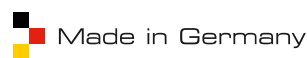


## MADRIX® I/O products are supplementary input and output devices.

External equipment, such as sensors, bring additional automation processes and interaction to any LED project using MADRIX® 5.

## MADRIX I/O



### MADRIX USB SMPTE

4<sup>th</sup> Edition – 05/2019



### Key Features

This input device allows you to effortlessly use SMPTE time code for time synchronization across multiple devices.

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:** Cue List

### Technical Specifications

|                   |                                                |
|-------------------|------------------------------------------------|
| Power Supply      | DC 5 V, 500 mA, Power over USB                 |
| Power Consumption | ~ 50 mA during normal operation                |
| USB               | 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                                       |

### Package Contents

- MADRIX® I/O
- Quick start guide / technical manual

### More Information

Find all the latest user manuals, drivers, firmware updates, and more at [www.madrix.com](http://www.madrix.com)



# **MADRIX** LIGHTING CONTROL



POWERFUL PRODUCTS  
FOR CREATIVE LED LIGHTING

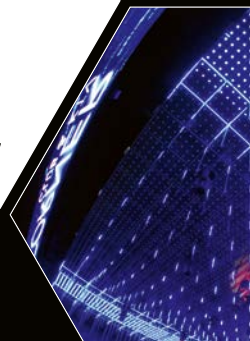
# Award-Winning Software For Award-Winning Projects



**Dragonfly Club**  
A Project By  
**LEDSCONTROL**



**Corner Club**  
A Project By  
**Lights Professional & NewVision Technology**



8<sup>th</sup> edition  
**PALM SOUND & LIGHT AWARDS**

## **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

LIVE DESIGN  
**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), CAST Software BlackTrax, CIP, 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<br>64 bit only                                                                                                                                                                                                                                                                                                                                                                                                               |
| License Requirements                        | MADRIX® 5 licenses require a valid, metallic MADRIX® KEY.                                                                                                                                                                                                                                                                                                                                                                                         |
| Demo Version                                | Download MADRIX® 5 from <a href="http://www.madrix.com">www.madrix.com</a>                                                                                                                                                                                                                                                                                                                                                                        |

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



# MADRIX 5 Software

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



## **3D Voxel Mapping In X, Y, And Z**

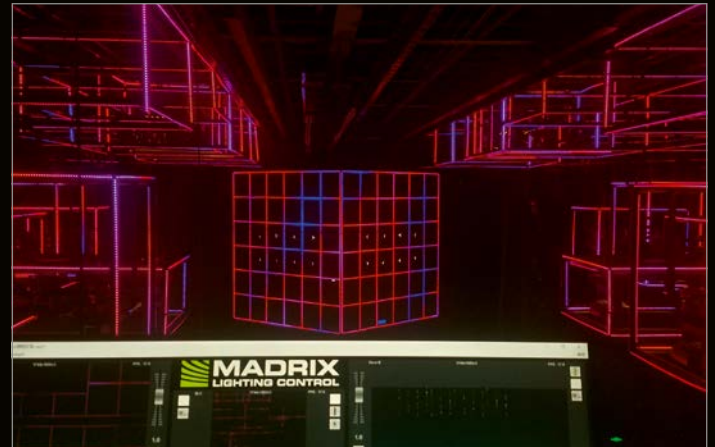
MADRIX® 5 provides a leading-edge feature set to fully control real 3D LED matrices. MADRIX® 5 supports volume rendering (voxel mapping). This approach is fundamentally different to the 3D projections or the physical layout of 2D surface areas that are widely known nowadays. It makes your installation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

## **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.



# 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 | —<br>Lifetime                                                                                                                                                        |
| Upgradable                  | ✓             | —             |                                                                                                                                                                      |
| Validity                    | Lifetime      | Lifetime      |                                                                                                                                                                      |

