



MADRIX HARDWARE MANAGER User Manual

[Software User Guide]

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//PART A

Introduction

1 Introduction

This topic includes:

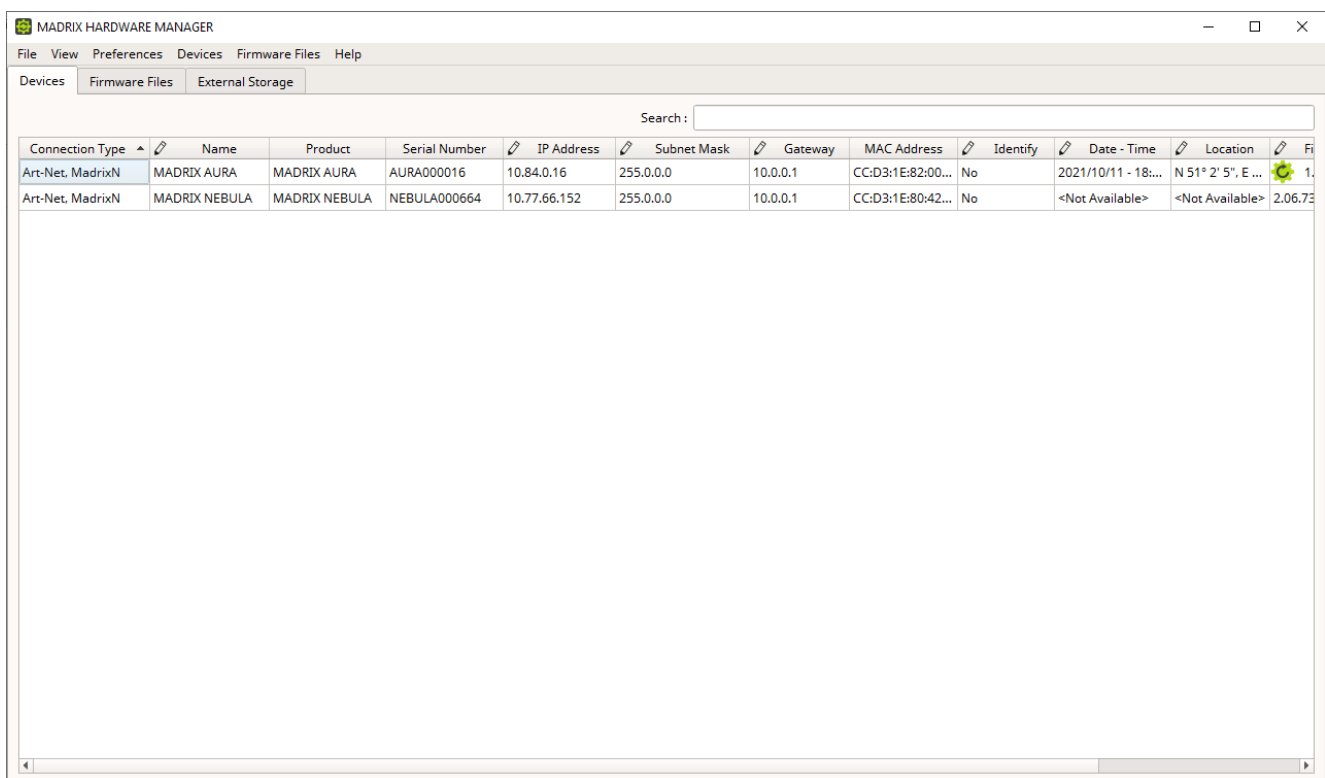
- [Welcome To MADRIX HARDWARE MANAGER](#)
- [How To Use This User Manual](#)
- [Topics Of This Chapter](#)

Welcome To MADRIX HARDWARE MANAGER

MADRIX HARDWARE MANAGER allows you to manage compatible MADRIX hardware devices.

Quickly change the main settings of devices or update them to the latest firmware, which is always highly recommended.

Thank you for choosing MADRIX!



How To Use This User Manual

- Press **F1** on your keyboard while working with the application to quickly call up the MADRIX HARDWARE MANAGER User Manual.
- [LINKS](#) are displayed in this color. Simply click through and you will be taken to the corresponding part within the same topic.
- »[LINKS](#) will take you away from the topic which you are currently reading to another section in this guide or to an external website.
- This user guide is written in English.

Important Information

Firmware updates are possible over USB or even via an Art-Net Ethernet network connection:

- **Either use USB or the Ethernet connection!**
 - When using both connection types devices will be shown with two different entries in the list, which may lead to severe issues when accidentally updating the device over both connections simultaneously.
- **Make sure to -stop- sending control data to your devices when managing them with MADRIX HARDWARE MANAGER.**
 - This refers to input and/or output over Art-Net, sACN, DMX512, etc.
 - Otherwise, changes and updates might fail. If an update fails, stop sending data and try to update the firmware again.
- **An active internet connection is required to download firmware files. There are no files available when starting the software for the first time.**

Topics Of This Chapter

- [System Requirements](#)
- [Supported Devices](#)
- [Web Links](#)

1.1 System Requirements

This topic includes:

- [Supported Operating Systems](#)
- [System Requirements](#)
- [General Requirements](#)

Supported Operating Systems

- Microsoft Windows 10
- 64 bit only.
- Please keep the system, drivers, and updates up to date.

System Requirements

- 2.0 GHz dual-core CPU
- 2 GB RAM
- 512 MB free harddisk space
- 1280 x 768 screen resolution
- Network card
- USB 2.0

General Requirements

- For the intended purpose of the software, the following is required:
 - **Devices, i.e. hardware interfaces and controllers, connected over USB or via Ethernet that should be configured and managed.**
 - See also »[Supported Devices](#)

1.2 Supported Devices

This topic includes:

- [Overview](#)

Overview

MADRIX HARDWARE MANAGER supports hardware products, such as:

- **MADRIX AURA 2**
- **MADRIX AURA 8**
- **MADRIX AURA 32**

- **MADRIX LUNA 4**
- **MADRIX LUNA 8**
- **MADRIX LUNA 16**

- **MADRIX NEBULA**

- **MADRIX ORION**

- **MADRIX STELLA**

Note: MADRIX USB ONE, MADRIX NEO, and MADRIX PLEXUS are not supported.

1.3 Web Links

This topic includes:

- [Overview](#)

Overview

You can find a selection of useful internet links here:

- MADRIX Website
» www.madrix.com
- Drivers
» www.madrix.com/support/download
- User Guides [Online And Downloadable PDF]
» help.madrix.com
- Hardware Technical Manuals / Quick Start Guides [Downloadable PDF]
» help.madrix.com
- Online Forum
» www.madrix.com/support/forum
- Release Notes
» www.madrix.com/products/software/releases
- Online Text Tutorials
» help.madrix.com/tutorials/html/index.html
- Video Tutorials
» <https://www.madrix.com/training/video-tutorials>

//PART B

Getting Started

2 Getting Started

This topic includes:

- [Introduction](#)
- [Topics Of This Chapter](#)

Introduction

Learn in this chapter how to install and start the MADRIX HARDWARE MANAGER, and more.

Topics Of This Chapter

- [Installation Process](#)
- [Starting The Software](#)
- [About](#)

2.1 Installation Process

This topic includes:

- [Important Information](#)
- [Using The MADRIX USB Flash Drive](#)
- [Downloading The Software Online](#)
- [Setup Process](#)
- [Uninstallation](#)
- [Software Updates](#)

Important Information

- The MADRIX HARDWARE MANAGER can be downloaded from »www.madrix.com. Software updates will be also released online.
- **It is highly recommended to always use the latest software update.**

Using The MADRIX USB Flash Drive

When using a MADRIX USB flash drive for the installation process, please connect the drive to a free USB port of your operational computer. The MADRIX HARDWARE MANAGER setup will start automatically using an Auto Installer. Please wait until the setup has fully loaded. Then, proceed with the [Setup Process](#) as described below. When the Auto Installer does not launch, please navigate to the drive in Windows and manually start the setup process by performing a double-click on **MADRIX_HARDWARE_MANAGER_Install.exe**

Downloading The Software Online

- Download **MADRIX_HARDWARE_MANAGER_Install.exe** from »www.madrix.com

- After downloading the installer, please double-click with your mouse on this file in order to start the setup process.
- Please wait while the Auto Installer is loading the setup.
- Afterwards, proceed with the [Setup Process](#) as described below.

Setup Process

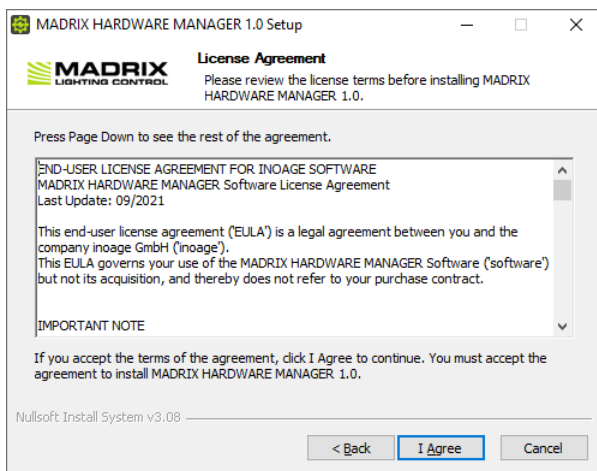
Please make sure to:

- 1]** If possible, log into Windows as administrator [Admin].
- 2]** Let the computer process the setup. This may take some minutes depending on the speed of your computer.
- 3]** Allow Windows to install all drivers. Windows may ask for your permission to install drivers and expects your confirmation. Please search for such pop-up windows; they might have opened in the background and might be covered by other windows.



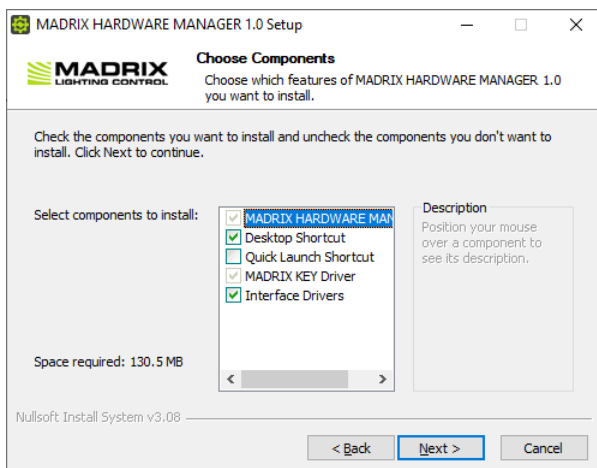
Step 1]

- Click **Next** to start the installation.
- You can always quit the setup by choosing **Cancel**
- Click **Back** in order to return to a previous step during the setup process.



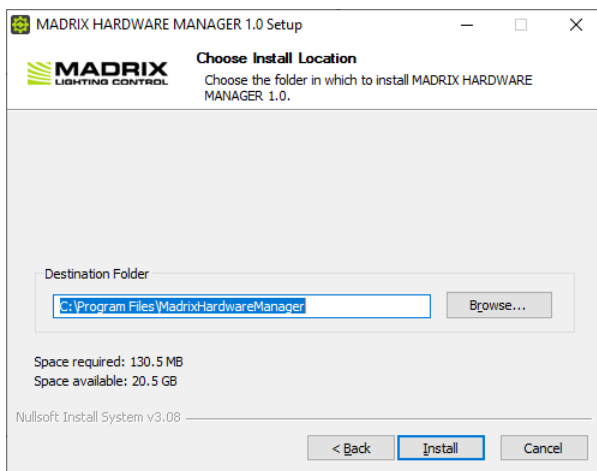
Step 2]

- The **License Agreement** will appear. It outlines the terms you are agreeing to by installing the software. You must accept these terms in order to continue.
- Please click **I Agree**

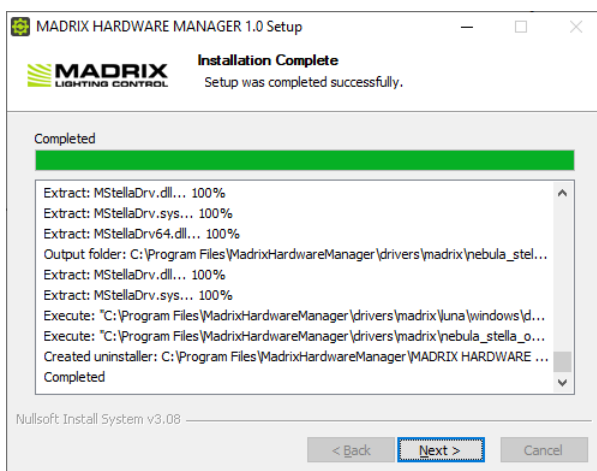


Step 3]

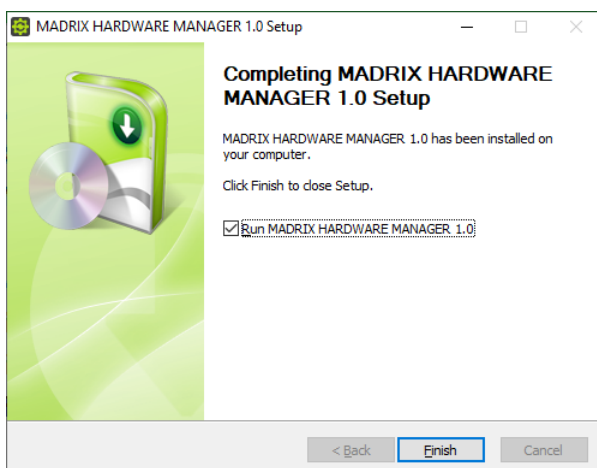
- This window allows you to select which components and which drivers you want to install. A description is given for each item.
- **MADRIX HARDWARE MANAGER** - Is a required component. It refers to the MADRIX HARDWARE MANAGER Software.
- **Desktop Shortcut** - Select if you wish to create a shortcut to the software on your Windows desktop. By default, the component is selected.
- **Quick Launch Shortcut** - Select if you wish to create a shortcut to the software in your Windows taskbar. By default, the component is not selected.
- **MADRIX KEY Driver** - Is a required component. It is normally required by all MADRIX software products and possibly by other applications.
- **Interface Drivers** - Select if you wish to install the drivers for supported MADRIX hardware interfaces. By default, the component is selected.
[You may not need to do this again, since you may already have them installed via MADRIX 5 Software, for example.]
[**The interface drivers are required for the connection over USB.**]
- **Next** - Click Next after choosing the components in order to continue.

