MADRIX
LIGHTING CONTROL

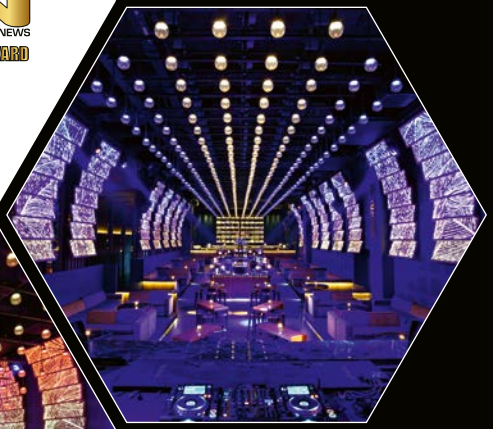
POWERFUL PRODUCTS

FOR CREATIVE LED LIGHTING

INOAGE®

Award-Winning Software For Award-Winning Projects

PLSN 2018
PROJECTION LIGHTS & STAGING NEWS
GOLD STAR PRODUCT AWARD



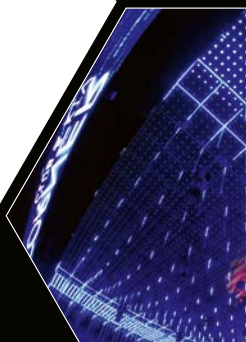
8th edition
PALM SOUND & LIGHT AWARDS

mondo dr AWARDS WINNER

Dragonfly Club
A Project By
LEDSCONTROL

mondo dr AWARDS 2018 WINNER

Corner Club
A Project By
Lights Professional & NewVision Technology



The MADRIX® Team. We are here to support you.

MADRIX® is all about powerful yet simple products for creative LED lighting. This includes compelling tools for lighting management, monitoring, and control. Our innovative features will bring you the best results.

Benefit from years of experience and industry knowledge. inoage® develops lighting software since 2005. Our dedicated team created the award-winning controller MADRIX® 5. We are located in the beautiful city of Dresden.

The MADRIX® Quality. Our commitment is your choice.

MADRIX® products are proudly designed, engineered, and made in Germany. We are creating high-quality products for you that are easy to use and extremely reliable. It means that you can drastically reduce on-site maintenance and support; and thus your time and costs.

For us, it is very important to offer you the complete package. This does not only include a product that works and fits your needs, but also extensive user manuals, tutorials and training, a worldwide distribution network for great sales and design services, and world-class technical support.

Made in Germany

LIVEDESIGN PRODUCTS 2013-2014 OF THE YEAR

MADRIX 5 Software

The award-winning LED lighting controller for ultimate pixel mapping in 2D or 3D.

Ultimate Creativity

Bring your LED design to life with beautiful colors, stunning visuals, and spectacular effects. MADRIX® 5 adapts to your needs. Use it as LED lighting controller, VJ software, 2D pixel mapper, 3D voxel mapper, media server, or media creator. This software is very easy to use with a VJ-like operation, 2 decks and a crossfader, plus 3 real-time previews to show your effects in advance.

Audio-Reactive Visuals

MADRIX® 5 features a state-of-the-art audio analysis. It can process any live audio signal and create stunning real-time lighting visuals. These live effects will create a light show that runs in sync with your music. And thanks to the integrated effects generator, you can also create many lighting patterns without audio input. And you can always customize everything, such as speed, color, shape, direction, size, movement, position, brightness, and much more.

Ultimate Flexibility

From the smallest projects to the biggest ones – get the best out of your LEDs. MADRIX® 5 can produce a complete LED light show from a normal computer or laptop. Still, it can drive tens of thousands of LEDs without problems. This powerful software will not only allow you to control nearly any 2D LED display in every possible way, but real 3D LED applications as well. This makes it the ideal solution for your LED project.

Ultimate Control

MADRIX® 5 is the ultimate control software for LED lighting. All-new features such as the TRI effect category, audio playback for videos, the CSV fixture list import, a fresh user interface with two themes that is even easier to use, unprecedented performance and speed thanks to the powerful new 64-bit render engine, and many more allow you to produce amazing results right from the start. Cutting-edge technologies provide you with all the tools you need for modern LED control.

Specifications

User Interface Languages	Deutsch (German), English, Español (Spanish), Français (French), Italiano (Italian), 日本語 (Japanese), Português brasileiro (Brazilian Portuguese), русский (Russian), Türkçe (Turkish), 简体中文 (Simplified Chinese)
Industry Standards For Output	MADRIX® 5 excels in flexibility. You can directly connect to a wide range of LEDs and compatible first-party or third-party LED controllers:
DMX-Based	Art-Net (I, II, 3, 4) (Unicast & Broadcast), DMX512, Philips Color Kinetics KiNET (V1 / V2), Philips Hue, SPI (via MADRIX® NEBULA), Streaming ACN (sACN / E1.31) (Unicast & Multicast)
DVI-Based	ColourSmart Link, Colorlight A8, Colorlight 5A, Colorlight T9, DVI (VGA, HDMI, and more), Eurolite T9
Industry Standards For Input	MADRIX® 5 easily integrates with other lighting desks, consoles, controllers, and many other hardware or software tools:
Interoperability, Remote Control, And Audio	Art-Net (I, II, 3, 4), ASIO, Blackmagic Design (DeckLink, Intensity, and more), CITP, DMX512, GamePort, MA-Net 1 / MA-Net 2, MADRIX® I/O, MADRIX® ORION, Media (Images, Pictures, Logos, Videos, Text, Live Signal Capturing, Screen Capturing), MIDI, NewTek NDI (Send & Receive), Remote HTTP (Web Server), Spout (Send & Receive), Streaming ACN (sACN / E1.31), Time Code (Art-Net / MIDI / SMPTE / System Time), WDM
Supported Operating Systems	Microsoft Windows 10 64 bit only
License Requirements	MADRIX® 5 licenses require a valid, metallic MADRIX® KEY.
Demo Version	Download MADRIX® 5 from www.madrix.com

Even more options are available via converters or bridging tools for input as well as output.

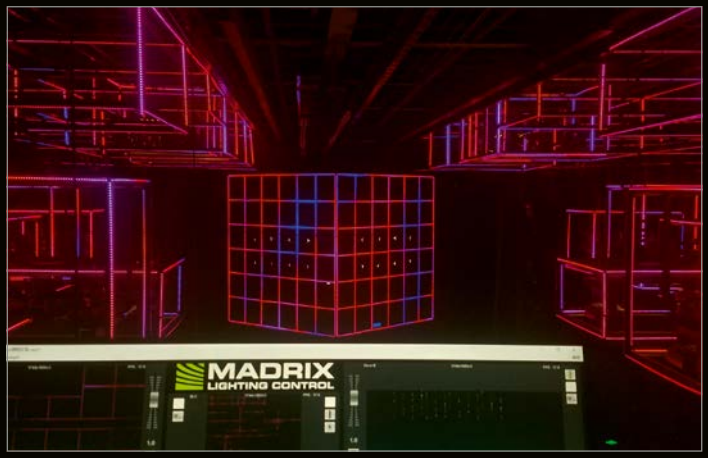
ASIO COMPATIBLE
ASIO is a registered trademark of Steinberg Media Technologies GmbH

MADRIX 5 Software

Enjoy state-of-the-art features for unique 2D and real 3D.

