



Contents

Thank you for your trust	3
Introduction	4
Technical Description – Hardware	5
Technical description – Software	6
Your new Extreme – front	7
Your new Extreme – back	8
Power cycle routine	9
Quick start guide	10
Access your Extreme Desktop	11
VNC Troubleshooting	15
Access your Extreme Desktop – TeamViewer	16
Add music to your Extreme	17
Add a network drive	18
Add a driver for your DAC	21
Remove a driver from your Extreme	22
Roon – Quick start guide	24
Roon – Adding music	25
Roon – Adding Streaming Services	26
Roon – Connecting your DAC	27
Roon – The Interface	28
Troubleshooting	29
Advice for HiFi OCD	30
Safety instructions	32
Taiko Audio Mission Statement	33
Warranty and service	34
Technical Specifications	35
Your Notes	36
Copyright statement	37

Thank you for your trust

Taiko Audio is an innovative Dutch high-end audio laboratory, equally passionate about music and technology. Through extensive research and development, we create new solutions where needed and improve upon existing technologies. We have a strong professional background in science, engineering and IT and like to use our knowledge for making your musical experience at home all the more exiting.

You can be sure that every component that left our factory went through a meticulous quality control process and has been thoroughly tested. Should you still encounter any unexpected behavior from your Taiko Audio product, contact us anytime at contact@taikoaudio.com

You can also visit our FAQ and troubleshooting area at www.taikoaudio.com

Thank you

Your Taiko Audio team

Introduction

Emerging from many years of relentless researching, comparing and listening, the Taiko Audio Extreme is the culmination of what is possible in the field of music servers.

It combines many technology breakthroughs completely unseen before in the world of digital High End Audio. Only the best components from the most respected vendors are sourced for it, many of which are custom designed from the ground up.

During the lengthy design process, no stone has been left unturned, giving equal attention to resonance control, prevention of electric pollution, reliability and user friendliness.

It is designed to deliver the most realistic sounding reproduction from stored music files and streaming music from Qobuz and Tidal.

Due to its flexible and modular architecture, you can expect a very long life expectancy with both hard- and software updates, giving you the confidence of a future proof investment in the best digital source for years to come.

Technical Description - Hardware

- Dual CPU design for the lowest queue depths and latencies possible.
- All data and software storage is non SSD, and utilizes non SATA, non volatile solid state storage modules.
- Selected custom high speed RAM modules.
- The Extreme is powered by a linear power supply with Lundahl choke regulation and a large capacitor bank utilizing the highest audiophile grade Duelund and Mundorf capacitors.
- Music files can be stored in the internal storage up to 32 TB or in a NAS (Network attached Storage).
- 45kg / 99lbs Aluminium/Copper/Panzerholz hybrid chassis with radiation waveguide drillings.
- Custom built passive cooling system for completely silent operation and noise.

Technical description – Software

- Custom Windows-based OS
- Roon Core (default)
- Jplay (default)
- HQPlayer (on request)
- Teamviewer
- VNC Viewer

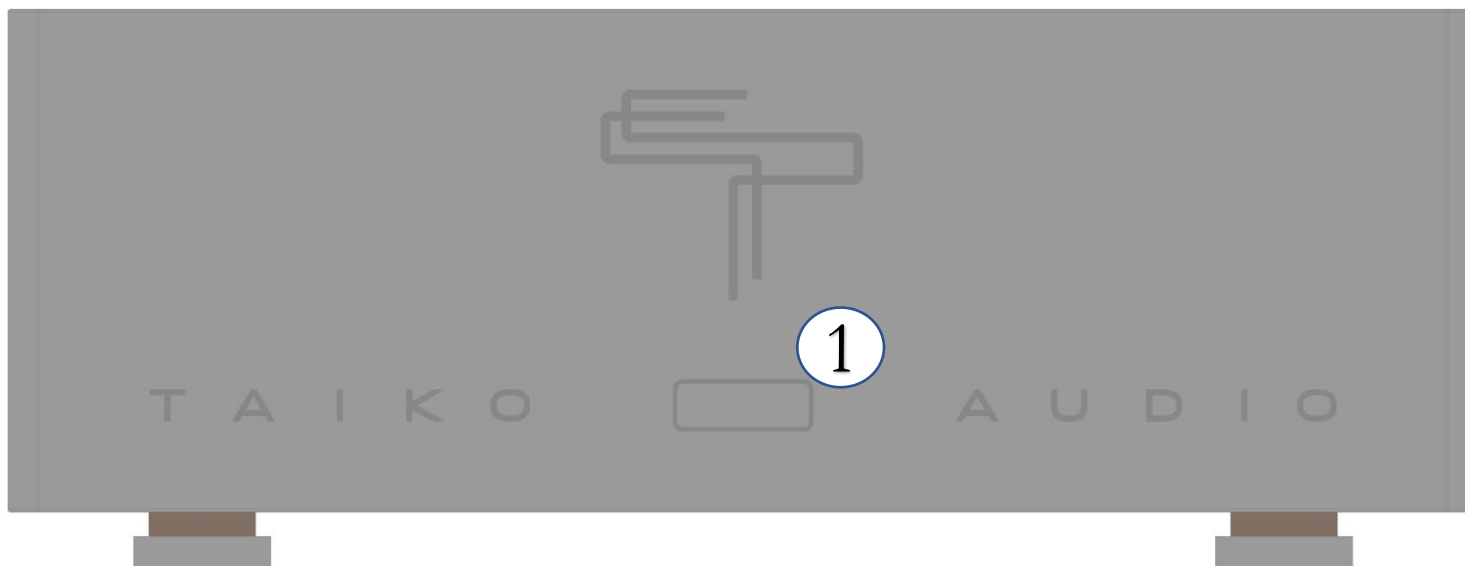
Installation of any additional piece of software is quite likely to audibly degrade the sound quality by making demands on the Windows task scheduler and disrupt the carefully optimized allocation of Roon and JPlay processes to the cores of the two CPU's.

Clean and complete removal of User installed software is often quite labor intensive and may incur customer service charges.

