized Recording and Playing - YouTube](#)

[MaNima Tutorial 4 DMX Functions - YouTube](#)

[MaNima Tutorial 5 Digital Triggers - YouTube](#)

[MaNima Tutorial 6 Analog Triggers - YouTube](#)

[MaNima Tutorial 7 Loop Functions - YouTube](#)

[MaNima Tutorial 8 Updating with Ethernet - YouTube](#)

[MaNima Tutorial 9 Using Segments - YouTube](#)

[MaNima Tutorial 10 Connecting the MaNima Pollux - YouTube](#)

[MaNima Tutorial 11 Configuring NTC inputs - YouTube](#)

[MaNima Tutorial 12 Current and Failure handlers - YouTube](#)

[MaNima Tutorial 13 Inputs and Outputs - YouTube](#)

[MaNima Tutorial 14 Installing the MaNima HMI Touchscreen - YouTube](#)



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