2D Pixel Mapping

The MADRIX® 5 Software makes it possible to control numerous LED fixtures; also of different kinds. Position them according to your needs in nearly any form or shape. Map pixel by pixel and achieve pixel-perfect results, even with the lowest of pixel resolutions. The result are crisp and sharp visuals on your LEDs.



3D Voxel Mapping In X, Y, And Z

MADRIX® 5 provides a leading-edge feature set to fully control real 3D LED matrices. MADRIX® 5 supports volume rendering (voxel mapping). This approach is fundamentally different to the 3D projections or the physical layout of 2D surface areas that are widely known nowadays. It makes your installation state-of-the-art.

Combine 2D And 3D

Combine any 2D project with 3D elements in order to create even more spectacular attractions for your audience, customers, and clients. MADRIX® 5 is a powerful tool that will help you realize the projects you want to build. Mapping LEDs is fast, creative, and fun. MADRIX® 5 certainly takes your LED display to the next level.

MADRIX 5 Licenses

Different licenses are available for different needs and project sizes.

MADRIX® 5 License	start	entry	basic	professional
DMX Channels	1,024	4,096	16,384	65,536
DMX Universes (Example)	2	8	32	128
RGB Voxels (Example)	341	1,365	5,461	21,845
DVI Voxels	4,096	16,384	262,144	1,048,576
Render Resolution (Example)	64 x 64	128 x 128	512 x 512	1,024 x 1,024
Upgradable	✓	✓	✓	✓
Validity	Lifetime	Lifetime	Lifetime	Lifetime

MADRIX® 5 License	ultimate	maximum	preprogrammer
DMX Channels	262,144	1,048,576	MADRIX® 5 preprogrammer is a special license available for project preparation. It provides no output for MADRIX® 5, but removes major limitations of the demo mode.
DMX Universes (Example)	512	2,048	
RGB Voxels (Example)	87,381	349,525	
DVI Voxels	2,097,152	2,097,152	
Render Resolution (Example)	2,048 x 1,024	2,048 x 1,024	
Upgradable	✓	–	–
Validity	Lifetime	Lifetime	Lifetime

MADRIX® 5 License Upgrades

You can easily upgrade the license on your MADRIX® KEY to any higher license at any time in order to increase the available output. MADRIX® 5 License Upgrades can simply be processed online. Please contact your dealer for more information.

MADRIX RADAR

NEW

Management. Manage all of your devices the remote way. Manage them the smart way.

Everywhere, lighting designs beautifully light up the world all around us. And clients expect them to do so without failure, each and every day. Behind the scenes, the lighting industry faces the complex aspects of modern technologies. Increasingly large projects become increasingly difficult to manage and maintain.

That is why today's DMX lighting fixtures are equipped with Remote Device Management. It is a two-way communication for receiving instructions as well as sending out feedback. When devices report back data, you gain access to a whole new level of available information, insights, and control. MADRIX® RADAR is the complete toolbox to make the most of this data; automatically and efficiently.

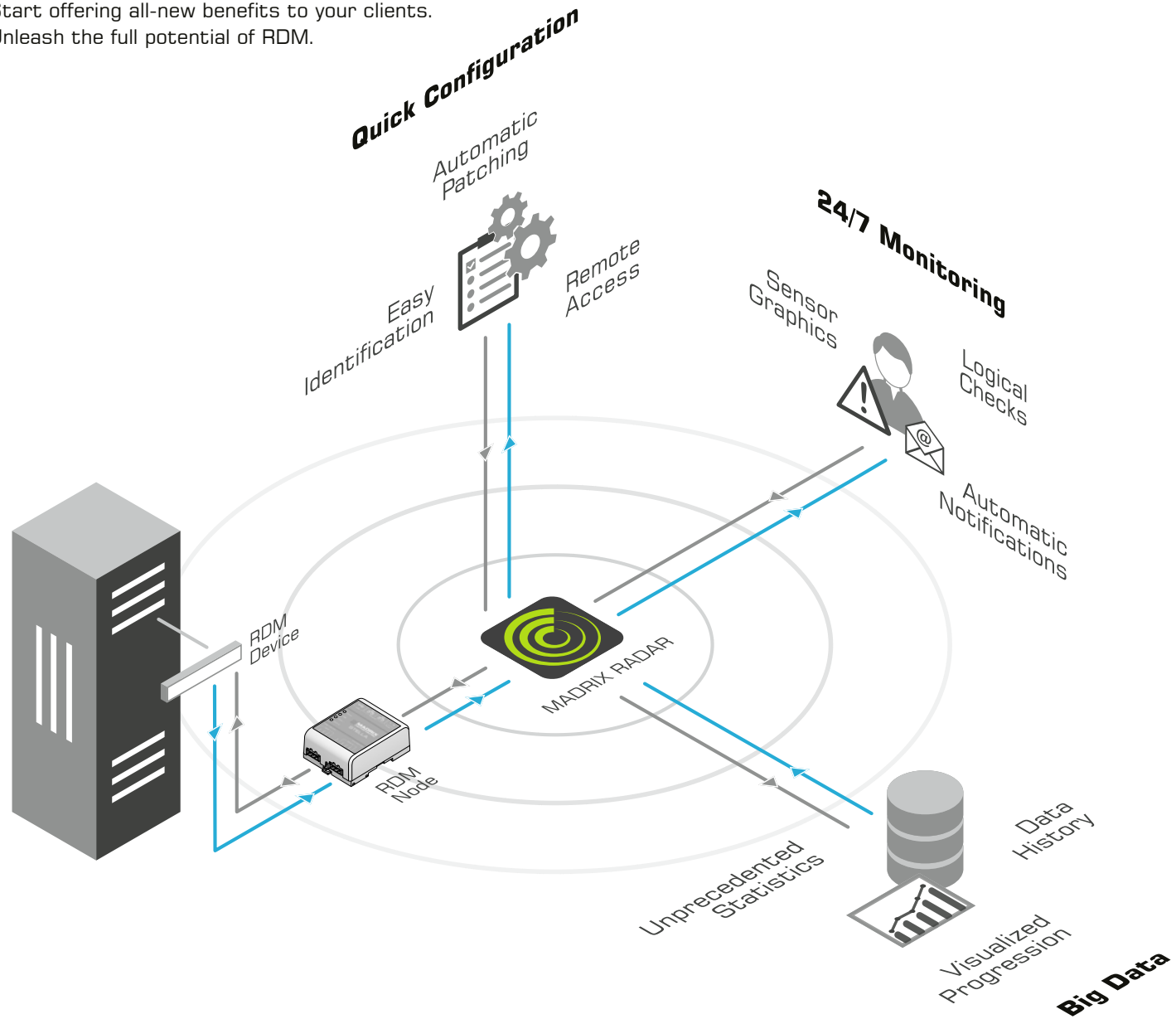
Supervise all of your lighting fixtures in a single software. Handle large amounts of RDM devices. It is a new kind of application that opens up entirely new possibilities for you and your clients. MADRIX® RADAR includes automatic fixture patching, fully automatic 24/7 device monitoring, automatic e-mail notifications, and much more.