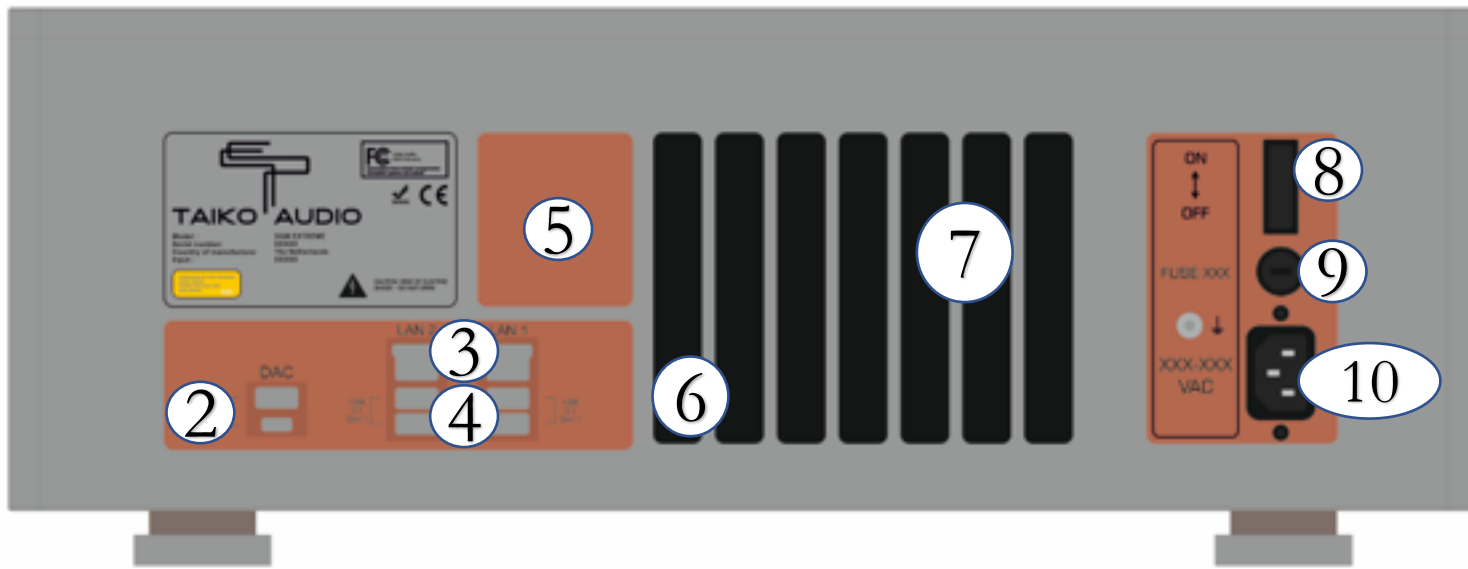


Your new Extreme - front

1 On / Off / Reboot



Your new Extreme - back



- ② USB out to DAC
- ③ LAN network ports
- ④ USB for data
- ⑤ Option slot
- ⑥ Fiber network port
- ⑦ Service / Monitor
- ⑧ Mains On / Off
- ⑨ Fuse
- ⑩ Mains power inlet

Power cycle routine

Powering on the Extreme from cold state and booting up

The Extreme has a rear panel power switch and a front panel start button. The turning on from cold sequence is as follows

1. Turn rear panel power switch on
2. Press the front panel start button momentarily
3. The front panel button should be illuminated immediately and stay on. The operating system boot and software startup should take about 25 seconds

Shutting down the Extreme

1. Press – release – press the front button

Complete power off of the Extreme to cold state

1. After the completion of the front panel button panel shutdown (light goes off), turn off the rear power switch

Quick start guide



Tip:
Try keeping the
USB cable
length under 2m

1. Make sure your Extreme is standing firmly on a solid surface in a dry environment
2. Connect your Extreme to your home mains supply with **10**
 - Stay within the accepted voltage range of 100V – 250V
 - Use a power cable with a safety ground connector
3. Connect your Extreme to your home network using a Cat network cable. Use either port from **3** or **6**
4. Connect your DAC with an USB cable, using output **2**
5. Make sure **8** is in the ON position
6. Press **1**
7. The button will light up and the system is ready for operation after about 25 seconds. Please note that the Extreme is completely silent and will not make any noise during operation
8. Control the server with any computer device using the Roon Application
 - Apple iPad /iPhone (recommended)
 - Mobile device using Google Android
 - Desktop computer (MacOS or Windows) using Roon desktop
9. Should you wish to activate the video output for monitor usage, press **1** once while the Server is running

Access your Extreme Desktop

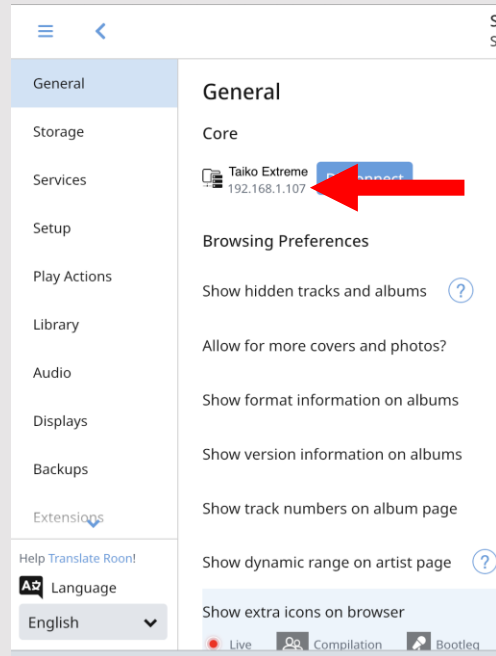


Tip: You won't ever need to connect a mouse, keyboard or screen to the Extreme

- Should new updates be available for any software that is installed on the Extreme, you can access the desktop via a tool called VNC, which is available on iOS, Android devices, Mac's and Windows 10 PC's.
- You will find the app in the Appstore, Playstore or directly here: <https://www.realvnc.com/en/connect/download/viewer/>
- If you know the IP address of your Extreme (you can easily find this out using Roon) you can dial into the Extreme from your mobile or desktop device.

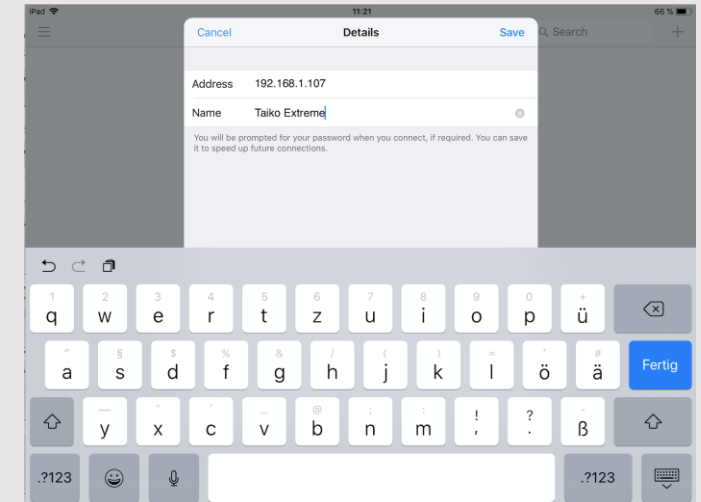
The following pages will provide an overview how to set up your Taiko Music Server.