**Step 4]**

- Choose an installation directory on your hard drive where the software will be installed. A default **Destination Folder** will automatically be provided by the setup.
- **Browse...** - Click to change the folder.
- **Install** - Click to start the installation process.

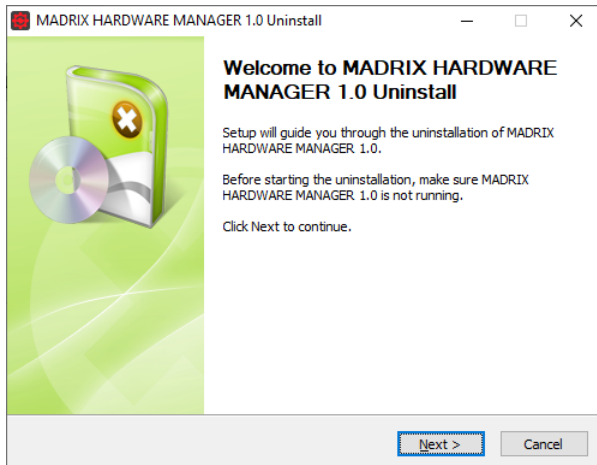
**Step 5]**

- The installation process may take a few minutes.
- **Installation Complete** - Click **Next** when this message shown.

**Step 6]**

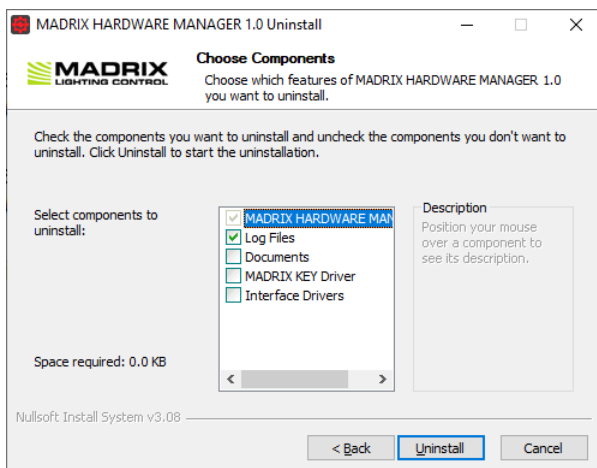
- **Run MADRIX HARDWARE MANAGER** - Deselect if you do not wish to start the software now.
- **Finish** - Click to quit the setup.

Uninstallation



Step 1]

- Click **Next** to start the uninstallation.
- You can always quit the uninstaller by choosing **Cancel**
- Click **Back** in order to return to a previous step during the process.



Step 2]

- This window allows you to select which components and which drivers you want to uninstall. A description is given for each item.

- **MADRIX HARDWARE MANAGER** - Is a required component. It refers to the MADRIX HARDWARE MANAGER Software.

- **Log Files** - Select if you wish to remove all files saved for logging. By default, the component is selected.

- **Documents** - Select if you wish to remove all documentation files saved for each hardware interface. By default, the component is not selected.

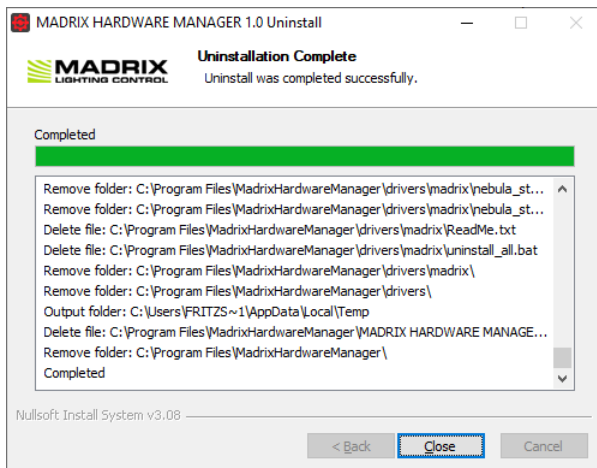
- **MADRIX KEY Driver** - Select if you wish to uninstall the MADRIX KEY driver. It is normally required by all MADRIX software products and possibly by other applications. By default, the component is not selected.

[Only remove it if no other software, such as MADRIX 5 or MADRIX RADAR, requires the driver. If you have such software installed and are using it, do not remove it!]

- **Interface Drivers** - Select if you wish to uninstall the drivers of the MADRIX hardware interfaces. By default, the component is not selected.

[Only remove them if no other software, such as MADRIX 5, requires the drivers. If you have such software installed and are using it, do not remove them!]

- **Uninstall** - Click Uninstall after choosing the components in order to continue.



Step 3]

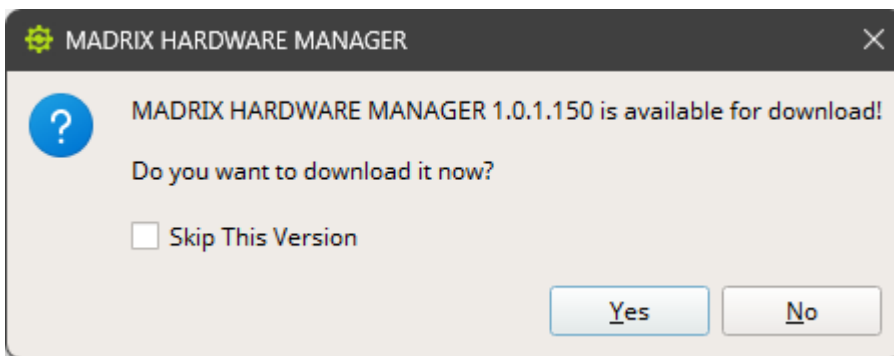
- The uninstallation process may take a short while.
- **Uninstallation Complete** - Click **Close** when this message shown.

Software Updates

Checking For New Software Versions

It is always recommended to run the latest software version. MADRIX HARDWARE MANAGER automatically searches for updates at startup.

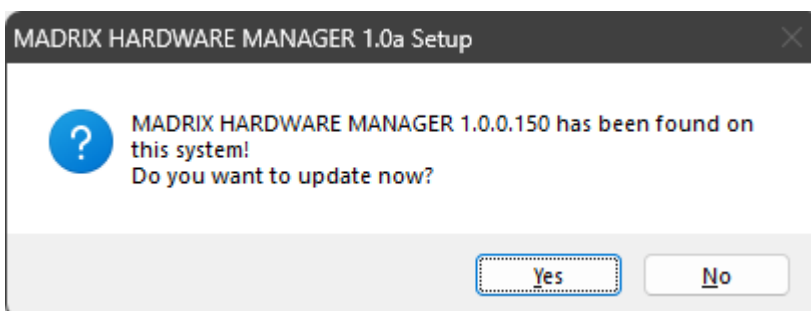
- By default, the option is enabled. To change it, select the menu **Preferences > Options... > Startup > Check For Software Updates**
- To manually search for an update, select the menu **Help > Check For Software Updates...**
- Choose **Skip This Version** if you would like to skip a particular version.



Installing New Software Versions

When a new software version has been released, please update your current MADRIX HARDWARE MANAGER installation to the newest version.

- Check and download the latest MADRIX HARDWARE MANAGER as described above.
- You can also directly download it from »www.madrix.com
- It is not required to uninstall MADRIX HARDWARE MANAGER before you install a new software version.
- Instead, follow the process described under [Downloading The Software Online](#)
- The installer will ask you if you would like to update your current software installation. Confirm with **Yes**



2.2 Starting The Software

This topic includes:

- [Introduction](#)
- [Desktop Shortcut](#)
- [Windows Start Menu](#)

Introduction

You can start MADRIX HARDWARE MANAGER in different ways. Among those, the Windows Start Menu is the standard way to launch applications under the Windows operating system.

Desktop Shortcut



- **Left Mouse Double-Click** - Perform a double-click with your left mouse button on the desktop shortcut in order to start the MADRIX HARDWARE MANAGER.
 - It is required that the shortcut has been manually placed on the Desktop or was automatically installed during the »[Installation Process](#)

Windows Start Menu

- In Windows, go to **Start > MADRIX HARDWARE MANAGER > MADRIX HARDWARE MANAGER**
 - The MADRIX HARDWARE MANAGER will start.

In addition, the Start Menu contains the following main items:

- ***Help MADRIX HARDWARE MANAGER***
- ***MADRIX HARDWARE MANAGER Quick Support***

2.3 About

This topic includes:

- [Introduction](#)
- [Overview](#)

Introduction

The About window provides a quick overview over software details and legal information.

- Go to the menu **Help > About...**

Overview



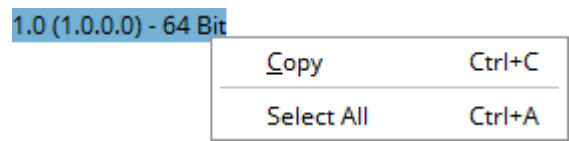
Software

Version	Shows which software version you are currently running and using. It also shows the used software architecture: MADRIX HARDWARE MANAGER is 64-bit only.
Build	Shows when the current software version was created.
Legal Copyright	© 2021 - 2022 inoage GmbH. All rights reserved. See » Imprint And Copyright
End-User License Agreement	Legal Information - Opens this user guide, which includes the End-User License Agreement. See » End-User License Agreement [EULA]

Third Parties

Qt	About Qt - Shows more information about the Qt development framework. License - Shows the license under which Qt is used.
OpenSSL	License - Shows the licenses under which OpenSSL is used.
Sourcetree	Is a Git client program used for development with thanks. Powered by Atlassian.

Miscellaneous



Left Mouse Click + Hold + Select / Left Mouse Double-Click / Left Mouse Triple-Click - Allows you to select text.

Right Mouse Click > Copy - Allows you to copy text in order to paste the information into an e-mail, for example.

Right Mouse Click > Select All - Selects all text of the currently selected row.

Check For Software Updates Checks online if a software update is available for downloading. This requires an active internet connection.

Close Closes the About window.

//PART C

Using The Software

3 Using The Software

This topic includes:

- [Introduction](#)
- [Topics Of This Chapter](#)

Introduction

MADRIX HARDWARE MANAGER allows you to conveniently manage different devices with one software. The following chapters will explain how to work with the software in more detail.

Topics Of This Chapter

- [Menu](#)
- [Devices \[View\]](#)
- [Firmware Files \[View\]](#)
- [External Storage \[View\]](#)
- [Updating Firmwares](#)
- [Options](#)
- [Log](#)
- [User Interface](#)


3.1 Menu

This topic includes:

- [Introduction](#)
- [Extra Information Displayed](#)
- [File Menu](#)
- [View Menu](#)
- [Preferences Menu](#)
- [Devices Menu](#)
- [Firmware Files Menu](#)
- [Help Menu](#)

Introduction

The main menu of this software is located at the top of the application window.



File View Preferences Devices Firmware Files Help

Extra Information Displayed

Ctrl + T - This represents a keyboard shortcut that will perform the action directly rather than using the menu.

... - Indicates that a new window will open on top of the main software window.

> - Indicates that this entry has sub-entries.

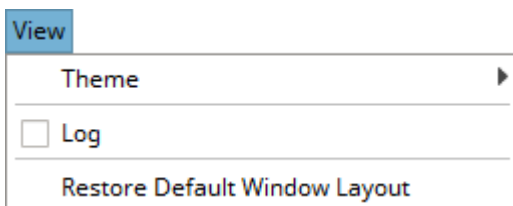
File Menu



- **Quit** - Closes the software.

View Menu

Refers to how the user interface looks.



- **Theme > Light** - Activates the user interface theme that is light in color.
- **Theme > Dark** - Activates the user interface theme that is darker in color.
- **Log** - Shows or hides the separate Log view. Learn more »[Log](#)
- **Restore Default Window Layout** - Applies the default settings for the graphical user interface, including sizes, layout, and default table columns. As such, it resets any changes in size you made to the software window.

Preferences Menu

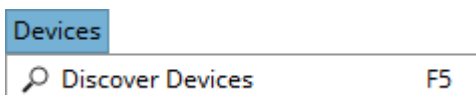
These settings remain valid and set beyond any restart of the software.



- **Options ...** - Allows you to configure various important settings for the software. Learn more »[Options](#)

Devices Menu

Refers to tools that allow configuration of devices or communication with them in the network.



- **Discover Devices** - Manually performs a scan for all available hardware interfaces in the network in order to find and add them to the list of devices. [USB devices do not require such a scan.]
Learn more »[Devices](#)

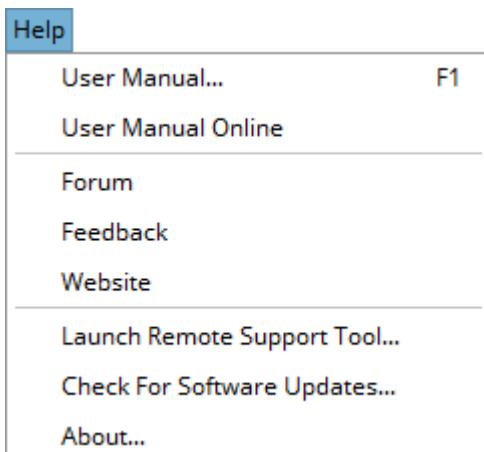
Firmware Files Menu

Refers to working with firmware files for the devices.