Transform how you work with luminaires. Easily configure settings remotely. Let the software monitor devices automatically for you. Quickly see the results in graphical overviews at a single glance. That means that your setup and maintenance processes are much faster, much easier, and much more cost-efficient than ever before.

Build a database of past sensor data and see the progression of device parameters, such as temperature and operating hours. Exchange devices that are likely to fail soon, before they do. Make your maintenance costs much more predictable by planning them more effectively in advance.

Overview. Visualize how it works.

Provide unparalleled support for each installation.
Start offering all-new benefits to your clients.
Unleash the full potential of RDM.



MADRIX RADAR

Configuration. Meet your favorite new addressing tool.

Convenient Remote Access
Easily set up your RDM devices remotely. This means you can perform any configuration conveniently from your computer; instead of requiring direct access to the devices themselves in the truss, in the ceiling, or on the facade.

Simplified Fixture Addressing
Avoid the complicated procedure to manually set up all of a project's lighting fixtures by hand before they can be mounted. Freely modify their settings, such as the important DMX start address, after any installation has taken place.

Incredibly Fast Workflows
Drastically reduce the time-consuming process of configuring a large number of devices. Use the built-in search function and change settings of a single device or select several entries to quickly make multiple changes at once.

Incredibly Powerful Automation
Let the software automatically patch all fixtures in a single DMX universe or across the entire range of addresses. Simply use drag and drop to put them in the correct order. Setting up DMX addresses has never been faster.

Useful Fixture Discovery
Use the built-in highlight mode to let a fixture flash with full-on white for quick identification of fixtures in your installation. See if a device correctly responds to DMX commands or if the lighting fixtures are addressed correctly in a row.

Full Support
MADRIX® RADAR supports all RDM parameters detailed in the official protocol specifications of ANSI E1.20 and ANSI E1.37-1 over Art-Net (including the ArtRdm package). All fixed parameters (PIDs for Set and Get) and manufacturer-specific parameters are included.

Monitoring. Fully automatic 24/7 device monitoring with automatic notifications.

Continuous Monitoring
Let the software monitor all of your devices 365 days a year, 7 days a week, 24 hours a day. It does so fully automatically without any required supervision. This simply wasn't possible before.

Making Sensor Data Understandable
MADRIX® RADAR checks the status of devices, such as voltage, temperature, status, power cycle, life cycle, and more. Graphical overviews allow you to quickly see if a sensor value is within its specified limits or out of its valid range.

Event Reports
In addition to merely requesting and receiving information, the software will apply its own logical routines in order to create events for you. By probing and validating incoming data, MADRIX® RADAR provides actionable reports for you.

Automatic Notifications
If MADRIX® RADAR detects any irregularities, you can receive automatic status updates within the software, run a PowerShell script, or let the system conveniently send you e-mails. In short, you are always up to date.

The MADRIX® System. Take advantage of high-quality software and high-quality hardware.

MADRIX® RADAR is an independent software that allows you to choose compatible RDM nodes.

You gain the enormous advantage with MADRIX® RDM nodes of running a fully integrated system.

Our MADRIX® hardware processes RDM data packages in a way that does not result in interference with DMX data packages during full and live operation, which could lead to visual flickering or other signal interruptions. MADRIX® interfaces manage these data streams highly efficiently and intelligently.

License Model. Integrate flexibly into your projects.

	MADRIX® RDM Nodes	**Third-Party RDM Nodes & MADRIX® RADAR License**			
Software License	**No additional software license is required.**	**Demo**	**MADRIX® RADAR fusion small**	**MADRIX® RADAR fusion medium**	**MADRIX® RADAR fusion large**
RDM Devices/Sub-Devices	**All connected devices are automatically unlocked for free.**	2	32	256	2,048
Management	✓	✓	✓	✓	✓
Configuration	✓	✓	✓	✓	✓
Monitoring	✓	✓	✓	✓	✓

MADRIX RADAR

Big Data. Access device data you never knew was obtainable.

Invaluable Data History
Leverage the valuable information that a device's data history can provide. See individual time series graphically over time. Access data records in order to see the progression, find trend lines, or spot probable issues.

Smart Data Management
Present comprehensive statistics to your clients based on the data that MADRIX® RADAR is collecting. Replace failing devices and avoid replacing the ones that need no immediate replacement.

Convenient Features
You can freely enable or disable if data points are recorded, for example during setup and construction times, or change the time intervals at which data is recorded.

License Model. Unlock the above features optionally and benefit even more.

	Big Data
	Available as a separate 1-year MADRIX® RADAR big data license, which can be renewed.

Screenshots. Have a closer look.

Specifications

User Interface Languages	English
Supported Operating Systems	Microsoft Windows 10 64 bit only
License Requirements	MADRIX® RADAR licenses require a valid, metallic MADRIX® KEY.
Demo Version	Download MADRIX® RADAR from www.madrix.com

MADRIX Training

Expand your knowledge.

MADRIX Training

MADRIX® Training includes hands-on seminars on site to learn directly from the makers of MADRIX®. Our MADRIX® training courses effectively and quickly teach you how the system works.

See all details: **www.madrix.com**
Book your seat: **info@madrix.com**

Choose between three different courses or attend all of them in one time block on three consecutive days. Each course is offered in English or German depending on the date and held at the MADRIX® Headquarters in Dresden, Germany.

1 **MADRIX® 5 Software: Crash Course**

Receive an extended overview over MADRIX® 5 in order to be able to create a basic LED show and operate the software comfortably within this scope.

2 **MADRIX® 5 Software: Patching, Mapping, And Group Control**

Learn all the details of working with fixture profiles, complex patches for different areas of application, fixture group control, and advanced mapping of effects.

3 **MADRIX® 5 Software: Creating Advanced Effects**

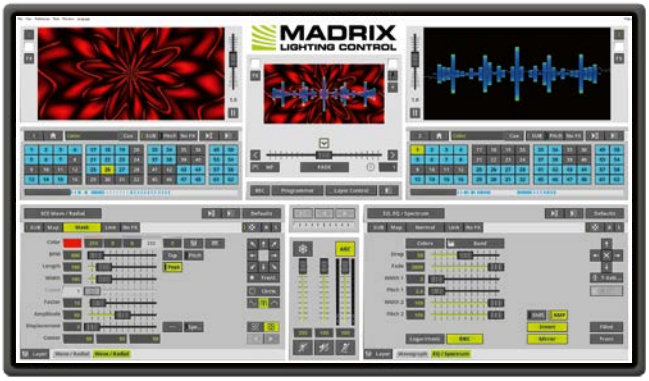
Create advanced effects with help of the easy-to-use, parametric settings for visuals, layers, and the unique MADRIX® Effects, and much more.

