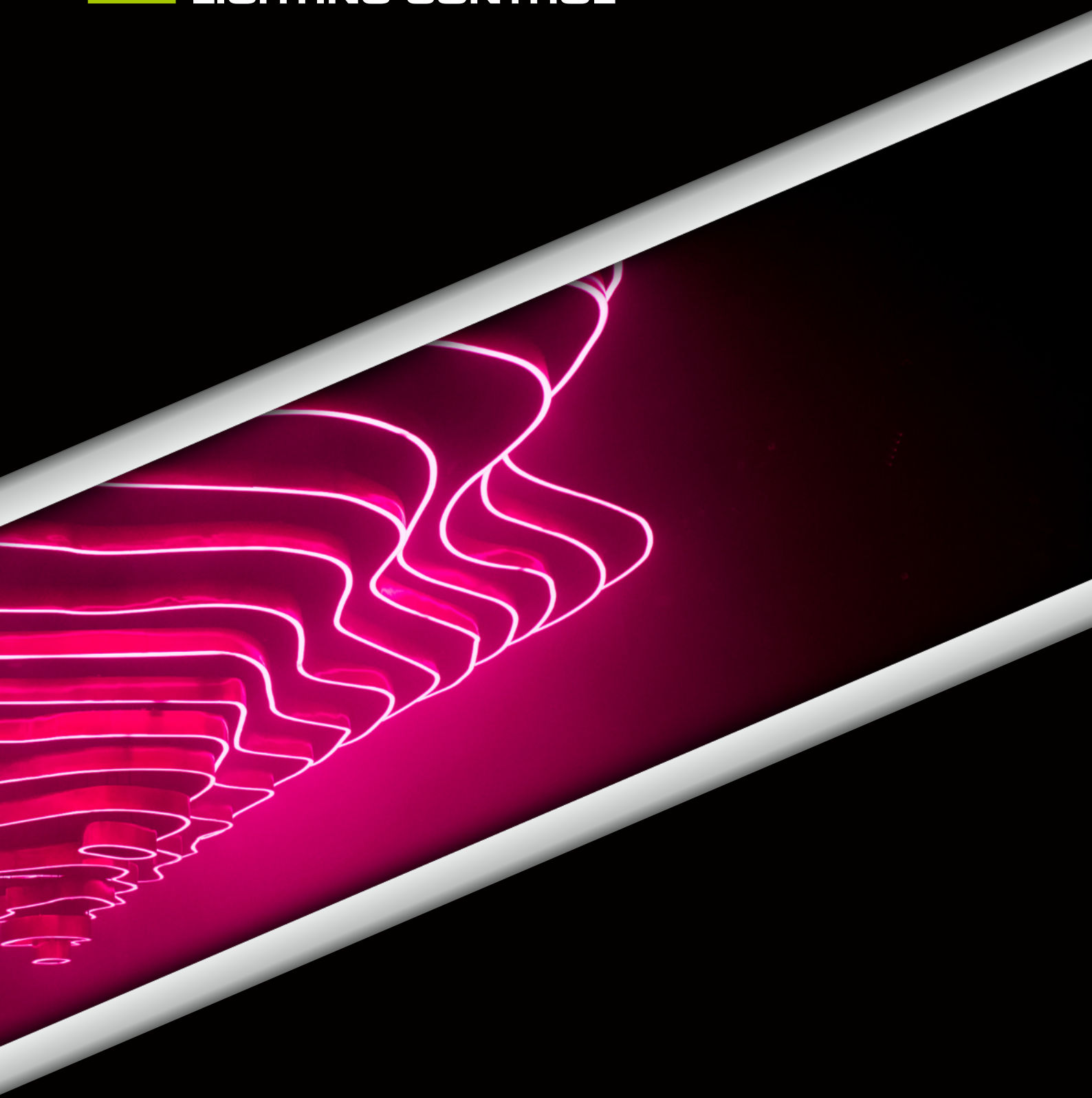
MADRIX
LIGHTING CONTROL



CREATIVE
DYNAMIC
RELIABLE

WELCOME

TO THE FASCINATING WORLD OF LED LIGHTING

Discover extraordinary lighting and reliable control.

Dynamic visuals, colorful effects, or static elegance —
A creative vision and stunning lighting design ultimately require the right solutions.

The MADRIX® range of software and hardware solutions includes state-of-the-art tools for easy configuration, automatic health monitoring, and creative lighting control.

All around the world amazing LED projects are brought to life in entertainment, live productions, and architainment thanks to our high-quality, professional products made in Germany.

5 Years of Warranty
Reliability you can count on.

eco Sustainability
Global awareness.

Made in Germany
Excellence in engineering.

Worldwide Community
Join the MADRIX® Family of lighting designers, VJs, operators, engineers, and dealers who support each other all around the globe.

Ease Of Use
You can start creatively right away since we focus on being able to get results fast and products that work out of the box.

Flexible Integration
Support for a wide variety of industry standards makes it easy to integrate MADRIX® into your current and future projects.

World-Class Support
Countless projects have been completed successfully thanks to our helpful and dedicated technical-support team.

Vast Experience
Benefit from years of experience and industry knowledge. inoage® develops lighting software since 2005.

Regular Free Updates
We regularly update our softwares and hardware firmwares, often for free, with new features and useful improvements.

TikTok
@madrix_team

@MADRIX.DE

@MADRIX

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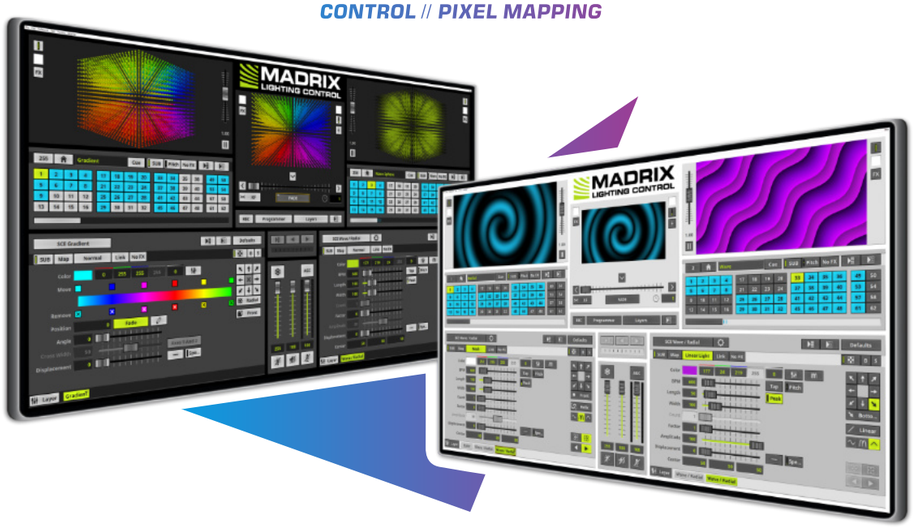
News
Projects
Inspiration

LET'S MAKE
YOUR PROJECT
AMAZING

MADRIX 5

CONTROL // PIXEL MAPPING



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 your LED lighting. All-new features such as timelines, 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.

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. You can always customize everything, such as speed, color, shape, direction, size, movement, position, brightness, and much more.

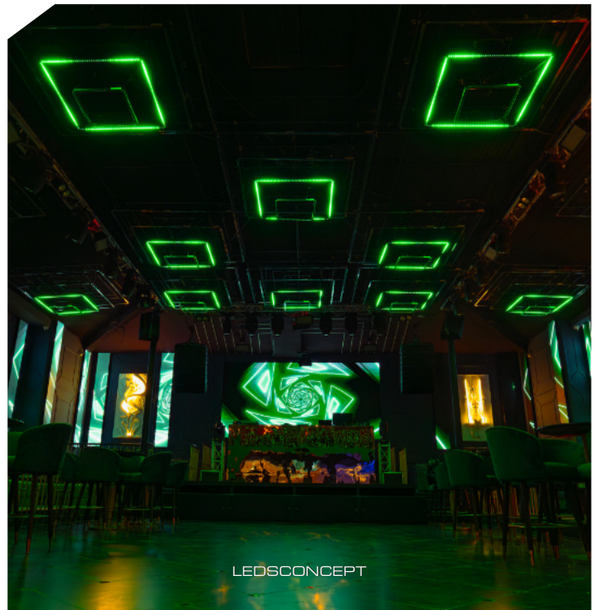
The award-winning LED lighting controller for ultimate pixel mapping in 2D or 3D.