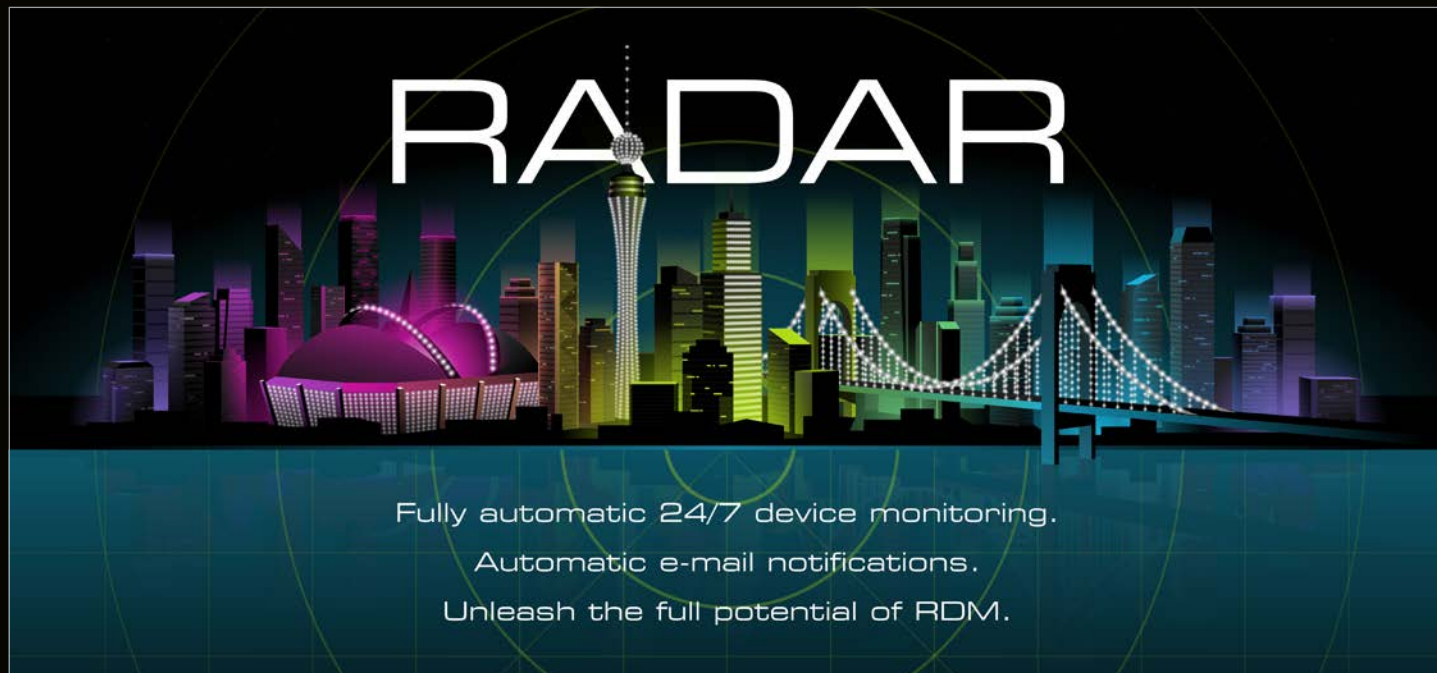
## MADRIX® 5 License Upgrades

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.