- **Import Files...** - Allows you to manually bring firmware files and bootloader files into the local directories of MADRIX HARDWARE MANAGER [in *.fwx file format].
 - First, a new window opens that allows you to choose the files from the file system. They will be copied from the source then. Afterwards, the firmwares are available in the Firmware Files tab.
 - The software uses <User Directory>\Documents\MADRIX HARDWARE MANAGER\cache\firmware\ to store the files.
 - Learn more »[Firmware Files](#)
- **Download Latest Firmware File For Each Product** - Manually starts the process to download the newest firmware versions for all supported devices if new versions are available.
 - Please note that this does not include any bootloader versions that may be required first to run the firmware on the device. It also does not automatically update any devices.
 - Learn more »[Firmware Files](#)

Help Menu



- **User Manual...** - Opens this user guide, locally on your computer using your default web browser.
- **User Manual Online** - Opens this user guide online by calling up a website using your default web browser. This requires an internet connection.

- **Forum** - Is an online link that will take you to the MADRIX Online Forum, where users and developers can exchange ideas about MADRIX HARDWARE MANAGER. This requires an internet connection.
- **Feedback** - Is an online link that will open your web browser with the MADRIX Contact Form. If you wish, please enter your comments into the form and send it to us. Thank you! This requires an internet connection.
- **Website** - Is an online link for the MADRIX website »www.madrix.com. This requires an internet connection.

- **Launch Remote Support Tool...** - Opens the external support tool provided with MADRIX HARDWARE MANAGER. This requires an internet connection. MADRIX technical support team may request that you launch this tool for further assistance.
- **Check For Software Updates...** - Checks online if a software update is available for downloading. This requires an internet connection.
- **About...** - Provides information about MADRIX HARDWARE MANAGER and legal information.

3.2 Devices [View]

This topic includes:

- [Introduction](#)
- [Connecting Your Devices](#)
- [List Of Devices](#)
- [Editing And Changing Values](#)
- [Context-Menu](#)
- [Search](#)
- [Customization](#)

Introduction

The list of devices shows all connected hardware interfaces and their main information and settings in a list.

MADRIX HARDWARE MANAGER

FileViewPreferencesDevicesFirmware FilesHelp

DevicesFirmware FilesExternal Storage

Search :

Connection Type	Name	Product	Serial Number	IP Address	Subnet Mask	Gateway	MAC Address	Identify	Date - Time	Location	Fi
Art-Net, MadrixD	MADRIX AURA	MADRIX AURA	AURA000016	10.84.0.16	255.0.0.0	10.0.0.1	CC:D3:1E:82:00...	No	2021/10/11 - 18:...	N 51° 2' 5", E ...	1.
Art-Net, MadrixD	MADRIX NEBULA	MADRIX NEBULA	NEBULA000664	10.77.66.152	255.0.0.0	10.0.0.1	CC:D3:1E:80:42...	No	<Not Available>	<Not Available>	2.06.73

Connecting Your Devices

1] Physical Connection

- Connect your devices over USB **or** via an Ethernet network connection to the computer that is running the MADRIX HARDWARE MANAGER.
 - See the Technical Manuals of each device for more information on how to properly connect them.
 - **Either use USB or the Ethernet connection!**
 - **When using both connection types devices will be shown with two different entries in the list, which may lead to severe issues when accidentally updating the device over both connections simultaneously.**
 - Either use the connection over USB, and make sure to disconnect the network cables. Or use the network connection and for corresponding devices use an external power supply, such as a USB power supply.

Connect only over USB or only via Ethernet. Do not connect devices using both USB and Ethernet!

2] Device Discovery

- MADRIX HARDWARE MANAGER automatically tracks the connection to your devices, especially when it comes to USB. New connections or disconnects over USB should be registered immediately.
- Regarding Ethernet, polls are sent out to devices every 30 seconds. New connections should be registered within 1 minute. Disconnects are registered within 1 to 2 minutes. You can manually start the discovery process to search for network devices via menu **Devices > Discover Devices**

3] Device Management

- After successfully establishing a connection to your devices, you can manage them using the list of devices as explained below.
- **Make sure to -stop- sending control data to your devices when managing them with MADRIX HARDWARE MANAGER.**
 - **This refers to input and/or output over Art-Net, sACN, DMX512, etc.**
 - **Otherwise, changes and updates might fail. If an update fails, stop sending data and try to update the firmware again.**

List Of Devices

By default, the following information regarding connected devices is provided since the following columns are enabled in the list.

Note: Certain information may not be available for all devices at all times. Then, **<Not Available>** will be shown accordingly.

Connection Type

Shows how devices are connected.

Devices can be connected over **USB**, **Art-Net** [Ethernet] and/or **MadrixN** [Ethernet].

Interface drivers are required for the connection over USB. See »[Installation Process](#)

Connect either over USB or Ethernet, but not both!

Name

Shows the description of the devices. Corresponds to the Name that can be set using the web configuration or the Art-Net Long Name.

You can change this setting. See [below](#).

Example: **MADRIX STELLA Unit 2**

Product

Shows the official name of the connected device [product/model].

Example: **MADRIX NEBULA**

Serial Number

Shows the unique numerical identifier of the device. May not be available for devices connected only over Art-Net.

Example: **NEBULA000664**

IP Address

Shows the currently set IPv4 network address, which is part of the basic network settings.

Is an identifier for devices that enables network communication. When using network protocols, it needs to be unique and set up for each individual sender or recipient in the network.

You can change this setting. See [below](#).

A new window will open to be able to change IP Address, Subnet Mask, and Gateway. Make sure to use correct settings. Changing the IP address without entering the correct and corresponding subnet mask can lead to the device not being accessible anymore, which then usually requires a reset to manufacturer default settings.

Example: **10.77.66.152**

Subnet Mask

Shows the currently set network mask, which is part of the basic network settings.

Is a technical grouping mechanism for network devices. When using network protocols, it needs to be set up for each sender or recipient in the network for correct data routing.

[Please note: Your devices and the sender, such as the PC that runs MADRIX 5, need to have the same subnet mask!]

You can change this setting. See [below](#).

A new window will open to be able to change IP Address, Subnet Mask, and Gateway. Make sure to use correct settings. Changing the IP address without entering the correct and corresponding subnet mask can lead to the device not being accessible anymore, which then usually requires a reset to manufacturer default settings.

Example: **255.0.0.0**

Gateway

Shows the currently set network gateway.

Is a technical routing mechanism for Ethernet networks, which acts as the main receiver in case the original network recipients are not available anymore. When using network protocols, it needs to be in the same network as the IP address and in this way set up correctly for network communication to work.

You can change this setting. See [below](#).

A new window will open to be able to change IP Address, Subnet Mask, and Gateway. Make sure to use correct settings. Changing the IP address without entering the correct and corresponding subnet mask can lead to the device not being accessible anymore, which then usually requires a reset to manufacturer default settings.

Example: **10.0.0.1**

MAC Address

Shows the Media-Access-Control address of the device, which is used as unique identifier in networks. Is always available for devices connected via Art-Net or MadrixN. May not be available for devices connected over USB.

Example: **CC:00:DD:00:CC:00**

Identify

Allows you to choose/activate the built-in identification mode of the device. May not be retrievable as information for devices connected over USB using older firmware versions, but it should still be possible to set it.

You can change this setting. See [below](#).

No deactivates identification. **Yes** activates identification.

Date - Time

Shows the currently set date and time [YYYY/MM/DD - HH:MM:SS].

If Daylight-Saving-Time is activated on the computer that runs MADRIX HARDWARE MANAGER, DST is also enabled on the device itself.

Is being updated nearly every second when connected over USB. Is being updated every 30s when connected via Ethernet.

You can change this setting. See [below](#).

Example: **2021/08/17 - 10:52:58**

Location

Shows the currently set location of the device [N/S d°m's", E/W ddd°m's"].

You can change this setting. See [below](#).

Values can be entered as:

- **N 41° 13' 37", E 013° 44' 0"** or as variants thereof **N 41° 13' E 12°33'**,
- Floating-point values **0.233 0.133**, which will be converted automatically into the sexagesimal format,
- **City**; using the built-in auto-complete.

Example: **N 51° 2' 5", E 013° 45' 7"**

Firmware



Shows the currently used firmware version. The firmware provides the software features of the device.

May show a green icon [that is, a gear wheel with an arrow] if a newer firmware version is available for the device.

It is always recommended to use the latest version.

You can change this setting. See [below](#). This means you can initiate an update to a different firmware version here directly.

Example: **2.06.7355**

- **Only devices which meet all requirements will be updated.**
 - The requirements are listed in the »[Firmware Files \[View\]](#)
- **Firmware updates might reset the device settings. / Firmware downgrades always require the device settings to be reset.**
 - Make a backup of the configuration and files before updating (or downgrading) the firmware of your devices!
 - New firmware versions may introduce new features, which requires a reset of all parameters. Downgrades to older firmware versions require a full reset to factory default settings to restore full functionality.
 - MADRIX LUNA, NEBULA, ORION, STELLA:
Device settings are available in the web configuration. Write down its settings or make a full-page screenshot, for example.
 - MADRIX AURA:
Scenes are saved on the SD card. ShowConfig.xml is saved on the SD card [includes Cue List, Timers]. ChannelConfig.xml is saved on the SD card if it has been created [includes Channel Mask configuration]. NetConfig.xml can be saved on the SD card by executing the backup function under Settings > Backup [includes Recording, Playback, and Remote Control]. Device Settings are only available in the web configuration. Write down its settings or make a full-page screenshot, for example.

Learn more »[Firmware Updates](#)

Bootloader

Shows the currently used bootloader version. The bootloader is a subsystem of the device's software that manages the underlying functionality of components and launches the firmware. Certain firmware versions may require a specific bootloader version.

If connected over USB, the device might need to switch into the bootloader, which might trigger a reconnect of the device.

If connected via Art-Net, the device needs to be in bootloader mode in order to retrieve the bootloader version, which then requires a firmware to be uploaded. That is why, the bootloader is usually not available via Art-Net. The bootloader version can also not be retrieved via MadrixN.

Example: **2.00.7095**


HW Revision

Short for Hardware Revision. Shows the edition/revision of the connected hardware interface.

Example: **1.0**

Editing And Changing Values

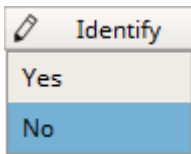
Overview

- In general, this list shows information provided by the devices.
-  In certain cases, the edit icon [that is, a pen] shows that the respective information/column can be edited by you.

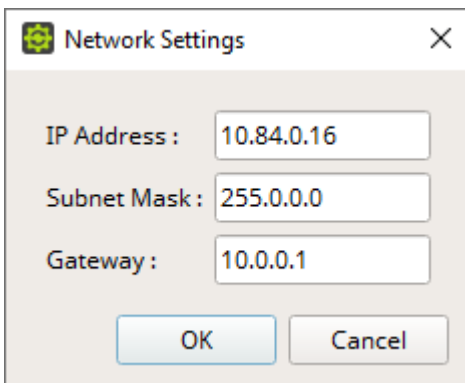
Single Edits

- **Left Mouse Click** - Allows you to select a single cell.
- **Left Mouse Double-Click** - Perform a double-click with your left mouse button on a value in order to edit it.
[Keyboard shortcut: **F2**]

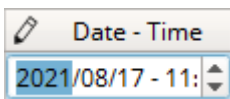
- Confirm with **Enter** [or click outside of the currently active cell with the mouse]. Abort any changes with **Escape**.



You may be presented with different choices.



You may be able to directly enter numbers or text as input.



Multi-Edits

- **Ctrl + Left Mouse Click** or **Shift + Left Mouse Click + Select First List Entry + Select Last List Entry** - Allows you to select multiple items in a column in the list.
- **Ctrl + A** - Selects all devices in the list.
- **F2** - Activates the edit mode for multiple devices at once. Select multiple devices first.
- Confirm with **Enter** [or click outside of the currently active cell with the mouse]. Abort any changes with **Escape**.
- Please note that different devices may support different values.

Visual Feedback For Edits

The software will show you if any changes you have made are set successfully or not. This status is shown for a couple of seconds after each change.

MADRIX AURA

Green - The changes were successfully set.

MADRIX AURA

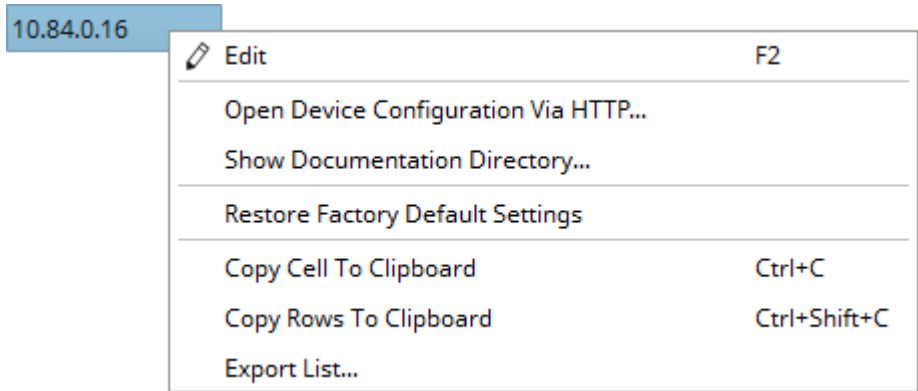
Yellow - The request is currently pending.

MADRIX AURA

Red - The new value could not be set.

Context-Menu

- **Right Mouse Click** - Perform a click with your right mouse button on a device.