Technical Specifications

Made in Germany

User-Interface Languages	Deutsch (German) English Español (Spanish) Français (French) Bahasa Indonesia (Indonesian) Italiano (Italian)	日本語 (Japanese) 한국어 (Korean) Português brasileiro (Brazilian Portuguese) русский (Russian) Türkçe (Turkish) 简体中文 (Simplified Chinese)
Industry Standards For Output	DMX-Based Art-Net (I, II, 3, 4) (Unicast & Broadcast) DMX512 Color Kinetics KiNET (V1 / V2 / V3) 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, Interoperability, Remote Control, And Audio	Art-Net (I, II, 3, 4) ASIO Blackmagic Design (DeckLink, Intensity, and more) CAST Software BlackTrax CITP DMX512 GamePort MA-Net 1 / MA-Net 2 MADRIX® I/O	MADRIX® ORION (Analog Input) 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, Microsoft Windows 11 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.



PLSN 2018 PROJECTION LIGHTS & STAGING NEWS GOLD STAR PRODUCT AWARD

LIVEDESIGN PRODUCTS 2013-2014 OF THE YEAR

8th edition PALM SOUND & LIGHT AWARDS

MADRIX 5

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.

Combine 2D + 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.

3D Voxel Mapping In X + Y + 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.

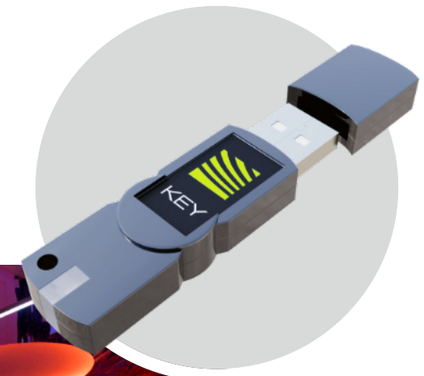
MADRIX 5

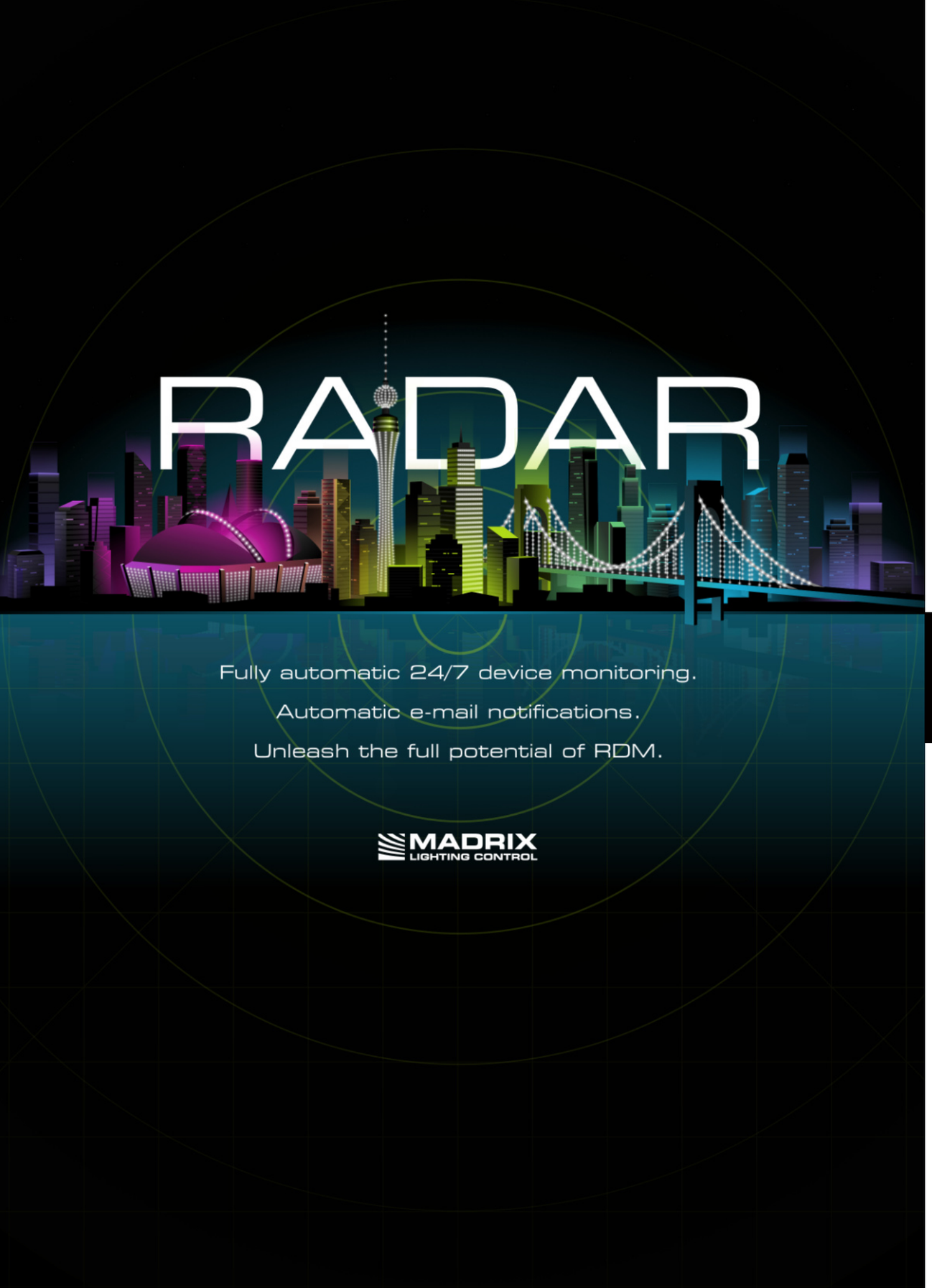
Different licenses are available for different needs and project sizes.

MADRIX® 5 License	start	entry	basic	professional
DMX Channels	1,024	6,144	16,384	65,536
DMX Universes (Example)	(2)	(12)	(32)	(128)
RGB Voxels (Example)	(341)	(2,048)	(5,461)	(21,845)
DVI Voxels	16,384	262,144	1,048,576	2,097,152
Render Resolution (Example)	(128 x 128)	(512 x 512)	(1,024 x 1,024)	(2,048 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.





RADAR

MONITORING // CONFIGURATION // RDM

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

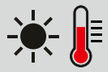
Everywhere, lighting designs beautifully light up the world all around us.
And clients expect them to do so without failure, each and every day.
Behind the scenes, the lighting industry faces the complex aspects of modern technologies.
Increasingly large projects become increasingly difficult to manage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