**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.

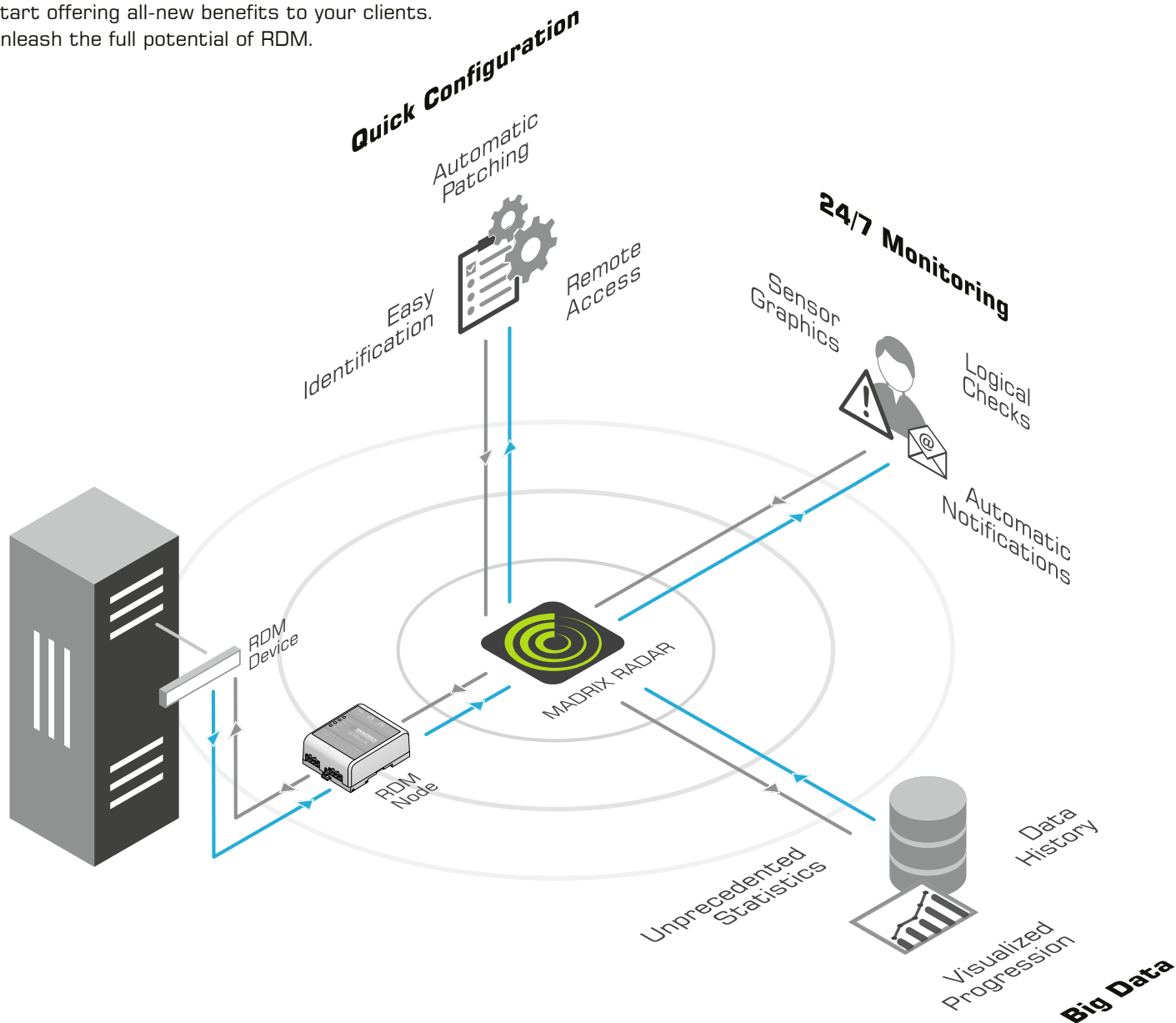
Supervise all of your lighting fixtures in a single software. Handle large amounts of RDM devices. It is a new kind of application that opens up entirely new possibilities for you and your clients. MADRIX® RADAR includes automatic fixture patching, fully automatic 24/7 device monitoring, automatic e-mail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

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.

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

**License Model.** Integrate flexibly into your projects.

|                         | MADRIX®<br>RDM Nodes                                                                |      | Third-Party RDM Nodes<br>& MADRIX® RADAR License                                      |                                   |                                  |
|-------------------------|-------------------------------------------------------------------------------------|------|---------------------------------------------------------------------------------------|-----------------------------------|----------------------------------|
| Software License        | No additional software license is required.                                         | Demo | MADRIX®<br>RADAR<br>fusion small                                                      | MADRIX®<br>RADAR<br>fusion medium | MADRIX®<br>RADAR<br>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.



**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

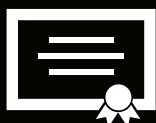
### License Requirements

MADRIX® RADAR licenses require a valid, metallic MADRIX® KEY.