Access your Extreme Desktop – step by step



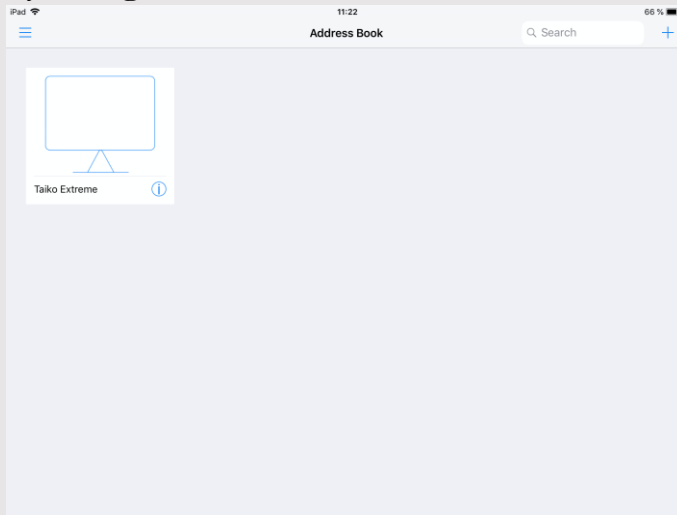
Start Roon (see [here](#) how to setup Roon), go to Settings → General
Note down the IP Address

Run the VNC application on any device connected to your local network.
Click the „+“ symbol top right, enter the IP adress and enter any name, e.g. „Taiko Extreme“, then click „save“



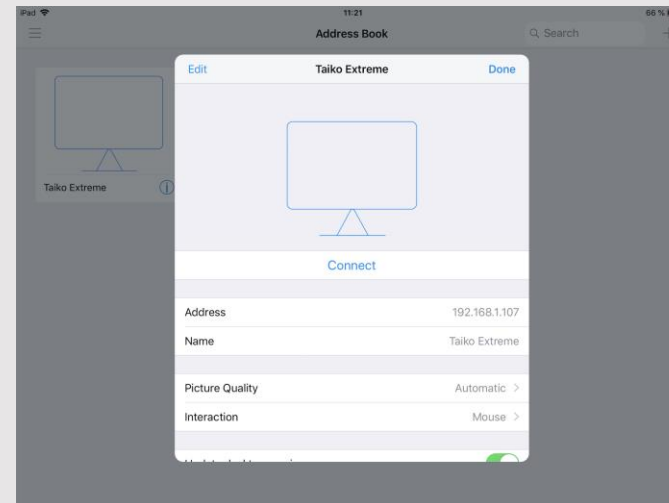
Access your Extreme Desktop – step by step

Click on the newly created connection profile with your given name



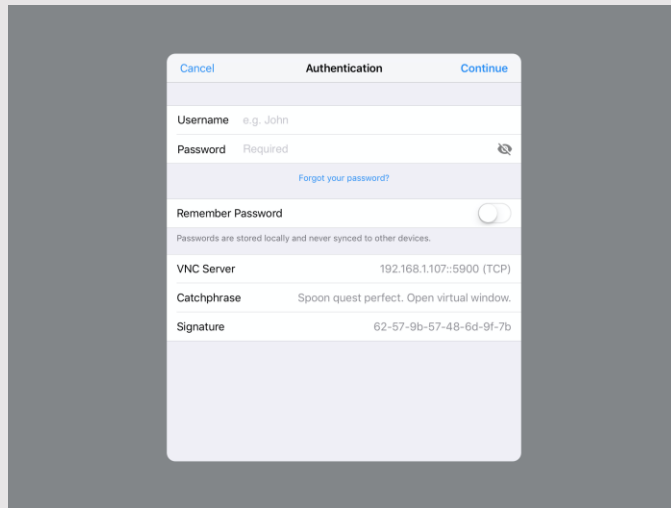
For Name and Password, please reach out to Taiko.

Click on „Connect“

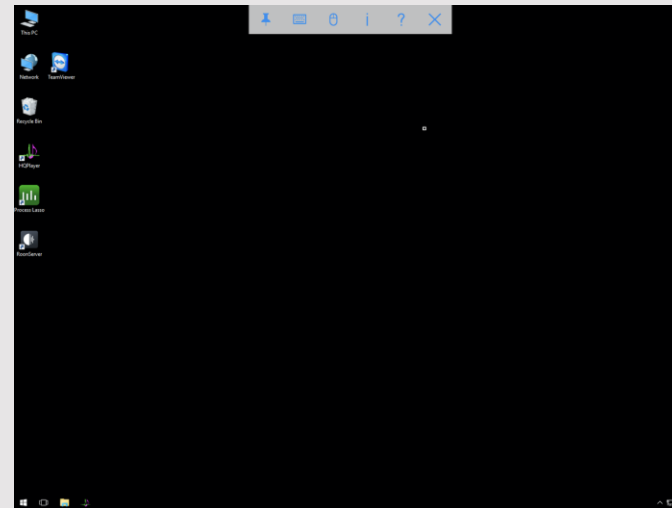


Access your Extreme Desktop – step by step

Enter the VNC credentials, select „remember password“, then click „Continue“



The Extreme’s desktop will show and can be navigated.
The keyboard if needed can be accessed at the top bar



More info how to navigate can be found here:

<https://archive.realvnc.com/products/vnc/documentation/4.2/win/winvncviewer.pdf>

VNC Troubleshooting

If the IP address of the Extreme has changed due to a LAN switch restart, the VNC app on your iPad or other device will need to have a new connection profile created with the new IP address.

You will need to enter the new IP Address and re-enter the VNC password, effectively repeating steps 1-4 of the VNC setup guide.

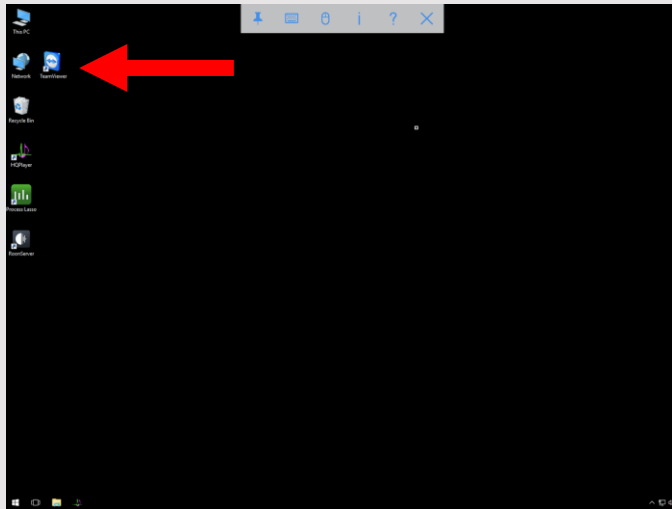
Tap on remember password and then connect to the Extreme.