Edit

Allows you to change the entry [if it can be edited].
[Keyboard shortcut: **F2**]

Open Configuration HTTP...	Device Via	<p>Opens the website configuration of the device using its IP address via the default web browser on your computer.</p> <p>If the web configuration cannot be opened, the network might not be reachable over HTTP or the device might be restarting.</p> <p>This requires an Ethernet network connection to the device.</p>
Show Documentation Directory...		<p>Opens the folder on your PC/file system with the latest documentation files for this device type, such as Technical Manual, Datasheet, and User Manual.</p> <p>New documents or updated documents will be automatically downloaded. Files that are not fully downloaded yet are named *.tmp until completed. Outdated documents will be removed.</p> <p>This requires an active internet connection.</p>
Restore Default Settings	Factory	<p>Restores the original settings of the device.</p> <p>Please allow some time for the process to take effect.</p>
Copy Cell To Clipboard		<p>Copies the currently selected cell [that is, single information] into the clipboard/temporary memory.</p> <p>[Keyboard shortcut: Ctrl + C]</p>
Copy Rows To Clipboard	To	<p>Copies the currently selected line or lines [that is, all device information] into the clipboard/temporary memory. If several lines are selected, the header of the column will be copied as well. Content is divided by single spaces.</p> <p>[Keyboard shortcut: Ctrl + Shift + C]</p>
Export List...		<p>Saves the entire, currently shown list/view/table as a preformatted text file.</p>

Search

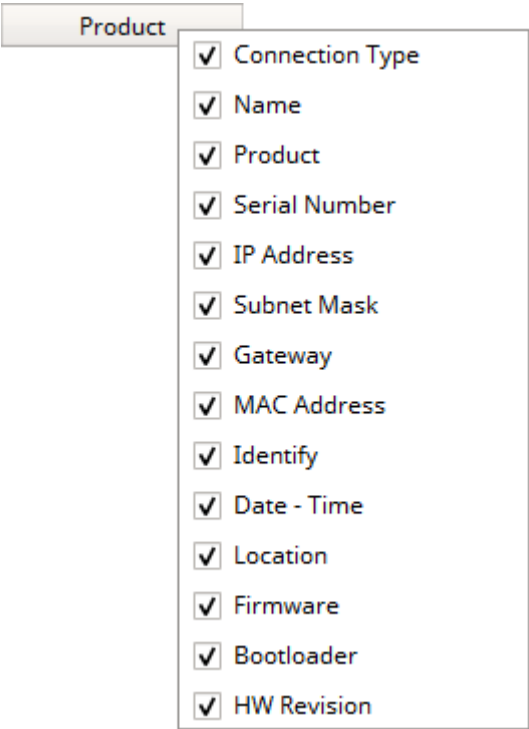


- **Search** - Enter any text in order to search all devices in the list.
 - Any device/line that includes the search term will be shown. All others are temporarily filtered out.
 - Terms can be case-insensitive. You don't have to use capital letters.
 - Feel free to use terms that are incomplete. For example, **mad** will include results for **MADRIX**.
 - You may specify certain columns by using a colon [:]. Only columns that are currently shown and visible can be searched this way.
 - For example: **Prod:AUR** shows all lines where a MADRIX AURA hardware interface is connected by referencing the column **Product** for example. If no column is shown that includes 'Prod', MADRIX HARDWARE MANAGER will search all shown columns for the specifically entered term.
 - You may execute RegEx searches [regular expression] by prefixing search terms via **/r**

Customization

MADRIX HARDWARE MANAGER allows you to choose which parameters are presented in this view. You can decide which columns are hidden or shown.

- **Right Mouse Click** - Perform a click with your right mouse button anywhere on the header of the list.



Shown - A checkmark means that columns are shown.



Hidden - No checkmark means that columns are hidden.

Connection Type Shows or hides the Connection Type column.

Name Shows or hides the Name column.

Product Shows or hides the Product column.

Serial Number Shows or hides the Serial Number column.

IP Address Shows or hides the IP Address column.

Subnet Mask Shows or hides the Subnet Mask column.

Gateway	Shows or hides the Gateway column.
MAC Address	Shows or hides the MAC Address column.
Identify	Shows or hides the Identify column.
Date - Time	Shows or hides the Date - Time column.
Location	Shows or hides the Location column.
Firmware	Shows or hides the Firmware column.
Bootloader	Shows or hides the Bootloader column.
HW Revision	Shows or hides the HW Revision column [Hardware Revision].

For example, if you wish to sort via Product, make sure to activate column **Product** and click on the corresponding header to sort in ascending or descending order.

3.3 Firmware Files [View]

This topic includes:

- [Introduction](#)
- [Overview](#)
- [Context-Menus](#)
- [Search](#)

Introduction

- The list of firmware files shows all available firmware versions and bootloader versions for supported devices in a list.
- **This requires an active internet connection.**
 - Files that have been imported manually via the menu without an internet connection will also be shown here. See [»Menu](#)
 - See [»Firmware Updates](#) to learn how to install firmwares on your devices.

You can manage these files here, including download and deletion.

MADRIX HARDWARE MANAGER

FileViewPreferencesDevicesFirmware FilesHelp

DevicesFirmware FilesExternal Storage

Search :

Product	Status	Type	Version	Release Date	Size	Required Firmware	Required Bootloader	Required HW Revision	Required Connection Type	Factory Reset
▼ MADRIX AURA	OK	Firmware	1.13.7413	2022/05/06	472.75 KiB	≥1.04.7384		1.0 - 1.9	Art-Net, USB	Always
	Available	Firmware	1.09.7403			≥1.04.7384		1.0 - 1.6	Art-Net, USB	After Downgrade
	Available	Firmware	1.07.7398			≥1.04.7384		1.0 - 1.6	Art-Net, USB	After Downgrade
	Available	Firmware	1.06.7396			≥1.04.7384		1.0 - 1.5	Art-Net, USB	After Downgrade
	Available	Firmware	1.05.7389			≥1.04.7384		1.0 - 1.5	Art-Net, USB	After Downgrade
	Available	Firmware	1.04.7384				≥1.01.7368	1.0 - 1.5	USB	Always
	OK	Bootloader	1.01.7368	2020/10/08	57.33 KiB		≥1.00.7348	1.0 - 1.5	USB	Always
► MADRIX LUNA										
► MADRIX NEBULA										
► MADRIX ORION										
► MADRIX STELLA										

An active internet connection is required to download firmware files. There are no files available when starting the software for the first time.

Overview

By default, the following information regarding files is provided since the following columns are enabled in the list:

Product	<p>Lists all supported devices.</p> <p>> Allows you to show all files for this kind of device by expanding the list. [You can collapse the list again vice versa.]</p>
Status	<p>Shows the current state of the file.</p> <p>OK - The file has been fully downloaded or imported and is available locally.</p> <p>Available - The file is available online and can be downloaded from the web server.</p> <p>Downloading... - The file is currently being downloaded from the web server.</p> <p>Corrupt - The file has been downloaded, but seems to be faulty. You should delete it and then download it again [Right Mouse Click > Delete & Right Mouse Click > Download].</p>
Type	<p>Shows the file type, which is either a Firmware file or a Bootloader file.</p>
Version	<p>Shows the firmware version or bootloader version; depending on the type.</p> <p>Files in the list are sorted in descending order according to their version number. You can find the latest firmware files at the top.</p>
Release Date	<p>Shows when the firmware or bootloader was released.</p>
Size	<p>Shows the file size [in B, KiB, MiB, GiB, or TiB].</p>

Required Firmware	<p>Shows if a file requires a specific firmware version, which should be uploaded to the device first.</p> <p>> means that the version needs to be greater than the specified version.</p> <p>< means that the version needs to be less than the specified version</p> <p>= means that the version needs to be greater than the specified version or exactly the specified version</p> <p>= means that the version needs to be less than the specified version or exactly the specified version</p>
Required Bootloader	<p>Shows if a file requires a specific bootloader version, which should be uploaded to the device first.</p> <p>> means that the version needs to be greater than the specified version.</p> <p>< means that the version needs to be less than the specified version</p> <p>= means that the version needs to be greater than the specified version or exactly the specified version</p> <p>= means that the version needs to be less than the specified version or exactly the specified version</p>
Required Revision	<p>HW Shows if a file requires a specific hardware revision.</p> <p>> means that the hardware revision needs to be greater than the specified hardware revision.</p> <p>< means that the hardware revision needs to be less than the specified hardware revision</p> <p>= means that the hardware revision needs to be greater than the specified hardware revision or exactly the specified hardware revision</p> <p>= means that the hardware revision needs to be less than the specified hardware revision or exactly the specified hardware revision</p>
Required Connection Type	<p>Shows the types of connections that can be used to install the specific firmware [Art-Net, USB].</p> <p>Certain firmware versions may only be possible over one connection type, such as USB.</p>

- Factory Reset**

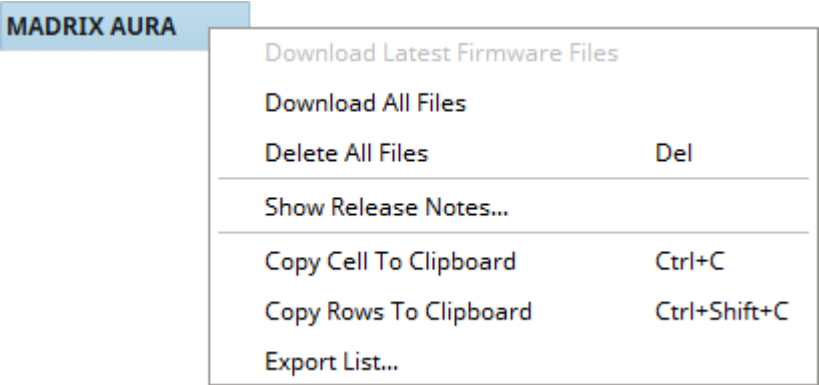
Shows if the software performs a reset to manufacturer default settings after installing the specific firmware [**After Downgrade, Always**].
Resets are always required after downgrading the firmware and may be always required, meaning after downgrades and after updates.
- Notes**

Shows if a firmware has been imported manually and is thus only available locally.
Note: When deleting manually imported files, they cannot simply be downloaded again since they are only available locally.

Context-Menus

Device Types

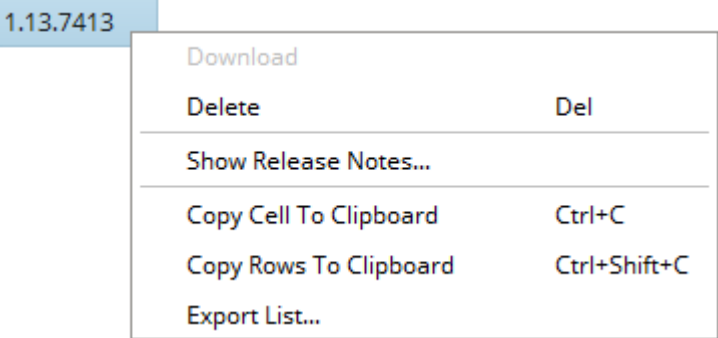
- **Right Mouse Click** - Perform a click with your right mouse button on a single or multiple device types in the list.



Download Latest Firmware Files	<p>Allows you to download the newest file, which is then saved locally on your computer system. This requires an active internet connection.</p> <p>Files are stored in <User Directory>\Documents\MADRIX HARDWARE MANAGER\cache\firmware</p> <p>This does not automatically download the specific bootloader version, which may be required.</p>
Download All Files	<p>Allows you to download all available firmware files and bootloader files, which are then saved locally on your computer system. This requires an active internet connection.</p> <p>Files are stored in <User Directory>\Documents\MADRIX HARDWARE MANAGER\cache\firmware</p>
Delete All Files	<p>Allows you to delete all firmware files and bootloader files, which are already saved locally.</p> <p>Note: When deleting manually imported files, they are only available locally and cannot simply be downloaded again.</p> <p>[Keyboard shortcut: Del]</p>
Show Release Notes...	<p>Opens a website showing the changes for every firmware version via the default web browser on your computer. This requires an active internet connection.</p>
Copy Cell To Clipboard	<p>Copies the currently selected cell [that is, single information] into the clipboard/temporary memory.</p> <p>[Keyboard shortcut: Ctrl + C]</p>
Copy Rows To Clipboard	<p>Copies the currently selected line or lines [that is, all device information] into the clipboard/temporary memory. If several lines are selected, the header of the column will be copied as well. Content is divided by single spaces.</p> <p>[Keyboard shortcut: Ctrl + Shift + C]</p>
Export List...	<p>Saves the entire, currently shown list/view/table as a preformatted text file.</p>

Files

- **Right Mouse Click** - Perform a click with your right mouse button on one or more files in the list.



- Download**

Allows you to download the currently selected files, which are then saved locally on your computer system. This requires an active internet connection.
Files are stored in <User Directory>\Documents\MADRIX HARDWARE MANAGER\cache\firmware
- Delete**

Allows you to delete the currently selected files, which are already saved locally.
Note: When deleting manually imported files, they are only available locally and cannot simply be downloaded again.
[Keyboard shortcut: **Del**]
- Show Release Notes...**

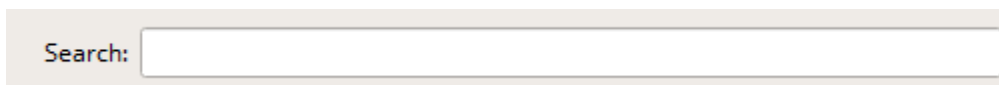
Opens a website showing the changes for every firmware version via the default web browser on your computer. This requires an active internet connection.
- Copy Cell To Clipboard**

Copies the currently selected cell [that is, single information] into the clipboard/temporary memory.
[Keyboard shortcut: **Ctrl + C**]
- Copy Rows To Clipboard**

Copies the currently selected line or lines [that is, all device information] into the clipboard/temporary memory. If several lines are selected, the header of the column will be copied as well. Content is divided by single spaces.
[Keyboard shortcut: **Ctrl + Shift + C**]

Export List... Saves the entire, currently shown list/view/table as a preformatted text file.