### Demo Version

Download MADRIX® RADAR from [www.madrix.com](http://www.madrix.com)

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](http://www.madrix.com)

Book your seat:

[info@madrix.com](mailto: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®.**

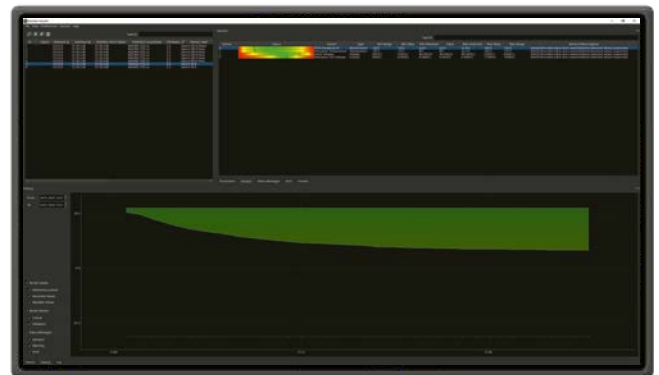
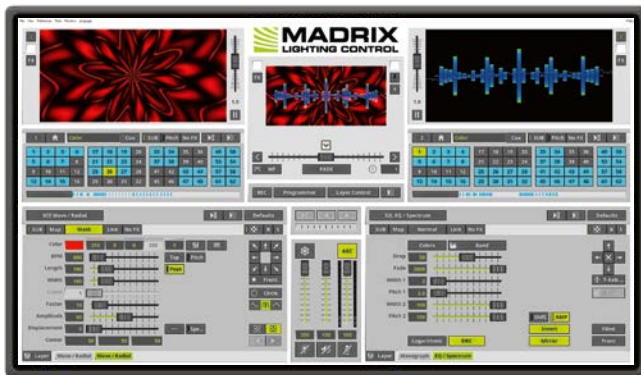


## Flexible Usage

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.



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



3 versions are available:  
**AURA 2 | 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 2, 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 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.

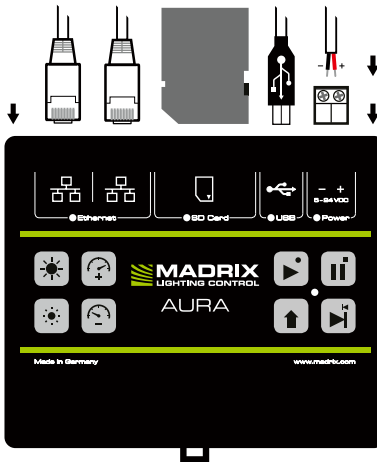
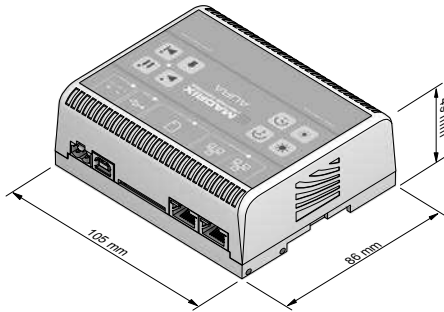
## Web Configuration

Use the built-in web configuration page to access and change specific device settings, such as the important IP address, 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               | 2x / 8x / 32x 512 DMX channels output over Ethernet network                                               |
| Recording Input      | 2x / 8x / 32x 512 DMX channels input over Ethernet network                                                |
| Remote-Control Input | 8x 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           | 86 mm x 105 mm x 49 mm (L x W x H)                                                                        |
| 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.

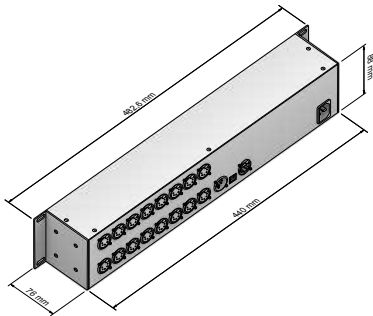
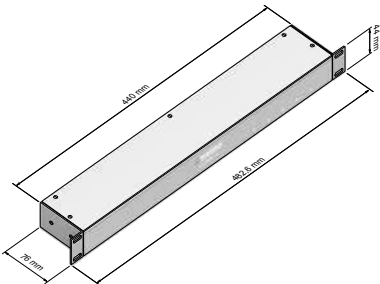
## **Invaluable Features**

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

|                        |                                                                                    |
|------------------------|------------------------------------------------------------------------------------|
| Power Supply           | 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<br>(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.