Tip: You can
contact Taiko
anytime for help

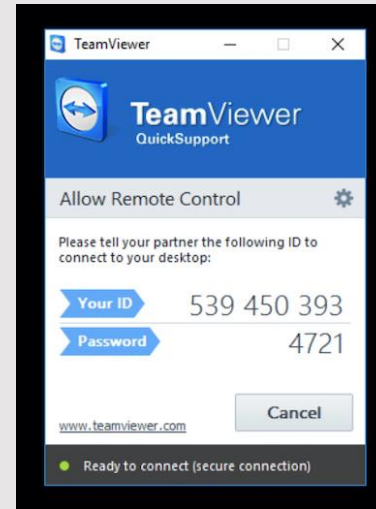
Access your Extreme Desktop – TeamViewer

Should your Taiko tech support ask you for a TeamViewer session, here's how you do it:



Click on the TeamViewer icon

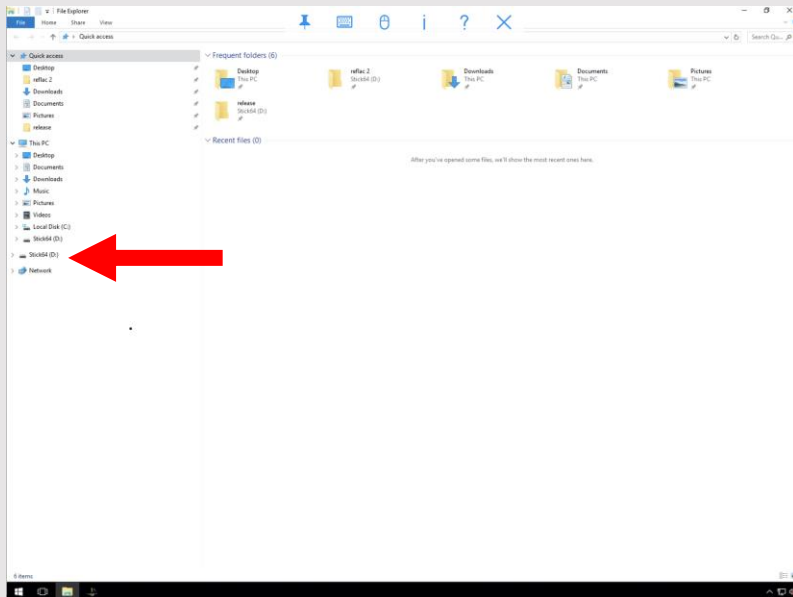
A new window will pop up with a session ID and a password. Share this data with your Taiko rep



Add music to your Extreme

Your Extreme sounds best by using its internal PCIe storage drives, we recommend to move all your music there. Also Roon will be slicker to navigate and the scanning of the drives will happen much faster.

The easiest way is to copy music from an USB mass storage drive, using port **4**.
Simply connect your USB drive and it will show up below Local Disk C:

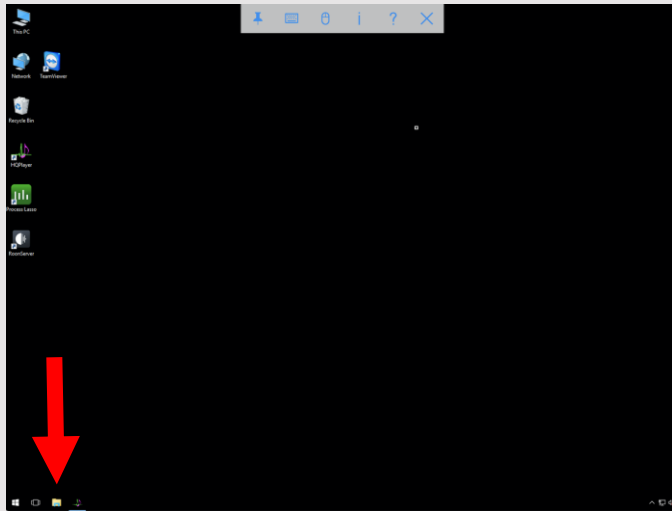


Now simply drag and drop your stored music to the Extreme's internal drives.

If you want to include network drives, the following guide will show you how to do this.

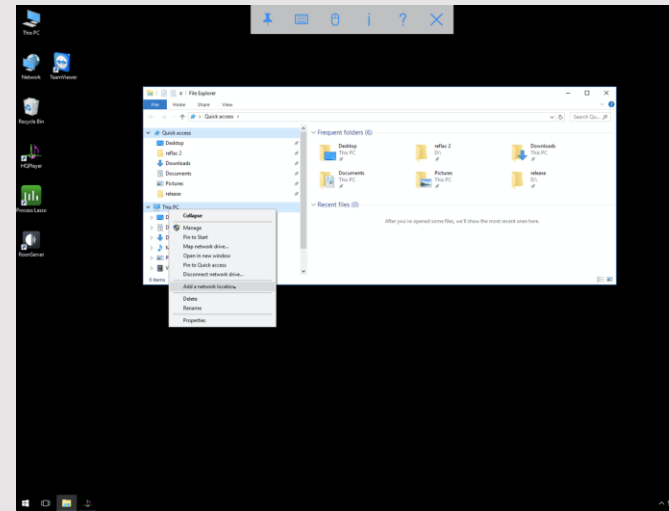
Add a network drive

Should you want to integrate a network drive such as a NAS to your Extreme, here is how you do that:



Click on the File Explorer symbol at the bottom

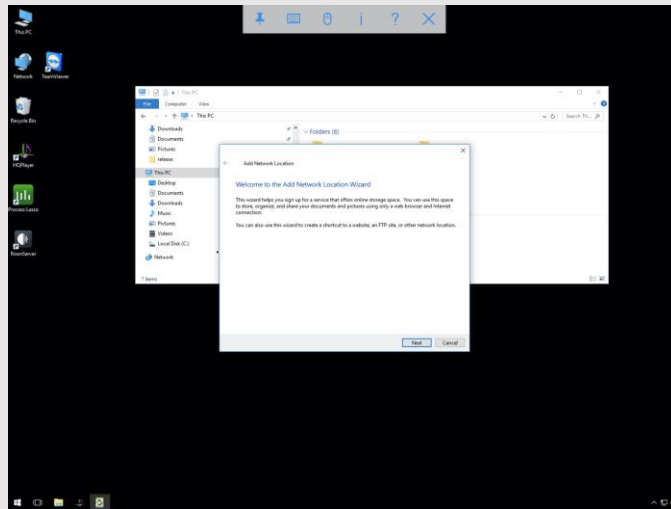
Right click (or press with 2 fingers if on a mobile device) on „This PC“