Search

A screenshot of a search input field. It consists of a light gray rectangular box with a thin border. Inside the box, the word "Search:" is written in a small, dark font, followed by a white rectangular text input area.

- **Search** - Enter any text in order to search all devices in the list.
 - Any device/line that includes the search term will be shown. All others are temporarily filtered out.
 - Terms can be case-insensitive. You don't have to use capital letters.
 - Feel free to use terms that are incomplete. For example, **mad** will include results for **MADRIX**.
 - You may specify certain columns by using a colon [:]. Only columns that are currently shown and visible can be searched this way.
 - For example: **Prod:AUR** shows all lines where a MADRIX AURA hardware interface is connected by referencing the column **Product** for example. If no column is shown that includes 'Prod', MADRIX HARDWARE MANAGER will search all shown columns for the specifically entered term.
 - You may execute RegEx searches by prefixing search terms via **/r**

3.4 External Storage [View]

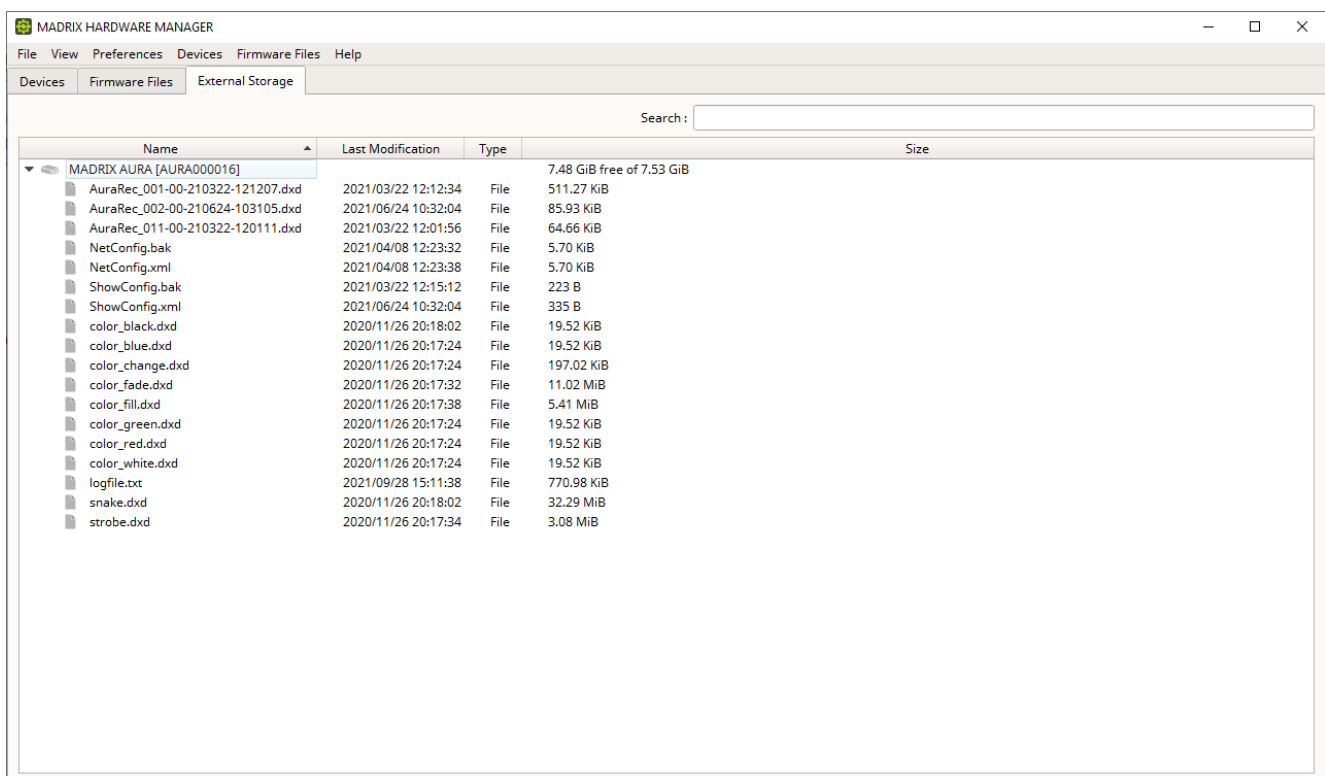
This topic includes:

- [Introduction](#)
- [Overview](#)
- [Context-Menu](#)
- [Visual Feedback For Edits](#)
- [Drag & Drop](#)
- [Search](#)

Introduction

The External Storage view allows you to manage files on devices that offer storage as part of their feature set, mainly MADRIX AURA.

Devices can either be connected over USB or via MadrixN over Ethernet network.



Overview

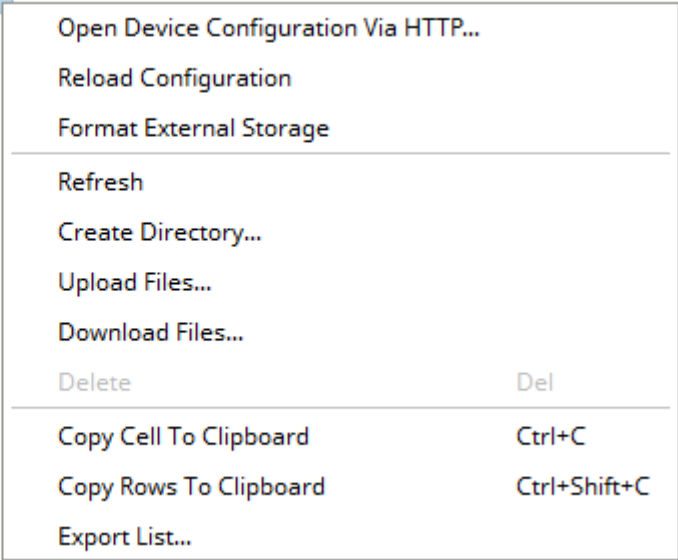
By default, the following information regarding external storage is provided since the following columns are enabled in the list:

Name	<p>Shows the name of devices [Name plus MAC Address and Serial Number; for better identification], directories, and files [including file format].</p> <p>> Allows you to show all files for this kind of device by expanding the list. [You can collapse the list again vice versa.]</p> <p>Hidden files will also be shown.</p>
Last Modification	<p>Shows when the files was changed the last time [YYYY/MM/DD HH:MM:SS].</p>
Type	<p>Shows the kind of the list item [File, File (Read Only), Directory, Directory (Read Only)].</p> <p>Also shows for each device any special status of the SD Card [Pending while reading the information, No SD Card if no memory card is inserted into the device or available, Read-Only if the SD card is write-protected].</p>
Size	<p>Shows the size of files [in B, KiB, MiB, GiB, or TiB].</p> <p>Also shows for each device the size of the SD card and any free space, such as 7.48 GiB free of 7.53 GiB for example.</p>

Context-Menu

- **Right Mouse Click** - Perform a click with your right mouse button on a device, a directory, or a file.

MADRIX AURA (CC:D3:1E:82:00:0F, AURA000015)



Open Configuration HTTP... **Device Via** Opens the website configuration of the device using its IP address via the default web browser on your computer.
If the web configuration cannot be opened, the network might not be reachable over HTTP or the device might be restarting.
This requires an Ethernet network connection to the device.

Reload Configuration Is only available if devices are selected.
Allows you to manually make the device reload the main configuration file again.
- **It is necessary for you to execute this functionality if a configuration file [ShowConfig.xml] has been uploaded before all scene files were uploaded and available on the storage.**
- Is automatically performed by MADRIX HARDWARE MANAGER if a configuration file [ShowConfig.xml] or scene files [of the *.dxd file format] have been uploaded.

Format Storage External Is only available if devices are selected.
Deletes and erases all files from the external storage [such as SD cards] by setting up the file system anew.

Refresh

Is only available if devices or directories are selected.

Updates the contents of the selected devices or directories and makes therefore sure that the latest data is shown in the list.

Create Directory...

Is only available if a single device or single directory is selected.

Creates a new directory on the external storage [when executed in a context menu that has been called by selecting a device] or creates a subfolder [when executed in a context menu that has been called by selecting a directory]. You can then choose and enter a name for the new directory.

Upload Files...

Is only available if a single device or single directory is selected. Is not available when having selected multiple devices in the list.

Opens a file dialog to choose the files that should be uploaded to the device from the file system of your computer.

- If there are already files available on the external storage with the same name, the software will add numbers to the file names of the new files accordingly [02, 03, etc.].

- Uploads the files into the selected directory if a directory has been selected.

- Deleting a file from the list will cancel the file upload if the file was not yet fully uploaded.


Please note:

- MADRIX AURA Scene Files are required in ***.dxd** file format.
- **NetConfig.xml** is a mandatory file of MADRIX AURA that contains the device configuration. Do not attempt any changes! [If needed, NetConfig.bak is the corresponding backup file.]
- **ShowConfig.xml** is a mandatory file of MADRIX AURA that contains the show configuration. Do not attempt any changes! [If needed, ShowConfig.bak is the corresponding backup file.]
- **logfile.txt** is a file to log events.

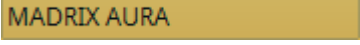
Download Files...	<p>Opens a file dialog to choose the folder to where files should be downloaded to the file system of your computer. Downloads all files if a device has been selected. Downloads the selected files if multiple files have been selected.</p> <ul style="list-style-type: none"> - If there are already files available in the download folder, the software will add numbers to the file names of the new files accordingly [02, 03, etc.]. - Any folder structure on the external storage will also be copied to the download folder.
Delete	<p>Is only available if directories or files are selected. Erases the selected files [if not set to read only] or erases entire directories and their contents [if possible].</p> <p>[Keyboard shortcut: Del]</p> <ul style="list-style-type: none"> - Deleting a file from the list will cancel the file upload if the file was not yet fully uploaded.
Copy Cell To Clipboard	<p>Copies the currently selected cell [that is, single information] into the clipboard/temporary memory.</p> <p>[Keyboard shortcut: Ctrl + C]</p>
Copy Rows To Clipboard	<p>Copies the currently selected line or lines [that is, all device information] into the clipboard/temporary memory. If several lines are selected, the header of the column will be copied as well. Content is divided by single spaces.</p> <p>[Keyboard shortcut: Ctrl + Shift + C]</p>
Export List...	<p>Saves the entire, currently shown list/view/table as a preformatted text file.</p>

Visual Feedback For Edits

The software will show you if any changes you have made have been set successfully or not. This status is shown for a couple of seconds after each change.

A horizontal green bar with the text "MADRIX AURA" in black.

Green - The actions were successful.

A horizontal yellow bar with the text "MADRIX AURA" in black.

Yellow - The request is currently pending.

A horizontal red bar with the text "MADRIX AURA" in black.

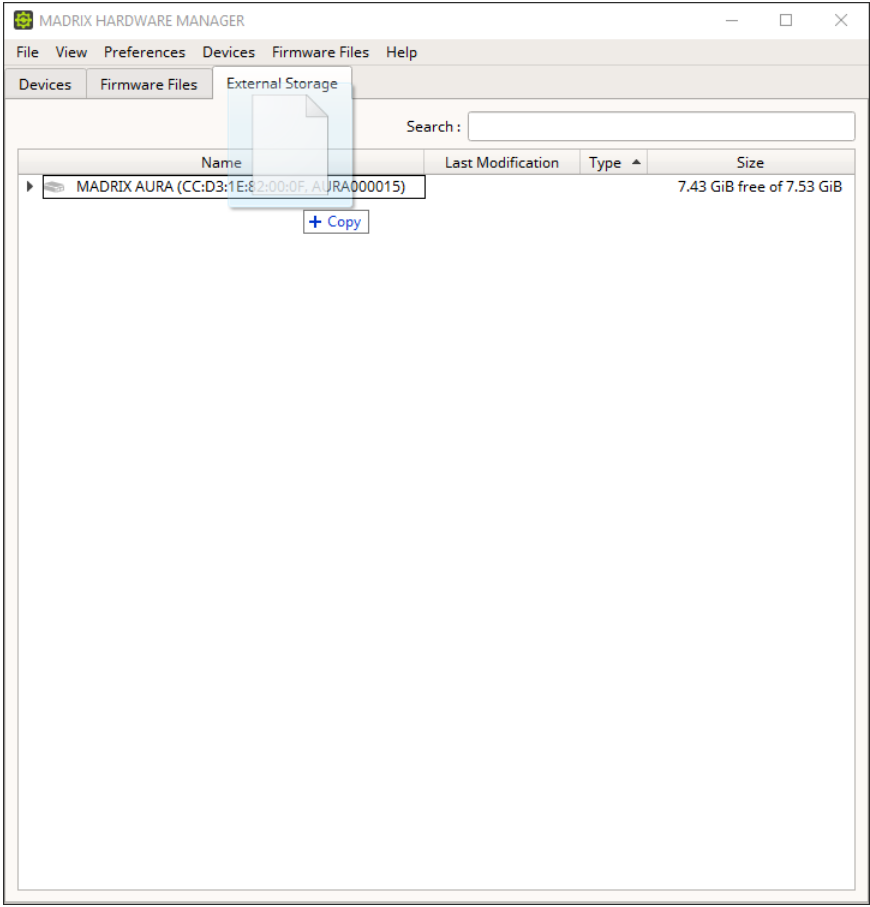
Red - The actions were not successful.

Drag & Drop

In addition to using the context menu as explained above, you may use drag and drop to copy files from the file system of your computer to the external storage of a device.

[Copying files from the external storage to your computer via drag and drop is not possible.]

MADRIX AURA Scene Files are required in ***.dxd** file format.