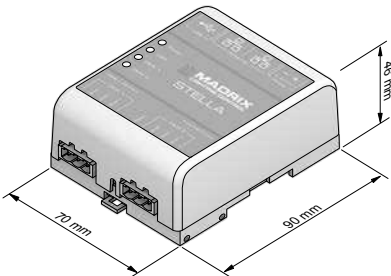
## **3rd-Party Controllers**

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**

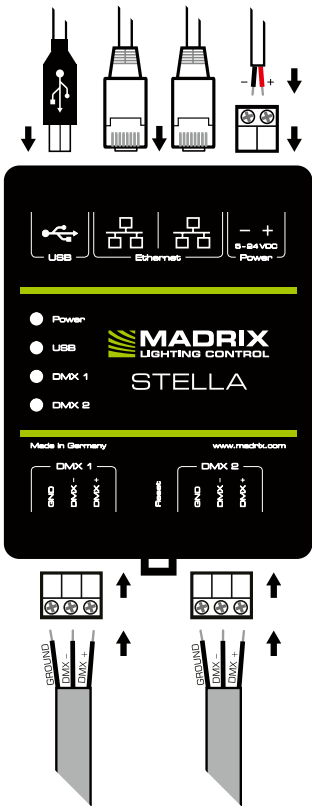
MADRIX® 5 and MADRIX® hardware allow you to fully synchronize Art-Net data for all output ports and across multiple devices to get an optimal image on the LEDs without visual interruptions.

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<br>(Compatible with 1 GBit/s)                                          |
| Dimensions        | 90 mm x 70 mm x 46 mm (L x W x H)                                                                         |
| 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.

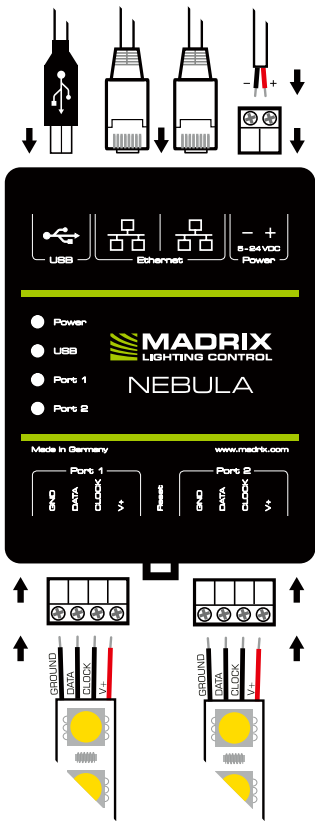
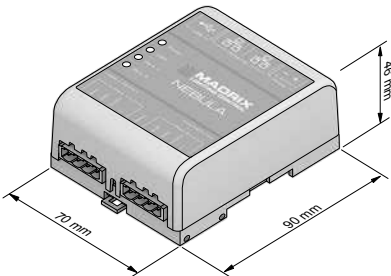
## Sync Mode & Daisy-Chain Support