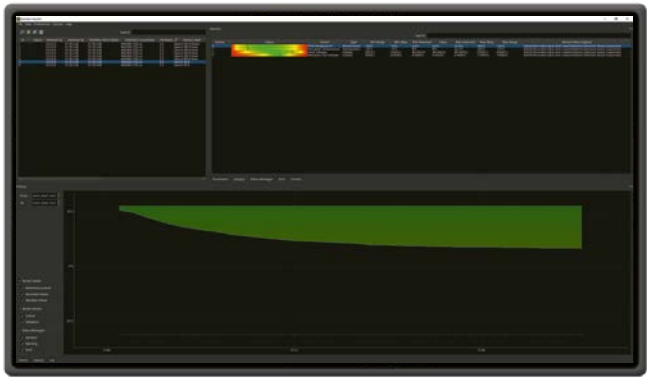
Receive MADRIX® 5 start for free when attending all three courses in Dresden; independently of the date or year!

Your key to the world of MADRIX®.

Flexible Usage
The MADRIX® KEY is a USB dongle that unlocks the features or output for the MADRIX® 5 Software or MADRIX® RADAR Software by holding the corresponding license. You can freely switch between different PCs as it is not bound to a specific system. It only needs to be activated online once.

What's In The Box
The beautiful, high-quality box includes 1x empty MADRIX® KEY, 1x USB flash drive incl. MADRIX® 5 Software and MADRIX® RADAR Software, 1x lanyard, and 1x quick start guide. All additional software tools and all user manuals are provided digitally.





MADRIX AURA

NEW

The advanced lighting control recorder and stand-alone playback unit.

2 versions are available:
AURA 8 | **AURA 32**

Stand-Alone Playback
Independently run the most sophisticated light shows from this energy-efficient playback unit via Art-Net or Streaming ACN. Easily control up to 8 or 32 universes per device.

Central Hub
Simply connect compatible MADRIX® hardware interfaces or third-party nodes to provide the correct output for your lighting fixtures.

Master-Slave Synchronization & Scalability
Manage large projects simply by connecting several units. The entire group is automatically synchronized across all DMX universes for flawless and uninterrupted playback.

Live Control
Encased in a non-conductive design for DIN rails or wall mounting, 8 on-device buttons allow for quick playback and recording control. You can also directly adjust the overall speed and brightness.

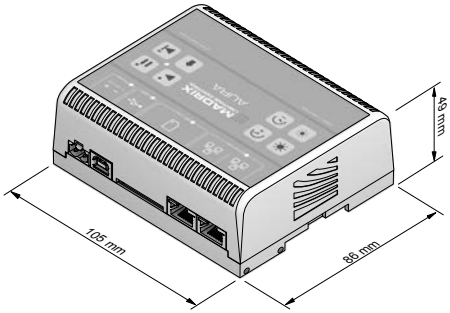
Live Recording
Record any Art-Net or Streaming ACN network stream onto the inserted memory card. Unlike any other solution, recording a beautiful light show with MADRIX® 5 is as easy as pressing record and play.

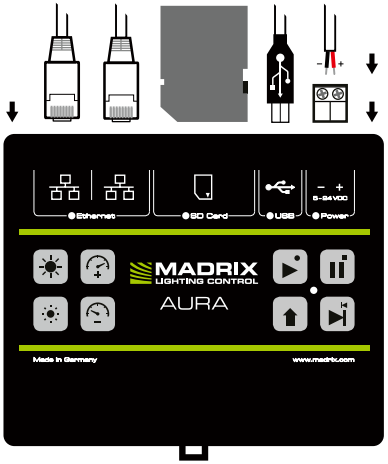
Time-Controlled Shows
Run scenes automatically with the help of the internal clock as well as the available sunrise and sunset timers.

Web Configuration
Use the built-in web configuration page to access and change specific device settings, such as the important IP address, subnet mask, playlist settings, and much more.

Remote Control
Trigger MADRIX® AURA via HTTP commands and the built-in web server or use Art-Net/sACN. You can even add MADRIX® ORION for interactive installations.

The MADRIX® AURA is the central stand-alone controller for simple recording and large-scale pixel mapping. It redefines what is possible in a compact control unit with exceptional performance.





Specifications

Supply Of Power	DC 5 V – 24 V; connection via 2-pin, pluggable screw terminal or via 5 V USB
Power Consumption	< 1.5 W (300 mA) during normal operation (500 mA max. fused)
Network Protocols	Art-Net, Streaming ACN
Output	8x / 32x 512 DMX channels output over Ethernet network
Recording Input	8x / 32x 512 DMX channels input over Ethernet network
Remote Control Input	1x 512 DMX channels received over Ethernet network
Ethernet	2x RJ45, Auto MDI-X, daisy-chain support, 10/100/1000 MBit/s
SD Card Slot	Supports SD, SDHC, and SDXC cards
USB Port	USB 2.0, type B plug
Handling	8 control buttons, 5 status LEDs (+ 4 network status LEDs)
Dimensions (L x W x H)	86 mm x 105 mm x 49 mm
Weight	148 g | 154 g incl. screw terminal, SD card, and wall mounts
Operating Temp.	-10 °C to 70 °C
Storage Temp.	-20 °C to 85 °C
Relative Humidity	5 % to 80 %, non-condensing (Operating / Storage)
Case	Non-conductive, V-0 flammability rating (UL94 test method), designed for 35 mm DIN-rails or wall mounting
IP Rating	IP20
Certificates	CE, FCC, RoHS

MADRIX LUNA

The easy-to-use and reliable network node.

3 versions are available:
LUNA 4 | **LUNA 8** | **LUNA 16**

Art-Net / Streaming ACN / USB
Art-Net or Streaming ACN data is directly converted to DMX512. Optimize and decentralize cabling to cover any distance to the device using Ethernet network.

Any small or large project greatly benefits from dependable data distribution and efficient operation. Use any compatible software or hardware controller. In addition, simply connect to MADRIX® 5 over USB.

Easy Configuration
MADRIX® LUNA offers powerful features, especially in combination with MADRIX® 5. Take full advantage of pixel mapping and voxel mapping. The installation of the device is still quick and easy.

Quality Design
Devices are built 19″ x 1U or 19″ x 2U. They feature a fanless, noiseless, low-energy design, a durable metal case, and NEUTRIK plugs. 2 premounted brackets make rack mounting possible. 5 indicators quickly show the status of a device.

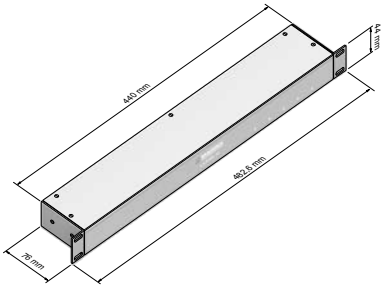
4/8/16 DMX-OUT + 1 DMX-IN
4, 8, or 16 XLR ports (5-pin, female) distribute the equal number of DMX universes per unit. 1 XLR port (5-pin, male) can be used for DMX input. Simply use several units at the same time for larger projects.