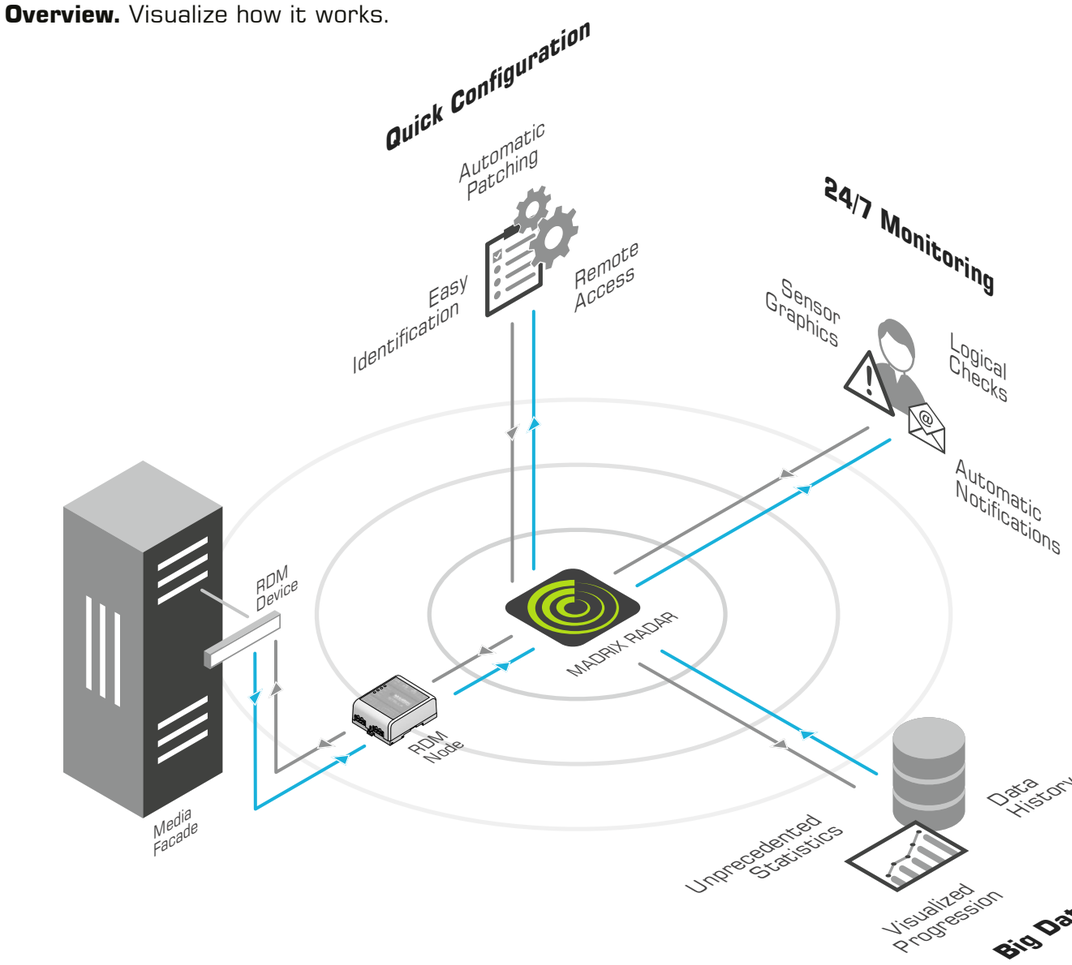
Build a database of past sensor data and see the progression of device parameters, such as temperature and operating hours. Exchange devices that are likely to fail soon, before they do. Make your maintenance costs much more predictable by planning them more effectively in advance.



Simply monitor parameters that are supported by RDM devices, such as temperature and supply of power.
Overheating and overvoltage are among the most likely reasons that LED lighting fixtures mounted on media facades fail.

MADRIX RADAR

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.

MADRIX RADAR

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

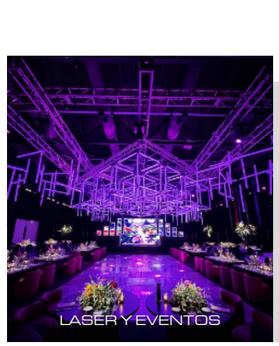
MADRIX® RADAR is an independent software that allows you to choose compatible RDM nodes.

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 (MADRIX® STELLA)	**Third-Party RDM Nodes & MADRIX® RADAR License**			
Software License	**Free** (Included In Hardware Purchase)	**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	64	512	4,096
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.**

Technical Specifications

Made in Germany

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)
Supported Operating Systems	Microsoft Windows 10 64 bit only	
Technical Standards	Art-Net (I, II, 3, 4, incl. ArtRdm), RDM (ANSI E1.20, ANSI E1.37-1)	
RDM Role	Sends commands and data requests to RDM Responders via ArtRdm (Manager)	
Supported Databases	SQLite In Main Memory, SQLite File, PostgreSQL Server (Via Local Computer Or Remote Server Connections)	
License Requirements	MADRIX® RADAR licenses require a valid, metallic MADRIX® KEY	
Demo Version	Download MADRIX® RADAR from www.madrix.com	

MADRIX KEY

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.

TRAINING

Expand your knowledge.

MADRIX® Training includes a variety of seminars to learn directly from the makers of MADRIX®.
Our courses effectively and quickly teach you how the system works.

See all details at **www.madrix.com**

In-House

MADRIX Training

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 in person at the MADRIX® Headquarters in Dresden, Germany.

Online

MADRIX Training

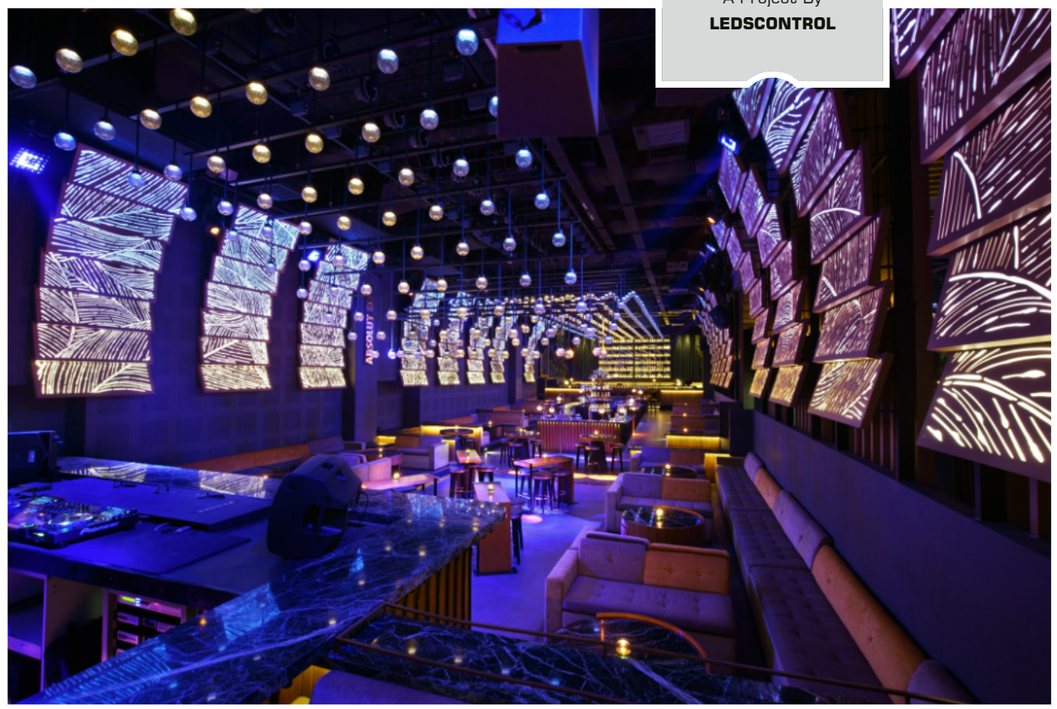
Choose between three different courses or attend all of them. Each course is offered in English or German depending on the date. All sessions are held online.