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<br><b>A)</b> 2-pin, pluggable screw terminal (12 A max.),<br><b>B)</b> 5 V USB, <b>C)</b> Port 1 or 2 sourced from LEDs;<br>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:<br>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<br>(Compatible with 1 GBit/s)                                                                                                                                                                                                                                                                                                                                        |
| Supported LEDs    | APA101 / APA102 / APA104 / APA106 / GS8207<br>GW6201 / GW6205 / LPD1882S / LPD6803 / LPD8806<br>MBI6120 / P9883 / SJ1221 / SK6812 / SK6822<br>SM16703 / SM16716 / TLS3001 / TLS3008<br>TM1804 / TM1809 / TM1812 / TM1814 / TM1829<br>UCS1903 / UCS2903 / UCS512B3 UCS8904 / UCS9812S<br>WS2801 / WS2803 WS2811 / WS2811S / WS2812<br>WS2812B / WS2813 / WS2815 / WS2818<br>WS2822S / WS2822S Addressing |
| Dimensions        | 90 mm x 70 mm x 46 mm (L x W x H)                                                                                                                                                                                                                                                                                                                                                                       |
| 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),<br>designed for 35 mm DIN-rails or wall mounting                                                                                                                                                                                                                                                                                            |
| IP Rating         | IP20                                                                                                                                                                                                                                                                                                                                                                                                    |
| Certificates      | CE, FCC, RoHS                                                                                                                                                                                                                                                                                                                                                                                           |

As of March 2019.  
See [www.madrix.com](http://www.madrix.com)  
for the latest information.

# 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.

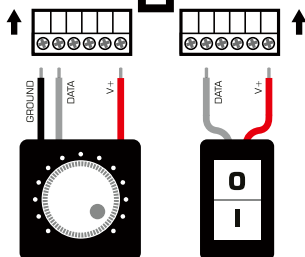
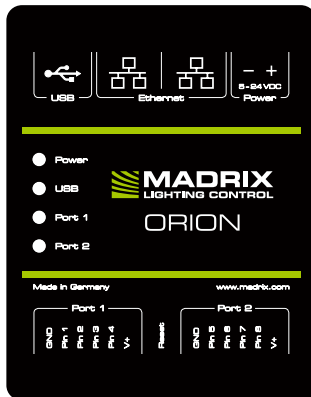
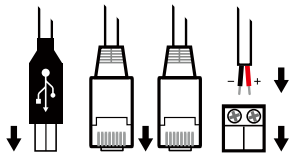
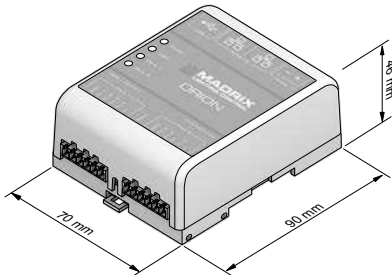
## **Daisy-Chain Support**

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<br><b>A)</b> 2-pin, pluggable screw terminal with 500 mA max. load per port when supplying through to the ports,<br><b>B)</b> 5 V USB, <b>C)</b> 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<br>(Compatible with 1 GBit/s)                                                                                                                      |
| Dimensions        | 90 mm x 70 mm x 46 mm (L x W x H)                                                                                                                                                     |
| 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

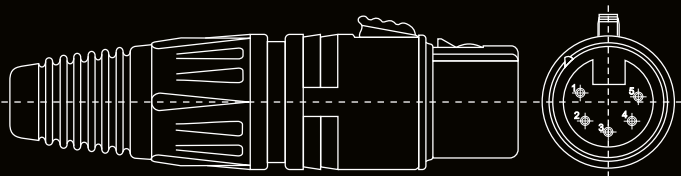
MADRIX® 5 can be controlled remotely using the implemented DMX-IN functions.

### 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                     |



**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® 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        | Available as a separate license, which can be renewed. |
| Management                | ✓             | ✓            | ✓             | ✓            |                                                        |
| Configuration             | ✓             | ✓            | ✓             | ✓            |                                                        |
| Monitoring                | ✓             | ✓            | ✓             | ✓            |                                                        |
| Upgradable                | —             | ✓            | ✓             | —            | —                                                      |
| Validity                  | —             | Lifetime     | Lifetime      | Lifetime     | 1 Year                                                 |