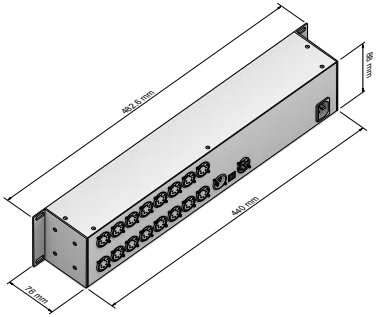
3rd-Party Controllers
MADRIX® LUNA complies with the official protocol specifications and can be used as a regular node with your other consoles, controllers, or software solutions.

Sync Mode
MADRIX® 5 and MADRIX® hardware allow you to fully synchronize Art-Net data for all output ports and even across multiple devices to get an optimal image on the LEDs without visual interruptions.

Invaluable Features
The device is ready within seconds after startup. HTP merging is automatically available for two Ethernet sources. Its firmware is upgradable for future enhancements. Access and change specific device settings using the built-in web configuration page.

The MADRIX® LUNA reliably distributes DMX512 data over long or short distances using Ethernet network or USB. Its sync mode makes sure that lighting effects look their best on the LEDs.





Specifications

Supply Of Power	AC 100 V – 240 V, 50-60 Hz, 0.4 A max., IEC C14 inlet
Power Consumption	< 1.5 W during normal operation
USB Port	USB 2.0, type B plug
DMX512 (OUT)	4x / 8x / 16x 512 DMX channels output
DMX512 (IN)	1x 512 DMX channels input
DMX512 Ports (OUT)	5-pin, XLR, female, NEUTRIK
DMX512 Port (IN)	5-pin, XLR, male, NEUTRIK
Ethernet	1x RJ45, Auto MDI-X, NEUTRIK etherCON, 10/100 MBit/s (compatible with 1 GBit/s)
Size	19″ x 1U (LUNA 4 / LUNA 8) | 19″ x 2U (LUNA 16)
Dimensions (Body Only)	76 mm x 440 mm x 44 mm (L x W x H)
Dimensions (Total)	76 mm x 482.6 mm x 44 mm (L x W x H)
Dimensions (LUNA 16)	76 mm x 482.6 mm x 88 mm (L x W x H)
Weight	1.3 kg (LUNA 4) | 1.4 kg (LUNA 8) | 2.0 kg (LUNA 16)
Operating Temp.	-10 °C to 60 °C
Storage Temp.	-20 °C to 70 °C
Relative Humidity	20 % to 80 %, non-condensing (Operating / Storage)
Case	Metal enclosure
IP Rating	IP20
Certificates	CE, FCC, RoHS

MADRIX STELLA

The 2-port network node with RDM support for solid-state projects.

Art-Net / Streaming ACN / USB
Art-Net or Streaming ACN data is directly converted to DMX512. Optimize and decentralize cabling to cover any distance to the device using Ethernet network. In addition, simply connect to MADRIX® 5 over USB.

2 DMX-IN/OUT
Directly connect DMX512 to the two 3-pin screw terminals to distribute 2 DMX universes per unit as input and/or output, eliminating the need for XLR connectors as a result. Simply use several units at the same time for larger projects.

Easy Configuration
MADRIX® STELLA offers powerful features. Managing the device is still quick and easy. Supply power over USB or 5 V to 24 V over a 2-pin screw terminal.

Invaluable Features
The device is ready within seconds after startup. HTP merging is automatically available for two Ethernet sources. Its firmware is upgradable. Access and change specific device settings using the built-in web configuration page.

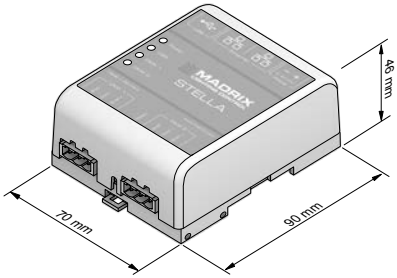
RDM & Daisy-Chain Support
2 Ethernet ports allow for separate network connections as well as linearly daisy-chaining several devices together. On top, the device supports the Remote Device Management standard.

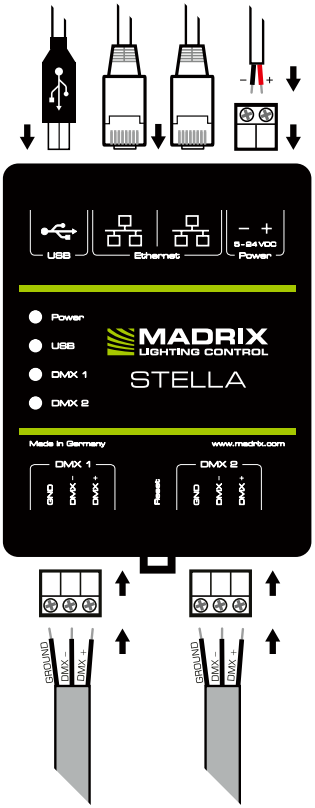
Designed For DIN Rails Or Walls
Its non-conductive enclosure and standardized design for 35 mm top-hat rails make mounting quick, easy, and safe. 2 extra brackets are provided for optional wall mounting. 9 indicators quickly show the device status with the option to turn them off.

3rd-Party Controllers
MADRIX® STELLA complies with official protocol specifications and can be used as a regular node with your other consoles, controllers, or software solutions.

Sync Mode
MADRIX® 5 and MADRIX® hardware allow you to fully synchronize Art-Net data for all output ports and across multiple devices to get an optimal image on the LEDs without visual interruptions.

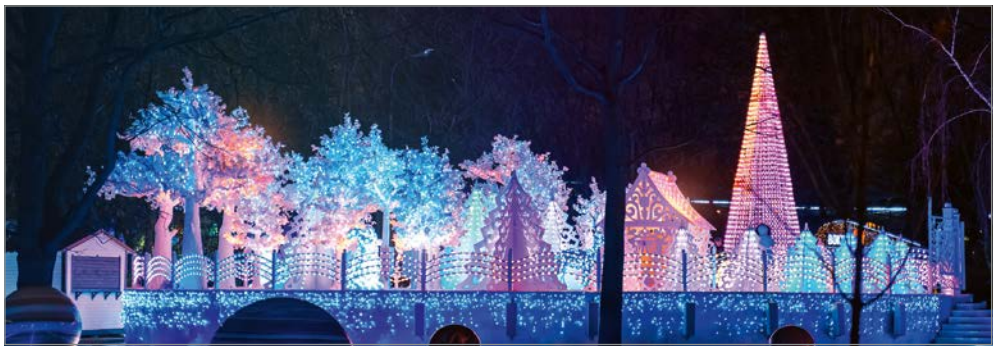
The MADRIX® STELLA is a dedicated control interface for DMX512 and Art-Net or Streaming ACN that is designed for high quality and practicability in permanent LED installations.