Tutorials

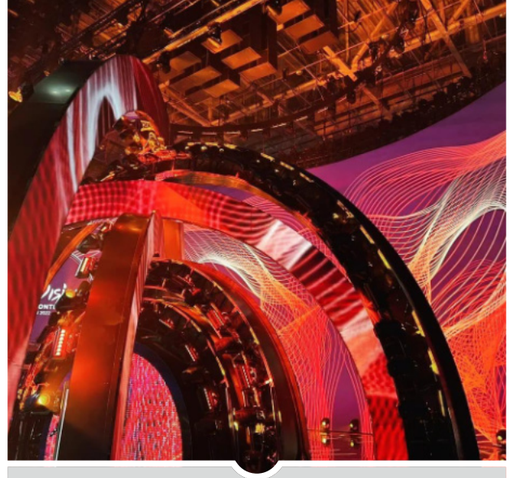
MADRIX

Level up your skills by diving into our extensive user manuals, online tutorials, and video tutorials freely available at **help.madrix.com**

1. **MADRIX® 5 Software: Crash Course**
2. **MADRIX® 5 Software: Patching, Mapping, And Group Control**
3. **MADRIX® 5 Software: Creating Advanced Effects**



Dragonfly Club
A Project By
LEDSCONTROL



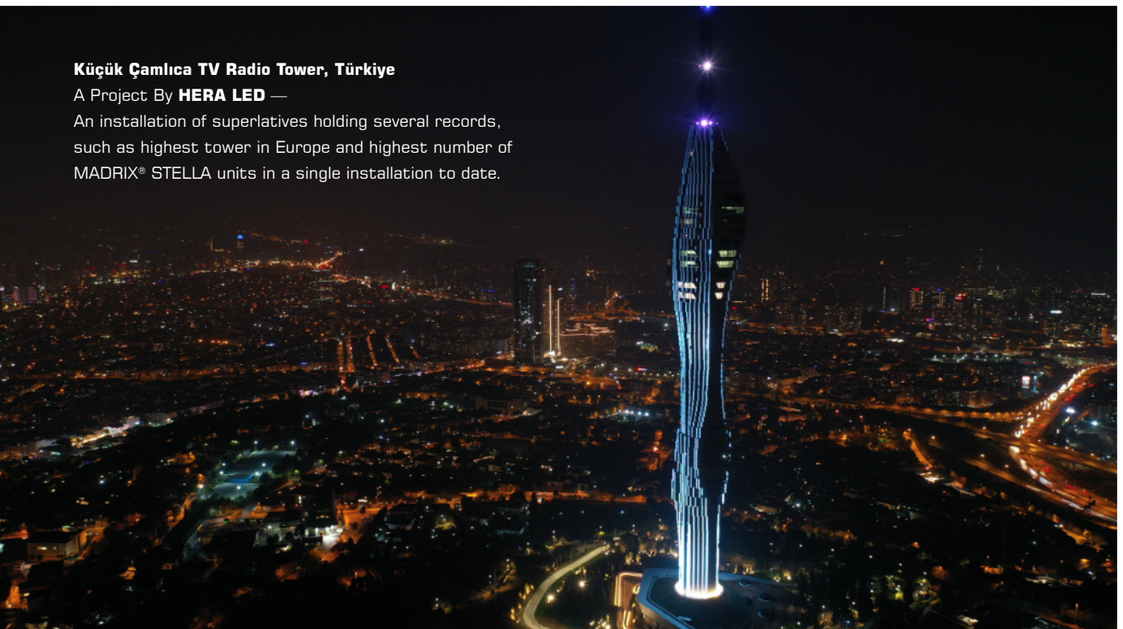
Eurovision Song Contest 2022
Special Thanks
Event Management

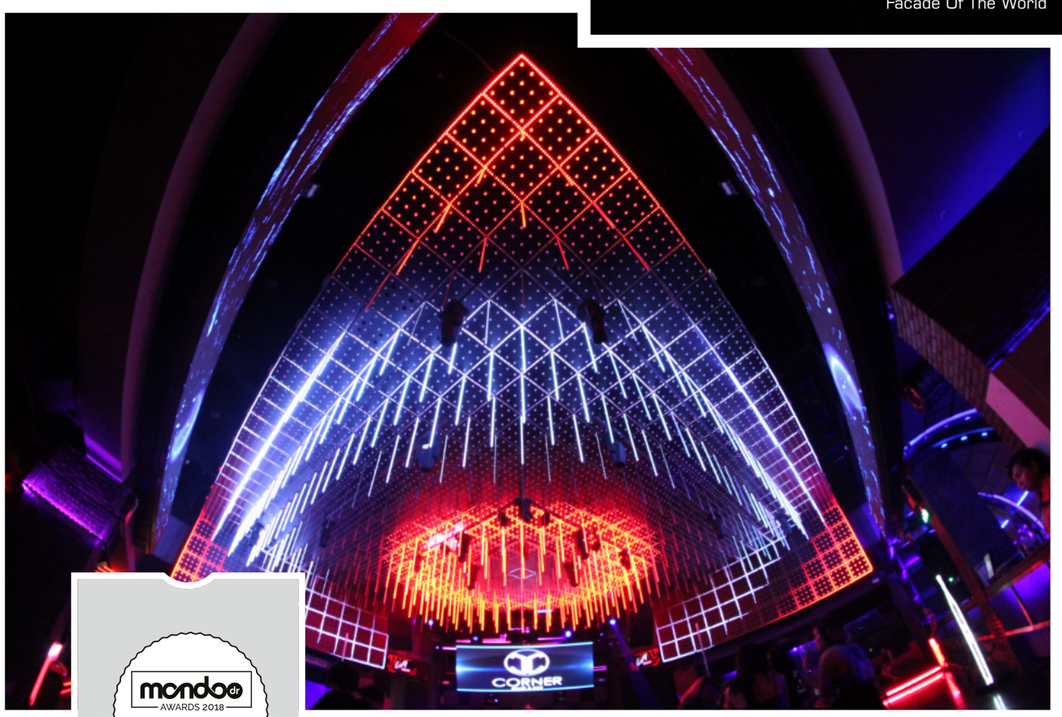
Eurovision Song Contest 2022
Special Thanks
scenoluminoso

Torch Tower, Qatar
A Project By
Carl Stahl ARC

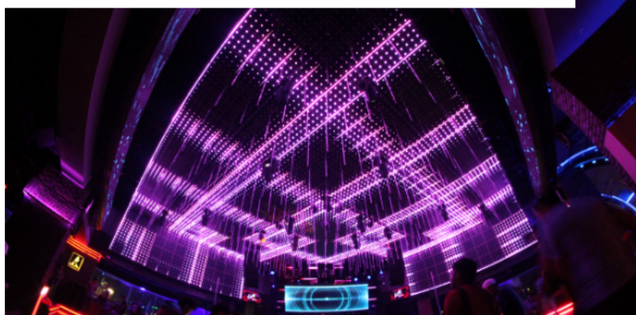
Guinness World Record 2022
Biggest 360° Media Facade Of The World

Küçük Çamlıca TV Radio Tower, Türkiye
A Project By **HERA LED** —
An installation of superlatives holding several records, such as highest tower in Europe and highest number of MADRIX® STELLA units in a single installation to date.





Corner Club
A Project By
Lights Professional & NewVision Technology



INTEGRATION

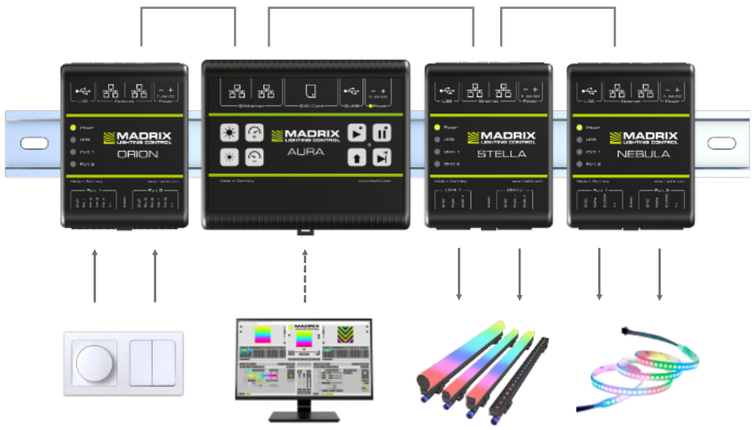
MADRIX® interfaces seemlessly integrate with any MADRIX® Software to form a fully integrated system.

High Performance
Dynamic and smooth visuals require high frame rates, which MADRIX® products deliver constantly and reliably.

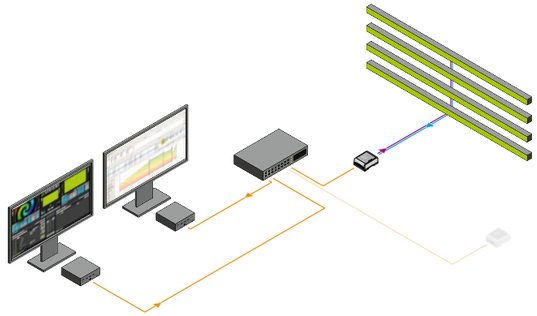
Unmatched Reliability
MADRIX® hardware products have incredibly low failure rates and return rates.