Search

Search:

- **Search** - Enter any text in order to search all devices in the list.
 - Any device/line that includes the search term will be shown. All others are temporarily filtered out.
 - Terms can be case-insensitive. You don't have to use capital letters.
 - Feel free to use terms that are incomplete. For example, **mad** will include results for **MADRIX**.
 - You may specify certain columns by using a colon [:]. Only columns that are currently shown and visible can be searched this way.
 - For example: **Prod:AUR** shows all lines where a MADRIX AURA hardware interface is connected by referencing the column **Product** for example. If no column is shown that includes 'Prod', MADRIX HARDWARE MANAGER will search all shown columns for the specifically entered term.
 - You may execute RegEx searches [regular expression] by prefixing search terms via **/r**

3.5 Updating Firmwares

This topic includes:

- [Overview](#)
- [1\] Firmware Files](#)
- [2\] Connect Your Devices](#)
- [3\] Device Selection](#)
- [4\] Firmware Selection](#)
- [5\] Confirmation](#)

Overview

As a short reference, the steps to update the firmware of devices are laid out in this chapter.

The firmware provides the software features of the device. **It is always recommended to use the latest firmware.**

Important Information

Firmware updates are possible over USB or even via an Art-Net Ethernet network connection:

- **Either use USB or the Ethernet connection!**
 - When using both connection types devices will be shown with two different entries in the list, which may lead to severe issues when accidentally updating the device over both connections simultaneously.
- **Make sure to -stop- sending control data to your devices when managing them with MADRIX HARDWARE MANAGER.**
 - This refers to input and/or output over Art-Net, sACN, DMX512, etc.
 - Otherwise, changes and updates might fail. If an update fails, stop sending data and try to update the firmware again.

- **An active internet connection is required to download firmware files. There are no files available when starting the software for the first time.**

- **Only devices which meet all requirements will be updated.**
 - The requirements are listed in the »[Firmware Files \[View\]](#)

- **Firmware updates might reset the device settings. / Firmware downgrades always require the device settings to be reset.**
 - Make a backup of the configuration and files before updating (or downgrading) the firmware of your devices!
 - New firmware versions may introduce new features, which requires a reset of all parameters. Downgrades to older firmware versions require a full reset to factory default settings to restore full functionality.
 - **MADRIX LUNA, NEBULA, ORION, STELLA:**
Device settings are available in the web configuration. Write down its settings or make a full-page screenshot, for example.
 - **MADRIX AURA:**
Scenes are saved on the SD card. ShowConfig.xml is saved on the SD card [includes Cue List, Timers]. ChannelConfig.xml is saved on the SD card if it has been created [includes Channel Mask configuration]. NetConfig.xml can be saved on the SD card by executing the backup function under Settings > Backup [includes Recording, Playback, and Remote Control]. Device Settings are only available in the web configuration. Write down its settings or make a full-page screenshot, for example.

- **Devices that are daisy-chained should not be updated at the same time!**
 - Reason: Restarting devices along the chain cut off communication between software and the rest of the devices, which can lead to devices being in unknown states.
 - Instead, perform the firmware update individually for each device.

1] Firmware Files

- Make sure to download and have available or the firmware files you require.
See »[Firmware Files \[View\]](#)

- Needed only in rare cases, it is also possible to manually import firmware files and bootloader files.

See »[Menu](#)

- By default, MADRIX HARDWARE MANAGER downloads the latest firmware files automatically.

See »[Options](#)

2] Connect Your Devices

- Connect your devices.

See »[Devices \[View\]](#)

3] Device Selection

- Select your device in the list of devices.

Then, navigate to view **Devices** > column **Firmware**

See »[Devices \[View\]](#)

4] Firmware Selection

- Under view **Devices** > column **Firmware** choose your firmware version via **F2** or **Right Mouse Click** > **Edit** or **Left Mouse Double-Click**
 - All firmware versions that are available locally are available for selection [files in the Firmware Files view with status **OK**].
 - The software may show a green icon [that is, a gear wheel with an arrow] if a newer firmware version is available for the device.
 - Confirm with keyboard shortcut **Enter** or click away with the mouse.

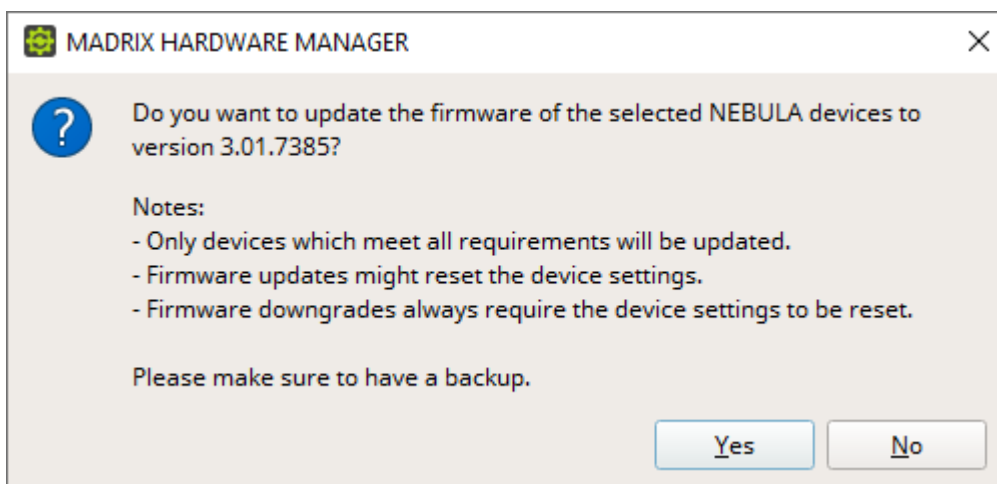


1.08.7401 ▼

1.08.7401
1.07.7398
1.06.7396

5] Confirmation

- Confirm that you wish to update the firmware of your device via **Yes**. Abort the process via **No**.



- **Please note:**

- MADRIX HARDWARE MANAGER will check if the requirements are met by the selected devices to update the firmware. First, a required bootloader may be uploaded to the device in the process.
- The update process might take a short while. Please allow a few minutes for the process to complete in case of Art-Net. Updates over USB are usually completed relatively quickly.
- Art-Net: If the update fails during the process, MADRIX HARDWARE MANAGER will try again several times to update the firmware of devices. Once successful, the device will be restarted.
- USB: If the update fails during the process, MADRIX HARDWARE MANAGER will try again several times to update the firmware of devices.
- During the update process, the software will show the progress in percent [%] under view **Devices** > column **Firmware** or view **Devices** > column **Bootloader**
- If the update was successful or if errors occur during the update process, the information will be written to the Log. See »[Log](#)
- If the update process is unsuccessful, devices might be in a bootloader state and/or unresponsive. If so, see the correlating Technical Manual on how to proceed.
- You may choose not only to update but also to downgrade the firmware and bootloader. In both cases a reset to factory default settings will automatically be executed afterwards by the software as indicated on the user interface.

3.6 Options

This topic includes:

- [Overview](#)
- [Startup](#)
- [Logging](#)
- [Notes](#)

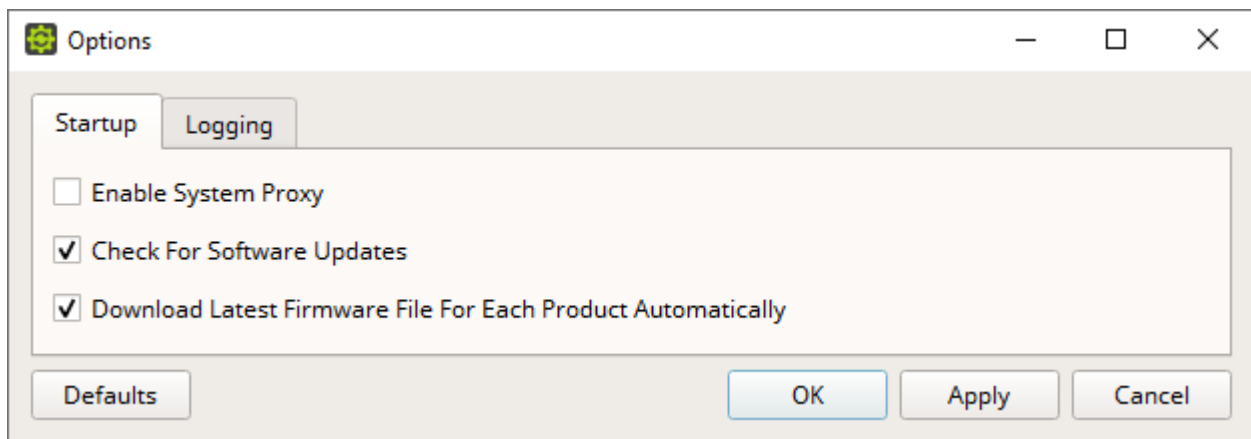
Overview

MADRIX HARDWARE MANAGER allows you to set up optional settings which remain valid and set beyond any restart of the software.

Startup

The following options refer to the initiation of the software.

- Go to the menu **Preferences > Options... > Startup**
[Keyboard shortcut: **Ctrl + Alt + O > Startup**]
- Restore the default settings via **Defaults**.
- Confirm any changes with **OK** or **Apply**. Discard any changes via **Cancel**.



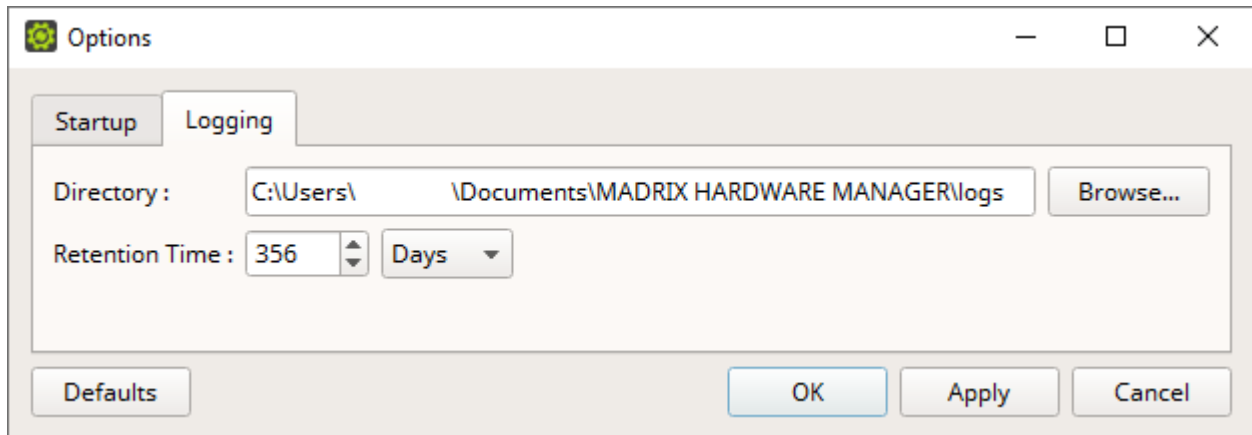
- **Enable System Proxy** - Uses the system proxy.
 - A proxy is an optional intermediary for the client-server communication in a network.
 - If you have set up and are using a system-wide proxy in the Windows operating system, enable this option here in order to let MADRIX HARDWARE MANAGER route its network data through it.
 - Leave this setting disabled if you are not using a system proxy or are unsure.[This option is set to Off by default.]
- **Check For Software Updates** - Automatically searches for software updates. When a new update is available, a notification will be presented to you when starting the software. This requires an active internet connection.
[This option is set to On by default.]
- **Download Latest Firmware File For Each Product Automatically** - For your convenience, MADRIX HARDWARE MANAGER automatically downloads the newest firmware version for each supported product during startup. This requires an active internet connection. See also »[Menu](#)
[This option is set to On by default.]

Logging

The following options refer to the automatic logging process of the software.

- Go to the menu **Preferences > Options... > Logging**
[Keyboard shortcut: **Ctrl + Alt + O > Logging**]

- Restore the default settings via **Defaults**.
- Confirm any changes with **OK** or **Apply**. Discard any changes via **Cancel**.



- **Directory** - Defines the location on your computer, where log files are saved.
 - **Browse...** - Allows you to choose a different folder or directory.
- **Retention Time** - Defines the time interval after which log files are deleted from the computer. Enter any number and choose between **Hours**, **Days**, and **Weeks**.
 - [The default value for this option is 365 days.]
 - [The maximum is 1679832 Hours, 69993 Days, or 9999 Weeks.]

Notes

All settings are saved locally on your computer.

3.7 Log

This topic includes:

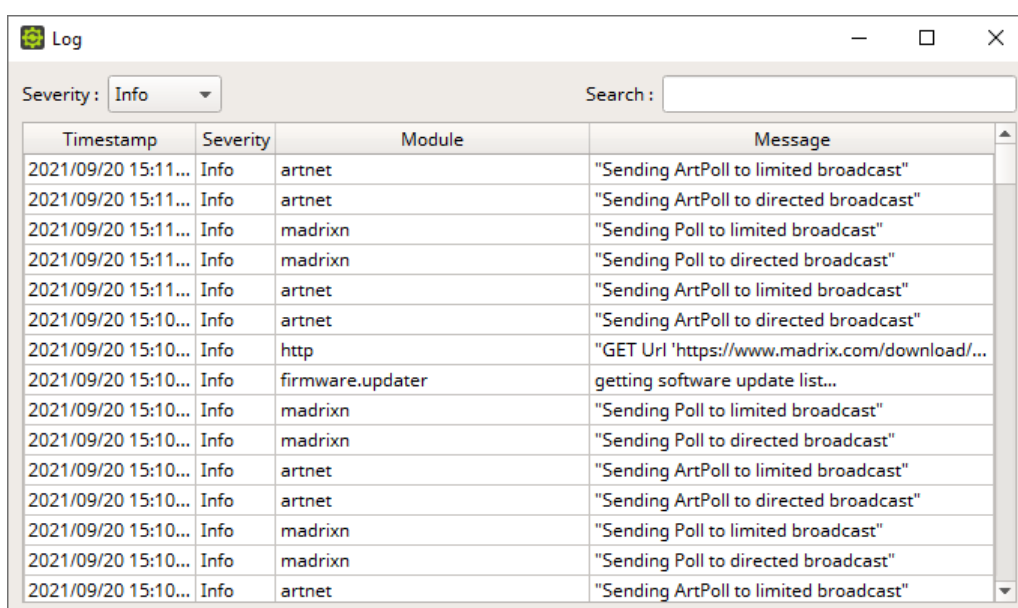
- [Introduction](#)
- [Overview](#)
- [Context-Menu](#)
- [Search](#)
- [Options](#)
- [Customization](#)

Introduction

The Log view shows all important occurrences for the MADRIX HARDWARE MANAGER itself and its communication with devices.