Specifications

Supply Of Power	DC 5 V – 24 V; connection via 2-pin, pluggable screw terminal or via 5 V USB
Power Consumption	< 1.5 W (300 mA) during normal operation (500 mA max. fused)
USB Port	USB 2.0, type B plug
DMX512	2x 512 DMX channels, input and/or output
DMX512 Ports	2x ports (via 2x 3-pin, pluggable screw terminals)
Ethernet	2x RJ45, Auto MDI-X, 10/100 MBit/s (compatible with 1 GBit/s)
Dimensions (L x W x H)	90 mm x 70 mm x 46 mm
Weight	108 g | 125 g incl. screw terminals and wall mounts
Operating Temp.	-10 °C to 70 °C
Storage Temp.	-20 °C to 85 °C
Relative Humidity	5 % to 80 %, non-condensing (Operating / Storage)
Case	Non-conductive, V-0 flammability rating (UL94 test method), designed for 35 mm DIN-rails or wall mounting
IP Rating	IP20
Certificates	CE, FCC, RoHS



MADRIX NEBULA

The versatile LED pixel tape driver to directly control a wide range of digital LEDs.

SPI Converter & Direct Connection
Directly connect to a wide range of supported LEDs via two 4-pin screw terminals. A signal frequency of up to 24 MHz is available. Supply power over USB or 5 V to 24 V over a 2-pin screw terminal.

Art-Net / Streaming ACN / USB
Network data is directly converted to SPI without the need for an additional interface. Reliably distribute data from any compatible software or hardware controller. In addition, simply connect to MADRIX® 5 over USB.

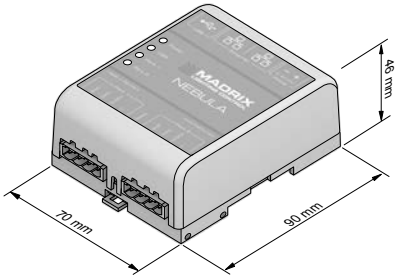
Designed For DIN Rails Or Walls
Its non-conductive enclosure and standardized design for 35 mm top-hat rails make mounting quick, easy, and safe. 2 extra brackets are provided for optional wall mounting. 9 indicators quickly show the device status with the option to turn them off.

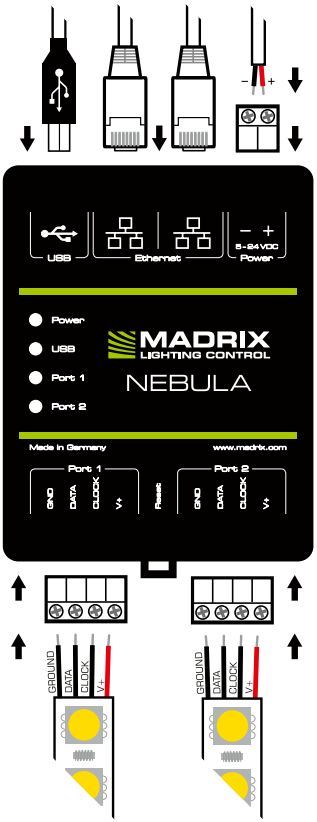
Quality Output Of 8 Universes
Each device drives up to 1,360 RGB pixels while ensuring responsive delivery of high-quality signals to each individual LED. You can choose the output protocol separately for each of the two ports.

Sync Mode & Daisy-Chain Support
MADRIX® 5 and MADRIX® hardware allow you to fully synchronize Art-Net data for all ports and across devices to get an optimal image on the LEDs without visual interruptions. 2 Ethernet ports allow linearly daisy-chaining several devices together.

Invaluable Features
The device is ready within seconds after startup. HTP Merging is automatically available for two Ethernet sources. Its firmware is upgradable. Access and change specific device settings using the built-in web configuration page.

The MADRIX® NEBULA directly connects to your LED pixels. This advanced SPI decoder receives control data over Ethernet network or USB and is built to provide excellent image quality.





Specifications

Supply Of Power	DC 5 V – 24 V; over **A)** 2-pin, pluggable screw terminal (12 A max.), **B)** 5 V USB, **C)** Port 1 or 2 sourced from LEDs; 6 A max. load per port when supplying through to LEDs
Power Consumption	< 1.5 W (300 mA) during normal operation (500 mA max. fused)
USB Port	USB 2.0, type B plug
Data Output	8x 512 channels SPI TTL (Maximum output per port: 680 RGB LEDs / 512 RGBW LEDs / 2048 1-channel LEDs)
Ports	2x ports (via 2x 4-pin, pluggable screw terminals)
Ethernet	2x RJ45, Auto MDI-X, 10/100 MBit/s (compatible with 1 GBit/s)
Supported LEDs As of March 2019. See www.madrix.com for the latest information.	APA101 / APA102 / APA104 / APA106 / GS8207 GW6201 / GW6205 / LPD1882S / LPD6803 / LPD8806 MBI6120 / P9883 / SJ1221 / SK6812 / SK6822 SM16703 / SM16716 / TLS3001 / TLS3008 TM1804 / TM1809 / TM1812 / TM1814 / TM1829 UCS1903 / UCS2903 / UCS512B3 UCS8904 / UCS9812S WS2801 / WS2803 WS2811 / WS2811S / WS2812 WS2812B / WS2813 / WS2815 / WS2818 WS2822S / WS2822S Addressing
Dimensions (L x W x H)	90 mm x 70 mm x 46 mm
Weight	110 g | 132 g incl. screw terminals and wall mounts
Operating Temp.	-10 °C to 70 °C
Storage Temp.	-20 °C to 85 °C
Relative Humidity	5 % to 80 %, non-condensing (Operating / Storage)
Case	Non-conductive, V-0 flammability rating (UL94 test method), designed for 35 mm DIN-rails or wall mounting
IP Rating	IP20
Certificates	CE, FCC, RoHS

MADRIX ORION

Adds a whole new level of interaction and control to your project.

Powerful A/D Converter
Easily convert any analog input signal ranging from 0 V – 12 V into an 8-bit or 16-bit digital DMX output signal. Sample incoming signals instantly and map all inputs individually to up to 8 or 16 DMX channels per device.

8 Versatile Inputs
Directly connect to a wide range of compatible sensors, potentiometers, switches, and triggers. Easily create interactive projects using sensors for light, temperature, PIR, and many more.

Direct Connection
2 main 6-pin ports are available with 4 individual pins each as well as GND and V+. Flexibly supply 5 V – 24 V power over the 2-pin screw terminal.

Designed For DIN Rails Or Walls
Its non-conductive enclosure and standardized design for 35 mm top-hat rails make mounting quick, easy, and safe. 2 extra brackets are provided for optional wall mounting. 8 indicators quickly show the device status with the option to turn them off.