choose „Add a network location“

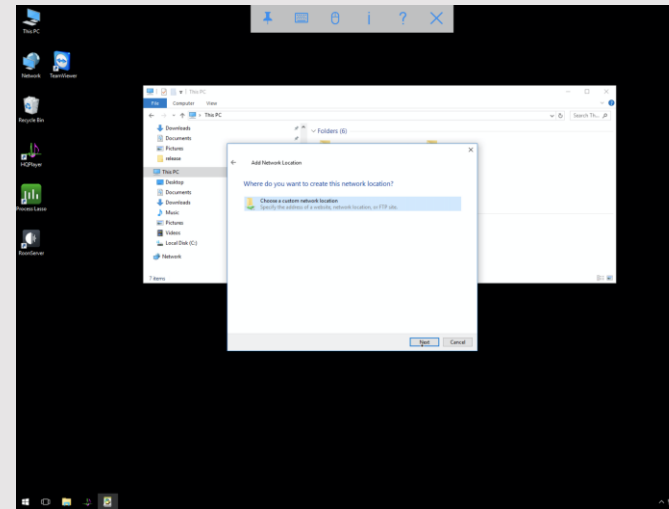
Add a network drive

The network setup wizard will open, follow the steps



Click „Next“

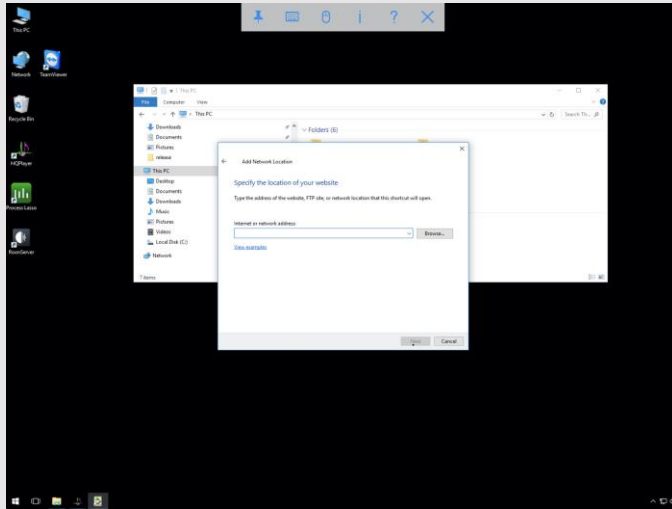
You want to choose a custom network location



Click „Next“

Add a network drive

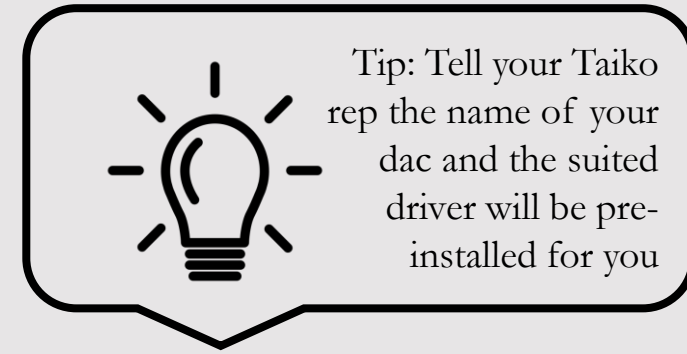
Now enter the network location of your shared drive



This can be the network address of e.g. a NAS, USB drive connected to a router, other computers on the network, FTP servers,...

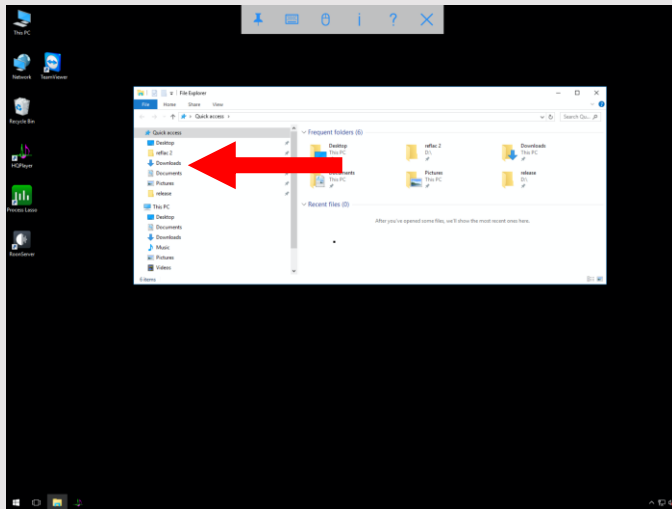
Your network drive is now ready to be accessed and can be either integrated in your Roon library directly, or you can move your stored music to the Extreme's internal PCIe drives.

Add a driver for your DAC



Tip: Tell your Taiko rep the name of your dac and the suited driver will be pre-installed for you

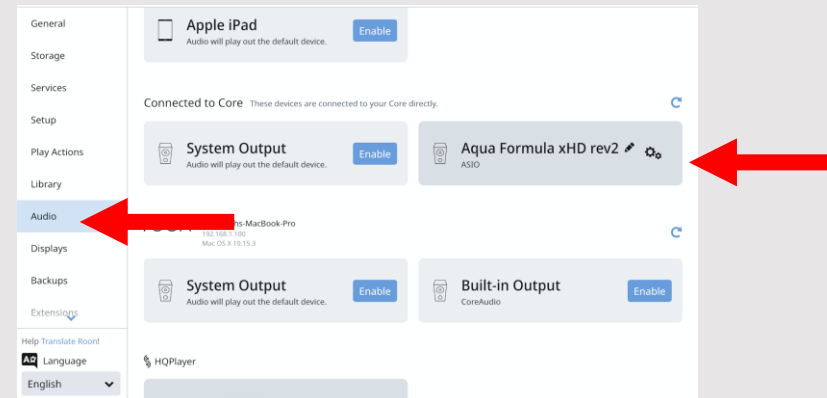
Download the driver for your DAC from the manufacturer's web presence.



Use the onboard Microsoft Internet Explorer, choose the version suited for Windows. Navigate to the Downloads section in the File Explorer.

Install the driver, following the installation wizard steps.

Connect your DAC via USB, using **1**



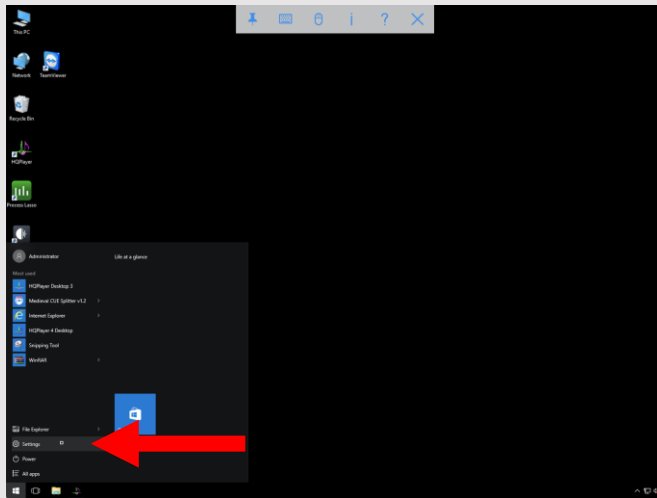
Reboot your Extreme, your DAC will now be visible in Roon's Audio Settings section