Such logging and subsequent files are very helpful for technical support and assistance, but aren't necessarily required for the general use of the software. Still, it can provide you with valuable information and feedback for troubleshooting.

- By default, the log view is hidden.
- To show it, enable it in the menu **View > Log**



Timestamp	Severity	Module	Message
2021/09/20 15:11...	Info	artnet	"Sending ArtPoll to limited broadcast"
2021/09/20 15:11...	Info	artnet	"Sending ArtPoll to directed broadcast"
2021/09/20 15:11...	Info	madrixn	"Sending Poll to limited broadcast"
2021/09/20 15:11...	Info	madrixn	"Sending Poll to directed broadcast"
2021/09/20 15:11...	Info	artnet	"Sending ArtPoll to limited broadcast"
2021/09/20 15:10...	Info	artnet	"Sending ArtPoll to directed broadcast"
2021/09/20 15:10...	Info	http	"GET Url 'https://www.madrix.com/download/...'"
2021/09/20 15:10...	Info	firmware.updater	getting software update list...
2021/09/20 15:10...	Info	madrixn	"Sending Poll to limited broadcast"
2021/09/20 15:10...	Info	madrixn	"Sending Poll to directed broadcast"
2021/09/20 15:10...	Info	artnet	"Sending ArtPoll to limited broadcast"
2021/09/20 15:10...	Info	artnet	"Sending ArtPoll to directed broadcast"
2021/09/20 15:10...	Info	madrixn	"Sending Poll to limited broadcast"
2021/09/20 15:10...	Info	madrixn	"Sending Poll to directed broadcast"
2021/09/20 15:10...	Info	artnet	"Sending ArtPoll to limited broadcast"

Overview

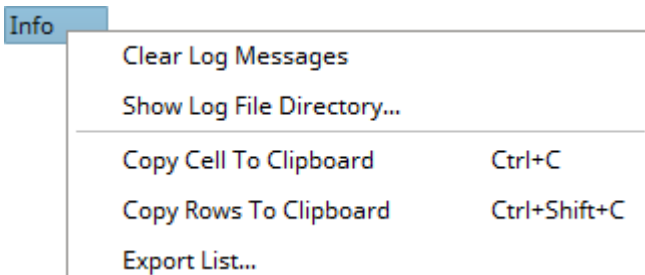
- **Severity** - Allows you to filter only for specific kinds of information [including **Info**, **Warning**, **Critical**, **Fatal**].
 - A specific severity level includes information for its own level as well as all higher levels.

By default, the following information is provided since the following columns are enabled in the list:

Timestamp	Shows the local time when the status message occurred [YYYY/MM/DD HH:MM:SS]. [In contrast, log files are set to UTC time zone.]
Severity	Shows the classification for messages.
Module	Shows the software module [as information for the developers].
Message	Contains the contents and main information of the status message.

Context-Menu

- **Right Mouse Click** - Perform a click with your right mouse button on an entry.



- Clear Log Messages** Removes all logged items from the list.
- Show Log File Directory...** Opens the folder on your computer that holds saved log files.
[You can change the directory in the options » [Logging](#)]
- Copy Cell To Clipboard** Copies the currently selected cell [that is, single information] into the clipboard/temporary memory.
[Keyboard shortcut: **Ctrl + C**]
- Copy Rows To Clipboard** Copies the currently selected line or lines [that is, all text and information] into the clipboard/temporary memory.
[Keyboard shortcut: **Ctrl + Shift + C**]
- Export List...** Saves the entire, currently shown list/view/table as a preformatted text file.

Search

A screenshot of a search input field. It consists of a light gray rectangular box with a thin border. Inside the box, on the left side, is the text "Search:" in a small, dark font. To the right of this text is a white rectangular input area.

- **Search** - Enter any text in order to search all items in the list.
 - Any device/line that includes the search term will be shown. All others are temporarily filtered out.
 - Terms can be case-insensitive. You don't have to use capital letters.
 - Feel free to use terms that are incomplete. For example, **mad** will include results for **MADRIX**.
 - You may specify certain columns by using a colon [:].
 - For example: **mess:IP** shows all lines that include IP device information by referencing the column **Message**, for example.

Options

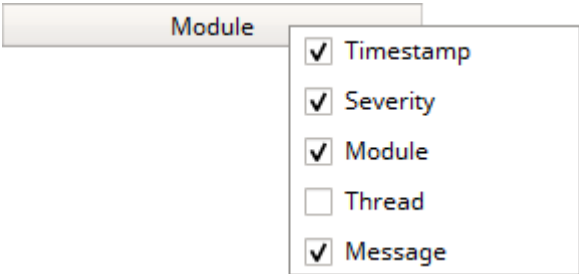
A new log file is created with each software start.

In addition, you can set up further settings for the Log in the Options.
Learn more »[Logging](#)

Customization

MADRIX HARDWARE MANAGER allows you to choose which columns are presented in this view. You can decide which columns are hidden or shown.

- **Right Mouse Click** - Perform a click with your right mouse button anywhere on the header of the list.



Shown - A checkmark means that columns are shown.



Hidden - No checkmark means that columns are hidden.

Timestamp Shows or hides the Timestamp column.

Severity Shows or hides the Severity column.

Module	Shows or hides the Module column.
Thread	Shows or hides the Thread column.
Message	Shows or hides the Message column.

3.8 User Interface

This topic includes:

- [Introduction](#)
- [Restore Default Window Layout](#)
- [Themes](#)
- [Working With Lists](#)
- [Showing Or Hiding Views](#)
- [Re-Arranging The Layout](#)

Introduction

The user interface of the software can be customized.

Restore Default Window Layout

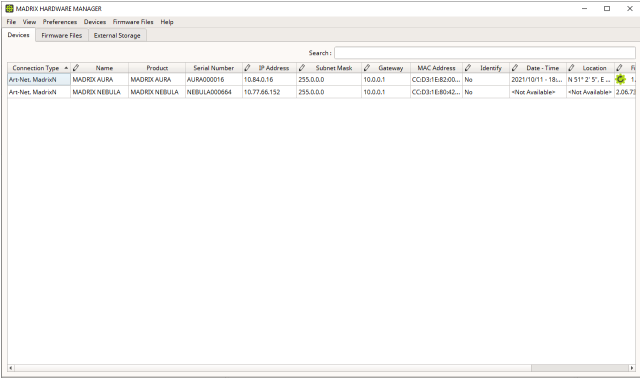
- Menu **View > Restore Default Window Layout** - Applies the default settings for the graphical user interface, including sizes and shown columns.
As such, it resets any changes you made to the software window.

Themes

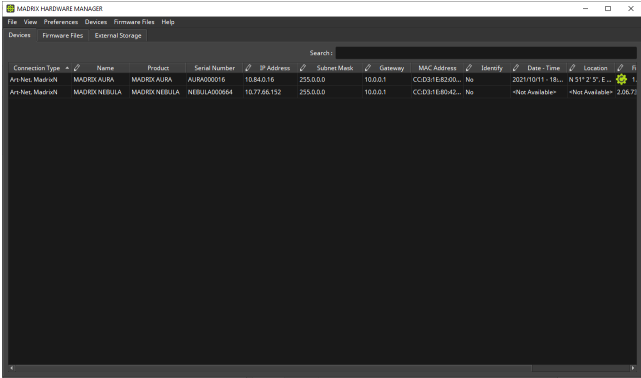
You can change the general appearance of the software.

- Menu **Themes > Light** - Activates the user interface theme that is light in color.
- Menu **Themes > Dark** - Activates the user interface theme that is darker in color.
- Learn more » [Menu](#)

Light Theme



Dark Theme



Working With Lists

Overview

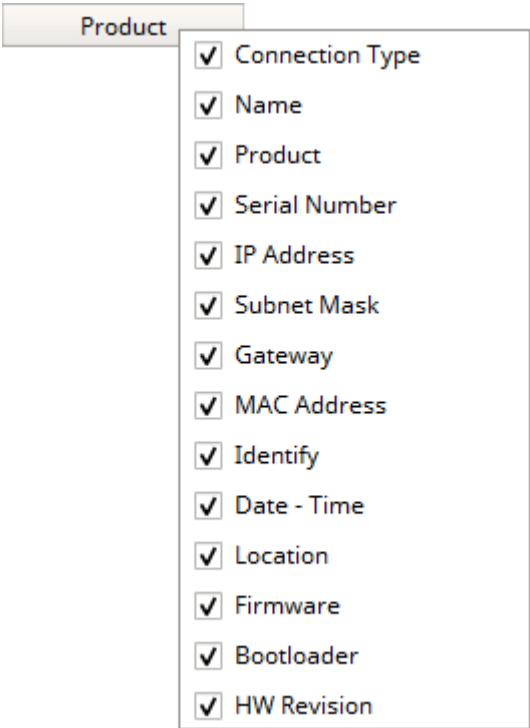
MADRIX HARDWARE MANAGER mainly presents information in lists.

There are numerous options to adjust the views and the information presented to you.

Show Or Hide Columns

MADRIX HARDWARE MANAGER allows you to choose which columns are presented in the Devices view. You can decide which columns are hidden or shown.

- **Right Mouse Click** - Perform a click with your right mouse button anywhere on the header of a list.



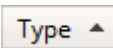
Show Column - A checkmark means that this particular column is shown.



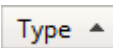
Hide Column - No checkmark means that this particular column is hidden.

Sorting

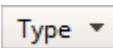
You can easily adjust how items are sorted in lists.



Click on a column header in order to sort the entire list accordingly.



Ascending Order - An up-arrow means that items are shown in ascending order.

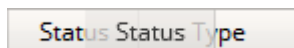


Descending Order - A down-arrow means that items are shown in descending order.

Re-Arranging Columns

You can easily change the order of columns in lists.


- **Left Mouse Click + Hold + Drag & Drop** - Perform a click with your left mouse button on a column header, continue to hold it, and move the header to its new position on the list. Release the mouse button in order to let the column snap into its place.



Automatically Resizing Columns

- Move your mouse pointer to the end of a header cell of a table/list.
- The mouse pointer will change to represent two arrows.
- Perform a Left Mouse Double-Click and the size of the column will adjust automatically to the length of the longest entry.

Showing Or Hiding Views

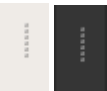
 **Undock View** - Allows you to quickly undock a single view [in order to use it as separate window or to rearrange the layout of the user interface].

 **Close View** - Allows you to quickly close a single view.

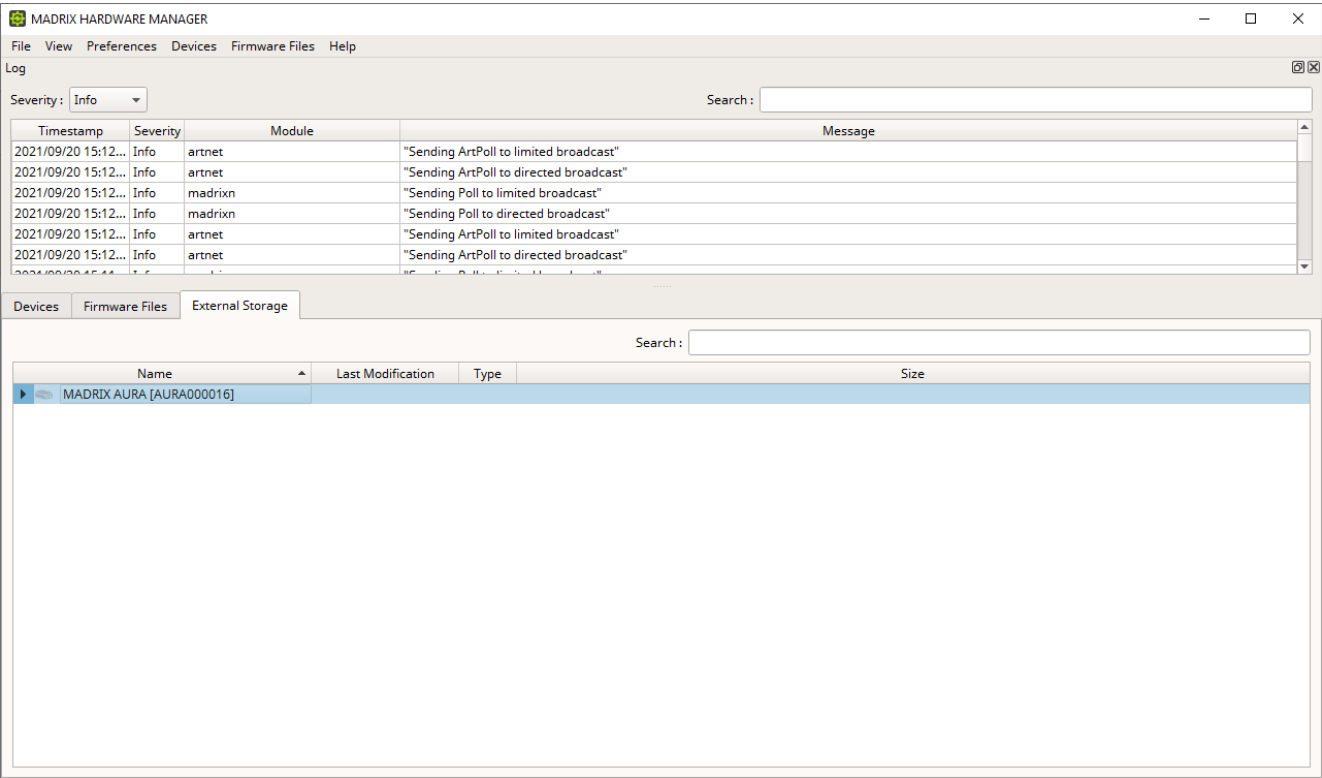
Re-Arranging The Layout

You can rearrange views of the software.