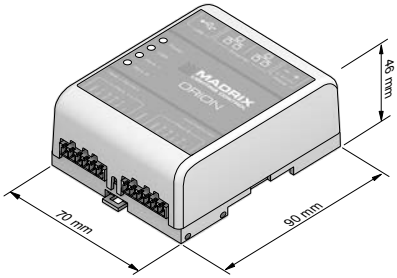
Art-Net / Streaming ACN / USB
Send the output signal as Art-Net or Streaming ACN (E1.31) over long or short distances to any compatible software or hardware controller. In addition, simply connect to MADRIX® 5 over USB.

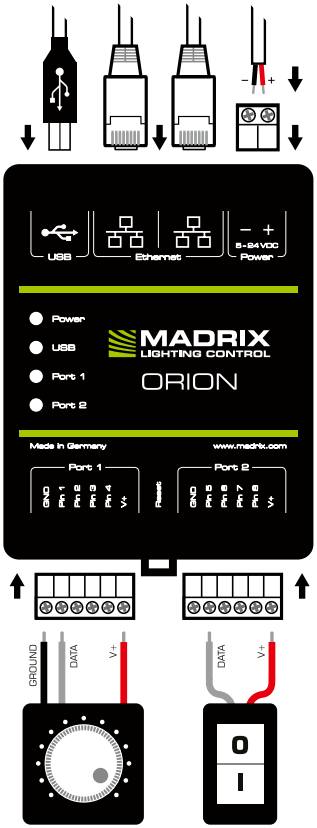
Versatile Output
Different input types allow data to be processed and parameterized differently for the output. Each input can be separately set as Analog-IN, Digital-IN, Counter, and other useful functions.

Daisy-Chain Support
2 Ethernet ports allow for separate network connections as well as linearly daisy-chaining several devices together for better cable management.

Invaluable Features
The device is ready within seconds after start-up. Its firmware is upgradable for future enhancements. Access and change specific device settings using the built-in web configuration page.

The MADRIX® ORION is specifically designed as a general-purpose input device for analog input and Ethernet-based output for remote control and interactivity.





Specifications

Supply Of Power	DC 5 V – 24 V; over **A)** 2-pin, pluggable screw terminal with 500 mA max. load per port when supplying through to the ports, **B)** 5 V USB, **C)** Port 1 or Port 2
Power Consumption	< 1.5 W (300 mA) during normal operation (500 mA max. fused)
USB Port	USB 2.0, type B plug
Input Signals	0 V – 12 V, analog
Ports	2x ports (via 2x 6-pin pluggable screw terminals)
Input Pins	2x 4 separate pins (8x in total)
Ethernet	2x RJ45, Auto MDI-X, 10/100 MBit/s (compatible with 1 GBit/s)
Dimensions (L x W x H)	90 mm x 70 mm xw 46 mm
Weight	105 g | 120 g incl. screw terminals and wall mounts
Operating Temp.	-10 °C to 70 °C
Storage Temp.	-20 °C to 85 °C
Relative Humidity	5 % to 80 %, non-condensing (Operating / Storage)
Case	Non-conductive, V-0 flammability rating (UL94 test method), designed for 35 mm DIN-rails or wall mounting
IP Rating	IP20
Certificates	CE, FCC, RoHS

MADRIX USB ONE

One of the smallest USB interfaces for DMX output or DMX input.

DMX-IN/OUT With 5-Pin NEUTRIK XLR Port
This device allows you to send or receive DMX data using 512 DMX channels. A male-to-male, 3-pin or 5-pin XLR Gender Changer is required for DMX-IN.

Hot Swapping & Plug and Play
Devices can be connected to and disconnected from the computer during use and without a reboot.

USB 2.0 Standard
The USB 2.0 standard is fully supported to allow for a higher maximum speed of 480 MBit/s.

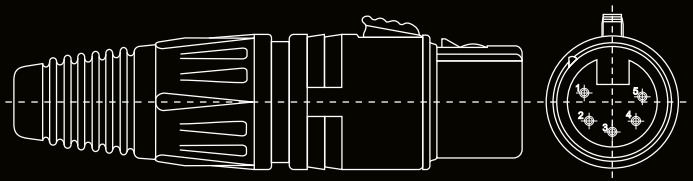
Power Over USB
The interface is powered directly via the USB port and does not need an additional power supply.

Remote Control
MADRIX® 5 can be controlled remotely using the implemented DMX-IN functions.

Frame Rate Stability
Up to 60 devices can be connected to a USB host controller without having any frame rate problems. (60 DMX512 interfaces amount to 30,720 DMX channels.)

Specifications

Supply Of Power	DC 5 V, 500 mA, Power over USB
USB Port	USB 2.0, type A plug, 2 m cable
DMX512	512 DMX channels, input or output
DMX512 Port	5-pin, XLR, female, NEUTRIK
Weight	105 g
Operating Temp.	10 °C to 50 °C
Storage Temp.	-10 °C to 70 °C
IP Rating	IP20
Certificates	CE, FCC, RoHS



MADRIX USB SMPTE

Simply add time code synchronization to your projects.

MADRIX® I/O
MADRIX® I/O products are supplementary input and output devices. External equipment brings additional automation processes and interaction to any project using MADRIX® 5.

SMPTE Time Code
This input device allows you to effortlessly use SMPTE time code for time synchronization across your equipment and multiple devices.

Standard Connectors
Data is received via the 3-pin, female XLR connector. The device can simply be connected to any USB 2.0 port.

Example Of Use
Synchronize the automated playback of scenes and effects in MADRIX 5® by using the Cue List.

Specifications

Supply Of Power	DC 5 V, 500 mA, Power over USB
Power Consumption	~ 50 mA during normal operation
USB Port	USB 2.0, type A plug, Plug and Play, 2 m cable
Plug	3-pin, XLR, female, NEUTRIK
Weight	110 g
Operating Temp.	10 °C to 50 °C
Storage Temp.	-10 °C to 70 °C
Relative Humidity	5 % to 80 %, non-condensing
IP Rating	IP20
Certificates	CE, RoHS

MADRIX Software

MADRIX® 5 License	**start**	**entry**	**basic**	**professional**
DMX Channels	1,024	4,096	16,384	65,536
DMX Universes (Example)	2	8	32	128
RGB Voxels (Example)	341	1,365	5,461	21,845
DVI Voxels	4,096	16,384	262,144	1,048,576
Render Resolution (Example)	64 x 64	128 x 128	512 x 512	1,024 x 1,024
Upgradable	✓	✓	✓	✓
Validity	Lifetime	Lifetime	Lifetime	Lifetime

MADRIX® 5 License	**ultimate**	**maximum**	**preprogrammer**
DMX Channels	262,144	1,048,576	Is a special license available for project preparation. It provides no output for MADRIX® 5, but removes major limitations of the demo mode.
DMX Universes (Example)	512	2,048	
RGB Voxels (Example)	87,381	349,525	
DVI Voxels	2,097,152	2,097,152	
Render Resolution (Example)	2,048 x 1,024	2,048 x 1,024	
Upgradable	✓	–	–
Validity	Lifetime	Lifetime	Lifetime