Remove a driver from your Extreme



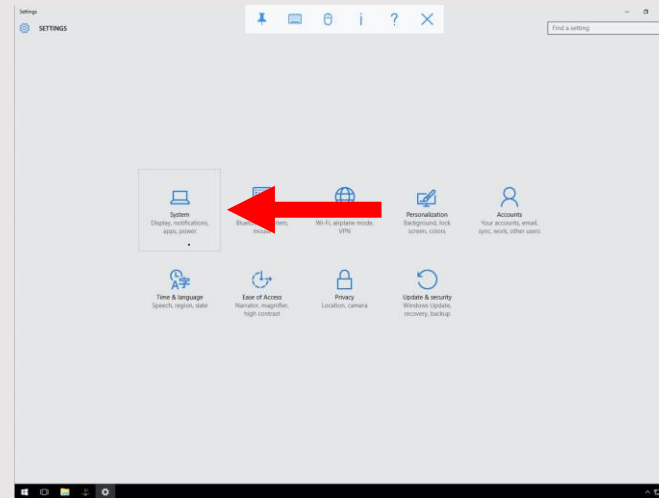
Tip: Any unused software should always be deleted from the system as it might be sonically detectable

Navigate to the Start menu (Windows symbol)



Click on „Settings“

Click on „System“

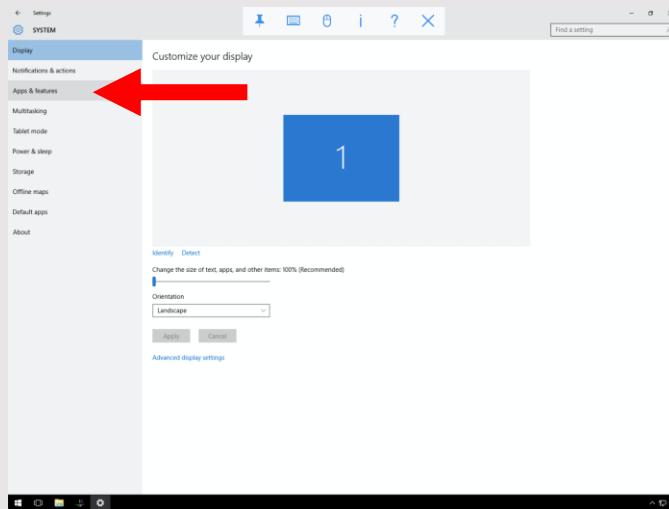


Remove a driver from your Extreme

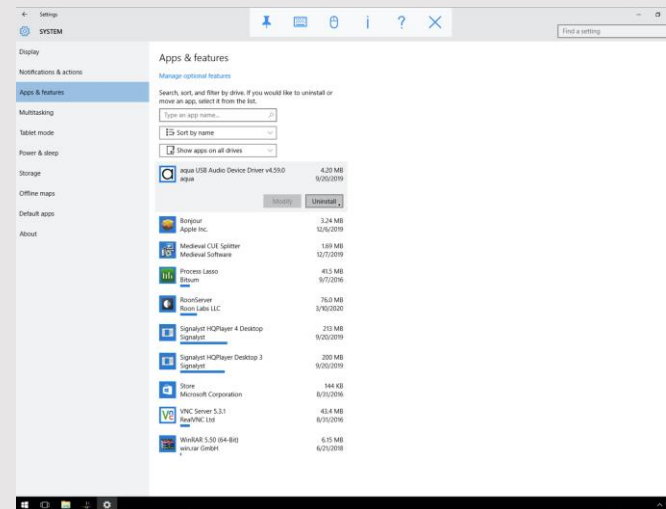


Tip: Any unused software should always be deleted from the system as it might be sonically detectable

Click on „Apps and Features“



Navigate to the application / driver that you want to have removed from the Extreme's system



Click „uninstall“ and follow the uninstall wizard steps
Reboot the Extreme using **1**

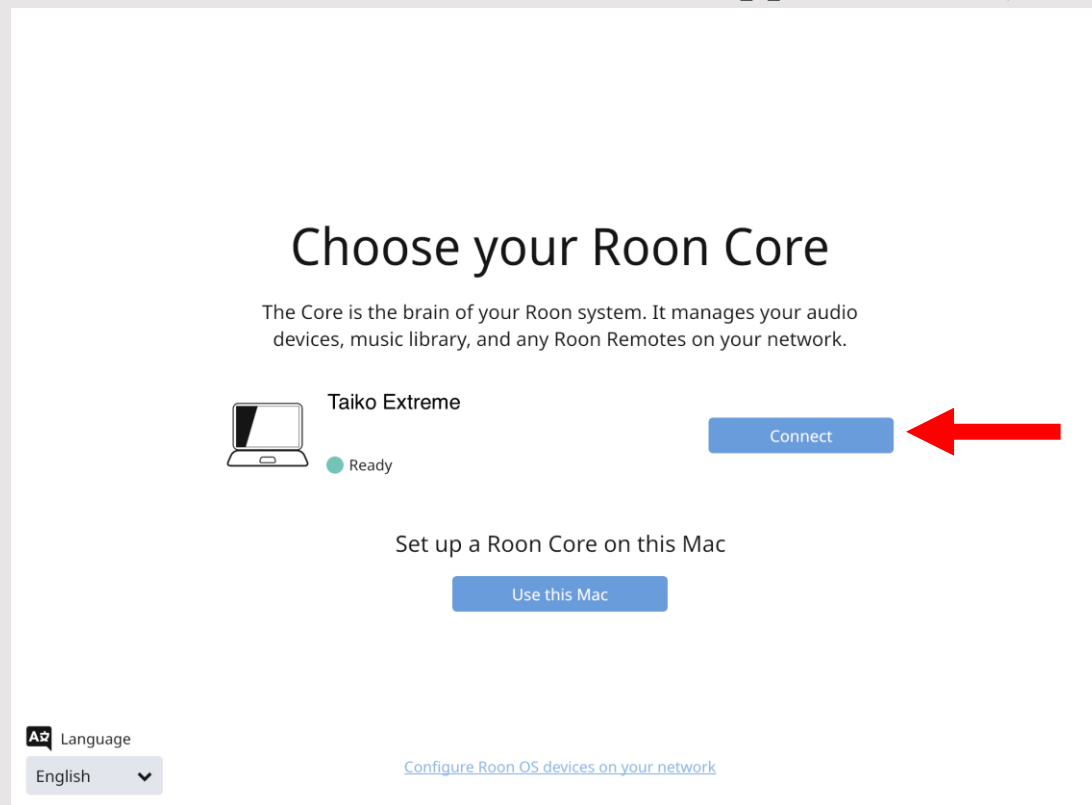
Roon – Quick start guide



Tip: You can find the best Roon knowledge here:

<https://kb.roonlabs.com/>

Roon can be downloaded in the App Store, Play Store or at www.roonlabs.com



Roon should find the Extreme in your network quickly, click on „Connect“

Roon – Adding music



Tip: You can edit all information also later in Roon

- Follow the Roon Wizard and answer the consecutive questions
 - Where do you keep your music?
 - Add a NAS (Network Attached Storage) if you have one by selecting „Add Network Folder“. In the [„Add a network drive“](#) section of this manual we show you how to set this up.
 - Choose „Add Folder“ to select music locally stored on the Extreme’s internal PCIe drives
 - Click „Next“

Where do you keep your music?