- 1] Show a view, such as Log.
- 2] Perform a **left mouse click + hold** on the top bar of the view window you wish to relocate and drag the view into its designated place.
- 3] The view will snap into its new location.
- 4] A variety of locations is available to position views anew [left, top, right, bottom].
- 5] Use the drag-handle that is positioned between views to increase or decrease the width of views.



- 6] When not docked, single views can also be shown on a different monitor, for example.



//PART D

Extra Tools

4 Extra Tools

This topic includes:

- [Introduction](#)
- [Topics Of This Chapter](#)

Introduction

Separate tools may be provided with the software.

Topics Of This Chapter

- [Quick Support](#)

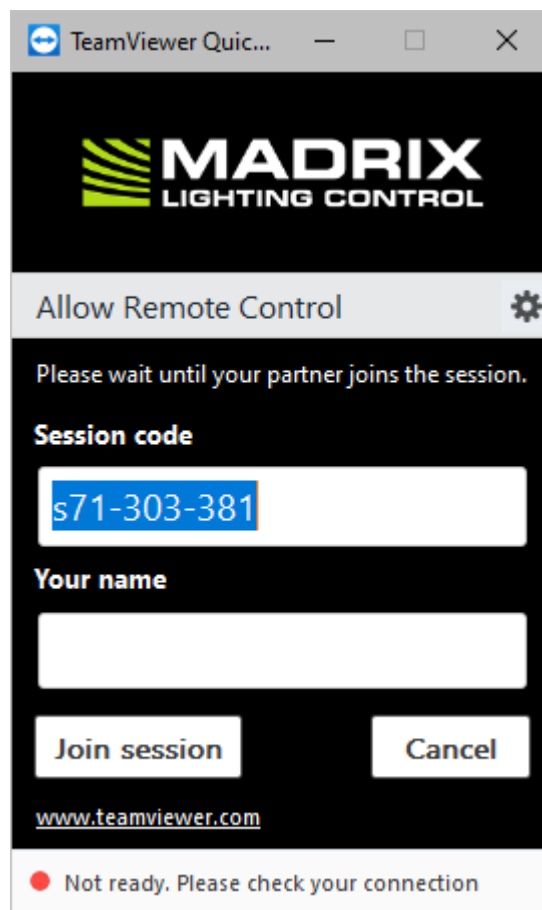
4.1 Quick Support

This topic includes:

- [Introduction](#)
- [Instructions](#)
- [Where To Find](#)

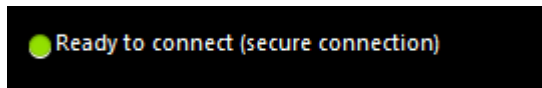
Introduction

The **MADRIX HARDWARE MANAGER Quick Support** is provided along with this software.



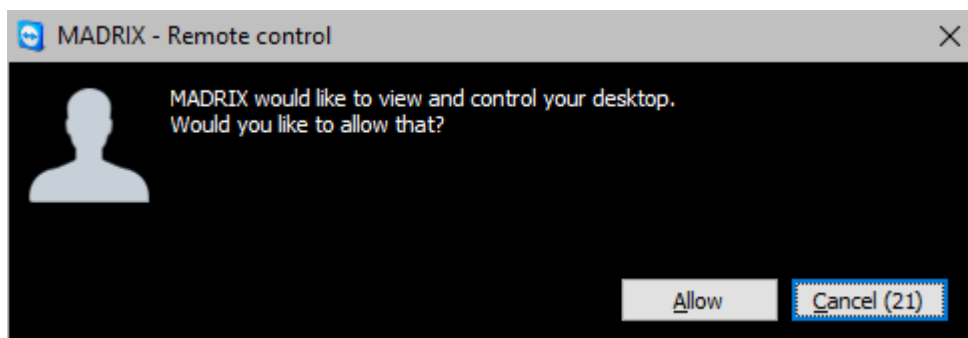
Instructions

- When contacting the MADRIX Support Team, you may be asked by them to use the MADRIX HARDWARE MANAGER Quick Support tool for technical support assistance on your computer.
- Click on the shortcut in order to launch it [see below where to find it].
- After the tool has been launched, wait until **Ready to connect (secure connection)** is shown.



- The MADRIX Support Team will then be able to connect to your computer.
- A new message window opens that reads: '**MADRIX would like to view and control your desktop. Would you like to allow that?**'

Please confirm by clicking **Allow**



- The MADRIX Support Team will now be connected.

Where To Find

MADRIX HARDWARE MANAGER Quick Support is included in the MADRIX HARDWARE MANAGER Installer. After installing the software, you can find the link to MADRIX HARDWARE MANAGER Quick Support in the Windows Start menu:

- In Windows 10, go to **Start > MADRIX HARDWARE MANAGER > MADRIX HARDWARE MANAGER Quick Support**

The original, executable program can be found in the software's installation directory:

- C:\Program Files\MadrixHardwareManager

//PART E

Legal

5 Legal

This topic includes:

- [Introduction](#)
- [Topics Of This Chapter](#)

Introduction

Legal includes all legal documents and information, including copyright and more.

Topics Of This Chapter

- [End-User License Agreement \[EULA\]](#)
- [OpenSSL & SSLeay \[Legal Information\]](#)
- [Qt \[Legal Information\]](#)
- [Sourcetree \[Legal Information\]](#)
- [Imprint And Copyright](#)

5.1 End-User License Agreement [EULA]

This topic includes:

- [Overview](#)
- [Copy Of License](#)

Overview

A copy of the following license is available as text file in the installation directory, for example C:\Program Files\MadrixHardwareManager\

Copy Of License

END-USER LICENSE AGREEMENT FOR INOAGE SOFTWARE
MADRIX HARDWARE MANAGER Software License Agreement
Last Update: 09/2021

This end-user license agreement ('EULA') is a legal agreement between you and the company inoage GmbH ('inoage').

This EULA governs your use of the MADRIX HARDWARE MANAGER Software ('software') but not its acquisition, and thereby does not refer to your purchase contract.

IMPORTANT NOTE

PLEASE CAREFULLY AND THOROUGHLY READ THIS LICENSE AGREEMENT. MAKE SURE THAT YOU FULLY UNDERSTAND ALL INFORMATION. BY CONTINUING THE INSTALLATION AND/OR BY USING THIS SOFTWARE, YOU CONFIRM THAT YOU HAVE READ THE LICENSE AGREEMENT, ACCEPT ALL OF ITS TERMS AND CONDITIONS WITHOUT RESERVATIONS, AND AGREE THAT YOU THUS BECOME LEGALLY BOUND TO THE TERMS OF THIS LICENSE AGREEMENT.

IF YOU DO NOT ACCEPT THESE TERMS AND CONDITIONS, PLEASE STOP THE INSTALLATION PROCESS. YOU CAN DO SO BY CLICKING 'CANCEL'.

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This software is free to use and does not require you to purchase a software license in order to fully unlock the software's features. However, the software's intended purpose is the management and configuration of MADRIX hardware products, which are available for purchase separately.

You are authorized to use the software extensively and according to its features as described above especially, but not limited to, for commercial purposes and production work.

RESTRICTIONS

You are not allowed to or allowed to attempt to and agree to not enable others to:

- (a) add to, alter, decode, decompile, delete from, disassemble, decrypt, edit, modify, recompile, rename, reverse-engineer the whole software or any part thereof (except as expressly permitted by this license regarding open-source components), otherwise attempt to derive or gain access to the source code, reduce the compiled binary assembly to human-readable form, or create derivative works from the software or any part thereof;
- (b) alter, delete, remove, or obscure any identification of the software, copyright note, or any other notes relating to the property restrictions of the software or any part thereof;
- (c) bypass, circumvent, overcome, or work around any technical or non-technical means, restrictions, or limitations that are put in place in or together with the software;
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Third-party copyright information and legal notices are accessible or point to further information under the menu 'Help > About...' or corresponding chapters in the software's user manual.

Certain third-party software, including features provided by the operating system, and/or SDKs and drivers are required for specific software features. Please note that all of these tools may be subject to their own, separate end-user license agreements or similar terms and conditions.

CONTACT

You may contact inoage using the following contact details:

inoage GmbH

Wiener Straße 56

01219 Dresden

Germany

Phone: +49 351 862 6869 0

Fax: +49 351 862 6869 68

E-mail: info@madrix.com

Web: <https://www.madrix.com>

ACCESS

This EULA will also directly be made available as a text file in the installation directory of the software.

CONSENT

By clicking 'I Agree', you hereby confirm that you have read, consent to the described policies, and accepted the license agreement as provided above.

5.2 OpenSSL & SSLeay [Legal Information]

This topic includes:

- [Included Libraries](#)
- [Copy Of License](#)

Included Libraries

MADRIX HARDWARE MANAGER uses the following libraries:

- libeay32.dll
- ssleay32.dll

A copy of the following license is available as text file in the installation directory, for example C:\Program Files\MadrixHardwareManager\

Copy Of License

```
LICENSE ISSUES
=====
```

```
The OpenSSL toolkit stays under a double license, i.e. both the conditions of
the OpenSSL License and the original SSLeay license apply to the toolkit.
See below for the actual license texts.
```

```
OpenSSL License
-----
```

```
/* =====
 * Copyright (c) 1998-2019 The OpenSSL Project. All rights reserved.
 *
 * Redistribution and use in source and binary forms, with or without
 * modification, are permitted provided that the following conditions
```

```
* are met:
*
* 1. Redistributions of source code must retain the above copyright
*    notice, this list of conditions and the following disclaimer.
*
* 2. Redistributions in binary form must reproduce the above copyright
*    notice, this list of conditions and the following disclaimer in
*    the documentation and/or other materials provided with the
*    distribution.
*
* 3. All advertising materials mentioning features or use of this
*    software must display the following acknowledgment:
*    "This product includes software developed by the OpenSSL Project
*    for use in the OpenSSL Toolkit. (http://www.openssl.org/)"
*
* 4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to
*    endorse or promote products derived from this software without
*    prior written permission. For written permission, please contact
*    openssl-core@openssl.org.
*
* 5. Products derived from this software may not be called "OpenSSL"
*    nor may "OpenSSL" appear in their names without prior written
*    permission of the OpenSSL Project.
*
* 6. Redistributions of any form whatsoever must retain the following
*    acknowledgment:
*    "This product includes software developed by the OpenSSL Project
*    for use in the OpenSSL Toolkit (http://www.openssl.org/)"
*
* THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT ``AS IS'' AND ANY
* EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR
* PURPOSE ARE DISCLAIMED.  IN NO EVENT SHALL THE OpenSSL PROJECT OR
* ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,
* SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT
* NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES;
* LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT,
* STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)
* ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED
* OF THE POSSIBILITY OF SUCH DAMAGE.
*
* =====
*
```

```
* This product includes cryptographic software written by Eric Young
* (eay@cryptsoft.com). This product includes software written by Tim
* Hudson (tjh@cryptsoft.com).
*
*/
```

Original SSLeay License

```
/* Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com)
* All rights reserved.
*
* This package is an SSL implementation written
* by Eric Young (eay@cryptsoft.com).
* The implementation was written so as to conform with Netscapes SSL.
*
* This library is free for commercial and non-commercial use as long as
* the following conditions are aheared to. The following conditions
* apply to all code found in this distribution, be it the RC4, RSA,
* lhash, DES, etc., code; not just the SSL code. The SSL documentation
* included with this distribution is covered by the same copyright terms
* except that the holder is Tim Hudson (tjh@cryptsoft.com).
*
* Copyright remains Eric Young's, and as such any Copyright notices in
* the code are not to be removed.
* If this package is used in a product, Eric Young should be given attribution
* as the author of the parts of the library used.
* This can be in the form of a textual message at program startup or
* in documentation (online or textual) provided with the package.
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This topic includes:

- [Included Libraries](#)
- [Copy Of License](#)

Included Libraries

MADRIX HARDWARE MANAGER uses the following libraries of the Qt development framework.

The libraries and their use are covered by GNU LGPL Version 3.

- Qt5Core.dll
- Qt5Gui.dll
- Qt5Network.dll
- Qt5Svg.dll
- Qt5Widgets.dll
- Qt5Xml.dll

- qgenericbearer.dll [Qt Plugin DLL]

- qsvgicon.dll [Qt Plugin DLL]

- qgif.dll [Qt Plugin DLL]
- qicns.dll [Qt Plugin DLL]
- qico.dll [Qt Plugin DLL]
- qjpeg.dll [Qt Plugin DLL]
- qsvg.dll [Qt Plugin DLL]
- qtga.dll [Qt Plugin DLL]
- qtiff.dll [Qt Plugin DLL]
- qwbmp.dll [Qt Plugin DLL]
- qwebp.dll [Qt Plugin DLL]

- qdirect2d.dll [Qt Plugin DLL]
- qminimal.dll [Qt Plugin DLL]
- qoffscreen.dll [Qt Plugin DLL]
- qwindows.dll [Qt Plugin DLL]

The complete, corresponding, and machine-readable source code of these files, including the license text, is available:

- On the MADRIX Software USB flash drive, in the subfolder ThirdParty. For example, D:\ThirdParty
- Online at <https://www.madrix.com/support/download/>

A copy of the following license is available as text file in the installation directory, for example C:\Program Files\MadrixHardwareManager\

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Version 3, 29 June 2007

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