MADRIX® RADAR License		**fusion small**	**fusion medium**	**fusion large**	**big data**
RDM Nodes	MADRIX®	Third-Party	Third-Party	Third-Party	All
RDM Devices / Sub-Devices	All Connected	32	256	2,048	
Management	✓	✓	✓	✓	Available as a separate license, which can be renewed.
Configuration	✓	✓	✓	✓	
Monitoring	✓	✓	✓	✓	
Upgradable	–	✓	✓	–	–
Validity	–	Lifetime	Lifetime	Lifetime	1 Year

MADRIX Hardware

	LUNA 4	**LUNA 8**	**LUNA 16**	**STELLA**	**NEBULA**
					
Output (Channels)	4x 512 **DMX**	8x 512 **DMX**	16x 512 **DMX**	1x Or 2x 512 **DMX**	8x 512 **SPI**
	And	And	And	And / Or	
Input (Channels)	1x 512 **DMX**	1x 512 **DMX**	1x 512 **DMX**	1x Or 2x 512 **DMX**	—
Ethernet	1x RJ45 100 MBit/s	1x RJ45 100 MBit/s	1x RJ45 100 MBit/s	2x RJ45 100 MBit/s	2x RJ45 100 MBit/s
USB	✓	✓	✓	✓	✓
Art-Net	✓	✓	✓	✓	✓
Streaming ACN	✓	✓	✓	✓	✓
RDM Support	—	—	—	✓	—
Stand-Alone	—	—	—	—	—
Mounting	19″ Rack			DIN-Rail Or Wall	DIN-Rail Or Wall

	AURA 8	**AURA 32**	**ORION**	**USB ONE**	**USB SMPTE**
					
Output (Channels)	8x 512	32x 512	8x / 16x	1x 512 **DMX**	—
	And	And		Or	
Input (Channels)	1x 512	1x 512	8x Analog Inputs	1x 512 **DMX**	1x Analog Input
Ethernet	2x RJ45 1 GBit/s	2x RJ45 1 GBit/s	2x RJ45 100 MBit/s	—	—
USB	✓	✓	✓	✓	✓
Art-Net	✓	✓	✓	—	This input device allows you to effortlessly use SMPTE time code for time synchronization across multiple devices. Example of use: Cue List
Streaming ACN	✓	✓	✓	—	
RDM Support	—	—	—	—	
Stand-Alone	✓	✓	—	—	
Mounting	DIN-Rail Or Wall		DIN-Rail Or Wall	—	

MADRIX Overview

Product	Order Number
MADRIX® KEY	
MADRIX® KEY	IA-SW-005007
MADRIX® 5 Licenses	
MADRIX® 5 preprogrammer	IA-SW-005036
MADRIX® 5 start	IA-SW-005008
MADRIX® 5 entry	IA-SW-005009
MADRIX® 5 basic	IA-SW-005010
MADRIX® 5 professional	IA-SW-005011
MADRIX® 5 ultimate	IA-SW-005012
MADRIX® 5 maximum	IA-SW-005013
MADRIX® 5 License Upgrades	
MADRIX® 5 start > entry	IA-SW-005014
MADRIX® 5 start > basic	IA-SW-005015
MADRIX® 5 start > professional	IA-SW-005016
MADRIX® 5 start > ultimate	IA-SW-005017
MADRIX® 5 start > maximum	IA-SW-005018
MADRIX® 5 entry > basic	IA-SW-005019
MADRIX® 5 entry > professional	IA-SW-005020
MADRIX® 5 entry > ultimate	IA-SW-005021
MADRIX® 5 entry > maximum	IA-SW-005022
MADRIX® 5 basic > professional	IA-SW-005023
MADRIX® 5 basic > ultimate	IA-SW-005024
MADRIX® 5 basic > maximum	IA-SW-005025
MADRIX® 5 professional > ultimate	IA-SW-005026
MADRIX® 5 professional > maximum	IA-SW-005027
MADRIX® 5 ultimate > maximum	IA-SW-005028

Product	Order Number
MADRIX® 5 Software Updates	
MADRIX® 5 Software Update start	IA-SW-005029
MADRIX® 5 Software Update entry	IA-SW-005030
MADRIX® 5 Software Update basic	IA-SW-005031
MADRIX® 5 Software Update professional	IA-SW-005032
MADRIX® 5 Software Update ultimate	IA-SW-005033
MADRIX® RADAR fusion Licenses	
MADRIX® RADAR fusion small	IA-SW-005051
MADRIX® RADAR fusion medium	IA-SW-005052
MADRIX® RADAR fusion large	IA-SW-005053
MADRIX® RADAR fusion License Upgrades	
MADRIX® RADAR fusion small > fusion medium	IA-SW-005054
MADRIX® RADAR fusion small > fusion large	IA-SW-005055
MADRIX® RADAR fusion medium > fusion large	IA-SW-005056
MADRIX® RADAR big data Yearly Licenses	
MADRIX® RADAR big data	IA-SW-005050

Product	Order Number
MADRIX® Network Nodes	
MADRIX® AURA 8	IA-HW-001025
MADRIX® AURA 32	IA-HW-001026
MADRIX® LUNA 4	IA-HW-001014
MADRIX® LUNA 8	IA-HW-001008
MADRIX® LUNA 16	IA-HW-001015
MADRIX® STELLA	IA-HW-001019
MADRIX® NEBULA	IA-HW-001018
MADRIX® I/O	
MADRIX® ORION	IA-HW-001021
MADRIX® USB ONE	IA-HW-001001
MADRIX® USB SMPTE	IA-HW-001016

Product	Order Number
Accessories	
XLR Gender Changer	IA-HW-001002
XLR Adapter Silver	IA-HW-001006
XLR Adapter Black (Premium Quality)	IA-HW-001020
STELLA Accessory Replacement Set	IA-HW-001024
NEBULA Accessory Replacement Set	IA-HW-001023
ORION Accessory Replacement Set	IA-HW-001022
DIN-Rail Power Supply 12 V	IA-HW-001027
Plug-In Power Supply 3 V – 12 V	IA-HW-001028

- For prices and more information, please contact your local dealer.
- Online activation initially required any software license, license upgrade, or update.
- Only one MADRIX® 5 License is possible per MADRIX® KEY.
- MADRIX® 5 License Upgrades to higher licenses are possible several times per MADRIX® KEY.
- The MADRIX® 5 Software Update is free of charge if you have bought MADRIX® 3 Software on April 01, 2017 or any later date.
- It is possible to have a MADRIX® RADAR fusion license and a MADRIX® RADAR big data license on a single MADRIX® KEY.

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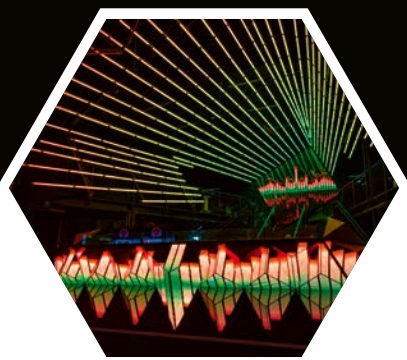

March 2020