Your files won't be moved or modified in any way

Add Folder

Add Network Folder

Next

Roon – Adding Streaming Services



Tip: You can edit all information also later in Roon

- Next you are being asked to add your music streaming services, like TIDAL.
 - Enter your account if you have one, else choose „No Thanks“.
 - That’s it!

Add streaming music

Roon makes magic out of your music collection. With TIDAL, Roon lets you explore the connections between your music and millions of artists, composers, and lossless tracks.



HIGH FIDELITY MUSIC STREAMING

I have a TIDAL account

I don't have one yet

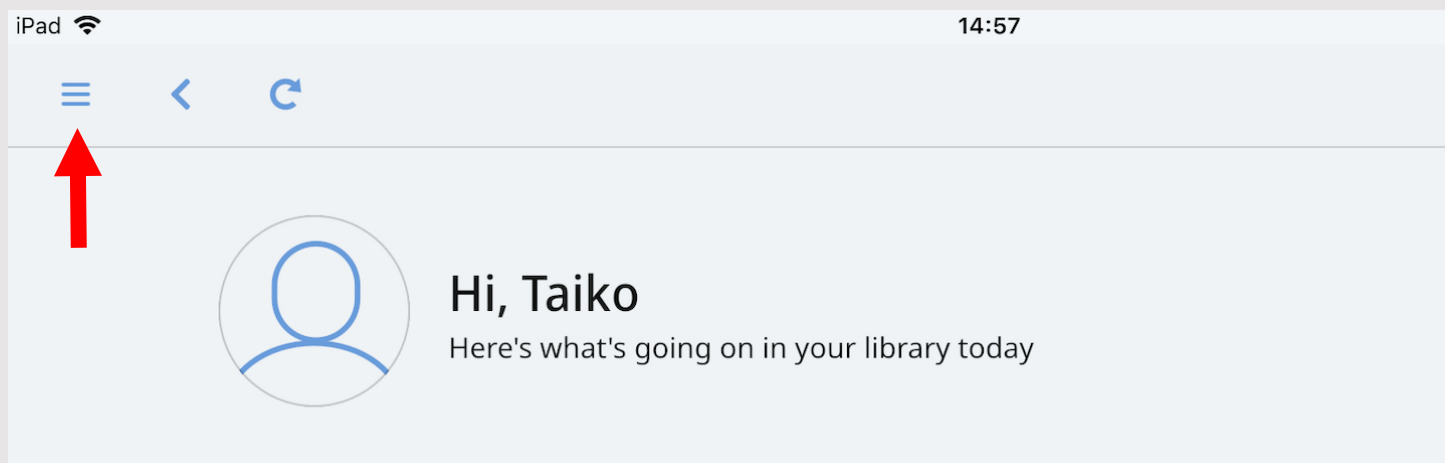
No Thanks

Roon will start importing your music and working it’s metadata magic. This can take hours depending on the size of your library! Roon will have to perform this action only once!

Roon – Connecting your DAC

Actually you can already start listening while Roon is still indexing, however we do not recommend you make any sound evaluation while Roon is setting up your library

When Roon is ready with indexing your music, follow these steps to add your DAC:



Go to Settings → Audio

Under “Connected to Core“ you should find your DAC driver that you installed [here](#)

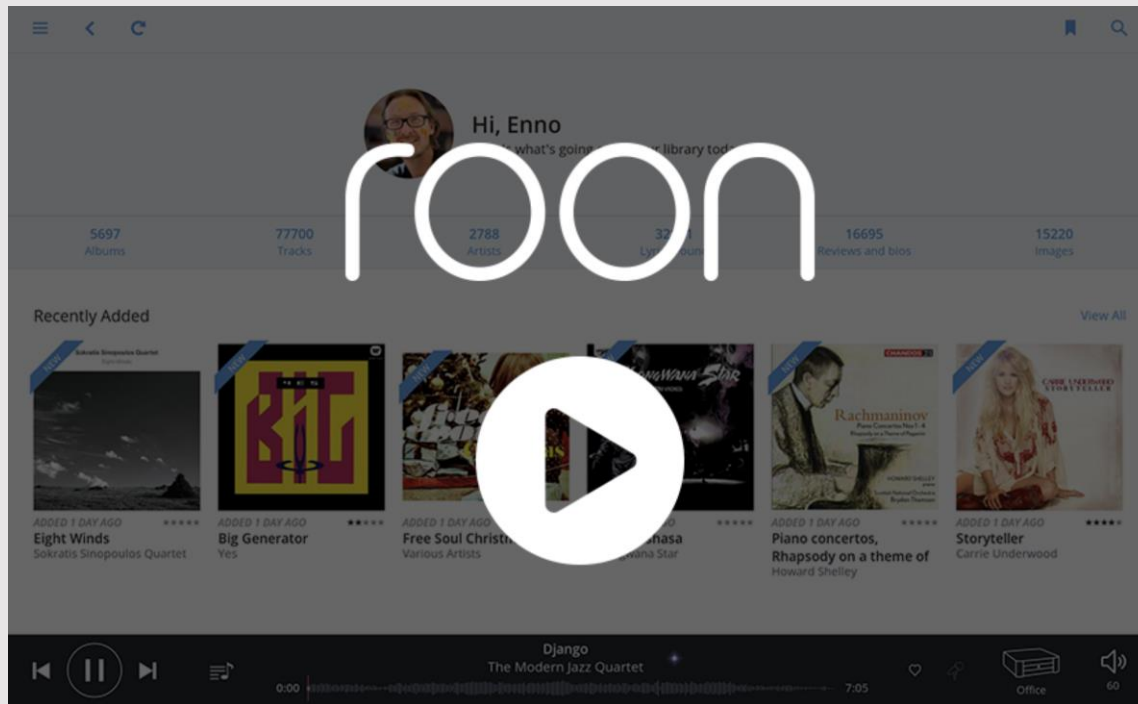
Click on **Enable** then on **Select an Audio Zone** at the bottom. The „Zones“ screen should pop up. Click on your preferred zone and the output is configured.

Roon – The Interface



Tip: You can contact Taiko anytime for help

To show all possible options that Roon's awesome interface offers would be far too much for this manual. Therefore we refer you to Roon's excellent Knowledge Base <https://kb.roonlabs.com/> for all things Roon.



Troubleshooting



Tip: You can contact Taiko anytime for help

If the IP address of the Extreme has changed due to a LAN switch restart, Roon will be able to discover the Extreme with its new IP Address, you just need to tap on the network name of the Extreme on the [Choose Roon Core](#) page.


Write down the new Roon Server IP address.

When your DAC and Extreme lose connection

- Shutdown the Extreme motherboard by pressing and holding **1** on front panel button until the back light goes off
- Power down the DAC, count to 15 and then power up the DAC
- When the DAC is fully powered up and “ready”, do a Front Panel boot up of the Extreme by momentarily pressing the Front Panel button **1**

Roon – remote service

Should you still experience troubles, Taiko is there to help. Download the TeamViewer Quick Support software onto a desktop Windows or Mac computer that is linked with your local network.