Easy Scalability
Simply connect several devices to increase the available output.

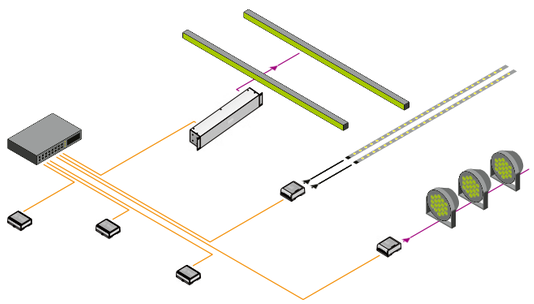
Custom Development
Our in-house development team uses specialized components and develops fully customized firmware.



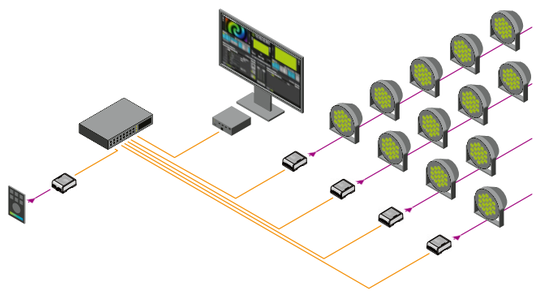
MADRIX® RADAR — Example



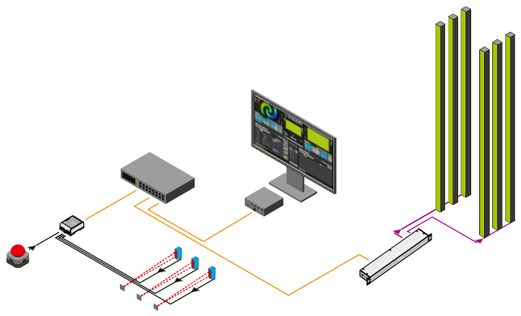
MADRIX® AURA — Example



MADRIX® STELLA — Example

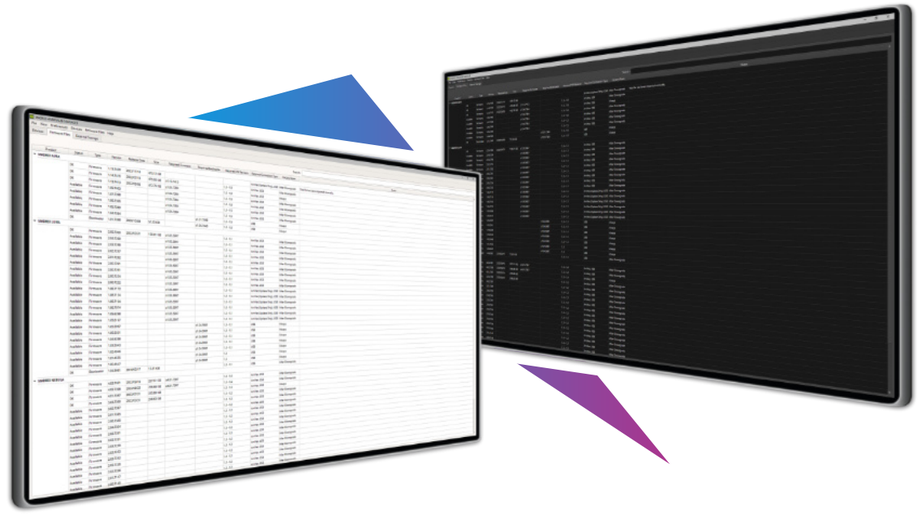


MADRIX® ORION — Example



MANAGER

CONFIGURATION // MADRIX HARDWARE



MADRIX® HARDWARE MANAGER — The software companion to your MADRIX® hardware.

Device Configuration
Easily configure basic device settings, such as the IP address, or perform a reset to factory default settings. Or quickly call up the web configuration of your connected devices.

Documentation
The latest PDF documentation files are also automatically downloaded and available for you.

Firmware Updates
Quickly update your devices to any firmware version that is available in just a few mouse clicks over USB or Ethernet. New firmware updates are automatically downloaded from our web server.

File Upload
Simply upload or delete scene files on the SD card of your MADRIX® AURA stand-alone devices. You only need access to the device itself over USB or Ethernet.

Technical Specifications

Made in Germany

User-Interface Languages	English
Supported Operating Systems	Microsoft Windows 10 64 bit only
Available Connection Types	USB, Ethernet
Supported Devices	MADRIX® AURA 2, MADRIX® AURA 8, MADRIX® AURA 12, MADRIX® AURA 32, MADRIX® LUNA 4, MADRIX® LUNA 8, MADRIX® LUNA 16, MADRIX® NEBULA, MADRIX® ORION, MADRIX® STELLA
Full Version	Download for free from www.madrix.com

AURA

CONTROL // STAND-ALONE

sACN Art-Net

3 versions are available:
AURA 2 | AURA 12 | AURA 32

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

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 2, 12, 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 intensity.

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.

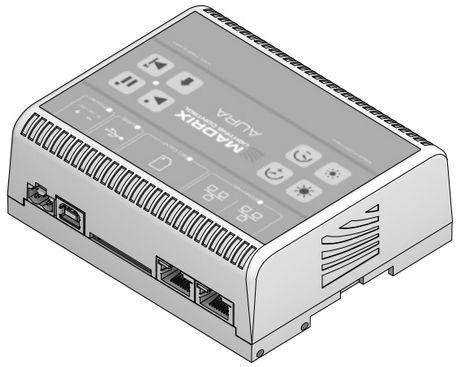
Web Configuration
Use the built-in web configuration page to access and change specific device settings, such as the important IP address, universes, playlist settings, and much more.

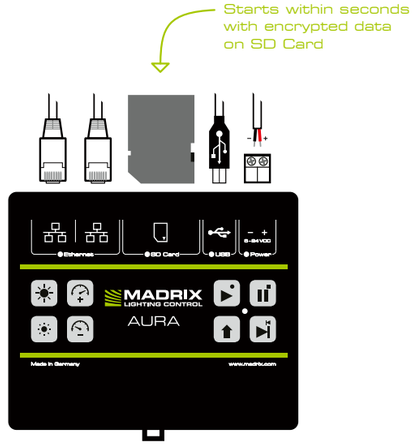
Remote Control
Trigger MADRIX® AURA via user-definable HTTP commands and the built-in web server or use Art-Net/sACN. You can even add MADRIX® ORION for interactive installations.

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

Technical Specifications — Made in Germany

Supply Of Power	DC 5 V – 24 V; over **A)** 2-pin, pluggable screw terminal or **B)** 5 V USB
Power Consumption	2.5 W (500 mA) during normal operation (500 mA max. fused)
BTU/h	8.53 during normal operation
Network Protocols	Art-Net (I, II, 3, 4, incl. ArtSync), Streaming ACN (sACN / ANSI E1.31)
RDM Role	Acts on commands and replies to requests with its own status and sensor data via ArtRdm (RDM Responder)
Output	2x / 12x / 32x 512 DMX channels output over Ethernet network
Recording Input	2x / 12x / 32x 512 DMX channels input over Ethernet network
Remote-Control Input	8x 512 DMX channels received over Ethernet network, or Remote HTTP
SD-Card Slot	Supports SD, SDHC, and SDXC cards (Tested up to 64 GB)
Ethernet	2x RJ45, Auto MDI-X, daisy-chain support, 10/100/1000 MBit/s
Ethernet Switch	Lookup Table (ALU) for 4,096 unicast MAC addresses
USB	1x port, USB 2.0, type-B female socket
Handling	8 control buttons, 6 status LEDs (+ 4 network status LEDs)
Case	Non-conductive, V-0 flammability rating (UL94 test method), designed for 35 mm DIN-rails or wall mounting
Dimensions	86 mm × 105 mm × 49 mm (3.39" × 4.13" × 1.93") (Length × Width × Height)
Weight	148 g (0.33 lb) | 154 g (0.34 lb) incl. screw terminal, SD card, and wall mounts
Temperature Range	-10 °C to 70 °C (14 °F to 158 °F) (Operating) | -20 °C to 85 °C (-4 °F to 185 °F) (Storage)
Relative Humidity	5 % to 80 %, non-condensing (Operating / Storage)
IP Rating	IP20
Certificates	CE, EAC, FCC, RoHS
Warranty	5 years of limited manufacturer's warranty
0.27 %	Average Hardware Failure And Return Rate (Last Update: December 2023)





LUNA

CONTROL // OUTPUT // INPUT

DMX 512 | sACN | Art-Net

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

The easy-to-use and reliable network node.