# MADRIX Hardware

## LUNA 4



## LUNA 8



## LUNA 16



## STELLA



## NEBULA



|                   |                          |                          |                          |                                     |                       |
|-------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|-----------------------|
| Output (Channels) | 4x 512 <b>DMX</b>        | 8x 512 <b>DMX</b>        | 16x 512 <b>DMX</b>       | 1x Or 2x 512 <b>DMX</b>             | 8x 512 <b>SPI</b>     |
| Input (Channels)  | And<br>1x 512 <b>DMX</b> | And<br>1x 512 <b>DMX</b> | And<br>1x 512 <b>DMX</b> | And / Or<br>1x Or 2x 512 <b>DMX</b> | —                     |
| Ethernet          | 1x RJ45<br>100 MBit/s    | 1x RJ45<br>100 MBit/s    | 1x RJ45<br>100 MBit/s    | 2x RJ45<br>100 MBit/s               | 2x RJ45<br>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 8



## AURA 32



## ORION



## USB ONE



## USB SMPTE



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

# MADRIX Overview

| Product                           | Order Number |
|-----------------------------------|--------------|
| <b>MADRIX® KEY</b>                |              |
| MADRIX® KEY                       | IA-SW-005007 |
| <b>MADRIX® 5 Licenses</b>         |              |
| 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 |
| <b>MADRIX® 5 License Upgrades</b> |              |
| 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 |
|-----------------------------------------------|--------------|
| <b>MADRIX® 5 Software Updates</b>             |              |
| 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 |
| <b>MADRIX® RADAR fusion Licenses</b>          |              |
| MADRIX® RADAR fusion small                    | IA-SW-005051 |
| MADRIX® RADAR fusion medium                   | IA-SW-005052 |
| MADRIX® RADAR fusion large                    | IA-SW-005053 |
| <b>MADRIX® RADAR fusion License Upgrades</b>  |              |
| 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 |
| <b>MADRIX® RADAR big data Yearly Licenses</b> |              |
| MADRIX® RADAR big data                        | IA-SW-005050 |

| Product                      | Order Number | Product                             | Order Number |
|------------------------------|--------------|-------------------------------------|--------------|
| <b>MADRIX® Network Nodes</b> |              | <b>Accessories</b>                  |              |
| MADRIX® AURA 2               | IA-HW-001029 | XLR Gender Changer                  | IA-HW-001002 |
| MADRIX® AURA 8               | IA-HW-001025 | XLR Adapter Silver                  | IA-HW-001006 |
| MADRIX® AURA 32              | IA-HW-001026 | XLR Adapter Black (Premium Quality) | IA-HW-001020 |
| MADRIX® LUNA 4               | IA-HW-001014 | STELLA Accessory Replacement Set    | IA-HW-001024 |
| MADRIX® LUNA 8               | IA-HW-001008 | NEBULA Accessory Replacement Set    | IA-HW-001023 |
| MADRIX® LUNA 16              | IA-HW-001015 | ORION Accessory Replacement Set     | IA-HW-001022 |
| MADRIX® STELLA               | IA-HW-001019 | DIN-Rail Power Supply 12 V          | IA-HW-001027 |
| MADRIX® NEBULA               | IA-HW-001018 | Plug-In Power Supply 3 V – 12 V     | IA-HW-001028 |
| <b>MADRIX® I/O</b>           |              |                                     |              |
| MADRIX® ORION                | IA-HW-001021 |                                     |              |
| MADRIX® USB ONE              | IA-HW-001001 |                                     |              |
| MADRIX® USB SMPTE            | IA-HW-001016 |                                     |              |

- 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.



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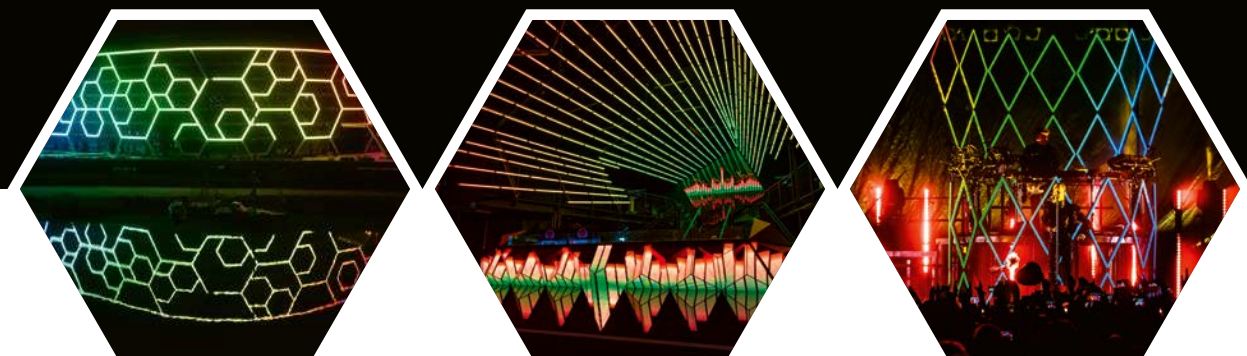
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**Thank you for purchasing MADRIX® USB SMPTE!**