Immediate assistance:

TeamViewer QuickSupport

Optimized for instant remote desktop support, this small customer module does not require installation or administrator rights – simply download, double click, and give the provided ID and password to your supporter.

[Download QuickSupport](#)

[Privacy Policy](#)

[Customize QuickSupport](#)

You will find the free software under the following address:

Windows:

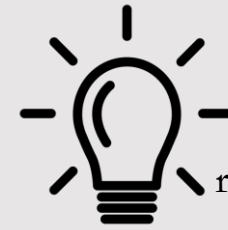
<https://www.teamviewer.com/en/download/windows/>

Mac:

<https://www.teamviewer.com/en/download/mac-os/>

You do not need to use the full version, use QuickSupport as indicated in the picture on the left side. You may have to scroll down a bit to find the link. Download, install and open the program, then share the displayed information with your Taiko rep as shown [here](#).

Advice for HiFi OCD



Tip: You can
contact Taiko
anytime for
recommended tweaks

- The Extreme is heavy and should be placed on a **vibration controlled shelf** which is as close to the floor as possible. The Taiko Audio Daiza platform is recommended as a cost and performance effective support shelf solution for the Extreme.
- As with all HiFi components, the quality of the **AC power supply** is very audible in a system with low noise components present in the whole audio chain. At a minimum it is suggested that the AC connection be capable of delivering 2 KW of continuous power without neither wiring or plugs and sockets getting warm. **Good quality power cords** with plugs and sockets with Rhodium, Silver or Gold plating is recommended. In countries with Schuko plugs, make sure the connector is in the orientation that sounds best.
- Absolutely to be avoided are any devices providing Local Area **Network connectivity over the AC mains** wiring in the home.
- Different **fuses** such a Synergistic Research Blue and Black, and Beeswax fuses do have an audible impact on the sound. Taiko Audio has not tested different fuses for long periods of time, and does not know how the sound differential varies over time, more or less, better or worse. Taiko's experience is that the sound quality delivered by the Extreme in a low noise and transparent system can be fully enjoyed without fuse swapping. If the fuse is going to be swapped, the new fuse must be of the same rating as the fuse delivered with the Extreme.

Advice for HiFi OCD



Tip: You can
contact Taiko
anytime for
recommended tweaks

- The effect of a low RF noise floor and a high speed LAN connection is quite audible with a low RF noise Music Server such as the Extreme. An Optical (SC Single Mode) connection to the **optical LAN port** of the Extreme is the preferred connection for ultimate performance, although extremely good results can still be achieved with a CAT 6 copper cable connection connected to a high quality LAN Switch.
- Our recommendation for non-stock software can be found on page [Technical Description – Software](#).
- There are many **USB cables**, each with their own sonic signature. Taiko does not recommend any particular cable, but they all have their characteristic sound.
- Many highend DAC's have a LAN connection to an onboard renderer built in to the DAC. A **Renderer**, well implemented, can be sonically competitive with a well implemented USB receiver when the LAN connection is low noise and high speed. The Extreme will also improve playback to a renderer to a similar degree as to a USB input on a DAC.
- An option for an add in card with a high quality AES/EBU output for DAC's such as the legendary Pacific Microsonics Model 2 is available. Contact Taiko Audio for details.



Safety instructions

- Always stay within the accepted voltage range of your unit. This is either 100-120V, 220-250V or 230-264V depending on your specification during the order.
- Always use a power cable with a safety ground connector.
- Keep the server away from any wet conditions, it must always remain dry.
- Please always look out for optimal ventilation of the component. The top cover should not exceed 32 C / 90 F. Placing the Extreme in a hot cupboard will shorten the life of the expensive capacitors used in the power supply. Higher operating temperatures increase thermal noise levels in key components and can be perceptible / audible in the sound coming from the speakers.
- Do not open the Extreme on your own, there are no user-servicable parts inside. There is risk for a lethal electric shock.
- Do not hot swap USB cables, there are some DAC's that can send voltage spikes when this is done.
- Avoid powering up power amplifiers without shutting down the Extreme first via the front panel button. A big change in current draw on the AC mains can sometimes cause an AC power spike large enough to AC powered computing devices to freeze.

Taiko Audio Mission Statement



Tip: You can
contact Taiko
anytime for help

- To provide the best user experience in the audiophile music reproduction equipment industry for the following activities.
- Equipment selection process.
- Delivery of equipment in perfect condition, fully tested, and burned in for a minimum of 3 days.
- Remote support session to install DAC drivers, set up Roon to connect to existing NAS and load music files onto Extreme's local storage.
- Remote support.
- Servicing and Warranty returns.

Warranty and service



Tip: You can
contact Taiko
anytime for
help

- The Extreme has a two year warranty for parts and labor of the replacement of any item or component that fails during normal operation in a adequately ventilated space with a temperature less than 32 C / 90 F.
- Should you experience any problem, do not hesitate to email your contact info to Taiko Audio at contact@taikoaudio.com suggesting a call time for a Taiko rep to get in touch with you and carry out remote examination / diagnostics of the Extreme.

Technical Specifications

Technical Specifications



CPU
Dual Intel Xeon Scalable
10 core - 20 thread CPU's for
20 cores - 40 threads in total.



RAM
Twelve 4GB custom order
industrial memory modules
for 48GB in total.



Software
Custom Windows 10 Enterprise
LTSC 2019 OS, Roon and Jplay
playback software.



Remote Access
Setup and maintenance will
all be conducted remotely,
no user action needed.



Cooling
In-house designed ultra high
precision passive cooling system.



Colour Options
Silver and Black.



Weight
45kg / 99lbs.



Dimensions
483 width, depth 455cm, height 180mm
including feet.



Storage
Standard storage provisions include 280GB of PCIe Intel
Optane storage for the operating system, 2TB of PCIe storage
for music files. Music storage can be increased in 2TB
increments up a maximum of 24TB.



Power Supply
No compromise linear power supply, 400VA transformer,
Lundahi chokes, 700.000uF of Mundorf and Duelund
capacitors.



Connections
External connections consist of 5 USB ports, 2 copper RJ45
ethernet ports, 1 fiber SFP open slot ethernet port, 1 VGA
port. S/PDIF, AES/EBU single, dual or quad optionally
available.



Chassis
CNC machined hybrid copper / aluminium / 'panzerholz'
chassis. Completely passive cooled for silent and fanless
operation.

What do you need to get started?



Taiko Extreme



iPad



DAC



USB



Internet Connection

Copyright statement

All mentioned trademarks are property of their respective owners:

- Microsoft Windows
- Apple iOS, MacOS, AppStore
- Google Android, Playstore
- HQPlayer
- Roon
- Jplay
- Teamviewer
- VNC Viewer
- TIDAL
- Synergistic Research