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.

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.

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.

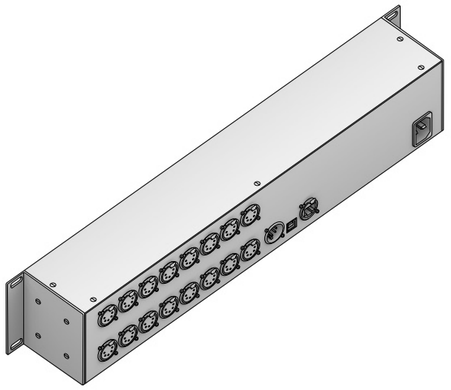
Invaluable Features
The device is ready within seconds after startup. HTP merging is automatically available for two Ethernet sources. Its firmware can be updated for future enhancements. Access and change specific device settings using the built-in web configuration page.

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

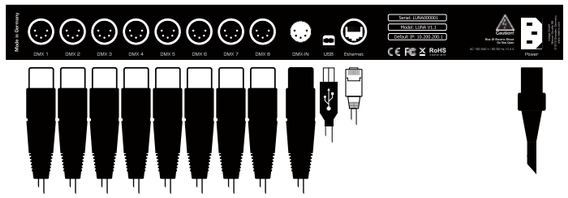
Technical Specifications

Made in Germany

Power Supply	AC 100 V – 240 V, 50-60 Hz, 0.4 A max., IEC C14 inlet
Power Consumption	< 5 W during normal operation
BTU/h	5.50 (LUNA 4) | 8.80 (LUNA 8) | 10.20 (LUNA 16) during normal operation
Network Protocols	Art-Net (I, II, 3, 4, incl. ArtSync), Streaming ACN (sACN / ANSI E1.31)
DMX512 (OUT)	4x / 8x / 16x 512 DMX channels output
DMX512 (IN)	1x 512 DMX channels input
Ports (OUT)	5-pin, XLR, female, NEUTRIK
Port (IN)	5-pin, XLR, male, NEUTRIK
Ethernet	1x RJ45, Auto MDI-X, NEUTRIK etherCON, 10/100 MBit/s (Compatible with 1 GBit/s)
USB	1x port, USB 2.0, type-B female socket
Handling	5 status LEDs
Case	Metal enclosure (With attached brackets for 19″ rack mounting)
Size	19″ × 1U (LUNA 4 / LUNA 8) | 19″ × 2U (LUNA 16)
Dimensions (Body Only)	76 mm × 440 mm × 44 mm (3″ × 17.32″ × 1.75″) (Length × Width × Height)
Dimensions (Total)	76 mm × 482.6 mm × 44 mm (3″ × 19″ × 1.75″) (Length × Width × Height)
Dimensions (LUNA 16 Total)	76 mm × 482.6 mm × 88 mm (3″ × 19″ × 3.5″) (Length × Width × Height)
Weight	1.3 kg (2.87 lb) (LUNA 4) | 1.4 kg (3.09 lb) (LUNA 8) | 2.0 kg (4.41 lb) (LUNA 16)
Temperature Range	-10 °C to 60 °C (14 °F to 140 °F) (Operating) | -20 °C to 70 °C (-4 °F to 158 °F) (Storage)
Relative Humidity	20 % to 80 %, non-condensing (Operating / Storage)
IP Rating	IP20
Certificates	CE, EAC, FCC, RoHS
Warranty	5 years of limited manufacturer's warranty
0.15 %	Average Hardware Failure And Return Rate (Last Update: December 2023)



Rock-solid DMX with 4, 8, or 16 outputs that beautifully sync across thousands of universes



STELLA

CONTROL // OUTPUT // INPUT

RDM · DMX 512 · sACN · Art-Net

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.

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.

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.

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.

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.

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.

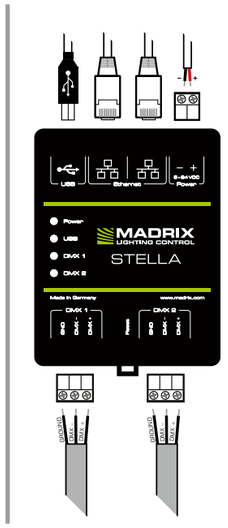
RDM & Daisy-Chain Support
2 Ethernet ports allow for separate network connections as well as linearly daisy-chaining several devices together. On top, the device supports the Remote Device Management standard.

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

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

Technical Specifications — Made in Germany

Supply Of Power	DC 5 V – 24 V; over **A)** 2-pin, pluggable screw terminal or **B)** 5 V USB
Power Consumption	< 1.5 W (300 mA) during normal operation (500 mA max. fused)
BTU/h	6.55 during normal operation
Network Protocols	Art-Net (I, II, 3, 4, incl. ArtSync), Streaming ACN (sACN / ANSI E1.31)
RDM Role	Transmits commands and requests to RDM Responders and back (Art-Net Node / RDM Controller)
RDM Responder Count	170 RDM Responders max. can be discovered per port
DMX512	2x 512 DMX channels, input and/or output (Automatically set per port)
Ports	2x ports (Via 2x 3-pin, pluggable screw terminals)
Ethernet	2x RJ45, Auto MDI-X, daisy-chain support, 10/100 MBit/s (Compatible with 1 GBit/s)
Ethernet Switch	Lookup Table (ALU) for 1,024 unicast MAC addresses
USB	1x port, USB 2.0, type-B female socket
Handling	5 status LEDs (+ 4 network status LEDs)
Case	Non-conductive, V-0 flammability rating (UL94 test method), designed for 35 mm DIN-rails or wall mounting
Dimensions	90 mm × 70 mm × 46 mm (3.54" × 2.76" × 1.81") (Length × Width × Height)
Weight	108 g (0.24 lb) | 125 g (0.28 lb) incl. screw terminals and wall mounts
Temperature Range	-10 °C to 70 °C (14 °F to 158 °F) (Operating) | -20 °C to 85 °C (-4 °F to 185 °F) (Storage)
Relative Humidity	5 % to 80 %, non-condensing (Operating / Storage)
IP Rating	IP20
Certificates	CE, EAC, FCC, RoHS
Warranty	5 years of limited manufacturer's warranty
0.09 %	Average Hardware Failure And Return Rate (Last Update: December 2023)



Seamless Integration Of Art-Net & RDM
RDM is fully supported over Art-Net, including ArtRdm, all other required packets, and full and continued discovery of RDM devices. Use MADRIX® STELLA and MADRIX® RADAR together for additional benefits:
1) All RDM devices/sub-devices connected to STELLA are automatically unlocked in the RADAR Software for free,
2) With RADAR, the complete RDM specifications of ANSI E1.20 and ANSI E1.37-1 are available to you over Art-Net,
3) Thanks to STELLA's Packet Multitasking, RDM and Art-Net can be sent and received at the same time and during live operation.

NEBULA

CONTROL // OUTPUT

SPI **sACN** **Art-Net**

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 12 Universes

Each device drives up to 2,048 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 can be updated for future enhancements. Access and change specific device settings using the built-in web configuration page.