7<sup>th</sup> Edition – August 2018

**Please read this guide carefully and thoroughly before using MADRIX® USB SMPTE.  
Make sure that you fully understand all information.**



## Key Features

This input device allows you to effortlessly use SMPTE time code for time synchronization across multiple devices.

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:** Cue List



## Technical Specifications

|                   |                                                   |
|-------------------|---------------------------------------------------|
| Power Supply      | DC 5 V, 500 mA, Power over USB                    |
| Power Consumption | ~ 50 mA during normal operation                   |
| USB               | 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 (Operating / Storage) |
| IP Rating         | IP20                                              |
| Certificates      | CE, RoHS                                          |

## Package Contents

1x MADRIX® USB SMPTE  
1x Quick start guide / technical manual

**Please note:** Check the package contents and the condition of the interface after unpacking! Contact your supplier if something is missing or damaged. Do not use the device if it seems to be damaged!



## Copyright Information And Disclaimer

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## Limited Warranty

Two years of limited manufacturer's warranty are granted to the purchaser of this product. Warranty applies to constructional fault, material defect, or incorrect assembly the manufacturer has caused or is to be held responsible for. Warranty will be void if the interface is opened, modified, damaged through inappropriate handling and wrong usage, damaged through overvoltage, or damaged through any other cause.

## End-Of-Life



This electrical device and its accessories need to be disposed of properly. Do not throw the device into normal trash or household waste. Please recycle packaging material whenever possible.

## Step-By-Step Configuration

- 1) Connect your device.
- 2) Enable drivers in the MADRIX® Software.
- 3) Use the Cue List.

### 1) Connect Your Device

- Connect your SMPTE time code source to the 3-pin, female XLR connector of MADRIX® USB SMPTE.
- Make sure that your SMPTE time code source is sending data.
  
- Connect your MADRIX® USB SMPTE to a free USB 2.0 port of your computer.
- Make sure that Windows recognizes the device. Windows will automatically install the drivers for the device.

### 2) Enable Drivers In The MADRIX® Software

- Go to the menu 'Preferences' > 'Options...' > 'Devices USB'.
- Activate 'MADRIX USB SMPTE'.  
[The option is activated by default.]
- Click 'Apply' and 'OK'.

### 3) Use The Cue List

The Cue List is the feature in the MADRIX® Software to work with Time Code.

- Go to the menu 'Tools' > 'Cue List...'.  
▪ Or press 'F7'.  
▪ Or click 'Layer Control' > 'Cue List...' on the user interface.
  
- Select the Time Code source 'SMPTE'.
- Select the required 'Time Code Format'.
  
- The MADRIX® Software will automatically start receiving external Time Code.
- The Time Code format is 'HH:MM:SS:FF' [hours:minutes:seconds:frames].  
Example: 10 o'clock and 20 minutes, 30 seconds, and 10 frames will be shown as '10:20:30:10'.
  
- Configure the column 'Time Code' for your Cue List entries.
- Add or edit more Cue List entries according to your requirements.

## Support

In case of further questions concerning handling of MADRIX® I/O or technical problems, please read the MADRIX® Help And Manual first, contact your dealer, or have a look at the website [www.madrix.com](http://www.madrix.com)  
You can also directly contact [info@madrix.com](mailto:info@madrix.com)

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