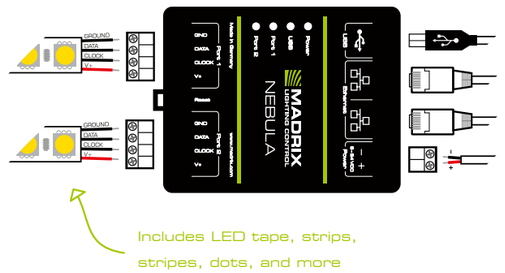
Over 70 ***Supported SPI Protocols***

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

Technical Specifications

Made in Germany

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)
BTU/h	5.73 during normal operation
Network Protocols	Art-Net (I, II, 3, 4, incl. ArtSync), Streaming ACN (sACN / ANSI E1.31)
RDM Role	Acts on commands and replies to requests with its own status and sensor data via ArtRdm (RDM Responder)
Data Output	12x 512 channels SPI TTL (Maximum output per port: 1,024 RGB LEDs / 768 RGBW LEDs / 3,072 1-channel LEDs)
Supported LEDs As of December 2023. See www.madrix.com for the latest information. Multiple frequencies are often available per type.	APA101, APA102, APA104, APA106, FW1935, GS8206, GS8207, GS8208, GW6201, GW6205, LB1908, LPD1882S, LPD6803, LPD8806, MBI6024, MBI6120, MY9291, P9883, SJ1221, SK6112, SK6805, SK6812, SK6813, SK6822, SK9816, SK9822, SK9826, SM16703, SM16704, SM16716, TLC5973, TLS3001, TLS3008, TM1803, TM1804, TM1809, TM1812, TM1814, TM1829, TM1934, UCS512B3, UCS1903, UCS2603, UCS2903, UCS2904, UCS2904B, UCS5603, UCS5603A, UCS8903, UCS8904, UCS9812S, VS17822, WS2801, WS2803, WS2811, WS2811F, WS2811M, WS2811S, WS2812, WS2812B, WS2812C, WS2813, WS2814, WS2814F, WS2815, WS2818, WS2818M, WS2821, WS2821 Addressing, WS2822S, WS2822S Addressing
Ports	2x ports (Via 2x 4-pin, pluggable screw terminals)
Ethernet	2x RJ45, Auto MDI-X, daisy-chain support, 10/100 MBit/s (Compatible with 1 GBit/s)
Ethernet Switch	Lookup Table (ALU) for 1,024 unicast MAC addresses
USB	1x port, USB 2.0, type-B female socket
Handling	5 status LEDs (+ 4 network status LEDs)
Case	Non-conductive, V-0 flammability rating (UL94 test method), designed for 35 mm DIN-rails or wall mounting
Dimensions	90 mm × 70 mm × 46 mm (3.54" × 2.76" × 1.81") (Length × Width × Height)
Weight	110 g (0.24 lb) | 132 g (0.29 lb) incl. screw terminals and wall mounts
Temperature Range	-10 °C to 70 °C (14 °F to 158 °F) (Operating) | -20 °C to 85 °C (-4 °F to 185 °F) (Storage)
Relative Humidity	5 % to 80 %, non-condensing (Operating / Storage)
IP Rating	IP20
Certificates	CE, EAC, FCC, RoHS
Warranty	5 years of limited manufacturer's warranty
0.08 %	Average Hardware Failure And Return Rate (Last Update: December 2023)



ORION

CONTROL // INPUT

sACN Art-Net

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. 9 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.

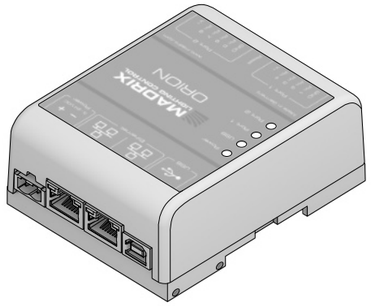
Daisy-Chain Support
2 Ethernet ports allow for separate network connections as well as linearly daisy-chaining several devices together for better cable management.

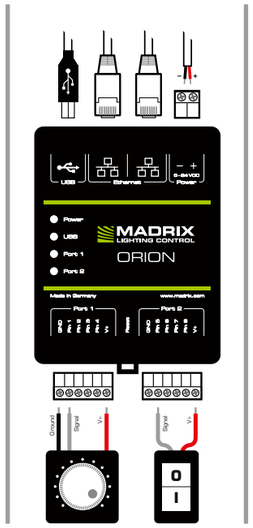
Invaluable Features
The device is ready within seconds after startup. Its firmware can be updated for future enhancements. Access and change specific device settings using the built-in web configuration page.

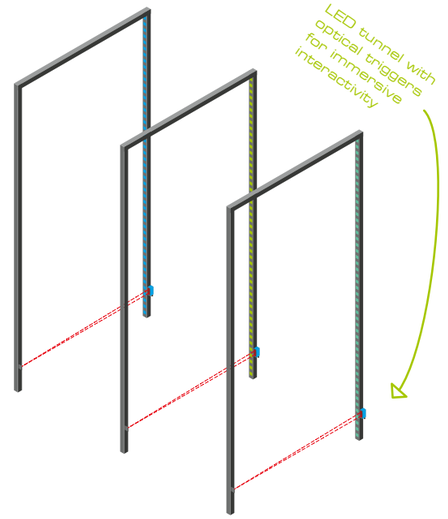
MADRIX® ORION is specifically designed as a general-purpose input device.
It is used for analog input and Ethernet-based output for remote control and interactivity.

Technical Specifications — Made in Germany

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)
BTU/h	5.73 during normal operation
Network Protocols	Art-Net (I, II, 3, 4), Streaming ACN (sACN / ANSI E1.31)
Input Signals	Analog 0 V – 12 V (Measurable) / Analog 0 V – 24 V (Permissible)
Ports	2x ports (Via 2x 6-pin pluggable screw terminals)
Input Pins	2x 4 separate pins (8x in total with 72 kΩ input resistance each)
Ethernet	2x RJ45, Auto MDI-X, daisy-chain support, 10/100 MBit/s (Compatible with 1 GBit/s)
Ethernet Switch	Lookup Table (ALU) for 1,024 unicast MAC addresses
USB	1x port, USB 2.0, type-B female socket
Handling	5 status LEDs (+ 4 network status LEDs)
Case	Non-conductive, V-0 flammability rating (UL94 test method), designed for 35 mm DIN-rails or wall mounting
Dimensions	90 mm × 70 mm × 46 mm (3.54" × 2.76" × 1.81") (Length × Width × Height)
Weight	105 g (0.23 lb) | 120 g (0.27 lb) incl. screw terminals and wall mounts
Temperature Range	-10 °C to 70 °C (14 °F to 158 °F) (Operating) | -20 °C to 85 °C (-4 °F to 185 °F) (Storage)
Relative Humidity	5 % to 80 %, non-condensing (Operating / Storage)
IP Rating	IP20
Certificates	CE, EAC, FCC, RoHS
Warranty	5 years of limited manufacturer's warranty
0.00 %	Average Hardware Failure And Return Rate (Last Update: December 2023)







USB ONE

CONTROL // INPUT // OUTPUT

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 over 512 DMX channels using MADRIX® 5. 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.

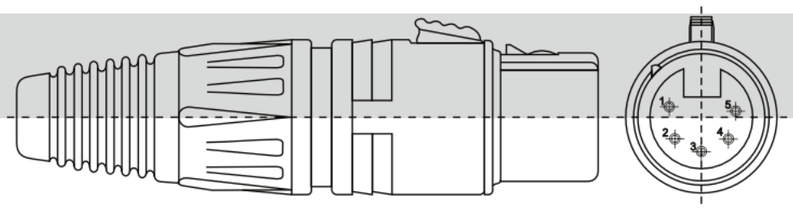
Frame Rate Stability

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.)

Technical Specifications

Made in Germany

Supply Of Power	DC 5 V, 500 mA, Power over USB
Power Consumption	~ 55 mA during normal operation
BTU/h	1.00 during normal operation
DMX512	512 DMX channels, input or output
Plug	5-pin, XLR, female, NEUTRIK
USB	1x port, USB 2.0, type-A male plug, Plug and Play, 2 m cable
Weight	105 g (0.23 lb)
Temperature Range	10 °C to 50 °C (50 °F to 122 °F) (Operating) -10 °C to 70 °C (14 °F to 158 °F) (Storage)
Relative Humidity	5 % to 80 %, non-condensing (Operating / Storage)
IP Rating	IP20
Certificates	CE, EAC, FCC, RoHS
Warranty	5 years of limited manufacturer's warranty
0.08 %	Average Hardware Failure And Return Rate (Last Update: December 2023)



USB SMPTE

CONTROL // INPUT

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.

Technical Specifications

Made in Germany

Supply Of Power	DC 5 V, 500 mA, Power over USB
Power Consumption	~ 50 mA during normal operation
BTU/h	0.34 during normal operation
Plug	3-pin, XLR, female, NEUTRIK
USB	1x port, USB 2.0, type-A male plug, Plug and Play, 2 m cable
Weight	110 g (0.24 lb)
Temperature Range	10 °C to 50 °C (50 °F to 122 °F) (Operating) -10 °C to 70 °C (14 °F to 158 °F) (Storage)
Relative Humidity	5 % to 80 %, non-condensing (Operating / Storage)
IP Rating	IP20
Certificates	CE, EAC, RoHS
Warranty	5 years of limited manufacturer's warranty
0.00 %	Average Hardware Failure And Return Rate (Last Update: December 2023)

SOFTWARE

MADRIX® 5 License	start	entry	basic	professional
DMX Channels	1,024	6,144	16,384	65,536
DMX Universes (Example)	(2)	(12)	(32)	(128)
RGB Voxels (Example)	(341)	(2,048)	(5,461)	(21,845)
DVI Voxels	16,384	262,144	1,048,576	2,097,152
Render Resolution (Example)	(128 x 128)	(512 x 512)	(1,024 x 1,024)	(2,048 x 1,024)
Upgradable	✓	✓	✓	✓
Validity	Lifetime	Lifetime	Lifetime	Lifetime

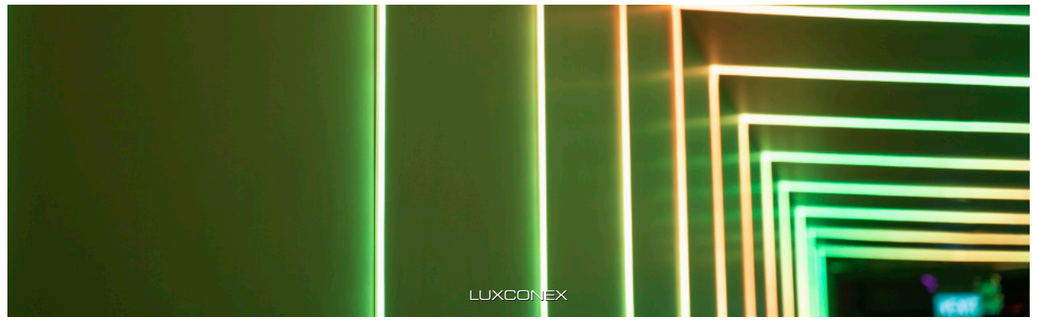
MADRIX® 5 License	ultimate	maximum	preprogrammer
DMX Channels	262,144	1,048,576	Is a special license available for project preparation. It provides no output for MADRIX® 5, but removes major limitations of the demo mode.
DMX Universes (Example)	(512)	(2,048)	
RGB Voxels (Example)	(87,381)	(349,525)	
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	64	512	4,096	
Management	✓	✓	✓	✓	Available as a separate license, which can be renewed.
Configuration	✓	✓	✓	✓	
Monitoring	✓	✓	✓	✓	
Upgradable	—	✓	✓	—	—
Validity	—	Lifetime	Lifetime	Lifetime	1 Year

HARDWARE

	LUNA 4	LUNA 8	LUNA 16	STELLA	NEBULA
					
Output (Channels)	4x 512 **DMX** And 1x 512 **DMX**	8x 512 **DMX** And 1x 512 **DMX**	16x 512 **DMX** And 1x 512 **DMX**	1x Or 2x 512 **DMX** And / Or 1x Or 2x 512 **DMX**	12x 512 **SPI**
Input (Channels)					—
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 2	AURA 12	AURA 32	ORION	USB ONE	USB SMPTE
						
Output (Channels)	2x 512 And 8x 512	12x 512 And 8x 512	32x 512 And 8x 512	8x / 16x	1x 512 **DMX** Or 1x 512 **DMX**	—
Input (Channels)				8x Analog Inputs		1x Analog Input
Ethernet	2x RJ45 1 GBit/s	2x RJ45 1 GBit/s	2x RJ45 1 GBit/s	2x RJ45 100 MBit/s	—	—
USB	✓	✓	✓	✓	✓	✓
Art-Net	✓	✓	✓	✓	—	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	—	



OVERVIEW

Software Product

MADRIX® KEY

MADRIX® KEY

MADRIX® 5 Licenses

MADRIX® 5 preprogrammer

MADRIX® 5 start

MADRIX® 5 entry

MADRIX® 5 basic

MADRIX® 5 professional

MADRIX® 5 ultimate

MADRIX® 5 maximum

MADRIX® 5 License Upgrades

MADRIX® 5 start > entry

MADRIX® 5 start > basic

MADRIX® 5 start > professional

MADRIX® 5 start > ultimate

MADRIX® 5 start > maximum

MADRIX® 5 entry > basic

MADRIX® 5 entry > professional

MADRIX® 5 entry > ultimate

MADRIX® 5 entry > maximum

MADRIX® 5 basic > professional

MADRIX® 5 basic > ultimate

MADRIX® 5 basic > maximum

MADRIX® 5 professional > ultimate

MADRIX® 5 professional > maximum

MADRIX® 5 ultimate > maximum

MADRIX® 5 Software Updates

MADRIX® 5 Software Update start

MADRIX® 5 Software Update entry

MADRIX® 5 Software Update basic

MADRIX® 5 Software Update professional

MADRIX® 5 Software Update ultimate

Software Product

MADRIX® RADAR fusion Licenses

MADRIX® RADAR fusion small

MADRIX® RADAR fusion medium

MADRIX® RADAR fusion large

MADRIX® RADAR fusion License Upgrades

MADRIX® RADAR fusion small > fusion medium

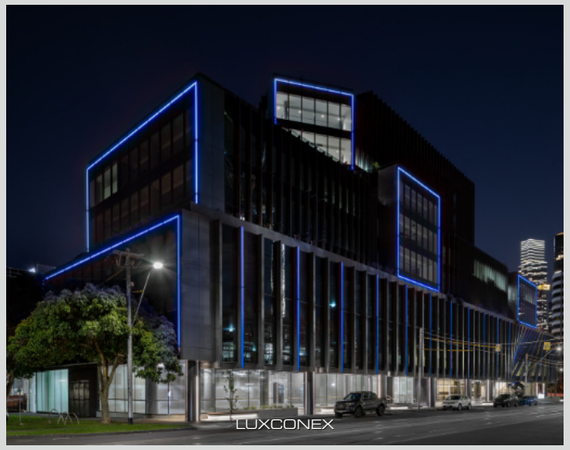
MADRIX® RADAR fusion small > fusion large

MADRIX® RADAR fusion medium > fusion large

MADRIX® RADAR big data Yearly Licenses

MADRIX® RADAR big data

- For prices and more information, please contact your local dealer.
- Online activation initially required one time for any software license, license upgrade, or update.
- Only one MADRIX® 5 License is possible per MADRIX® KEY.
- MADRIX® 5 License Upgrades and MADRIX® RADAR fusion 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.



OVERVIEW

Hardware Product

MADRIX® Network Nodes

MADRIX® AURA 2

MADRIX® AURA 12

MADRIX® AURA 32

MADRIX® LUNA 4

MADRIX® LUNA 8

MADRIX® LUNA 16

MADRIX® STELLA

MADRIX® NEBULA

MADRIX® I/O

MADRIX® ORION

MADRIX® USB ONE

MADRIX® USB SMPTE

Hardware Product

Accessories

XLR Gender Changer

XLR Adapter Silver

XLR Adapter Black (Premium Quality)

STELLA Accessory Replacement Set

NEBULA Accessory Replacement Set

ORION Accessory Replacement Set

AURA Accessory Replacement Set

DIN-Rail Power Supply 24 V

DIN-Rail Power Supply 12 V

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